Standard 2: Planning and Evaluation

Planning

Background and Description

Much of recent planning activity at UMass Amherst has been driven by two challenges: 1) rebuilding and rebalancing the faculty after successive waves of hiring restrictions and retirement incentive programs over a fifteen-year period; and 2) addressing an increasingly urgent need for facilities replacement and renewal. These two issues — and increasingly, their intersection — have been and remain the foundation of institutional planning.

They hold this central place in planning because of their importance to UMass Amherst’s ability to succeed in carrying out its mission as a flagship public research university. In terms of faculty, UMass Amherst has always been small for an institution of its type. The absence of medical, dental or veterinary schools imposes one kind of restriction on scale. The absence of a law school and the relative scarcity of other free-standing professional schools such as architecture or communication imposes another. The relatively modest scale of agriculture in modern-day Massachusetts tends to set a limit on the scale of our land-grant component. So, purely on the basis of mission and program mix, the campus is built on a modest scale, with a traditional arts and sciences core accompanied by selective professional activities in engineering, education, management, public health, and nursing, some of which are themselves of relatively modest scale.

To compete with other, often larger, research universities is therefore a challenge even with a full complement of faculty. But successive cycles of economic recession — each characterized by reductions in state support from which the campus never fully recovered when the economy eventually rebounded — have eroded the number of tenure system faculty from its high point of approximately 1,200 in the late eighties to fewer than 1,000 today. While the campus has been able to replace some of that lost instructional capacity through increased use of non-tenure system instructors, the impact of a diminished faculty on research and scholarship has been significant. Research productivity has grown during this period, but not at a rate sufficient to move the campus through the ranks of the research institutions with which it competes.

In terms of facilities, what had been a persistent concern has become a central challenge to the institution’s continued success. Over a period of decades, the Commonwealth of Massachusetts constructed millions of square feet of instructional, laboratory, and support space, but neither the Commonwealth nor the University had in place a financial strategy to provide for the routine maintenance and, more important, the facilities renewal necessary as buildings reached the point at which major building systems and structural elements required modernization. The university’s operating budget did not reflect the need for capital modernization, and the
Commonwealth continued to focus its resources on new construction, with very little available for renewal. Over time, as the buildings constructed in the wave of expansion following World War II reached the end of their designed lives, a large backlog of deferred maintenance and renewal developed. More recently, that backlog has spiked as the much larger expansion of the Baby Boom years has come to the end of its own life cycle. As a result, the combined effects of unfunded capital renewal and underfunded ongoing maintenance are now staggering (see Standard Nine).

While this undercapitalization has had serious consequences, it has been exacerbated by other trends placing increased demands on physical facilities. First, it is not enough to try to maintain the functionality of buildings constructed in the 1940s, 1950s, or even the 1970s. Designed capacity in those days fell far below modern standards. For example, our largest existing science facility, the Morrill complex, was constructed without even the basic HVAC systems that would allow for intensive use of chemical fume hoods. As the practice of science has changed, buildings once designed for science have becoming increasingly inadequate and in many cases obsolete. Similarly, over the decades changes in building, plumbing, electrical, seismic, accessibility and other codes have dramatically raised the standard for construction and renovation. Even when funds for building renewal have been made available, much of the funding is consumed simply bringing older buildings up to modern standards.

Ten years ago, in the campus’s self-study, the facilities issue was identified as a major concern. A facilities condition audit conducted at that time revealed roughly $400 million in deficiencies. Five years later, in its interim report to NEASC, the campus again highlighted the need to “address substantial deferred maintenance and infrastructure needs.” Since then, the urgency of the situation has increased, and capital and facilities planning has moved to the center of the campus’s strategic thinking.

Faculty Rebuilding and Rebalancing
Systematic planning to reverse the long decline in the number of tenure-system faculty began in 2005, when Chancellor John Lombardi launched the “Amherst 250 Plan,” a five-year program to add 250 net faculty positions, bringing the size of the faculty roughly back to the 1,200 level of the late eighties. The purpose was to bring the size of the faculty “back into scale with our mission as a nationally competitive public research university,” and in so doing to direct investments “to areas of current and emerging importance, so that the campus will be positioned to compete effectively in the years ahead.”

The Amherst 250 program was made possible because, after substantial declines in 2002, 2003, and 2004, the state appropriation to UMass Amherst began to rebound in 2005. Chancellor Lombardi indicated that a portion of the increase in state funding each year would be devoted to Amherst 250 hiring, beginning with FY2006. The precise number to be hired each year varied according to the size of the state increase and the scale of other needs, but over its first three years funding was made available for 150 positions (48 for 2006, 45 for 2007, and 57 for 2008).

In its first three years, Amherst 250 had two main objectives: 1) to address serious instructional imbalances that had emerged as multiple faculty retirement incentive programs had their effect; and 2) to make selective investments to promote research and scholarship competitiveness.

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Instructional allocations were guided in large part by instructional productivity benchmarking derived from the National Study of Instructional Productivity (“Delaware” study), in which UMass Amherst was one of about 30 Research I participants. Using disciplinary norms for research universities derived from the “Delaware” data, UMass Amherst programs with significant instructional staffing deficits were allocated positions through Amherst 250. Allocations to promote research and scholarship competitiveness were informed in several ways: at various points in the process trends in research productivity were examined, as were comparative research benchmarking data collected by each department; and proposals for new research initiatives proposed by deans were evaluated. In addition, a small number of positions were made available to meet disciplinary accreditation needs.

Chancellor Lombardi left UMass following the third year of allocations, and Thomas Cole served as interim Chancellor for the following year. At the time Chancellor Robert Holub arrived on campus, and discussion of continuation of Amherst 250 funding resumed, the state’s financial situation had begun to deteriorate and the campus faced the prospect of a significant reduction in state funding. Nonetheless, Chancellor Holub reiterated the importance of rebuilding the faculty and launched a new process requesting proposals for new faculty investment to advance the campus’s research and teaching distinctiveness. That process attracted more than thirty proposals, most of which requested multiple positions for interdisciplinary initiatives. Review will begin in fall, 2009.

Facilities and Capital Planning
Over the past several years, planning related to facilities has focused on two priorities: 1) responding to known, real-time facilities issues demanding prompt University action; and 2) better understanding the scope and nature of the larger, underlying dilemma presented by the campus’s aging infrastructure.

The first process involved careful, ongoing monitoring of building conditions as they affected the programs housed within them, with an emphasis on maintaining critical buildings systems and structural envelopes. In essence, this was a triage approach carried out through close collaboration between Physical Plant and Facilities and Campus Planning, designed to direct the campus’s limited maintenance and facilities dollars to the highest priorities. This process resulted in a set of continually updated project priorities that took maximum advantage of available funding to complete a large number of roof replacements, building systems upgrades, electrical power distribution projects, and the like.

The analysis of real-time programmatic issues also drove a series of capital funding decisions that accounted for much of the new building construction on the campus over the past decade. Two examples include:

- The new Central Heating Plant (CHP). The campus’s heating plant, dating back to 1918, which produced low-pressure steam distributed through 26 miles of tunnels, had been in a state of increasing deterioration and vulnerability for years. Its life had been extended through a variety of temporary means, but its replacement became an urgent need that could no longer be deferred. The campus therefore made the construction of a new CHP, capable of producing both steam and much of the campus’s electricity needs, a top
priority. This project consumed a large fraction of the campus’s available capital funding, but no alternative existed. The new CHP opened in 2009.

- The Studio Arts Building. For many years various aspects of the studio arts program (painting, sculpture, ceramics, printmaking, etc.) had been scattered across campus in nineteen locations, some of them relics of the campus’s agricultural past (the Milker’s Bungalow, the Art “Barn”). Many of these facilities were in advanced stages of deterioration, and a fire in one facility forced the campus to confront the future of its studio arts program. Faced with the choice of either closing the program or constructing a new facility, the campus made the decision to dedicate its limited capital resources to the construction of a new Studio Arts Building, bringing together many elements of the program for the first time in a modern facility. The Studio Arts Building opened in 2008.

While all these efforts represented careful and effective stewardship on the part of the institution, they did not resolve the underlying facilities dilemma, characterized by the bow wave of deferred maintenance and modernization that had been building up for decades. So the second planning priority — better understanding the scope and nature of the underlying problem so as to develop a basis for effective action — became increasingly urgent.

Standard Eight describes the various tools and approaches put in place in recent years to document the full extent of facilities deficiencies on the campus. They included a campus-wide space utilization study and accompanying classroom study conducted by Comprehensive Facilities Planning, Inc. and a comprehensive facilities condition audit conducted by Sightlines. These and related investigations confirmed the growing backlog of capital and maintenance needs, with the Sightlines study estimating the total cost of deferred maintenance and modernization at $1.5 billion.

The scale of facilities needs far exceeded the resources available to the campus, but the institution’s financial planning was realigned over a decade or more to reflect the urgency of the situation. Beginning in the early 1990s, the decision was made to divert campus operating funds to support capital projects, in the form of both direct expenditures and debt service for capital borrowing. This launched an aggressive self-financed capital borrowing program through the University of Massachusetts Building Authority (UMBA), which to date has financed nearly $750 million in current and planned projects.

Assessment

Formal Planning
Over the past year or so the campus has made three advances in its planning that recognize ongoing issues related to faculty and facilities but also mark a new and more aggressive approach to improving the campus’s situation. The first is the development of Chancellor Robert Holub’s Framework for Excellence: the Flagship Report, which begins a new strategic planning process for the campus. The second is the launch of three major facilities planning efforts in cooperation with the state Division of Capital Asset Management (DCAM): a comprehensive science and engineering study and plan, a comprehensive academic and
classroom study and plan, and a Master Plan for the campus. The third is the renewed commitment to, and a new framework for, rebuilding and rebalancing of the faculty.

**Framework for Excellence**

In March 2008, as the search for a new Chancellor was underway, the Board of Trustees adopted a resolution recognizing that “a strong and nationally-recognized flagship is essential to the success of the system as a whole” and committing itself to “moving UMass Amherst into the top tier of public universities in the country” (Trustee Document T08-34). The resolution also called upon the new Chancellor to develop a strategic plan to move the campus toward that goal.

Chancellor Holub began that process shortly after arriving on campus in fall 2008, and over the course of the year began to organize the planning process. A planning retreat involving senior administrators was held in late September, organized around an assessment of the campus’s strengths, weaknesses, opportunities and threats (SWOT analysis). The discussion at the retreat produced a set of strategic priorities within these themes: identity; faculty; research; graduate education; undergraduate education (including curriculum, enrollment management and student life); and resources (including fundraising and facilities). Within these themes a set of action plans was developed, identifying specific projects that could be accomplished in the six-month to two-year timeframe while a more comprehensive, longer-term plan was under development.

In December 2008 Chancellor Holub began discussions with senior staff around a draft document to serve as the foundation for the strategic planning process. This document developed the themes emerging from the retreat and incorporated the action plans and additional, related initiatives. It focused on the “high-level considerations” facing the campus in its efforts to move up through the ranks of American public research universities, and laid out key issues and dependencies to guide future action. During the spring semester successive drafts of the document were discussed among the senior staff and with the Faculty Senate Rules Committee, and comment was invited from Deans and other senior managers. A second planning retreat was held at the end of March to discuss the planning approach and review progress on the action plans. In April, a formal draft of Framework for Excellence: the Flagship Report was released to the campus. Chancellor Holub described the draft Framework as representing “the beginning of a campus-wide conversation, aimed at taking a thoughtful, purposeful and inclusive approach to positioning the University of Massachusetts Amherst for success, both in the short and long term.”

The Framework culminated a year of appraisal of the campus’s situation and circumstances, its specific challenges in becoming more successful in the competitive and increasingly dynamic environment of leading public research universities, and the nature and sequence of the steps on its path to success. That appraisal sets the stage for the next phase of the campus’s development.

**Facilities**

The Framework reaffirms that “the physical plant presents the campus with perhaps its greatest challenge.” Facilities needs represent not only an increasing drain on over-stretched campus resources, but also an increasingly critical limitation on faculty growth, research productivity, and instructional quality and capacity. Addressing the longstanding facilities challenge is critical to achieving virtually all of the Framework’s central goals.

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An important new phase in facilities planning was launched in 2008, when the Governor and legislature approved a far-reaching capital outlay bond bill for higher education. This initiative represented the largest state investment in higher education facilities in a generation, with a total of $1 billion to be made available over the course of ten years. The UMass Amherst share of this investment could ultimately be as much as $700 million, but especially important for campus planning was the inclusion in the bond bill of early funding for a $100 million science building and an $85 million academic classroom building. Moreover, a separate state initiative in the life sciences included funding for another $95 million science building on the Amherst campus, with those funds scheduled for release sometime later (see Standard 8).

While these buildings themselves are of critical importance to the campus, they also represent the first opportunity the institution has had in many years to engage in meaningful capital planning, as opposed to reacting to immediate facilities crises. The campus, in cooperation with the state Division of Capital Asset Management (DCAM), has seized this opportunity to launch the first comprehensive capital planning effort for the campus since the Baby Boom expansion of the 1960s. The effort has three components, each employing nationally known architectural and planning consultants:

- **Science and Engineering.** It was immediately evident to the campus and to DCAM that planning for the $100 new science building (NSB) and the $95 life sciences building (LSB) required a comprehensive assessment of campus needs, capacities and future directions related to science and engineering. Given the tremendous backlog of needs in science and the rapidly evolving demands of modern scientific research, wise investment in new facilities required an overall plan to guide construction and renovation in the years ahead. Of particular importance is the relationship between existing facilities — many of which are at or beyond the end of their usefulness for modern science — and the new capacity that will be added. The capital plan for science and engineering must account for backfill, modernization and conversion to other uses of existing science facilities as well as new construction.

Timing became a critical consideration. Campus needs are urgent, and the importance of securing and putting to use the available state funding argued for an unusually compressed planning process. To accomplish this, UMass Amherst and DCAM issued an RFP for an architectural firm to develop a comprehensive science and engineering facilities plan to guide development over the next ten to twenty years, but with a parallel process to program and design the $100 million NSB. Wilson Architects of Cambridge, Massachusetts, a national firm specializing in science facilities, was selected to guide this effort. Beginning in July 2008, Wilson led an intensive assessment and planning effort involving the entire science and engineering community. From this emerged the **Comprehensive Science Plan**, that lays out the nature and sequence of construction, renovation and backfill for all science facilities over the next two decades; it includes a design of the NSB as the first stage of that plan; and the conceptual design of the LSB as a key aspect of the second stage.
• **Classroom and Academic Support:** within months of the launch of the science and engineering study, the campus and DCAM issued an RFP for a comparable comprehensive review of instructional and academic support facilities. While the specific issues were different, the fundamental situation mirrored that of the science facilities: longstanding deferred needs, evolving demands, and the necessity of developing a larger context within which to place both new and existing facilities over the long term. Burt, Hill Associates, a leading national architectural firm, was engaged to guide this process, and in January 2009 began an intensive process to develop a comprehensive academic and classroom plan and, in parallel, to design the new $85 million building. This process will continue into fall 2009.

• **Campus Master Plan:** the final component of campus facilities planning is development of a new physical Master Plan for the campus. UMass Amherst has put in place aspects of a master plan over the years, including a series of area plans in 1993, but has not had the capacity internally to undertake a comprehensive master plan. In cooperation with DCAM, the master planning process will result in a state-approved plan that will help guide long-term development of the campus and improve coordination with state funding opportunities. The RFP for the master planning process was issued in May 2009, and work is expected to begin in fall 2009.

**Rebuilding and Rebalancing the Faculty**

The interruption of the Amherst 250 plan placed a temporary hold on campus efforts to rebuild the strength of the faculty. Moreover, the first three years of the plan had produced less growth than originally anticipated. As the general economy and the campus’s financial situation deteriorated during 2008 and 2009, some authorized positions in the hiring pipeline became casualties of the need to balance the budget in the face of declining revenues.

The centrality of a strong faculty to the campus’s success, however, remained clear. In November 2008, even as the campus was struggling to respond to rapid revenue losses, Chancellor Holub sent a message to the campus community confirming that critical faculty hiring would continue and reaffirming the goals of the Amherst 250 plan.

The Chancellor described an approach that would guide faculty growth once the budget situation stabilized sufficiently to resume new investment. That approach emphasized:

• Proven excellence of the campus in a research or teaching area

• The interdisciplinary/transdisciplinary nature of the project

• The willingness of departments and schools and colleges to support this direction with their own resources

• Established campus leadership for the initiative

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• The ability to attract funding from federal, state and private sources, and

• Prospects that the project will establish or confirm UMass Amherst as the leader in the proposed area of scholarship, research or teaching.

In the ensuing months the budget situation shifted rapidly (see Responding to the Crisis, below). By April 2009, however, the campus had developed a sustainable budget strategy that included some funding for the faculty hiring plan. The Framework placed faculty development at the core of the campus’s strategy, noting first that “the key to any great research university is the quality of its faculty,” but also observing that “the most important challenge we face … with regard to faculty is simply their overall number. In comparison to the public research universities to whose ranks we aspire, we have too few faculty members.” The Framework also reaffirmed the hiring approach described in November. Shortly thereafter, the Chancellor and Provost released Guidelines for Proposals for New Investment in Faculty Hiring, and indicated that funds had been identified for an immediate round of proposals with additional hiring likely in subsequent years.

During 2008 and 2009 campus planning retained its focus on facilities and faculty growth, but took these key issues in important new directions. The campus launched its first comprehensive strategic planning process in more than a decade, and set the stage for a new, more coordinated campus-wide planning effort.

Responding to the Crisis
The shift in planning during 2008 and 2009 described above would be noteworthy under any circumstances. It occurred, however, during an intense period of financial uncertainty and instability. The campus was called upon to both realign its ongoing planning approaches and to develop short-term strategies that respond to unfolding events and provide as much long-term stability as possible.

Standard Nine describes the financial planning approach used by the campus to respond to the ongoing events of 2008 and 2009. The central strategies were to preserve the academic core when making necessary budget reductions, to strike a reasonable balance between expenditure reductions and increases in student costs, and to offset any increases in student costs with a broader and more progressive financial aid policy. These strategies were implemented to balance the FY 2009 budget and prepare for the still uncertain FY 2010 budget:

• Differential budget reductions were assigned to campus units. Academic Affairs was assigned proportionately the lowest cuts, and within Academic Affairs the schools and colleges received the lowest cuts. Initially, targets were set to accommodate roughly half the estimated total revenue reduction, with the other half to be provided through student fee increases. As the process unfolded, and the extent and timing of federal stimulus funding became clearer, the scale of budget cuts was reduced although the proportions remained in place.

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• A student fee increase of $1,500 was proposed to the Board of Trustees, sufficient to accommodate something less than half the total revenue shortfall as it was estimated in late 2008. The timing of the fee approval process and the admissions cycle required the increase proposal to be formulated before all the facts of the budget situation — especially the availability of federal stimulus funding — were known, so the Trustees were asked to approve the full fee increase with a rebate provision that would allow the actual amount charged to be reduced in the event additional federal revenues were received by the University.

• In tandem with the fee increase, the University adopted a new financial aid policy that devoted a larger fraction of new revenues to financial aid, and that extended eligibility for aid to more middle class families. Under the policy, students from families earning at or below the median family income in the state would see the fee increase offset by grant and scholarship aid.

In responding to the shifting financial situation, the campus faced a dual challenge: remaining abreast of developments and framing sound policies on the one hand, and involving the campus community in understanding the challenges and choices on the other. Because events were moving so quickly, in November 2008 the Chancellor appointed a Budget Planning Task Force to work with the administration in “developing innovative strategies for dealing with reduced budgets while retaining focus on our collective goal of becoming one of our nation’s best public research universities.” The Task Force met regularly during the remainder of the fall and throughout the spring semester; it organized itself into subcommittees addressing increasing revenues and reducing expenditures. It discussed all major components of the budget strategy as it developed during the year.

One specific element of the budget strategy also engendered broad campus involvement and debate. As part of the effort to protect the academic core from budget cuts, the Chancellor proposed a reorganization, described in Standard Three, that reduces the number of schools and colleges, potentially yielding $1 million or more in administrative savings. In December 2009, the Chancellor asked the Budget Planning Task Force and the Faculty Senate Rules Committee to propose a process for considering reorganization proposals, and in February of 2009 he appointed a Reorganization Task Force, composed of sixteen faculty members to review his reorganization proposal and to explore an alternative College of Arts and Sciences proposal that had been offered by some faculty “or any other alternate organizational structure that it finds appropriate.” The Task Force issued its Report in March 2009, favoring the College of Arts and Sciences model but also finding a “strong alternative” in a model forming a new, unified science college, while leaving the humanities and social science colleges separate “in the short run.” The Chancellor issued a revised proposal along these lines, and the Faculty Senate reviewed and approved it during the spring semester.

Ongoing Collaboration
In addition to formal planning structures of the kind described above, in recent years the campus has made excellent use of task forces or working groups organized to solve specific problems. These groups, often established jointly by the administration and the Faculty Senate, have been

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especially helpful in resolving larger and more complex issues that do not fit easily within existing structures. Four recent examples are:

- **Joint Task Force on Online Learning**: for a number of years, the campus struggled with issues arising from the growing use of distance learning. Much of this activity was developed originally through the self-supporting Continuing and Professional Education (CPE) program, although recent online offerings and technologically mediated instruction have become more common in state-supported academic programs. Concerns over standards, oversight, and evaluation of online education recurred as this activity increased, and in 2006 the Provost and the Faculty Senate created the Joint Task Force on Online Learning, whose Report reviewed a range of relevant issues and recommended a unified set of expectations and standards for face-to-face and online education. These standards were adopted by the Faculty Senate in 2007 (see Standard Four).

- **Ad Hoc Committee on Certificates**: UMass Amherst’s policies on certificate programs had been in place for many years, and reflected a narrow view of certificates as supplementary credentials acquired by matriculating students on the way to degree completion. One manifestation of this view was that certificates were prohibited from overlapping with degree requirements. Increasingly, this restrictive view frustrated efforts to reach new students, develop online offerings, and create more flexible pathways to degree completion. In 2008, the administration and the Faculty Senate formed this Ad Hoc committee and charged it with a de novo examination of certificate policies and practices. The Committee examined national best practices and proposed sweeping changes to certificate policies in their Report. These changes were adopted in 2009 (see Standard Four).

- **First Year Task Force**: longstanding concerns about first-year student retention rates led to broad examination of the undergraduate student experience in the first year. It quickly became apparent that, while an extensive array of first-year programs had developed over the years, the first-year experience tended to be uneven, poorly coordinated, and difficult to describe and navigate. In 2007, the Provost and the Vice Chancellor for Student Affairs appointed a First Year Task Force to bring greater coherence and effectiveness to campus programs, including better integration of first-year residential learning communities and the new first-year residence hall program. The Task Force developed a new framework for all first-year activities, and this new framework will be implemented in the fall 2009 (see Standard Five).

- **General Education Task Force**: UMass Amherst’s General Education program has been in place for more than two decades. Efforts to update and revitalize it were attempted over the years but they encountered a number of obstacles. Shifts in faculty, program funding and enrollment had stretched capacity and increased interest in examining how the program is organized and delivered. In 2007 the Provost and the Faculty Senate appointed a General Education Task Force to clarify program goals and purposes, evaluate delivery, and recommend improvements. The Task Force has proposed a

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significant revision to General Education, including a new course structure and an upper division integrative capstone experience (see Standard Four).

Projection
The intensive activities of 2008 and 2009 marked a shift in campus planning that will continue in the years ahead:

- The strategic planning process introduced by the Framework will continue. The Framework will be reviewed and tested as the campus continues to make its way through uncertain times. The plans and initiatives described in the Framework will be evaluated and revised as necessary to permit the campus to make progress toward its overall goal of moving through the ranks of public research universities.

- Facilities planning will become more focused as a result of the findings of the science and academic studies. It may also become more urgent, as the full scale of campus needs is documented. It is already clear from the findings of the science study that the challenge of maintaining facilities capable of supporting modern scientific research even for a faculty of the current size far exceeds the resources the campus can marshal on its own. Making provisions for faculty growth adds an even greater challenge. The campus will need to enlist the support of the University system and Board of Trustees for a long-term effort to leverage University funds, to secure continuing high levels of capital investment by the state, and to attract private support for the massive building and renovation plans emerging from the current studies.

- Planning for rebuilding and rebalancing the faculty will continue, beginning with the current RFP process described earlier, and expanding as resources permit. The shift toward large-scale, interdisciplinary foci for faculty hiring should accelerate the development of areas of nationally competitive strength that can themselves attract additional faculty and funding.

- The reality of the facilities challenge will require that faculty and facilities planning become fully integrated. The allocation of faculty lines and the physical facilities to house them will be viewed as a single process, with both dimensions carefully staged and sequenced over time.

Finally, the entire campus must remain engaged in the long-term problem solving necessary to support successful planning. A strong collaborative approach of the kind evidenced in the various task forces and committees described above will be essential for the campus to move forward.

Evaluation
The University has a system of evaluation that is as diverse and extensive as its mission. It is guided by a set of core principles: First, evaluation activity is mission driven. In all major areas of the University’s core mission – teaching and research – systematic evidence is collected and
used to monitor institutional effectiveness and inform practice. This theme runs through this self-study, and particularly the standards pertaining to the Academic Program, Faculty, Students, Library and Other Information Resources, and Physical and Technological Resources. Table 2.1 (below) provides a summary of the primary evaluation initiatives conducted in recent years. Each is discussed in more detail within the relevant standard.

Evaluation is also integrated with planning. Some evaluation components are regularized, providing trend data and benchmarking of institutional goals related to core planning issues. These areas include (but are not limited to) admission trends, retention rates, research productivity, and instructional productivity and quality. Other evaluation efforts emerge on an as-needed basis, in response to new initiatives, new concerns, and questions generated from planning priorities. Most recently, these evaluation efforts have included a focus on facility capacity and condition, departmental instructional needs and faculty hiring, the quality of the first-year undergraduate experience, and the effectiveness of the General Education program.

In addition, evaluation activity is focused on building a culture of evidence where results are used to make better decisions. Throughout this self study examples are provided of the kind of evidence that has been used to help inform decision making and improve current practices. Table 2.1 provides examples of actions taken related to evaluation activity and evidence collected.

Most evaluation activities for the campus are coordinated centrally within the Provost’s Office through the Office of Academic Planning and Assessment (OAPA) and the Office of Institutional Research (OIR). By centralizing evaluation activity, the campus has been able to develop a number of common measures derived from standardized and well documented sets of definitions. For example, the Instructional Activity System (IAS) is used to report on credit-based instruction on the campus. Through this system the campus has a standardized definition of instructional activity that facilitates a common vocabulary for understanding instructional productivity for departments. Similarly, the Instructional Benchmarks provide departments with a common set of measures of instructional quality, drawing from three sources of student feedback about their experiences (Senior Survey; National Survey of Student Engagement, or NSSE; the campus’s course evaluation instrument, Student Response to Instruction, or SRTI) including Instructional Benchmarks. These tools, and others like them, make it possible to make comparisons across departments in a standardized and easily understandable manner. In addition to providing information for centralized planning, these resources (and others like them) give departments ready access to a variety of sources of evidence to inform their own planning and evaluation efforts.

While the University coordinates a variety of evaluation components centrally it also encourages and supports individual departments and other units to conduct their own, unit-specific, evaluations. The role of centralized evaluation in this aspect of the campus’s evaluation activity is to provide relevant and accessible sources of evidence that departments can use to inform their own evaluation efforts, www.umass.edu/oapa. One example of these unit-based evaluation activities is the Academic Quality and Development (AQAD) Program Review process. Each academic program conducts a self-study on a seven year cycle and an external review visiting team conducts a review of the program. Academic Departments are required to review various sources of evidence regarding productivity and quality and incorporate analysis of these results.
into their self-study. Following the review, the program and the Dean identify action steps based on the results. See AQAD Table^ for information on the actions academic programs have taken as a result of these program reviews.

Other units use different models, drawing from evaluation resources and tools connected to their own professional associations. For example, the Library uses survey tools and other assessment resources developed by the Association of Research Libraries (ARL) and external library professional to review and evaluate their activities (see Standard Seven). In yet another model, the Facilities and Campus Planning Office has worked with consulting firms to develop an extensive database about instructional and other facilities on campus (see Standard Eight). In both these cases, the evaluation results have guided the identification of priorities and action steps.

Evaluation methods and tools vary, depending upon the specific issues and goals being assessed. These evaluation activities incorporate both qualitative and quantitative research techniques and, as indicated earlier, often include longitudinal or trend analyses. In recent years, these methods have also increasingly included an external or other type of comparative perspectives. For example, faculty allocation analyses include data from the Study of Instructional Costs and Productivity (NSICP), sponsored by the University of Delaware, to compare departmental teaching loads at peer campuses, the campus’s academic program review process (AQAD) includes a review by an external team, student success research uses the national ACE-CIRP survey results to compare UMass Amherst students’ entering characteristics and goals with those of students at peer institutions, enrollment analyses include the national Admitted Student Questionnaire (ASQ) provides information regarding students’ perceptions of UMass Amherst as compared to peer competitors, and studies of the student experience include data from the National Survey of Student Engagement (NSSE) to compare the experiences of UMass Amherst students with those of students at other research universities. Table 2.1 identifies the mission-related evaluation activities that include this external perspective.

**Appraisal**

Evaluation activity at UMass Amherst is well supported and includes a robust set of evaluation tools that inform numerous aspects of the campus’s efforts, particularly those most related to the University’s core mission of teaching and research. Evidence is used to inform decision making on campus and provide the campus with external comparative perspectives when appropriate.

Perhaps one of the campus’s greatest evaluation strengths is the focus on making evaluation evidence accessible and useful to individual departments and other units in addition to using the results for centralized decision making purposes. Individual academic departments use the campus-wide evidence to identify areas of strength and areas needing attention, and further their understanding of these issues through their own inquiry. In this way, the campus continues to move forward in developing a culture of evidence, where all members of the community incorporate the use of valid and appropriate evidence into planning and decision making.

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While there have been many successes, a challenge remains in promoting the use of evidence in decision making. Not all members of the community are equally attuned to or adept in using evidence to support decision making, or in developing their own evaluation and assessment strategies.

**Projection**

While much progress has been made, it will be important to continue to move forward in thoughtful ways. This includes reviewing evaluation activities and curtailing those efforts or tools that are not informative to planning and programmatic design or innovation. Similarly, it is important to incorporate new relevant sources of evidence as they emerge. Finally, the campus must continue to develop means for making the evidence gathered as accessible and understandable as possible and to synthesize results in a way that provide clear guidance to decisions makers.

During 2009 the campus will begin its participation in the Voluntary System of Accountability (VSA).

As the campus responds to the ongoing economic recession and plans for further revenue reductions evaluation will play a key role. The more restricted the resources, the more important it is to make choices with a full understanding of their impact. The evaluation and planning tools that have been developed to provide insight into instructional effectiveness, faculty productivity, admissions competitiveness, and facilities utilization will be central to the campus’s effectiveness over the next few challenging years.
Table 2.1. Evaluation Activities Related to Planning and Action

<table>
<thead>
<tr>
<th>Mission-Related Focus</th>
<th>Evaluation Methods/Evidence</th>
<th>Includes External Perspective</th>
<th>Outcomes/Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Four: Academic Program</td>
<td>Departmental Profiles</td>
<td>Yes</td>
<td>External Review Team makes recommendations; Department and Dean respond. See link to AQAD summary for actions taken as result of individual reviews.</td>
</tr>
<tr>
<td>Program Review &amp; Accreditation</td>
<td>Instructional Benchmarks</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Department Self-Study</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Peer Review/Site Visit</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Standard Four: Academic Program</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curriculum: Undergraduate Major</td>
<td>Senior Survey</td>
<td>Yes</td>
<td>The synthesis of these data sets results in the “Instructional Benchmarks” report which provides comparisons across department; departments are asked to describe how they have used the results (see link to benchmark summary for results); Seventy-six percent of departments report specific changes made/actions taken to improve student experience based, at least in part, on benchmark results.</td>
</tr>
<tr>
<td></td>
<td>Course Evaluation (SRTI)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>National Survey of Student Engagement (NSSE)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curriculum: Graduate Student Experience</td>
<td>Advising Survey</td>
<td>Yes</td>
<td>Graduate School used results to inform policies on student stipends, housing, &amp; mentoring opportunities. Adequate departments received report showing their results compared to other departments. Some departments made changes to advising and community building as a result of report.</td>
</tr>
<tr>
<td></td>
<td>Graduate Experience Survey</td>
<td>(Subgroup of STEM discipline comparisons across selected Northeastern research universities)</td>
<td>NSF funded Northeast Alliance for the Graduate Education and the Professoriate (NEAGEP) used STEM results to inform programmatic practices.</td>
</tr>
<tr>
<td></td>
<td>Graduate Milestones Tracking</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Table X. Evaluation Activities Related to Planning and Action (cont.).

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</thead>
<tbody>
<tr>
<td>Curriculum; Department Student Learning Assessment</td>
<td>Inventory of Undergraduate Student Learning Practices for each department; Departmental Response/Update Requested</td>
<td>79% of departments have learning objectives stated; another 11% in process</td>
<td>75% of Departments are implementing their assessment plans and another 19% are in the process of developing their assessment plan.</td>
</tr>
</tbody>
</table>
| Curriculum: General Education | Gen Ed Council reviews new Gen Ed course proposals and reviews approved courses on a 5 year cycle  
Student focus groups and surveys  
Instructor survey  
Curricular mapping  
Course Descriptives | As a result of a Gen Ed Task Force (2007-2009) a number of enhancements were made to Gen ED:  
- Statement of Gen Ed Learning Objectives  
- Enhanced instructional development opportunities  
- Improved communication regarding Gen Ed  
- enhanced monitoring of Gen Ed courses  
- Recommendations for course structure/credits and an upper-level integrative seminar  
- Recommendations for enhanced student learning assessment | |
| Standard Five: Faculty | Amherst 250 including Delaware Instructional Comparisons & Instructional Benchmark Results  
Cluster Hire RFP Process  
Research Productivity  
SRTI Course Evaluation System  
Mid-Semester Assessment Process (MAP) | Yes | Identification of most serious instructional needs; faculty allocations linked to results  
See Framework for Excellence\(^\) for example of use of this evidence for planning purposes.  
Individual instructors make changes in their own teaching as a result of SRTI results, MAPs. |
Table X. Evaluation Activities Related to Planning and Action (cont.).

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</table>
| **Standard Six: Students Retention and Student Success** | ACE/CIRP National Freshman Survey  
Retention Tracking and Predictive Analyses (impact of entering characteristics, learning community involvement, and other factors on retention and student performance)  
Non-Returner Survey  
Various Climate/Quality of Life surveys  
Student Services Effectiveness Surveys  
Advising Survey | Yes | Evidence used to inform the work of the First-Year Task Force |
| **Admissions and Enrollment** | Admitted Student Questionnaire (ASQ)  
Noel-Levitz Consulting  
Generations Study  
Marketing Study  
ACE/CIRP Freshman Survey  
Focus Groups | Yes | |
| **Standard Seven: Library** | LibQual+ Campus Survey  
ClimQual+ Workplace Survey  
Self-Study | Yes | Used to identify priorities for action (e.g., improve electronic resource collection) |
| **Standard Eight: Physical Resources** | Space utilization study  
Space condition analysis *(Sightlines)* | Yes | Identified serious instructional space limits  
Helped in identifying building/renovation priorities |

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