

Standard Two: Planning and Evaluation

I. Planning

Description

Much of recent planning activity at UMass Amherst has been driven by two challenges: rebuilding and rebalancing the faculty after successive waves of hiring restrictions and retirement incentive programs over a 15-year period; and addressing an increasingly urgent need for facilities replacement and renewal. These two issues – and increasingly, their intersection – have been and remain at the core of institutional planning.

Faculty and facilities issues hold a central place in planning because they are critical to UMass Amherst's success in carrying out its mission as a flagship public research university. UMass Amherst has always had a relatively small faculty for an institution of its type. The absence of medical, dental and 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 limit the scale of operations linked to the UMass Amherst land-grant component. So, 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.

Competing with other, often larger, research universities is therefore a challenge even with a full complement of faculty. Successive cycles of economic recession – each characterized by reductions in state support from which the campus never fully recovered – have eroded the number of tenure-system faculty from a high point of approximately 1,200 in the late 1980s to about 975 today. That's a decline of about 20 percent. The campus has replaced some lost instructional capacity with increased use of non-tenure system instructors. But the impact of diminished tenure-system faculty on research and scholarship has been significant: Research productivity has grown, but not at a rate sufficient to move the campus through the ranks of the research institutions with which it competes.

Facilities have been a persistent concern, and more recently have become a central challenge to UMass Amherst'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 for building-system and structural 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 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. That backlog recently 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 Eight).

Facilities undercapitalization has had serious consequences – and 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. It was a five-year program to add 250 net faculty positions and to restore the faculty size to its high point of roughly 1,200. 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 fiscal year 2006. 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. The breakdown of positions by year was: 48 for 2006, 45 for 2007, and 57 for 2008.

In its first three years, Amherst 250 had two main objectives: to address serious instructional imbalances that had emerged as multiple faculty retirement incentive programs had their effect; and to make selective investments to promote research and scholarship competitiveness. Instructional allocations were guided in large part by instructional productivity benchmarking derived from the National Study of Instructional Productivity (known as the "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: Trends in research productivity were examined, along with comparative research benchmarking data collected by each department; deans' proposals for new research initiatives were also evaluated. In addition, a small number of positions were made available to meet disciplinary accreditation needs.

Chancellor Lombardi left UMass after the third year of Amherst 250 allocations, and Thomas Cole served as interim Chancellor for the following year. When Chancellor Robert Holub arrived on campus, and discussion of continued 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. He launched a new [faculty hiring process](#) requesting proposals for new faculty investment to advance the campus's research and teaching distinctiveness. That process attracted more than 30 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: responding to known, real-time facilities issues demanding prompt University action; and better understanding the scope and nature of the larger, underlying dilemma presented by the campus's aging infrastructure.

The first process has involved careful, ongoing monitoring of building conditions as they affected the programs housed within them, with an emphasis on maintaining critical building systems and structural envelopes. In essence, this has been a triage approach carried out through close collaboration between Physical Plant and Facilities and Campus Planning, and designed to direct the campus's limited maintenance

and facilities dollars to the highest priorities. This process has resulted in a set of continually updated project priorities, taking maximum advantage of available funding to complete a large number of roof replacements, building systems upgrades, electrical power distribution projects, and the like.

These efforts represented careful and effective stewardship on the part of the institution. But 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 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 total cost of deferred maintenance and modernization exceeding \$2 billion.

The scale of facilities needs has far exceeded the resources available to the campus, but the institution's financial planning has been 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.

Appraisal

Over the past year or so the campus has made three advances in its planning process that recognize ongoing issues related to faculty and facilities, while marking a new and more aggressive approach to improvement. The first planning advancement is 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 a renewed commitment to, and a new framework for, rebuilding and rebalancing the UMass Amherst faculty. The third step forward with formal planning 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.

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” ([*Board of Trustees Votes, March 19, 2008*](#)). 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 2008, organized around an assessment of the campus's strengths, weaknesses, opportunities and threats. 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 time frame 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 spring 2009, 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 2009, 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.

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. Growth in the tenure-system faculty will be required for the campus to make significant progress in improving academic quality and research productivity, and hence, to advance in the research university rankings.

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;
- The ability to attract funding from federal, state and private sources; and
- Prospects that the project would establish or confirm UMass Amherst as a leader in the proposed area of scholarship, research or teaching.

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 faculty growth would continue as quickly as economic circumstances permitted.

Facilities Planning

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.

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 10 years. The UMass Amherst share of this investment could ultimately be as much as \$700 million. 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 Eight).

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 million new science building (NSB) and the \$95 million 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. Wilson Architects of Boston, a national firm specializing in science facilities, was selected to guide this effort. Beginning in July 2008, Wilson has led an intensive assessment and planning effort involving the entire science and engineering community. From this will emerge a comprehensive science plan that lays out the nature and sequence of needed construction, renovation and backfill for all science facilities over the next two decades, and design of the NSB as the first stage of that plan.
- *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 Inc., a leading 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.

Responding to the Financial 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 present financial challenges. The central strategies have been 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 increases in student costs with a broader and more progressive financial-aid policy. The following strategies were implemented to balance the fiscal year 2009 budget and to prepare for the fiscal year 2010 budget:

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 that strategy 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. In February 2009, the Chancellor appointed a [Reorganization Task Force](#), composed of 16 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, the campus in recent years 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 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*: In recent years concerns over standards, oversight and evaluation of online education recurred as this kind of 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 reflected a narrow view of certificates as supplementary credentials acquired by matriculating students on the way to degree completion. 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 is developing a new framework for all first-year activities, built on the foundation of each student's academic plan (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 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 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.
- 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.
- 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.

- 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.

II. Evaluation

Description

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 teaching and research mission, systematic evidence is collected and used to monitor institutional effectiveness and to inform practice. This theme runs through the Self-Study, 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 in which results are used to make better decisions. This Self-Study describes examples of evidence used to help inform decision making and improve current practices. Table 2.1 (below) 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. This tool, and others like it (For example, see description of Instructional Benchmarks below), make it possible to make comparisons across departments in a standardized and easily understandable manner. In addition to providing information for centralized planning, these and similar resources give departments ready access to a variety of sources of evidence to inform their own planning and evaluation efforts.

Academic program improvement efforts are central to the University's evaluation program. There are currently three components of the program improvement program that together provide academic departments with a rich set of evidence and varied perspectives with which to inform their changes and enhancements [Program Improvement Summary](#). One component is a systematic program review program where, on a five- to seven-year cycle, each academic department participates in the Academic Quality, Assessment and Development (AQAD) review process. This review process includes a departmental self-study based on the AQAD standards ([AQAD Program Review](#)). As a part of their self-studies, departments are required to review various sources of evidence regarding productivity and quality, and to incorporate analysis of these results into their self-studies. The review process also includes a visit by an external team. The external team provides a report to the department and the academic administration. Following the review, the program and the Dean identify action steps based on the results. A synthesis of these reports is provided to the UMass system office ([Annual AQAD Summaries, 1998-2008](#)). The [Departmental Responses to AQAD Program Review](#) describes the actions that departments and Deans have taken to address the recommendations and challenges identified by the AQAD review process.

[Instructional Benchmarks](#) serve as a second component of the campus's program improvement efforts. These benchmarks provide departments with a common set of measures of instructional quality. The benchmarks draw from three sources of student feedback about their experiences: the Senior Survey; the National Survey of Student Engagement, or NSSE; and the campus's course evaluation instrument, called Student Response to Instruction, or SRTI. Departments use this information to identify aspects of the student experience that need attention. [Departmental Responses to Benchmarks](#) (all schools and colleges).

The third program improvement effort focuses on departments' Student Learning Outcomes Assessment activity ([Undergraduate Program Assessment](#)). Most departments (89 percent) have established student learning outcomes for their undergraduate programs, 74 percent are implementing their assessment plans, and another 19 percent are in the process of developing those plans (See [E-Series 1.a](#)).

A Focus On: Benchmarking the Student Experience

Academic departments often ask, "How are we doing?" A focus on student responses to this question prompted development of the Instructional Benchmarks report in 2006. The Benchmarks report reflects a trend at UMass Amherst toward academic improvement based on targeted assessment. It has become a significant assessment tool by providing departments with a method of evaluation based on student feedback – and by allowing for interdepartmental comparison. The report details students' ratings of their experiences in their majors, their experiences in courses, and their perceived learning gains organized by department. Departments use the information to understand more about the quality of the experience for their majors and the quality of instruction experienced by the students they teach, whether those students are majors or undergraduates in General Education courses. Benchmarks are derived from the overall campus average and from departmental ratings, allowing an individual department to better evaluate its performance. The Instructional Benchmarks report has helped departments determine where to improve; a recent study showed that 76 percent of departments made changes in their undergraduate programs based at least in part on Instructional Benchmarks results.

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

UMass Amherst also participates in system-wide evaluation activity. In 1997, the University of Massachusetts system implemented a [Performance Measurement System](#) to evaluate campus performance. The system consists of three components: a set of annual performance indicators, a series of periodic in-depth reports and studies, and a procedure to assess the quality of academic departments (AQAD). The [Annual Indicators Report](#) is intended to provide trustees, legislators and state-level policy makers with information about the five campuses, focusing on performance in five primary areas: academic quality, student success and satisfaction, access and affordability, service to the commonwealth, and financial health. On many of these measures, the campuses compare performance with peer institutions.

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, often include longitudinal or trend analyses. In recent years, these methods also have increasingly included external or other 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 review by external teams;
- Student success research uses the American Council on Education/Cooperative Institutional Research Program (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), providing 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 (below) identifies the mission-related evaluation activities that include external perspectives.

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 to 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. Individual academic departments use the campus-wide evidence to identify areas of strength and areas needing attention, and to 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, in which all members of the community incorporate the use of valid and appropriate evidence into planning and decision making.

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 at 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 provides clear guidance to decisions makers.

During 2009, the campus will begin participation in the [Voluntary System of Accountability \(VSA\)](#). Participation in VSA requires campuses to use a standardized reporting mechanism, known as the “College Portrait,” to provide the public with a range of consumer information, such as costs of attendance, degree offerings, living arrangements, student characteristics, graduation rates, transfer rates, and post-graduate plans. The College Portrait also includes evidence of the quality of the student experience, using National Survey of Student Engagement (NSSE) results; and learning outcomes results, gained from standardized assessment tests of student learning linked to General Education objectives, such as critical thinking and writing, within the contexts of the humanities, social sciences and natural sciences.

Evaluation will play a key role as the campus responds to the ongoing economic recession and plans for further revenue reductions. 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.

Institutional Effectiveness

UMass Amherst has a robust, mission-driven planning and evaluation process. The process is characterized by strong linkages between planning and evaluation activities, a commitment to the use of evidence in decision making, and the incorporation of external and comparative perspectives for benchmarking purposes. Planning and evaluation processes continue to evolve, adapting to external demands, emerging institutional priorities, and the needs of members of the campus community who use the information to make improvements in their own programs or campus-wide.

Table 2.1

Planning and Action Related to Evaluation Activities

Mission Focus	Evaluation Methods/Evidence	Outcomes/Actions
Standard Four: Academic Program Program Review	<ul style="list-style-type: none"> • Departmental Profiles • Instructional Benchmarks • Department Self-Study • Peer Review/Site Visit 	External review team makes recommendations; department and Dean respond. [See Departmental Responses to AQAD Program Review actions taken.] Most common actions are: faculty hiring (73%) and program revision/redesign (64%).
Curriculum: Undergraduate Major	<ul style="list-style-type: none"> • Senior Survey • Course Evaluation (SRTI) • National Survey of Student Engagement (NSSE) 	Synthesized into “Instructional Benchmarks” report, with comparisons across departments; 76% of departments report specific changes to improve student experience informed by benchmark results [See Departmental Responses to Instructional Benchmarks].
Curriculum: Graduate Student Experience	<ul style="list-style-type: none"> • Advising Survey • Graduate Experience Survey • Graduate Milestones Tracking 	<ul style="list-style-type: none"> • Results informed policies on student stipends, housing and mentoring opportunities; some departments made changes to advising and community building. • NSF-funded Northeast Alliance for the Graduate Education and the Professoriate (NEAGEP) used STEM results to inform programmatic practices.

Table 2.1

Planning and Action Related to Evaluation Activities (cont.)

Mission Focus	Evaluation Methods/Evidence	Outcomes/Actions
Standard Four: Academic Program Curriculum: Student Learning Assessment	<ul style="list-style-type: none"> Inventory of Undergraduate Student Learning practices for each department 	<ul style="list-style-type: none"> 89% of departments have learning objectives stated; another 4% are in process. 74% of departments are implementing assessment plans, and another 19% are in the process of developing assessment plans. [See E-Series 1.a].
Curriculum: General Education	<ul style="list-style-type: none"> Review of new Gen Ed course proposals and five-year review of approved courses Student focus groups and surveys Instructor survey Curricular mapping Course-taking patterns 	Gen Ed Task Force (2007-09) improvements: <ul style="list-style-type: none"> Revised statement of Gen Ed learning objectives. Enhanced instructional development opportunities. Improved communication regarding Gen Ed. Enhanced monitoring of Gen Ed courses. Restructuring of courses and credits. Introduction of upper-level integrative seminar. Enhanced student learning assessment.
Standard Five: Faculty Planning and curricular improvement	<ul style="list-style-type: none"> Instructional productivity analysis , including “Delaware” study Instructional Benchmarking Cluster Hire RFP analysis Research Productivity analysis 	<ul style="list-style-type: none"> Allocation of faculty to respond to most serious instructional needs. Allocation of faculty to drive research competitiveness. Institutional positioning and planning (See Framework for Excellence).
Teaching and Advising	<ul style="list-style-type: none"> Instructional Benchmark results SRTI Course Evaluation System Mid-Semester Assessment Process (MAP) 	<ul style="list-style-type: none"> Improvements to courses and teaching practices.
Standard Six: Students Student Retention and Student Success	<ul style="list-style-type: none"> ACE/CIRP National Freshman Survey Retention tracking and predictive analyses Non-Returner Survey Various Climate/Quality of Life surveys Student Services Effectiveness Surveys Advising Survey 	Informed work of the First-Year Task Force. Actions include: <ul style="list-style-type: none"> Greater coordination of first-year advising and programming. Development of a first-year “road map” to better integrate aspects of the first-year experience. Comprehensive realignment of academic advising: <ul style="list-style-type: none"> Adoption of college-based advising model. Sharper focus on non-declared students.
Admissions and Enrollment	<ul style="list-style-type: none"> Admitted Student Questionnaire (ASQ) ACE/CIRP Freshman Survey External consultants (Generations; marketing study) Focus Groups Noel-Levitz consulting 	<ul style="list-style-type: none"> Used by Enrollment Management Group and Enrollment Growth Task Force to set targets and revise enrollment strategies. Comprehensive reassessment of financial aid strategies. Informed academic program development and planning for new academic/classroom building.
Standard Seven: Library	<ul style="list-style-type: none"> LibQual+ Campus Survey ClimQual+ Workplace Survey Self-Study 	Used to identify priorities for action (e.g., improve electronic resource collection).
Standard Eight: Physical Resources	<ul style="list-style-type: none"> Space utilization study Facilities condition analysis External consultants (science study, academic/classroom study, master plan) 	<ul style="list-style-type: none"> Informed comprehensive science and academic/classroom facilities plans. Identified building/renovation priorities.