

University of Pennsylvania **ScholarlyCommons**

Theses (Historic Preservation)

Graduate Program in Historic Preservation

2013

A Seat at the Table: Integrating Historic Preservation into Comprehensive Campus Planning

Sarah Elisabeth VanLandingham University of Pennsylvania

Follow this and additional works at: http://repository.upenn.edu/hp_theses



Part of the Historic Preservation and Conservation Commons

VanLandingham, Sarah Elisabeth, "A Seat at the Table: Integrating Historic Preservation into Comprehensive Campus Planning" (2013). Theses (Historic Preservation). 212. $http://repository.upenn.edu/hp_theses/212$

Suggested Citation:

VanLandingham, Sarah Elisabeth (2013). A Seat at the Table: Integrating Historic Preservation into Comprehensive Campus Planning. (Masters Thesis). University of Pennsylvania, Philadelphia, PA.

This paper is posted at ScholarlyCommons. http://repository.upenn.edu/hp_theses/212 For more information, please contact libraryrepository@pobox.upenn.edu.

A Seat at the Table: Integrating Historic Preservation into Comprehensive Campus Planning

Abstract

Historic preservation should be incorporated into comprehensive campus planning in such a way that it is always part of the discussion. Although many universities are effectively managing their historic resources, there are many that would benefit from clear guidance on how to approach these issues. The existing literature is insufficient to meet these needs. This thesis analyzes the tools suggested by the literature in light of a variety of types of institutions to determine which tools are most appropriate for which types of schools and how they should be applied, which ones have more general application, and, finally, what preservation strategies may be missing from current campus planning techniques. Historic preservation on college campuses is a multifaceted endeavor and requires the careful balancing of priorities.

Keywords

heritage, college, university, scup, facilities

Disciplines

Historic Preservation and Conservation

Comments

Suggested Citation:

VanLandingham, Sarah Elisabeth (2013). A Seat at the Table: Integrating Historic Preservation into Comprehensive Campus Planning. (Masters Thesis). University of Pennsylvania, Philadelphia, PA.

A SEAT AT THE TABLE: INTEGRATING HISTORIC PRESERVATION INTO COMPREHENSIVE CAMPUS PLANNING

Sarah Elisabeth VanLandingham

A THESIS

in

Historic Preservation

Presented to the Faculties of the University of Pennsylvania in Partial Fulfillment of the Requirements of the Degree of

MASTER OF SCIENCE IN HISTORIC PRESERVATION

2013

Advisor
David Hollenberg
University Architect
Lecturer in Historic Preservation

Frank G. Matero Acting Program Chair Professor of Architecture

For Nana.

Thank you for your unwavering love and support.

Thank you to my advisor, David Hollenberg, for catching my typos, providing practical advice, and being a willing participant in the dialogical process of idea generation.

Additionally, I would like to thank the PennDesign Historic Preservation program staff and faculty for being so supportive and helpful throughout this project and my time in graduate school.

To my classmates who became my friends, I am grateful for the opportunity to have had my world-view expanded and challenged by your passion and individual perspectives. I look forward to following your post-graduate successes.

Finally, thank you to Nicholas.

CONTENTS

Introduction	1
Justification	2
Methodology	5
Terms	7
Chapter 1: Literature Review	9
Campus Planning: History, Functions, Effects	10
Older Ideas about Existing Buildings and Campuses	16
Incorporating Historic Preservation into Campus Planning	18
Getty Campus Heritage Initiative	18
Society for College and University Planning	19
Chapter 2: Planning Tools	32
Tools	33
Chapter 3: School Typology	40
Analysis of Pennsylvania's Schools	41
The Types	43
Chapter 4: Analysis	47
Identification and Inventory	
Building Condition Survey	49
Landscape Survey	51
National Register of Historic Places and Local Designation	54
Appoint Preservation Officer	56
Use of Faculty and Students and Campus Engagement	
Robust Maintenance Program	
Partnerships	
Other Issues	
Missing from Traditional Campus Planning	
Values-Based Preservation	
Cultural Landscape	
Recommendations	
Further Research	
Conclusion	
Bibliography	69
Appendices	74
Index	86

"Stewards we are and stewards we should be; with the challenges and opportunities to create, protect and burnish this jewel called campus design; so that on the outstretched finger of time, it will sparkle forever."

INTRODUCTION

Historic preservation on college campuses is a multifaceted endeavor and requires the careful balancing of priorities. Although many universities are effectively managing their historic resources, there are many that would benefit from clear guidance on how to approach these issues. The existing literature is insufficient to meet these needs. Even examples of successful stewardship of historic resources on campus can frequently be traced to either chance or mandatory regulatory oversight rather than to thoughtful preservation planning. Those assets most likely to be preserved are the iconic buildings and landscapes that can be easily identified as crucial manifestations of the institution. Buildings and landscapes that do not fit into this category are often less well preserved, either because they are newer and thus do not have the historical associations, their significance is unknown, or they were not built as part of the campus but rather have been annexed as the institution expanded.

If the treasures of collegiate architecture and landscape design of the past are to continue to be relevant to the future, there is a need for clear guidance on best practices

^{1.} Richard P. Dober, Campus Design (New York: John Wiley and Sons, 1992), 280.

and, ultimately, a practical decision-making model. Clarification of best practices may also allow for some of these planning processes to be done "in house" without having to hire an outside firm. This is important for those schools that lack an adequate budget for extensive campus master planning. While some tools may be best employed by an external firm, others may be undertaken by staff members with minimal outside guidance.

Important elements emerging from the pursuit of such best practices guidance in this thesis have necessitated substantial research on existing guidance for managing heritage buildings and landscapes on campus, use of campus plans, reviews, and articles to identify successful planning tools, and the distillation of patterns from these examples. These elements have been synthesized and analyzed to determine which tools are most effective and how they can best be applied to a range of institution types. There should be a decision-making methodology for campus planners to approach heritage buildings and landscapes in a thoughtful and comprehensive manner. The first step in doing this is to identify and evaluate a toolset that can be generally adapted.

Justification

From almost our earliest colonial days Americans have held higher education in high esteem. The largest structures in the colonies were not churches or government buildings but rather educational facilities. This indicates that significant resources were allocated to the construction of these buildings and thus higher education in the United States has always been about both content (knowledge) and form (place). A vast network of higher-educational facilities has sprung up from these initial colonial designs.

The historical precedents for what would become the American system are traced to English institutions, especially Cambridge, but that iconic symbol of university life- the campus- is an American invention.² First used in the 1770s to describe Princeton's great lawn in front of Nassau Hall, the term came to imply a park or field with buildings scattered throughout.³ Thus it is not only the buildings but also the spaces between them that must be considered as historic assets. As such, it may be helpful to consider a university campus as a cultural landscape. The elements must not be preserved in amber but rather allowed to change and adapt over time.

Colleges and universities play a large role in the life of many Americans not only as places of formal education and memory, but also as influential components of their respective communities. As the role of American universities continues to evolve, it is important for campus planners to have access to comprehensive guidance on how best to incorporate and make the most of their existing assets. It has become commonplace to hear about the challenges facing these institutions. Issues such as shrinking budgets from endowments hit by the recession and continual funding cuts to state-related schools hit at the same time as the number of users continues to increase and the purview of campus facilities continues to expand to include social, recreational, and personal uses never previously included in college life.

In addition to these social and economic changes, sustainability has come to the forefront as a necessary part of campus planning. Besides the triple-bottom-line advantages gained by investing in green design, there is also often pressure from alumni, donors, and students for universities to be leaders in this emerging field. As the role of existing buildings in sustainable design continues to increase and be better codified,

^{2.} Paul V. Turner, Campus: An American Planning Tradition (Cambridge: MIT Press, 1984), 3.

^{3.} Turner, 47

heritage buildings will see an increase in their value but, currently, sustainability is often considered only as the energy efficiency of systems, and historic buildings are frequently, and often incorrectly, dismissed as energy hogs.

The issues of shrinking budgets, expanding needs, and the desire for an evergreener campus are compounded in the case of those institutions that have physical constraints on their ability to build new. Urban campuses especially frequently face a dearth of quality developable land for campus expansion. As such, the value of land that the institution already possesses increases and there is often pressure to infill valuable open space or to replace existing buildings with new, larger facilities. The alternative is to build a satellite campus such as Columbia's Manhattanville expansion⁴, Harvard's Allston campus⁵, or Yale's West Campus⁶. There are positives and negatives associated with this kind of development. In looking to a new site to build institutional facilities, some of the pressure is taken off of the older campus area. This may grant a reprieve to buildings threatened by the need to expand, but it also has the potential to foster a disconnect between the historic heart of the campus and a new cutting-edge area.

Although there may be situations in which these types of satellite developments make sense, there is often an important iconic brand associated with the original campus and it remains the most desirable area. In recent years the concept of branding seems to have penetrated all aspects of everyday life. Despite this pervasiveness it somehow manages to be simultaneously vague and confusing and yet is also deemed essential. Without undertaking an in-depth analysis of the impacts and effects of

^{4. &}quot;Manhattanville in West Harlem," Columbia University, accessed March 15, 2013, http://neighbors.columbia.edu/pages/manplanning/proposed_plan/PhasedDevelopment.html.

^{5. &}quot;Allston: Progress Report of the Faculty Task Forces 2004," Harvard University Gazette, accessed March 15, 2013, http://www.news.harvard.edu/gazette/2004/05.20/99-allston overview.html.

^{6. &}quot;Yale University West Campus History and Vision," Yale University, accessed March 15, 2013, http://www.yale.edu/westcampus/history.html.

branding on universities, the fact remains that those iconic buildings inspire alumni to donate and prospective students to attend. Universities should place great emphasis on making sure that those buildings and spaces are well cared for and well used.

Unfortunately, it is these conflicting pressures that often put historic campus buildings in jeopardy. Part of the answer lies in the ability to adapt the building to a new use; examples of successful adaptive reuse projects are admired equally for their aesthetic achievement as for their practical reconfiguration of space. Another part of the answer involves taking careful stock of existing assets and making informed decisions that are based on values and focused on the future. In order for campus planners to do that, there needs to be contemporary guidance that is sufficiently general to be applicable across the board and yet specific enough to be useful. Additionally, the framework should privilege an objective analysis of the campus such that, given the same information, outside experts would be able to replicate the approach and come to similar conclusions.

Comprehensive planning is needed to make sure that the values, priorities, and philosophical approaches to managing historic assets are understood before having to make decisions regarding specific buildings. This helps campus planners and administrators defend their decisions against those who may disagree with them, and helps mitigate some of the knee-jerk reactions to questions of architectural style.

Methodology

There is an extensive array of elements outside of official campus planning documentation that influence the way in which a university manages its historic resources. Some of these include: whether the institution is public or private, its

age and location, how much available land there is and how much it is worth, the development pressure outside the boundaries of the school itself, and, perhaps most intangibly, the inclinations and opinions of the administration. Some planning tools cut across these divisions but others are more suited to a specific type of institution. Even those that are generally applicable are often best adjusted to meet the needs of the type of college of university.

The methodological approach taken by this thesis in order to lay the foundation for a best practices guide is to first study the current campus planning literature and from that to outline existing guidelines for dealing with heritage buildings. Common themes are distilled from the literature and specific techniques and methods are considered. In addition to these planning tools, the thesis broadly categorizes and examines the various types of schools in order to determine their respective challenges and opportunities. To do this, a matrix of the 121 public and private (non-profit) four-year degree granting institutions of the Commonwealth of Pennsylvania is used to identify commonalities and differences between the schools in order to group them into general categories (see appendix A).⁷ The institutional categories that have emerged from this analysis are: *Large Public Research Institutions, Rural Charm, Metropolitan Mammoths, Doing More with Less, Small, Old, and Wealthy,* and *Newcomers*.

The thesis then analyzes the tools suggested by the literature in light of these types of institutions to determine which tools are most appropriate for which types of

^{7.} Pennsylvania is used in this thesis purely as an example due to its large number of institutions of higher education and its diversity of types. It is not necessarily representative of the relative numbers of each type of campus, but since this thesis looks more at the range of types and less at their frequency, this is not seen as a limitation. An analysis of all U.S. institutions was not deemed to be necessary for the purposes of this thesis, but the author recognizes the importance of issues related to weather and climate in planning for the future of campuses and suggests that a regional analysis could be helpful in incorporating those issues into campus preservation.

schools and how they should be applied, which ones have more general application, and, finally, what preservation strategies may be missing from current campus planning techniques. While this toolset should not be considered to be comprehensive or definitive, this analysis may be useful to university facilities departments and firms undertaking campus master plans.

The conclusion makes a plea for the inclusion of historic preservation as a central element in strategic campus planning. If place-based campuses are going to remain vital in the face of social and economic changes, preservation has an important role to play in the creation and maintenance of colleges and universities as special places devoted to both the proliferation of knowledge and the protection of American heritage.

Terms

For the purposes of this thesis, the terms "college," "university," "school," and "institution" should be understood to be synonymous unless the context indicates otherwise.

In this thesis, "planning tools" are considered to be any activity undertaken by or on behalf of campus facilities in order to better understand, protect, market, or generally make use of any building or landscape controlled by the institution.

In general, "building" should be understood to mean any historical asset including built structures, designed landscapes and the elements contained within such as benches, planters, sculptures, and other interstitial spaces unless the specific context indicates otherwise.

More specific than "building," the term "landscape" is used to mean the non-building elements of a campus. Depending on the institution, the entire campus may

be considered one "landscape" or it may be comprised of multiple "landscapes." The entirety of the campus including the buildings is sometimes referred to as a "cultural landscape."

CHAPTER 1: LITERATURE REVIEW

Historic preservation on campuses often takes the form of protecting or rehabilitating a specific building. While these actions are important and thought-provoking, they are really elements of a higher order of activity. This thesis looks not at individual buildings but at the ways in which preservation is incorporated at the level of campus planning. To that end, the literature reviewed in this chapter focuses less on specific building projects and more on the ways in which campuses plan for and manage their existing assets. Some of the resources look at campus planning generally and others relate to the activities at specific institutions. This research is intended to set the stage upon which the analysis can be done to determine: What are the best practices for protecting, utilizing, and integrating existing and historic resources into comprehensive campus master planning?

Although historic buildings have been a part of campuses for a long time, the inclusion of preservation planning into general campus planning is a relatively new activity and there are still many questions about the appropriate tools and the best ways to implement them. There is not a definitive source for campus planners to refer to for guidance on the ways in which historic preservation can be incorporated into campus planning.

This literature review starts by looking at books on campus planning and preservation. Although there are a few resources that relate to this topic, none are comprehensive in scope or instructive in a way that might enable specific application of these ideas to a particular campus. After considering the books that comprise the

foundation of information, the literature review turns to articles on the topic. It is worth noting that, unlike the majority of the books, most of these articles have been written in the past few years and are authored by practitioners in the field. Thus, the information contained within them is considered to be generally more up-to-date especially as it relates to recent experiences at institutions tackling this problem. The increase in the amount of articles written about historic preservation and planning recently is an indication that the issue is gaining interest in the field.

Campus Planning: History, Functions, Effects

The seminal book on the history of campus planning was written in 1984 by Paul Turner. In *Campus: An American Planning Tradition*⁸, Turner writes a thoughtful history of the development of the campus in America and the ways in which it is both a product of its circumstance and, in turn, very influential in the greater culture. American Universities are distinct from their European counterparts architecturally, spatially, socially, and culturally. Higher education had a central role in the colonial days and, tellingly, the largest buildings in North America were not governmental or religious but educational.⁹ Despite the long history of education in England and the Continent, Turner explains that "the American Campus, from the beginning, has been shaped less by European precedents than by the social, economic, and cultural forces around it." In terms of physical layout, the concept of a campus is decidedly American and, in fact, the notion did not exist until a student penned the term about Nassau Hall at Princeton sometime in the 1770s. It obviously appealed to something in the American spirit because it caught on quickly, and by the middle of the 19th century roughly 90% of

^{8.} Paul V. Turner, Campus An American Planning Tradition (Cambridge: MIT Press, 1984).

^{9.} Ibid., 47.

^{10.} Ibid., 6.

institutions were using the term to describe their grounds.¹¹ Since then, the idea of a campus has captured the imaginations of the American public and has been the setting of countless books, movies, plays, and television shows.

Perhaps the most prolific contributor to the field of campus planning, Richard Dober has published six books related to the topic: *Campus Planning, Campus Design, Campus Architecture, Campus Landscape, Campus Heritage,* and *Old Main.*¹² These texts have been crucial in forming a baseline understanding of the role of heritage in creating a sense of place and have been useful as background information in justifying why campuses matter and why they ought to be preserved.

In his book, *Campus Design*¹³, Dober looks specifically at placemaking and the way in which buildings and open spaces contribute to creating a sense of place. He considers campuses that are rapidly expanding as well as those that are trying to manage what they already have and grow in a more restrained way. He is especially interested in the latter group, which he believes has a greater challenge in trying to orchestrate improvements likely to "occur in small increments stretched over time." Dober considers four elements of campus design—landmarks, style, materials, and landscapes—as the basis for "placemarking" on campus. ¹⁵ For Dober, placemarking is the physical side of campus planning and placemaking is the larger and less tangible frame that distinguishes and creates the sense of place.

He uses these four elements of campus design to explain examples of successful college campuses. In considering landmarks, he advocates for the reuse of landmark

^{11.} Ibid., 47.

^{12. &}quot;Richard P. Dober, AICP," Dober, Lidsky, Craig and Associates, Inc., accessed April 5, 2013, http://www.dlca.com/Bios/RPDoberBIO.pdf.

^{13.} Richard P. Dober, Campus Design (New York: John Wiley and Sons, 1992).

^{14.} Ibid., 9.

^{15.} Ibid., 14.

buildings that are solid and meaningful and is also supportive of designating landmark buildings in order to help protect them. He writes "to save and savor is better than to destroy or diminish, not because the old is better than the new, but because blending the two communicates best, physically, the essential character of viable institutions; which, reiterated, is the signification of continuity and change." ¹⁶ In addition to buildings, Dober points out that landscapes and elements of landscapes can also be landmarks. He also includes "statues, carillons, monuments, and gateways" as potential placemarking elements.

In discussing the role of style, Dober writes, "campus designs can be categorized as monoforms, metamorphorics and mosaics." Monoforms are a single style applied to the whole of a campus or to a major part. Metamorphics are those campuses whose buildings respond to the original style in a modern way. They are reinterpretations of the beginning idea. Dober writes that "a string of buildings that interpret with cause, rather than imitate through caprice . . . will yield a strong image." At the other end of the spectrum from monoforms, mosaics are campuses with no singular architectural style. Although this thesis does not look specifically at the ways in which campus style impacts preservation practices, it is an important topic and one that deserves a closer examination in the future. Dober also considers materials and writes that when divorced from the question of style, "materials can be used to mark a place, honor antecedents, and connect generations." 19

The final element of the four considered by Dober is the landscape. He sees landscapes as the essential component of a campus. In his view, they serve a multitude

^{16.} Ibid., 26-28.

^{17.} Ibid., 44.

^{18.} Ibid., 45.

^{19.} Ibid., 95.

of roles including: circulation, beauty, abatement of noise, security, privacy, leisure, and recreation. He goes so far as to say "landscapes are art forms." ²⁰

For Dober, these four elements—style, materials, landscapes, and landmarks—are all in the service of "placemaking," a nebulous but important concept. As Dober sees it, it is in striking a balance between new ideas, roles and functions and the traditional experience and activities that a campus is able to best position itself for the future. He believes that "placemaking and campus planning are synonymous phrases."²¹ In campus planning, Dober advocates for a nine-step placemaking process which he believes can be applied to campuses both old and new.

Expanding on his discussion of landscapes in *Campus Design*, Dober explains the types, uses, and elements of campus landscapes as well as the feelings and sentiments they evoke in his book *Campus Landscape*²². His section on heritage spaces is especially applicable to preservation planning on campus because it speaks to the existence of something greater than the physical material and spaces themselves; they are "campus personified."²³ While these spaces conjure up feelings of generational connectedness and tradition, this is sometimes more artifice than fact in that new buildings can be designed to look as though they have been there for decades. Still, they are important features for "cultural conventions"²⁴ and can "become icons of institutional purpose and presence."²⁵ One of the most important aspects of this work is the way in which Dober explains that it is impossible to separate landscapes from buildings. This notion is the basis for the discussion in the analysis chapter about the appropriateness of thinking

^{20.} Ibid., 169.

^{21.} Ibid., 229.

^{22.} Richard P. Dober, Campus Landscape (New York: John Wiley and Sons, 2000).

^{23.} Ibid, 158.

^{24.} Ibid., 158.

^{25.} Ibid., 159.

of a campus as a cultural landscape as opposed to merely a collection of buildings and interstitial spaces.

Campus Heritage²⁶ is Dober's third book directly relevant to this thesis. He defines campus heritage as "the three-dimensional commemoration, celebration, and memorializing of people, activities, and events through and with physical objects that are consciously created or identified to serve and symbolize a college or university's purpose, presence, and patrimony."²⁷ In this book, Dober deals explicitly with existing and historic campus buildings, sculpture, objects like benches, and landscapes.

Dober discusses the role that each of these plays in the collegiate setting and also makes some recommendations for incorporating them into campus planning. These recommendations include the completion of an "index of campus architecture arranged in some uniform listing by characteristics and merit."²⁸ Dober suggests that one way to do this is to use a framework that already exists, such as the criteria for listing on the National Register of Historic Places. These can include everything from architectural monuments to the relatively mundane buildings that have acquired significance through their history.²⁹ Having a list of the historic buildings on campus as well as their features and values is a useful tool for decision-making.

One of Dober's most relevant points is that since all heritage and values are site-specific, "an appropriate approach to heritage architecture on campus requires careful study, objective assessments, and an understanding of the realities of the specific campus setting." This thesis builds on this idea in suggesting that institutions can be divided into types as an initial way to determine which tools are best applied where.

^{26.} Richard P. Dober, Campus Heritage (SCUP, 2005).

^{27.} Ibid., 5.

^{28.} Ibid., 10.

^{29.} Ibid., 12.

^{30.} Ibid., 28.

Dober is careful to remind the reader that preservation is not about stifling progress but rather is a method by which future development can be shaped. He asserts that "a campus should not be pickled for posterity. New architecture should be as welcomed as the respect given to the works of earlier generations."³¹

Dober is not the only author to focus specifically on college campuses. In *American Places*³², Chapman looks at the future of the American campus in a variety of ways. He notes the centrality of the education sector in our current and future economy as well as the political lip service paid to improving it and contrasts this with the struggles by schools like state-related Clarion University in western Pennsylvania that are still fighting hard for capital.³³ Throughout the book, Chapman refers to what he calls an "ethic of place" or soul of a campus.³⁴ This concept of placemaking reappears in works about campus design by many of these authors. Chapman uses examples of specific schools and their campuses in order to address issues of sustainability and the relationship with nature. He does not look too closely at the ways in which historic buildings are incorporated into a campus; he does write that "what made the old principles valid was their focus on the qualities of the natural setting and the character of space as a host to the human learning endeavor."³⁵

The book contains a great deal of information about campuses, the way they evolved, and what possibilities exist for their future. He considers the change in the amenities offered by a university such as state of the art gymnasiums, suite-style dormitories, and excellent cafeterias. Along this vein of change, Chapman looks at our globalizing world and sees the roles of colleges and universities shifting to meet these

^{31.} Ibid.

^{32.} Chapman, M. Perry, American Places (Westport, CT: Praeger, 2006).

^{33.} Ibid., 115.

^{34.} Ibid., 182.

^{35.} Ibid., 48.

needs. He wonders about the ways in which place-based campuses will deal with these changes, but seems optimistic that there is still a role for the traditional campus.³⁶

Older Ideas about Existing Buildings and Campuses

These next two resources are included in order to show how much the field has evolved over the past decade. In "Adaptive Reuse and Space Allocation," written in 1983, Nat Firestone looks at adaptive reuse in comparison with new construction and explains that new construction is to be used when "existing facilities are structurally unsound, endanger the life or safety of their occupants, or cannot accept new and sophisticated services." On the other hand, Firestone calls for adaptive reuse in cases when the "appearance of the campus for historical, sentimental, or aesthetic reasons is important" and when it is less expensive than new construction. This is not as nuanced an examination as is typical in the current preservation discipline, but since Firestone was the Director of the Office of Facilities and Space Planning for the University of Texas Health Science Center in Houston, it is most likely drawn from his experiences there. This resource is useful because it offers an example of how campuses approached their historic buildings in the not-too-distant past. Since this thesis deals with practical contemporary issues and not pure theory, it is helpful to keep in mind the realities involved in actually dealing with the way in which campuses are planned.

In addition to the typical reasons for adaptive reuse, Firestone also cites the creation of an "Instant Campus." By this he means the creation of a campus out of a group of existing facilities. These may be buildings that were originally independent

^{36.} Ibid., 195-197.

^{37.} Nat Firestone, "Adaptive Reuse and Space Allocation" in *Campus Planning: Redesign, Redevelopment, Rethinking: Proceedings of a professional development symposium* (Dallas: Myrick, Newman, Dahlberg & Partners, 1983).

^{38.} Ibid., 71

and are now being combined to form something more than the sum of their parts. Although this thesis does not deal explicitly with this kind of created campus, there are implications for the way in which an existing campus deals with the acquisition of an adjacent or nearby building that was originally independent. Firestone promotes creating flexible spaces that can be altered as needs change in the future. He writes, "great foresight must be exercised in designing utilities; their location in the building, and the possibility of their future expansion." ³⁹

Like Firestone's paper, "Renewal and Expansion of Existing Facilities" 40 by James L. Hunt is an example of an older way of thinking about the use of historic buildings on campus. In this paper, Hunt explains the process that went into updating the Baton Rouge campus of the Southern University System to meet new code requirements. This involved both the construction of new facilities and the updating of existing ones. The university first conducted an inventory of the existing facilities in order to determine both physical condition and available space for relocating departments. The inventory used a point system to determine and compare the condition of the buildings. It also made brief mention of "Intangible Evaluations," which the author explained as "historical, etc., other consideration, legal financing. Consideration for considerations that supercedes [sic] all of the above." This paper is useful only insofar as it shows the limitations with traditional building scoring systems that do not have a method for parsing the historic, cultural, and social significance of a structure. In this case all of the intangible values were lumped together almost as an afterthought.

^{39.} Ibid., 73

^{40.} James L. Hunt, "Renewal and Expansion of Existing Facilities," in *Campus Planning: Redesign, Redevelopment, Rethinking: Proceedings of a professional development symposium* (Dallas: Myrick, Newman, Dahlberg & Partners, 1983).

^{41.} Ibid., 178.

Incorporating Historic Preservation into Campus Planning

Unlike the previous two papers, the following resources represent the current thinking on preserving campus heritage. The field of preservation has evolved over the past decade to become a more dynamic and productive apparatus that goes beyond simply saving historic buildings to creating a robust system for managing change so that the significance of our cultural heritage is conserved. Thinking about the preservation of campus heritage has evolved alongside the greater field and has gained interest from a variety of stakeholders including alumni, students, university administration, and local residents.

Getty Campus Heritage Initiative

From 2002 to 2007, the Getty Foundation's Campus Heritage Initiative (GFCHI) provided funding to colleges and universities in the United States for the "research and survey of historic resources, preparation of preservation master plans, and detailed conservation assessments and analyses." ⁴² In addition to the 86 campuses across the country that received grants, the Getty also worked with the Society for College and University Planning (SCUP) to organize a national conference in 2011 and also a survey of independent colleges, through the Council of Independent Colleges (CIC). ⁴³

Robert Z. Melnick, director of the Getty Foundation's Campus Heritage Grant program from 2005-2007, reflected on the program in a short piece: "Lessons from the Getty's Campus Heritage Initiative." In it Melnick identifies some key issues campuses face when dealing with their historic buildings and landscapes including

^{42. &}quot;Campus Heritage Grants," The J. Paul Getty Trust, accessed April 10, 2013, http://www.getty.edu/grants/conservation/campus_heritage.html.

^{43.} Ibid.

^{44. &}quot;Lessons from the Getty's Campus Heritage Initiative," Robert Z. Melnick, accessed December 10, 2012, http://www.aia.org/practicing/groups/kc/AIAB081859.

"heritage resource identification, survey, and assessment; campus planning and historic preservation; community relations and local zoning and institutional leadership, alumni relations, funding, and trustee and legislative priorities." He sees the most important aspect of the project as raising awareness about the role of historic buildings and landscapes on campuses. The goal is not simply to look at these resources in a vacuum, but rather to integrate historic preservation into comprehensive master planning so that all impacts of changes made to a campus are understood.

Society for College and University Planning

As a supplement to the Getty Initiative, in 2011 SCUP devoted an entire issue of its journal, *Planning for Higher Education*, to planning for the preservation of campus heritage and in doing so attracted many important figures in the field to weigh in on what they see as the challenges and opportunities associated with the topic. Some of the articles are drawn specifically from lessons learned from the plans created as part of the Getty's Campus Heritage Initiative and others are more general in scope. In addition to this particular issue of the journal, SCUP has been active in promoting the preservation of campus heritage at its conferences, on its websites, and in a various other articles appearing in subsequent issues of *Planning for Higher Education*.

The 2011 special issue of *Planning for Higher Education* is entitled "Integrated Planning to Ensure the Preservation of Campus Heritage" and is comprised of 22 articles discussing a range of issues relating to planning for and managing collegiate heritage. 46 This resource is one of the most important because it deals with historic preservation on campus from a perspective that is explicitly planning-oriented. It is also a recent

^{45.} Ibid.

^{46.} Planning for Higher Education 39, no. 3 (2011).

publication and thus is especially relevant to the challenges currently facing colleges and universities in this post-recession era.

The publication starts off with a piece called "What Will We Remember," What Will We Treasure?" by L. Carole Wharton. In it, Wharton sets the stage for the special issue by discussing the role of heritage buildings on campus and situating the SCUP/Getty project in terms of the needs reported by campus planners regarding approaches to historic preservation on campus. These include documentation, care and maintenance, processes, modern buildings, the integration of preservation planning, landscapes, sustainability, incentives, and disaster planning.⁴⁷

This introduction is followed by a more in-depth reflection by Robert Z. Melnick on the Getty Initiative, "Caring for American Campuses: Stewardship Lessons from the Getty Foundation Campus Heritage Initiative," in which he identifies the outcomes of the initiative. From Melnick's perspective, the impacts include increasing awareness of the value of campus heritage (improved staff engagement, alumni donations, etc.), providing a launching point from which campuses can continue to improve preservation planning activities, improved communication between campus constituencies (from college presidents to facilities staff to students and alumni). Melnick cautions that "while the Getty Foundation's Campus Heritage Initiative has had an impact on how we think about, understand, and plan for historic resources on campus, there is still much work to be done."

From there Calvert W. Audrain writes in "The Stewardship of Campus Heritage" that designation, whether it be institution-specific, local, state, or listing on the National

^{47.} L. Carole Wharton, "What Will We Remember, What Will We Treasure?," *Planning for Higher Education* 39, no .3 (2011), 6.

^{48.} Robert Z. Melnick, "Caring for American Campuses: Stewardship Lessons from the Getty Foundation Campus Heritage Initiative," *Planning for Higher Education* 39, no .3 (2011), 15.

Register of Historic Places, is the first and most important step in the stewardship of heritage buildings. All buildings require stewardship but heritage buildings have specific needs and heritage buildings on campuses present specific challenges. These include the need for the building to continue to remain in use and for it to adapt to the changing needs of the collegiate community.⁴⁹

As a central figure in all discussions about campus heritage, Richard Dober contributed a short piece to the special issue entitled "Campus Heritage in the 21st Century: Notable Precedents and Inspiring Antecedents," in which he reiterates some of the points from his books including that, among its other functions, campus heritage creates a sense of place. He also advocates that stewardship of the campus as a "communal art work" should have "a tenured academic position responsible for promoting campus heritage during place-making and place-marking." 50

Richard H. Ekman, president of the Council of Independent Colleges (CIC) since 2000 contributed the article "The CIC Historic Campus Architecture Project" that explains CIC's methodology. He stresses that schools identified values associated with places rather than having them imposed from the outside in. This is important so that "places selected [are] those that had meaning within the local campus community."51

Any current campus planning inevitably involves some discussion of sustainability. In keeping with this, in "Sustainability and Preservation in an Age of Campus Innovation" Ted Landsmark writes that campus heritage has a role to play in sustainability— environmentally, social, and economically. Successful campuses

^{49.} Calvert W. Audrain, "The Stewardship of Campus Heritage," *Planning for Higher Education* 39, no .3 (2011), 34.

^{50.} Richard P. Dober, "Campus Heritage in the 21st Century: Notable Precedents and Inspiring Antecedents," *Planning for Higher Education* 39, no. 3 (2011), 40.

^{51.} Richard H. Ekman, "The CIC Historic Campus Architecture Project," *Planning for Higher Education* 39, no. 3 (2011), 43.

combine new buildings with old ones in a dynamic and purposeful way. He writes that "new buildings may dramatically symbolize the institution's commitment to creativity, experimentation; historic buildings speak to the longevity of the institution's commitment to the millennium-old foundation of sustained scholarship that builds upon well-tested precedents."52

One of the most directly relevant articles to this thesis in the special issue is Charles A. Craig, David N. Fixler and Sarah D. Kelly's "A Rubric for Campus Heritage Planning." In it, the authors set out to create a rubric for heritage planning on campuses. They assert that the first step in this process is to have a clear vision for the goals of the planning effort. If planners keep these goals in mind throughout the process, it helps to ensure that the project stays on track and does not deviate from the purpose of the undertaking. From there it is essential to create an inventory of buildings and landscapes. This inventory should consist not only of general information about the building (its size, location, architect, etc.) but also its condition and level of code compliance. The next step, according to the authors, is to gain a clear understanding of the regulatory environment. This includes both local and national designations that might be useful for receiving grant money. Although the primary carrot associated with listing on the National Register is tax credits and is thus usually unavailable to taxexempt institutions, the authors suggest that "creative financing partnerships" should be considered "when direct fund-raising appeals have not been fruitful and grant monies are in short supply."53

^{52.} Ted Landsmark, "Sustainability and Preservation in an Age of Campus Innovation," *Planning for Higher Education* 39, no. 3 (2011), 52.

^{53.} Charles A. Craig, David N. Fixler, and Sarah D. Kelly, "A Rubric for Campus Heritage Planning," *Planning for Higher Education* 39, no. 3 (2011), 64.

Once these initial tasks have been performed, planners can begin to actually plan for the future of the campus by comparing the existing resources to the needs of the university. This is also the step in the process in which campuses should consider nominating a building to the National Register of Historic Places. The authors point out that while listing on the National Register does not usually impose limitations on private institutions, it does have implications for public universities. These include adhering to the Secretary of the Interior's Standards for Rehabilitation, standards that can be a useful guide for any historic rehabilitation project. The authors also note issues that may arise during the implementation of a plan to help planners anticipate challenges. The article intends this rubric to be a generalized one and expects that it will need to be altered to be appropriate for a specific place. The planning rubric influenced the analysis of planning tools later in this thesis.

The following article, "Beyond an Initial Campus Survey: Creating an Infrastructure for Renewal," by David J. Neuman was also especially useful for analyzing some of the tools suggested later in this thesis. In this article, Neuman, University Architect at the University of Virginia, discusses preservation planning at that institution. The oldest part of campus, Thomas Jefferson's Academical Village, is a UNESCO World Heritage Site, but beyond this there are many areas of the campus with local and national significance. Due to the centrality of historic buildings and landscapes to the university's culture and sense of place, the preservation plan includes the appointments of both a senior historic preservation planner and a university conservator. Furthermore, the facilities staff includes individuals with experience in historic preservation project management and skilled trades. In addition to these staff members, UVa also has a voluntary Historic Preservation Advisory Committee, comprised of both knowledgeable university faculty and local experts, which meets

quarterly and advises the office of the University Architect. The school also incorporates the use of graduate students from related fields.

Beyond simply creating an inventory of campus resources, part of the UVa preservation plan includes a survey of the buildings with their preservation priority rated as "fundamental," "essential," "important," "contributing," and "not contributing."⁵⁴

Neuman summarizes an approach to incorporating historic preservation into the campus. He advocates linking the needs and strengths of preservation to other endeavors such as sustainability, branding, and fundraising, creating a "panel of recognized experts" to advise planners, and working with local and national preservation groups to achieve the best results.⁵⁵

Taking another look at sustainability, the article "The Full and True Value of Campus Heritage" by Carl Elefante, who coined the phrase "the greenest building is the one already built," 56 discusses sustainability as it relates to campus heritage. Campus heritage fulfills the three elements of sustainability- environmental, social, and economic. In addition to all the reasons why campus heritage is important, Elefante also points out that the impending climate change crisis necessitates a "restorative approach" to mitigation. That is, "we must work with what we already have and transform it in the most efficient and effective manner possible." 57

One frequently cited challenge facing universities is the best way to deal with modern buildings. Unlike older structures, newer buildings do not always conjure up

^{54.} David J. Neuman, "Beyond an Initial Campus Survey: Creating an Infrastructure for Renewal," *Planning for Higher Education* 39, no. 3 (2011), 73.

^{55.} Ibid., 78.

^{56. &}quot;The Greenest Building is the One Already Built," accessed March 20, 2013, http://www.thegreenestbuilding.org/.

^{57.} Carl Elefante, "The Full and True Value of Campus Heritage," *Planning for Higher Education* 39, no. 3 (2011), 87.

the same feelings of nostalgia and tradition. It can be difficult for planners to know how to advocate on behalf of modern college buildings, especially those that are far from universally loved. This issue is addressed by two articles in the special issue. In "Modern Architecture and the U.S. Campus Heritage Movement," Jon Buono expresses concern for modern campus architecture and asserts that much preservation of it has been done "by default" and without a thorough understanding of its significance.⁵⁸ In addition to this, "The Historian's and the Preservationist's Dilemma: The Challenge of the Recent Past in Campus Heritage Efforts" by Barbara S. Christen expresses concern about the fate of buildings of the recent past. She advocates for a methodology to determine which buildings are worthy of preservation and how they ought to be treated. As part of this, Christen notes that planners should think not only about the value of the recent past today, but about how the campus will be viewed in 50 years.⁵⁹

A comparative study, "A Tale of Three Campuses: Planning and Design in Response to the Cultural Heritages at Mills College, the University of California, and Stanford University" by Karen Fiene with input from Robert Sabbatini explores the preservation efforts at three California colleges with special attention to Mills College. Some of the lessons learned from these universities include the necessity of advocacy in addition to stewardship, the importance of hiring thoughtful architects, and how crucial it is to be flexible with regard to incorporating changing technologies and standards. 60

Frances Gast also uses a comparative approach in "A Half-Century of Change on College Hill: Institutional Growth, Historic Preservation and the College Hill Study" when

^{58.} Jon Buono, "Modern Architecture and the U.S. Campus Heritage Movement," *Planning for Higher Education* 39, no. 3 (2011), 88.

^{59.} Barbara S. Christen, "The Historian's and the Preservationist's Dilemma: The Challenge of the Recent Past in Campus Heritage Efforts," *Planning for Higher Education* 39, no. 3 (2011), 108.

^{60.} Karen Fiene, "A Tale of Three Campuses: Planning and Design in Response to the Cultural Heritages at Mills College, the University of California, and Stanford University," *Planning for Higher Education* 39, no. 3 (2011), 137.

she looks at Providence, Rhode Island and considers the preservation efforts at the two colleges located on its aptly named College Hill, Brown University and the Rhode Island School of Design (RISD). This area has experienced both urban redevelopment (in the form of "slum" clearance) and also an active culture of preservation. Gast admires this effort but cautions that there are some down sides to omnipresent historic preservation, including using it as a "rationale for keeping things the way they are."⁶¹

Historically black colleges and universities (HBCUs) are among those institutions most vulnerable to negative change. In "The Danger of History Slipping Away: The Heritage Campus and HBCUs", authors Arthur J. Clement and Arthur J. Lidsky consider the threats to HBCUs. These schools have been collectively been listed as "endangered" by the National Trust for Historic Preservation, but little has been done to protect this important part of American history. Sometimes this heritage is lost when HBCUs close their doors and cease to operate as a college but other times shrinking enrollments and insufficient endowments conspire to erode the campus fabric more slowly. These challenges are part of the reason a one-size-fits-all approach to heritage preservation on campuses is insufficient.

Another challenge with which colleges must contend is the often changing relationship between a college and the adjacent community. In "In Perfect (Imperfect) Harmony: Keene State College and Keene, NH Rebalance Community Relations through Historic Preservation," Jay V. Kahn expresses the importance of town-gown relations for campus planning. The local historical commission was concerned when Keene State wanted to build a new alumni center and demolish a few older non-collegiate buildings.

^{61.} Frances Gast, "A Half-Century of Change on College Hill: Institutional Growth, Historic Preservation and the College Hill Study," *Planning for Higher Education* 39, no. 3 (2011), 147.

^{62.} Arthur J. Clement and Arthur J. Lidsky, "The Danger of History Slipping Away: The Heritage Campus and HBCUs," *Planning for Higher Education* 39, no. 3 (2011), 149.

^{63.} Ibid., 156.

By compromising with the town, both parties were able to meet their needs. The agreement fostered trust between the college and the town and paved the way for a positive relationship.⁶⁴

As Dober asserted in his books on the topic, landscapes are a crucial element in campus planning. Frank E. Martin considers this topic in "The Puzzles and Promise of Campus Landscape Preservation: Integrating Sustainability, Historic Landscapes, and Institutional Change." In the article, Martin looks at the role of landscape preservation as part of comprehensive campus planning. He advocates for a type of planning that does not stop at the boundaries of the university but rather strives to connect the school to the areas adjacent to it to create a truly sustainable and integrated community for students and residents. Martin discusses the perceived impasse between maintaining the historic character of the original landscape and creating a sustainable design that is effective at dealing with contemporary issues such as managing storm water and mitigating the heat island effect. He rejects the notion that these values are fundamentally at odds with one another and challenges planners to think more broadly about what constitutes the character of a campus. While the buildings are certainly important, Martin asserts that "defining essential character must begin with spaces."

"Revealing Campus Nature: The Lessons of the Native Landscape for Campus

Heritage Planning" is an article by Jeffrey L. Bruce that also deals explicitly with campus

landscapes but from a slightly different perspective. The article is about the role of

landscape and ecology in campus planning. As a landscape architect, Bruce is well-

^{64.} Jay V. Kahn, "In Perfect (Imperfect) Harmony: Keene State College and Keene, NH Rebalance Community Relations through Historic Preservation," *Planning for Higher Education* 39, no. 3 (2011), 166.

^{65.} Frank E. Martin, "The Puzzles and Promise of Campus Landscape Preservation: Integrating Sustainability, Historic Landscapes, and Institutional Change," *Planning for Higher Education* 39, no. 3 (2011), 178.

^{66.} Ibid., 168.

versed in contemporary standards for landscape design and preservation. He believes that it is not enough for a campus to simply be sustainable; rather campuses should strive to be restorative and didactic. Using species that are native or well-suited to the location of the campus helps to reinforce the sense of place. Bruce asserts that ecological systems are fundamentally integrated with campus heritage and he cautions that "full preservation of campus designed landscape features such as historic hedges and lawns cannot easily occur without bringing the energy flows of water back into balance through such strategies as green roofs, integrated water management, and the reduction of hard surfaces."⁶⁷

With an effort to look at the realities of managing historic buildings and landscapes on campuses, Dale McGirr and Ron Kull's article "Campus Heritage Planning: Understanding the Economics and Managing the Financing" considers the financial side of the preservation of campus heritage. While general support of historic preservation on campus is an acceptable starting point, the authors caution that "heritage must be supported by a comprehensive policy developed before emotions heat up as a decision deadline on a specific project nears, and this policy must be enacted by the board of trustees so it will withstand the quite probable pressure of a loud debate." The authors note four key reasons why campuses should take on the challenge of preserving their heritage: They are committed to their location, campus heritage is often a central element of branding, there are faculty and staff who can devote time to creating a preservation plan, and universities have the ability to use innovative management tools for investment. One of the issues that arises when dealing with historic preservation

^{67.} Jeffrey L. Bruce, "Revealing Campus Nature: The Lessons of the Native Landscape for Campus Heritage Planning," *Planning for Higher Education* 39, no. 3 (2011), 180.

^{68.} Dale McGirr and Ron Kull, "Campus Heritage Planning: Understanding the Economics and Managing the Financing," *Planning for Higher Education* 39, no. 3 (2011), 190-191.

^{69.} Ibid., 191.

on campus is the fundamental difference between decisions about short-term financing and decisions about long-term investment in heritage. It makes more sense for an institution to use "an economic model with a long time horizon that allows the maturation of the ROI (return on investment) and a seamless blending of different funds and intangible assets."⁷⁰

Distinct from the other articles in the special issue, "User Experience and Heritage Preservation" by Steven J. Orfield, J. Wesley Chapman, and Nathan Davis takes a hard look at the impacts and effects of preservation on campuses. The authors advocate for a more rigorous approach to measuring the effect of preservation on an institution in order that projects can be accomplished at less cost and higher quality of preservation. They suggest that methods such as user perceptual benchmarking could be used to measure the "meaning" of a building to the users and how successful a preservation project is at maintaining it.

Interpretation for the public is a common element in many historic preservation projects but it is not frequently part of the discussion when dealing with campus heritage. In "Learn About and Visit Historic College and University Campuses using the National Park Service Discover Our Shared Heritage Travel Itinerary Series" Carol D. Shull supports expanding interpretation. She describes the National Park Service's *Discover Our Shared Heritage Travel Itinerary Series* and the role colleges and universities play in the heritage of the US. She advocates listing significant buildings on the National Register in order to help raise awareness of the array of collegiate buildings.⁷³ In her

^{70.} Ibid., 200.

^{71.} Steven J. Orfield, J. Wesley Chapman, and Nathan Davis, "User Experience and Heritage Preservation," *Planning for Higher Education* 39, no. 3 (2011), 208.

^{72.} Ibid., 206.

^{73.} Carol D. Shull, "Learn About and Visit Historic College and University Campuses using the National Park Service Discover Our Shared Heritage Travel Itinerary Series," *Planning for Higher Education* 39, no. 3 (2011), 215.

opinion, featuring college heritage in these types of programs helps to draw attention and garner interest.

After analyzing the final reports of the institutions that received grants through the Campus Heritage Initiative, Claire L. Turcotte noted some shared themes in "Themes and Highlight." The common themes are: architectural style, importance of landscape, stewardship of the land, adaptive reuse, mid-20th-century buildings, importance of additional design elements, use of students, development of systems used to evaluate and prioritize buildings and landscapes, training and maintenance manuals, creation of stewardship leaders and champions, use of preservation plans, reporting methods, and community involvement.⁷⁴

The final article in the special issue is "Historic Preservation Vocabulary, Designations and Resources" by Stacy D. Williams. In it Williams notes the importance of being clear on the language used to discuss historic preservation on campus. Many terms have specific meanings and precise usage helps to clarify the meaning. She notes that some plans include definitions of terms to help non-preservationists who may be unfamiliar with some of the jargon.⁷⁵

In addition to the articles in the special issue from 2011, a recent article in *Planning for Higher Education* entitled "A DIY Campus Preservation Plan"⁷⁶ presents an analysis of the University of Mary Washington's (UMW) recently completed preservation plan to augment its master plan. Like many other preservation initiatives on campus, this one came out of a moment of crisis. This article explains the origins of the plan and

^{74.} Claire L. Turcotte, "Themes and Highlights," Planning for Higher Education 39, no. 3 (2011), 218.

^{75.} Stacy D. Williams, "Historic Preservation Vocabulary, Designations and Resources," *Planning for Higher Education* 39, no. 3 (2011), 228.

^{76.} Andréa Livi Smith and Michael Spencer, "A DIY Campus Preservation Plan," *Planning for Higher Education* 40, no. 2 (2012).

the way in which it was carried out. It is really a piece about the process of creating a preservation plan and the stakeholders involved. Some of the lessons learned may be applicable to other schools.

Unlike some planning efforts, the process behind the preservation plan was an inclusive one. It was done in-house without using an outside firm by a coalition including faculty, representatives from the administration and finance, members from the Virginia Department of Historic Resources, UMW's Facilities Services, Student Government Association, and the Department of Historic Preservation. In addition to the official committee, the university benefitted from having a historic preservation professor who created a senior studio class to make recommendations for a preservation plan. Although it was not a binding exercise, many of their recommendations aligned with those of the committee and helped validate conclusions. Plan elements included a tiered ranking system for historic buildings, inclusion of landscape elements for significance, a questionnaire about stakeholder priorities, a comparison with the preservation plans of similar schools (from the Getty Campus Heritage Initiative), and extensive historical documentation for a richer analysis of values. The authors cite the good working relationship between the administration, faculty, students, and staff as essential in the process and praise the administration, especially, for being open minded and involved. While it is too early to fully evaluate the outcomes of this plan, it seems like a good model for other schools without the financial means to hire an outside firm.

CHAPTER 2: PLANNING TOOLS

Planning for the preservation and maintenance of heritage resources on campus should be incorporated into the greater scope of campus planning in general. Taking a comprehensive approach to campus planning entails considering all impacts of proposed changes to the physical fabric of the campus. As many of the articles in the literature review attest, there are a variety of activities that can help campus planners take better care of heritage resources. In this thesis these options are referred to as planning tools. They can be used individually or in conjunction with one another.

It is clear that there is no one-size-fits-all solution to managing historic buildings and spaces on campuses, but there are some tools that are applicable across the board and others that are more appropriate for a particular type of school and campus. This section of the thesis explores some of the tools that have been suggested in the literature and attempts to flesh out how they work. While this may not be a completely exhaustive survey, it covers the majority of potential tools. The next chapters analyze these tools and consider the types of schools for which they are best suited.

A campus is more than the sum of its parts, and each asset must be considered not only on its own but in light of the others. As the landlord of the federal government, the General Services Administration (GSA) oversees a vast portfolio of buildings, historic and non-historic. As such, the agency has a great deal of experience trying to manage priorities that are often at odds with one another. As the GSA explains, "along with fiduciary responsibilities driving the portfolio restructuring initiative, GSA

has a significant stewardship responsibility to preserve historic buildings."⁷⁷ Unlike the GSA and other portfolio managers, universities must not only analyze each building but also the ways in which they interact and the degree to which the needs of the institution are being met by the current stock. One of the reasons to look at the campus as a whole is the benefit from the volume savings associated with economies of scale. Buildings of a similar age and style may have maintenance needs in common that can be addressed at the same time.

Tools

Identification and Inventory

As many authors have noted, before further steps can be taken, a school must identify and evaluate all existing resources. Surveys can range from a cursory list of buildings to a full-fledged analysis of all resources with their associated details and values. As discussed in the literature review, Craig, *et al.* note in their campus planning rubric that the inventory is primarily to assess historical significance, and that information on buildings may include "age of construction, planners and designers (all phases), current uses and changes in use over time, role in institutional development, impact on surroundings, historic role in neighborhood, municipality, region, nation." In addition to this it seems important to note other attributes such as style and materials.

^{77. &}quot;Legacy Vision Policy," General Services Administration, accessed March 7, 2013, http://www.gsa.gov/portal/content/101707.

^{78.} Charles A. Craig, David N. Fixler, and Sarah D. Kelly, "A Rubric for Campus Heritage Planning," *Planning for Higher Education* 39, no. 3 (2011), 67.

In conjunction with the Getty Campus Heritage Initiative⁷⁹, the Council of Independent Colleges⁸⁰ administered a program that helped colleges survey their historic assets. It was called the CIC Historic Campus Architecture Project and its goal was "to identify resources for further research about significant buildings, campus plans, open spaces, and heritage sites of American higher education."81 The project resulted in a searchable website (www.cic.edu/hcap) that sorts historic resources by their materials, date of construction, location, designer, function, and type. Most of the resources listed are large historic buildings, but there are also a fair number of landscape sites and a few campus plans. This project speaks to the importance of knowing what the existing assets are in order to better plan for their futures. Despite this significance, a survey alone is not sufficient for planning purposes because it does not generally look at assets in relation to one another. Likewise, the focus on individual buildings overshadows the experiential nature of a campus. While some surveys look only at the decidedly historic buildings and spaces on campuses, expanding the inventory to include all assets helps to provide continuity as buildings increase in significance and allows for all resources to be compared to each other.

Building Condition Survey

Once the inventory of assets has been completed, the next step is to assess them. One of the most important aspects of managing historic resources is a clear understanding of the conditions of a building and the anticipated maintenance and

^{79. &}quot;Campus Heritage Grants," The J. Paul Getty Trust, accessed April 10, 2013, http://www.getty.edu/grants/conservation/campus heritage.html.

^{80.} The Council of Independent Colleges (CIC) is an association of nonprofit independent colleges and universities. The Council of Independent Colleges, accessed April 10, 2013, http://www.cic.edu/Pages/default.aspx.

^{81. &}quot;CIC Historic Campus Architecture Project," The Council of Independent Colleges, accessed April 10, 2013, http://www.cic.edu/Programs-and-Services/PandS-Archives/Past-Programs-and-Services/Pages/Historic-Campus-Architecture-Project-(HCAP).aspx.

repair costs. Craig, *et al.* suggest not only recording current conditions and necessary repairs, but also chronicling those made over time "noting those [responsible for] enhancing or degrading historic character or integrity."⁸² Having a clear understanding of all the repairs required for historic buildings including their priorities and the likely timing involved with addressing them, helps a university budget for them. This is especially crucial in light of the crisis of the deferred maintenance that affects so many schools. SCUP recognized the issue of deferred maintenance at its 2012 annual conference by highlighting Oberlin College as an institution that has successfully dealt with the problem.⁸³ Creating an inventory is an essential step for prioritizing actions and rating the value of heritage resources.

Landscape Survey

In addition to a survey of the built structures on campus, some colleges undertake a landscape survey. This type of tool helps colleges distinguish between open areas with cultural significance and those that are essentially empty lots. Having this type of survey allows a university to target new development to appropriate areas while maintaining the character of important open areas on campus. Craig *et al.* write that the landscape survey should "identify historic components and note their planners and designers, inventory existing plantings and their conditions, annotate evolution and changes, evaluate landscape contributions to campus architecture (accent or obstruction of views to destinations), and indicate special features, including those significant to the institution and its traditions (e.g., graduation green, donor-dedicated places)."⁸⁴ As their rubric points out, campus landscapes are a mix of created spaces, hardscaping, and

^{82.} Craig, "Rubric," 67.

^{83.} Todd Griffith and Steven Varelmann, "A Comprehensive Approach to Planning for Deferred Maintenance" (presentation at SCUP's 47th Annual, International Conference & Idea Marketplace, Chicago, Illinois, July 7-11, 2012).

^{84.} Craig, "Rubric," 67.

plantings. While each may play a role in creating a sense of place, the values associated with them will vary from school to school. As some landscape architects have noted, the specific plantings are not always the element from which the value of a place is derived.⁸⁵

National Register of Historic Places and Local Designation

Beyond citing the importance of a structure to its institution, some schools elect to note its local, state, or national significance. Employing outside designations of historic significance is often used to raise awareness of campus resources. In addition to boosting the profile of a campus, outside designation can help protect resources from the whims of future decision makers. For private institutions, listing on the National Register does not in and of itself place any restrictions on what can be done to a building. On the other hand, for public and state-related institutions, listed structures are subject to Section 106 review for any substantial changes using federal or state funding. These considerations increase in states that have a review process at the state level that is like that of Section 106. For example, "the New Jersey Register law requires review of any state, county or municipal undertaking involving properties listed in the New Jersey Register." 86

One of the major incentives generally associated with listing on the National Register is rehabilitation tax credits. Since universities are tax-exempt entities, this is not applicable to them. One way to utilize this tool can be in appropriate circumstances

^{85.} Frank Edgerton Martin, "The Puzzles and Promise of Campus Landscape Preservation: Integrating Sustainability, Historic Landscapes, and Institutional Change," *Planning for Higher Education* 39, no .3 (2011), 168.

^{86. &}quot;New Jersey and National Registers of Historic Places," accessed March 7, 2013, http://www.nj.gov/dep/hpo/lidentify/nrsr.htm.

through the use of creative public-private financing partnerships, as discussed later in the partnerships section of this chapter.

In addition to National Register listing, many cities have procedures for local designation. Unlike National Register listing, local designation often entails some restrictions on what can be done to a property, regardless of the funding source. These restrictions are typically applicable only to exterior changes. It is also important to note that some municipalities have legislation that automatically applies local designation to all National Register listings. Although designation of a building can sometimes limit what can be done to it in the future, it is rare that it would conflict with thoughtful stewardship of resources.

Appoint Preservation Officer

While most institutions would benefit from educating their real estate and facilities staff about the importance of heritage buildings on campus, a few schools go so far as to appoint a preservation officer as part of the campus planning staff. As mentioned in the literature review, Richard Dober advocates for the creation of a tenured academic position to look out for the heritage of the university.⁸⁷ The University of Virginia considers its heritage as crucial to its identity and has thus created positions for preservationists within the planning and facilities departments: Senior Historic Preservation Planner and Conservator.⁸⁸

^{87.} Richard P. Dober, "Campus Heritage in the 21st Century: Notable Precedents and Inspiring Antecedents," *Planning for Higher Education* 39, no .3 (2011), 40.

^{88.} David J. Neumann, "Beyond an Initial Campus Heritage Survey: Creating an Infrastructure for Renewal," *Planning for Higher Education* 39, no .3 (2011), 73; "Office of the University Architect: About Us," University of Virginia, accessed March 15, 2013, http://www.virginia.edu/architectoffice/about.html.

Use of Faculty and Students and Campus Engagement

In addition to creating a specialized preservation position, some successful preservation planning efforts look inward to make use of the expertise of university faculty and the willingness of students to engage in preservation activities. This tool is especially appropriate for those schools that contain programs in architecture, landscape architecture, planning or historic preservation. For example, as discussed in the literature review, at the University of Mary Washington, historic preservation students engaged in the preservation planning process for their school and helped to craft the current plan.⁸⁹ As with all planning endeavors, involving the university community in the plan helps promote transparency and build consensus.

Robust Maintenance Program

As in many activities, the implementation of campus planning is often hampered by a lack of available funds for the repair and maintenance of existing facilities. One of the issues associated with this is the multiple budget areas through which new construction and the maintenance of existing buildings are funded. Typically, new construction and major restoration/renovation projects are funded through capital outlays. By contrast, funding for the maintenance, operation, and small repair work required is usually part of an annual operating budget. When there is more work needed than financial resources available, such tasks are postponed until the next fiscal year. Over time, this results in an accumulation of deferred maintenance. One of the reasons for this is that major donors are typically more willing to give one-time gifts than recurring payments and tend not to be interested in deferred maintenance projects.⁹⁰

^{89.} Andréa Livi Smith and Michael Spencer, "A DIY Campus Preservation Plan," *Planning for Higher Education* 40, no. 2 (2012).

^{90.} Natalie Krawitz, "Capital Budgeting," American Council on Education, accessed March 10, 2013, http://www2.acenet.edu/resources/chairs/docs/Krawitz_Capital_BudgetingFMT.pdf.

Creating a robust maintenance program that considers alternative funding streams and avoids significant deferred maintenance will help to avoid more expensive future restoration or repair work. While it may not be possible, or even desirable, to totally eradicate deferred maintenance, having a system in place to address issues as they arise is beneficial to both the building and the bottom line.

Partnerships

The final planning tool considered in this thesis is the use of partnerships.

By partnering with local non-profits or private entities, universities can undertake projects that might not be feasible without an outside group. The specific terms of the partnerships depend on the institution and its goals, but examples include working with a local preservation organization or doing a project with a private developer. This technique is frequently used in the creation of non-academic amenities such as retail and student-oriented residential associated with campuses. For example, the University of Pennsylvania worked with a private developer to renovate a university-owned historic 1929 Pennsylvania Railroad Freight Depot into a new mixed-use development featuring luxury apartments, restaurants, and small retail stores. The project was able to make use of historic preservation tax credits by using private funding and appropriate long-term lease arrangements.⁹¹

^{91. &}quot;The Left Bank," Dranoff Properties, accessed March, 20, 2013, http://www.dranoffproperties.com/portfolio/the-left-bank; Alan J. Heavens, "New Section Of City Beckons A Developer Over The Schuylkill," Philly.com, accessed March 20, 2013, http://articles.philly.com/2000-06-25/news/25601992 1 luxury-apartments-empty-building-leap.

CHAPTER 3: SCHOOL TYPOLOGY

Institutions of higher education vary greatly from large public research universities in rural areas to small specialized arts colleges in large cities. These schools have not only different academic missions but also different types of campuses and a variety of constraints, resources, and opportunities available to them. This section of the thesis looks at some of the major factors that contribute to the state of preservation planning at these different types of schools. Because some schools do not fit perfectly into any of the groups defined, these types are not intended to be comprehensive and are useful mainly as a way of getting beyond the idiosyncrasies of a particular institution.

This thesis analyzes institutions of higher education based on an array of attributes. As explained in the methodology section of the introduction, the Commonwealth of Pennsylvania was chosen due to its large number and variety of such institutions. There are 121 private non-profit and public four-year degree granting institutions in the Commonwealth of Pennsylvania. Since the data represent only one state, the school types were not chosen based on frequency but rather on variety. That is, although there is only one very large public institution (Penn State) in Pennsylvania, this type is discussed because its attributes are significantly different from other Pennsylvania schools and similar to institutions in other states. The types discussed are intended to show the range of challenges and opportunities for preservation planning associated with each type of institution.

In the following chapter these school types will be considered alongside the planning tools discussed earlier in order to show the ways in which attributes of an

institution influence the best methods for engaging in preservation activities on campus. To that end, the matrix does not consider issues like selectivity or academic reputation. While these are certainly important elements to consider when choosing a college to attend, it is less clear that they are particularly crucial for campus planning and preservation.

Analysis of Pennsylvania's Schools

The schools included in the matrix⁹² represent a wide variety of locations, ages, sizes, public affiliation and endowments. Pennsylvania's institutions are scattered across the state. Their locations are broken down into five categories: metropolis, city, town, village, and rural areas.⁹³ Although each municipality has its own relationship to the school(s) located within and near it, there are some generalizations that can be drawn about the pressures and opportunities presented by the type of location. Schools range in founding date from 1740 to 2000, a span of 261 years. The decades that experienced the most growth were the 1850s, 1860s, 1920s, and 1960s.⁹⁴ Campuses range in size from 2 acres to 7,264 acres.⁹⁵ Of the 121 institutions of higher education in Pennsylvania considered in this study, 79 (65%) are private and 42 (35%) are public.⁹⁶ This is a very important factor when considering issues like listing on the National Register or, where they exist, local registers, and state planning and preservation mandates. Like other factors, the endowments of Pennsylvania schools range greatly from \$6.7 billion to essentially no endowment at all.⁹⁷ Even though this number is not directly analogous to

^{92.} See Appendix A-1.

^{93.} See Appendix B-1, this category from The Complete Book of Colleges, 2013 Edition.

^{94.} See Appendix B-2, for chart showing number of schools founded in Pennsylvania by decade.

^{95.} Harrisburg University of Science and Technology and Penn State University, respectively. See Appendix B-3 for all acreages; data not available for all schools.

^{96.} See Appendix B-4.

^{97.} See Appendix B-5.

a university's operating budget, it is an indication of the amount of funding available to a school.

Although this institutional typology is concerned mostly with the range and diversity of schools, it is important to note that a great number of institutions in Pennsylvania exhibit similarities. The majority enroll around 1000-2000 students and have somewhat limited endowments. They tend to attract local students and most likely do not have an extensive staff with knowledge of preservation available on campus. This is a type of institution that requires more extensive consideration as it is rarely the focus of reports on campus preservation.

In addition to the attributes noted in the matrix, other factors can influence the preservation and planning of campuses at institutions. One issue that contributes to campus engagement is the number and percent of students who live on campus, in off-campus student-oriented housing, and how many commute. 98 Other factors that are not easily captured in a matrix include town/gown relations, leanings of the trustees and administration, alumni engagement, and, of course, the extent and conditions of the heritage buildings and landscapes on campuses as well as their apparent meaning to the university community.

It is possible to break down Pennsylvania's institutions by many different criteria and some schools fit into multiple groups. The following types are not intended to be comprehensive. Instead, they strive to highlight some of the key factors that can influence an institution's ability and need to engage in preservation practices. Some form of preservation can be applied to all schools, but many articles have tended to err

^{98. &}quot;National Survey of Student Engagement Commuter vs. Resident Student Responses," Bridgewater State College, 2009.

on the side of a one-size-fits-all approach. By breaking down schools into types, it is easier to determine which tools are better applied to which schools.

This typological concept is based roughly on the ESRI Tapestry segmentation product, which "classifies US neighborhoods into 65 market segments based on socioeconomic and demographic factors, then consolidates them into LifeMode and Urbanization Groups." These groups include clever names such as "Laptops and Lattes" and "Senior Sun Seekers." ESRI's product is intended for market analysis purposes and should not be understood to be representative of all people living in the area. It is useful insofar as it helps to make some initial inferences about a neighborhood, from which point a more detailed analysis can be developed.

The Types

Large Public Research Institutions

Large and very large public universities with substantial endowments (>\$500M)¹⁰⁰
Examples: Penn State (University Park), University of Pittsburgh (Pittsburgh)

These schools tend to be large research universities. As such, they require state of the art equipment and facilities. They may be situated in any type of location and, unlike some smaller schools, are large enough to have a great deal of local influence due to the extensive jobs they create. In Pennsylvania these schools should more accurately be called "state-related" rather than "public" because only a portion of their budgets come from state appropriations. For example, of Penn State's 2012-2013

^{99. &}quot;Lifestyles-ESRI Tapestry Segmentation," ESRI, accessed April 15, 2013, http://www.esri.com/data/esri_data/tapestry.

^{100.} See Appendix C-1.

^{101.} Allison M. Ohme, "The Economic Impact of a University on its Community and State: Examining Trends Four Years Later" (presentation at North East Association for Institutional Research Annual Conference, Portsmouth, New Hampshire, November 15, 2004).

budget, only 14% of funding is from the Commonwealth.¹⁰² The total amount and percent of funding for institutions in this category varies greatly from state to state and between schools in the same state.

Rural Charm

Medium, small, and very small public institutions in rural areas¹⁰³

Examples: Edinboro University of PA, Kutztown University of PA, Mansfield University (6 Schools total)

This is a common type of school in Pennsylvania. Many of these are former teachers colleges that have been converted to standard four-year institutions. Since they are located in rural areas, schools like these may not have access to all of the preservation resources available in larger cities, such as a robust network of preservation professionals. They tend to have smaller endowments and are dependent on the state for funding. Many of the public institutions of this type in western Pennsylvania have benefitted from a project by the Pittsburgh History and Landmarks Foundation that used a grant from the Getty Campus Heritage program to provide expertise to undertake campus preservation plans.¹⁰⁴

Metropolitan Mammoths

Medium, large, and very large Institutions located in a metropolis¹⁰⁵

Examples: Temple, Carnegie Mellon, University of Pennsylvania (6 Schools total)

^{102. &}quot;General Funds," Penn State University Budget Office, accessed February 10, 2013, http://www.budget.psu.edu/openbudget/primer_genfunds.aspx.

^{103.} See Appendix C-2.

^{104. &}quot;Historic Campus Heritage," Pittsburgh History and Landmarks Foundation, accessed March 20, 2013, http://www.phlf.org/programs-and-services/historic-campus-heritage.

^{105.} See Appendix C-3.

These schools are characterized by a combination of large size and location within a large city. Many of them are research institutions and, as such, require state of the art facilities. While similar schools in less developed areas are often able to expand with little difficulty, metropolitan universities have to contend with existing built fabric, high real estate prices, and, sometimes, resistance by the adjacent community. These schools are often pressured to find creative ways to engage in advanced research with limited space, and may have to balance the desire to preserve existing buildings with the need for increasingly dense development.

Doing More with Less

Institutions founded before 1850 with small endowments (<\$100M) and large land areas (>100 Acres)¹⁰⁶

Examples: York College of PA, St. Francis University (5 schools total)

Schools like these often have significant historic resources in the form of both buildings and landscapes. But, without significant endowments, such schools must figure out creative ways to maintain their heritage while carrying out their educational mission. Since they own large amounts of property, finding places to construct new facilities is not as difficult as on smaller campuses. Due to their generous landholdings, prioritizing areas of significance for both buildings and landscapes is a useful management technique to focus energy on the most important assets.

^{106.} See Appendix C-4.

Small, Old, and Wealthy

Very small and small private institutions with substantial endowments (>\$500M) founded in the 19th century¹⁰⁷

Examples: Bucknell University, Lehigh University, Bryn Mawr College (5 Schools total)

Institutions that fit into this category are old enough to have significant historic buildings, and have more funding available than some other less-well-established institutions to take care of them. Many elite colleges fall into this category. These institutions tend to compete in a regional or national market and thus put a great deal of emphasis on institutional and campus branding. Most of these schools are liberal arts colleges and do not have the same focus on research as their larger counterparts. Even though their student populations may be relatively small and stable, changing collegiate trends may necessitate constructing new facilities to compete nationally.

Newcomers

Institutions Founded since 1940¹⁰⁸

Examples: Cabrini College, Pennsylvania College of Technology (22 schools total)

These newer institutions tend not to have the name recognition of more established schools. They attract local students and do not yet have much in the way of an endowment. Some of these schools specialize in a particular niche such as technical training or religious study. Since they are newer, any historic resources on campus tend to pre-date the founding of the institution. This impacts the relationship of the school

^{107.} See appendix C-5.

^{108.} See appendix C-6.

with its campus. As the first buildings constructed for the university reach the 50 year mark, they will need to begin to engage with questions about preservation and campus significance.

CHAPTER 4: ANALYSIS

This chapter examines the best uses for the tools discussed in Chapter Two and provides some preliminary guidance for which tools are most applicable to the different types of schools considered in Chapter Three. It then considers what historic preservation practices may be missing and makes some recommendations for better incorporating historic buildings and spaces into comprehensive campus planning.¹⁰⁹

Identification and Inventory

The most common reason to undertake a cultural resource inventory of existing buildings is to evaluate their significance. The National Park Service describes significance as "the importance of a property to the history, architecture, archeology, engineering, or culture of a community, state, or the nation." Used regularly by those in the preservation field, this seemingly simple word shrouds a complex concept. Campus planners would be right to ask: what is significance? Does this mean significance for the campus community or a larger group? How does it affect planning?

One of the fundamental characteristics of a campus is that it must continue to evolve and remain relevant and, indeed, groundbreaking. Rather than seeing this as in conflict with preservation, it should be understood to make campuses an excellent laboratory for contemporary theory in this field. Far from the old-fashioned and stereotyped view of preservation as the process of putting architecturally distinctive or historically important monuments into glass boxes like specimens in a museum,

^{109.} See Appendix 6

^{110. &}quot;National Register Bulletin: How to Complete the National Register Registration Form," National Park Service, accessed March 21, 2013, http://www.nps.gov/nr/publications/bulletins/nrb16a/nrb16a_II.htm.

detached from their context and held up as icons of the past, new thinking considers the multivalent nature of sites and their vital connection to their surroundings. It is not acceptable to merely ascribe a value to a building and assume that it will hold for eternity. Rather, enlightened preservation must consider the ways in which significance changes over time as the context and community change. Thus, as the buildings on a campus are reimagined for new uses and the open spaces gather significance from the activities that occur there, the inventory of buildings must be redone to reflect these new meanings.¹¹¹

An inventory of existing and historic buildings is essential for all types of institutions. The specific information gathered, on the other hand, should be tailored to the current and anticipated needs of the university. Those campuses that are actively expanding will likely use the inventory to evaluate which buildings are currently meeting the needs of the institution and where there are gaps between supply and demand. These gaps can occur either because of a physical lack of space or because technical or social obsolescence has made an existing building unfit for its original purpose. The former situation might include, for example, the need to build more residence halls to house more of the students, whereas the latter might be the need for science buildings that can support the energy-intensive equipment used in state-of-the-art laboratories.¹¹²

Example: Bryn Mawr College¹¹³

Bryn Mawr College created an inventory that ranked its facilities according to their significance. The ranking takes into account the significance of a resource with the

^{111.} Randall Mason, "Fixing Historic Preservation: A Constructive Critique of 'Significance,'" *Places* 16, no. 1 (2004).

^{112. &}quot;Breaking Ground in Nanotechnology," *Time to Shine*, University of Pennsylvania, accessed January 29, 2013, http://makinghistory.upenn.edu/node/737.

^{113.} Bryn Mawr College, "Campus Heritage Preservation Initiative," 2004, accessed March 3, 2013, http://www.brynmawr.edu/facilities/documents/BrynMawr_report_final_screen.pdf.

context of the college as well as the broader community. From the *Bryn Mawr Campus*Heritage Preservation Initiative:

The analysis was based on the standards and criteria of the National Register of Historic Places. The historic value determination for each individual building owned by Bryn Mawr College was based on a combined score on two scales. The first of these scales assessed the significance of the resource within the context of the history of Bryn Mawr College – the role it has played within the institution and its place in its history. The second scale analyzed the historical significance of the resource within the relevant context(s) of the outside community on the basis of local, regional, national, and international significance. The combined score of these two assessments resulted in this ranking system.¹¹⁴

One of the mistakes colleges make is creating an inventory once and then never updating it. While the particulars of a building such as its architect and materials may never change, as noted above in the discussion about significance, the meaning of the site may alter for both the institution and the larger community over time.

Building Condition Survey

In addition to an inventory of the significance of a building, a survey of current conditions gives a school a better sense of how much repair and maintenance is necessary to bring a building up to a desired level. Even if an institution does not have the funding available to complete all of the necessary work, having such a survey allows them to create maintenance schedules or prioritize the needlest sites first. Like the inventory, this tool is applicable to all types of institutions. It is especially important in areas that are prone to natural events like earthquakes or hurricanes that can damage

^{114.} Bryn Mawr College, "Campus Heritage," 27.

buildings. Knowing the baseline conditions allows a surveyor to more easily determine which damage was preexisting and which was caused by the event. It can also help to identify weak points that should be monitored for increased damage. This use of a building condition survey as a reference is applicable to all types of institutions and can help staff to determine which pathologies are continuing and which have stagnated. Campuses in disaster-prone areas such as Florida Atlantic University in Boca Raton, Florida often have a process by which to assess any damage to buildings caused by a storm. In addition to buildings, landscape features should also be included in the condition assessment.

Example: Philadelphia University¹¹⁶

In 2006, Philadelphia University received a Getty Campus Heritage grant to undertake campus heritage planning including a building condition survey. The university created a comprehensive survey that identified necessary repairs and categorized needs into emergency repairs, repair recommendations, and restoration recommendations. This kind of prioritization makes it much easier for a facilities department to decide which projects to undertake first and to justify the expenditure. The maintenance requirements were accompanied by order of magnitude cost estimates that made it easier to plan for future budget requirements. One point to note is that, in keeping with standard practice for such surveys, the conditions assessment was based on visible evidence but did not include invasive activities such as opening up walls. This means that there are conceivably other problems that are currently hidden from view. In addition to information gathered on the physical condition of the buildings, the survey

^{115.} Florida Atlantic University, "Post Hurricane Damage Assessment Procedures," accessed March 15, 2013, http://fau.edu/facilities/uavp/policies-folder/UAVP5-Post-Hurricane-Procedures.pdf.

^{116.} One-One-Six Technologies, Inc., "Philadelphia University Campus Heritage Project: Historic Buildings Condition Assessment Report," a report prepared for Philadelphia University, 2005 (Accessed via https://oneness.scup.org/asset/61728/Philadelphia_University_1_of_3.pdf.)

also rated the historic integrity of campus buildings. The report was augmented with pictures of the damage or deterioration of building elements.

Landscape Survey

A landscape is more than just the spaces between the buildings. It cannot be defined merely as *not something* or *not yet something*. As contributing elements of the value of a place, the non-building spaces of a campus, including physical objects like roads, plantings, and benches and less obvious aspects such as symmetry or the way areas are used, are crucially important but their significance is often elusive. Although the landscape of a campus could be understood to be the sum total of the campus including the buildings, for the purposes of this thesis, it is understood as the non-building areas. Depending on the individual place, an entire campus can be considered as a landscape or as comprised of multiple landscapes. Unlike the general consensus surrounding the definition of a building, the definition of a landscape is often interpreted in different ways. These interpretations can then inform the associated values and, subsequently, management practices. There is nothing inherently wrong with this, but it is an important consideration when approaching a campus landscape survey.¹¹⁷

A landscape survey can be important for all types of schools but its form should be guided by the type of campus. Institutions of the *Doing More with Less* type described in the School Typology chapter should consider creating zones in order to better manage their vast landholdings. This way, maintenance programs can be designed to meet the needs of a particular zone. Campuses with formal or planned

^{117.} Emily Anne Eide, "Cultural Landscapes in Conflict: Addressing the Interests and Landscape Perceptions of Native Americans, the National Park Service, and the American Public in National Parks" (MA thesis, University of Montana, 2011).

landscapes such as the Academical Village at the University of Virginia¹¹⁸ require a different approach than more organic interstitial spaces. Additionally, institutions in the *Metropolitan Mammoths* category face a great deal of pressure to expand and should use a landscape survey to carefully consider which areas are appropriate for building lots and which should remain as open space.

While there can be aesthetic and design values associated with a campus landscape, there are also values associated with the events that occur there and the informal quotidian uses. Many colleges have traditions that revolve around specific places on campus. Over time, these areas accrue value and become embedded in the memories of alumni as important features. Used in different ways at different times and by different groups, open spaces on campus are especially prone to develop multivalent layers of history. The purpose of a landscape survey is to identify the significance of the non-building spaces on campus and to develop appropriate guidelines for the maintenance and preservation of these areas.

Plants are an important aspect of campus landscapes and, by nature of their being living organisms, they grow, react to their environment, and eventually die. Thus all landscape preservation must strike a balance between allowing a campus to change over time and keeping enough of the original intent to maintain the significance of a site. One frequent issue with landscape preservation on campus is whether to replace a dead and dying specimen with an identical species. Extensive exploration of this topic is outside the scope of this thesis, but it is worth pointing out that decisions like this should be well thought out and should arise out of a comprehensive analysis that takes into account the historical significance among other concerns. In some situations, replacing

^{118. &}quot;Thomas Jefferson's Academical Village," University of Virginia, accessed March 9, 2013, http://www.virginia.edu/academicalvillage.

lost plants with new ones of the same species is deemed unacceptable. Penn State
University is well known for its many grand elm trees, including two large ones flanking
Old Main. Unfortunately, in recent years many have become infected with elm yellows
and Dutch elm disease. Those infected have been removed to slow the spread but, since
there is no known cure, they are being replaced by a variety of species of shade trees.¹¹⁹

In addition to these considerations about individual species, sustainability has become an important general concern for campuses. As institutions rooted to their location, colleges must balance priorities with an eye on their long-term health. As such, no preservation plan should be developed or implemented that does not align with the institution's goals for sustainability.

Example: Bucknell¹²⁰

The 2008 *Bucknell University Master Plan* builds on the legacy of Jens Larson, the architect who designed the framework for the campus layout in 1932. Between 1932 and 2006 the campus grew according to Larson's plan. ¹²¹ In keeping with the original intent, this new master plan differentiates between formal and informal landscapes on campus. The plan designates the academic core as the heart of the campus and the most formal area and sets forth appropriate management techniques, noting that "the materials used here should reflect this situation, including brick paving with bluestone building entrance plazas, better quality seating, lighting, and other site amenities. A somewhat more manicured, refined management of plant materials is

^{119. &}quot;Disease Claims Historic Old Main Elm," Penn State University: Elm Yellows, accessed February 28, 2013, http://elmyellows.psu.edu/story/58164.

^{120.} Shepley Bulfinch Richardson & Abbott, "The Master Plan: A Vision for Bucknell," a report prepared for Bucknell University, 2008 (accessed via http://www.scup.org/asset/53715/Bucknell_University_Master_Plan_2008.pdf), 82, 74.

^{121.} Ibid., 3.

also warranted."¹²² The treatment of this area is in keeping with its formal symmetrical arrangement. Creating different zones on campus helps to define management techniques for different types of spaces. This allows a school like Bucknell to identify those areas that are most significant to the history and culture of the institution. As the master plan explains, "each (legacy zone) currently requires refurbishment and, in the future, should always receive priority maintenance. They should all be considered 'sacred' in the sense that their preservation should be considered imperative."¹²³

In addition to a more traditional campus, some institutions have other special landscapes. A good example of this is the Haverford Arboretum. In this space, William Carvill designed a landscape and campus plan for the college a year after its founding. As the website notes, his "mark is still evident today in the pastoral landscape which includes several original trees." Such special landscapes require individualized plans that support their cultural significance and allow future generations the ability to enjoy them.

National Register of Historic Places and Local Designation

The National Register of Historic Places, authorized by the National Historic Preservation Act of 1966, is administered by the National Park Service. It is, essentially, the national inventory of significant buildings and sites in the United States. Although the designation itself conveys only limited protection to a building, and even then only under limited circumstances, it nevertheless denotes it as significant and draws

^{122.} Ibid., 82.

^{123.} Ibid., 74.

^{124. &}quot;Inside the Arboretum: About Us," Haverford University, accessed April 1, 2013, http://www.haverford.edu/arboretum/inside/about us.php.

^{125. &}quot;National Register of Historic Places," National Park Service, accessed February 19, 2013, http://www.nps.gov/nr/.

attention to its parent institution. Furthermore, it triggers Section 106 review¹²⁶ for all projects using federal money; many states have a similar state-run review process for projects using state money. This means that the implications of designation tend to be greater for public and state-related institutions that receive a substantial portion of their operating funds from the federal and/or state government.

Listing a campus resource on the National Register can be a useful tool for both private and public institutions, but its consequences should be understood. Even if they do not go so far as to nominate a building to the National Register, many universities find the Secretary of the Interior's Standards for the Treatment of Historic Properties to be a useful guide for making decisions about what types of interventions are appropriate for a historic building. Listing a building on the National Register is also a good way for a college in the *Newcomers* category to gain standing as a forward-looking institution with long-term aspirations.

Example: University of Pittsburgh

In 2005 the University of Pittsburgh completed a *Civic Center Conservation Plan*an area encompassing the heart of the campus. The entire area is located within the
City of Pittsburgh's Oakland Civic Center local Historic District, which means

any exterior alteration or demolition of existing buildings and new construction requires a Certificate of Appropriateness issued by the Pittsburgh Historic Review Commission. The Pennsylvania Historical and Museum Commission monitors any state or federally funded work on the National Register listed or eligible resources in accordance with the Pennsylvania History

^{126.} For a guide to Section 106 see: "A Citizen's Guide to Section 106 Review," Advisory Council on Historic Preservation, accessed April 2, 2013, http://www.achp.gov/docs/CitizenGuide.pdf.

Although designating buildings places some restrictions on them, it also helps to ensure that future work carried out on them will be done in accordance with the Secretary of the Interior's Standards. Additionally, as the conservation plan explains, one of the benefits of listing a property on the National Register is that it thereby becomes eligible for grants through the Keystone Historic Preservation Program.¹²⁸

The benefits and restrictions of listing on a local register vary greatly from place to place, but it can be a useful tool to help protect a building and identify it as significant. Some states have review procedures that are similar to Section 106 for locally designated buildings. Having a firm understanding of the local and state designation options available is crucial for all campus planners.

Appoint Preservation Officer

Unlike some of the other tools discussed, the appointment of a preservation officer or an equivalent position is not necessary or appropriate for all schools. This tool is best used at institutions for which the historic fabric is an integral part of the identity of the school and at which the institution places an exceptionally high value on the quality of all changes made to the fabric. In general, these institutions are more likely to fall into the category of *Small*, *Old*, *and Wealthy*, but any type of institution with significant historic resources could conceivably find value in creating such a position.

^{127.} University of Pittsburgh, "The University of Pittsburgh Civic Center Conservation Plan," 2005 (accessed via http://www.scup.org/asset/53095/UPittCivic.pdf), 5.

^{128. &}quot;Keystone Historic Preservation Project Grants," Pennsylvania Historical and Museum Commission, accessed March 15, 2013, http://www.portal.state.pa.us/portal/server.pt/community/grants/3794/keystone historic preservation project grants/426654.

Example: University of Virginia

As discussed in the literature review, the University of Virginia has expanded the Office of the University Architect to include two positions specifically charged with the preservation and management of heritage resources. The Senior Historic Preservation Planner is responsible for developing "guidelines for the restoration and upkeep of the Academical Village and all of the historic facilities, as well as oversight of all historic structure reports and capital projects associated with adaptive reuse of historic buildings." The Conservator "has responsibility to determine the nature of historic fabric; to oversee daily maintenance activities in the Academical Village and other historic facilities; and, to develop training programs for all crafts working on Central Grounds historic structures." The existence of these specialized positions is most likely a result of the designation of Thomas Jefferson's Academical Village as a UNESCO World Heritage Site. Appointing a dedicated preservation officer is still rather uncommon, but it is mentioned as an implementation strategy by Craig, et al. in "A Rubric for Campus Heritage Planning" for institutions with significant historic resources and is advocated for by Richard Dober.

Even though most schools cannot afford to appoint a preservation officer, and nor do their needs warrant such a specialized position, it is still helpful to ensure that the planning staff has knowledge of preservation issues. Selecting a university architect or

^{129. &}quot;Brian Hogg, Senior Historic Preservation Planner," Office of the Architect of the University of Virginia, accessed February 15, 2013, http://www.virginia.edu/architectoffice/about_hogg.html.

^{130. &}quot;Mark Kutney, Conservator," Office of the Architect of the University of Virginia, accessed February 15, 2013, http://www.virginia.edu/architectoffice/about_kutney.html.

^{131. &}quot;Monticello and the University of Virginia in Charlottesville," UNESCO, accessed March 15, 2013, http://whc.unesco.org/en/list/442.

^{132.} Charles A. Craig, David N. Fixler, and Sarah D. Kelly, "A Rubric for Campus Heritage Planning," *Planning for Higher Education* 39, no .3 (2011), 69.

planner with knowledge of preservation practices helps to ensure that these issues are considered as part of comprehensive master planning.

Example: University of Pennsylvania

The University of Pennsylvania is very committed to preserving its historic resources. Although there is not a specialized position within the facilities department that is specifically charged with issues of preservation, the University Architect has substantial experience in the field of preservation. This thesis advocates for a comprehensive guide to help current campus planners without extensive knowledge of preservation better understand the tools available to manage the historic assets at their respective institutions.

Use of Faculty and Students and Campus Engagement

While it is not feasible for most colleges to appoint a specialized preservation officer, there are other ways to gain access to individuals with familiarity with preservation. One frequently untapped resource is the expertise of faculty, staff, and students. Schools with programs in architecture, landscape architecture, planning, and, especially, historic preservation can benefit from the knowledge of faculty and, possibly, cost-effective efforts by students. Larger institutions such as *Large Public Research Institutions* and *Metropolitan Mammoths* are more likely to have programs in the aforementioned design disciplines, but a few smaller schools specialize in these as well.

In addition to tapping the specialized knowledge of faculty, staff, and students, some universities make use of the campus community when undertaking a preservation plan. By deeply engaging students, faculty, and staff about which aspects of the

^{133. &}quot;David Hollenberg," University of Pennsylvania, accessed March 20, 2013, http://www.design.upenn.edu/people/hollenberg_david.

campus they most value and why, campus planners can get a more robust sense of the significance of buildings and spaces. This is especially helpful if the plan is being undertaken substantially by an outside consultant who might not be as aware of the multivalence of campus places. Getting the community involved also helps to ensure transparency and improve reception of the plan.

Example: Swarthmore College¹³⁴

As part of a comprehensive outreach program that included a series of open meetings and opportunities to provide feedback, Swarthmore College created a website to get the campus community involved in its recent master plan project. The site allowed visitors to read about the proposed plan, track progress as the plan was ongoing, and voice their opinions through a survey. The site also answered questions about the purpose, content, and scope of a master plan. By reaching out to the community, Swarthmore was able to build support for the plan.

Robust Maintenance Program

As discussed in the chapter on planning tools, funding is often a constraint for the regular maintenance of historic buildings. When budgets are tight, repairs are postponed to a later fiscal year, resulting in deferred maintenance. While this can be a problem for any existing building, it is especially threatening to historic buildings that risk atrophying original fabric potentially resulting in a loss of integrity. Additionally, preventative maintenance can reduce the future need for large repair or restoration expenditures.

^{134. &}quot;Campus Master Planning," Swarthmore College, accessed March 1, 2013, http://cmp.swarthmore.edu/.

Making maintenance a priority is an important element of comprehensive planning for campus heritage. Often the first step is to reduce the accumulation of deferred maintenance needs. From there, it is important to setup a system of condition monitoring and prioritization so that developing pathologies can be arrested before they destroy important historic buildings. One crucial element of planning for maintenance is understanding the long-term cost-savings associated with early intervention. As institutions with longterm interests, this should be a central tenet of any university facilities plan. Unfortunately, since colleges must balance their priorities, repair and maintenance projects are often postponed resulting in an increase in total deferred maintenance. Some institutions have been successful in mitigating this issue by using creative funding streams and setting goals for dealing with the backlog.

Example: University of Illinois: Champaign-Urbana

The University of Illinois at Champaign-Urbana recognizes the impact of deferred maintenance on its historic resources and has developed a couple of funding strategies to deal with the problem.¹³⁵ The university created a fee called the Academic Facilities Maintenance Fund Assessment, which charges students a small amount per semester and is funneled directly to the maintenance budget. The university has also sold Certificates of Participation, which is basically a funding mechanism that uses a sale/ leaseback or lease/leaseback agreement with a right of reversion allowing the university to receive upfront capital from the sale.¹³⁶

Example: University of Virginia

^{135. &}quot;Deferred Maintenance," University of Illinois at Urbana-Champaign, accessed March 20, 2013, http://www.fs.uiuc.edu/planning/deferredmaintenance/pdfs/deferred%20maintenance%20brochure.pdf.

^{136.} This is a new funding tool that is typically used when there is a limitation on how much debt a governmental unit can have. From the Colorado Treasury Department explanation of Public Finance & Debt Issuance: "A lease-financing mechanism where the government enters into an agreement to make regular lease payments for the use of an asset over some period, after which the title for the asset transfers to the government." http://www.colorado.gov/cs/Satellite/Treasury_v2/CBON/1251592046949

In 2004 the University of Virginia addressed the university's deferred maintenance problem. Despite the emphasis placed on historic architecture, by 2005 the university had amassed a substantial backlog of needed repairs. Seeing this as a threat to the campus heritage, UVa took a number of steps to increase the amount of funding allotted for maintenance. A team researched the best practices for decreasing the amount of deferred maintenance over a period of 10 years. One of the practices included establishing a "major repair and renovation reserve to fund projects which may span several years or require the accumulation of significant cash balances" and that would "not be subject to the state's re-appropriation process and should receive interest earnings." ¹³⁷ Creative funding and financing strategies should be a part of managing the problems of deferred maintenance that can plague campuses of all types.

Partnerships

Another tool that can be useful, especially for a smaller institution or one with limited resources, including *Doing More with Less, Rural Charm*, and *Newcomers*, is to forge a partnership with a local nonprofit organization. These types of groups tend to be well-versed in local regulations and aware of potential grants and other opportunities. Additionally, they are sometimes able to provide technical assistance and advice. Another type of partnership involves a university joining forces with a private entity for some kind of development project. As discussed in the chapter on planning tools, this can sometimes be structured to allow for use of the historic preservation tax credits.

Example: Pittsburgh History and Landmarks Commission

137. University of Virginia, "Addressing the University's Deferred Maintenance Backlog," University Budget Office, 5.

The Pittsburgh History and Landmarks Commission coordinated efforts to develop preservation plans at a total of eight campuses in western Pennsylvania. With two grants from the Getty Campus Heritage program and funding from the individual schools, the Commission first created plans for Allegheny College, Geneva College, Grove City College, and Slippery Rock University, and then for California University of Pennsylvania, Indiana University of Pennsylvania, Seton Hill University, and Washington and Jefferson College. These institutions represent a mix of public and private schools ranging in enrollment, age, and type of location. As the Commission explains, even though the schools are "committed to the responsible stewardship of their historic resources, none of them has the individual capacity to develop a historic preservation plan." 138

All plans have an identical layout template, with content tailored to the individual school. While this is certainly a cost-saving measure, it does suggest that all college plans are essentially the same. The reality is that campus master plans and preservation plans ideally should vary greatly, based on the characteristics of the institution, purpose of the plan, previous work done at the school, and availability of resources. Nevertheless, this partnership is a model in that it enabled a number of schools to create preservation plans that might not have been able to do so otherwise, and paved the way for future collaborative work. But the format of the resulting plans should not be taken as applicable to all institutions in all places.

Other Issues

There are other issues to consider in addition to these planning tools. Specialty colleges such as Historically Black Colleges and Universities, women's colleges, and

^{138. &}quot;Indiana University of Pennsylvania Preservation Plan," Society for College and University Planning, accessed March 20, 2013, http://getty.scup.org/index.php?P=FullRecord&ID=81.

seminaries often struggle to meet the needs of the campus community within their limited budgets. One contemporary challenge is to find ways to support the health of such schools that balance their mission with planning for their historic resources.

Missing from Traditional Campus Planning

The tools discussed above are all useful for incorporating campus heritage into comprehensive master planning but, in order to be most effective, they should be part of a larger framework for understanding a campus. That is, the philosophical approach toward campus planning impacts the outcomes. There are elements in contemporary historic preservation theory that can be applied to campus planning to get the most out of the tools.

Values-Based Preservation

One of the biggest threads in contemporary preservation planning is the application of a values-based approach to identifying significance, prioritizing activities, and setting guidelines for appropriate interventions. Discussed at length in the Burra Charter¹³⁹, the approach entails first considering the values of a site from the point of view of a wide variety of stakeholders. These values include: historical, aesthetic, economic, ecological, and social. Once the values have been determined and mapped to their stakeholders, options for the type of preservation, interpretation, and intervention can be chosen. This ensures that a bottom-up approach that grows from the site itself and not from a top-down assumption about how a site should be treated.

^{139.} Australia ICOMOS Inc., "The Burra Charter," Australia ICOMOS, 1999.

Cultural Landscape

Another preservation tool that could be useful for university planners is to look at the campus as a cultural landscape. Typically the word "landscape" is used to connote open spaces without buildings but often containing plant material. A cultural landscape, on the other hand, encompasses both the building and non-building areas.

A cultural landscape allows an area to be managed in a macro way that considers its overall significance over specific historical elements. This type of thinking privileges the sum of the whole over the parts and is more accepting of change over time. Just as a forest or other natural resources are best managed through a process of judicial decision making that looks to the health of the whole over individual trees, so does cultural landscape theory allow for small changes that are in keeping with the significance of the whole.

Recommendations

When attempting the preservation of campus heritage, there are a variety of tools that can be used by campus planners. Despite this array of options, planners should implement the tools most suited to the needs of their particular campus. Although each campus is different, this thesis has formulated some generalizations about which tools are most appropriate for which types of schools and how they should be used. Using the right tools ensures that campus heritage is well-protected while staying within the constraints of an institution's budget and human resources.

Some of the tools that are of use to campus planners include creating and updating an inventory, undertaking a building condition survey, generating a survey of campus landscapes, using outside designation including listing on the National

Register of Historic Places, appointing a preservation officer, engaging the campus community, rationalizing the maintenance budget, and forging partnerships with outside organizations. These tools can be looked at as a kit-of-parts to be judiciously employed as necessary. Some institutions may have sufficient facilities staff to be able implement the majority of these tools in-house, while others benefit from the use of external planning and design firms. Knowing which tools are most appropriate ensures that even if an outside entity is employed, the institution is involved with the planning process and is able to play an active role in preserving its heritage.

Having a comprehensive understanding of these tools is also beneficial to planning firms that do not specialize in preservation. Making sure that preservation practices are included as part of comprehensive master planning helps to ensure that decisions about the built environment are respectful of the existing historical landscape while still oriented toward the future of the place. There are many decisions that benefit from a strong understanding of campus historic resources including, among others, how and where to build new facilities, which existing structures should be preserved, and what the best approach is to preserving the character of the campus.

Further Research

The topic of preservation on campus is an important one that is just beginning to be explored in depth. Further research is needed to determine the best practices for the preservation of campus heritage. As more institutions undertake plans that deal explicitly with their historic assets and then implement those plans, it will become easier to determine which tools are the most effective. It is difficult to objectively measure the success of any kind of planning effort because it is not something that can be studied in a controlled experiment. Unanticipated external forces often turn out to

be the most influential in the fate of an institution. The goal of planning cannot be to predict all future threats and opportunities, but rather to have a robust decision-making framework that enables a campus to evolve in such a way that it maintains its sense of place without being trapped in amber.

The most important product from these efforts is the dissemination of information to campus planners in university facilities departments and also in private practice. Unless planners are equipped with the proper tools and knowledge of how to implement them, it is unlikely they will be able to provide adequate protection of the campus heritage resources that contribute to the sense of place of a university. Historic buildings are not merely bricks, mortar, and outdated systems; they represent an enduring commitment to education, research, and community.

More than the sum of its parts, a college campus is the place where students come to learn and grow. Many people look back nostalgically on their college years and images of those old buildings signify this important role in their lives. The careful stewardship of campus heritage ensures that these important places in American culture continue to inspire students and to remind graduates of their significance.

CONCLUSION

Universities play a central role in the lives of many Americans. Whether located in busy urban centers or bucolic farmland, a campus is a place of inspiration, education, work, and leisure. Distinct from the fabric of the surrounding areas, a campus is an architectural and cultural irregularity. Many campuses are important community anchors but they are still a fundamentally different place than the municipality outside their perimeter. In some ways a campus is like a little city unto itself. There are residential areas, commercial areas, and spaces devoted to work and play. Some universities have their own police forces and all have their own particular culture.

Although they differ in form and style, campuses tend to involve some combination of buildings and open spaces arranged in such a way as to create meaningful places. This sense of place can be threatened when development is out of scale and out of touch with existing campus conditions. Strategic preservation activities can help to strengthen the sense of place while still allowing for necessary changes and growth.

This thesis has considered the tools that can be used by planners to better protect and integrate historic resources into campus planning, but these tools are not sufficient in and of themselves. The ways in which the tools are used will make the difference between successful preservation planning that is a productive force for an institution and a stagnated place that is unable to leverage its historic resources. This depends greatly on if the tools are used in isolation or if they are part of an inclusive planning program.

Preservation deserves a seat at the table; it should not be thought of as existing in a silo but rather should be incorporated into a comprehensive approach to campus planning. As Robert Melnick expressed in reflections on the Getty Foundation Campus Heritage Initiative, just as "campuses would never consider planning for a new building without analyzing its impacts on parking, pedestrian circulation, environmental concerns, long-term maintenance expenditures, energy conservation, and construction funding," 140 preservation considerations should be incorporated into all planning decisions. Too often historic preservation is looked at as a one-off endeavor or a side project to be accomplished as an independent undertaking. This conception misses the point entirely. Preservation is not a one-time activity that can be performed, documented in a report, and then shelved as something that has been checked off a list. Rather, planning for the preservation of campus heritage must permeate all aspects of campus planning.

Interest in heritage preservation on campus has grown considerably in the past few years and there have been a wide range of articles exploring the challenges and opportunities faced by institutions. Despite this progress, there is no comprehensive guide for campus planners to turn to for advice on how to deal with their historic resources. This thesis intended to contribute to identifying some of the tools available but further work must be done to synthesize the best practices. A complete guide would help to ensure that all campus planners have access to guidelines on how to best manage the resources with which they are charged.

^{140.} Robert Z. Melnick, "Caring for America's Colleges and Universities: Stewardship Lessons from the Getty Foundation Campus Heritage Initiative," *Planning for Higher Education* 39, no .3 (2011), 16.

BIBLIOGRAPHY

- Advisory Council on Historic Preservation. A Citizen's Guide to Section 106 Review. n.d. http://www.achp.gov/docs/CitizenGuide.pdf (accessed April 2, 2013).
- Audrain, Calvert W. "The Stewardship of Campus Heritage." Planning for Higher Education 39, no. 3 (2011):18-35.
- Australia ICOMOS Inc. The Burra Charter. Australia ICOMOS, 1999.
- Barnett, Robert S. Hindsight Foresight: From the Founding to the Future of Five Ivy League Campuses. SCUP, 2012.
- Bruce, Jeffrey L. "Revealing Campus Nature: The Lessons of the Native Landscape for Campus Heritage Planning." Planning for Higher Education 39, no. 3 (2011):179-189.
- Bryn Mawr College. "Campus Heritage Preservation Initiative." 2004. http://www.brynmawr.edu/facilities/documents/BrynMawr_report_final_screen.pdf (accessed March 3, 2013).
- Buono, Jon. "Modern Architecture and the U.S. Campus Heritage Movement." Planning for Higher Education 39, no. 3 (2011):88-102.
- Chapman, Perry M. American Places: In Search of the Twenty-first Century Campus. Westport, CT: Praeger, 2006.
- Christen, Barbara S. "The Historian's and the Preservationist's Dilemma: The Challenge of the Recent Past in Campus Heritage Efforts." Planning for Higher Education 39, no. 3 (2011):103-109.
- Columbia University. Manhattanville in West Harlem. n.d. http://neighbors.columbia.edu/pages/manplanning/proposed_plan/PhasedDevelopment.html (accessed March 15, 2013).
- Clement, Arthur J. and Arthur J. Lidsky. "The Danger of History Slipping Away:
 The Heritage Campus and HBCUs." Planning for Higher Education 39, no. 3
 (2011):149-158.
- Craig, Charles A., David N. Fixler, and Sarah D. Kelly. "A Rubric for Campus Heritage Planning." Planning for Higher Education 39, no. 3 (2011):55-70.
- Dahnke, Harold L., ed. Higher Education Facilities Planning and Management Manuals. Boulder, Co.: Western Interstate Commission for Higher Education, 1971.
- Dober, Richard P. Campus Design. New York: John Wiley and Sons, 1992.
- —. Campus Heritage. SCUP, 2005.

- —. "Campus Heritage in the 21st Century: Notable Precedents and Inspiring Antecedents." Planning for Higher Education 39, no. 3 (2011):36-40.
- —. Campus Landscape. New York: John Wiley and Sons, 2000.
- —. Campus Planning. New York: John Wiley and Sons, 1992.
- Dober, Lidsky, Craig and Associates, Inc. "Richard P. Dober, AICP," http://www.dlca.com/Bios/RPDoberBIO.pdf (accessed April 5, 2013).
- Doxiadis Associates. Campus planning in an urban area; a master plan for Rensselaer Polytechnic Institute. New York: Praeger Publishers, 1971.
- Ekman, Richard H. "The CIC Historic Campus Architecture Project." Planning for Higher Education 39, no. 3 (2011):41-50.
- Eide, Emily Anne. Cultural Landscapes in Conflict: Addressing the Interests and Landscape Perceptions of Native Americans, the National Park Service, and the American Public in National Parks. Thesis, Missoula, MT: The University of Montana, 2011.
- Elefante, Carl. "The Full and True Value of Campus Heritage." Planning for Higher Education 39, no. 3 (2011):79-87.
- ESRI. "Lifestyles-ESRI Tapestry Segmentation," http://www.esri.com/data/esri_data/tapestry (accessed April 15, 2013).
- Fiene, Karen with Robert Sabbatini. "A Tale of Three Campuses: Planning and Design in Response to the Cultural Heritages at Mills College, the University of California, and Stanford University." Planning for Higher Education 39, no. 3 (2011):110-138.
- Florida Atlantic University. Post Hurricane Damage Assessment Procedures. n.d. http://fau.edu/facilities/uavp/policies-folder/UAVP5-Post-Hurricane-Procedures.pdf (accessed March 15, 2013).
- Gaines, Thomas A. The Campus as a Work of Art. Westport, CT: Praeger Publishers, 1991.
- Gast, Frances. "A Half-Century of Change on College Hill: Institutional Growth, Historic Preservation and the College Hill Study." Planning for Higher Education 39, no. 3 (2011):139-148.
- The Greenest Building is the One Already Built. n.d. http://www.thegreenestbuilding. org/ (accessed March 20, 2013).
- Harvard University Gazette. Allston: Progress Report of the Faculty Task Forces 2004. May 20, 2004. http://www.news.harvard.edu/gazette/2004/05.20/99-allston_overview.html (accessed March 15, 2013).
- Haverford University. Inside the Arboretum: About Us. n.d. http://www.haverford.edu/

- arboretum/inside/about us.php (accessed April 1, 2013).
- Hunt, James L. "Renewal and Expansion of Existing Facilities." In Campus Planning: Redesign, Redevelopment, Rethinking: Proceedings of a professional development symposium (Dallas: Myrick, Newman, Dahlberg & Partners, 1983).
- Kahn, Jay V. "In Perfect (Imperfect) Harmony: Keene State College and Keene Rebalance Community Relations through Historic Preservation." Planning for Higher Education 39, no. 3 (2011):159-166.
- Landsmark, Ted. "Sustainability and Preservation in an Age of Campus Innovation." Planning for Higher Education 39, no. 3 (2011):51-54.
- Martin, Frank E. "The Puzzles and Promise of Campus Landscape Preservation: Integrating Sustainability, Historic Landscapes, and Institutional Change." Planning for Higher Education 39, no. 3 (2011):167-178.
- Mason, Randall. "Fixing Historic Preservation: A Constructive Critique of "Significance"." Places 16, no. 1 (2004): 64-71.
- McGirr, Dale and Ron Kull. "Campus Heritage Planning: Understanding the Economics and Managing the Financing." Planning for Higher Education 39, no. 3 (2011):190-200.
- Melnick, Robert Z. "Caring for America's Colleges and Universities: Stewardship Lessons from the Getty." Planning for Higher Education 39, no. 3 (2011): 8-17.
- Lessons from the Getty's Campus Heritage Initiative. n.d. http://www.aia.org/ practicing/groups/kc/AIAB081859 (accessed December 10, 2012).
- National Association of College and University Business Officers. "U.S. and Canadian Institutions Listed by Fiscal Year 2012 Endowment Market Value and Percentage Change in Endowment Market Value from FY 2011 to FY 2012." (Revised February 4, 2013).
- National Park Service. National Register Bulletin: How to Complete the National Register Registration Form. n.d. http://www.nps.gov/nr/publications/bulletins/nrb16a/nrb16a II.htm (accessed March 21, 2013).
- National Register of Historic Places. June 13, 2011. http://www.nps.gov/nr/ (accessed February 19, 2013).
- Neuman, David J. "Beyond an Initial Campus Survey: Creating an Infrastructure for Renewal." Planning for Higher Education 39, no. 3 (2011):71-78.
- Notestein, James E. A selected and annotated bibliography of campus planning literature. Monticello, Ill: Council of Planning Libraries, 1974.

- Office of the Architect of the University of Virginia. Brian Hogg, Senior Historic Preservation Planner. November 15, 2012. http://www.virginia.edu/architectoffice/about hogg.html (accessed February 15, 2013).
- Office of the Architect of the University of Virginia. Mark Kutney, Conservator. November 15, 2012. http://www.virginia.edu/architectoffice/about_kutney.html (accessed February 2013, 2013).
- Orfield, Steven J., J. Wesley Chapman and Nathan Davis. "User Experience and Heritage Preservation." Planning for Higher Education 39, no. 3 (2011):201-208.
- "Penn Connects." University of Pennsylvania. http://www.pennconnects.upenn.edu.
- Penn State University: Elm Yellows. Disease Claims Historic Old Main Elm. March 2, 2012. http://elmyellows.psu.edu/story/58164 (accessed February 28, 2013).
- Pennsylvania Historical and Museum Commission. Keystone Historic Preservation Project Grants. 2013. http://www.portal.state.pa.us/portal/server.pt/community/grants/3794/keystone_historic_preservation_project_grants/426654 (accessed March 15, 2013).
- Princeton Review. Complete Book of Colleges 2013 Edition. New York: Random House, 2012.
- Shull, Carol D. "Learn About and Visit Historic College and University Campuses using the National Park Service Discover Our Shared Heritage Travel Itinerary Series." Planning for Higher Education 39, no. 3 (2011):209-217.
- Society for College and University Planning. Indiana University of Pennsylvania Preservation Plan. November 7, 2011. http://getty.scup.org/index.php?P=FullRecord&ID=81 (accessed March 20, 2013).
- Swarthmore College. "Campus Master Planning." 2013. http://cmp.swarthmore.edu/ (accessed March 1, 2013).
- Turcotte, Claire L. "Themes and Highlights." Planning for Higher Education 39, no. 3 (2011):218-227.
- Turner, Paul V. Campus: An American Planning Tradition. Cambridge: MIT Press, 1984.
- UNESCO. Monticello and the University of Virginia in Charlottesville. 2013. http://whc.unesco.org/en/list/442 (accessed March 15, 2013).
- University of Illinois at Urbana-Champaign. "Deferred Maintenance." n.d. http://www.fs.uiuc.edu/planning/deferredmaintenance/pdfs/deferred%20maintenance%20brochure.pdf (accessed March 20, 2013).
- University of Pennsylvania. "Breaking Ground in Nanotechnology." Time to Shine. February 25, 2011. http://makinghistory.upenn.edu/node/737 (accessed January

- 29, 2013).
- —. David Hollenberg. 2012. http://www.design.upenn.edu/people/hollenberg_david (accessed March 20, 2013).
- University of Virginia. "Addressing the University's Deferred Maintenance Backlog." University Budget Office, 2005.
- Thomas Jefferson's Academical Village. 2013. http://www.virginia.edu/academicalvillage/ (accessed March 9, 2013).
- US News and World Review. "Best Colleges," http://colleges.usnews.rankingsandreviews. com/best-colleges (accessed March 3, 2013)
- Wharton, L. Carole. "What Will We Remember, What Will We Treasure?" Planning for Higher Education 39, no. 3 (2011): 5-7.
- Williams, Stacy D. "Historic Preservation Vocabulary, Designations and Resources." Planning for Higher Education 39, no. 3 (2011):228-229.
- Yale University. Yale University West Campus History and Vision. n.d. http://www.yale.edu/westcampus/history.html (accessed March 15, 2013).

APPENDICES

CONTENTS

Appendix A: Matrix of PA Institutions of Higher Education	.76
Appendix B: Charts Derived from Institutional Matrix	.79
Appendix B-1: Pennsylvania Institutions by Location	. 79
Appendix B-2: Pennsylvania Institutions by Decade	. 79
Appendix B-3: Pennsylvania Institutions by Acreage	. 80
Appendix B-4: Public and Private Institutions in Pennsylvania	. 80
Appendix B-5: Pennsylvania Institutions by Endowment	. 81
Appendix C: Tables Derived from Institutional Matrix	.82
Appendix C-1: Large Public Research Universities	. 82
Appendix C-2: Rural Charm	. 82
Appendix C-3: Metropolitan Mammoths	. 83
Appendix C-4: Doing More with Less	. 83
Appendix C-5: Small, Old, and Wealthy	. 84
Appendix C-6: Newcomers	. 85
Appendix D: Summary Matrix	.86

Appendix A: Matrix of Pennsylvania Institutions of Higher Education

• •	•	Public/		· ·		
Institution	Enrollment	Private	Location	Endowment \$000	Founded	Acreage
Albright College	2,074	Private	City	52,21	1856	118
Allegheny College	2,094	Private	Town	146,51		565
Alvernia University	2,019	Private	Village	17,24	1958	80
Arcadia University	2,151	Private	Town	52,94	1853	60
Baptist Bible College and Seminary	668	Private	Town	???	1932	121
Bloomsburg University of PA	9,065	Public	Village	17,71	1839	282
Bryn Athyn College of the New Church	233	Private	Village	68,41	1877	130
Bryn Mawr College	1,302	Private	Metropolis	645,42	1885	135
Bucknell University	3,535	Private	Village	599,21	1846	446
Cabrini College	1,820	Private	Town	12,65	1957	112
Cairn University (formerly						
Philadelphia Biblical University)	937	Private	Village	9,61	1913	114
California University of PA	6,199	Public	Village	13,59	1852	188
Carlow University	1,441	Private	City	???	1929	15
Carnegie Mellon University	6,178	Private	Metropolis	987,05	1900	136
Cedar Crest College	1,370	Private	City	18,94	<mark>)</mark> 1867	84
Chatham University	751	Private	Metropolis	70,35	1869	39
Chestnut Hill College	1,535	Private	Metropolis	5,98	1924	75
Cheyney U of PA	1,339	Public	Village	???	1837	275
Clarion U of PA	5,929	Public	Village	???	1867	192
College of Saint Thomas More	53	Private	Town		1832	77
Delaware Valley College	1,877	Private	Village	32,84	<mark>1</mark> 1896	600
DeSales University	2,375	Private	Town	47,73	3 1964	400
Dickinson College	2,358	Private	City	325,68	1783	308
Drexel University	13,652	Private	Metropolis	555,38	<mark>l</mark> 1891	40
Duquesne University	5,639	Private	Metropolis	177,21	L 1878	49
East Stroudsburg U of PA	6,274	Public	Village	???	1893	213
Eastern University	2,054	Private	Town	21,57	1952	107
Edinboro U of PA	6,301	Public	Rural	14,18	1857	585
Elizabethtown College	2,096	Private	Village	54,75	5 1899	193
Franklin & Marshall College	2,324	Private	Town	285,10	3 1787	180
Gannon University	2,652	Private	City	41,27	1925	13
Geneva College	1,340	Private	Village	???	1848	55
Gettysburg College	2,500	Private	Village	229,11	1832	200
Gratz College	12	Private	???		1895	???
Grove City College	2,452	Private	Rural	92,48	1876	150
Gwynedd- Mercy College	2,130	Private	City	15,04	1948	160
Harrisburg University of Science and						
Technology	145	Private	City		2001	2
Haverford College	,	Private	Town	387,56		200
Holy Family University	2,031	Private	Metropolis	10,62	7 1954	46
Immaculata University		Private	Town	14,67		400
Indiana University of PA	12,660		Village	47,02		342
Juniata College	1,469	Private	Village	79,37		800
Keystone College		Private	Rural	6,74		270
King's College	=	Private	City	55,64		48
Kutztown University of PA		Public	Rural	16,01		325
La Roche College		Private	City	4,41		43
Lafayette College	2,443	Private	Village	556,91	3 1826	340
Lancaster Bible College and Graduate				222		
School		Private	Village	???	1933	100
LaSalle University		Private	Metropolis	71,68		120
Lebanon Valley College		Private	Rural	47,82		340
Lehigh University	-	Private	City	1,035,59		1600
Lincoln University		Public	Rural	???	1854	422
Lock Haven University of PA		Public	Village	8,95		175
Lycoming College	1,346	Private	Town	155,22	<mark>2</mark> 1812	39
		7	c			

Appendix A: Matrix of Pennsylvania Institutions of Higher Education

		Public/				
Institution	Enrollment	Private	Location	Endowment \$000	Founded	Acreage
Mansfield University	2,887	Public	Rural	705	1857	174
Marywood University	2,190	Private	City	37,688	1915	115
Mercyhurst College	668	Private	Village	23,164	1926	88
Messiah College	2,751	Private	Village	123,841	1909	471
Millersville University of PA	7,536	Public	Village	20,469	1855	250
Misericordia University	2,335	Private	Town	25,434	1924	120
Moore College of Art and Design	525	Private	Metropolis	???	1848	???
Moravian College	1,551	Private	City	91,586	1742	60
Mount Aloysius College	1,493	Private	Rural	20,013	1939	125
Muhlenberg College	•	Private	City	149,467	1848	81
Neumann College	2,501	Private	Town	22,293	1965	55
Pennsylvania College of Technology	•	Public	Town	???	1989	984
Philadelphia University	•	Private	Metropolis	22,564		100
Point Park University	•	Private	Metropolis	24,716		
PSU- Abington	•	Public	Village	See PSU- Main	1950	45
PSU- Allegheny Valley	•	Public	???	See PSU- Main	1929	
PSU- Altoona		Public	Village	See PSU- Main	1929	
PSU- Beaver	•	Public	Village	See PSU- Main	1929	
PSU- Berks	•	Public	Village	See PSU- Main	1924	241
PSU- DuBois	•	Public	Village	See PSU- Main	1935	13
PSU- Erie, Behrend College		Public	Village	See PSU- Main	1948	732
PSU- Fayette	•	Public	Village	See PSU- Main	1934	193
PSU- Greater Allegheny		Public	???	See PSU- Main	1912	42
PSU- Harrisburg		Public	Village	See PSU- Main	1966	
PSU- Hazleton	· ·	Public	Rural	See PSU- Main	1934	73
PSU- Lehigh Valley	-	Public	???	See PSU- Main	1912	42
PSU- Mont Alto		Public	Village	See PSU- Main	1929	62
PSU- New Kensington	· ·	Public	???	See PSU- Main	1958	71
PSU- Schuylkill		Public	???	See PSU- Main	1934	42
PSU- Shenango		Public	Village	See PSU- Main	1965	14
PSU- University Park	37,855		Town	1,779,958		7264
PSU- Wilkes-Barre		Public	???	See PSU- Main	???	???
PSU- Worthington-Scranton		Public	???	See PSU- Main	1923	43
PSU- York		Public	Village	See PSU- Main	1926	52
PSU-Brandywine		Public	Village	See PSU- Main	1966	87
Robert Morris University	•	Private	Metropolis	25,465		230
Rosemont College		Private	Village	12,868	•	56
Saint Francis University		Private	Rural	34,159		600
Saint Joseph's University		Private	Metropolis	168,834	1851	103
Saint Vincent College		Private	Village	71,348	1846	200
Seton Hill University		Private	Town	30,207		200
Shippensburg U of PA	7,066	Public	Village	32,069		200
Slippery Rock U of PA		Public	Rural	17,786		600
Susquehanna University		Private	Town	119,543		306
Swarthmore College		Private	Village	1,498,775		399
Temple University	27,075	Public	Metropolis	277,479	1888	330
The Pennsylvania Academy of Fine						
Arts	???	Private	Metropolis	???	1804	???
Thiel College	1,019	Private	Rural	24,313	1866	135
Thomas Jefferson University	827	Private	Metropolis	???	1967	???
University of Pennsylvania	9,779	Private	Metropolis	6,754,658	1740	279
University of Pittsburgh- Bradford	1,557	Public	Village	See Pitt- Pittsburgh	1963	317
University of Pittsburgh- Greensburg	1,840	Public	Village	See Pitt- Pittsburgh	1963	217
University of Pittsburgh- Johnstown	2,956	Public	City	See Pitt- Pittsburgh	1927	650
University of Pittsburgh- Pittsburgh	18,092		Metropolis	2,618,436	1787	132
University of Scranton	3,999	Private	City	125,154	1888	50
University of the Arts	2,100	Private	Metropolis	44,940	1876	18

Appendix A: Matrix of Pennsylvania Institutions of Higher Education

		Public/				
Institution	Enrollment	Private	Location	Endowment \$000	Founded	Acreage
University of the Sciences in						
Philadelphia	2,478	Private	Metropolis	147,781	1821	35
Ursinus College	1,741	Private	City	105,149	1869	170
Villanova University	6,898	Private	Village	366,106	1842	254
Washington & Jefferson College	1,418	Private	Village	103,817	1781	60
Waynesburg College	1,600	Private	Village	50,390	1849	30
West Chester University of PA	12,521	Public	Village	21,621	1871	403
Westminster College	1,387	Private	Village	87,205	1852	350
Widener University	3,253	Private	Town	72,640	1821	110
Wilkes University	2,171	Private	City	43,423	1933	27
Wilson College	515	Private	Village	67,366	1869	300
York College of PA	5,168	Private	City	65,737	1787	190

NOTES:

All Colleges and information, unless otherwise noted, from *Princeton Review, Complete Book of Colleges 2013 Edition (New York: Random House, 2012).*

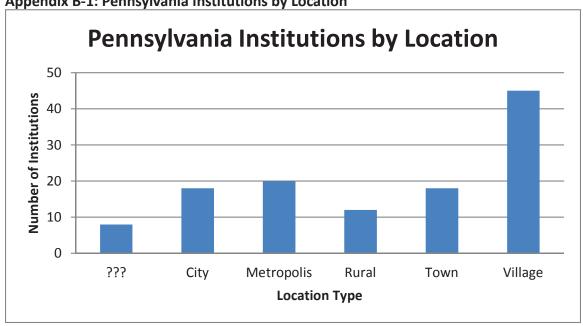
National Association of College and University Business Officers, "U.S. and Canadian Institutions Listed by Fiscal Year 2012 Endowment Market Value and Percentage Change in Endowment Market Value from FY 2011 to FY 2012," (Revised February 4, 2013).

"Best Colleges," US News and World Review, accessed March 3, 2013, http://colleges.usnews.rankingsandreviews.com/best-colleges.

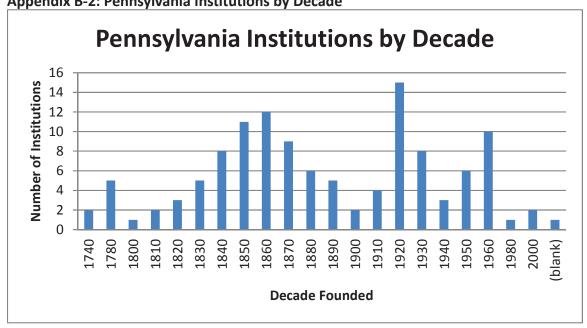
Limited information available on these institutions

???=Data Unavailable



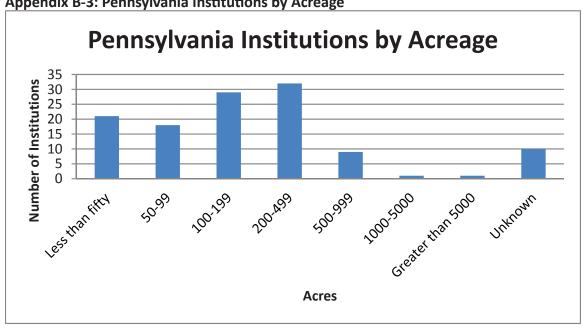




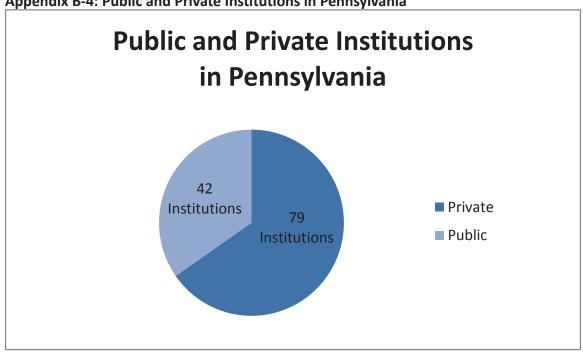


Appendix B: Charts Derived from Institutional Matrix (see Appendix A)

Appendix B-3: Pennsylvania Institutions by Acreage

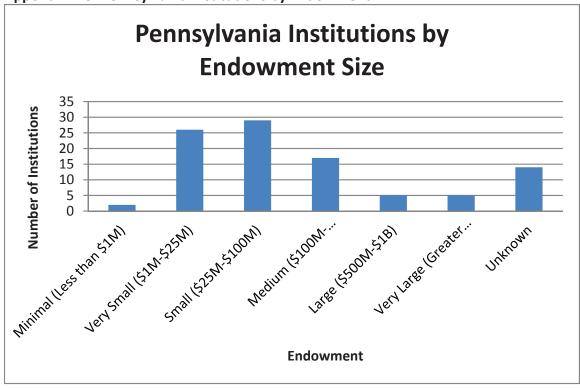






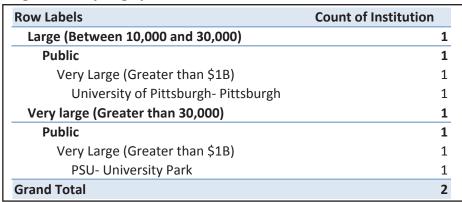
Appendix B: Charts Derived from Institutional Matrix (see Appendix A)

Appendix B-5: Pennsylvania Institutions by Endowment



Appendix C-1: Large Public Research Universities

Large and Very large public universities with substantial endowments (>\$500M)



Appendix C-2: Rural Charm

Medium, small, and very small public institutions in rural areas

Row Labels	Count of Institution
Rural	6
Public	6
Medium (Between 5,000 and 10,000)	3
Edinboro U of PA	1
Kutztown University of PA	1
Slippery Rock U of PA	1
Small (Between 1000 and 5,000)	2
Lincoln University	1
Mansfield University	1
Very Small (about a thousand or less)	1
PSU- Hazleton	1
Grand Total	6

Appendix C-3: Metropolitan Mammoths
Medium, large, and very large Institutions located in a metropolis

Row Labels	Count of Institution
Metropolis	6
Large (Between 10,000 and 30,000)	3
Drexel University	1
Temple University	1
University of Pittsburgh- Pittsburgh	1
Medium (Between 5,000 and 10,000)	3
Carnegie Mellon University	1
Duquesne University	1
University of Pennsylvania	1
Grand Total	6

Appendix C-4: Doing More with Less Institutions founded before 1850 with small endowments (<\$100M) and large land areas (>100 Acres)

Row Labels	Count of Institution
Small (\$25M-\$100M)	4
100-199	2
1780	1
York College of PA	1
1820	1
Widener University	1
200-499	1
1840	1
Saint Vincent College	1
500-999	1
1840	1
Saint Francis University	1
Very Small (\$1M-\$25M)	1
200-499	1
1830	1
Bloomsburg University of PA	1
Grand Total	5

Appendix C-5: Small, Old, and Wealthy
Very small and small private institutions with substantial endowments (>\$500M)
founded in the 19th century

Row Labels	Count of Institution
Large (\$500M-\$1B)	3
Small (Between 1000 and 5,000)	2
200-499	2
1820	1
Lafayette College	1
1840	1
Bucknell University	1
Very Small (about a thousand or less)	1
100-199	1
1880	1
Bryn Mawr College	1
Very Large (Greater than \$1B)	2
Small (Between 1000 and 5,000)	2
1000-5000	1
1860	1
Lehigh University	1
200-499	1
1860	1
Swarthmore College	1
Grand Total	5

Appendix C-6: Newcomers Institutions Founded since 1940

Row Labels	Count of Institution
1940	3
Gwynedd- Mercy College	1
King's College	1
PSU- Erie, Behrend College	1
1950	6
Alvernia University	1
Cabrini College	1
Eastern University	1
Holy Family University	1
Pennsylvania State University- Abington	1
PSU- New Kensington	1
1960	10
DeSales University	1
La Roche College	1
Neumann College	1
Point Park University	1
PSU- Harrisburg	1
PSU- Shenango	1
PSU-Brandywine	1
Thomas Jefferson University	1
University of Pittsburgh- Bradford	1
University of Pittsburgh- Greensburg	1
1980	1
Pennsylvania College of Technology	1
2000	2
Harrisburg University of Science and Technology	1
Immaculata University	1
rand Total	22

Appendix D: Summary Matrix

	Identification and Inventory	Building Condition Survey	Landscape Survey	Historic Designation	Appoint Preservation Officer
Large Public					
Research	1	1	1	2	2
Institutions					
Rural Charm	1	1	1	2	3
Metropolitan	1	1	2	1	2
Mammoths	1	1	2	1	2
Doing More	1	1	1	1	3
with Less	1	1	1	1	3
Small, Old, and	1	1	1	1	2
Wealthy	-	-			
Newcomers	1	2	2	1	3
Often					
Applicable (1)					
Sometimes					
Applicable (2)					
Rarely					
Applicable (3)					

	Use of Faculty and Students	Campus Community Engagement	Maintenance Budget	Nonprofit Partnerships	Private Partnerships
Large Public Research Institutions	1	1	1	2	1
Rural Charm	3	1	1	1	2
Metropolitan Mammoths	1	1	1	2	1
Doing More with Less	3	1	1	1	2
Small, Old, and Wealthy	1	1	1	2	2
Newcomers	3	1	2	1	2
Often Applicable (1) Sometimes Applicable (2)					
Rarely Applicable (3)					

INDEX

Α

Adaptive Reuse 5, 15, 16, 29, 56 Audrain, Calvert W. 20

<u>B</u>

Benchmarking, Perceptual 28
Branding 4, 5, 23, 27, 45
Bruce, Jeffrey L. 26, 27, 68
Bryn Mawr College 45, 47, 48, 68
Bucknell University 45, 52, 53
Buono, Jon 24

C

Chapman, J. Wesley 14, 15, 28, 68, 71 Christen, Barbara S. 24, 68 Clement, Arthur J. 25 Condition Survey 33, 48 Council of Independent Colleges 17, 20, 33, 69 Craig, Charles A. 10, 21, 32, 33, 34, 56, 68, 69 Cultural Landscape 62

D

Davis, Nathan 28
Designation 20, 35, 36, 53, 54, 55, 63
Dober, Richard 1, 10, 11, 12, 13, 14, 20, 26, 36, 56, 68, 69
Doing More With Less 6, 44, 50, 60, 81

Ε

Ekman, Richard H. 20 Elefante, Carl 23 Endowment 3, 25, 40, 41, 42, 43, 44, 45, 80, 81, 82 Engagement 36, 41, 57

F

Fiene, Karen 24

Firestone, Nat 15, 16 Fixler, David N. 21

G

Gast, Frances 24 General Services Administration 31, 32 Getty Foundation Iv, 17, 18, 19, 30, 32, 43, 49, 60, 67, 70

Н

Historically Black Colleges and Universities 25, 68 Hunt, James L. 16, 70

ı

Interpretation 28
Inventory 16, 21, 23, 32, 33, 34, 46, 47, 48, 53, 63

K

Kelly, Sarah D. 21 Kull, Ron 27

L

Landscape 2, 3, 7, 8, 12, 13, 26, 27, 29, 30, 33, 34, 36, 49, 50, 51, 53, 57, 62, 63 Landscape Survey 34, 50 Landsmark, Ted 21 Large Public Research Institutions 6, 42, 57 Lidsky, Arthur J. 25

M

Martin, Frank E. 26, 35, 70 Mcgirr, Dale 27 Melnick, Robert Z. 17, 18, 19, 67, 70 Metropolitan Mammoths 6, 43, 51, 57, 81

INDEX

Ν

National Park Service 28, 46, 50, 53, 69, 70, 71

National Register 13, 21, 22, 28, 35, 36, 40, 46, 48, 53, 54, 55, 63, 70

National Trust for Historic Preservation 25

Neuman, David J. 22, 23, 70

Newcomers 6, 45, 54, 60, 83

0

Orfield, Steven J. 28

P

Partnerships 38, 60
Penn State 39, 40, 42, 43, 51, 52, 71
Pennsylvania I, 6, 14, 38, 39, 40, 41, 42, 43, 45, 47, 54, 55, 56, 57, 60, 61, 71, 74, 75, 76, 77, 78, 79
Philadelphia University 49
Placemaking 10, 12, 14
Placemarking 10
Planning for Higher Education 18, 19, 20, 21, 23, 24, 25, 26, 27, 28, 29, 32, 35, 36, 37, 56, 67, 68, 69, 70, 71, 72
Portfolio 31, 32, 38
Preservation Officer 36, 55
Preservation Planning 1, 8, 12, 19, 22, 36, 37, 39, 62, 66

R

Rubric 21, 32, 34, 56, 68 Rural Charm 6, 43, 60, 80

S

School Typology 39, 50 Secretary of the Interior's Standards 22, 54, 55 Section 106 35, 53, 54, 55, 68 Shull, Carol D. 28 Significance 13 Small, Old, and Wealthy 6, 44, 55, 82 Society for College and University Planning 13, 17, 18, 19, 34, 68 Stakeholders 17, 30, 62 Stewardship 19, 20, 67, 68, 70 Sustainability 3, 4, 14, 19, 20, 21, 23, 52

T

Turcotte, Claire L. 29 Turner, Paul 3, 9, 71

U

University of Mary Washington 29, 30, 37 University of Pennsylvania I, 38, 43, 47, 56, 57, 60, 61, 71 University of Pittsburgh 42, 54 University of Virginia 22, 23, 36, 50, 55, 56, 59, 60, 71, 72

V

Values-Based Preservation 61

W

Wharton, L. Carole 19, 72 Williams, Stacy D. 29, 72