

Duke University



Campus Master Plan

MAY 2000

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*"These buildings have been constructed . . . to be the home of the soul of the University and in the belief that these appropriate and beautiful surroundings will have a transforming influence upon students generation after generation and even upon the character of the institution itself."*¹

President William Preston Few, Speech to the Graduating Class 1931

"I believe these buildings have had such an influence over our 105,000 living alumni and on all of us who work and study here—reminding us of the seriousness of our mission while defining a sense of place that fosters camaraderie, spiritual and intellectual growth, a sense of infinite possibility and infinite yearning."

President Nannerl O. Keohane, Spring 2000

Table of Contents

I. Introduction	
- Intent of the Duke Plan	I-2
- Elements of the Master Plan	I-3
- Context	I-4
- Campus History	I-4
- Campus Master Plan	I-6
- Recent Campus Planning	I-8
- Regional Context	I-9
II. Principles & Goals	II-1
III. Strategies	III-1
IV. Application	
- Conserving the Campus	IV-3
- Structuring the Campus	IV-9
- Placemaking	IV-50
V. Illustrative Plans	V1
- New Science Quad and Bryan Center Area	V-4
- Engineering Plaza Area	V-8
- West Edens Link	V-12
- West Quad Area/Transit Center	V-16
- Recreation Plaza/ Towerview and Public Policy	V-20
- Parking Area on Wannamaker	V-24
- Thomas Center and Law/Business Interdisciplinary Center	V-26
- LSRC Area	V-30
- West of Research Drive	V-32
- East of Research Drive	V-34
- Medical Center Area	V-36
- Medical Center North	V-40
- Medical Center East/Mixed Use Area	V-42
- Central Campus Residential Area	V-44
- Sarah Duke Gardens Area	V-46
- Regional Transit Center Option	V-50
- Steam Plant/Warehouse Area	V-52
- East Campus Area	V-54
- Center for Living	V-56
VI. Implementation Plan	VI-1
Appendix 1: Bibliography	A1-1
Appendix 2: Parking Study	A2-1
Appendix 3: Illustrative Master Plan	A3-1

I. INTRODUCTION

Intent of the Duke Plan

The master plan provides a vision of what the Duke campus could be in the future—a vision that looks for opportunities and potential without regard to specific program requirements, which are being considered at length elsewhere in the provost’s long-range strategic plan and which will themselves evolve over the coming years. The intent of this document, then, is to inspire development of the Duke campus so that each new project contributes to the campus environment as a whole.

The master planning effort has resulted in two related documents. One, the Duke University Campus Master Plan, contains a comprehensive background analyzing the campus, proposing potential changes, and providing a context in which future development can contribute to the whole. It also includes an implementation plan, intended as a mechanism for carrying out future planning. The second document is the first of a series of Action Plans, which outlines a series of actions and projects considered a high priority for study or implementation. Further Action Plans should be considered as a regular part of the ongoing planning process.

The documents build on and coordinate the substantial body of work that has already been done by others for various portions of the campus, or on various systems within the campus. One of the first tasks in the master planning process was a review of prior documents and studies, and much previous work is included in the recommendations published here.

Specific objectives are as follows:

Set forth agreed-upon principles, goals and strategies

Broadly consensual principles and goals—as well as strategies to achieve them—are presented as the foundation for decision making on campus. While the details of development may be subject to debate, decisions can be judged on the extent to which they promote the principles themselves.

Create enforceable regulations where necessary

In addition to the guiding principles in Sections III and IV, there need to be “tools with teeth” that go beyond guidance into a more regulatory realm. For example, conservation in key areas of the Duke Forest and preservation of buildings on the historic quads are appropriate for higher levels of regulation. Such tools are embedded in the text where appropriate.

Provide a framework for the future

The plan’s mission includes: 1) identifying those areas of campus that need to be protected and enhanced; 2) looking for opportunities to strengthen and improve specific areas; and 3) making recommendations for consistent elements that will help tie together the campus as a whole with an identity unique to Duke.

Establish a new decision making process

An implementation plan is of critical importance both to facilitate consensus among the leadership of Duke and to provide a continuing means to debate and to decide on important decisions regarding development of the campus.

Identify near-term actions

While much of the plan considers the campus in broad terms without addressing specific program needs, of course certain actions have already been identified as high priorities that should be addressed now. These are considered with higher levels of specificity where programs have been developed.

Elements of the Master Plan

With these objectives in mind, the master plan balances long-term guiding principles with more specific near-term actions. The “chapters” or products of this process are:

Principles & Goals

These principles and goals represent a consensus among current decision makers at Duke. Future actions will be measured against these common goals.

Strategies

In order to ensure protection of Duke’s irreplaceable assets, conservation zones have been established with criteria for testing whether proposed actions are allowable, and what mitigation measures may be required. Outside the conservation zones, other portions of the campus are less restricted but still are to be developed in accordance with the principles outlined in the master plan, including the specific guidelines of the Application section.

Application and Illustrative Plans

The body of the document is intended as a long-range vision of the Duke campus’ potential. This section, then, includes an illustrative plan showing how future development might create new open spaces and connections on campus. As the illustrative plan is not based on specific program needs, it will need to be revised over time as changes occur on campus.

Implementation Plan

This portion of the plan guarantees that the master plan plays a central role in all development decisions. It includes 1) setting up review bodies and defining their responsibilities, 2) decision making criteria, and 3) ongoing scheduled review of the master plan and its process.

Ongoing Action Plans

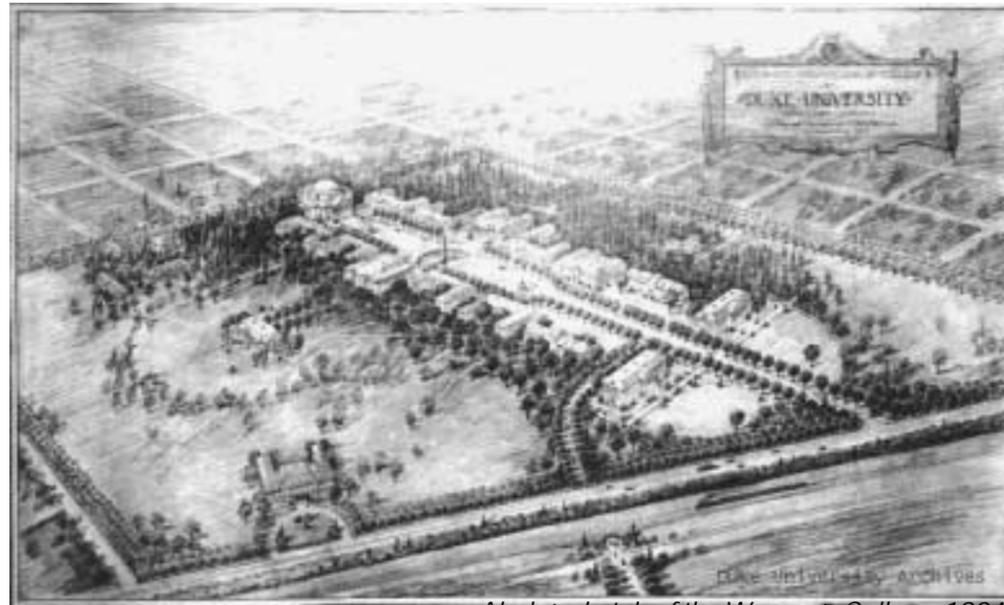
Action areas and systems are geographically defined places or systems in which change can be of great benefit to Duke University. On a regularly scheduled basis, Action Plans will be presented to the leadership for approval.

Illustrative Master Plan

The Illustrative Master Plan at the end of this document is a schematic compilation of the specific information outlined in the Master Plan. This is *illustrative* in the sense that the building footprints and circulation realignments are meant only to imply the intent of the Master Plan, not be an accurate representation of future construction. This overall plan will be monitored and periodically adjusted to more effectively depict actual development on the campus.

Context

Both Duke's setting—the rolling, forested piedmont of North Carolina—and its powerful architecture contribute to its reputation as one of the nation's most picturesque college campuses. Known as a University carved from a forest, Duke was carefully designed to maximize its location and to represent the lofty ideals of a young university.



Abele's sketch of the Woman's College, 1924

Campus History

Duke University traces its origins to 1838 when Union Institute, a small local institution, opened in Randolph County, North Carolina. Over several decades, despite the tumult of the Civil War and Reconstruction, the school evolved into a thriving liberal arts college. In 1892, with \$85,000 in support from Washington Duke, for whom Duke University was named in 1924, and with a gift of land from Julian S. Carr, Trinity College was relocated to Durham and a new, small campus (three academic buildings plus six faculty residences) was built on Blackwell Park, the old Durham fairgrounds.

The establishment of the Duke Endowment in 1924 by James B. Duke and Benjamin Duke prompted Trinity President William Preston Few to rename the college Duke University. The original Trinity campus became the Woman's College of Duke University. Horace Trumbauer of Philadelphia was appointed as the Campus Architect and new construction on Trinity was followed by the new gothic-style men's campus. Julian Abele, chief designer of Trumbauer's firm, designed the East and West campuses in two distinct styles.

Today's East Campus was constructed between 1925 and 1927 on the site of the original Trinity College. The new quadrangle, defined by eleven American Georgian buildings, was symmetrical, contained and orderly, inspired in part by Thomas Jefferson's work at the University of Virginia. The main axis stretched from a tree-lined entrance approach to the domed performance hall at the opposite end. The expression of the use within the style was subordinate to the cohesiveness of the whole, and the hierarchy was clear and powerful.

A large woodland tract about a mile from the Trinity campus was purchased based on the availability of land and on the suitability of the ridge for construction. This decision created a dual campus which has been a defining factor for Duke ever since.



Interior of the Chapel



Study of Proposed Buildings for DUKE UNIVERSITY at Durham, North Carolina



The West Campus, built from 1927 to 1932, reflected many of the same values as the East Campus. The original plan envisioned an ideal university where unity — conceptually and aesthetically — overrode a diversity of functions. Communal life was centered on the quadrangles, with the Chapel as the end of the axis and the heart of the communal space.

Duke began to grow even as its new campus was under construction. The School of Divinity opened in 1926, followed by Medicine (1930), Nursing (1930), and Forestry (1938). Already the question of separate departmental identities began to challenge the unity of the campus.

The Olmsted Brothers of Brookline, Massachusetts, famed for their work in developing parkland and greenbelts throughout the country, offered a development plan in 1945. Proposed as an escape hatch from the monetary requirements of a unified campus, the firm planned a wooded, visual barrier — a “greenbelt” — which would separate the West Campus quadrangle from its surroundings. Beyond this greenbelt, buildings would not need to be built in Duke’s Gothic style. However, after the university had constructed several less costly red-brick Colonial buildings beyond the new greenbelt, the visual differentiation and physical separation of the campus began to divide it academically and socially.

Campus Master Plans

Since the completion of the two original quadrangles in the 1930's, a number of planning studies have been done, though the majority were never formally adopted. Only one—the Caudill, Rowlett and Scott study of 1964—included both the University and the Medical Center.

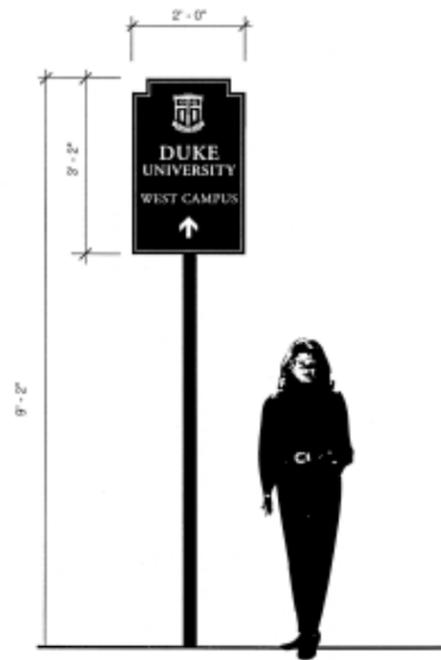
The firm of Caudill, Rowlett and Scott developed its comprehensive plan for the University from 1963 to 1966, grappling with the problem of unity, both in the visual and political sense. The plan suggested a return to some of the traditions of the "Duke" style, using Duke stone, for instance, and emphasizing the verticality of the Gothic style, but using contemporary construction systems and a modernist aesthetic. These references to the original design, it was hoped, would help reunite a visually fractured campus.

The plan also discussed whether to promote identical yet separate facilities and programs on the East and West campuses or to promote a mixed, unified campus. The resulting recommendations called for linking the campuses with facilities needed by both sets of students—administrative space, a University Center, a Graduate Center, an Arts Center, etc—preferably on an expanse of land acquired by the University in the 1960's and now called the Central Campus. Caudill, Rowlett and Scott's concept for the design of the Central Campus was the development of "coherent and unified building groupings in the tradition of the established quadrangles."

Many recommendations of the CRS plan are still relevant. Throughout, the plan asked how Duke could "grow in size and efficiency without sacrificing the beauty of the natural landscape, the unity of the campus, and the heritage of existing buildings." One recommendation included rethinking the approach to site planning: buildings should create clusters or groups of buildings as "outdoor rooms" rather than "stringing beads" along a street. Such an approach, CRS argued, would orient buildings to pedestrians rather than motorists. Additionally, they advocated a



From Caudill Rowlett and Scott, Campus Design Study, November 1963



From Duke University Sign Standards

comprehensive approach to planning: "no new buildings should be built before the total building group of which they are a part has been planned."

The two decades from 1965 to 1985 marked a time of enormous growth for Duke, especially within the Medical Center and the Central Campus.

A study of the campus environs and the Duke Forest was produced by the Urban Land Institute in the mid-eighties. Only some of its recommendations were accepted. Management of the Duke Forest was a primary issue which has since resulted in protections for critical portions of the forested land and consideration of other areas as real estate assets for the potential benefit of the University.

In 1987, Dober and Associates prepared a new land use plan for the University. The Medical Center was not included in the Dober Plan, but several projects that were under consideration at the time were specifically discussed. These included a technology center, expansion in the sciences and engineering, an art museum, new housing on East Campus, the Center for Jewish Life, and several other projects. Emphasis was placed on planning for each sector.

The Dober Report instigated much internal debate over the future direction of major portions of the campus and set the stage for the current master plan. According to the Strategic Planning Committee in their 1994 Report, "Shaping Our Future," the lack of firm policy guidelines in the Dober report resulted in case-by-case decisions for building projects, which is time-consuming and costly in terms of limiting opportunities for coordinated future development.

Recent Campus Planning

Since the 1987 Dober Report, planning efforts have focused on either a specific topic or a limited geographic area.

Cooper, Robertson & Partners prepared a master plan for a portion of the Medical Center in 1993. This plan used the need to place a new specialty clinic and parking garages as an opportunity to initiate a long-range plan for land use and to project the Medical Center's ultimate capacity. Overall, the study endeavored to organize the pattern of recent buildings and streets through intelligent placement of new development. For instance, the placement of the new specialty clinic and parking garage afforded the opportunity to create a medical "quad" with one side open to the Sarah P. Duke Gardens. Additionally, following the direction of the ULI report recommendation to acquire property north of Erwin Road, the plan included proposals to build in that area.

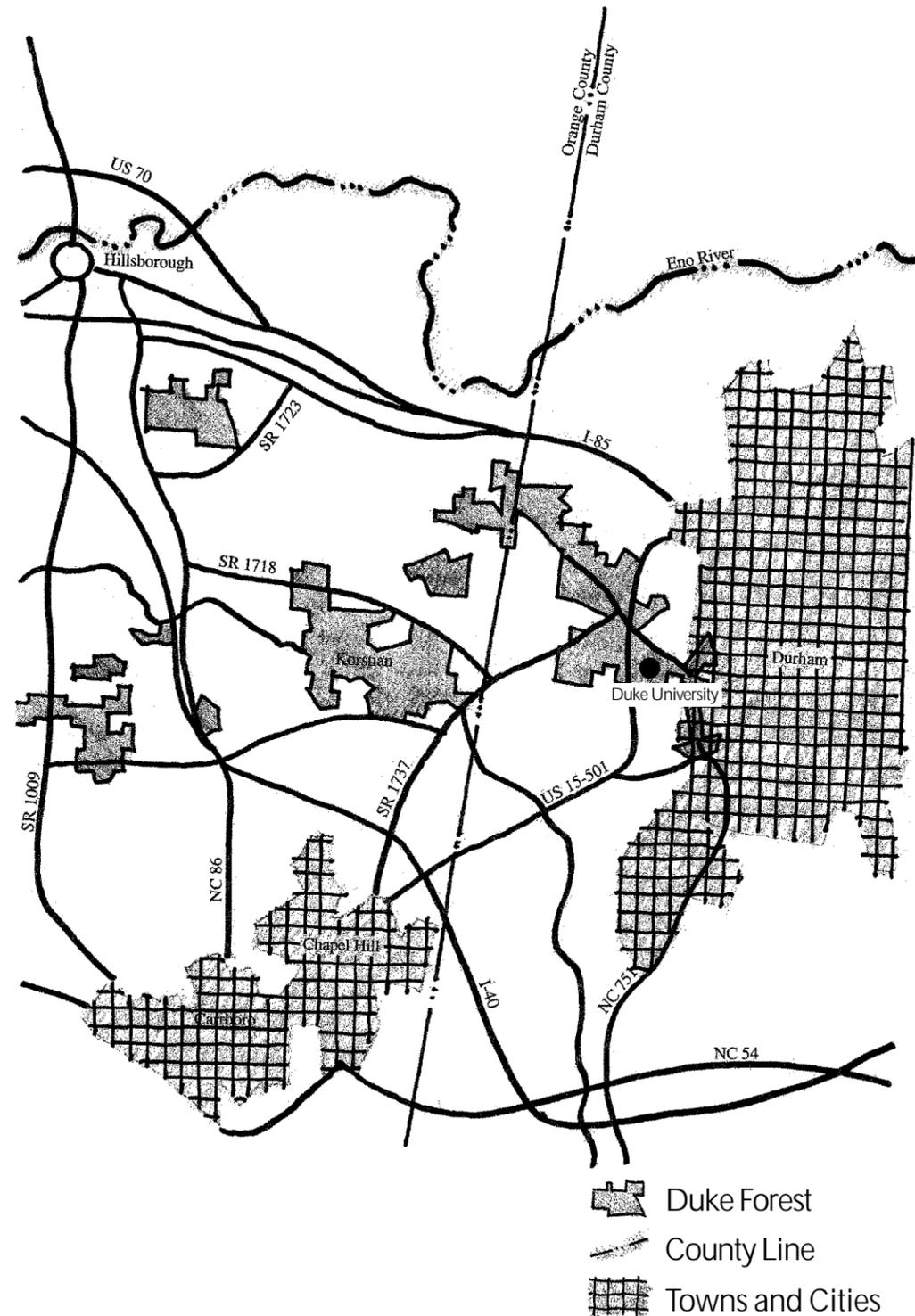
Duke President Nannerl Keohane directed Parsons Brinckerhoff to produce a Transportation Study, which was issued in 1995. The report included seven specific transportation issues to be resolved: parking for visitors, parking for faculty, students and staff; transit; bicycles; and roadway modification and traffic management. Both short term recommendations and longer term issues were discussed in the report.

At the close of 1997, the Olin Partnership completed a Conceptual Landscape Plan, focusing on the spaces and connections of the campus. The plan aimed to strengthen the campus identity by building on previously established "campus icons" such as the tall pines, massive willow oaks, and stone walls. Among other recommendations, the plan also earmarked the striking contrast between the manicured, axial spaces of the quadrangles and the rolling, rustic connecting streets as a characteristic worthy of preservation. Other recommendations advised that new buildings be sited to create cohesive outdoor places and new development be designed to reinforce the established structure of streets, edges, and entrances.

In coordination with the Olin Landscape Plan, the Exterior Sign Standards report was issued by Jon Roll & Associates, Inc. in January of 1998. The primary goal of this plan was to make Duke more welcoming and accessible through clear, consistent signage. The plan stressed the need to define a clear set of destinations—East Campus, Medical Center, and West Campus—and also addressed the concept of "gateways" into each of these three areas. Gateways were identified as entrances to the campus where a sense of arrival is unmistakable; it is the point at which a first-time visitor knows he or she has reached Duke.

Implementation of an athletic precinct plan by Cesar Pelli and Associates is currently underway. This plan accommodates growth of the athletic complex while maintaining a connection to the main campus, ensuring that varsity athletes and students would share a common, deliberately created place. The latest recommendations include the creation of "outdoor rooms," one between Wallace Wade Stadium and Cameron Indoor Stadium, another in the underutilized space created by Cameron, the Card Gymnasium, and the Aquatic Center.

Work is also underway by the office of Kieran Timberlake & Harris for adding to and renovating undergraduate housing on West Campus. In addition to increasing residential units in the area, ways of better connecting the Edens housing and the upper West Campus housing are being recommended. Parking in the area will also need to be restructured.



Regional Context Map

Regional Context

While the focus of this master plan is the main campus, it is important to look at Duke within the context of the region and in the context of its larger property holdings.

The main campus of Duke University consists of approximately 800 acres in Durham County, North Carolina. In addition, Duke owns major tracts of woodland known as the Duke Forest and several parcels of non-forested land near campus. Duke also owns and operates off-site facilities including the Primate Research Center just beyond the western edge of campus and the Marine Biology Labs in Beaufort, NC. This page shows the location of the main campus and the Duke Forest in the context of the region.

Duke's main campus lies on the western edge of the city of Durham, in the northeast corner of North Carolina's central Piedmont, a geographic region of foothills lying between the coastal plains and the Appalachian mountains. Terrain in the Piedmont region primarily slopes gently toward the Atlantic, with numerous streams, marshes, lakes and swamps. Common trees include loblolly pine, southern yellow pine, oak, hickory, red maple and dogwood.

Durham's economy, originally based on tobacco and textiles, has shifted over the last several decades to encompass health care, research, and high-tech manufacturing. Nearly one-third of Durham's workforce is involved in health and medical industries; the internationally respected Duke University Medical Center is the county's largest employer. Durham adopted the title "City of Medicine, USA" in 1981.

Durham is part of a metropolitan area known as the "Triangle," originally referring to an area formed by three major universities: Duke University, UNC-Chapel Hill, and North Carolina State University. The Triangle, which includes Durham, Raleigh, Chapel

Hill and Research Triangle Park, has grown and developed rapidly in recent years, more than doubling in population since 1970 to its current level of 1,128,000. The culture and the economy of the Triangle area is greatly affected by the presence of Duke University and Duke University Medical Center.