# Table of Contents

Message from the Chancellor  

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>HISTORICAL BACKGROUND</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>FACILITIES ASSESSMENT SUMMARIES</td>
<td>19</td>
</tr>
<tr>
<td>4</td>
<td>ACCESSIBILITY ASSESSMENT</td>
<td>43</td>
</tr>
<tr>
<td>5</td>
<td>SITE / LANDSCAPE</td>
<td>51</td>
</tr>
<tr>
<td>6</td>
<td>TRAFFIC &amp; TRANSPORTATION</td>
<td>99</td>
</tr>
<tr>
<td>7</td>
<td>SPACE USE ANALYSIS</td>
<td>113</td>
</tr>
<tr>
<td>8</td>
<td>MASTER PLAN ANALYSIS</td>
<td>159</td>
</tr>
<tr>
<td>9</td>
<td>GROWTH RECOMMENDATIONS</td>
<td>165</td>
</tr>
</tbody>
</table>

Conclusions  

Acknowledgements  

The Master Plan TECHNICAL APPENDIX is provided as a separate document (see page 222 for details) and includes:

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GENERAL</td>
</tr>
<tr>
<td>2</td>
<td>SPACE PLANNING</td>
</tr>
<tr>
<td>3</td>
<td>FACILITIES</td>
</tr>
<tr>
<td>4</td>
<td>ACCESSIBILITY</td>
</tr>
</tbody>
</table>
Message from the Chancellor

I am very pleased to present to you the first Campus and Facilities Master Plan for the Dartmouth campus in 30 years. This document represents a significant milestone in our continuing strategic planning process. It provides us with data, context, and options for ensuring that our physical environment supports our strategic goals related to teaching, learning, research and service.

Development of a Campus and Facilities Master Plan was recommended by the University Planning Council. The dedication of the faculty and staff members of the Master Plan Steering Committee helped us see the project through to completion.

In addition, countless faculty, staff and students participated in the workshops and presentations conducted by the consultants, Chan Krieger and Associates. I am very appreciative of your effort and your willingness to share your ideas. I know that the Dartmouth campus will benefit from your vision well into the future.

This project could not have been undertaken without the financial and administrative support of the Commonwealth of Massachusetts and its Division of Capital Asset Management, which have partnered with the university in every aspect of this project. Their skillful project management assisted us through the inevitable roadblocks and kept us on track.

Finally, the Chan Krieger and Associates team is to be commended for its fine work. This document reflects not only the firm's technical expertise, but its extensive experience in collaborating with education clients in a participatory and inclusive manner.

Our university and the generations that follow us are indeed fortunate that this firm was selected to lead this process. We are especially pleased with the outcome.

Jean F. MacCormack
Chancellor
January 2005
The campus and facilities master plan for the University of Massachusetts Dartmouth campus was conducted as a joint effort between the University administration, staff and faculty and the Division of Capital Asset Management with a broad range of consultants led by the Architecture and Planning firm of Chan Krieger & Associates. The process was initiated in the fall of 2003, when the DCAM issued a public request for proposals for the plan. Upon selection of the consultant team, the planning process began in January of 2003, initiated by the Chancellor’s naming of a Steering Committee consisting of a broad cross section of the University community. The Master Plan steering committee met on a monthly and bi-monthly basis throughout the next 12 months to discuss the goals, progress and process of the master plan.

To initiate the planning process, Chan Krieger & Associates utilized the findings and recommendations of the Chancellor’s Strategic Planning Process from which the University Planning Council recommended the development of a facilities master plan. The findings of this strategic planning process were utilized as a framework for the general goals and aspirations identified within this document as well as those articulated throughout the process by a broad cross section of the University community. An integral part of this framework is the projected enrollment increases that will result in a student population of 10,000 students by the year 2010, a 25% increase over current enrollment. Clearly, such growth will have a significant impact on University facilities, campus and culture. The goal of this master plan is to evaluate those impacts and identify a strategy for physical expansion that will enable the University to achieve the projected enrollment increases while maintaining its academic standards, cultural identity and sense.
Beyond simply maintaining these standards however, the ultimate goal of the plan is to ensure that campus facilities will support and enhance the University’s mission.

In addition to accommodating projected growth, however, the master plan seeks to identify and address current campus and facilities issues – many of which have been compounded gradually by years of enrollment increases without significant recent physical expansion. Other critical factors that the Master Plan seeks to address include:

- Deferred maintenance and the life-cycle limitations of building systems, some of which are close to 40 years old
- The shift in culture from a largely commuter campus to an increasingly residential population and the transition from a regional institution to one with a broader reach
- Universal changes in higher education such as the increasing need for research space and specialized laboratories, shifts in teaching pedagogy and the impact of technology (physical, spatial, cultural and educational impacts)
- The challenges of planning within the constraints of a campus architecture that is not flexible or easily adaptable to changes in use and configuration – a condition that is in conflict with the ever changing nature of Academic institutions
- The challenge of balancing the need to preserve an important architectural artifact with issues of fiscal limitations deferred maintenance and changing life safety, building and accessibility codes
- The aesthetic challenges of designing new facilities in an atmosphere of such a pervasive, powerful and individual architectural style – a style that belongs distinctly to a different era whose unique aesthetic expression does not always appeal to a broad audience

The ensuing master plan seeks to respond to all of these challenges with both short term and long term strategies that, among other goals, attempts to:

- Assess and prioritize deferred maintenance items and strategies for physical improvements to existing buildings
- Analyze occupancy patterns and space utilization and suggest improvements to inefficiencies and strategies for redistribution and managing growth
- Identify patterns of campus expansion that will not only protect and preserve the architectural integrity of the original architecture, but improve upon the less successful aspects of the campus and create new and improved relationships and environments
- Recommend strategies for continued improvements to the campus landscape – an important and ever evolving component of the campus experience and an integral part of the strategy to temper the sometimes imposing characteristics of the campus architecture
- Improve the relationship between vehicular transportation and the experience of the campus as a pedestrian realm
- Improve accessibility to the campus, around the campus and through the buildings including identifying and removing physical barriers, improving signage, communication and way-finding while addressing overall campus safety and security issues
- Preserve the architectural character and qualities of the
original campus architecture while enhancing the quality of the interior environments, particularly those spaces for teaching, and social gathering

- Identify and prioritize areas of required growth and physical expansion to support and advance the University’s academic reputation and competitive standing amongst its peer institutions

- Ensure that the future of the University’s campus facilities will support and improve upon the ability for the University to meet its academic, cultural and social mission

Process and Methodology

Kick-Off Data Gathering and Interviews
The UMASS Dartmouth Master Plan began in earnest in late February of 2003 with the first meeting of the Master Plan steering committee. At this meeting Chan Krieger & Associates gave a general presentation on the goals and scope of the Master Plan, as well as examples of some pertinent campus planning approaches. For the next several months, the Master Planning team engaged in a series of interviews with deans, department heads, faculty, administrators, staff and students, the complete list of which is included below. Prior to the
conducting the interviews, the Master Planning team issued the following questionnaire as a guideline, although the actual content of the interviews was much more dynamic. The purpose of the interviews was to gain a better understanding of the culture of the University and to hear directly from a cross section of multiple constituencies regarding the varying issues, concerns, goals and vision for the University. A broad and diverse range of topics were discussed during the interview process including:

- Current physical space needs of individual departments and future growth projections
- Facilities issues within department spaces and across the campus
- The relationships between departments, across colleges and between various constituencies
- Varying departmental pedagogical practices and the extent to which the facilities place constraints on teaching and research
- How the campus facilities succeed and where they fall short of supporting the academic and cultural mission of individual departments, colleges, organizations and campus communities
- How the institution has and continues to change with time and how the campus facilities might be adapted to accommodate these changes
- Where the need for the expansion of new facilities is most critical

This exercise was critical in the education of the Master Planning team on the complex physical, cultural and organizational makeup of the University (Summaries of the interviews and a list of the attendees can be found in the Master Plan Appendix).

Concurrent with the interview phase of the Master Plan, the team spent time compiling and assembling the variety of graphic and written campus data available. A critical task was the creation of an electronic CAD base of the campus and the buildings. Building plans that previously existed only in hand drafted format were re-drawn electronically and assembled to formulate a working existing conditions base map. The product of this effort was updated throughout the master plan process by the full building surveys and CAD documentation conducted by the Facilities Department and their building survey consultant. The resulting data base represents the first fully electronic plan data base of the campus, a critical tool in not only the master plan, but for the documentation, assessment and inventory of the university facilities.

Other documentation included the assembly of available GIS (Geographical Information Systems) data such as wetlands and topography, campus aerial photographs, prior planning studies (departmental and University-wide), reports and general data and information about the university. The team also spent time during this phase touring the facilities, both on and off campus and conducting a preliminary cursory documentation of the physical condition of the buildings and grounds.

**Steering Committee Meetings / Workshops / Presentations**
Throughout the Spring 2003 and Fall 2004 semesters the master plan team met on a monthly basis with the Master Planning steering committee assembled by the chancellor (see acknowledgements for steering committee membership). The formats varied from presentations by the consultant team with comments from the committee, to general open discussions by the committee about the range of campus issues affecting the master plan. Minutes from these meetings were distributed to all committee members and presentations were posted on the campus master plan web-site. Augmenting these meetings were a series of 3 open forum workshops that were advertised to the entire campus community. The consultant team gave summary presentations followed by open comments and discussions. The steering committee is scheduled to meet again following submission of this draft and again following the final report submission. The final plan will also be presented to the faculty and the Trustees.
The following summaries identify the general tasks and scope items of the master plan.

**Space Utilization**
With the electronic base map of the campus, the facilities department has undertaken the creation of a space data base that identifies the current assignment of all campus space by academic or administrative department, including classroom spaces assigned to the registrar’s general classroom supply. The square footage of each space is also determined and tallied by department. Using the *National Center for Education Statistics* (NCES) standards for room coding, as coordinated by the master plan consultant, the information was analyzed by the academic planning firm Rickes Associates. Occupancy patterns, and space to staff ratios were analyzed among other general observations about space allocation and utilization. General classroom sizes were scrutinized against actual class sizes, schedules and standards as well as tested against potential enrollment projections. From these exercises the team developed a critique of space management policy and made recommendations for improving efficiency, utilization and projected growth needs.

**Analysis**
Following the data-gathering phase of the master plan, the team undertook a series of campus and architectural analysis exercises. Campus organization and use distribution patterns were evaluated as well as entry and access, traffic, parking, pedestrian and vehicular circulation patterns, landscape and environmental conditions. The scale of the campus was compared to a variety of other University campuses to demonstrate the actual and perceived relative distances between buildings and spaces, campus size and population, and how growth patterns have affected the manner in which vehicles and pedestrians negotiate the campus.

![Typical Group I third floor corridor](image1)

![East facade of Group I and Auditorium annex](image2)
Initial Concepts
The exercises conducted during the analytical phase of the master plan, as well as information gained from the interviews and committee discussions, informed the initial concepts of the master plan. These planning and growth studies were more of a reflection of potential patterns and areas for growth rather than specific proposals for particular uses. The team analyzed the original campus master plan and master plan update from 1971 to identify earlier concepts for campus growth. The initial concepts sought to establish new spatial relationships and develop criteria for how future buildings could help define new outdoor spaces and improve relationships between existing buildings.

Facilities Assessments
As a parallel effort to these initial phases, the master planning consultant team conducted comprehensive assessment surveys of the existing building and campus facilities. The team’s consulting engineers conducted evaluations of mechanical, electrical, plumbing and fire protection systems and made recommendations and cost impact estimates for upgrades, improvements and code compliance. Structural and exterior building envelope surveys were also undertaken on existing campus buildings with standard repair details produced as part of the recommendation. Interior finishes were surveyed and general recommendations for addressing deferred maintenance and interior finish standards were identified. A comprehensive existing conditions survey of the campus landscape was conducted including the identification of major planting characteristics, paving conditions, drainage, site lighting and signage. Completing the assessment portion of the master plan, a general survey of major accessibility issues on campus was also undertaken. This exercise includes identification of physical barriers within buildings and on the campus, signage, communication and general recommendations for improving access to the University’s programs and services for students, staff and the general public.
Refined Concepts
With input from the Master Plan steering committee, and the findings of the space utilization studies, the master planning team concluded the planning process by refining the concepts explored for future campus growth and strategies for addressing many of the issues identified by the facilities assessments. Siting strategies, relative square footages and preliminary programs were identified for academic, residential, athletic and administrative building expansion. Areas recommended for landscape improvements were identified and developed to a conceptual level. A parking expansion and relocation strategy was outlined and existing facility improvements categorized and prioritized. All of the refined master plan concepts have preliminary cost estimates associated with them and a measure of relative priority and category of improvement.

Summary
The purpose of this final report is to serve as a comprehensive assembly and written summary of all of the master plan scope items described above. Most of this information has been presented in an abbreviated form to the master plan steering committee although much of it has been refined for this document. A draft report was issued in order to solicit comments and responses from the Steering Committee, the facilities department, the administration and the Division of Capital Asset Management. Written comments and discussions from the subsequent steering committee meetings and other presentations have been incorporated into the final draft of the report.