

PERFORMANCE MEASUREMENT SYSTEM

UNIVERSITY OF MASSACHUSETTS
2009 Annual Indicators Report



Amherst-Boston-Dartmouth-Lowell-Worcester

*UMASS Presidents Office
Office of Institutional Research
June 2009*

DEFINITIONS AND SOURCES

ACADEMIC QUALITY INDICATORS

Doctorates Awarded Total number of Doctorates awarded by UMass campuses for the academic year 2007-08, which includes September 2007, January 2008, and May 2008 award dates.

Research Expenditures. Data as reported to the National Science Foundation (NSF) through its annual Survey of R&D Expenditures at Universities and Colleges.

License income. Amount of annual income from license agreements as reported to the Association of University Technology Managers for its annual survey.

ACCESS AND AFFORDABILITY INDICATORS

Tuition and fees as a percentage of family income. Tuition and mandatory fees for in-state undergraduates as a percentage of state-wide median family income as reported by US Census in 2008 inflation-adjusted dollars (latest available). Comparative data are from IPEDS and US Census.

Percentage of undergraduate students from Massachusetts. Percentage of Fall 2008 undergraduate state-supported students from in-state as determined by tuition residency classification. Data for Massachusetts private universities are from Fall 2007 IPEDS and the universities' institutional research offices.

Rate of growth in distance education enrollments. Percentage rate of growth in annual course registrations. Does not represent headcount enrollments. Academic Year represents Fall, Winter, Spring and Summer enrollments.

STUDENT SUCCESS AND SATISFACTION INDICATORS

Percentage of undergraduate students of color. Fall 2008 undergraduates who are Black, Hispanic/Latino, Asian and/or Native American, divided by total U.S. citizens and permanent residents who report race/ethnicity. Comparative data for 2008 public high school graduates are from the MA Department of Education.

Percentage Undergraduates who are International. Percentage of all undergraduates who are studying at the university on a student visa. International students include all eligible visa types as long as they are enrolled for a credit course; i.e., international students do not include U.S. citizens, U.S. permanent residents or refugees.

SERVICE TO THE COMMONWEALTH INDICATORS

Enrollment of Massachusetts residents. Number of first-year undergraduates enrolling at each institution who are residents of Massachusetts. Data for Massachusetts private universities are from Fall 2007 IPEDS and the universities' institutional research offices.

Enrollment by region. In-state undergraduate enrollment by region for Fall 2008.

Degrees conferred by field. 2007-08 degrees conferred by UMass campuses by field.

UMass degrees as Percent of all Massachusetts degrees. Degrees awarded by UMass as % of total degrees awarded by colleges and universities in the state in 2007-08 based on IPEDS Completions Survey.

Percent of graduates who live in Massachusetts. Percentage of total undergraduate and graduate degree recipients who currently reside in Massachusetts based on alumni records as of Fall 2008.

MTEL Science & Math Test-Takers. Total number of students who took the Massachusetts Tests for Educator Licensure (MTEL) subject tests in science and math fields. Data compiled from the campuses' MTEL Annual Institution reports.

FINANCIAL HEALTH INDICATORS

Endowment assets. Market value of true and quasi-endowment assets. Comparative data are from IPEDS, financial statements and NACUBO survey.

Private funds raised annually. Private funds raised includes restricted and unrestricted revenues from individuals, foundations, corporations and other organizations. Includes private grant revenues but not private contract revenues. Totals for each year include pledges made in that year as well as the value of in-kind contributions (exception: Lowell's equipment gifts in-kind were not included). Comparable peer data are not available.

Return on net assets. Increase/decrease in net assets divided by total net assets at beginning of the year. Peer data from published financial statements.

Financial cushion. Unrestricted net assets as a percentage of operating expenditures and interest expense. Peer data are from published financial statements. Not comparable to prior years.

Debt service to operations. Debt service payments as a percentage of operating expenditures and interest expense. Peer data from published financial statements. Not comparable to prior years.

Total Deferred Maintenance (DM) Cost & Deferred Maintenance Cost (DM) per Square Foot of Space.

These new indicators better reflect the condition of campus facilities and are based on work being done with the facilities asset advisory firm *Sightlines* utilizing their *The Return on Physical Assets (ROPA sm)* methodology.

Total Deferred Maintenance (DM) Cost: Includes deferred and other maintenance dollars needed to maintain the current function of the campus. This is the amount needed to address the deferred maintenance backlog plus the code work that would be mandated to allow the campus to continue to use the space once the repairs were complete.

DM Cost per square foot: The total deferred maintenance cost per square foot of space. This ratio quantifies the average dollar level of deferred maintenance work needed per square foot of space.

PEER INSTITUTIONS FOR UMASS SYSTEM

Peer University Systems

University of Connecticut
University of California
University of Colorado
University of Illinois
University of Maryland
University of Missouri

New England Public Universities

University of Connecticut
University of Maine
University of New Hampshire
University of Rhode Island
University of Vermont

Massachusetts Private Universities

Boston College
Boston University
Brandeis University
Clark University
Harvard University
Massachusetts Institute of Technology
Northeastern University
Suffolk University
Tufts University

HEADLINES FROM THE 2009 ANNUAL INDICATORS

ACADEMIC QUALITY

The Top American Research Universities (The Center) identifies seven performance indicators as measures of academic quality to evaluate the comparative performance of 156 research universities. These public and private institutions generate over \$40 million in federal research annually. Included in this group are ten public research universities with a Carnegie classification of very high research activity (RU/VH) with which the Amherst campus is comparing its progress on these and other indicators. All but two of the peers, the Universities of Connecticut and University of Delaware, are among the 62 members of the Association of American Universities (AAU), which are recognized for their excellence in research and education. Hence, the benchmark for the Amherst campus is quite high, and its performance is generally lower than its peers.

Student Academic Quality. The academic profile of entering students has improved in recent years, evidenced by growth in both high school GPA and SAT scores, which were at historical highs in Fall 2008. The high school GPA of entering students rose from 3.48 to 3.56 in one year, and 96% of students entered UMA with a high school GPA of 3.0 and above. SAT scores have increased by almost 20 points since 2004 but still lag below the median of the peer group. Further, seniors report high satisfaction with their undergraduate experience. Results from the National Survey of Student Engagement (NSSE) show that 87% of seniors evaluate their UMass Amherst educational experience positively.

Advanced Training. The campus has demonstrated strength in the education and training of pre- and post-doctoral researchers. Here, too, UMass Amherst is below the peer median for the number of degrees awarded. In recent years, the number of post-doctorates receiving training has increased and the campus is above the peer median on this measure.

Research and Creative Activity. Total and federal research dollars in science and engineering (R&D) are key measures of an institution's commitment to and success in research. The Amherst campus faculty has been successful in competing for these dollars. Total R&D spending increased by 27%, and per faculty expenditures increased by 16% in the past five years. The campus ranks among the top 75 public research universities on R&D expenditures; however, it consistently performs below the peer median on total spending.

The number of academic honors and awards bestowed on its faculty is another indicator of an institution's quality. UMass Amherst's faculty has shown strength in this area. In particular, it consistently ranks at or above the peer median on faculty awards.

In recent years, the campus has made an investment in tenure-system faculty, but the size of the faculty is below 1,000 and considerably smaller than top public research universities. 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, advance in the research university rankings.

ACCESS AND AFFORDABILITY

Providing an affordable and accessible education of high quality is stated in the University's mission. The neediest students at UMA (23%) receive aid in the form of Pell grants. In the 2008-09 academic year, 88% of need was met for in-state students. In the 2009-10 academic year, the campus will enhance the financial aid package for the neediest in-state students and will increase grant aid for in-state students as well. This will ease the financial burden on families and continue to make a UMass Amherst education affordable.

STUDENT SUCCESS AND SATISFACTION

Most UMass Amherst students have a positive educational experience. Eighty-seven percent of students return for their sophomore year, and 69% graduate within six years. These rates have improved in recent years but remain somewhat below the peer median. The campus hopes to make progress in programs that will enrich the college experience and ultimately increase retention and graduation rates. Such initiatives include a First Year Experience program, expanded research and scholarship opportunities for undergraduates, and changes in the design and delivery of the General Education curriculum.

The campus has made progress in increasing the diversity of the campus. The Fall 2008 entering class was the most diverse group of students in recent history. Many will be the first in their families to complete the baccalaureate. The campus will continue to attract a diverse student body and to encourage greater appreciation for diverse populations on the campus.

SERVICE TO THE COMMONWEALTH

The Amherst campus has invested in programs to promote the enrollment and graduation of undergraduate and graduate students in the sciences and mathematics. In Fall 2008, one quarter of baccalaureate students and 27% of master's and doctoral students were enrolled in STEM programs. These investments will continue.

FINANCIAL HEALTH

Two measures of an institution's financial strength also used in The Center's rankings are its endowment assets and private funds raised. Although the endowment and levels of private dollars raised in recent years have shown strong gains, the campus is well below other research universities on these measures. In the short-term, little growth is expected because of the economic downturn. Investment in capital improvements and restoration of faculty are necessary if the campus is to remain nationally competitive. Through these investments, the campus will enhance its academic mission and bolster its reputation.

2009 ANNUAL INDICATORS AT A GLANCE

ACADEMIC QUALITY

• Average HS GPA of Freshmen	3.56
• SAT Scores of Freshmen	
<i>Median</i>	1155
<i>25th – 75th Percentile</i>	1050 – 1260
• Average GPA of Entering Transfer Students	3.16
• Satisfaction With Major	87%
• No. of Doctorates Awarded	291
• No. of Postdoctoral Appointees	207
• Total R&D Expenditures	\$152.88M
• Federal R&D Expenditures	\$79.74M
• Total R&D/Faculty	\$156,804
• Patent Applications	33
• License Income	\$697,008
• New Tenured/Tenure-Track Faculty Hired	72
• Change in Tenured/Tenure-Track Faculty	+3
• Change in Faculty FTE	+11
• Faculty Awards	11
• National Academy Members	9

ACCESS AND AFFORDABILITY

• % Pell Grant Recipients	23%
• % of Need Met for In-State Students Awarded	
Need-Based Aid	88%
• % Undergraduates from Massachusetts	80%
• Online Course Enrollments	11,142
• Annual Growth in Online Course Enrollments	18%

STUDENT SUCCESS AND SATISFACTION

• % Undergraduates who are Students of Color	19.4%
• % Undergraduates who are First Generation	
in College	14%
• % Undergraduates with English as a Second	
Language	9%
• % Undergraduates who are International	1.4%
• Number Undergraduates who Participated in a	
Study Abroad Program	1,008
• Freshman One-Year Retention Rate	87%
• Freshman Six-Year Graduation Rate	69%

SERVICE TO THE COMMONWEALTH

• Enrollment in STEM Programs	
<i>Undergraduate</i>	4,845 (25%)
<i>Graduate</i>	1,393 (27%)
• Degrees Awarded in STEM Fields	
<i>Undergraduate</i>	911 (21%)
<i>Graduate</i>	427 (28%)
• MTEL Science and Math Test-Takers	31

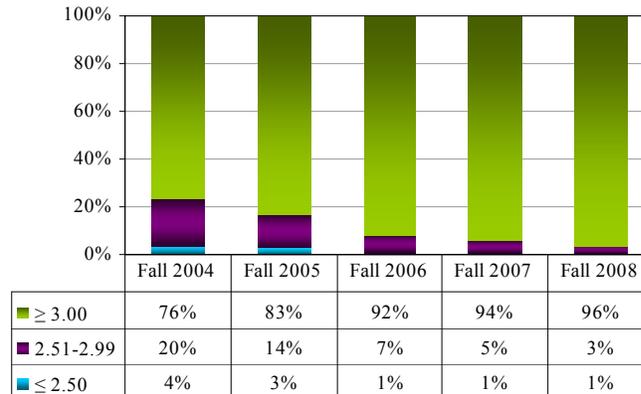
FINANCIAL HEALTH

• Endowment	\$168.24M
• Endowment Per Student	\$7,426
• Return on Net Assets	8.0%
• Financial Cushion	19.3%
• Debt Ratio	4.7%
• Deferred Maintenance per GSF	\$159

ACADEMIC QUALITY

High School GPA of Freshmen

UMass Amherst entering first-year students are strong academically with high school GPAs surpassing 3.5. The Fall 2008 entering class was the strongest in the five year period with 96% of students earning a GPA of 3.0 and above in high school.



<i>Mean GPA</i>	2004	2005	2006	2007	2008
<i>UMA</i>	3.29	3.38	3.46	3.48	3.56

SAT Scores of Freshmen

The SAT profile of UMass Amherst students improved in Fall 2008, but is somewhat below that of its peers. UMA students perform slightly better at the 25th percentile than they do at the 75th percentile when compared with this group. The UMA mean SAT scores have increased by 18 points since 2004.

<i>SAT Score</i>	2004	2005	2006	2007	2008
<i>UMA</i>					
<i>25th %ile</i>	1050	1050	1050	1050	1050
<i>75th %ile</i>	1220	1240	1240	1230	1260
<i>Peer Median</i>					
<i>25th %ile</i>	1080	1080	1080	1060	1070
<i>75th %ile</i>	1295	1295	1300	1290	1295
<i>UMA Rank</i>					
<i>25th %ile</i>	10	10	9	9	8
<i>75th %ile</i>	10	10	10	11	10

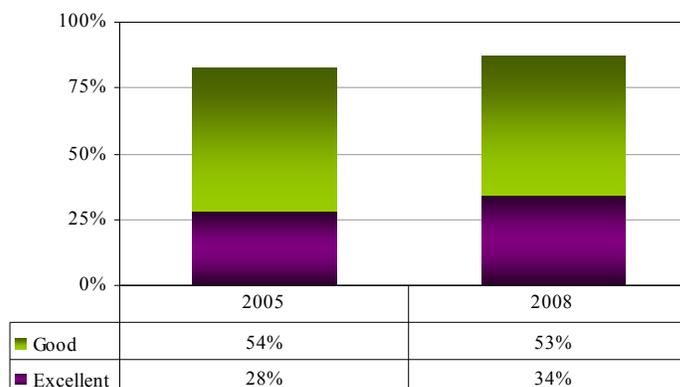
Average GPA of Entering Transfer Students

The transfer grade point average has been consistently high and surpasses the mandated Department of Higher Education minimum of 2.00 for transfer students.

<i>Average Transfer GPA</i>	2004	2005	2006	2007	2008
<i>UMA</i>	3.20	3.13	3.18	3.14	3.16

Student Evaluation of Educational Experience

Seniors generally evaluate their UMA educational experience positively. In 2008, almost 90% of students rated their experience as good or excellent. The percentage of students who rated the experience as excellent gained six points between 2005 and 2008.



Number of Doctorates Awarded

The number of doctorates awarded at UMA has grown since 2004; however the rate of increase at peer institutions surpasses that of UMA.

Doctorates	2004	2005	2006	2007	2008
UMA	274	267	253	293	291
Peer Median	271	280	325	329	335
Rank	6	7	9	9	8

Postdoctoral Appointees

UMass Amherst senior faculty mentor recent PhDs with science and engineering degrees who wish to receive advanced research training. The number of post-doctoral scholars is at a five-year high. UMass's rank is above the peer median, evidence of strong research programs.

Post-Docs	2004	2005	2006	2007	2008
UMA	167	165	182	195	207
Peer Median	154	152	162	NA	NA
Rank	4	5	5	NA	NA

Research Expenditures

Total R&D spending in FY 2008 was \$157 million, of which nearly \$153 million was in science and engineering (S&E). S&E expenditures increased by 27% in total dollars and 22% in federal dollars since FY 2004.

Despite these gains, the relative position of UMA has not changed.

Total S&E Research (\$000's)	2004	2005	2006	2007	2008
UMA	\$120,788	\$127,487	\$136,057	\$141,538	\$152,884
Peer Median	\$202,421	\$204,916	\$218,924	NA	NA
Rank	9	8	9	NA	NA

Federal S&E Research (\$000's)	2004	2005	2006	2007	2008
UMA	\$65,452	\$66,921	\$69,642	\$71,984	\$79,736
Peer Median	\$92,242	\$100,980	\$105,361	NA	NA
Rank	10	10	9	NA	NA

Total Research Expenditures per Tenure System Faculty

The total S&E dollars per faculty increased by 16% in that same period.

Per Tenure System Faculty FTE	2004	2005	2006	2007	2008
Total	\$135,064	\$138,049	\$142,468	\$146,368	\$156,804
Federal	\$73,188	\$72,386	\$72,847	\$74,441	\$81,781

Patent Applications

The number of patent applications filed per year has more than doubled since 2005. In FY 2008, the campus received over \$1 million in sponsored research support from its licensees, and over \$2 million in sponsored research support associated with patented but not-yet licensed technologies.

<i>Number Patent Applications</i>	2005	2006	2007	2008
<i>UMA</i>	13	26	32	33

License Income

The licensing revenue for fiscal years 2005 and 2006 include large, one-time payments.

<i>License Income</i>	2005	2006	2007	2008
<i>UMA</i>	\$721,219	\$1,585,517	\$652,043	\$697,008

New Tenured/Tenure-Track Faculty Hired

The campus has made significant investments in tenure system faculty hires in recent years, and will remain committed to supporting the strongest faculty possible during the economic downturn. 45 new faculty positions will be funded over the next few years.

	AY 2005-06	AY 2006-07	AY 2007-08	AY 2008-09
<i>UMA</i>	64	61	68	72

Change in Tenured/Tenure-Track Faculty

Fall 2008 saw a one-year gain of three in the tenure-system faculty, and an increase of 58 since Fall 2004. Investment in faculty is required to maintain the campus as a nationally competitive public research university and will continue to be a priority.

	Fall 2004	Fall 2005	Fall 2006	Fall 2007	Fall 2008	<i>1-year Change</i>
<i>UMA</i>	917	954	961	972	975	3

Change in Faculty FTE

Faculty full-time equivalent has grown by 83 since Fall 2004, with 70% of the growth in the tenure system faculty.

	Fall 2004	Fall 2005	Fall 2006	Fall 2007	Fall 2008	<i>1-year Change</i>
<i>UMA</i>	1,183	1,157	1,231	1,255	1,266	11

Faculty Awards

UMass Amherst faculty members are recipients of many prominent awards in the arts, humanities, science, engineering and health fields. The campus often performs at or above the median of its peers on this measure.

<i>Awards</i>	2003	2004	2005	2006	2007
<i>UMA</i>	15	10	13	19	11
<i>Peer Median</i>	11	11	15	12	11
<i>Rank</i>	3	6	7	1	6

National Academy Members

Several UMass faculty members have been elected to some of the most prestigious disciplinary organizations: the National Academy of Science, the National Academy of Engineering, or the Institute of Medicine. These are some of the highest honors academic faculty can receive. The campus ranks somewhat below its peers on this measure. The absence of a medical school limits the ability of UMA faculty to be elected to the IOM.

<i>Members</i>	2003	2004	2005	2006	2007
<i>UMA</i>	7	7	9	7	9
<i>Peer Median</i>	12	13	12	11	11
<i>Rank</i>	9	9	7	8	7

ACCESS AND AFFORDABILITY

Percent Pell Grant Recipients

Nearly one-quarter of UMA undergraduate students receive support in the form of Pell grants. This number has remained steady and is quite favorable. The campus is surpassed by only one of its peers where 25% of students were Pell Grant recipients.

	<i>Fall 2005</i>	<i>Fall 2006</i>	<i>Fall 2007</i>	<i>Fall 2008</i>
<i>UMA</i>	23%	22%	23%	23%

Percent of Need Met for In-State Students Awarded Need-Based Aid

The campus has enhanced the financial aid packages of the neediest in-state students for 2009-10 which will likely increase the percent of need met. The number of in-state students receiving need-based grant aid will increase as well.

<i>Percent Need Met</i>	<i>Fall 2008</i>
<i>UMA</i>	88%

Percent Undergraduates from Massachusetts

The campus is committed to maintaining access to a quality education for residents of the Commonwealth. About four-fifths of UMass Amherst students enrolled in state-supported programs are residents of the state.

<i>Percent UG's from MA</i>	<i>Fall 2006</i>	<i>Fall 2007</i>	<i>Fall 2008</i>
<i>UMA</i>	80.1%	79.7%	80.1%

Online Course Enrollments

The Amherst campus offers five undergraduate and graduate degree programs and five certificate programs that can be completed partially or fully online. In addition, a variety of other courses are offered. Enrollment in online courses reached a record high in FY 2008.

<i>Online Course Enrollments</i>	<i>FY 2007</i>	<i>FY 2008</i>
<i>UMA</i>	9,175	11,142

Annual Growth in Online Course Enrollments

There has been considerable growth in online course enrollment on the Amherst campus in recent years. Online programs afford students flexibility in course-taking.

<i>Annual Growth Online</i>	<i>FY 2007</i>	<i>FY 2008</i>
<i>UMA</i>	NA	18%

STUDENT SUCCESS AND SATISFACTION

Percent Undergraduates who are Students of Color

The Amherst campus is committed to enrolling a diverse student body evidenced by the growth in the proportion of undergraduates who are students of color. The Fall 2008 entering class was the most diverse group of students in recent history.

<i>Students of Color (UG's)</i>	<i>Fall 2006</i>	<i>Fall 2007</i>	<i>Fall 2008</i>
<i>Percent</i>	17.5%	18.4%	19.4%

Percent Undergraduates who are First Generation in College

Although most students who enter UMass Amherst have parents who are college-educated, many students who enroll will be the first in their family to earn the baccalaureate.

<i>First Generation College-Going (UG's)</i>	<i>Fall 2008</i>
<i>Number</i>	390
<i>Percent</i>	14%

Percent Undergraduates with English as a Second Language

English is not the first language of about one tenth of students entering UMass. This is another indicator of the diversity of the campus.

<i>English as a Second Language (UG's)</i>	<i>Fall 2008</i>
<i>Number</i>	234
<i>Percent</i>	9%

Percent Undergraduate Students who are International

The Amherst campus attracts a small number of undergraduate international students, many of whom are studying on the campus as part of an international exchange program. In contrast, 22% of graduate students are international. The campus will explore ways to increase the number of international students on campus.

<i>International Undergraduate</i>		<i>Fall 2006</i>	<i>Fall 2007</i>	<i>Fall 2008</i>
<i>Number</i>		266	231	251
<i>Percent</i>		1.5%	1.3%	1.4%

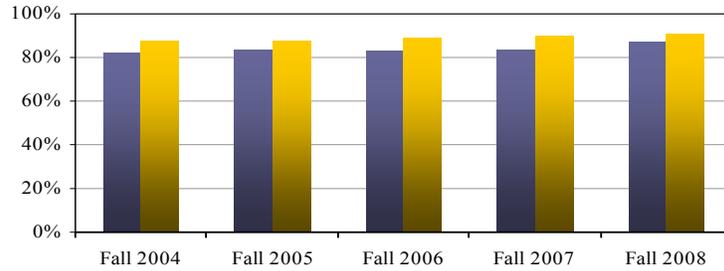
Number Undergraduates who Participated in a Study Abroad Program

Over 1,000 UMass undergraduates participated in a study abroad experience during the 2006-07 academic year. The campus encourages students to take advantage of these enriching experiences.

<i>Study Abroad (UG's)</i>	<i>2006-07</i>
<i>Number</i>	1,008

Freshman One-Year Retention Rate

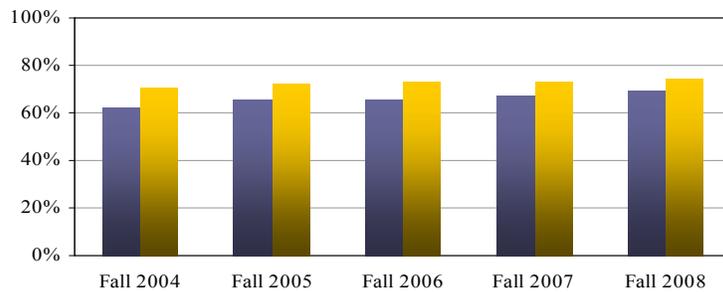
The one-year retention rate has been below the peer median. However, there has been improvement in the retention rate since Fall 2004. In particular, there has been a five-point gain in the retention rate. Improving the first-year experience and hence student retention is a campus priority, and new strategies are being developed.



	Fall 2004	Fall 2005	Fall 2006	Fall 2007	Fall 2008
UMA	82%	84%	83%	84%	87%
Peer Median	88%	88%	89%	90%	91%
Rank	10	9	11	9	8

Freshman Six-Year Graduation Rate

Almost 70% of full-time Amherst campus students graduate within six years of entrance. Like one-year retention, the campus has made progress in improving the graduation rate. The 2008 rate is below the peer median; however the campus has moved up in its rank.



	Fall 2004	Fall 2005	Fall 2006	Fall 2007	Fall 2008
UMA	62%	66%	66%	67%	69%
Peer Median	71%	72%	73%	73%	74%
Rank	9	8	7	7	7

SERVICE TO THE COMMONWEALTH

Enrollment in STEM Programs

There are several initiatives on the Amherst campus to promote the enrollment and graduation of students in science, technology, engineering and mathematics (STEM) fields. An added goal is to increase the enrollment and persistence of underrepresented minorities in STEM programs. Presently, 25% of baccalaureate students and 27% of graduate students are enrolled in such programs.

Undergraduate

	Fall 2004	Fall 2005	Fall 2006	Fall 2007	Fall 2008
<i>UMA</i>					
<i>Total</i>	18,378	18,812	19,299	19,621	19,016
<i>STEM</i>	4,096	3,961	4,157	4,455	4,845
<i>Percent STEM</i>	22%	21%	22%	23%	25%

Graduate

	Fall 2004	Fall 2005	Fall 2006	Fall 2007	Fall 2008
<i>UMA</i>					
<i>Total</i>	4,898	4,890	5,067	5,077	5,105
<i>STEM</i>	1,522	1,474	1,453	1,413	1,393
<i>Percent STEM</i>	31%	30%	29%	28%	27%

Degrees Awarded in STEM Fields

The proportion of undergraduate and graduate students receiving degrees in STEM disciplines tends to mirror the enrollment in these programs.

Undergraduate

UMA	2003-04	2004-05	2005-06	2006-07	2007-08
<i>Total Degrees</i>	3,919	4,262	4,038	4,235	4,431
<i>STEM</i>	876	952	953	919	911
<i>Percent STEM</i>	22%	22%	24%	22%	21%

In 2007-08, 21% of undergraduate and 28% of graduate degrees awarded were in STEM fields.

Graduate

UMA	2003-04	2004-05	2005-06	2006-07	2007-08
<i>Total Degrees</i>	1,332	1,411	1,402	1,448	1,506
<i>STEM</i>	412	393	369	419	427
<i>% STEM</i>	31%	28%	26%	29%	28%

FINANCIAL HEALTH

Endowment Assets and Annual Growth in Endowment

The campus endowment is one of the lowest in the country for a public flagship campus. Annual growth in the total endowment was 20% or more in the last three years. This was fueled in part by transferring some of the cash balance into a quasi endowment fund. Instability in the financial markets will likely result in a sharp decline in this growth rate in the next several years.

<i>Endowment (\$000's)</i>	<i>FY 2004</i>	<i>FY 2005</i>	<i>FY 2006</i>	<i>FY 2007</i>	<i>FY 2008</i>
<i>UMA</i>	\$81,880	\$91,193	\$113,724	\$136,954	\$168,241
<i>Annual % change</i>	10%	11%	25%	20%	23%

Endowment per Student

The campus endowment per student is one of the lowest in the country for a public flagship campus. Unlike its peers, the UMA endowment per FTE increased by 22% in FY 2008. This was due primarily to a transfer of some cash balances into a quasi endowment fund. In the short term this ratio is expected to show little or no growth due to instabilities in the financial markets.

<i>Endowment per FTE</i>	<i>FY 2004</i>	<i>FY 2005</i>	<i>FY 2006</i>	<i>FY 2007</i>	<i>FY 2008</i>
<i>UMA</i>	\$3,830	\$4,232	\$5,164	\$6,101	\$7,426
<i>Peers</i>	\$16,426	\$18,529	\$19,769	\$21,304	\$14,915

Return on Net Assets

Return on net assets for the campus is above the peer average. This ratio will decline sharply in future years as new buildings come online, resulting in higher depreciation and O&M costs. The campus also anticipates reduced investment income gains.

	<i>FY 2005</i>	<i>FY 2006</i>	<i>FY 2007</i>	<i>FY 2008</i>
<i>UMA</i>	5.42%	8.4%	17.2%	8.0%
<i>Peers</i>	-	3.0%	7.8%	5.3%

Financial Cushion

Financial cushion represents an institution's capacity to sustain itself during difficult financial times. Although lower than its peers, the ratio for the Amherst campus still compares favorably. The financial cushion will decline over the next several years as accumulated unrestricted funds, which have been designated for capital improvements are spent on these projects, and some reserves are used to bridge spending in response to base budget reductions.

	<i>FY 2004</i>	<i>FY 2005</i>	<i>FY 2006</i>	<i>FY 2007</i>	<i>FY 2008</i>
<i>UMA</i>	16.8%	15.2%	16.7%	18.2%	19.3%
<i>Peers</i>	21.5%	22.4%	22.5%	25.6%	26.8%

Debt Service to Operations

The debt service ratio for the campus is slightly below its peers. It will escalate over the next several years as the campus begins repaying the debt service on its new construction and major renovation projects. In addition, as expenses are cut in other areas, this operating line will consume more of the total budget.

	<i>FY 2004</i>	<i>FY 2005</i>	<i>FY 2006</i>	<i>FY 2007</i>	<i>FY 2008</i>
<i>UMA</i>	3.2%	3.7%	4.8%	4.2%	4.7%
<i>Peers</i>	6.2%	5.9%	4.9%	5.3%	4.8%

Deferred Maintenance per GSF

This ratio tracks the progress the campus anticipates making in reducing its deferred maintenance backlog over the next few years. Due to the loss of state appropriation, the campus will not make as much progress as previously planned on reducing this backlog.

	<i>FY 2008</i>
<i>UMA</i>	\$165

DEFINITIONS AND SOURCES

ACADEMIC QUALITY INDICATORS

High school GPA of freshmen. Cumulative GPA for college prep courses with additional weight to honor and AP courses, according to BHE admissions policy, reported on all first-year students.

SAT scores of freshmen. 25th & 75th percentiles of all first-year students. Peer data are from US News.

Average GPA of entering transfer students. Cumulative GPA for college-level courses transferred to UMA according to admissions policy.

Student Evaluation of Educational Experience. Percent of seniors who responded “good” or “excellent” to the question, “How would you evaluate your entire educational experience at this institution?” on the National Survey of Student Engagement administered in Spring 2008.

Number of Doctorates Awarded. Number of Doctorates awarded for the academic year 2008 which includes September 2007, January 2008, and May 2008 award dates.

Postdoctoral Appointees. The number of postdoctoral appointees as reported to NSF.

Research Expenditures. R&D expenditures in all academic fields from all sources (federal, state, local governments, industry, private and institutional) as reported to NSF.

Total Research Expenditures per Tenure System Faculty. R&D expenditures in all academic fields from all sources (federal, state, local governments, industry, private and institutional) as reported to NSF, divided by total tenure system faculty as reported to IPEDS. Peer data are from NSF.

Patent Applications. Number of U.S. Patent applications filed per year.

License Income. Amount of annual income from license agreements.

New Tenured/Tenure-track Faculty. The number of new tenured/tenured-track faculty members hired to start their new positions in the academic year.

Change in Tenured/Tenure-track Faculty. The difference in the number of tenured/tenure-track faculty from one fall semester to the next. Includes faculty members who are on paid leave. Does not include individuals whose primary responsibility is administrative. For the 2009 PMS report, the difference will be between the figure for Fall 2008 and Fall 2007.

Change in Faculty FTE. The difference in the total FTE, from one fall semester to the next, for all full-time and part-time instructional faculty teaching state-supported courses. Includes faculty members who are on paid leave. Does not include individuals whose primary responsibility is administrative. For the 2009 PMS report, the difference will be between the figure for Fall 2008 and Fall 2007.

Faculty Awards. Number of faculty with awards from a list of 24 prominent grant and fellowship programs in the arts, humanities, science, engineering and health fields (e.g., Fulbright American Scholars, Guggenheim Fellows, MacArthur Foundation Fellow, National Endowment for the Humanities Fellows, NSF Career Awards, Sloan Research Fellows). Data reported in The Top American Research Universities and were obtained from directories or web based listings.

National Academy Members. Number of faculty with active or emeritus status who have been elected to membership in the National Academy of Sciences, the National Academy of Engineering, or the Institute of Medicine. Data reported in The Top American Research Universities.

ACCESS AND AFFORDABILITY INDICATORS

Percent Pell Grant Recipients. Federal Pell Grants are awarded to low-income undergraduates based on their expected family contribution. Data as reported by campuses to the UMass President’s Office in the Financial Aid Template.

Percent of Need Met for In-state Students Awarded Need-based Aid. The average percentage of demonstrated financial need that is met by the institution’s award of need-based financial aid to undergraduate students. Data as reported by to the Common Data Set and to the UMass President’s Office in the Financial Aid Template.

Percentage Undergraduate from Massachusetts. Percentage of undergraduate students from in-state as determined by tuition residency classification.

Online Course Enrollments. Enrollments or course registrations for the academic year for online credit courses. Academic year includes summer, fall, intersession, and spring. These do not include hybrid course, but fully online only.

Annual Growth in Online Course Enrollments.

Percentage rate of growth in Enrollments or course registrations for the fiscal year for online credit courses. Fiscal year includes summer, fall, intersession, and spring. These do not include hybrid courses, but fully online only.

STUDENT SUCCESS AND SATISFACTION INDICATORS**Percent Undergraduate who are Students of Color.**

Undergraduates who are African American/Black, Cape Verdean, Hispanic/Latino, Asian and/or Native American, divided by total U.S. citizens and permanent residents who report race/ethnicity.

Percent Undergraduates who are First Generation in College.

First-generation college students are defined as those students with neither parent having attended college. Data are from Cooperative Institutional Research Program (CIRP) Freshmen Survey 2008.

Percent Undergraduates with English as a Second Language.

Data are from Cooperative Institutional Research Program (CIRP) Freshmen Survey 2008.

Percent Students who are International. Percentage of all undergraduates who are studying at the university on a student visa. International students include all eligible visa types as long as they are enrolled for a credit course; i.e., international students do not include U.S. citizens, U.S. permanent residents or refugees.

Number Undergraduates who Participated in a Study Abroad Program. Data are numbers of students who participated in a credit bearing study abroad program as reported on the Institute of International Education Open Doors survey for Fall 2006 through Summer 2007.

Freshmen One-Year Retention Rate. Percent of first-time, full-time freshmen who entered in previous fall and were still enrolled as of the next fall. Peer data are as reported to IPEDS and represent 4-year averages.

Freshmen Six-Year Graduation Rate. Percent of first-time, full-time freshmen who entered in a given fall and had graduated within six years. Peer data as reported to IPEDS and represent 4-year averages.

SERVICE TO THE COMMONWEALTH INDICATORS

Enrollment in Science, Technology, Engineering, and Mathematics (STEM) Programs. Total number of students enrolled in STEM programs. STEM programs are those fields of study defined in the National Science & Mathematics Access to Retain Talent (SMART) Grant with the exclusion of foreign languages. Enrollment count includes undergraduate, graduate and certificate students.

Degrees Awarded in STEM Fields. Number of undergraduate and graduate degrees and certificates awarded in STEM fields. STEM fields are those defined in the National Science & Mathematics Access to Retain Talent (SMART) Grant with the exclusion of foreign languages.

FINANCIAL HEALTH INDICATORS

Endowment Assets and Annual Growth in Endowment. Annual growth in total UMass Amherst endowment balance.

Endowment per Student. Total UMass Amherst endowments per annualized FTE student, where FTE of peer institutions is standardized to UMass formula.

Return on Net Assets. Increase/decrease in net assets divided by total net assets at beginning of the year. Peer data from published financial statements.

Financial Cushion. Unrestricted net assets as a percentage of total operating expenditures. Peer data are from published financial statements.

Debt Service to Operations. Debt service as a percentage of total operating expenditures. Peer data are from published financial statements.

Deferred Maintenance per GSF. Deferred Maintenance per Gross Square Footage includes deferred and other maintenance dollars needed to maintain the current function of the campus, calculated by the "Sightlines" Return on Physical Assets methodology (ROPA sm) and shown per square foot of space.

PEER INSTITUTIONS FOR UMASS AMHERST

Indiana University-Bloomington

*Iowa State University

Rutgers University-New Brunswick

Stony Brook University

*University of California-Santa Barbara

*University of Colorado-Boulder

*University of Connecticut-Storrs

University of Delaware

*University of Maryland-College Park

University of Nebraska-Lincoln

*Financial Peer