

A SENSE OF PLACE: CAN FORM-BASED CODE PLANNING CONTRIBUTE
TO THE PUBLIC REALM OF PRINCE AVENUE?

by

SCOTT SIMPSON

(Under the Direction of David Spooner)

ABSTRACT

Prince Avenue in Athens, Georgia has been the subject of much interest in the last few years. The Athens Regional Medical Center (ARMC) is rapidly expanding, The University of Georgia (UGA) will convert the existing Navy Supply Corps School (NSCS) into a Medical School Campus, and iconic architectural landmarks have been razed. With no true blueprint for future growth, expansion can occur haphazardly, with little to no attention given to the human experience. The Community Approach to Planning Prince Avenue (CAPPA) formed in response to these pressures on Prince Avenue. CAPPA graphically demonstrated design solutions favorable to pedestrian issues along the corridor. As well, professionals have authored several books on the theoretical and physical components of place, form and the public realm that can be incorporated into a design vocabulary to influence the built form of successful urban environments. The results from the CAPPA initiative and theoretical research are an appropriate base for further study to explore how the use of form based code planning can be applied to Prince Avenue as a regulating vehicle to achieve results that are favorable to pedestrians and sensitive to human scale.

INDEX WORDS: Place, Space, Form Based Codes, Prince Avenue,
Public Realm, Pedestrian, Human Scale

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DEDICATION

For Eric: This journey wouldn't be complete without you.

I have had many mentors and people who encouraged and inspired me throughout my life; those who would become my family when I had none of my own. This is for all of you.

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CHAPTER 1

INTRODUCTION

Problem:

The physical designs of traditional urban development historically give primacy to the pedestrian, the spatial organization arranged in a manner considerate of human form, scale and proportion. At the center of traditional urban development was the street. Streets served to organize a city in a manner that was human centered, taking physical constraints and accessibility into consideration. Streets joined the components of places together, a portion of the ubiquitous continuum, providing property access, while connecting landmarks, public squares, and delineating space. Streets in traditional urban development are generally arranged in a gridiron pattern, subdividing blocks with commerce and social exchange occurring within the public realm. Successful streets according to the research of Jacobs, Lynch, and Appleyard are ones “that are well used and that invite public participation, provide opportunities for discovery and adventure, and that are locally controlled and broadly accessible.”¹ William Whyte called the street, “...the river of life of the city, the place where we come together, the pathway to the center.”²

Streets and their rights of ways make up one third of the total land area of a city.³

Streets are one of the basic components of an assemblage of parts that comprise the public realm.

¹ Anne Vernez Moudon, *Public Streets for Public Use* (New York: Van Nostrand Reinhold Company, 1987)

² William Whyte Biography, Available from <http://www.pps.org/info/placemakingtools/placemakers/wwhyte>; Internet; accessed 15 March 2010.

³ Allan Jacobs, *Great Streets* (Cambridge: MIT Press, 1993)

Broadly defined, the public realm is that physical space in an urban environment that is not privately owned. It belongs to the public. Kunstler describes it as the “connective tissue of our everyday world.”⁴ It is the space between buildings, the public square, the sidewalk, street trees and street furnishings. It serves to connect people, places and things to one another. Following World War II, there was a shift in the manner in which architects, planners, and developers approached the built environment. Streets and the public realm began to decline with the introduction of the automobile. “The internal combustion engine dramatically altered the perception of the street, from a locally oriented public space to an efficient transportation corridor.”⁵ Streets that once served to visually organize space became corridors for the movement of people, goods and services by automotive transportation. “Street standards were institutionalized during the 1930s through the 1950s, at which time the efficient movement of vehicular transportation became the overarching goal of street design.”⁶ In addition to the onslaught of the automobile, in the post war era, fewer architects were trained in the Beaux- Arts style that dominated the first half of the century. The emergence of modern architecture spawned new slogans (“less is more” and “form follows function”) that denoted a spare, functional aesthetic. Attention was focused on incremental growth, signature buildings, and vehicular access, with the greater context of site taking a secondary role. The result is often a fragmented, vehicle-oriented landscape with little pedestrian orientation or positive contribution to the community it was intended to serve. The spaces between buildings became an afterthought, with architecture reigning supreme. The importance of the public realm was subjugated to the automobile, with no consideration given to a hierarchical order of design elements as had previously existed. As automobiles became more affordable and gained primacy over pedestrians, people migrated from the inner city to the sprawling suburbs.

⁴ James Howard Kunstler, *Home From Nowhere* (New York:Touchstone, 1996), 36.

⁵ E. Ben-Joseph, T Szold, *Regulating Place, Standards and the Shaping of Urban America*(New York: Routledge, 2005)

⁶ IBID

The physical design and spatial organization of the street and public realm that once gave primacy to the pedestrian and were human centered, began to erode and become automobile centered. Traditional street designs were retrofitted with numerous curb cuts to allow for drive thru access to banks and fast food establishments so one would never leave the comfort of the car. Asphalt parking lots replaced green spaces and forecourts to buildings, contributing to the decline of the public realm. The traditional form eroded further with strip mall development that ignored thoughtful building placement setbacks while developing parking directly in front of businesses. Public works monies formerly used for civic projects to improve the public realm were spent at an unprecedented scale on street improvements to facilitate traffic movement.⁷ “Traffic engineering, with its concerns for efficient traffic movement, became a powerful shaper of city form and continues to dominate decision making regarding streets today. The result has been a decline in the attractiveness and desirability of urban streets.”⁸ Architects’ designs that once engaged the public realm turned their back to the street, disengaging from the context with an inward focus on the building interior.⁹ Without the “eyes on the street” this internal focus of architecture, and automobile reliance led to an increase of crime, traffic congestion, pollution, noise, and decreased social and economic pedestrian activity.¹⁰

Purpose:

The purpose of this research is to demonstrate the significance of the urban form and public realm as a place that provides an important social, economic, and recreational amenity to the community. People have expressed interest in revitalizing the public realm, as a means to satisfy the social, economic, and recreational needs of their communities. There is a renewed interest in place making – to recognize and celebrate the significant cultural identity or resources

⁷ Kunstler, 95.

⁸ Carolyn Francis and Claire Cooper Marcus, *People Places: Design Guidelines for Urban Open Space* (New York: Van Nostrand Reinhold, 1997)

⁹ Allen Jacobs, *Great Streets* (Cambridge:Massachusetts, MIT Press, 1993)

¹⁰ Jane Jacobs. *The Death and Life of Great American Cities* (New York: Random House, 1961)

that are unique to a specific place. Additionally, the unprecedented rise in fuel costs has led many people to rethink the sprawl mentality of car dependence. As well, communities are sensitive to environmental impacts of global warming, noise and air pollution.

Argument and Questions:

This research will focus to identify the qualities and characteristics of the urban form that make up the public realm to create place. It contends there are specific components or characteristics of place that comprise the successful public realm and the public realm is an amenity that serves a community socially, economically, and contributes to its identity or sense of place. It posits that these components can be incorporated into a design process to rehabilitate places that have suffered from the impact of the automobile dominated culture. Further, this thesis suggests that the spatial organization or the form of the public realm can greatly impact its success. In an effort to restore vitality to the compromised public realm, this thesis will address four questions: 1) what are the elements of place that contribute to the form of the public realm? 2) how does form or the spatial organization contribute to the cultural and psychological meaning of sense of place? 3) can form be manipulated through the design process to successfully rehabilitate a compromised traditional urban form to one that contributes to the social and economic vitality of the sense of place? and 4) How can this information inform the future of the Prince Avenue corridor in achieving the desired results as expressed from the community charette process?

Goals:

Peter Katz wrote that the physical form of a place is the community's most intrinsic and enduring characteristic.¹¹ This thesis will examine place theory and how physical form influences place and the public realm. The thesis contends that the physical form is paramount in

¹¹ Peter Katz, *Regulating the New Urbanism* Planning Magazine, November 2004

the creation of the public realm. The goal of this thesis is to apply the research of form, place, and the public realm to a site in Athens, Georgia where the local community has rallied to discover alternatives to suburban sprawl and to rehabilitate an in town neighborhood district.

Process:

The initial discussion centers on the question, what is place? A real place is much more than physical space. The theory of form, place and the public realm will be evaluated through a literature review by authors who have spent considerable time on the subject. To support the public realm, place theory, the thesis will explore the physical components and qualities of the physical environment that contribute to the public realm to create place. The research will identify how the public realm has been compromised from its original form, once human-centered, by the advent of the automobile, after which the public realm became automobile-centered. The thesis then focuses to a thoroughfare in Athens, Georgia where the community has rallied to insure that future development is sensitive to existing context, maintains sense of place, preserves cultural heritage, and is pedestrian-centered. The community group known by the acronym CAPP (Community Approach to Planning Prince Avenue) through a community visioning process identified tangible ideas, which if implemented, could contribute to the desired future developmental form. As a vehicle for implementation to fulfill the preferences of CAPP, the thesis will explore the use of the New Urbanist Form-based codes. Finally, the thesis will conclude with an assessment of the form-based code application and make recommendations for methods of improvement to the district, upon synthesizing the various theoretical and physical components of the public realm.

Chapter 2 explores the theoretical components of place and form as they contribute to the public realm. A literature review will identify recurring themes in place and form theory. While there are many contributing factors to what makes a space a place, the recurring dimensions of

place from the authors researched are *image* or aesthetic qualities of urban space, that informs our ‘sense of place’ or perception of the urban environment, The functional aspect of the urban environment – measured by the *activity* that occurs there, and the spatial dimension – analyzed by the physical *form* of the urban environment.

Secondly, will be the exploration of the theoretical components that create the form of the public realm. The literature reviews of vested researchers identify the four recurring themes that contribute to the form of the public realm: human scale; density; culture and context; and permeability.

Chapter 3 traces the evolution of the form of Prince Avenue in Athens, Georgia from the earliest settlements of the Cherokee Nation through the mid 20th Century. The corridor’s modest beginnings as the ‘road to Atlanta’ evolved over time to one of the premier residential streets of Athens. Once home to plantation farms occupied by a who’s who in Georgia’s State history, the Avenue peaked near the turn of the century, then as was happening in cities across the United States, witnessed a decline following the Industrial Revolution, two World Wars, and the advent of the automobile which allowed the beginning of what has become known as sprawl development. The historical perspective includes personal views as expressed in memoirs of former residents in order to identify the sometimes intangible idea of ‘sense of place’.

Chapter 4 explores the resurgence of interest that occurred in in-town neighborhoods, beginning in Athens and the Prince Avenue District in the late 1970s. If the previous years witnessed the total decline of the public realm, the decades through the millennium witnessed unparalleled interest in revitalization of the district. Although the neighborhoods prospered by the efforts of area homeowners, the Prince Avenue corridor remained a chasm between what historically was a contiguous neighborhood district. Interest in guiding future physical development of the Avenue toward pedestrian-centered design sparked with the evolution of the

community group CAPP (Community Approach to Planning Prince Avenue). By working through an inclusive community process, CAPP worked to identify the community vision for the future of Prince Avenue. Through a design charrette process, CAPP provided the community with a template of a wide variety of ideas for the future form of Prince Avenue.

Chapter 5 is concerned with method of application for achieving the desired CAPP results and marrying them with the place and form components identified through the literature review. It begins with a discussion on traditional zoning which ultimately leads to the New Urbanist practice of form-based codes. The components of the form-based code are explained through a series of graphics and definitions.

Chapter 6 identifies the major sections of Prince Avenue as outlined in the CAPP charrette process, then zooms in to the identified precincts as a test ground for the application of form-based codes to achieve the desired CAPP results against the established place and form criteria as outlined in Chapter 2. Afterwards, an evaluation of the results of form-based codes as applied to the study site, with an assessment of their effectiveness at delivering the desired physical form as outlined from the CAPP charrette in chapter 4.

CHAPTER 2
PLACE, SPACE, AND THE PUBLIC REALM
THEORETICAL COMPONENTS OF PLACE & FORM

Place, space, and the public realm are intricately related terminology when applied to the physical urban environment. Though each has independent meaning, they are often used in context with one another and sometimes interchangeably when referencing urban form. One of the goals of this thesis is to define and identify place, and then examine how the physical form of place can inform and influence place with established desired characteristics that enhance pedestrian activity and experience. The Webster dictionary tells us that the word place is derived from the Latin, *platea*, meaning broad street, and that the word space comes from the Latin, *spatium*, referring to a volume or area. Public realm is a more recent addition adopted by the New Urbanist Movement that is broad in meaning, but refers to the many varied components of place, that make up that civic area in the urban environment that is not within private ownership. Places are capable of affecting our emotions, making us happy or sad; as well, places influence our health, well-being and social relationships with one another. In order to understand a place's physical form, it is first necessary to briefly explore the component pieces that contribute to a sense of place. Following the exploration of place will be the greater dominant part of this thesis, the discussion of *form*, with an assessment of what has been written on the topic, but first, a look at *place*.

In *The Image of the City*, Kevin Lynch outlines how humans perceive space in the urban environment. His theory of place legibility suggests that people form a mental image map of spaces as they travel through a city. He identified these mental images as paths, edges, districts,

nodes, and landmarks. *Paths* include the structure for travel, such as the streets, sidewalks, and trails. *Edges* psychologically define a space by perceived boundaries in the way of buildings, walls, or shorelines. Large portions of the city associated with identity or character make up *districts*. Intersections or focal points in the urban form are identified as *nodes*. Finally, *landmarks* are those readily identifiable objects that serve as reference points. Lynch concluded from his research that the places most easily navigated are those with good urban form, most notably good paths – those places with the strongest forms had the best imageability – very distinct parts and spatial properties that are immediately recognizable. Lynch maintains that a place becomes a true place when people inform it with their own meanings and connections.¹²

In his second book, *Site Planning*, Lynch goes on to describe the relationship between the senses, the perception of the urban form through the limitations of human anatomy. He gives specific examples: “It is unpleasant if the line of site just at eye level is an ambiguous one. Preferably, vision is either kept clear at this sensitive elevation or is decisively blocked. Thus walls should be low, or over six feet high, and railings at eye level are to be avoided.”¹³ Lynch believed that the senses of vision, hearing, and touch could be consciously used by designers in the shaping of the urban form to illicit emotional responses appropriate to the function of the urban space. Lynch concludes with:

In a site plan, therefore, we are dealing with the total organization of space, a space which is loose, continuous, and dynamic in nature. This space is formed with buildings, earth, rock, water, plants, and light. The criteria for visual success are first, that this space be imageable, i.e, well structured and vivid in form, endowed with a prevailing sense of place. Second, it must be conceived as a sequential experience, rhythmically organized, with contrast and variety, yet with strong continuity. Third, it must be meaningful: highly expressive of the nature, function, and value of the place and the uses that occupy it.¹⁴

In his 1972 book entitled, *What Time is this Place?* Lynch examines the fourth dimension of time as it responds to the theory of place. When considering the evidence of time on the

¹² Kevin Lynch, *The Image of the City*, (Cambridge:Massachusetts, 1960), 92

¹³ Kevin Lynch, *Site Planning*, (Boston:Massachusetts, 1962),

¹⁴ IBID

physical world and how those external signals affect our experience, he states it is the quality of the personal image of time that is crucial for individual well being and to successfully managing environmental change. “Time as applied to place, is an emblem of past, present, and future time, we live in time-places, and it is clear that space and time are the great framework within which we order our experience.”¹⁵ In the experience of place, “Group memories are supported by the stable features of the environment, which becomes, ‘a spatial emblem of time’. The consciousness of the group is further reinforced by ceremonies that vivify the sense of a common present.”¹⁶ He gives as an example a sample of the writings of the Danish writer Isak Dinesen, fighting for the rights of the kikuyu tribe to remain on the land where generations shared a common experience. “It is more than their land you take away. . . . It is their past as well, their roots and their identity. If they were to go away from their land, they must have people round them who had known it. . . . Then they could still, for some years, talk of the geography and history of the farm, and what one had forgotten the other would remember. As it was, they were feeling the same extinction falling on them.”¹⁷

Gordon Cullen, author of *Townscape*, compares the component parts of the urban environment metaphorically to pieces of a board game. He says that only through the collective experience of living can a town’s complete potential be realized. He maintains that the environment’s collective form components of trees, buildings, nature, water, and traffic in successful urban places are woven together to create drama. He says, “The city is a dramatic event in the environment.”¹⁸ The drama unfolds as one walks through the streets or sidewalks of a city. For example, often, the paths are not in a straight alignment, thus the scenery of towns is often revealed to pedestrians through a series of jerks or revelations that Cullen calls *serial*

¹⁵ Kevin Lynch, *What Time Is This Place?* (Boston:Massachusetts, MIT Press, 1972), 241.

¹⁶ IBID,125.

¹⁷ IBID,126.

¹⁸ Gordon Cullen, *Townscape* (New York:Reinhold Publishing Corporation, 1961), 8.

vision.¹⁹ Cullen makes the distinction between the existing and emerging views revealed along the way, by recognizing that ‘*I am here*’, so I must have ‘*been there*’.

For Cullen, the way our body reacts to its position in the environment is a response to the impacts of enclosure and exposure. He states “since it is an instinctive and continuous habit of the body to relate itself to the environment, this sense of position cannot be ignored; it becomes a factor in the design of the environment.”²⁰ He goes on further to say that this should be exploited through the design of the urban form. Cullen holds that the urban form should be designed from the pedestrian viewpoint. “The variety of forms from wide-open spaces to obscured tunnels where the end cannot immediately be seen are similar to a journey through pressures and vacuums, a sequence of exposures and enclosures, evoking a sense of constraint and relief.”²¹

Cullen contends that successful urban forms offer variety, composed of color, texture, scale, style, character, personality and uniqueness, but warns against the desire to create conformity by way of designing to an idea of perfection through symmetry and balance. He says that conformity results in a sterile abstract of undesirable urban form. It is by exploiting the nuances of scale, texture, color, character and individuality that creates collective benefits of interest in the urban form.

Once the background to the game is understood, the most difficult part is playing. The complex relationships of the various components are dynamic in nature. The challenge is to mimic this dynamic characteristic in the design of the urban form to create ‘place’ infused with meaning or a ‘sense of place’.

Author of *Place and Placelessness*, Edward Relph sees place as prescribed by human consciousness, a phenomenological connection between humans and places whereby the human

¹⁹ IBID, 9.

²⁰ IBID, 12.

²¹ IBID

consciousness absorbs ‘information’ and translates it into ‘the world’.²² Relph holds that places are “a fundamental aspect of man’s existence in the world...they provide sources of security and identity...they are a part of our lived-world of our everyday experiences”²³ Places are greater than the sum of their parts. They may include the physical features like the earth, water, air, the built spaces of towns and landscape, but it is only through the phenomenon of human consciousness that they become real places filled with meaning. “Although the meanings of places may be rooted in their physical setting and objects and activities, but they are not a property of them – rather they are a property of human intentions and experiences.”²⁴

Relph’s body of work identifies place as being comprised of three interrelated components: physical features or appearance, observable activities and functions, and meanings or symbols.²⁵ Relph states that “There is an infinite range of content within each of these and numberless ways in which they can combine...hence, there is no discernable limit to the diversity of identities of places, and every identifiable place has unique content and patterns of relationship that are expressed and endure in the spirit of that place.”²⁶ The physical features include the earth, sky, water, and constructed elements. The activities include all human interaction with the physical features, while meaning is deeply rooted in human consciousness. “Physical appearance, activities, and meanings are the raw materials of the identity of places, and the dialectical links between them are the elementary structural relations of that identity.”²⁷

One additional, less tangible dimension to place identity is the *genus loci*, or sense of place. Also referred to as the ‘spirit of the place’ or ‘genius of the place,’ it refers to the character or personality of the place and serves to link and embrace the other place identity components.

²² Matthew Carmona et al, *Public Places, Urban Spaces: The Dimensions of Urban Design* (London:Architectural Press, 2003), 96.

²³ Edward Relph, *Place And Placelessness* (London:Pion Limited, 1976), 6.

²⁴ IBID, 47.

²⁵ IBID, 61.

²⁶ IBID.

²⁷ IBID,48.

The *genus loci* or sense of place “suggests that people experience something beyond the physical or sensory properties of places, and can feel an attachment to a spirit of place.”²⁸ Relph states that sense of place persists even after profound changes, be it social, cultural or physical. For Relph, this sense of place was “... to have a secure point from which to look out on the world, a firm grasp of one’s own position in the order of things, and a significant spiritual and psychological attachment to somewhere in particular.”²⁹

Author Christian Norberg-Shulz, describes the *genius loci* as the sense people have of a place, which is understood as the sum of all the physical as well as symbolic values in nature and the human environment. Shulz identifies four levels that contribute to the *genius loci* as: 1. The topography of the earth’s surface, 2. The cosmological light conditions of the sky, 3. Buildings, and 4. Symbolic and existential meanings in the cultural landscape.³⁰ Shulz views the horizontal silhouette of a town’s skyline as keys to the mental images of a place. He preferred the traditional form of buildings, which he saw as the basis for bringing about a deeper symbolic understanding of places. For Shulz, the details of the physical form, the culture, and the people personify the character of a place. Shulz contends that our identity as people is directly tied to our sense of place and that each place must have a unique language in order to produce a mental image. Shulz makes the distinction between the components of place and the *genius loci* of a place, realizing that “The contributions of topography, natural conditions and variations, and symbolic meanings...result in a place with identifiable character, but it is the people – individuals and society – that integrate these features, through their value systems, to form a sense of place.” In

²⁸ John Brinckerhoff Jackson, *A Sense of Place, A Sense of Time* (New Haven: Yale University Press, 1994), 157.

²⁹ Relph, 38.

³⁰ Gunila Jiven, Peter J. Larkham, *Sense of Place, Authenticity and Character: A Commentary* (Journal of Urban Design, Volume 8, Issue 1, February 2003), 78.

creating a personal definition of place, Schulz wrote: “The spaces where life occurs are places. A place is a space which has distinct character...a setting for human activity.”³¹

Author and place psychologist, David Canter in his book *The Psychology of Place* explores the concept of place experience and how people conceptualize places. He states that place is the amalgamation of all the activities that occur within the backdrop of the physical form in and around the buildings that house the activity. He holds that human behavior will act and respond differently and in various ways based on the characteristics of the place. For instance, if entering a building space that resembled a church, one might act differently than one would when entering an office building. His theory is based on the notion that “any act is made in relation to the context within which the individual thinks himself to be”. He compares this human instinct to an animal that must first be aware of the stimulus before responding.³² Canter holds that there is much to be gleaned from people’s descriptions of places. He recognizes two valuable pieces of information come from a description of place. First is the evaluation assigned to a place and secondly is the activity that is associated with the place. He says that we do not fully know a place until we know “what behavior is associated with that place, what the physical parameters of the setting are, and the descriptions or conceptions, which people hold of that behavior in that physical environment.”³³ In the creation of place, Canter says it is the designer’s “task to manipulate the physical attributes in such a way as to draw upon, or create, the appropriate context for specifiable activities and conceptions.”³⁴

Interpretation of Readings

³¹ Christian Norberg-Schulz, *Genius Loci: Towards a Phenomenology of Architecture* (New York: Rizzoli, 1980), 48.

³² David Canter, *The Psychology of Place* (Great Britain: BAS Printers Limited, 1977), 1.

³³ IBID, 159.

³⁴ IBID, 163.

Place holds various meanings for different people. It is the combination of a variety of components, amalgamated – or not – influenced by physical location and the perception and influences of the activity that result from the amalgamation. For Lynch, it is the clarity of the image or visual perception of place that matters, followed by the characteristics of a form that supply the stimuli of our senses through sequential experience of space that is rhythmically organized, offering a high degree of contrast, variety and continuity upon which we base our values to inform the place with meaning or a sense of place. Cullen, who sees our experience in place as an unfolding drama watched in serial vision, identifies place as a series of enclosures or exposures with variety of form with regards to color, texture and scale. Relph regards place as the physical manifestations of our psychological connection to the activities, values and meanings that combine to create a sense of place. Sense of place for Norberg-Schulz is the essence of the physical, cultural and symbolic values found in the environment and human nature. Place is where life occurs. For Canter, place is informed by the activity that occurs there. The form of place will influence the activity and personal behavior. Place is the combination of many things physical, ephemeral, emotional, visual, audible and intangible – and a location – that is unique to individual cognitive perception in identifying place. Only when people inhabit it with activity is it capable of becoming a real place capable of stirring emotions and feelings unique to individual interpretation. The components of place as described by the authors can be distilled down to three critical elements: image, activity and physical form. (Table 2.0), (Figure 2.0).

If place is an amalgamation of activity, image and physical form, then what are the components that work together to make up form? The next section of the thesis will focus on reviewing the literature to identify the recurring themes associated with form of the public realm.

Table 2.1 Literature Review of Elements of Place

Author	Place Elements
Lynch (1960, 1972,1981)	Legibility, Structure, Imageability. Well-designed places provide good mental imageability with reference points to help establish the quality of the personal image.
Cullen (1961)	Enclosure, Exposure, Variety, Non-Conformity, Drama. Places with the proper mix of the component pieces infused with a 'sense of place' become real places.
Relph (1976)	Physical Setting, Objects, Activities. These contribute to place, but meaning associated with place stems from the human dimension.
Norberg-Shulz (1980)	Genius Loci, Physical Form, Culture, Identity. Place is where life occurs.
Canter (1977)	Evaluation, Activity. Place influences human and animal behavior.

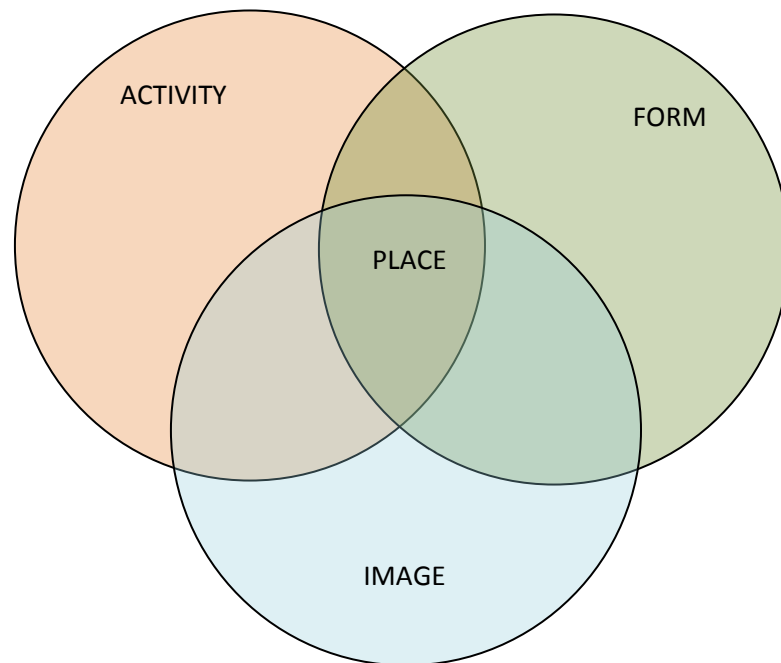


Figure 2.1
Theoretical Components of Place³⁵

³⁵ Matthew Carmona et al., *Public Places, Urban Spaces: The Dimensions of Urban Design* (London: Architectural Press, 2003), 99.

Theoretical components - form

In his 1981 book titled, *A Theory of Good City Form*, Lynch examines the relationships between the form of a place and human values. He states, "One can be miserable in an island paradise and joyful in a slum."³⁶ He acknowledges that we are made miserable or joyful by physical conditions (ie, lack of sunlight, cold, cramped dwelling space, difficult access, the absence of plants or water), but more often, it is the social conditions, and the complex relationship between the physical form and social relationships that affect the satisfaction of human values. Lynch claims that unless you specify the particular social circumstances of the people who occupy a place, you cannot judge the quality of that place. For instance, traditional Eskimo families are comfortable in quarters that would be intolerable to North Americans.³⁷ Lynch claims that physical spatial form and social patterns are complexly intertwined, and you cannot alter one without affecting the other. He goes on to explain that certain physical patterns can be applied more broadly without disrupting social patterns because of certain regularities of human beings and their cultures. "Our physical setting is a direct outcome of the kind of society we live in. He cites the inertia of social and physical patterns, and how they work on each other over a period of time by way of the human variable - or the actions and attitudes of persons. It is the satisfaction and development of the individual that spurs changes in the physical form.

Lynch maintains that we know that the quality of a place is due to the joint effect of the place and the society that occupies it.³⁸ He sets up three criteria for linkages between form and purpose. The first is that linkages exist because of certain species-wide or human settlement-wide regularities; For instance, the temperature tolerances of human beings. Secondly, to acknowledge that spatial arrangement and form are a reflection, to some extent, of the actions that take place there. These actions then influence the dynamics of the spatial form, modeling it to

³⁶ Kevin Lynch, *A Theory of Good City Form* (Cambridge: MIT Press, 1981), 99.

³⁷ IBID, 100.

³⁸ IBID, 111.

enhance the activity going on. Thirdly, Lynch stresses to evaluate, in general terms, performance dimensions for city form. "That is, certain identifiable characteristics of the performance of cities which are due primarily to their spatial qualities and which are measurable scales, along which different groups will prefer to achieve different positions...Ideally, the dimensions should also include all the qualities which any people value in a physical place."³⁹ To be useful, performance dimensions should be as general as possible, relate to the cultural values and goals of any culture, be measurable, deal with qualities that change over time, be applicable where values are different, and refer primarily to the broadly defined, spatial form of the city.⁴⁰ From this, Lynch developed five basic dimensions for evaluating form: vitality, sense, fit, access and control. The broadest dimension, **Vitality**, deals with the human requirement for food, oxygen, water, and protection from harmful disease and bacteria. Vitality refers to the degree to which the form supports the biological requirements to sustain human life. The degree to which form can be clearly perceived and mentally differentiated and structured in time and space - and the degree to which that structure connects with the values of the people living there, Lynch calls **Sense**. Sense refers to identity or sense of place. Lynch states that a good place is perceived through the senses of smell, touch, and sight. "The direct enjoyment of vivid perception is further enlarged because sensible, identifiable places are convenient pegs on which to hang personal memories, feelings, and values. Place identity is closely linked to personal identity. I am here support I am."⁴¹ A sub-component of sense is structure. Structure contributes to orientation and how parts of the form fit together. In addition to assisting with spatial orientation, structure supports orientation in time, allowing us to order our day, know when events occur, and link the present time to past or future.⁴² **Fit**, implies the degree to which the form supports the activity that occurs in the place. Lynch asserts that those places with the best fit are those where place and action develop together

³⁹ IBID, 112.

⁴⁰ IBID, 113.

⁴¹ IBID, 132.

⁴² IBID, 135.

and that the best fit comes when it is "controlled by those immediately using it, who have the stake and knowledge to make it function well." ⁴³ **Access**, is the ability to reach other persons, activities, resources, services, information or places, to include the number and diversity of the elements that can be reached. This includes: access to other people, access to activities, access to material resources, access to places, and access to information.⁴⁴ Finally, **Control**, refers to the degree to which the use and access to spaces and activities, and their creation, repair, modification, and management are controlled by those who use, work, or reside in them.⁴⁵

Great Streets author Allen Jacobs concentrates on the street as the central organizer of urban form. His research focuses on identifying the qualities that comprise great streets and great urban environments. For Jacobs, one of the most important criteria of great streets is that they contribute to creating community. He says, "Streets are settings for activities that bring people together."⁴⁶ There are an infinite range of activities, including social and economic, but the best streets are easily accessible to vast numbers of people; the young, elderly, and the handicapped. Streets should facilitate creating community across a spectrum of ages, economic and racial divides. If a street is capable of creating community, then it will be one of the most desirable places to be.

Jacob's says that great streets must be "physically comfortable and safe."⁴⁷ By physical comfort, he refers to comfort from the elements such as wind gusts and hot blazing sun. He stresses the importance of providing shade through canopy trees, which also have the ability to filter light from the sun to create interesting visual patterns on the pavements. With regards to physical safety, Jacobs is concerned that elements such as sidewalks be designed to conform to recognized standards, so one is safe from tripping or similar injury. He makes clear that the

⁴³ IBID, 165.

⁴⁴ IBID, 189.

⁴⁵ IBID, 118

⁴⁶ Allan Jacobs, *Great Streets* (Cambridge:MIT Press, 1993), 8.

⁴⁷ IBID, 8.

elements that together contribute to a great street environment should not be subjugated to fears of robbers or muggers that may be lurking behind a tree or in a doorway: “Light, by all means, to see the way and to see others, and ramps rather than steps where helpful for the comfort and safety of the handicapped and elderly, but no sanitizing of streets to avoid societal misfits.”⁴⁸ For Jacob’s, the best streets encourage participation. Participation can be in the form of a personal conversation or by way of a demonstration of a large assembly of people. Jacob’s maintains great streets are those that can be remembered and can be representative as an example for other streets to strive to for similar results.

Jacob’s discusses the design elements that can be incorporated to create his idea of great streets. “Great urban streets are often great streets to drive along as well as great public places to walk... great streets allow *leisurely, safe walking*. Sidewalks should be wide enough to allow people to walk at varying paces without crowding and should be safe, primarily from vehicles.”⁴⁹ The separation of vehicular from pedestrian traffic is best achieved through the use of a planted strip between the sidewalk and the street. Street furnishings in the way of benches or low seat walls provide places for people to gather. Additionally, on street parking allows for further separation while fulfilling a functional aspect.

Trees, according to Jacobs are the single best element that can be used to improve a street. Trees release oxygen into the atmosphere, the green color of tree leaves is a psychologically comforting color, and tree movement modulates the amount of light reaching the sidewalk. In addition to their aesthetic qualities, trees contribute to the urban form by defining space, often hiding what is unattractive. Trees direct and limit the visual perception of the urban form, and as their branches come close together overhead, they contribute to the sense of scale and define the street spatially, separating pathways visually and psychologically. Trees can also

⁴⁸ IBID, 9.

⁴⁹ IBID, 272.

serve as an elegant safety barrier between pedestrians and cars, providing a transparent but distinct edge that creates a pedestrian zone that feels safe. In order to maximize the benefits to the urban form from trees, Jacobs recommends planting close together at spacing of 15 to 25 feet apart, and to plant as close to corners as possible. Finally, on the best streets, the trees are cared for with a suitable long-term maintenance program.⁵⁰

Jacobs advises more buildings than fewer. The more buildings there are, the more people, and the more diverse a street will be. Jacobs expresses concerns for the architectural expression of building facades and building height to width ratios. Rather than a flat vertical plane, buildings should articulate details that create interest and captivate the eye of the pedestrian – they should contribute to ‘visual complexity.’

In the ordinary vision of everyday life, any long fixation of the eyes is a rarity....It is equally rare to perceive the environment with the head motionless....The visual field is ordinarily alive with motion...In the activities of everyday life the center of clear vision will shift as often as a hundred times a minute, and during reading or driving a car the rate of fixations will exceed this figure.⁵¹

Jacobs calls for complex building facades where the vertical plane is broken with horizontal elements such as cornices and windowsills that create shadow lines that the eye can move over. Jacobs bases building scale preferences on earlier research that identified “harmonious proportions” of the Parisian streetscape and the research conducted by Maertens and Blumenfeld that identify the human scale of buildings to be at a 1:2 ratio, best viewed at an angle of 27 degrees. Human scale is defined as the maximum distance apart that one is capable of being able to recognize another. For instance, “...a three storey building at 30 feet and a width of 36 feet, with a street width of 72 feet, are the maximum dimensions for a building of human scale.”

⁵⁰ IBID, 273,280-282,293-294.

⁵¹ IBID, 281-282.

⁵² Jacobs gives special consideration to the idea that the buildings have a quality of transparency about them. This transparency is best expressed as the point where the ‘public’ public realm space meets the more ‘private’ public realm of buildings. Windows best serve this transparency by allowing people to see what is happening inside a building and for the inhabitants to see the activity outside. Doorways serve the transparency function also. Jacobs recommends doorways to occur as little as 12 feet apart.⁵³ Buildings should be respectful of each other in terms of general massing and proportions, with details unique to the individual buildings. Streets should be adequately maintained and constructed of materials that can endure over time. Jacobs contends that the best streets create and leave strong, lasting, positive impressions; they catch the eyes and the imagination. They are joyful places to be, and given a chance one wants to return to them. Streets are places for activity, including relaxation. The best streets continue, and are long-lived.⁵⁴

For author Jan Gehl, it is the spaces between buildings where life occurs. His research centers on the human condition and our instinctive desire to interact with other people. Gehl sees the street as “the very essence of the phenomenon city.”⁵⁵ He holds that the activities that occur in public spaces are a result of the physical form of the environment in which they occur. Gehl identifies three types of outdoor activities as necessary activities, optional activities, and social activities.⁵⁶ (Figure 1.2) Necessary activities are those that one has to participate in like going to school or work. Optional activities are preference oriented and take place if time and environmental conditions allow. These activities are especially dependent on exterior physical conditions. Gehl states, “In streets and city spaces of poor quality, only the bare minimum of activities takes place. People hurry home. In a good environment, a completely different, broad

⁵² IBID, 278.

⁵³ IBID, 286.

⁵⁴ IBID, 312.

⁵⁵ Jan Gehl, *Life Between Buildings: Using Public Space* (New York:Van Nostrand Reinhold, 1987), 91

⁵⁶ IBID, 11.

spectrum of human activities is possible.”⁵⁷ Social activities Gehl describes as being any activity that depends on the presence of others in public spaces. He terms this as “resultant” activity to the necessary and optional activities. Social activity is spontaneous and results from people being in shared space. Gehl points out that the design of the public space can lend itself to encouraging ‘chance’ encounters with others that are meaningful, especially if it is pedestrian friendly and accessible.⁵⁸

	Quality of the physical environment	
	Poor	Good
Necessary activities	●	●
Optional activities	•	●
"Resultant" activities (Social activities)	●	●

Figure 2.2⁵⁹ Gehl Activity Diagram

Gehl asserts that there are certain physical features that encourage pedestrian activity. If the physical form is compact, it will favor the pedestrian over the automobile. Compactness of the urban form and services allow for a shorter commute time. Compactness favors a walking environment while intensifying the sensory experience of the pedestrian. According to Gehl, “pedestrians experience the street at close range and with considerable intensity.”⁶⁰

⁵⁷ IBID, 13.

⁵⁸ IBID 15.

⁵⁹ IBID 13

⁶⁰ IBID, 71.

Gehl identifies the activities of walking, standing, sitting, seeing, hearing and talking as part of the important complex matrix of social activities. Wide, accessible sidewalks are desirable for pedestrians to get from one place to another. The ground plane surface should facilitate comfortable walking and where possible, the option of ramps should occur along with stairs. Waiting for the bus or contemplating the scene or ‘window shopping’ constitutes some of the activities of people standing. Gehl advocates for a range of sitting opportunities and writes that this can lead to other social activities. He distinguishes between primary seating such as a streetscape bench and secondary seating such as walls, planters, and building steps. The most popular places for sitting activities occur along the edge, where one’s back is to something for a feeling of security, but from where the entire scene of other’s activity can be viewed. Seeing, hearing and talking can be manipulated or enhanced through physical design by the distance between elements, (or proximity to) site lighting, and sound attenuation through the buffering of street traffic. Gehl confirms from city case studies that the bulk of pedestrian activity occurs along buildings that have interesting façade details. In addition, those buildings with greater façade transparency (glassed area versus closed area) experience more activity. He says, “activities concentrate in places where there is high transparency (looking in windows) and where there are niches and openings and other opportunity for stopping for stationary activities.”⁶¹ Finally, Gehl asserts that “Urban life flows to sectors with more activity: people attract people.”⁶²

Author of *The Death and Life of Great American Cities*, Jane Jacobs asserts that “A city’s very structure consists of mixture of uses, and we get closest to its structural secrets when we deal with the conditions that generate diversity.”⁶³ For Jacobs, the level of diverse activities on the street measures the health of a city. Diversity of activities occurs on many levels with subtle differences unique to each layer of activity. The most successful urban places experience a

⁶¹ IBID, 39.

⁶² IBID, 37.

⁶³ Jane Jacobs, *The Death and Life of Great American Cities* (New York:Random House, 1961), 376.

multitude of activities, which range from social to economic to unintentional. Sidewalks are where the action takes place.

A sidewalk life, so far as I can observe, arises out of no mysterious qualities or talents for it in this or that type of population. It arises only when the concrete, tangible facilities it requires are present. These happen to be the same facilities, in the same abundance and ubiquity that are required for cultivating sidewalk safety. If they are absent, public sidewalk contacts are absent too.⁶⁴

Jacob's establishes four criteria, which are necessary for sidewalk diversity to prosper. First an area must have a variety of primary uses. These primary uses are what bring people to the outside. Jacobs asserts "These (primary uses) must insure the presence of people who go outdoors on different schedules and are in the place for different purposes, but who are able to use many facilities in common."⁶⁵ Primary users are made up of storeowners, customers and surrounding residences. The primary use can spur other uses of activity that usually occur at a central focal point. The second condition states, "Most blocks must be short; that is, streets and opportunities to turn corners must be frequent."⁶⁶ Jacob's argues that short blocks increase diversity and allow for more opportunities for different uses. She says, "...frequent streets and short blocks are valuable because of the fabric of intricate cross use that they permit among the users of a city neighborhood."⁶⁷ The third condition for diversity says, "The district must mingle buildings that vary in age and condition, including a good proportion of old ones."⁶⁸ A mixture of buildings allows for greater diversity of uses. In economic terms, it makes some rents cheaper and more affordable than others. A neighborhood's vitality is compromised when the building stock is too new. A mixture of aged buildings along with some new ones, allow for a diversity of incomes, thus a diversity of people and activities. The fourth and final condition is that there must be a dense concentration of people in order to have the diversity of uses and users. This density of

⁶⁴ IBID, 70.

⁶⁵ IBID, 152.

⁶⁶ IBID, 178.

⁶⁷ IBID, 186.

⁶⁸ IBID, 187.

population includes residential as well as commercial and requires a density of the urban form. Jacob's believes this density should be viewed as an asset to the city. "... they should be enjoyed as an asset and their presence celebrated: by raising their concentrations where it is needful for flourishing city life, and beyond that by aiming for a visibly lively public street life and for accommodating and encouraging, economically and visually, as much variety as possible." ⁶⁹

Author of *City: Rediscovering the Center*, William Whyte made a career of observing pedestrian activity and behavior on city streets. Whyte's research identified seven necessary components that contribute to the creation of good form. They include a zero setback dimension for buildings facing the street with the edge flush to the sidewalk, a mixture of commercial uses such as stores and restaurants along the street frontage, transparency along the ground floor, wide sidewalks for pedestrian flows, deciduous canopy shade trees, various types of seating opportunities and basic amenities such as drinking fountains and trash receptacles. ⁷⁰ Whyte stresses that municipalities should avoid designing sunken plazas as they become dead space with a lack of pedestrian density. ⁷¹ Whyte acknowledges the advantages of having a good physical location that he maintains should be accessible both physically and visually from different angles, having a high degree of permeability. Whyte warns against the temptation to construct blank walls that breakup the continuum of the urban form. "Lookers become buyers", thus Whyte stressed the importance of façade articulation that includes an abundance of windows and doorway entries to local shops. Whyte concludes that people prefer movable chairs to fixed seating as they allow for repositioning to take in the best views. ⁷² Whyte supports the idea of short street blocks in a grid pattern. Shorter blocks respond better to pedestrian circulation and provides for the recurrence of street corners, an important intersection for the opportunity for

⁶⁹ IBID, 221.

⁷⁰ William Whyte, *City:Rediscovering the Center* (New York:Doubleday, 1988), 44

⁷¹ IBID, 130.

⁷² IBID, 122.

social interaction. He writes: “The tight grid and short blocks may be rigid, but the pattern maximizes pedestrian activity, and it provides many of those best of spaces, street corners.”⁷³

Author of *Making People-Friendly Towns*, Francis Tibbalds, says that places matter most, and that the public realm is the most important part of our towns and cities. He stresses that the private realm has flourished at the expense of the public realm.⁷⁴ The flourishing of the private realm is directly related to a greater concern for individuality than for the common whole. He calls for a return to urban form that has a unique identity, rooted in a regional or local context. Tibbalds declares: “The physical design of the public domain as an organic, colorful, human-scale, attractive environment is the overriding task of the designer.”⁷⁵ He calls for not only a human scale, but also an urban scale with a particular local architectural typology or form suitable to the building use or function. The urban scale should relate to the place or overall precinct of a given area. New buildings should be respectful of existing urban scale and context. Tibbalds compares new development to a houseguest who should be respectful of entering another’s home. Similarly for traffic, Tibbalds suggest, “...if motorist feel like guests in a predominately pedestrian area, hopefully they will behave like guests.”⁷⁶ Tibbalds holds that there should be a greatness and variety of scale, with an overlying hierarchy of arrangement. Order of the physical form can be achieved through application of classic design qualities of scale, harmony, repetition, unity and proportion. This contributes to what he terms consistency of the urban form. For Tibbalds, the best urban forms are those that offer a mixture of uses and a variety of activities and experiences.⁷⁷ In order to provide the appropriate setting for street level activity and experience, Tibbalds suggests the use of sheltered arcades and wide sidewalks, especially at public entryways. The design of the physical form should relate to a human scale and urban

⁷³ IBID, 317

⁷⁴ Francis Tibbalds, *Making People Friendly Places* (Hong Kong:Longman, 1992), 1.

⁷⁵ IBID, 12.

⁷⁶ IBID, 16.

⁷⁷ IBID, 32.

environments should be made permeable and fine-grained, with options for pedestrian movement through the spaces. As well, the form of the street should be influenced by the nature of the activities that take place there. According to Tibbalds, “The public realm is, in my view, the most important part of our towns and cities. It is where the greatest amount of human contact and interaction takes place. It is all the parts of the urban fabric to which the public have physical and visual access.” ⁷⁸

Finally, Tibbalds asserts that streets should be legible, with identifiable landmarks and a recognizable beginning and end. He states: “The more well-used and varied a place is, the more likely it is to have the quality of people friendliness.” ⁷⁹

Interpretation of Readings

There are a variety of physical elements of form that contribute to create a desirable public realm as outlined in the literature review. (Table 2.1) From the larger city block to the intricate detail of a building façade, or somewhere in between; thus, they exist at all scales. The components of form most readily assimilated from the readings that are required to create a desirable, pedestrian-oriented urban place are: human scale; density; culture and context; and permeability. (Figure 2.2)

⁷⁸ IBID, 1.

⁷⁹ IBID, 27.

Table 2.2 Literature Review of Physical Components of Urban Form

Author	Physical Components of Urban Form
Lynch (1981)	Activity, vitality, sense, fit, access, control, landmarks. Fit – the degree to which the form supports the activity.
A. Jacobs (1995)	Community, human scale, wide sidewalks, seating, pedestrian separate from vehicular, pedestrian accessibility, importance of trees, vegetation, visual complexity, leisurely, safe walking, human scaled environment, context.
J. Gehl (1987)	Compactness, wide sidewalks, second storey activity, façade transparency, pedestrian scale, things to sit, stand and lean on.
J. Jacobs (1961)	Diversity of uses/activity, building stock diversity with old and new buildings, level of population density, wide sidewalks, robustness quality, short blocks, details, doors, windows, site furnishings.
W. Whyte (2000)	Mixed uses, building flush with lot edge, pedestrian amenities, façade articulation, no blank walls, window transparency, permeability, short blocks, grid pattern of streets
F. Tibbalds (1992)	Context, legible, sense of wayfinding through use of landmarks, sheltered arcades, covered entryways, wide sidewalks, ease of pedestrian circulation, permeability.

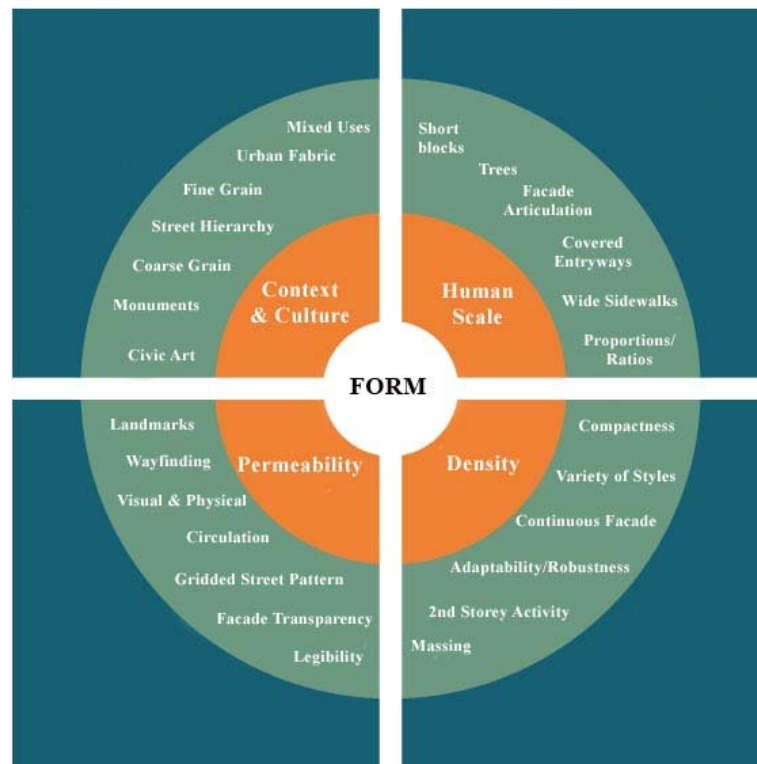


Figure 2.3 Components of Form Diagram⁸⁰

⁸⁰ Adapted from Project for Public Spaces 'Place' diagram; available from <http://www.pps.org/>; Internet; accessed 16 March 2010

The components of form most readily assimilated from the readings that are required to create a desirable, pedestrian-oriented urban place are: human scale; density; culture and context; and permeability. (Figure 2.2) Form is the central concept in figure 2.2, with the numerous variables that contribute to form expanding out from the center of the diagram. The key attributes of form shown in orange on the diagram are: human scale; density; culture & context; and permeability. The next outer layer in teal green on the diagram express the variety of elements that make up each of the key attributes of form. Each element contributes in some measureable way to the form of the public realm.

Human Scale

Scale occurs at all levels of the urban environment. Scale refers to the size of something; its height, width, and distance to or from. Scale can be a New York skyscraper or a two-storey apartment building. Scale can be the expanse of the horizon or the length of the seashore. The term human scale is concerned with something very particular in size. When the word human is put in front of the word scale, it becomes something more intimate. The size of an urban environment that is human scaled is one that is sensitive to the proportions and limitations of a human being able to relate physically, emotionally and psychologically to his surroundings. The research of Maertens and Blumenfeld defined human scale for buildings at a 1:2 ratio, best viewed at an angle of 27 degrees.⁸¹ This measurement is loosely based on the harmonious proportions of the Parisian streetscape, and is intended more as a general guide than the dictum. The arsenal of elements and design tools that can be used to contribute to human scale include trees, short street blocks, detail of building façade articulation and covered entryways.

⁸¹ A. Jacobs, 278.

Density

In terms of the urban form, density could also be termed intensity. A density of use or intensity of activity are two elements that contribute to the success of the urban form to create a desirable public realm. Density can also be associated with the compactness of the urban environment. Gehl pointed out that a compact form will favor the pedestrian over the automobile, but to keep the pedestrian engaged, should have a continuous façade with variations in the articulation of details, with lots of windows or doorways. The overall massing should be sensitive to existing context to complement the existing density without being a carbon copy. Buildings should engage the street in order to relate to the public realm, with parking relegated to the street (parallel) or accessed from a rear alleyway. The pedestrian experience can be enhanced by incorporating trees, site furnishings and accessible pavements. A mixture of buildings old and new with mixed uses can provide for density at different times of the day or night, thus creating around the clock opportunities for a wide variety of uses, for a wide variety of people.

Context and Culture

In order to create successful forms within urban space, great attention must be paid to the existing context and cultural identity of the community. Consideration of existing context can inform a substantial portion of proposed infill design. Most places have qualities that are unique to themselves, and paying attention to these qualities and incorporating them in the design of urban spaces will not only strengthen the design, but enhance Lynch's 'fit' as appropriate for the existing context. Context is not limited to bricks and mortar. There is a cultural dimension as well that will influence design decisions. As well, how people in the community relate to each other and the physical environment is intimately related to their cultural beliefs and attitudes. There is valid concern that communities face with respect to the destruction of existing context by future development. Different and larger isn't necessarily better – especially if the existing fabric is rich

and varied. The theme of context will be explored further in the proceeding chapters as the thesis focus shifts to the Prince Avenue corridor.

Permeability

Permeability refers to the opportunity for movement through an urban environment. The best places have both physical and visual permeability. Physical permeability offers multiple routes for circulating through an area. Visual permeability allows the user of an urban environment to see the routes from which he will decide the one to take. Those places with good permeability are also described as being fine grained. A fine grained urban environment is characterized by short blocks and multiple opportunities to move through an area. By contrast, coarse grained urban environments are comprised of larger blocks with limited routes to circulate through as well as more limited visual permeability.⁸²

The form components of human scale, density, context and culture, and permeability as outlined from the literature, are required to create a successful urban form and public realm that is pedestrian centered. The next chapter will introduce the rich history of the study site of Prince Avenue, once the premier residential street in Athens; it presently suffers from the abuse of the automobile and urban sprawl. The community has expressed a desire to ensure that future development is sensitive to existing context, maintains sense of place, preserves cultural heritage, and is pedestrian-centered. The community involvement is known by the name CAPPa, acronym for Community Approach to Planning Prince Avenue. Chapter 4 will reveal how the data collected by CAPPa through a community-wide visioning process aligns with the components of form outlined above. The question for CAPPa then becomes, “We know what we want, but how do we get it?” The thesis will then explore the use of the New Urbanism form-based codes as a

⁸² Matthew Carmona et al *Public Places, Urban Spaces: The Dimensions of Urban Design* (London: Architectural Press, 2003), 64.

vehicle for creating a physical form that reflects the expressed community desires for future development.

CHAPTER 3

A BRIEF HISTORY OF PRINCE AVENUE

The history of a place can be very helpful to understanding its current physical form. There are many variables that influence physical growth patterns across the measurement of time. The form of a place can be attributed to human interaction with the built environment. Generally, man has helped to shape the environment he occupies taking into consideration such things as use, function, and aesthetics, but there are a number of things that influence the growth of a city and a city's components, such as streets, that ultimately contribute to the form of the place and street over time. As well, different time periods of history will reflect the development of different types of forms. For example, during colonization of an area, prominent structures were located on high ground. This may have had a practical application, such as to prevent flooding or pooling of water during storms, but it also literally elevated the importance of the structure socially, as one that was meant to be seen, usually from an established vista. Additionally, things such as topography, cultural influences, function, modes of transportation and neighboring adjacencies all contributed to the shaping of the street.

This holds true for the Prince Avenue corridor in Athens, Georgia. One period of the corridor's timeline is characterized by suburban growth with the construction of houses described as being of the finest Victorian character. Transportation advancements later led to further development along the corridor that provided a form that centered on a human scale with respect to size, proportion, use, and accessibility. At a later era in the street's history, a number of homes were demolished, moved on site or relocated to a different site that helped shape the Avenue. Later, further advancements in technology gave people mobility independence with the advent of

the automobile, but at a significant cost to the quality of the form of the street's public realm. The form of the street that had evolved around a human scale was swiftly altered to accommodate the automobile. Fortunately, the changes across time have been well documented in books and newspaper articles. As well, the oral history of Athens has been handed down generationally through storytelling. From these resources, an accurate picture can be gleaned of the street. A careful historical examination of the Prince Avenue corridor, will lead to an understanding of its present physical form.

Humble Beginnings

The development of Athens into a prosperous 18th century agricultural and manufacturing town occurred alongside the charter of the first state university in 1785. The humble beginnings of this college town are not unlike other college towns, developing initially as a clearing in the wilderness to slowly, over time, progress to a sizeable institution well respected as a center of higher education. The initial wilderness is no exaggeration. This area of the Piedmont was the Eastern boundary of the Cherokee Nation until the white settlers expelled them with the Indian Removal Act of 1830. *Nunna dual I sunyi* in Cherokee language or the *Trail of Tears* is what this expulsion of the Native American Indians to Oklahoma territory came to be called. Although the University was chartered in 1785, the first class was not taught until 1801, reportedly while members of the Cherokee tribe looked on. The initial buildings were a few log cabin structures on the North Campus no longer in existence. (Figure 3.1)

The State owned the vast land area now recognized as the downtown central business district all the way out to present day Milledge Avenue. In order to generate revenue to fuel the growth of the University, parcels of land were surveyed and sold off. Initially, the adjacent lots on the North side of Front Street (today Broad Street) across from North Campus were sold, developing into commercial businesses that included two banks. The Trustees of the University

developed a gridded plat, identifying lots for sale. (Figure 3.2) The revenue generated from the sale of the downtown lots was used to construct Old College on North Campus in 1802, modeled after Connecticut Hall at Yale, alma mater of Abraham Baldwin.⁸³ Streets were arranged in a grid arrangement creating the downtown blocks as we know them today. The streets would not be paved for some time, and it was not uncommon for buggy wheels to sink in the occasional mud holes, or have to skirt around tree stumps in the middle of the road. Once the downtown core was substantially developed, the land beyond to Milledge Avenue was identified to be put on the market to keep the revenue streams flowing.

Between 1830 and 1840 the county's population increased by roughly a thousand from 1,434 to 2,500, and in the next decade another 500 settled there. The increased number of persons located in Athens necessitated the expansion of the town's physical limits. The university trustees announced the sale of forty town lots in July 1834 and the sale of additional lots and fractions in September 1839. In December 1843 they voted to sell sixteen more town lots to open up the vacant side of Front Street in the business district...meanwhile, John A. Cobb, one of the principal landowners in the west end of town, took steps to promote development there. In August 1834 he offered for sale eighty lots which lay on both sides of the main road to Jefferson. The community that developed there was called Cobbham.⁸⁴

It is interesting to note that both sides of Prince Avenue were considered a part of Cobbham.

Today, Cobbham has strictly defined boundaries as part of its historic designation. Presently, the district is roughly bounded to the north by Prince Avenue, with the neighborhoods to the south considered part of the Cobbham district. The parcels on the north side of Prince Avenue of any historical significance fall into the Boulevard Historic District.

The commercial intrusions on Prince Avenue interrupt the cohesive image of the residential nature of the street. Thus, there are 'remnant' 19th century residential structures surrounded by 20th century strip commercial development appearing as 'islands' of the Avenue's former glory. This 'interruption' of the district and reallocation of parcels from the Cobbham neighborhood to Boulevard neighborhood perhaps has contributed to the lack of identity to the

⁸³ Medora Perkerson, *White Columns in Georgia*. (Canada:Holt, Rinehart and Winston, 1952), 278

⁸⁴ Ernest Hynds, *Antebellum Athens and Clarke County Georgia*. (Athens:University of Georgia Press, 1974), 32

present day Prince Avenue by reducing its stature as one of Cobbham's premier residential streets to a purely vehicular corridor, the dividing line between neighborhoods.

Prince Avenue

In the beginning, the unimproved road to the Northwest of the downtown was called, the 'way to Atlanta' that would later become Prince Avenue. The 'way to Atlanta' followed Prince Avenue west to Mitchell Bridge Road (presently Oglethorpe Avenue). At this time Prince Avenue did not extend beyond the Rock College site which would later develop into the State Normal School to finally what we know today as the Navy Supply Corps School property. (Figures 3.3) At this important intersection would develop the small commercial center known as Normaltown, named for its proximity to the State Normal School. Although, now famously honored in song lyrics by Athens band, the B-52s, it developed as a small trading post, the last stop for those leaving town heading to Atlanta, or the first opportunity to stop for goods upon entering town from Mitchell Bridge Road. By the turn of the century, the merchants of Normaltown consisted of a post office, drugstore, butcher, shoe shop, a lodge, and seven grocers. (figure 3.4) Today, Normaltown is home to popular restaurants and shops, but suffers from a lack of available parking and the high speeds of traffic on Prince Avenue.

In the 19th century, Prince Avenue area was mostly comprised of farms on large acreages. The early form of the corridor reflects its function. It was the initial route to Atlanta from Athens, but given the proximity to the young University and availability of large tracts of land, the area was used for farming. The first few scatterings of houses, though majestic, were on the fringe of the town limits at the time. The adjacency to downtown and the University, plus the fact that there was vast acreage available for the construction of large antebellum houses and farms, led to the early settlement of this area. (Figure 3.5)

In order to comprehend the existing conditions of Prince Avenue, it is helpful to understand the contextual history of how these early houses – some of which remain today – came into existence. Some of the early land owners who built these houses of splendor at this time include Milledge, Upson, Prince, Cobb, and Camak. House sites were clearings in the forest built on high ground. Although this was forest area and houses sited along ridges or high points, all of the homes faced the road, paralleling the orientation. The homes that survive from this time period in Prince Avenue’s developmental history are important for a variety of reasons. The families that lived in these homes were prominent contributors to local history as well as many having a substantial role in American political history. The houses were built during a time when the South experienced a prolonged, financially prosperous period as a result of successful plantation farming, primarily of cotton. These homes offer us a ‘snapshot’ in time that assists our understanding of how these people lived. Finally, these houses of splendor contribute significantly to the aesthetic character of Prince Avenue today. Their classical lines, scale, proportions, assemblage of indigenous materials, placement, and setback define a context of form that creates a human scale to one’s relationship to the street, thus contributing to a level of comfort, safety, appreciation and understanding.

There may have been glimpses of these homes from the road, as they sat high, but not the clear sightlines we enjoy today. One of the earliest homes was the Camak house which sets back from the Avenue by 370 feet, constructed in 1830, on a four-acre block overlooking Prince Avenue. (Figure 3.6) “...the first white man’s residence, erected beyond the original limits of the town. For eight years – until the Indians were removed west in 1838 – this house technically stood within the borders of the Cherokee Nation.”⁸⁵ Camak played a significant role in bringing the railroad to Athens. For many years, the railroad stopped at Carrs Hill in East Athens. Supplies were offloaded onto wagons and hauled into town across covered bridges. Extending the rail

⁸⁵ Perkerson, 278.

across the Oconee would insure continued growth for Athens as an important city for cotton textile manufacturing. James Camak served as Treasurer for the railroad and ran the Athens branch of the railroad bank.

In subsequent years, the neighborhood grid of Meigs Street was cut through the site with the Prince frontage being developed commercially, but the house remains. The house and grounds have long been recognized for its aesthetic contribution to the community as a place of beauty. Dean Tate wrote in the mid 1970's, "In some way, hopefully, this building and its beautiful surroundings can be saved from crowded commercial development. Athens should make this a priority, a "must" in keeping Athens beautiful."⁸⁶ Today it is home to the offices of a local law firm. The Camak House is one of the few early homes that occur on the south side of Prince Avenue, thereby being vulnerable to the extension of the city grid. Development of the north side of Prince Avenue would not be impeded on by development until a much later date, and so houses constructed during this period on the large lots remain as 'remnants' to this earlier period. Many have been lost to the wrecking ball. We are fortunate to have those that remain, as they assist in telling the story of how Prince Avenue has come to its present form.

Prince Avenue was home to important figures in Georgia history. As Medora Field Perkerson writes in her book, *White Columns in Georgia*, "Prince Avenue is not only one of Georgia's loveliest streets of white columns; it is also a Who's Who of the state's history."⁸⁷ The Cobb House at 698 Pope Street is another example of a house on a hillcrest (elevation 770), contributing to the early form of Prince Avenue. Built in 1835, this was the home of Howell Cobb who would later become a Governor of Georgia, Secretary of the Treasury under President Buchanan, President of the Confederate Convention in 1861, and a General in the Confederate

⁸⁶ William Tate, *Strolls Around Athens*. (Athens: The Observer Press, 1975), 29.

⁸⁷ Perkerson, 285.

Army.⁸⁸ The current Pope Street with an allée of trees either side served as the approach to the house from Prince Avenue. “The Howell Cobb House, built in 1835, stands at the head of Pope Street, one block back from Prince. Originally, Pope Street was the driveway leading to the Cobb House (600’ setback). The grounds then extended all the way to a broad Prince Avenue frontage.”

⁸⁹ “At the time of our stroll, there was a drive from the house on Prince Avenue lined with splendid trees, the house and grounds were in perfect order, and it was the ideal of an elegant Southern home.” ⁹⁰ There were a few Cobb families, all related, so it can be confusing to keep them straight, but they built three significant houses all relating to the Prince Avenue corridor that contributed to the early form of the street. As well, they were instrumental in the fruition of the Lucy Cobb Institute – the popular finishing school for young ladies, and the earliest subdivision, Cobbham Village (1834) is named for the family.

Along the north side of Prince, it was common for houses to occupy the entire block or more, with a broad frontage along the street. Many of these homes began as plantation houses, the lots extending as far north as the railroad tracks, beyond the city limits. Travelling west, the Stephen Upson House at 1022 Prince Avenue, once occupied the entire block between Chase Street and Nacoochee Avenue. Built in 1840, it has been described as “pillard elegance” due to the classic style, scale and proportions of construction.⁹¹ The house remains and operates today as Suntrust Bank. Development has occurred on either side, but with respect to the existing setback (155’) and the vast greenspace and tree canopy to the Avenue. This is an important consideration that does not hold true for the bulk of the residential property that has been redeveloped over the years.

⁸⁸ Athens Area Chamber of Commerce, *Athens of Old*. (Athens: Athens Historical Society, 1966)

⁸⁹ Perkerson, 286

⁹⁰ Sylvanus Morris, *Strolls About Athens*. (Athens: Athens Historical Society, 1969), 24.

⁹¹ Athens Area Chamber of Commerce,

The T.R.R. Cobb House at 194 Prince Avenue was constructed in 1830 on a hillcrest with an elevation of 740. Similar to the Camak house and the Howell Cobb house, it sat a distance off the road (400') with a broad frontage expanse. Thomas Reeds Rootes Cobb authored the Confederate Constitution and was leader of "Cobb's Legion" of the Army of Northern Virginia. He died in the Battle of Fredericksburg during the Civil War.⁹² He significantly altered the house when he had octagonal wings added around 1845. The house was sold to Stone Mountain Park, Georgia in the late 1980's as the Catholic Church came to own the property and needed expansion space. The house was disassembled, loaded onto flatbed trucks and hauled to Atlanta. It was never reconstructed in Atlanta. Some 20 years later, the house was returned to Athens and reassembled in Cobbham not far from its original location. (Figure 3.6) The house is much closer to the road than originally, but creates an interesting backdrop on what was previously a vacant lot. It can be seen from Prince Avenue and now is a house museum with many of the original furnishings from descendants of the Cobb family.

The E.K. Lumpkin house at 973 Prince Avenue remains intact, although now a part of the First Methodist Church. It has been sensitively connected to the church by a rear unobtrusive architectural element that serves as a hallway between the church and house. It sits generously (175') off the Avenue on high ground, elevation 764. It is the only house from this era that was saved by a church. Most often, churches move or demolish existing structures – usually for parking. Built in 1858, the house once occupied the block bounded by Prince Avenue, Prince Place, Cobb Street and Franklin Street. Although the Prince Avenue frontage remains intact, the Cobb Street frontage has been divided into smaller lots where smaller homes have been built. The Prince Avenue frontage at 358' between Prince Place and Franklin Street, make it the most expansive green space on the corridor. This house has special significance as it was home to the first Ladies Garden Club in the United States, organized in 1891.

⁹² IBID.

The Joseph Henry Lumpkin House at 248 Prince Avenue was constructed in 1841. It sits back 75' from Prince Avenue and the lot was originally a fifty acre site.⁹³ "The house, situated at the crest of the hill above Prince Avenue, had a semicircular drive bordered by holly trees....on that occasion literally hundreds of Athenians swarmed over the spacious front lawn that stretched all the way down to Prince Avenue."⁹⁴ It was not unusual for houses to be moved closer to the street, or away from the middle of the lot, towards a corner by subsequent owners as parcels of the property were sold off for development. The Lumpkin house was moved closer to the street when the Child's family had ownership.⁹⁵ Joseph Henry Lumpkin would become the first Chief Justice of the Supreme Court of Georgia.⁹⁶ Today, the house is used for offices for the Institute for Continuing Legal Education.

The Taylor Grady House at 634 Prince Avenue was built in 1845 sits at elevation 754, with grounds that step back from the Avenue by 125'. The house remains in good condition, having been maintained through the years, with substantial restoration occurring at critical junctures to prevent further decline of the structure. Built by General Robert Taylor, the house's 13 columns are representative of the original 13 colonies.⁹⁷ Much later, namesake for the UGA Henry Grady School of Journalism lived in the house. Grady was editor of the Atlanta Constitution in the latter half of the 19th century. The Junior League of Athens presently owns the house. It is a favorite wedding location for the Athens bridal scene.

The President's House or Hill House at 570 Prince Avenue dates back to just prior to the Civil War in 1856. (Figure 3.8) It rises from the elevation of 750 with a 125' setback comprised of formal boxwood gardens. It is the only house on Prince Avenue where the lot remains intact in the form of a nine acre garden. The rear lot reaches back to Dubose Avenue. The house and

⁹³ Athens Area Chamber of Commerce,

⁹⁴ Tate, 193

⁹⁵ IBID,29

⁹⁶ Perkerson, 285

⁹⁷ Athens Area Chamber of Commerce

garden have been identified as “museum quality” examples of Greek Revival Architecture.

Originally, the house was owned by Benjamin Harvey Hill who was in the House and Senate. Hill is credited with being persuasive in getting Federal troops out of Georgia following the war, which signaled the end of the Reconstruction Era.⁹⁸ The home has been owned by the university since 1949. The current president uses the house for formal occasions but does not reside there.

During the post civil war years, Georgia was occupied by Federal troops. Athens survived unscathed from the war in terms of physical harm to the town’s structures; however, there was a tremendous loss of life, leaving behind a number of widows and orphans. The way of life the South knew and enjoyed had been decimated. It would take the Reconstruction years for the South to establish a new way of life, economy and social structure. Though Athens remained intact, there would be no more plantation houses built on Prince Avenue. Slave labor that had built and maintained these houses for decades for all practical purposes ended with the war and emancipation act that freed the slaves. They remain as a snapshot in time of a period that would not happen again, as author Margaret Mitchell put it; they were, ‘*Gone With the Wind*’.

Streetcar Suburbs-

The importance of the railroad cannot be underestimated in considering the early growth and form of the city. As the railroad came to Athens and continued to expand, it brought goods, services and people from other places who would eventually settle here. Increases in population led to the need for more social services and civic amenities.

Railroad facilities brought in new citizens with a demand for houses and lots. Nothing brings about such change in a town as a railroad. Not only the character and volume of business, but the physical features of a railroad town undergo a complete change. Years ago...our railroad shyly refused to come nearer than the top of the hill across the river. Then we had an extensive wagon trade with the up country.the old schooner wagon was a familiar site on the streets. The building of the North eastern road converted a beautiful grove alive with birds and squirrels, where a limpid brook hurried along by mossy banks to the quiet river, into a bustling scene of

⁹⁸ IBID

activity, noisy with the clatter of wagons, the whirl of machinery and the passing of trains. The Macon and Covington then invaded the sanctity of the City of the dead, raised an unsightly trestle over beautiful monuments, cut an enormous gash through the hills and came into the very bosom of the city. The Georgia Railroad cut down trees, removes old land marks, blasts away a hillside and run its trains across the public street. The Georgia Carolina & Northern then with a whiff comes in and goes out touching lightly on the edge of town, crossing the river on a high bridge and leaving behind a deep rock cut and a smell of gun powder.⁹⁹

Over a century later Athenians would be lamenting the loss of the railroad trestle Hull described, which has come to be called the Mumar Trestle from it being featured on a record album cover by the local band REM.

From early 1880 through the turn of the century, the Cobbham district grew substantially. Larger lots were subdivided and some of the finest Victorian cottages were built on either side of Prince Avenue, in and among the existing mansions built before the war.¹⁰⁰ By this time, additional buildings had been added to the State Normal School campus and Prince Avenue was extended to the west and called Jefferson Road or Prince Avenue Extension. Although plantation houses belonged to the previous generation, fine homes were still being built on Prince Avenue. The Michael Brothers' houses at 596 and 598 Prince Avenue were unique in that they were identical neoclassical houses connected by a Doric-columned portico. (Figure 3.9) The houses were torn down in the late 1960s. William Tate lamented the loss of the twin houses in his *Strolls Around Athens*: "Two famous Southern houses are gone: the Michael homes between the Benjamin Hill house and Grady Avenue, twin houses with columns, identical, with a walkway joining them. If preserved, they would have given Athens a unique feature – four magnificent, columned Southern mansions in a row, unmatched anywhere as Greek Revival masterpieces. Prince Avenue, Athens, Georgia, and the South are poorer forever for our lack of vision – a loss as final as carelessly burning a valuable manuscript to light a fire."¹⁰¹

⁹⁹ Augustus L. Hull, *Annals of Athens, Georgia, 1801-1901* (Athens: Banner Job Office, 1906), 351.

¹⁰⁰ Phiniza Spalding, *Getting It All Together In Cobbham* (Athens: Georgia Historical Quarterly, 1979), 90-99.

¹⁰¹ Tate, 30.

In 1885 a gentleman from Texas named Mr. Snodgrass came to town. His enterprise was constructing street railroads in towns that were without. His train cars relied on mule power, and he had three named cars: Lucy Cobb, Pocahontas, and No. 2.¹⁰² Mule power was not dependable in the mud and as the streets were still not paved, this was a common problem. “These little mules were shipped in car load lots and were as wild as rabbits and much more active. They had to be broken in, and during this process the schedule was smashed into fragments and the passenger never knew where to find the mule. If they had rope enough they were as likely to be behind the car as in front, or for that matter, inside.”¹⁰³

In 1890, a group of businessmen formed the Athens Park and Improvement Company. They purchased the streetcars along with a substantial amount of land totaling some 300 acres to create the Boulevard, Athens first streetcar subdivision.¹⁰⁴ Parcels of the properties to the rear of the mansions on the north side of Prince Avenue were purchased to create home lots. A significant amenity was the 21 acre park complete with lake, trails and merry go round off the aptly named Park Avenue. (Figure 3.10) Land to the north of the development was reserved for commercial industry. Experiments with electric power had proved successful enough to electrify the lines in 1910, thereby ending the calamity of donkeys, mules and mud. The streetcar barn located on Boulevard was the precursor to Georgia Power, as the company that provided electricity for the streetcars also provided early electric service to Athens residents. A future subsidiary of the Georgia Power Company, the business underwent a few name changes, beginning with the Classic City Street Railway, when the cars were powered by livestock, to the Athens Railway Company in 1889, to the Athens Electric Railway Company, to finally be called

¹⁰² Hull, 388.

¹⁰³ Hull, 389

¹⁰⁴ James K. Reap, *Athens – A Pictorial History* (Norfolk: The Donning Company, 1982), 77.

the Athens Railway and Electric Company to distinguish its service as a utility provider to Athens' residents.¹⁰⁵ In his *Reminiscences of Athens*, Mell chronicles the streetcar transitions:

Passengers were brought into town from the Georgia Railroad Depot, which was situated at the top of Oconee Street hill in East Athens, by a bus drawn by four horses, we called it the omnibus. Such passengers were transported to all points in town at a nominal cost. Later on, 'hacks' were substituted for the omnibus. Streetcars pulled by Texas mules were added to the transportation system at a later date. These cars would accommodate eight or ten passengers. The mules were about the size of donkeys and were stubborn customers. I have often seen them trying to walk the rails in front of St. Mary's Hospital as they attempted to get out of the mud. These cars were succeeded by electric cars. It was quite a fad to 'ride around the Boulevard' on open cars in the summers. Motors in the early cars had a tendency to magnetize metals, and boys amused themselves with bunches of keys which 'acted crazy' on the floors over the motors. This tendency of the motors was rather promptly remedied, however.¹⁰⁶

It appears that the streetcars not only provided an important functional need in transporting people within the community, but as social entertainment for young college students' antics. In addition to the 'crazy keys', Dean Tate recalls in his *Strolls Around Athens*: "The cars were electric; the motorman clanged for attention. For a quarter, students would buy six bars of Octagon soap and grease the track up Lumpkin hill. They would then stand back to watch the spinning wheels, listen to the cussing motorman, and have the excitement of fire engines coming to wash away that vile, yellow, slippery soap."¹⁰⁷ Streetcar service extended to Hill Street, Prince Avenue, Milledge Avenue, and Boulevard. The Athens Park and Improvement Company's neighborhood is named for the main street of Boulevard running east west through the center of the development parallel to Prince Avenue. Later, Grady, Dubose, and Virginia Avenue would be cut in to the Boulevard, Grady from Prince at the site of the Taylor Grady House with Virginia running from Boulevard to Dubose, the latter being parallel to Prince. This development further encroached on the Prince Avenue mansion parcels, creating the beginning forms to the recognizable patterns we see today.

¹⁰⁵ Hull, 390.

¹⁰⁶ Edward Baker Mell, *Reminiscences of Athens, Georgia, About 1889 to 1890* (Athens:N.p.,1964),17.

¹⁰⁷ Tate, 13.

Automobiles -

The streetcar and the Boulevard development designed around optimizing them as the most efficient mode of transportation flourished through the turn of the century. At this time, Prince Avenue was at the height of its glory. The tree lined street was filled on the north and south by residential structures that generally followed a homogenous setback pattern as evidenced on turn of the century Sanborn Fire Insurance maps. (Figure 3.11) Transitions in the setback placement of the lots were made up by landscape in the form of manicured lawns, shrubs, ornamental flowering and canopy trees. The streetcars shared the street with horse and buggy, and once off the streetcar, walking was still the predominate form of mobility to specific destinations. The streetcars top speed of 20 mph. made crossing the street much safer than navigating a crossing through the top speeds of automobiles today. As well, the streetcar system encouraged density of development within the limits of its destination loop as opposed to the sprawl development witnessed over the last several decades. The streetcar era links the pre-industrial city to the post war automobile dependent society of today. The streetcar as the most efficient mode of transportation peaked around 1920 and steadily declined afterwards. This occurred in Athens, but was also the trend in Atlanta, Macon, and Rome where the company had streetcar systems, as well as across the United States. In *Trolley Car Treasury*, Frank Rowsome writes:

The mileage of electrified track had hit its peak back in 1918, and had steadily dwindled each year since. Somewhat like a moribund whale, the trolley industry was so large that it kept growing even after it had begun to die. Passenger riding kept inching slowly upward until 1923, when the total hit 14 billion rides annually. Then riding too, began to slope steeply downward...it was painfully clear during the 1920s that trolleys were coasting downhill fast.¹⁰⁸

In the spring of 1930, electric streetcar service in Athens ended. It would be replaced for three years by buses purchased and operated by Georgia Power, but the popularity and independence of the automobile had caught on, and it would be nearly 50 years before public

¹⁰⁸ Frank Rowsome, Jr. and Stephen D. Maquire, Technical Editor, *Trolley Car Treasury: A Century of American Streetcars – Horsecars, Cable Cars, Interurbans, and Trolleys* (New York:Bonanza Books, 1956), 176.

transit would return to Athens.¹⁰⁹ The first automobile is said to have appeared on the streets of Athens in 1899.¹¹⁰ The Ford Model T began production at the turn of the century and by the mid 1920's, at a rate of 9,000 cars daily, there were plenty to go around.¹¹¹ (Jackson, 161). As well, the industrial revolution brought advancements that contributed to the efficiency of the automobile, and citizens that had done without in an effort to reserve all things necessary to benefit the country through two World Wars were ready to enjoy the appurtenances identified as conveniences of modern living. The streetcar as a means of public transportation had a certain cachet associated with it that was socially acceptable and as much a "pleasure" as it was a necessity. Once cars came on the scene and buses replaced streetcars as the mode of public transport, the favorable association was gone, and people that rode the bus were merely identified as those that were without and could not afford automobiles. Automobiles led areas in Athens beyond the streetcar routes to develop. "...Bloomfield Street and East Athens – and new areas were opened for development in Five Points and the area west of Milledge Avenue. This growth was at first spurred by convenient streetcar service and later encouraged by the easy access the automobile made possible."¹¹² "Perhaps the automobile, which I remember first about the time of World War I, has changed American life more than any other invention; and no one can interpret changes in the last fifty years without evaluating this cheap, efficient, and common symbol of mobility."¹¹³

By the 1930's, Cobbham was beginning to show signs of wear. (Figure 3.12) Fraternities or sororities occupied some of the larger mansions as the families moved, sold or died off. Although not realized at the time, this had a positive effect on the survival of the homes and much of the present state of Milledge Avenue surviving intact has been credited as an unexpected

¹⁰⁹ Retrieved from *www.athens transit.com* on March 14, 2010

¹¹⁰ Reap, 104.

¹¹¹ Jackson, 161.

¹¹² Reap, 97.

¹¹³ Tate, 1.

positive end result of the Greek system's existence and occupation of these structures. A necessity of the automobile, gas stations sprung up first along the edges of the residential neighborhood – for instance, early stations appear at the Oglethorpe/Prince Avenue corner to the west and at the Meigs Street/Prince Avenue corner to the east. Slowly, they would expand to occupy any available corner real estate parcel. By the 1950's, real estate speculators began buying up available lots along the corridor for redevelopment. "Prince, one of the south's most handsome residential streets, was opened to fast food, gas station and other strip development and suffered body blows from which it can never recover. It appeared that the inner core of Cobbham – now separated realistically from the northern side of Prince by six roaring traffic lanes – was ticketed for ultimate destruction."¹¹⁴ In addition to the influx of gas stations and fast food establishments, the Athens General Hospital continued to grow exponentially. By the mid 1970s, it had successfully eradicated an entire block of residential housing in the heart of Cobbham, forever changing the form of Prince Avenue. (Figure 3.13)

Churches were not immune from taking advantage of development opportunities either – the Prince Avenue Baptist Church was successful in tearing down residential structures to build an addition on top of the northern end of Church Street and Prince, thus altering the neighborhood and the street grid pattern to Prince Avenue. Where there was not enough real estate to expand, churches would move on to build in another location, where they could ensure ample parking for their congregation who were all driving to church now. "The Central Presbyterian Church is gone, moved into a new building on the Alps Road. A problem with many downtown churches is no parking, a by-product and a "negative fringe benefit" of mobility and the automobile"¹¹⁵ As well, the aforementioned Prince Avenue Baptist Church recently moved to a new location two years ago, citing that they had outgrown their facility and lack of available parking. The former church is now occupied by Piedmont College.

¹¹⁴ Spalding, 90-99.

¹¹⁵ Tate, 32.

Further lamenting the loss of residential character to Prince Avenue, Dean Tate writes: “Much of Prince became residences of some good people (for instance, the O’Callahans, the Meadows, the Henleys, the Cranes, the Newtons, the Bryans, the Pattersons, the Parkers, the Orrs, the Earnests, the Summerlins, to mention a few), and of course a simple listing of their names wouldn’t be interesting. Prince should have remained zoned for residences from the firehouse to Athens General... Milledge was a street of homes in 1920, now weakened by mixed commercial development.”¹¹⁶ In subsequent years, rogue development on Prince Avenue would eclipse similar development of Milledge Avenue, Athens other grand residential street. Tate realized the fatal impact the automobile would have on the urban form well before it became the mainstream conclusion. “One Sunday afternoon I walked with Paul Richards down the west banks of the Oconee a long way, on a well-walked path marked by fishermen; and on another day I walked the railroad tracks to Watkinsville, too – before walking was replaced by autos, when our legs weren’t connected to accelerators”¹¹⁷

¹¹⁶ Tate, 33,42.

¹¹⁷ IBID, 53.

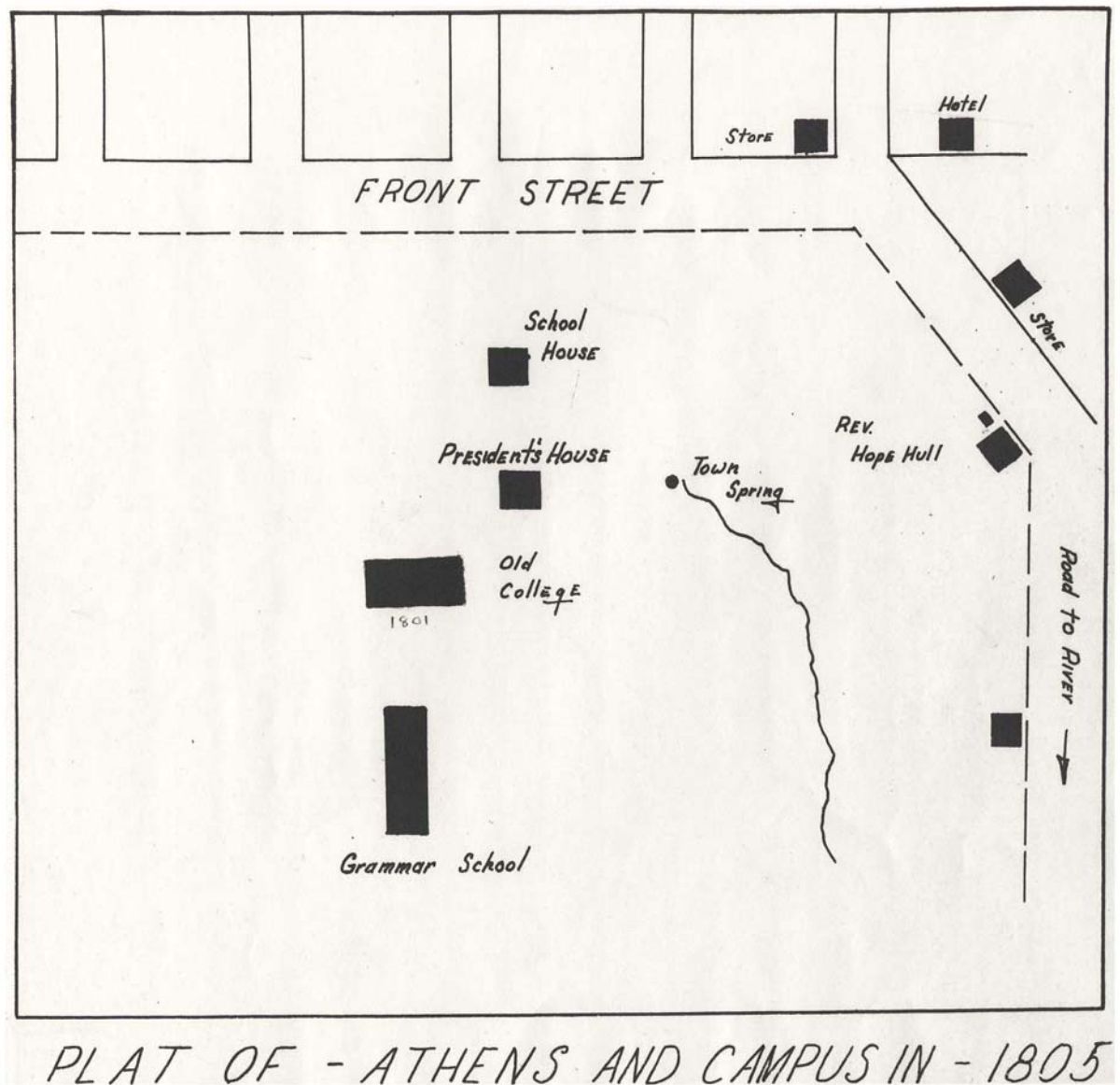


Figure 3.1: *Plat of Athens and Campus in 1805*
Courtesy of Hargrett Rare Book & Manuscript Library / University of Georgia Libraries

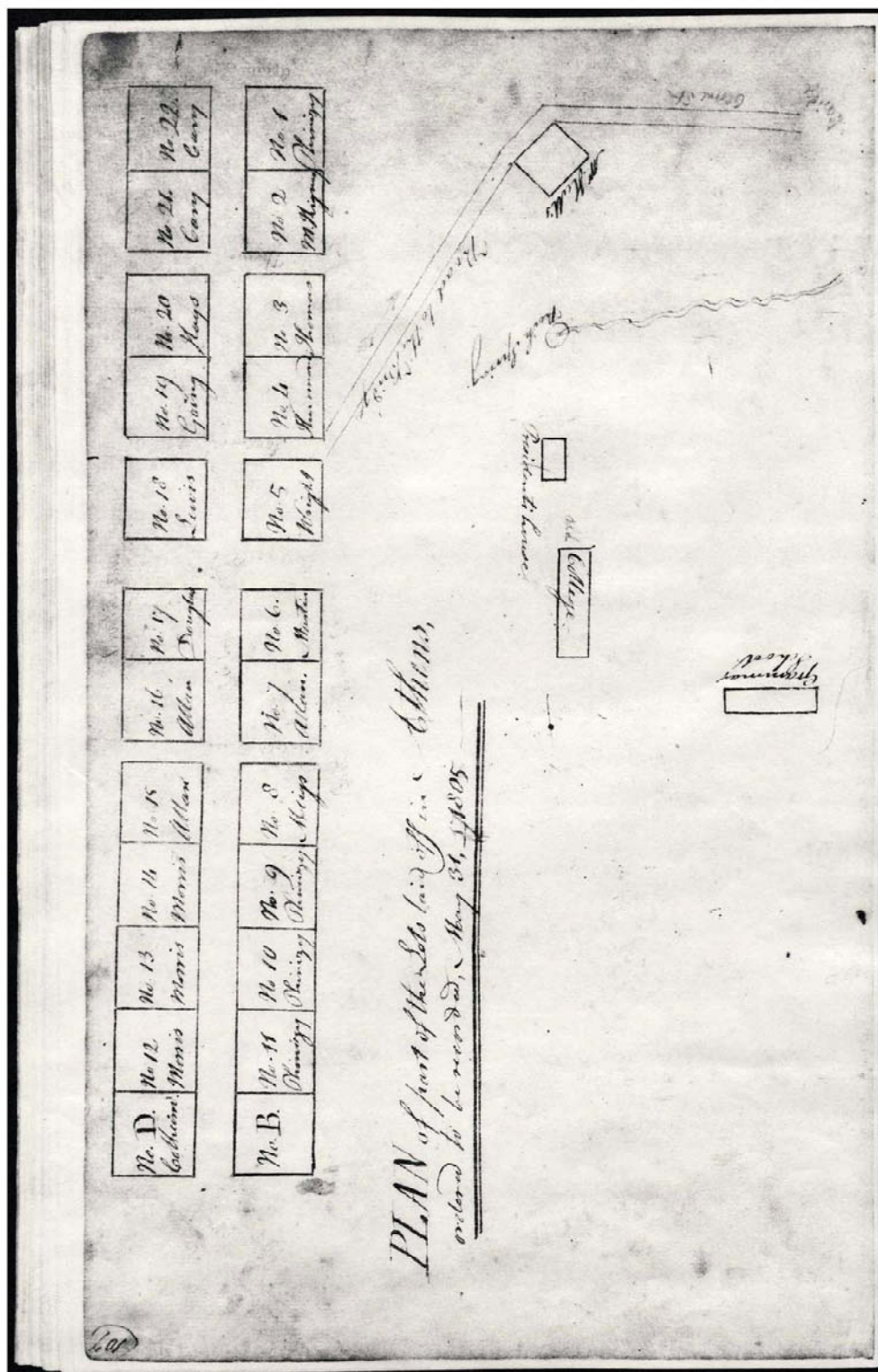


Figure 3.2: *Plan of Athens & Campus, 1805*
 Courtesy of Hargrett Rare Book & Manuscript Library / University of Georgia Libraries

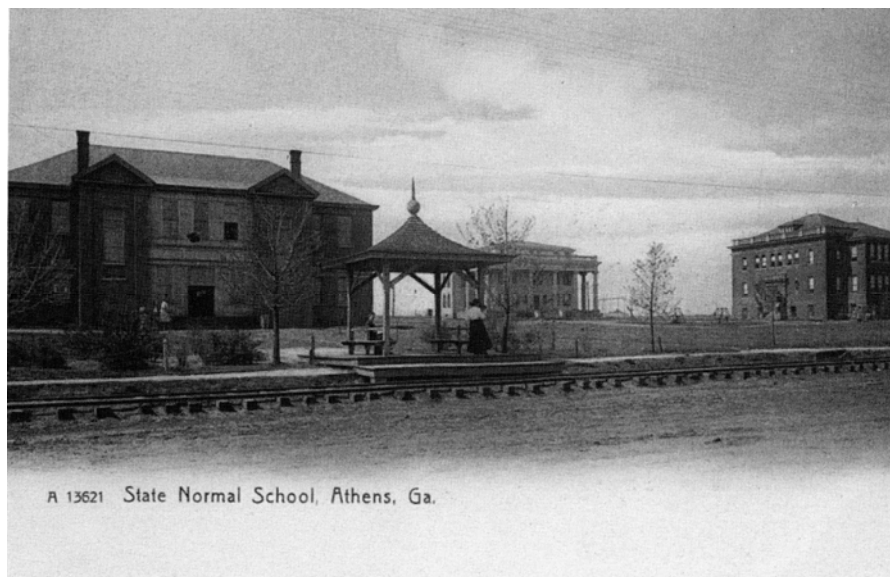


Figure 3.3: *State Normal School Campus*, circa 1900
Courtesy of Hargrett Rare Book & Manuscript Library / University of Georgia Libraries
& Gary L. Doster, *From Abbeville to Zebulon, Early Postcard Views of Georgia*
The University of Georgia Press. 1991

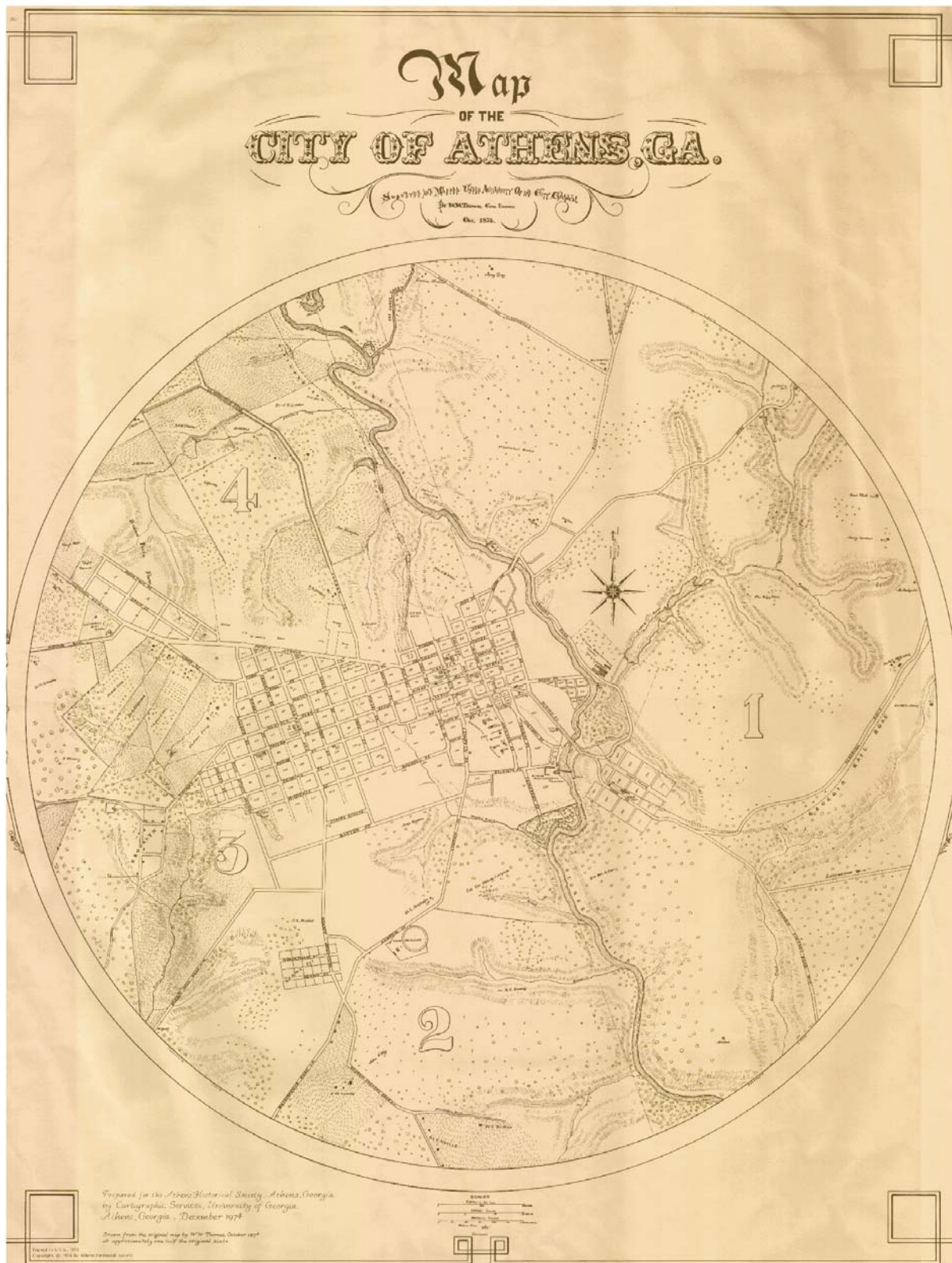


Figure 3.5: *Map of Athens, October 1874*
 Drawn By: W.W. Thomas, Civil Engineer
 Courtesy of Hargrett Rare Book & Manuscript Library / University of Georgia Libraries



Figure 3.6: *Camak House*, Athens, Georgia
Courtesy of Hargrett Rare Book & Manuscript Library / University of Georgia Libraries



Figure 3.7: *T. R. R. Cobb House*, Athens, Georgia
Athens Clarke Heritage Foundation



Figure 3.8: *Hill House / UGA President's House*, Athens, Georgia
 Courtesy of Hargrett Rare Book & Manuscript Library / University of Georgia Libraries
 Bottom photograph: Courtesy of The College of Environment & Design, The University of Georgia

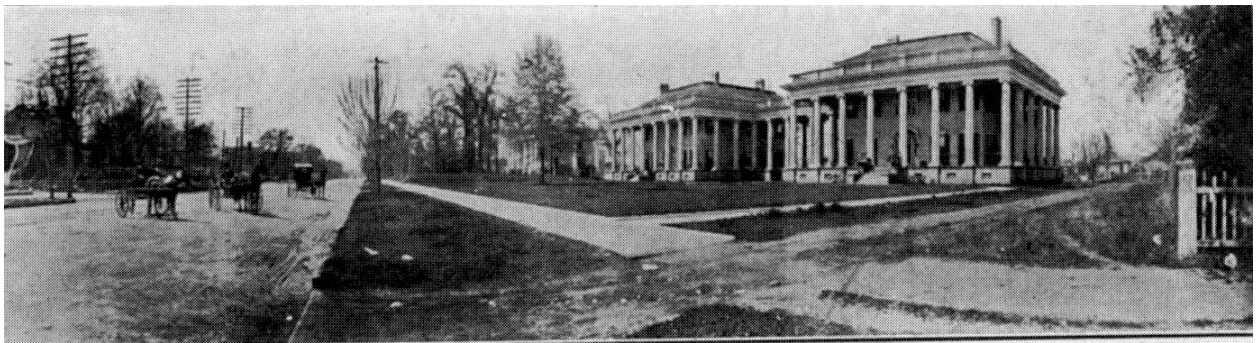


Figure 3.9: *Michael Brothers Homes, Views of Prince Avenue*, circa 1920, 1960
 Courtesy of Hargrett Rare Book & Manuscript Library / University of Georgia Libraries



Figure 3.10: *Map of the Athens Park and Improvement Company*
Published by G. Wm. Baist, circa 1890
Courtesy of Hargrett Rare Book & Manuscript Library / University of Georgia Libraries



Figure 3.11: *Prince Avenue & Environs*
Sanborn Map Company Fire Insurance Map – Athens, Georgia, December 1918.
Courtesy of Map Room, University of Georgia Libraries

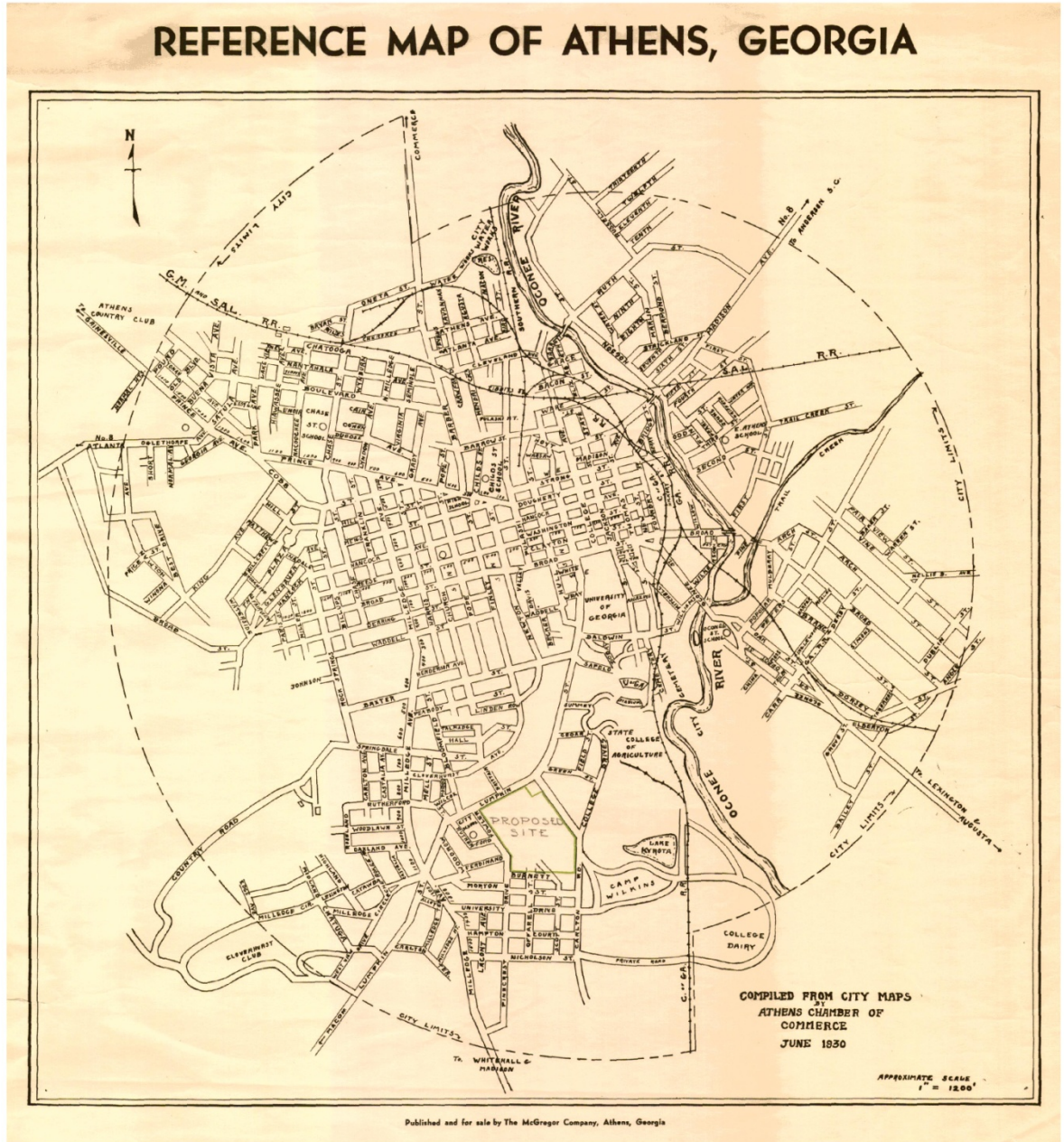


Figure 3.12: *Reference Map of Athens, Georgia*
Published by The McGregor Company, Athens, Georgia, circa June 1930
Courtesy of Hargrett Rare Book & Manuscript Library / University of Georgia Libraries



Figure 3.13: *The Changing Face of Prince Avenue*
 Courtesy of Athens Clarke County Planning Department
 The College of Environment and Design, The University of Georgia, and
 The Hargrett Rare Book and Manuscript Library / University of Georgia Libraries

CHAPTER 4

CAPPA

The cohesive residential character of Prince Avenue continued to erode through the decades following the Second World War. The automobile had allowed for suburban housing beyond the city limits and the vast numbers of veterans returning from service were eager to take residence in these new (sprawl) developments. Service stations, supermarkets, and convenience stores popped up sporadically on former residential lots along Prince Avenue. Prior to 1961, there was no official zoning in the city of Athens. It had appeared unnecessary until that time. Early zoning maps for Athens identify broad categories of land use. Most of Prince Avenue became zoned as B-1, which at that time designated local business. Other categories included B-2 for Wholesale Business, B-3 for the Central Business District, and B-4 as a Highway Service Business. These maps did not account for irregular lot patterns or topography. They relied on a referenced set back from the centerline of the road. In this instance, the set back was denoted by a solid parallel line drawn 250' off the centerline of Prince Avenue to the north and south. This allowed for the several gas station sites as well as the supermarket buildings and strip commercial developments that remain today to proliferate along the corridor. A general sense of apathy for the Cobbham and Boulevard neighborhoods developed throughout the 1960s and 70's. People were moving into newer, larger and perceived better homes in neighborhoods farther out from the city grid in suburbia.

In the late 1970's a sort of renaissance of interest in Cobbham, Boulevard and the Prince Avenue corridor began when people interested in saving what was left of the neighborhood districts moved back into the older homes with the intent of re-colonizing the in-town neighborhoods for single family use.

Much of the larger homes that had been divided into apartment units were thoughtfully restored to their former glory. Residents promoted the advantages of living in an in-town neighborhood, formed residential groups with the goals of preservation, advocating bicycle and pedestrian accessibility, safety and community involvement. As local resident Milton Leathers stated, “I told my parents we were moving into the old house on Hill Street. Mother said, son, why do you want to move back to Cobbham? We’ve spent the last thirty years trying to get out.”¹¹⁸ Slowly over the next two decades, houses became owner-occupied, street by street, with Meigs Street being one of the last to convert.

Following the residential revival, neighborhood-oriented commercial interest grew on the area’s fringes with the adaptive reuse conversion of a Salvation Army Thrift Store to a locally owned bakery and the Coca Cola Bottling Recap Plant as mixed-use, with residential above commercial businesses. The Normaltown commercial area also saw an influx of new business types as buildings changed hands and some retirement of the older generation. Lulu’s Café, next door to Normal Hardware, though short-lived, initiated the turn toward restaurant establishments in Normaltown – culminating in Marti’s at Midday and the Aqua Linda restaurant that are popular today. The early gas stations cornered on the edges of the residential districts have been adaptively reused as florists, bike shops, insurance offices, bakeries, a Pizza Hut and the Go Bar, now a popular townie nightspot.

Similar to the commercial revival along Prince Avenue, the medical industry sustained tremendous growth. The Athens General Hospital became Athens Regional, one of the fastest growing healthcare providers in the state. The Regional healthcare provider’s expanding facilities along Prince Avenue and within its neighborhoods have contributed to community interest in planning along the corridor. Four of the neighborhood districts rallied against the uncontrolled growth of the hospital ‘campus’ at the surrounding neighborhood’s expense in the late 90s. A master plan evolved out of the participatory process that struck a compromise for the various interests. The Prince Avenue corridor was identified as a logical place for hospital expansion. Feeling the pressure from neighborhoods to the east,

¹¹⁸ M. Leathers interview, March, 2010.

west and south, the hospital began accumulating parcels to the north along Prince that serve as place holders for future expansion. As the medical establishment looked toward Prince Avenue for its future, the attention of the community also shifted to the corridor. Having been successful at brokering the hospital master plan process, the neighborhood districts took an active interest in visualizing the future physical form of Prince Avenue, and began to consider what kind of growth would best benefit the surrounding neighborhoods, while enhancing the pedestrian experience.

Background

The first proposal came in 2002, when an Atlanta-based developer proposed constructing a four-story office building with structured parking to the rear. The building would occupy 74,000 square feet, and have nearly a zero lot line setback from Prince Avenue. The building illustrative depicted a structure that did not contribute to the pedestrian realm and was imposing on the Avenue. (Figure 4.1) The zero lot set back left no room for trees or landscape, being set directly back of sidewalk. Additionally, one of the last low income apartment buildings in town was demolished to make room for the proposed building. The plan's approval was contingent upon the Athens-Clarke County Mayor and Commission agreeing to rezone two residential lots to commercial use, and approve a Planned Development zoning designation that would permit substantial waivers from the size limitations of the neighborhood commercial zoning. The proposal went before the Mayor and Commission but was withdrawn from consideration when the developer realized he had insufficient votes for an approval.¹¹⁹ At numerous preceding public hearings, there was tremendous public outcry against the proposed building design. People raised concerns over the scale and proportion of the building as well as its incompatibility with the Future Land Use Plan of 2000. People voiced opposition to the idea that the building, as proposed, in no way related to the character of the existing buildings along Prince Avenue. There was also grave concern over the adjacent Chase Street School and perceived student safety associated with the large parking structure dependent upon Nachoochee Avenue for access. Modest Architectural and site plan changes were made to the plan, but

¹¹⁹ Information gleaned from a conversation with Athens Clarke County Staff Planner, February, 2010

area residents were still not satisfied. (Figure 4.2) It was not that they were against development at all costs, but against what the vast majority perceived as poor design, inappropriate scale, and non-neighborhood oriented uses. Residents wanted a design that interfaced with the existing character of Prince Avenue. Many people suggested some kind of mixed-use facility that would have pedestrian-related activity at the street level, with perhaps a residential component, retail, dining or grocery store with office space above. People were interested in the development contributing to the public realm of Prince Avenue and providing better transition to the adjacent residential realm.

CAPPA

The Atlanta-based developer walked away from the deal. At that time, the local realtor involved with the failed attempts agreed to participate in a larger-scale corridor visioning process. Neighborhood leaders realized the project's withdrawal was only a temporary stay and they set to work to develop a proactive vision for future development on the corridor with a series of exploratory meetings.¹²⁰ From these initial meetings, the idea of having a community-wide design charrette germinated. Neighborhood groups partnered with planning professionals from the UGA School of Environmental Design, and thus the Community Approach to Planning Prince Avenue (CAPPA) evolved. The charrette process focused exclusively around the topic of "How would you like to see the future of Prince Avenue develop?" A concerted effort to include as many people as possible was made and the numbers topped out at 200 people who were directly involved with the charrette process. A questionnaire survey was developed and out of 600 people to respond to what they would like to see for the future of Prince Avenue, the overriding majority stressed the importance of giving pedestrians priority over automobiles. The corridor should be walkable. It should have a nice tree canopy to shade the sidewalks. There should be benches for seating. There should be safe crosswalks and bicycle lanes. Where possible, the paved center street medians should be demolished and replaced with landscape. Places loved should be preserved. A grocery store within walking distance to from home would be nice. Something should be done about the amount

¹²⁰ IBID.

of traffic and the high speeds that make crossing the street unsafe. There should be adequate lighting and street furnishings such as drinking fountains. The history of Prince should somehow be incorporated into the design. Prince should be celebrated as one of the major gateways into the city. The overhead utility lines should be buried so that canopy trees can be planted in their place. Create a distinctive ‘sense of place’ along Prince by treating it more as a neighborhood than thoroughfare. Creative solutions to parking should be designed for functionality, aesthetics and pedestrian safety.

The charrette centered on five areas of interest as narrowed down from the responses to the questionnaire. The five broad categories included Landscape, Historic Resources, Planning, Urban Design, and Solutions to Traffic.¹²¹

Landscape

The many respondents recognized the importance of vegetation along the corridor. Generally, the areas of Prince Avenue that people liked or would like to see more of were those areas with lush landscapes. Nearly all of the early mansions that remain have green lawns dotted with old pecan or oak trees that provide ample overhead structure and canopy. This was identified as a positive attribute and one that should be duplicated elsewhere, when possible. Respondents also liked the existing dogwood planting along Prince and saw the importance to maintain this tradition by supplementing with new trees where needed. The general lack of mature canopy trees was something that concerned respondents. They thought it was necessary and should be incorporated as part of the future of Prince Avenue. The theme, ‘Bury Utilities – Raise a Forest’ became a mantra of the charrette group focusing on landscape solutions. Telephone and electric power line poles and the wires strung between them were identified as the factor limiting the growth of a mature tree canopy to shade the sidewalks and improve the aesthetic character of the area. The idea that, in some places, the center turn lanes could be omitted and in their place a raised median planting could create ‘safe havens’ for pedestrians crossing the street was another issue the

¹²¹ 2004 CAPPA Presentation accessed from <http://www.historicboulevard.org/cappa.htm> on March 15, 2010

landscape team added to the presentation. Realizing the importance of neighborhood greenspaces, a suggestion was developed around a greenspace and neighborhood park network that would provide connectivity along the corridor and its environs terminating at the Bishop Park southwest of the Prince Avenue corridor. People had heard that there used to be a park off Park Avenue, suggesting it might be appropriate to reinstate such a green space. Lastly, where appropriate, the protection of landscape was contributed to the charette by way of suggesting a tree ordinance that would provide incentives for compliance and penalties for non-compliance, while protecting trees from unwarranted removal for private gains.¹²²

Historic Resources

Much of the history of Prince Avenue was unearthed and shared with the charette design team. It astonished many to be made aware of the Avenue's history as one of the premier residential streets in the South with a rich history of residents, many as has been pointed out who were involved so prominently in the history of the state. Old photographs were incorporated into the charette presentation to inspire people to what the future of the corridor could be again in terms of beauty, character and aesthetics. A thorough inventory was compiled with suggestions to preserve the old and the more recent past. The eclectic nature of Normaltown as evidenced by the quirky building facades was cited as something special that should be encouraged to remain. The large church owned acreages were recognized as significant areas, and the importance of maintaining amiable relationships with these powerful property owners that have a substantial presence on the street is necessary as they contribute in a positive way to the overall appearance and charm and character of the Avenue. As a method of protection, it was also suggested to give a local historic designation to some unique older structures that sit on parcels potential speculative developers might see as more profitable developed differently. The team divided the Avenue into five different character areas that reflect their individual distinct physical appearance by the materials and style of architecture that comprise them. These included the Bottleworks Area, Central Prince (the older

¹²² IBID.

mansions), Normaltown, Navy School, and West Prince. The team stated that the different areas of Prince required different solutions, and that new infill buildings should take their cue from the existing defining urban elements of the area. For instance, Central Prince is defined by wide setbacks and lush landscaping. Normaltown was described as having a small town character. West Prince is comprised mostly of smaller later era residential houses; thus rehabilitation and reuse was stressed for this area. The Bottleworks area is characterized by infill development sensitive to surrounding contextual identity. The Navy School acreage has a campus setting and should be maintained as such.¹²³

The Historic Resources charette team's component stressed that new development should be respectful of existing building setback placement on the lots. It was suggested that neighborhood involvement in the planning process could be facilitated through Neighborhood Planning Units. Finally, the rich cultural heritage of the corridor could be celebrated and shared through a suggested project called *footPrince*, where prominent people or sites in history could be featured on signage dotted along the Avenue. From this, a self guided walking tour brochure would highlight the historical aspects of the street. Participation could be garnered with an annual street festival that sponsored an 'open doors day' to allow the public to see inside the significant structures in order to gain a better understanding and appreciation for the rich cultural heritage of Prince Avenue.¹²⁴

Planning

The CAPPA charette planning group's effort focused on four aspects: High Intensity Activity Centers, Connectivity Between Uses, Parking Solutions, and Green / Gathering Spaces. The High Intensity Activity Centers was a thought that focused on containing the sprawl aspect of potential hospital growth. It identified contiguous land near the Athens Loop 10 that would be suitable for clustering development. New construction in this location was favored for this use over demolishing or trying to retrofit an existing building that could be better adapted to a different use. In addition, the adjacency to

¹²³ IBID

¹²⁴ IBID

the Athens Loop 10 and adjacent Highway 316 appeared advantageous for the hospital. Another alternative in developing the High Intensity Activity Centers was the suggestion by the team to explore the use of the Transfer of Development Rights (TDR). For instance, if a land parcel off the Athens Loop 10 and Prince Avenue were identified as a suitable area to maximize development, then one of the smaller, historically significant lots in the middle of the corridor could ‘transfer’ its development rights to the other parcel, thereby maximizing development in the preferred location, while preserving the historically significant in another. This concept was particularly applicable to transferable ‘air rights’ of developmental square footages for multi-storey buildings where the interest is preserving a single story structure.¹²⁵

The Planning team looked for creative solutions to parking that would enhance the street aesthetics and safety through the use of vegetated tree islands along on-street parallel parking and median tree islands connected by raised crosswalks. Another creative alternative was to promote the use of shared parking among groups of businesses to discourage multiple curb cuts and surface lots fronting Prince Avenue. Structured parking was recommended where topography allowed a portion of the deck to occur below grade. Green roofed structures were suggested as overlooks where buildings adjacent to parking structures transitioned to the scale of existing buildings. Finally, green spaces and gathering spaces were suggested as important to maintain if currently in existence, or to take form at locations that would allow for such with minimal intervention. Examples of green or gathering spaces included making use of the underutilized lawn expanses of the older mansions, while another was to close off the side street at the Grit restaurant to allow for additional outdoor seating.

Urban Design

The urban design component of the CAPPA charette addressed broad based design concepts that would require more in depth future study. Through broad brush strokes, the group presented public

¹²⁵ IBID

features that contribute to the notion of ‘sense of place’ to establish corridor identity such as public art displays, creatively designed bus stops, and markers at neighborhood gateway entrances. The group reiterated the clustering concept of future medical buildings to limit sprawl, with all infill commercial comprised of mixed use construction, thus allowing residential above, with retail on the ground floor of a building. The team divided the corridor into districts. These individual districts were the downtown district, the Normaltown district, and the Sunset district. The interface linkages connecting the districts were identified as green space corridor connections that continued the focus on the overall lack of mature canopy vegetation along Prince Avenue. ¹²⁶

Traffic

Allowing for the efficient unimpeded flow of automobile traffic while enhancing the pedestrian experience are intrinsically at odds with each other, but CAPP looked for design solutions that allowed the two to coexist with a slight priority given to the pedestrian. Speed was cited as the largest detractor to the corridor, both towards aesthetics and pedestrian safety. A better attempt at speed enforcement to slow traffic down and put pedestrians first topped the list of recommendations. Other suggestions included a sign and curb cut standard that would reduce the visual clutter and the number of curb cuts allowed per property parcel. The inconsistency of contiguous sidewalks with clearly defined adequate crossings also was cited for needing improvement. Bicycle safety and lack of bike travel lanes as well as the adequacy of mass transit, number of stops, and weather –safe bus stops and suggestions for how these could be improved were incorporated into the presentation for consideration for future improvement projects along the corridor. As in all segments of the charette, the importance of landscape in obtaining the desired goals for the future of Prince Avenue was seen as imperative to successfully implementing the traffic team’s design objectives.

¹²⁶ IBID

Summary

Following World War II, Prince Avenue eroded from a premier residential street to a high speed vehicular corridor. Many of the residential structures were demolished and strip development in the form of gas stations and fast food restaurants took up residence. Zoning was first introduced to Athens in 1961 with the bulk of Prince Avenue zoned as B-1, local business. Zoning outlines followed a prescribed 250' setback from the road centerline. An increase in automobile ownership allowed development beyond the city limits to flourish as personal transportation allowed people to move outside the city perimeter to emerging suburban developments.

The in-town neighborhoods of Boulevard and Cobbham suffered as a result of the urban flight until the late 1970s when preservation conscious families returned to take control of the neighborhoods as viable places to reside. Slowly, the neighborhoods converted from multifamily housing to single family occupancy, and a renewed interest to reside in in-town neighborhoods became popular. The neighborhoods legacy as important places worthy of preservation found legal protections under state and local historic preservation ordinances and affiliations.

In the 1990s, the Athens Regional Hospital expanded their campus boundaries threatening the edges of the surrounding neighborhoods. The neighborhood districts rallied against the pressure resulting in a Hospital Master Plan that struck a compromise for proposed growth within the residential boundaries. The hospital group considered Prince Avenue as a suitable expansion location for medical complexes and office space.

The community wide charette known as CAPPA or the Community Approach to Planning Prince Avenue began in response to a poorly planned medical office building design proposed for 1140 Prince

Avenue. Through an inclusive public process, the charette sought to find design solutions through verbal and graphic expression to what survey respondents wanted to see for the future of the Prince Avenue corridor. The essence of the survey included the five areas of interest that were recurring in answers to a questionnaire. The five broad categories included Landscape, Historic Resources, Planning, Urban Design, and Traffic Solutions. There were five charette teams of varying size made up of members of the community, Athens-Clarke County, the hospital, and the University. The design solutions were presented at a public forum to the community and the presentation was made available through the Historic Boulevard neighborhood website.¹²⁷

The work performed during the CAPPa charette process resulted in a narrative with graphic representation to a community vision, but the regulatory environment framing new development has not changed. As the community is on the cusp of grappling with how to translate CAPPa goals into development parameters, the question arises, what is the approach to realistically achieving the varied but related ends identified by the CAPPa process?

¹²⁷ CAPPa Presentation; available from <http://www.historicboulevard.org/historic.htm>; Internet; accessed 19 March 2010.

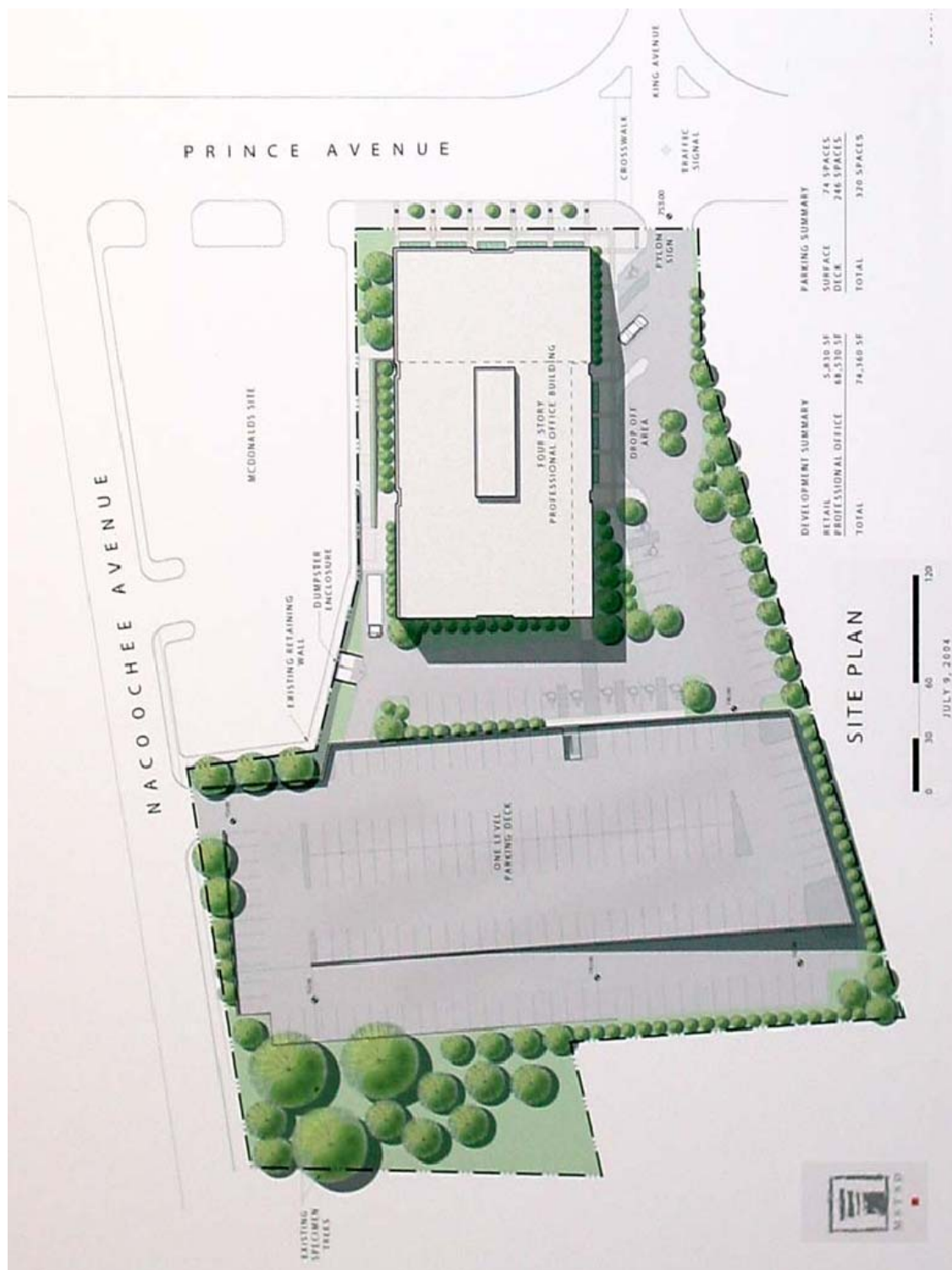


Figure 4.1
Proposed Medical Office Development for 1140 Prince Avenue
Courtesy of Boulevard Neighborhood Association



Figure 4.2
Proposed Medical Office Development for 1140 Prince Avenue
Courtesy of Boulevard Neighborhood Association



Figure 4.3
Proposed Medical Office Development for 1140 Prince Avenue
Courtesy of Boulevard Neighborhood Association

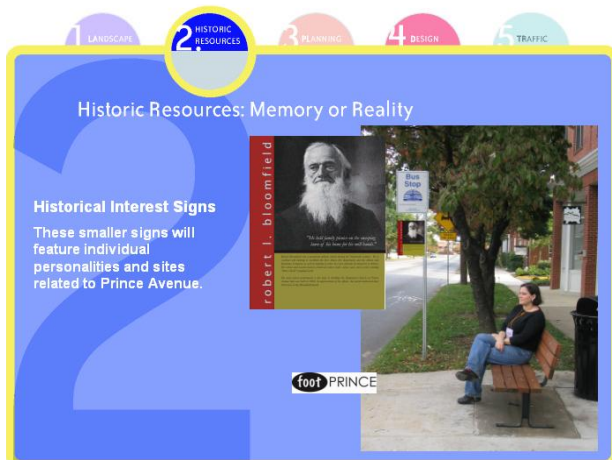
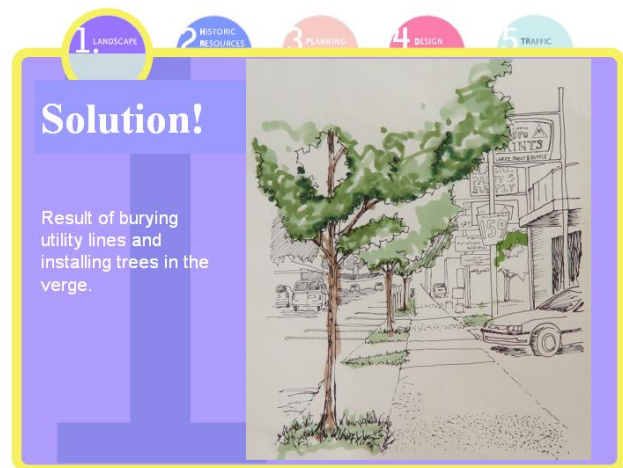
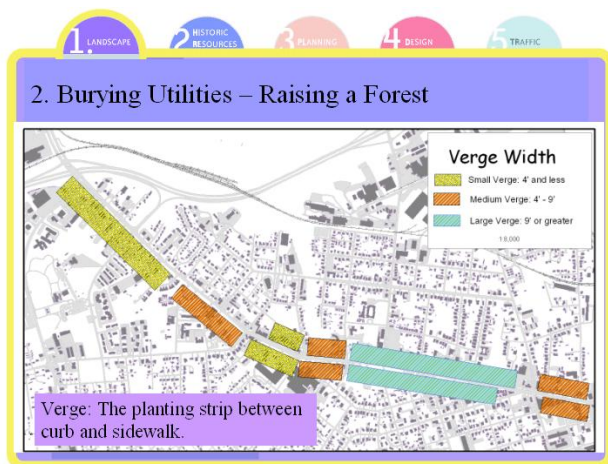


Figure 4.4
Representative Slides from the CAPPA Presentation
Courtesy of Boulevard Neighborhood Association

CHAPTER 5

FORM-BASED CODES

A Brief History of Zoning

The earliest laws applied to zoning in North America occurred during Spanish settlement of the new world in the Fourteenth century. The Law of the Indies, established by Prince Phillip of Spain regulated design criteria for the location of public spaces, the organization of civic buildings and open space, along with the separation of different uses.¹²⁸ European countries separated industrial and residential districts in the late nineteenth century. At the turn of the century, both Massachusetts and Washington, DC put height restrictions on buildings so that everyone might have equal access to light and air circulation. New York City adopted zoning standards in 1916 that regulated use and put restrictions on building heights as they related to street widths. In the 1920s, the federal government gave states the power to enable zoning through the Standard Enabling Act, which provided the zoning template for communities across the United States. “For the purpose of promoting health, safety, moral and the general welfare of the community, the legislative bodies of cities and incorporated villages is hereby empowered to regulate and restrict the height, number of stories, and size to the building, and other structures the percentage of the lot that may be occupied, the size of the yards, courts, and other open spaces, the density of the population, and the location and use of buildings, structures, and land

¹²⁸ Chad Lewis, *Design-Based Codes for 21st Century Communities*, New Urbanism In Practice, 2003, 1-12.

for trade, industry, residence, or other purpose...”¹²⁹ Early zoning efforts in the United States were an exercise of the police power of local governments to separate noxious land uses for the protection of the public health, safety and welfare. Zoning maps typically separated commercial uses from industrial uses, and each from residential uses. As well, multi-family uses (apartments) were also seen as negatively impacting single family residential uses, thus the two were separated from each other too. Zoning ordinances also dictated space between buildings to limit the spread of fire, and a maximum number of floors that related to the capacity of the local fire department to fight fires. As well, early codes ensured equal access to sunlight by requiring setbacks in building heights at certain levels. In 1926, the term “Euclidean zoning” was coined when the US Supreme court upheld the constitutionality of conventional zoning practices in the court case, *Village of Euclid v. Ambler Realty Company*.¹³⁰

Ambler Realty owned some 68 acres of land in the Village of Euclid, Ohio that they wanted to develop for industrial use. Having previously enacted a zoning ordinance, Euclid rejected the proposal, maintaining that industrial development was not in the best interest of the public good. The case was heard by the United States Supreme Court that voted in favor of the Village of Euclid, stating:

Until recent years, urban life was comparatively simple; but with the great increase and concentration in population, problems have developed...which require, and will continue to require, additional restrictions in respect of the use and occupation of private lands in urban communities...The exclusion of buildings devoted to business, trade, etc., from residential districts, bears a rational relation to the health and safety of the community. Some of the grounds for this conclusion are...aiding the health and safety of the community by excluding from residential areas the confusion and danger of fire, contagion and disorder which is greater or less degree attach to the location of stores, shops, and factories.¹³¹

¹²⁹ Newman Freese Baker, *Legal Aspects of Zoning* (Chicago:University of Chicago Press, 1927), 144.

¹³⁰ Daniel Parolek, *Form-Based Codes, A Guide for Designers, Municipalities, and Developers* (Hoboken: John Wiley and Sons, Inc., 2008), 7.

¹³¹ United States Supreme Court, *Village of Euclid v. Ambler Realty Co.* 272 US 365, 1926.

The Standard Enabling Act along with the verdict from *Euclid v. Ambler* assured states that zoning laws would remain unscathed by legal challenges.¹³²

The *Euclid* verdict ingrained the concept of favoring single-family residential houses on large lots. Not allowing a mix of uses has resulted in multiple use zones of total separation. In addition to regulating use, zoning ordinances regulate for intensity of development and bulk of development. The use is regulated among commercial, residential, industrial, manufacturing, or agricultural. The intensity of development refers to the amount of use of a specific site. Residential zones are often measured by a minimum lot size. Commercial zones are regulated by their Floor Area Ratio (FAR), for example, if the size of the area being developed is 10,000 square feet, and the floor area ratio is five, then the allowable floor area is five times the lot area at 50,000 square feet.¹³³ Bulk is concerned with building massing and is often regulated through minimum building setback dimensions off of the property lines. The zoning map is the planner's tool used to delineate the different zone regulations of a region.

For the last 84 years, Euclidean zoning has been the model to influence land use development across the United States. It has been very successful at separating the different categories of land use from one another. Critics of Euclidean zoning maintain that the system is archaic and has not evolved to reflect current demographics, cultural changes, or socio economic conditions. In the seminal book *The Death and Life of Great American Cities*, Jane Jacobs was one of the first to question if Euclidean Zoning practices were detrimental to society. She maintained that the exclusionary nature of zoning is undemocratic and creates a method for the social and economic exclusion of one group from another. She also contends that zoning has led to singular-use, low density development that suppresses the opportunity for human interaction.

¹³² Stuart Meck, *Model Planning and Zoning Enabling Legislation: A Short History*. Modernizing State Planning Statutes: The Growing Smart Working Papers, 1, 1-17.

¹³³ Jonathan Barnett, *Redesigning Cities: Principles, Practice, Implementation* (Chicago: Planner's Press, 2003), 24

She argued that regulating the kind of use rather than the scale of use led to a monotony of the landscape:

The greatest flaw in city zoning is that it *permits* monotony. Perhaps the next greatest flaw is that it ignores *scale* of use, where this is an important consideration, or confuses it with *kinds* of use, and this leads, on the one hand, to visual (and sometimes functional) disintegration of streets, or on the other hand, to indiscriminate attempts to sort out and segregate kinds of uses no matter what their empiric effect. Diversity itself is thus unnecessarily suppressed.¹³⁴

Author William Whyte criticized zoning for its exclusionary nature that he maintains leads to leapfrog development, where land is developed that is not connected to an urban area, thereby requiring the costly extension and duplication of infrastructure systems like water and sewage. This leapfrog development is only second to suburban sprawl as one of the negative by products of conventional zoning. As early as 1937, this blight on the landscape was commented on by Earle Draper of the Tennessee Valley Authority who said: “Perhaps diffusion is too kind a word...In bursting its bounds, the city actually sprawled and made the countryside ugly..., uneconomic [in terms] of services and doubtful social value.”¹³⁵ In addition to leapfrog development and suburban sprawl, Euclidean zoning is characterized by single-use, low-density commercial ‘strip mall’ development with poor accessibility, and a lack of functional open space, and total reliance of the automobile for accessibility. The very nature of the product of the built environment from traditional zoning requires the use of an automobile.

The negative effects associated with Euclidean Zoning were influenced by other factors that perhaps made the consequences worse than they would have been otherwise. In the post World War II era, the middle class grew in numbers and became a prominent contributor to society. The introduction of the GI Bill gave financial assistance to vast numbers of veterans to attend college, who previously were not educated.¹³⁶ The Veteran’s Administration and The Federal Housing Authority guaranteed mortgage loans for homes to WWII veterans as well as

¹³⁴ Jacobs, 237.

¹³⁵ Sprawl Guide, *How Do You define Sprawl?* Available from <http://www.plannersweb.com/sprawl/define.html>; Internet; accessed 31 January 2010.

¹³⁶ Whyte, 5.

civilians. These loan policies favored single-family homes in suburban areas.¹³⁷ Meanwhile, advancements in mass production manufacturing made the automobile affordable to a larger populace. The advancement in technologies of the era included advancement in home construction practices. Tract subdivision housing such as Levittown brought mass production of housing to a large number of people. The expanse of growth and development farther out from the city proper guaranteed the need for car ownership. Additionally, The Interstate Highway Act of 1956 further increased automobile ownership and allowed for distant tracts of land removed from the urban core to be developed.¹³⁸

Zoning Alternatives

Euclidean zoning does not allow for the mixing of uses. Although successful in responding to the conditions that existed at the turn of the century, it has failed to evolve with changes in societal attitudes and the demographic changes of the population. At the center of this shift in attitudes is the desire for places comprised of a mix of uses. The resultant physical environment from Euclidean zoning is simply unattractive and negatively impacts the development of community. Simplistically stated, Euclidean zoning prohibits good urban design. The negative impacts include the separation of uses, dependence on the automobile, a general sense of placelessness and a lack of community. (Figure 5.1) For the last 25 years, there has been a growing movement to create mixed use developments over what many see as an outdated system of land regulation that separates uses. The cadre of professionals endorsing this movement is comprised of architects, planners, and landscape architects. The movement is called New Urbanism and those who practice it refer to themselves as New Urbanists. There are a variety of characteristics that comprise New Urbanist mixed use developments. In addition to providing a mix of uses, the development should favor pedestrian accessibility over the automobile and

¹³⁷ J.B. Jackson, *A Sense of Place, A Sense of Time* (New Haven:Yale University Press, 1994), 249.

¹³⁸ IBID, 249.

encourage the use of alternative modes of transportation that may include biking or mass transit. Additionally, these new developments should be sensitive to a scale and proportion based on the limitations of human ergonomics, to create memorable places that are respectful of the social and environmental qualities that are part of a community environment. Planners have developed ways to design New Urbanism developments within the framework of Euclidean zoning regulation through the creation of Planned Unit developments (PUD) with varying degrees of success. The use of Form-based codes has been a more recent approach to developing the kinds of places people prefer that incorporate the ideas from the earlier Planned Unit Developments under a code that can replace or overlay existing zoning regulations.

Form-Based Codes

Form-based codes evolved out of planners' desires to create traditional neighborhood developments that enrich the character and identity of a community over continuing a pattern of suburban sprawl that destroys a community's character and negatively impacts the environment at substantial costs. Form-based codes are greatly concerned with the public realm. The public realm has been defined as those spaces not held in private ownership such as plazas, squares and parks. This includes the sidewalks, street trees, street furnishings, streets and right of ways. Great care is given to the quality of the public realm spaces as they contribute to the pedestrian experience. "It is difficult to achieve the kind of fine-grained detailing of the public realm at the heart of the New Urbanism without specifying how this is to be done at the site-specific level... The importance of detailed site-specific design codes, in many ways at the heart of New Urbanist practice, cannot be overstated."¹³⁹ Form-based codes work to create rich, stimulating, and safe public realm environments that are less dependent on automobiles and gives preference to walking, biking, and using mass transit alternatives.

¹³⁹ Joel Russell, *New Urbanist Essentials*, from *Codifying New Urbanism, How to Reform Municipal Land Development Regulations*, Report # 526, American Planning Association, 2004, 10.

Definition

Form-based codes, as the name implies places emphasis on the shape or form of buildings. The goals of form-based codes are to create a public realm centered on the pedestrian with regards to scale, proportion, and experience. “They (form-based codes) regulate private development for the impact it has on the public realm.”¹⁴⁰ Less emphasis is placed on use of buildings and more emphasis is placed on the form of the building and the spaces that they frame and help to create. Form-based codes are “A method of regulating development to achieve a specific urban form. Form-based codes create a predictable public realm primarily by controlling physical form, with a lesser focus on land use, through city or county regulations.”¹⁴¹ Whereas conventional zoning regulations strictly control land-use, the underlying principle in Form-based codes is that the design takes precedence over use. In Form-based codes, the resulting desired built environment is prescribed by clear and simple graphic illustrations for building height, how the building is placed on a site, and the street and sidewalk arrangements.

Components of Form-Based Codes

The first and most important portion of a form-based code is the community visioning process. Often in the form of a community charette, the visioning process enables the local stakeholders the opportunity to participate in the vision they have for the future physical growth of their community. As the form-based code template is broad based, it allows communities to tailor the design process to their unique, particular vision. Depending on the size of a community, stakeholders can divide into groups that then identify what they would like to see changed or preserved and thereby take an active participatory role in arriving at a collective community vision. This vision is illustrated in a wide variety of site plan maps, perspective sketches and aerial photography. Once the visioning process is complete, there are three components used to

¹⁴⁰ Parolek, 11.

¹⁴¹ IBID, 4.

implement the community's vision plan: the Regulating Plan, Building Envelope Standards, a Glossary of terms, and where desired, Architectural Standards (optional).

The Transect

The transect is a terminology borrowed and reinterpreted from the study of ecology of a geographical cross-section of a region used to show a sequence of environments. As applied to Form-Based Codes, the transect determines the appropriate type and arrangement of buildings, streets and open space used for human habitation.¹⁴² The transect is based on the premise that for each environmental zone, there is an appropriate form of human development that naturally would occur there. For example, townhouses might seem out of place in a rural hamlet, but they would be appropriate for an urban center. There is room for regional variation from city to city as planners adjust the code accordingly to respond to particular locations. There are six transect zones or T-zones as applied to Form-Based Codes. They are: Natural (T1), Rural (T2), Suburban (T3), General Urban (T4), Urban Center (T5), and Urban Core (T6). For areas that are difficult to define there is an optional Special District (SD) zone. Each transect zone can have a Form-Based Code specific to its regional characteristics.¹⁴³ (Figures 5.2)

The Regulating Plan

The Regulating Plan is a diagrammatic drawing that translates where things belong from the community-visioning plan. The Regulating Plan focuses on all the proposed streets and the blocks they create.¹⁴⁴ It provides building and street type information for available land parcels. In some instances it may be a particular single type of building or possibly a range of building types that may be constructed in a particular area. It also includes build-to lines and the location

¹⁴² Robert Sitkowski & Brian Ohm, *Form-Based Land Development Regulations*, The Urban Lawyer, Volume 28, No. 1. Winter 2006, by the American Bar Association, 168.

¹⁴³ IBID, 164.

¹⁴⁴ Peter Katz, *Introduction to Form-Based Codes. Zoning Reform Through Form-Based Codes*. (Videocassette), National Realtors Association, 2003.

of community civic buildings or public spaces in relationship to neighborhood spaces. (Figure 5.3)

Building Envelope Standards

The Building Envelope Standards summarizes the physical characteristics of each building type through formatted plan and cross section drawings on a single sheet or sometimes grouped to a poster format. (Figure 5.4) The information included on the building envelope standards covers building height, usually given as dimensions to eaves or maximum number of floors. There is also a minimum height given so as not to sacrifice the streets ‘wall’ edge. Also included is the placement of the building on the property parcel taking into consideration the surrounding property lines, the location of curb cuts, parking, green spaces and courtyards.¹⁴⁵ Architectural features like windows, doors and porches are also covered. Street standards are provided under building envelope standards in section drawings and identify parking, travel lanes, bike lanes, pedestrian sidewalks, medians, planting strips and street tree plantings. Some communities may wish to include appropriate street tree, shrub and ground layer species in this section also.

Glossary of Terms

In order to create a code that is easy to use and understand, a glossary of terminology used rounds out the basic three sections of the form-based code. All terminology used to write the sections of the form-based code are located here for easy reference and to enable ease of use by non-professionals. (Figure 5.5)

¹⁴⁵ IBID.

Architectural Design Standards

The Architectural Design Standards are an optional part of the code that some communities may want to include to cover things like color, materials, or type of construction. For instance, design standards could be included in a historic district or a special master planned development of a community. (Figure 5.6)

Implementation

The initial process towards a form-based code application begins with a community visioning process. The community visioning process or charette involves all the stake holders of the area usually led by a design professional such as the local planning department or a hired outside Planning Professional. Through the charette process, the preferences for future growth and development are synthesized from community input. Plans, drawings, photographs and written reports detailing the charette findings are the end results which are then published and distributed. The end results are then presented to the community at a local forum with time for questions or comments. In order to be officially adopted, the form-based code must be enacted through the local governing body, such as the city commission. Cities may elect to replace the existing zoning outright. A more common approach is to offer the form-based code as a parallel zoning regulation that gives the property owner the option of developing under the existing zoning regulation or the form-based code option. Incentives associated with choosing the form-based code for development over conventional zoning include tax incentives and a streamlined plan approval process through the local governing departments.

Conclusions

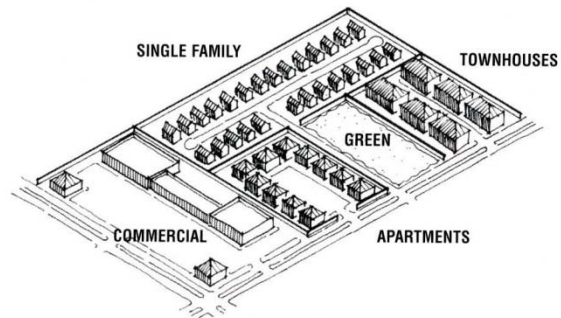
The verdict is still out on the effectiveness of form-based codes. Critiques argue that cities are dynamic in nature and a ‘one size fit all’ approach will not work. Others say that the idea of creating pedestrian-scaled environments is not new technology, but has existed for as long

as man has been shaping his environment. Still others maintain that reaching design consensus across a diverse group of multiple property owners who are naturally inclined to be self-serving rather than civic minded with regards to property development is unrealistic.

The next chapter focuses on the redesign of the Prince Avenue corridor by applying the principles of form-based coding over traditional zoning together with the theoretical components of form identified in Chapter 2, in an attempt to manipulate the public realm towards the preferences expressed from the CAPPa charette. It will conclude with a discussion of form and the applicability of the form-based coding principles usefulness to create the desired urban form, place and public realm.

EUCLIDEAN SEPARATION VS. MIXED-USE INTEGRATION

EUCLIDEAN SEPARATION



MIXED-USE INTEGRATION

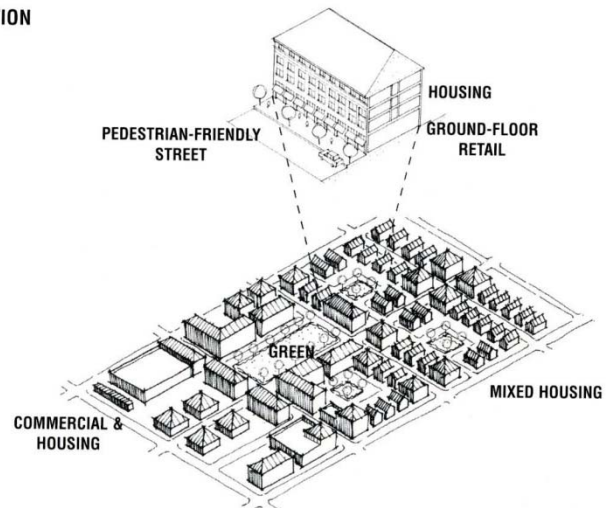
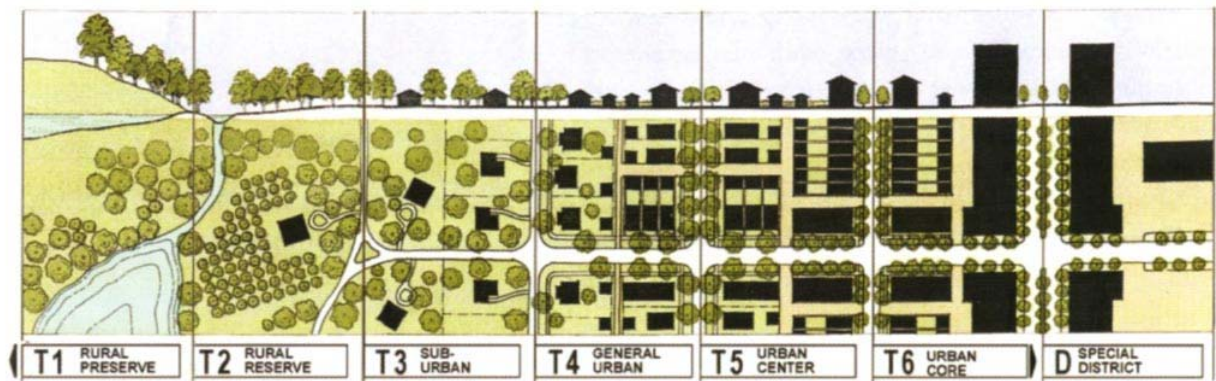


Figure 5.1¹⁴⁶

Euclidean vs. Form-Based Codes

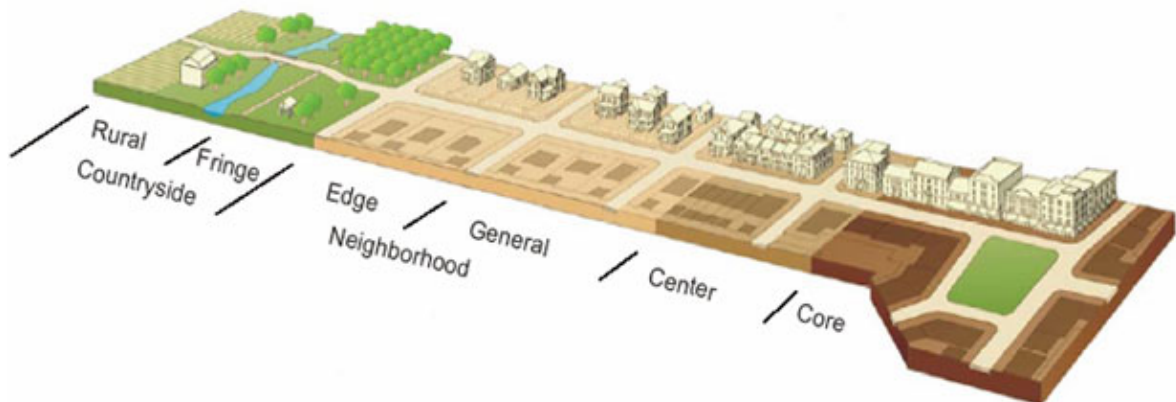
¹⁴⁶ Joel Russell. *Codifying New Urbanism, How to Reform Municipal Land Development Regulations, Report # 526*. American Planning Association, 2004, 18.



Source: Duany Plater-Zyberk

The six transect zones are diagrammed in idealized form in this illustration. In real places, the zones are often found in complex patterns rather than in a continuum.

The Transect Zones



Urban-to-Rural Transects

Figures 5.2 ¹⁴⁷

¹⁴⁷ IBID, 39.

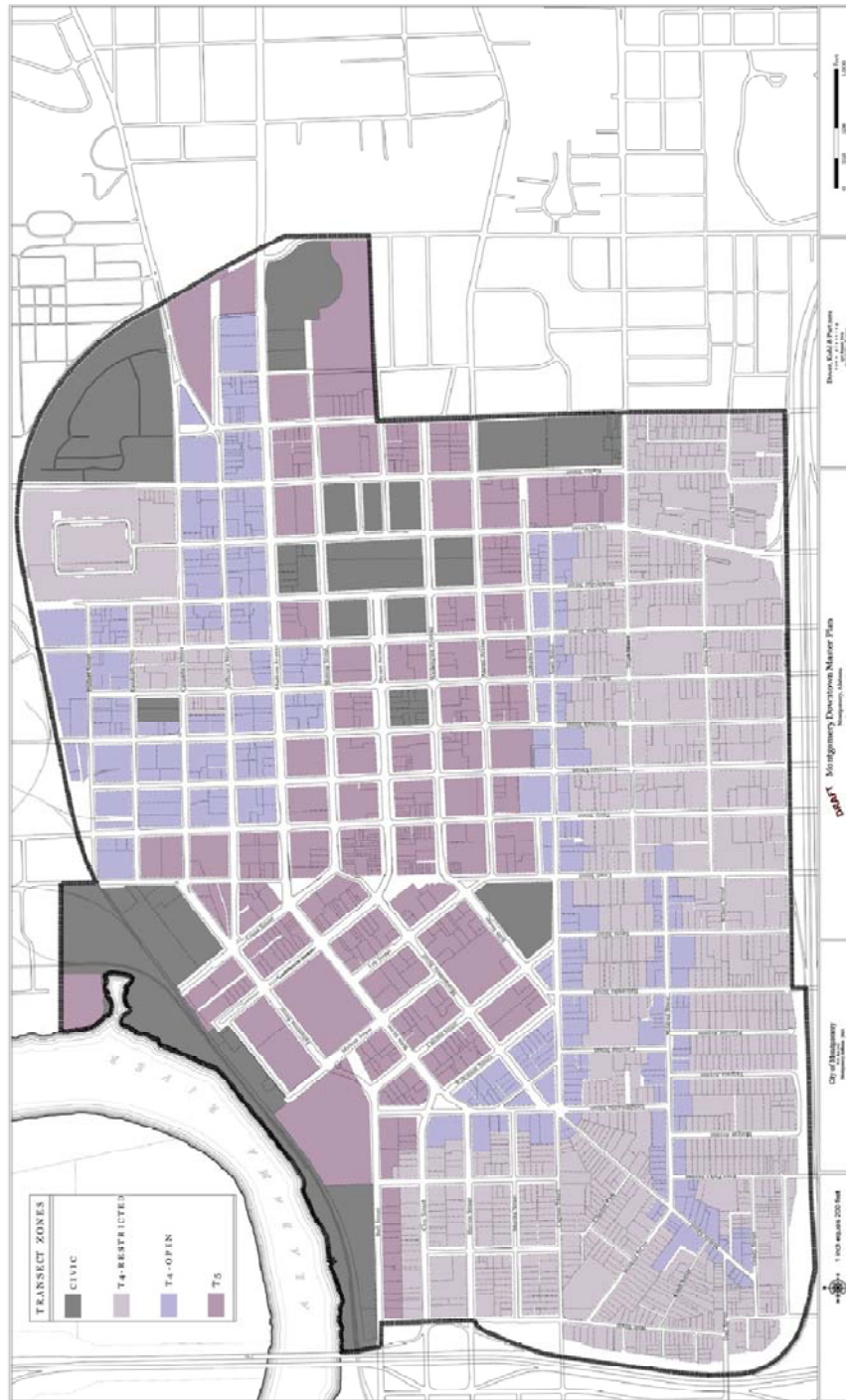
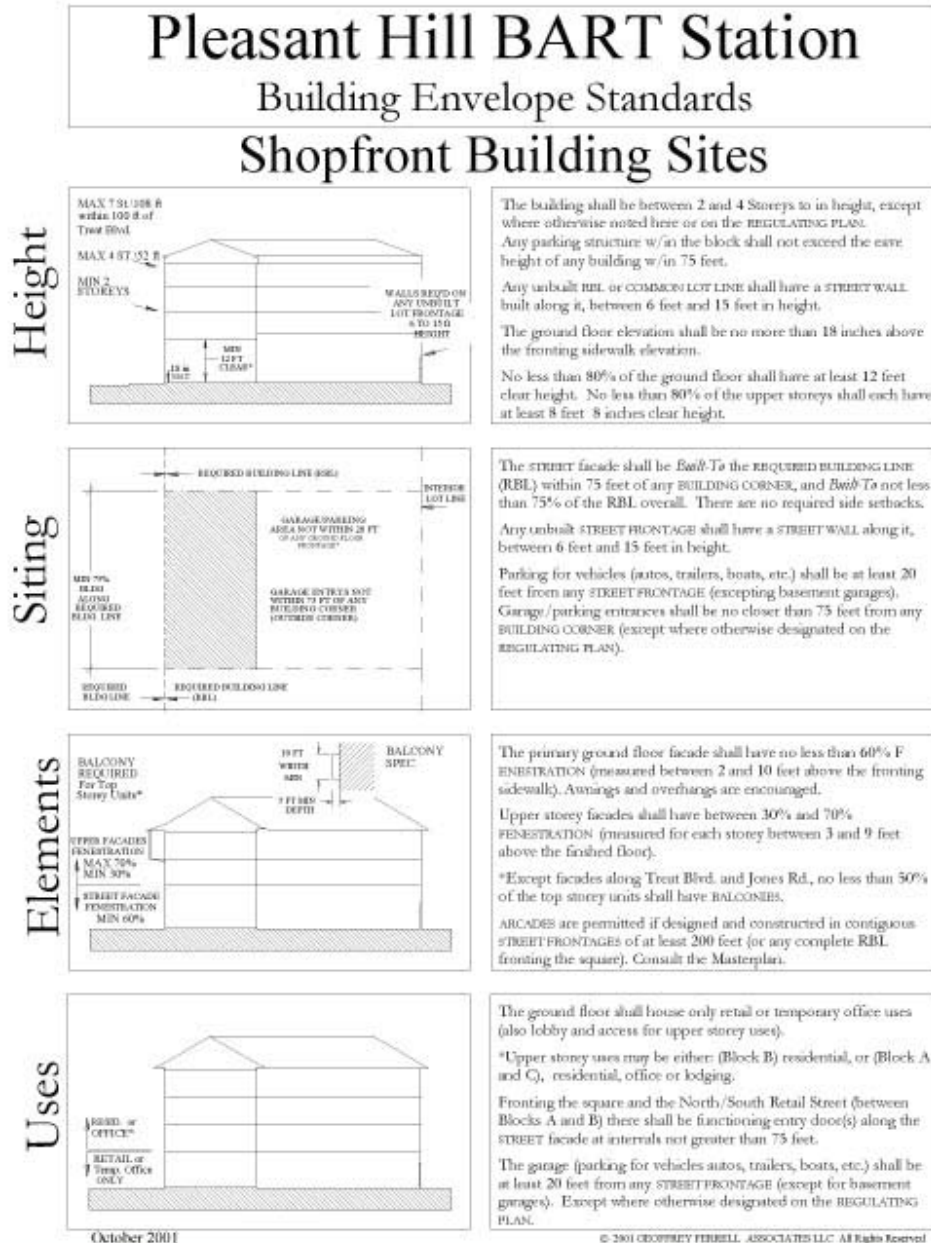


Figure 5.3 ¹⁴⁸

The Regulating Plan

¹⁴⁸ Montgomery Regulating Plan; available from http://www.transect.org/regulating_img.html; Internet; accessed 16 March 2010



GEOFFREY FERRELL ASSOCIATES FINAL DRAFT

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Figure 5.4 ¹⁴⁹

Building Envelope Standards

¹⁴⁹ Bart Hill Station Building Envelope Standards; available from <http://www.co.contra-costa.ca.us/depart/cd/charrette/outcome/PHCODE%20final.PDF>; Internet; accessed 16 March 2010.

STREET

Includes all public space (STREETS, SQUARES, PEDESTRIAN PATHWAYS, CIVIC GREENS, parks)—including any transit service operator passenger platform—but not GARAGE ENTRIES or ALLEYS.

STREET FRONTAGE

The LOT line coincident with the RBL or that portion of the building that is coincident with the RBL as required by the **Code**.

STREET LIGHT

A luminaire installed on both sides of STREETS, along the STREET TREE ALIGNMENT LINE, unless otherwise designated on the REGULATING PLAN, at intervals of no more than 60 feet, measured parallel to the STREET. STREET LIGHTS shall be between 9 and 16 feet above ground in height. Lighting standards for STREETS and ALLEYS should be developed to meet the minimum standards of the Illumination Engineering Society (with the design criteria giving equal weight to the lighting of the pedestrian areas and the automobile areas).

STREETSCAPE

Improvements to a property, including paving, tree and/or other decorative plantings, lighting, and the placement of street furniture, within the STREET.

STREET TREE

A deciduous canopy shade tree as required per the REGULATING PLAN and listed in the **Form Based Code** STREET TREE LIST. STREET TREES shall be of a proven hardy and drought tolerant species, large enough to form a canopy with sufficient clear trunk to allow traffic to pass under unimpeded. STREET TREES shall be planted and spaced 25 to 30 feet on center. Where necessary, spacing allowances may be made to accommodate curb cuts, fire hydrants and other infrastructure elements. At no time may spacing exceed 45 feet on center.

STREET TREE ALIGNMENT LINE

A line along which STREET TREES are to be planted. The STREET TREE ALIGNMENT LINE is parallel with the STREET or SQUARE right of way and, unless otherwise specified in the appropriate REGULATING PLAN, is 4 feet from the back of the curb. (Existing trees are not required to be relocated by this requirement.)

STREET WALL

A masonry wall set back (or forward) not more than 8 inches from the RBL or adjacent building façade and built to the height specified in the BUILDING ENVELOPE STANDARDS. A vehicle entry gate (opaque, maximum 18 feet wide) and a pedestrian entry gate (maximum 6 feet wide) are both allowed as limited substitutions within any required STREET WALL length.

Figure 5.5 ¹⁵⁰

Glossary

¹⁵⁰ Columbia Pike FBC Definitions; available from http://www.columbiapikepartnership.com/FORM/index_E.html; Internet; accessed 16 March 2010.

D. Street Walls

INTENT AND GUIDING ILLUSTRATIONS FOR STREET WALLS

STREET WALLS establish a clear edge to the STREET where the buildings do not. The **Columbia Pike Special Revitalization District Form Based Code** requirements include masonry walls that define outdoor spaces and separate the STREET from the private realm (parking lots, trash cans, gardens, and equipment). All STREET WALL facades shall be as carefully designed as the building façade, with the finished side out, i.e. the "better" side facing the STREET. The illustrations and statements on this page are advisory only. Refer to the **Code** standards below for the specific prescriptions of this section.



ARLINGTON, VIRGINIA

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ARCHITECTURAL STANDARDS

Figure 5.6 ¹⁵¹

Optional Architectural Standards

¹⁵¹ IBID.

CHAPTER 6

APPLICATION TO PRINCE AVENUE

This chapter focuses on the redesign of Prince Avenue to support and enhance a public realm that incorporates the desires expressed by the local community through the CAPPa charrette process; namely, to ensure that future infill development to the Prince Avenue corridor is sensitive to existing context, maintains sense of place, preserves cultural heritage, and is pedestrian-centered. The design incorporates the qualities found in form-based codes when possible, within the framework of the existing contextual urban fabric. The study site begins at the intersection of Pulaski Street with Prince Avenue and ends at the Oglethorpe Avenue intersection with Prince Avenue, an area just at 1.2 miles in length. (Figure 6.1, 6.2) The design will focus attention to the urban form of the corridor in an effort to achieve the expressed desired results and an environment that is characteristic of the physical form components from Chapter 2. A discussion of the effectiveness of form-based codes will follow, with suggestions for further research on the topic.

The length of the study site of Prince Avenue is intersected by 14 streets on the south and by 8 streets on the north. The streets to the south are part of the original city grid, while the streets to the north developed with the Boulevard neighborhood at the turn of the century as discussed in Chapter 3. The design approach for the study site examined the corridor block to block for the north and south sides of Prince Avenue, rather than dividing the street into zones or districts as was the case with the CAPPa study. The reasoning being that it is difficult to categorize unique districts along Prince, with the exception of Normaltown. Evaluation is performed on a block to

block basis. In some instances, the block is relatively intact and exhibits qualities the community desires to preserve. In other cases, the block form has deteriorated, the edge taken over by curb cut connections to the street. The discussion will highlight three specific blocks of the study site that best exemplify the components of form as outlined in Chapter 2 rather than following the overall design geographically from East to West. The three specific sites were also identified by the CAPPa charette as being of primary concern for the future of Prince Avenue. Those blocks not specifically addressed in the discussion will be summarized with general observations that are applicable to the entire Avenue.

The focus of this thesis was to identify those elements that contribute to urban form to create real and meaningful places filled with life and activity. Secondly, once identified, the work focused on applying the principles behind the theory to a compromised site where the potential to become a great place has been recognized by the community. One of the vehicles to achieve the ideas generated in the proposed design are to apply the principles of form-based codes as described in Chapter 5, as an alternative to traditional zoning. The proposed design works under the assumption that the form of the urban environment is paramount to its success.

In Chapter 2, four primary contributors to form were identified as: human scale, density, context & culture, and permeability. An urban utopia might have all of these elements in balance with one another in perfect proportion, but realistically, the best urban environments may have a disproportionate blend of the three components. Before proceeding to the proposed design for the corridor, it will be helpful to briefly review the elements of form that contribute to a successful urban environment through the filter in which they are applicable to Prince Avenue.

Human Scale

Human scale tops the list as the most critical component. Without the human element, there would be no need for the urban environment. Human scale has been discussed in depth in

this thesis, as the human dimension as it relates to form, sense of place, and the public realm. Actual dimensions based on the harmonious proportions of the Parisian streetscape came from the research of Maertens and Blumentfeld as discussed in Chapter 2. For Gehl, human scale is supported by the urban form as it supports the complex matrix of social activities that include walking, standing sitting, seeing, hearing and talking. The actual physical features that come into play for the discussion on human scale as it relates to form include short blocks, trees, façade articulation, covered entryways, wide sidewalks (for safe leisurely walking per Allen Jacobs), and a balance with respect to proportions and ratios of the urban environment. Likewise, the findings of the CAPPa charette centered on the desire to create a more pedestrian friendly area, focusing on tree canopy, contiguous sidewalks, walkable destinations, and buildings that enhanced the pedestrian realm with street level interest. Human scale informs an intimacy and vulnerability with form as it relates to the proportions and limitations of a human being to comprehend and relate physically, emotionally and psychologically to his surroundings.

Density

Density has been discussed in this thesis as the compactness of the urban environment and an intensity of activity. Gehl observed that a compact urban environment would favor the pedestrian over the automobile, especially if buildings have a continuous façade, variety of styles, and second level activity to keep the pedestrian engaged. Jane Jacobs qualified density of the urban form to include a mixture of old and new buildings in order to attract the most diverse groups of people. Buildings with a sense of robustness she said lent themselves to being adapted for different uses at different times. From the CAPPa results, density was expressed with the desire for a compact urban form of mixed uses. CAPPa expressed an interest in the adaptability of existing buildings in converting them to new uses over time. Additionally, density of people could be achieved through the mixed use idea of providing residential units on the upper levels over ground floor retail spaces. With any place, there is an appropriate scale of density that relates

to the size and character of the area. Density for density sake alone may not be appropriate to the unique attributes of a particular site. To speak to the density of an area or the desire to increase the density of someplace, the existing context and culture of density must be understood.

Context and Culture

The existing context and culture component of form is directly tied to all future infill and development. This is closely associated with the character of a place, as there are intangible ephemeral qualities that are difficult to identify. Tibbalds called for new buildings to be respectful of existing urban scale and context, Jacobs said that buildings should be respectful of each other in terms of general massing and proportions. The CAPPa results expressed a desire for a regional, even local aesthetic to the future of Prince Avenue. The relationship of the general massing of proposed buildings to existing buildings should complement one another – the ‘guest’ theory from Chapter 2. Aesthetic cues should be taken from existing buildings when possible, for instance, the simple brick facades of the Normaltown area could inspire a future infill building. Equally important, the cultural identity of the community must be respected as it relates to proposed infill design. Who are the people populating the space? In the case of Prince Avenue, the existing context is rich and varied, as is the cultural component. Both create a rich backdrop that can enhance future infill development. Proposed development must be sensitively designed to achieve Lynch’s ‘fit’ into the existing context and existing urban fabric of activities.

Permeability

Permeability is the fourth and final component of form synthesized from the literature review in Chapter 2. Permeability refers to the degree to which the urban form allows for pedestrian movement through the space. A distinction is made between visual permeability and physical permeability. Visual permeability allows one to see potential routes for walking even though the route may not be physically permeable. Physical permeability allows for movement

through a space. This thesis is centered on pedestrian permeability as it relates to physical form. The best urban environments offer good permeability. It was William Whyte from the literature review that highlighted the importance of permeability to the urban form. For CAPP, permeability took the form of connectivity to Prince Avenue by contiguous sidewalks along the corridor that tie back to destinations and the surrounding neighborhoods. Also, CAPP highlighted the importance of permeability with regards to ground floor transparency, the use of suggested landmarks, and a clear orderly framework for pedestrian circulation. Prince Avenue is somewhat obviously permeable along its east-west orientation, but the importance of permeability comes into play in the redesign as infill buildings are sited along the corridor. The concern of permeability for the proposed design will be the manner in which the proposed buildings are accessed from the primary circulation route and what opportunities they offer for visual or physical permeability or both.

Proposed Design

The redesign of the overall corridor focused on maintaining what the CAPP results found as favorable and infilling through design those areas of Prince Avenue the CAPP results deemed unfavorable. CAPP results and the literature review provided the criteria reflected in proposed infill development. An attempt was made to demonstrate working within existing parameters with regards to building use, and in other cases, liberty was taken to redesign entire parcels. This was done to be realistic in terms of potential expectations, but also to show the extent of possibilities for new design if given a blank slate and the freedom to design the perceived ‘best’ urban form possible. Although attention was given to the entire corridor, only three primary areas will be highlighted for discussion with the remaining being addressed in a general nature.

Childs Street to Pulaski Street

The length of this block of Prince Avenue is 750 feet long. Historically, it was occupied by the now famous T.R.R. Cobb house, whose story was told in Chapter 3. The three remaining significant structures on the block are the St Joseph's Catholic Church, a Victorian cottage that currently serves as the local Democratic Headquarters, and the Joseph Henry Lumpkin house near the corner of Childs Street. What lies in the middle of the block is an ocean of black top asphalt. There are four major curb cuts to this block whose widths exceed their function; three of which are undifferentiated, and minimally separated. The corners at Pulaski and Childs Streets are well defined with continuous curb, sidewalk and vegetation; however the single story office building at the Childs Street corner is unremarkable within the existing context of the remaining original structures, particularly the Joseph Henry Lumpkin house. (Figure 6.3)

The proposed design calls for the removal of the single story office building, converting the corner to greenspace to supplement and serve as a green forecourt to the Joseph Henry Lumpkin house. (Figure 6.4) This relates to the permeability of the corridor by imposing an open visual sightline to the house. From the CAPPA perspective, it celebrates the cultural history of Prince Avenue. As outlined in Chapter 3, this was the home that was moved closer to Prince Avenue in the last century. As such, the view of the house from Prince has been truncated. Clearing the corner office building from the site will reestablish visual permeability and balance the proportion of built to open space for this block.

The existing building setback placement for this block varies from 50 feet to 80 feet. The proposed infill mid-block (between St. Josephs and the Victorian cottage) roughly follows the pattern established by the Victorian cottage at around a 60 foot setback. This provides for a density within context, two of the form components identified as contributing to good urban form. It also facilitates a continuous visual façade while relating to a human scale as there are multiple

smaller scale components that have filled the large expanse of void space of the parking lot. The addition of canopy trees and a continuous sidewalk and curb form and define the edge to the street, identifying the pedestrian ‘safe’ zone. Curb cuts have been removed and modified so as to have the least disruption to the pedestrian desired hierarchy of design. There are two access points from Prince Avenue. All of the properties have connections to the rear, thus a shared drive is a possibility. Additionally, there is an existing connection from the rear of the properties to Childs Street.

Park Avenue to Nacoochee Avenue

This block of Prince Avenue is about 800 feet long. Historically, the great park developed along the western portion with cottage residences along the eastern portion. In more recent history, park parcels were privately developed and the largest fast food chain, McDonalds came to occupy the Nacoochee/Prince corner. The 1140 parcel that spurred the CAPPA initiative is located between the park and McDonalds. The proposed design amalgamates the McDonalds property with the 1140 property in order to provide a building footprint that is scaled realistically for a healthcare related program. (Figure 6.4) The hospital, unpopular mostly because of its uncontrolled growth along residential boundaries, is an important player in the future development of Prince Avenue. The hospital is exempt from zoning ordinances, so it is critical that every effort to help influence future growth parallel the community effort to revitalize the avenue for pedestrians. The hospital is the largest potential single influence to alter the context and culture of the avenue from post residential urban sprawl to extended medical related use. The medical related influence can be seen with the Rite Aid pharmacy and other health related commercial businesses in this area. The proposed building is sited on the corner of Prince and Nacoochee and stretches over the parcel to just east of the remaining exposed Brickmans Creek. The proposed use of this structure includes upper level residential, laboratory research space, medical offices, and ground level mixed uses that could include coffee bars, restaurants, and a

pharmacy or retail store. The form and orientation to the street attempt to increase permeability and human scale elements through the use of an open courtyard with the building forming a ‘U’ shape around the courtyard for a sense of enclosure. The permeability is both visual and physical as the building frames the space and the courtyard connects to the main street sidewalk. The main portion of the middle section of the building ‘stops’ the eye, thus manipulating visual permeability to focus on the open courtyard area. The building is four stories, totaling to just over 100,000 square feet. The U shape of the building is meant to minimize the scale, providing a setback similar to the existing residential structures to the east. The open-to-the-road courtyard together with the articulated façade contribute to the sense of human scale, while the density of the building and variety of mixed uses lead to a form that can have 24 hour activity.

The western portion to Park Avenue reinstates the southern end of the Great Park along Prince Avenue in what currently is a sea of asphalt. The CAPPa results identified the possibility of returning this area to its former use for the surrounding neighborhoods. The iconic mid-century merry go round building that currently houses the Rite Aid pharmacy is retained as the only constructed element in the park. It serves as a focal point or landmark for this stretch of Prince Avenue which contributes to way finding and permeability as outlined in Chapter 2. It also serves as a cultural reminder reminiscent of the merry go round feature that existed historically within the park. It is anticipated that the park will encourage a density of users from the surrounding neighborhoods as well as the commercial and proposed residential uses for Prince Avenue. The park feature answers the call for context and culture by providing for mixed uses and a rich urban fabric. The proposed overhead tree canopy allows for enclosure and exposure opportunity while contributing to the much desired human scale. Finally, the park contributes to a balance of open space to built environment along Prince Avenue that is in keeping with the expressed community desires of CAPPa, allowing for an additional diversity of uses that do not currently exist on Prince Avenue.

Normaltown, from Satula Avenue to Park Avenue

The stretch of Prince Avenue from Satula to Park Avenue is one of the longer blocks, almost double to the previous blocks. Named for the proximity to the State Normal School, it has historically been the retail-commercial center of Prince Avenue. As outlined in Chapter 3, the area has only recently introduced restaurants among the competing commercial interests.

Victorian cottages once dotted the section towards Park Avenue. A gas station has invaded the corner of Park and Prince Avenue and only three of the original cottages survive, although two remain disguised behind false retail storefronts. The block backs up to Yonah Avenue, whose north side has recently witnessed unprecedented single family residential infill development.

There are two parking lots that front Prince Avenue on this block; one at the medical office building which is currently vacant and for lease, and the other at the Satula Avenue corner, location of one of the early 20th century gas stations. The CAPPA findings for this section included preserving the ‘funky’ eclectic nature that has come to be associated with Normaltown.

This speaks to the culture and context form component of mixed uses with a rich and varied urban fabric. The context and rich urban fabric of Normaltown was greatly compromised recently by the demolition of Allen’s hamburger site and Foxy’s Tavern. These buildings were perhaps unattractive individually, but as part of the assemblage of parts, they made a substantial contribution to the Normaltown district as a whole. Infill buildings of similar style and context have been proposed at the parking lot on the Satula Avenue corner and at the former Allen’s hamburger site. (Figure 6.5) Human scale is addressed through the use of awnings along the storefronts, wide sidewalks and covered entryways along the retail storefronts. Permeability by way of façade transparency is maintained through incorporating substantial glazing along the street ground floor edge.

The remaining cottages with false storefronts have been renovated to reflect their original form. Although apparently not historically appreciated, the intent was to answer the CAPPA call

to celebrate the eclectic diversity of the area. This also restores a context that was previously missing. That these original structures remain at all, acknowledges their adaptability or quality of robustness, the element which contributes to the density component of form. Culturally, there is honesty and purity to removing the false storefronts and celebrating the history of the avenue, through its original inhabitants. These houses, if you will, are the DNA of the avenue and the story they tell can lead to an understanding of its formation and changes over the course of time, endear it with meaning, and that intangible sense of place.

The design of the eastern edge of the block to Park Avenue proposes dense infill development of a multifamily housing apartment complex. The proposed buildings are modeled after the existing Mathis Apartments on Lumpkin Street. The Lumpkin comparative are only two stories, but the proposed are three story units designed in a combination of one and two bedrooms with 30 people maximum to an individual building, with maximum capacity at around 300 people. The units wrap the block at Park Avenue creating an urban street wall that satisfies the density form component of compactness and continuous façade. The smaller scale apartment buildings are walk ups, sensitive to human scale. There is a potential density of people with the proposed units, but also a density of form. This area of Prince Avenue appears to be a very adequate site for this type of infill development. It answers Jane Jacob's call for "eyes on the street" which contributes to a safer, friendlier pedestrian environment, also a goal of the CAPP charette. The form component of context is respected as the proposed apartments fall within the range of an appropriate density that is respectful of the existing. Additionally, this proposed concentration of users has the ability to cumulatively affect the activities that occur along Prince Avenue.

General Observations

Although much of Prince Avenue suffered from the urban environment adapting to the automobile in the 21 century, there is still much on the avenue that is recognized as good and worth preserving. The community will help to shape the future of Prince through continued involvement in the planning process. The redesign focused on three individual sites, but there are other influences that detract from the desired urban form of the corridor. These include the absence of a contiguous canopy of street trees, an excessive number of curb cuts per block, and an excessive amount of parcels where parking lots ‘front’ the avenue.

Canopy Street Trees

In Chapter 2, author Allen Jacobs held that trees are the single best element that can be used to improve a street. In addition to the environmental and aesthetic contributions, Street trees are directly related to providing the quality of ***human scale***, one of the four physical components of urban form as identified by the literature review. Prince Avenue has pockets of green spaces that include trees, but they are absent along the corridor where they are needed the most. Prince Avenue is lined with dogwood trees. There have been recent efforts to plant additional dogwood trees to sustain the pattern, but they do not create the kind of overhead structure or begin to define the avenue spatially in a way that relates to human scale. This can only be achieved through a sustained canopy street tree planting as reflected in the overall design. If nothing else were to change about Prince Avenue, the incorporation of a street tree canopy would have measurable positive influences towards creating the desired pedestrian-centered public realm highlighted during the CAPPA process.

Curb Cuts

The second overall largest detractor for the avenue is the excessive number of curb cuts per block. The number and excessive width of the curb cuts detracts from a form that is

pedestrian-centered. Multiple curb cuts actually impact the *permeability* of the form for the pedestrian experience. They serve the automobile exclusively. They decrease the pedestrian sense of way finding and increase the potential for conflicts with the automobile, thereby decreasing pedestrian safety. Multiple curb cuts confuse and detract from the order of the urban form making it too permeable and less legible for the pedestrian sense of way finding. Multiple curb cuts contribute to a sense of chaos. The design for Prince Avenue reduces the number and width of multiple curb cuts in order to maintain a continuous and defining edge to the avenue. Wherever possible, curb cut numbers were reduced and existing widths modified to a minimum necessary, often relying on ‘shared’ access or access from a rear or side street when appropriate.

Parking Lot Frontage

Many of the lots that front Prince Avenue have been paved over in an effort to provide parking spaces that are accessible both visually and physically. This conflicts with the desire to create a public realm that gives priority to the pedestrian. Parking lot frontages are out of *context* with the general character of the avenue. They contribute to a coarse grain, and are aesthetically unappealing. While they may immediately offer convenience for the driver, by their very nature cannot contribute to the form of a public realm that the local community desires. Parking lot frontages can be made to appear less noxious through the inclusion of trees and landscape, but wherever possible, they were relocated in the redesign of the corridor.

Analysis and Conclusions

This research has sought to acknowledge the significance of the urban form and public realm as a place that provides an important social, economic, and recreational amenity to the community. The research has identified the qualities and characteristics of the urban form that make up the public realm to create place, and provide a basis of understanding for the notion of sense of place. These qualities and characteristics were used in an effort to restore place to an

urban environment that has been compromised by the automobile. The Prince Avenue corridor in Athens, Georgia was once the premier residential street in town. After years of abuse and neglect resulting mostly from retrofitting the physical environment for the automobile, the community interest is now moving towards revitalization of the corridor centered on a pedestrian scaled environment. The proposed design for Prince Avenue relied heavily on the form components blended with the results of the CAPPa charrette results and the ideas behind the New Urbanist form-based codes to create a pedestrian centered environment.

It appears that form-based codes as a means to implement future development on Prince Avenue could be successful with some modifications to the general regulating plan. The eclectic physical nature of Prince Avenue makes it difficult to place into a ‘one size fits all’ category. The solution for one area of the corridor would not be as effective for another. Perhaps a ‘hybrid’ approach to the form-based code would work best. The research suggests that a form-based code regulatory framework for Prince Avenue would be most efficient if acknowledged block to block, rather than for the entire corridor. A form-based code approach would be more effective if an entire block bounded by streets on all sides were being redeveloped. For Prince Avenue, the challenge to writing a form-based code arises as individual infill opportunities should relate to existing context. The research suggests that infill buildings should act like guests and be respectful of the existing. A form-based code would need to accommodate a variety of building placement on lots from block to block. Adopting form-based codes for Prince Avenue would be challenging given the diverse group of property owners who may be naturally inclined to look out for individual self-interest before considering funding a portion of the community vision. To implement in that direction would mean a broad outreach to all the property owners to generate buy in to a collective vision. The economic benefit is difficult to quantify, as changes to the physical environment are often based in ‘good’ design or what is aesthetically pleasing from the design practitioner’s opinion. Bricks and mortar cost money. A way to highlight the economic

return to property owners should be included in a pitch to move from conventional zoning to form-based codes.

From the CAPP perspective, the proposed infill design would contribute to the outcome of the community visioning process. The results of the CAPP charette sought to maintain a sense of place, preserve cultural heritage, that future development be sensitive to existing context, be sensitive to surrounding residential scale, and that all future development would be pedestrian-centered. Form-based codes bring Prince Avenue closer to CAPP than conventional zoning, but the devil is in the details. Again, a block to block approach is recommended based on the research identified by the thesis.

Limitations and Future Research

The information presented in this thesis, while useful, is but a small piece of the much larger and complex puzzle. While the research relied heavily on urban form there are other contributing elements that affect the urban environment in the creation of place. These might include economic demographic information, and population or home ownership statistics. There are limitations associated with density as well. Prince Avenue and its place in Athens are significant, but size in numbers of people and number of possible uses of the corridor are limited to what the community can currently sustain, there is a context that exists, and although there is room to become denser, it's not likely to happen too soon. The community should have a realistic vision for future development along the corridor. Mixed use is nice and preferable, but it is not needed along the entire stretch of Prince. A suggestion would be to consider the density of specific nodes, like Normaltown and preserving the less dense character of other nodes.

Vehicular circulation is an important consideration that the thesis raised peripherally in terms of pedestrian safety and defining edges, but more in depth concentration on how drivers use the Avenue would be beneficial to making changes. Decreasing vehicular speeds, providing safe

pedestrian connections and the need for bike lanes is evident. Converting Prince Avenue to three lanes has been openly debated in the community and would be a positive step in supporting cyclist and hopefully getting cars off the street. Bike lanes are needed from the Loop 10 to Pulaski Street. Lowering the speed limit and beefing up enforcement could assist with this problem too. Opportunities to improve public transportation to encourage use go in kind with vehicular circulation and would be another area for further study.

CAPPA needs a sustained presence within the community. The charette focused attention to Prince Avenue. Efforts should be made to sustain the momentum of community interest in reforming the corridor. Maybe a second or even third charette should take place to refine the earlier vision. Charette groups could work with property owners to demonstrate that good design can be functional and economically profitable. Perhaps CAPPA could transform its identity from a charette organizer to a real continued presence through the formation of a nonprofit entity that works to break down the myriad of complex pieces of planning, zoning, and urban design to understandable bite size chunks and then disseminates that information to the general public. They could be the source for information about Prince Avenue, kind of the ‘watchdog’ for the street. This has worked for neighborhood groups over time; it could work for Prince Avenue.

There is great opportunity for outreach and education on Prince Avenue. From both a historical and political context, Prince Avenue really was a who’s who of Georgia State history. The story should be told and the larger mansions opened occasionally to the public. A greater understanding of the historic cultural significance of the street may assist with its renaissance.



Figure 6.1
Existing Conditions
Milledge Avenue to Pulaski Street



Figure 6.2
Existing Conditions
Oglethorpe Avenue to Milledge Avenue



Figure 6.3
Existing Conditions
Childs Street to Pulaski Street



Figure 6.4
Childs Street to Pulaski Street



Figure 6.5
Existing Conditions
Park Avenue to Nacoochee Avenue



Figure 6.6
Park Avenue to Nacoochee Avenue



Figure 6.7
Existing Conditions
Satula Avenue to Park Avenue



Figure 6.8
Satula Avenue to Park Avenue

REFERENCES

Alexander, Christopher. *Notes on the Synthesis of Form*. Cambridge: Harvard University Press, 1967.

Athens Area Chamber of Commerce (Athens, Ga.). *Athens of Old*. Athens: Athens Historical Society, 1966.

Athens, Ga. *Athens, Georgia, Home of the University of Georgia, 1801-1951*. Athens: Athens, 1951.

Babcock, Richard F. *The Zoning Game: Municipal Practices and Policies*. Madison. Wi.: University of Wisconsin Press, 1966.

Bacon, E.N. *Design of Cities*. New York: Penguin Books, 1976.

Baker, N. *Legal Aspects of Zoning*. Chicago: University of Chicago Press, 1927.

Barnett, Jonathan. *Redesigning Cities: Principles, Practice, Implementation*. Chicago: Planner's Press, 2003.

Ben-Joseph, Eran and Szold, Terry S. *Regulating Place, Standards and the Shaping of Urban America*. New York, New York: Routledge, 2005.

Ben-Joseph, Eran. *The Code of the City*. Cambridge, Massachusetts: MIT Press, 2005.

Blumenfeld, Hans. *The Modern Metropolis*. Montreal, Canada: Harvest House, 1971.

Canter, David. *The Psychology of Place*. Great Britain: BAS Printers Limited, 1977.

Carmona, Matthew...et all. *Public Places, Urban Spaces: The Dimensions of Urban Design*.

London: Architectural Press, 2003.

Carr, Stephen. *Public Space*. New York: Cambridge University Press, 1992.

Cullen, Gordon. *Townscape*. New York: Reinhold Publishing Corporation, 1961.

Doster, Grady. *From Abbeville to Zebulon, Early Postcard Views of Georgia*. Athens, Georgia:

University of Georgia Press, 1991.

Duany, Andes, and Elizabeth Plater-Zyberk. *Towns and Town-making Principles*. New York,

New York: Rizzoli, 1991.

Duany, Andres et all. *Suburban nation*. New York, New York: North Point Press, 2000.

Dunham-Jones, Ellen and Williamson, June. *Retrofitting Suburbia*. Hoboken, New Jersey: John

Wiley & Sons, Inc., 2009.

Dunham-Jones, Elllen and Williamson, June. *Retrofitting Suburbia*. Hoboken, New Jersey: John

Wiley & Sons, 2009.

Elliott, Donald L. *A Better Way to Zone, Ten Principles to Create More Livable Cities*.

Washington, D.C.: Island Press, 2008.

Francis, Carolyn and Marcus, Claire Cooper. *People Places: Design Guidelines for Urban Open*

Space. New York: Van Nostrand Reinhold, 1997.

Gallagher, Winifred. *The Power of Place: How Our Surroundings Shape Our Thoughts,*

Emotions, and Actions. New York: Poseidon Press, 1993.

Gehl, Jan. *Life Between Buildings: Using Public Space*. New York: Van Nostrand Reinhold,

1987.

- . *Public Spaces, Public Life*. Copenhagen: Danish Architectural Press and the Royal Danish Academy of Fine Arts, School of Architecture, 1996.
- Hull, Augustus L. *Annals of Athens, Georgia, 1801-1901*. Athens: Banner Job Office, 1906.
- Hynds, Ernest. *Antebellum Athens and Clarke County Georgia*. Athens: The University of Georgia Press, 1974.
- Ittelson, William et al. *An Introduction to Environmental Psychology*. New York, New York: Holt, Rinehart and Winston, Inc., 1974.
- Jackson, J.B. *A Sense of Place, A Sense of Time*. New Haven: Yale University Press, 1994.
- Jacobs, Allan. *Great Streets*. Cambridge, Massachusettes: MIT Press, 1993.
- Jacobs, Jane. *The Death and Life of Great American Cities*. New York: Random House, 1961.
- Katz, Peter. *Introduction to Form-Based Codes. Zoning Reform Through Form-Based Codes*. National Realtors Association, 2003.
- . "Regulating the New Urbanism." *Planning Magazine*, November 2004.
- Krier, Rob. *Urban Space*. New York, New York: Rizzoli, 1979.
- Kushner, James A. *Healthy Cities: The Intersection of Urban Planning, Law and Health*. Durham, N.C.: Carolina Academic Press, 2007.
- Lennard, Henry L. *Livable Cities*. USA: Eastern Suffolk Printing, 1987.
- Lewis, C. *Design-Based Codes for 21st Century Communities*. New Urbanism In Practice, 2003.
- Lofland, Lynn H. *The Public Realm, Exploring the Citiy's Quintessential Social Territory*. Hawthorne, New York: Aldine De Gruyter, 1998.

- Lynch, Kevin. *A Theory of Good City Form*. Cambridge: MIT Press, 1981.
- . *Managing the Sense of a Region*. Boston, Massachusetts: MIT Press, 1981.
- . *Site Planning*. Boston, Massachusetts: MIT Press, 1962.
- . *The Image of the City*. Cambridge, Massachusetts: MIT Press, 1960.
- . *What Time Is This Place?* Boston: MIT Press, 1972.
- McElfish, James M. *Nature-Friendly Ordinances: local Measures to Conserve Biodiversity*. Washington, D.C.: Environmental Law Institute, 2004.
- Meck, Stuart. "Model Planning and Zoning enabling Legislation: A Short History." 1996, 1-17.
- Mell, Edward Baker. *Reminiscences of Athens, Georgia, About 1889 to 1890*. Athens: N.p., 1964.
- Morris, Sylvanus. *Strolls About Athens*. Athens: Athens Historical Society, 1969.
- Moudon, Anne Vernez. *Public Streets for Public Use*. New York, New York: Van Nostrand Reinhold Company, 1987.
- Moughtin, Cliff. *Urban Design, Street and Square*. Oxford, UK: Architectural Press, 2003.
- Norberg-Schulz, Christian. *Genius Loci: Towards a Phenomenology of Architecture*. New York: Rizzoli, 1980.
- Parolek, Daniel, G et al. *Form Based Codes, A Guide for Designers, Municipalities, and Developers*. Hoboken, New Jersey: John Wiley & Sons, Inc., 2008.
- Perkerson, Medora. *White Columns in Georgia*. Canada: Holt, Rinehart and Winston, 1952.
- Pierce, Neal. "The Washington Post Writers Group." *The Washington Post Writers Group*. 2003. <http://www.postwritersgroup.com/archives/peir0616.htm> (accessed June 30, 2008).

- PPS. *Project for Public Spaces*. March 15, 2010.
- <http://www.pps.org/info/placemakingtools/placemakers/wwhyte> (accessed March 15, 2010).
- Reap, James. *Athens, A Pictorial History*. Norfolk, Virginia: The Donning Company, 1982.
- Relph, E. *Place and Placelessness*. London, England: Pion Limited, 1976.
- Rowsome, Frank. *Trolley Car Treasury: A Century of American Streetcars - Horsecars, Cable Cars, Interurbans, and Trolleys*. New York: Bonanza Books, 1956.
- Russell, Joel. *Codifying New Urbanism, How to Reform Municipal Land Development Regulations, Report # 526*. American Planning Association, 2004.
- Sitte, Camillo. *City Planning According to Artistic Principles*. New York, New York: Random House, 1965.
- Spalding, Phinizy. "Neighborhood Conservation or Getting It All Together In Cobbham." *Georgia Historical Quarterly* (Georgia Historical Quarterly 63), Spring 1979: 90-99.
- Stevens, Quentin. *The Ludic City, Exploring the Potential of Public Spaces*. New York, New York: Routledge, 2007.
- Szold, Eran Ben-Joseph and Terry S. *Regulating Place: Standards and the Shaping of Urban America*. New York: Routledge, 2005.
- Tate, William. *Strolls Around Athens*. Athens: The Observer Press, 1975.
- Tibbalds, Francis. *Making People-Friendly Towns*. Hong Kong: Longman, 1992.
- Tiesdell, Steven and Oc, Taner. *Safer City Centres: Reviving the Public Realm*. London: Paul Chapman, 1997.

Tuan, Yi-fu. *Space and Place: The Perspective of Experience*. Minneapolis: University of Minnesota Press, 1977.

Tuan, Yi-Fu. *Topophilia, A Study of Environmental Perception, Attitudes, and Values*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1974.

Village of Euclid v. Ambler Realty Co. 272 US 365 (United States Supreme Court, Washington, D.C. 1926).

Web, Planner's. *plannersweb.com*. January 31, 2010.

<http://www.plannersweb.com/sprawl/define.html> (accessed January 31, 2010).

Whyte, William. *City: Rediscovering the Center*. New York: Doubleday, 1988.