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# University of Massachusetts

## **2004 Report on Annual Indicators** *University Performance Measurement System*

# TABLE OF CONTENTS

## University of Massachusetts

The 2004 Report on Annual Indicators	1
2004 Annual Indicators by Campus	2
Headlines from the 2004 Annual Indicators	3
2004 Annual Indicators at a Glance	4
Data Tables and Charts	
Access and Affordability	5
Service to the Commonwealth	6
Financial Health	7
Definitions and Sources	9

## UMass Amherst

About the Campus	1
Headlines from the 2004 Annual Indicators	2
2004 Annual Indicators at a Glance	3
Data Tables and Charts	
Academic Quality	4
Student Success and Satisfaction	5
Financial Health	7
Definitions and Sources	8

## UMass Boston

About the Campus	1
Headlines from the 2004 Annual Indicators	2
2004 Annual Indicators at a Glance	3
Data Tables and Charts	
Academic Quality	4
Student Success and Satisfaction	5
Access and Affordability	6
Service to the Commonwealth	7
Financial Health	8
Definitions and Sources	10

## UMass Dartmouth

About the Campus	1
Headlines from the 2004 Annual Indicators	2
2004 Annual Indicators at a Glance	3
Data Tables and Charts	
Academic Quality	4
Student Success and Satisfaction	5
Service to the Commonwealth	7
Financial Health	7
Definitions and Sources	9

## UMass Lowell

About the Campus	1
Headlines from the 2004 Annual Indicators	2
2004 Annual Indicators at a Glance	3
Data Tables and Charts	
Academic Quality	4
Student Success and Satisfaction	4
Access and Affordability	5
Service to the Commonwealth	6
Financial Health	6
Definitions and Sources	8

## UMass Worcester

About the Campus	1
Headlines from the 2004 Annual Indicators	2
2004 Annual Indicators at a Glance	3
Data Tables and Charts	
Academic Quality	4
Student Success and Satisfaction	6
Access and Affordability	6
Service to the Commonwealth	7
Financial Health	8
Definitions and Sources	10

# THE 2004 REPORT ON ANNUAL INDICATORS

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The 2004 Report on Annual Indicators is the seventh annual report of the University Performance Measurement System. This report provides Trustees, Legislators, and state-level policy makers with information by which they can assess the University of Massachusetts as compared with similar institutions and its own performance in the past. Through this report and other aspects of performance measurement and assessment, the University seeks to be open and accountable to the constituencies it serves.

The Report on Annual Indicators includes measures that relate to five primary areas: Academic Quality, Student Success and Satisfaction, Access and Affordability, Service to the Commonwealth, and Financial Health. Indicators for Academic Quality and Student Success are presented in the individual campus reports. Indicators related to Access and Service are mostly contained in the System report, although some campuses have included related indicators in their own reports. Indicators for Financial Health are presented both for the system and the campuses.

Within each area, many indicators are common to all campuses, but several are unique to one or two (see summary on the next page). For example, the Amherst campus includes a number of indicators of productivity or quality in research and graduate education; the Medical School includes indicators on patent activity and its volume of state service activity; and the Boston campus includes indicators related to the college GPA, retention rate and graduation rate of transfer students, who comprise a majority of its incoming class each year.

The report provides relevant longitudinal and comparative data to help the reader assess the information being provided. Each campus has an established peer group that contains comparable as well as "aspirant" institutions. For the Amherst campus, the peer group consists of the national universe of 138 research universities (public and private). For the Worcester campus, the peer group consists of the 75 public medical schools in the United States. For the Boston, Dartmouth, and Lowell campuses, small groups of institutions comparable in mission, size, student characteristics and programmatic mix are used.

The report presents some indicators in aggregate for the entire system, specifically those that relate to Access and Affordability, Service to the Commonwealth, and Financial Health. Indicators in these areas reflect decisions that rest with the system administration and the Board (such as tuition and fee levels) or describe the collective role of the campuses in serving the students and citizens of the Commonwealth (such as degree production or enrollment of Massachusetts residents). Depending on the indicator, data for the UMass system are compared with Massachusetts private universities, Massachusetts demographic data, New England public universities, or (for the financial indicators) a small group of public university systems in other states.

The System report is followed by individual reports for each campus. Each report follows this format:

- About the Campus
- Headlines from the 2004 Annual Indicators
- 2004 Annual Indicators at a Glance
- Data Tables and Charts
- Definitions and Sources

## 2004 ANNUAL INDICATORS BY CAMPUS

### ACADEMIC QUALITY

HS GPA of freshmen  
 SAT scores of freshmen  
 Average GPA of transfer students  
 MCAT scores of entering students  
 Licensure and certification pass rates  
 Research Expenditures (total and per faculty)  
 Federal Research Support  
 Rank in total R&D (NSF)  
 Doctorates awarded  
 National Academy Members  
 Faculty Awards  
 Postdoctoral appointees  
 Sponsored Instruction/outreach per faculty  
 % of classes under 20  
 % of classes 50 or higher  
 Rank in NIH funding among medical schools  
 US News Ranking in Primary Care Medicine

Sys	A	B	D	L	W
	x	x	x	x	
	x	x	x	x	
		x			
					x
	x	x	x	x	x
	x		x		x
	x				
	x				
	x				
		x			
			x		
					x
					x

### STUDENT SUCCESS AND SATISFACTION

Freshman one-year retention rate  
 Freshman six-year graduation rate  
 Transfer one-year retention rate  
 Transfer graduation rate  
 Student rating of education  
 Alumni satisfaction  
 Satisfaction with Major (Senior survey)  
 Number of students enrolled in for-credit internships  
 Match rate/choice of residency

Sys	A	B	D	L	W
	x	x	x	x	
	x	x	x	x	
		x	x		
		x	x		
	x	x	x	x	x
	x	x	x	x	
	x	x			
		x			
					x

### ACCESS AND AFFORDABILITY

Tuition & fees as % of statewide family income  
 Tuition & Fees as % of feeder community income  
 Tuition & Fees with Learning Contract  
 % UG's from Massachusetts  
 % UG's who are students of color  
 % UG's who are first generation in college  
 % UG's who have English as Second Language

Sys	A	B	D	L	W
x					
				x	
					x
x		x			
x		x		x	
x		x			
		x			

### SERVICE TO THE COMMONWEALTH

% Mass residents attending UMass  
 In-State UG Enrollment by Region  
 UMass % of all Massachusetts degrees  
 % of graduates who remain in MA  
 Online course enrollments  
 Patent applications  
 License Income  
 Enrollments in continuing/corporate education  
 Regional Impact  
 Service to State Agencies (\$)

Sys	A	B	D	L	W
x					
x					
x					
x					
x		x		x	
				x	x
x				x	x
			x	x	
			x		
					x

### FINANCIAL HEALTH

Endowment and endowment per student  
 Annual growth in endowment  
 Private Funds Raised Annually  
 Operating Margin  
 Financial Cushion  
 Debt Service to Operations  
 Age of Facilities Ratio

Sys	A	B	D	L	W
x	x	x	x	x	x
x	x	x	x	x	x
x	x	x	x	x	x
x	x	x	x	x	x
x	x	x	x	x	x
x	x	x	x	x	x
x	x	x	x	x	x

# HEADLINES FROM THE 2004 ANNUAL INDICATORS

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The 2004 Annual Indicators tell a positive story. The Academic Quality and Student Success and Satisfaction Headlines are based on the campus annual indicators, while the rest are based on both system and campus indicators.

## Academic Quality

UMass continues to attract highly qualified applicants, as evidenced by academic profile of entering students at all campuses. Over the seven years of reporting, the mean SAT score as well as the average GPA of first-time students has risen steadily.

UMass campuses generally outperform state and national averages on professional certification and licensure exams in fields such as education, medicine, and nursing.

The UMass system generated over \$320 million in sponsored research in FY2003, continuing an upward trend of several years. Available data show that the campuses are competitive with their peers in research funding per faculty.

UMass Amherst compares favorably to research universities nationally in the quality of its faculty and its productivity in advanced education and training. UMass Worcester has moved to third from twelfth ranking nationally in *US News'* ranking of medical schools with an emphasis in primary care medicine.

## Student Success and Satisfaction

The freshman retention and graduation rates of UMass campuses are generally similar to or slightly higher than those of their peer institutions.

"Student rating of education" and "alumni satisfaction" are measured by surveys which were last conducted in spring 2002. At that time, more than four-fifths of UMass seniors rated their educational experience "good" or "excellent" on a national survey. Most campuses compared favorably with similar institutions nationally on this measure. Also, 96 percent of recent alumni surveyed said they were "satisfied" or "very satisfied" with the quality of undergraduate education they received at UMass.

## Access and Affordability

Despite increases in tuition and fees, UMass continues to remain affordable relative to median family income in the state and compares favorably with New England public universities and Massachusetts private universities.

The vast majority of UMass undergraduates continue to come from Massachusetts, compared with just over a quarter of undergraduates in the state's private university sector.

The proportion of UMass undergraduate students who are African American, Asian, Hispanic/Latino, or Native American (21%) compares favorably with the state's population of high school graduates.

Approximately 44 percent of UMass undergraduates are from the first generation in their families to attend a four-year college or university. At UMass Boston, over half of first-time, full-time students report that neither of their parents have a college degree.

## Service to the Commonwealth

Almost 60 percent of Massachusetts residents attending a university in the state as undergraduates are enrolled at UMass. The University's students come from every region of the state.

The University awarded over 10,500 undergraduate and graduate degrees last year, representing approximately 14 percent of all bachelor's and graduate degrees awarded in the Commonwealth.

Almost two-thirds of all the University's graduates live and work in the Commonwealth. For *recent* bachelor's degree recipients, this figure is 75 percent.

Through UMass Online, the University continues to expand the availability of its courses and programs to students across the state and beyond, with more than 12,000 course enrollments in AY2003. Enrollment growth was 33 percent over 2001-2002.

License income from commercializable products and processes has grown to \$20 million.

## Financial Health

The University's endowment has grown from \$106M in FY98 to \$182.8M in FY03.

The University continues a positive upward trend in private fund raising.

The FY03 operating margin, financial cushion, ratio of debt service to operations, and age of facilities ratio all reflect how the University's financial condition is being eroded by the downturn in state support along with the continued need to invest in infrastructure.

# 2004 ANNUAL INDICATORS AT A GLANCE – UMASS SYSTEM

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## ACCESS AND AFFORDABILITY

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- Tuition & Fees as % of Family Income 12%
- % UG from Massachusetts 87%
- % UG who are Students of Color 21%
- % First-Generation College Students 44%

## SERVICE TO THE COMMONWEALTH

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- Proportion of Mass residents attending universities in Mass. enrolled in UMass 59%
- Enrollment of In-State Undergrads by Region:
  - Metro Boston 34.1%
  - Southeastern Mass 19.1%
  - Northeastern Mass 25.4%
  - Central Mass 8.3%
  - Western Mass 13.1%
- UMass as % of all Massachusetts Degrees 14%
- % Graduates who Remain in Mass 65%
- Annual Growth in Online Course Enrollments 33%
- Online Course Enrollments 12,131
- License Income \$20M

## FINANCIAL HEALTH

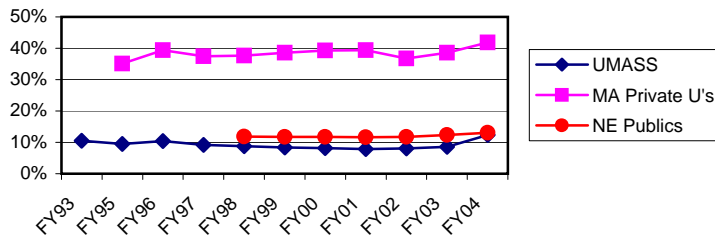
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- Endowment Assets \$182.8M
- Annual Growth in Endowment 13%
- Private Funds Raised Annually \$92.6M
- Operating Margin 0.5%
- Financial Cushion 17.1%
- Debt Service to Operations 4.1%
- Age of Facilities Ratio 10.4

# ACCESS AND AFFORDABILITY

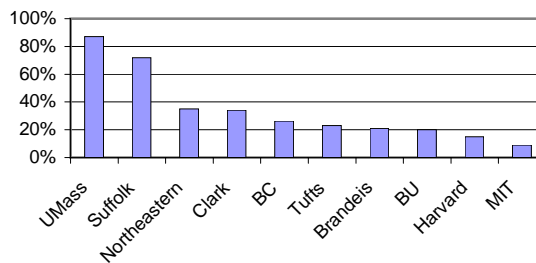
## Tuition and Fees as a Percentage of Family Income

Despite substantial increases in tuition and fees during FY2002 and FY2003, UMass average tuition and fees remain affordable relative to median family income. UMass tuition and fees average 12 percent of statewide median family income, compared with an average of 42% for the state's private universities and 13% for other New England public universities.



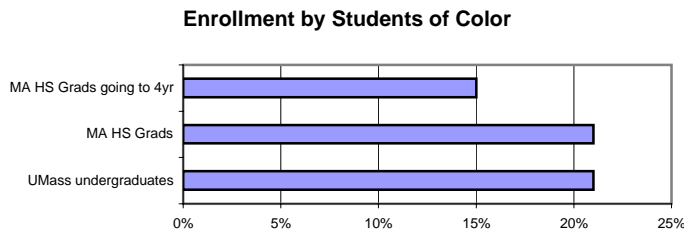
## % Undergraduate Students from Massachusetts

The vast majority (87%) of UMass undergraduates are citizens of the Commonwealth. The percentages are highest at the more regional campuses (Boston, Dartmouth, and Lowell) and lowest at UMass Amherst, the system's flagship campus. By contrast, only 26% of undergraduates enrolled in the state's private universities come from Massachusetts.



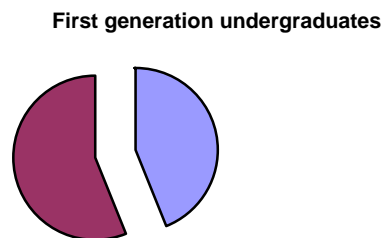
## % Undergraduate Students of Color

Approximately one-fifth (21%) of the University's undergraduate students are Black, Asian, Hispanic, or Native American, compared with 21% of the state's population of High School graduates and 15% of High School graduates who intend to enroll in a four-year college or university.



## % First Generation College Students

Although the number has declined slightly in recent years, a substantial percentage of UMass undergraduates are still from the first generation in their family to attend college (about 44% of current students). These percentages are highest at the Boston and Lowell campuses (more than half) and lowest at the Amherst campus (about one-third).

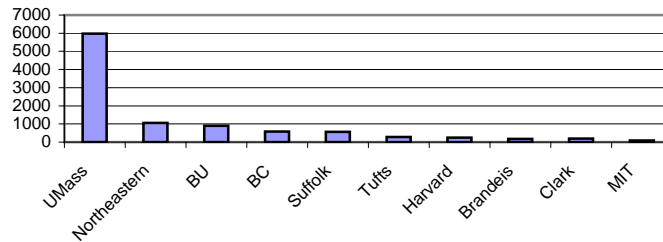


# SERVICE TO THE COMMONWEALTH

## Enrollment of Massachusetts Residents

Fifty-nine percent of Massachusetts residents enrolling in universities within the state as first-time undergraduates attend the University of Massachusetts.

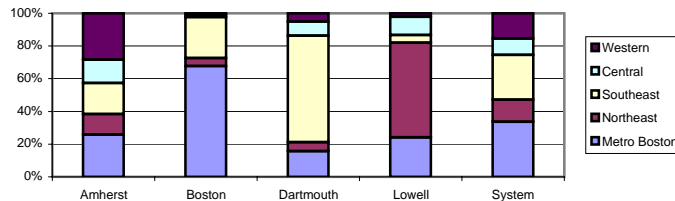
MA resident enrollment of first-year undergraduates



## Enrollment by Region

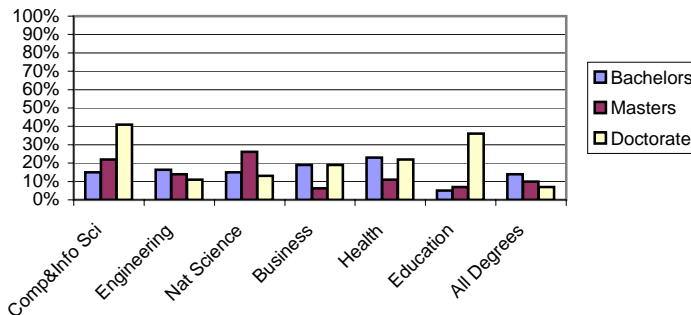
UMass campuses draw their in-state undergraduate students from different regions of Massachusetts, with UMass Boston drawing 68% from the metro Boston area, Dartmouth drawing 65% from Southeastern Massachusetts, and Lowell drawing 58% from the northeastern corner of the state. Even UMass Amherst draws one third of its in-state students from Western Massachusetts, more than any other single region.

New In-State Undergraduate Enrollment by Region



## UMass Degrees as Percentage of all Massachusetts Degrees

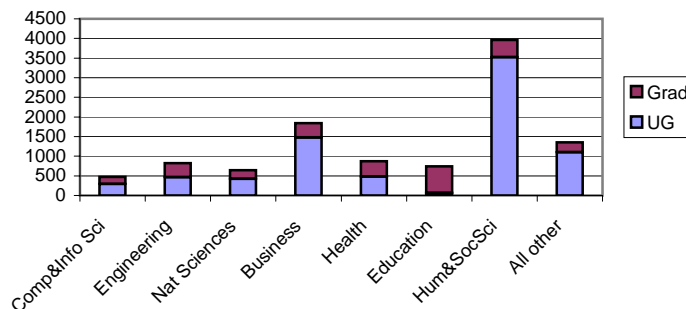
The University of Massachusetts annually awards 14 percent of baccalaureate and graduate degrees (16 percent of bachelors and doctoral degrees, and 10 percent of master's degrees) in the state. The University's impact at the doctoral level in computer and information sciences, and education is particularly high, as is its impact at the master's level in natural sciences and the bachelor's level in health (which includes nursing).



## Degrees Conferred by Field

Of the 10,701 degrees conferred by the University in 2003, approximately three-quarters were at the undergraduate level and one-quarter at the graduate level. Almost 40% of degrees were in the humanities and social sciences, followed by 17% in business/management. The University awarded 473 degrees in computer and information sciences, 820 degrees in engineering, 644 degrees in the natural sciences, 870 degrees in health sciences and professions, 739 degrees in education (almost all of them at the graduate level), and 1354 degrees in other fields, such as criminal justice, public affairs, and natural resources and conservation.

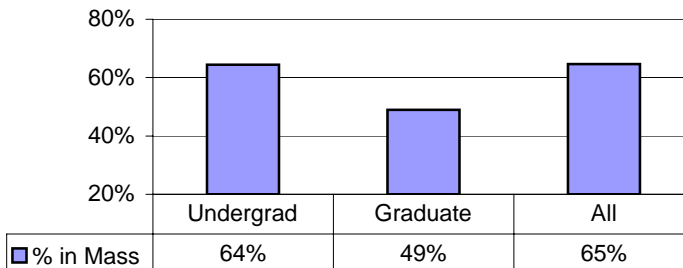
Degrees Conferred by Field, 2002-03





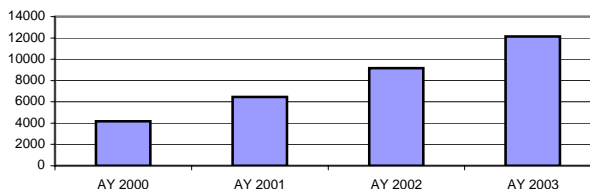
**Percentage of Graduates Who Live in Massachusetts**

Nearly two-thirds of the undergraduate alumni and more than half the graduate alumni of the University live and work in the Commonwealth of Massachusetts. According to a recent survey of alumni who received their bachelor's degrees in 1997-98, more than 75 percent of recent undergraduate alumni live and work in Massachusetts.



**Rate of Growth in Online Course Enrollments**

The UMass campuses offer more than 30 degree and certificate programs through UMass Online, the University's vehicle for interactive, Internet-based learning. Course enrollments in UMass Online continue to grow at a healthy rate. Academic year 2003-04 course enrollments were 33% higher than 2002-03.

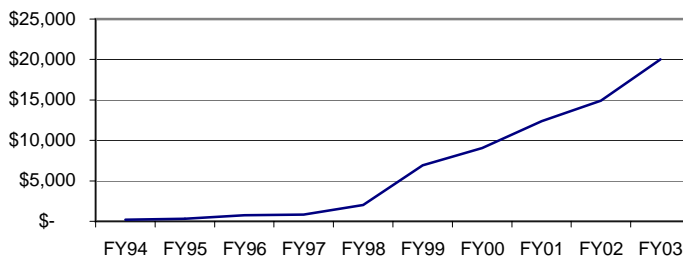


	AY 2000	AY 2001	AY 2002	AY 2003
Annual growth rate		55%	42%	33%

**License Income**

License income is a measure of the economic value of an institution's inventiveness and a contributor to the University's economic health. It is difficult to predict when or for what products or processes a license will begin to generate significant income. License income for UMass totaled \$20million in FY2003, up from just \$195,000 in FY1994. The University of Massachusetts ranks 17th in the nation in license income (based on the latest ranking by the Association of University Technology Managers).

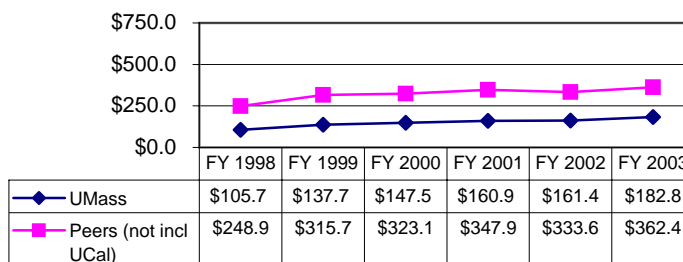
Annual License Income (\$'000s)



**FINANCIAL HEALTH**

**Endowment Assets**

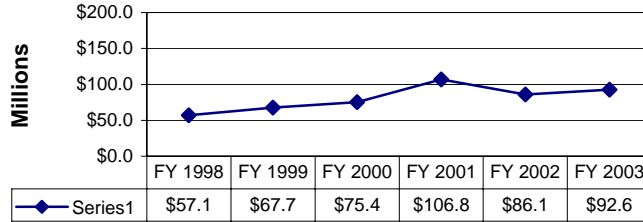
Despite a relatively small overall endowment and a very difficult economic environment, the University managed to post a small increase in the market value of its endowment between FY02 and FY03.



Annual growth rate	FY00	FY01	FY02	FY03
UMass	7.1%	9.1%	0.3%	13.3%
Peers	2.3%	7.8%	-4.1%	8.6%

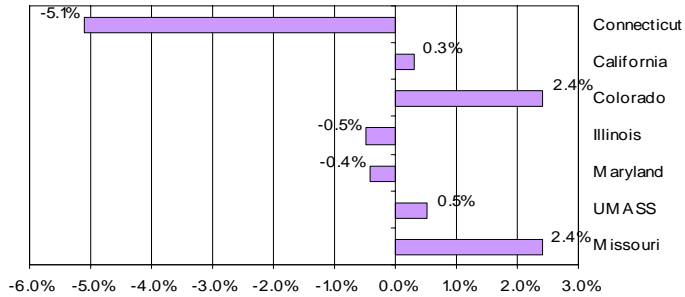
**Private Funds Raised Annually**

Despite a drop from FY2001 to FY2002 which reflects the downturn in the economy, the University's private fund raising shows a steadily increasing trend.



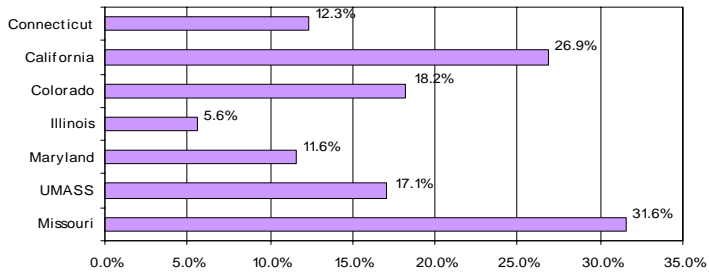
**Operating Margin**

As a short-term indicator of financial health, improving operating results over time will allow for long-term improvements in financial condition and increased stability. In FY2003, the University's operating margin was comparable to that of many of the peer systems. The addition of depreciation to the financial statements added an additional \$103 million of expenses for FY2003 pushing the margin downward. If we used the "old" method that does not consider depreciation costs, the University's margin would be a positive 7.9%.



**Financial Cushion**

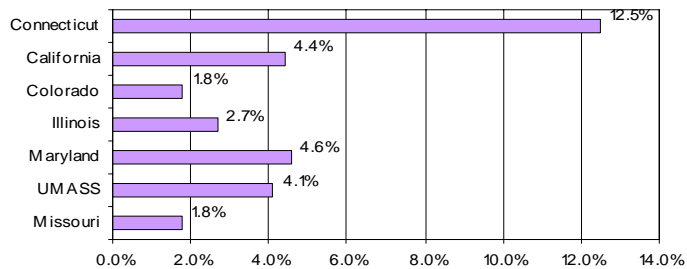
This ratio reflects long-term financial health of an institution and its ability to weather or "cushion" itself from short-term ups and downs. In FY2003, the University as a whole had a financial cushion of 17.1% which was within the range for the peer systems of 5.6% to 31.6%. Due to a change in reporting standards, calculation of this ratio is not comparable to prior years.



**Debt Service to Operations**

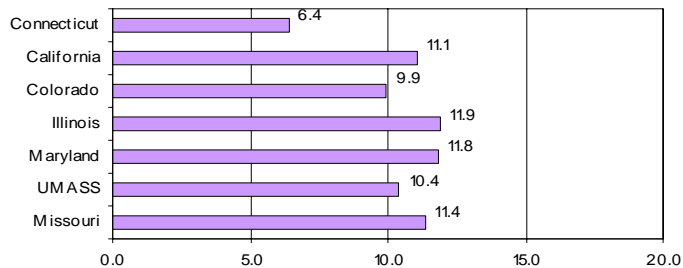
This ratio measures the demand that annual commitments to creditors place on the institution's operating funds.

Rating agencies generally consider that a debt service ratio of greater than 10% represents an institution that is highly leveraged. The FY2003 ratio is in line with peer systems.



**Age of Facilities Ratio**

This ratio calculates the average age of plant as measured in years. A low age of plant ratio indicates recent investments, while a high age (ratio) may indicate a large deferred maintenance burden. Continuous investments in plant including building renovations, infrastructure improvements, new construction, and (capitalizable) equipment upgrades all add to and improve the capital assets of the University and can reduce the average age of facilities ratio. The University's indicator for FY2003 is within the range of its peer systems.



# DEFINITIONS AND SOURCES

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## 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. Comparative data are from IPEDS, *Chronicle*, and US Census. FY02 and FY03 income data are compared against 2002 median family income (latest available).

**Percentage of undergraduate students from Massachusetts.** Percentage of Fall 2003 undergraduate students from in-state as determined by tuition residency classification. Data for Mass. private universities are from IPEDS and reflect first-time students in Fall 2002.

**Percentage of undergraduate students of color.** Fall 2003 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 are for 2002 public HS graduates (MA Department of Education).

**% first generation college students.** Percentage of seniors and freshmen who answered "no" to the question, "did either of your parents graduate from college?" on the National Survey of Student Engagement, Spring 2002.

## SERVICE TO THE COMMONWEALTH INDICATORS

**Enrollment of Massachusetts residents.** Number of first-year undergraduates enrolling at each institution who are residents of Massachusetts. Mass. private university data are from IPEDS Enrollment Survey, Fall 2002.

**Enrollment by region.** In-state undergraduate enrollment by region, Fall 2001.

**UMass degrees as % of all Massachusetts degrees.** Degrees awarded by UMass as % of total degrees awarded by colleges and universities in the state in 2000-2001 based on IPEDS Completions Survey.

**Degrees conferred by field.** 2002-03 degrees conferred by UMass campuses by field.

**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 2003.

**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.

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

## 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. Comparable peer data are not available.

**Operating margin.** Operating surplus as a percentage of total operating revenues plus federal and state appropriations. Peer data are from published financial statements. Not comparable to prior years.

**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.

**Age of facilities ratio.** The average age of plant as measured in years and defined as current depreciation expense divided by accumulated depreciation. Peer data are from published financial statements.

## 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



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# University of Massachusetts Amherst

## **2004 Report on Annual Indicators** *University Performance Measurement System*

## ABOUT THE CAMPUS

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The University of Massachusetts Amherst, founded under the Morrill Land Grant Act in 1863, is the flagship campus of the state university system. Located in the historic Pioneer Valley of Western Massachusetts, the 1,450-acre campus provides a rich cultural environment in a rural setting.

One of today's leading centers of public higher education in the Northeast, the University of Massachusetts Amherst has achieved a growing reputation for excellence in an increasing number of disciplines, for the breadth of its academic offerings, and for the expansion of its historic roles in education, research, and public service. Within its ten schools and colleges, the campus offers bachelor's degrees in 88 areas, associate's degrees in 6, master's degrees in 64, and the doctorate in 48 disciplines. There are approximately 24,300 students, made up of almost 19,000 undergraduate, 5,600 graduate students, and 265 students in the Stockbridge School of Agriculture.

Funding for the campus comes from a variety of sources, including the state, federal government, private industry, and private individuals and foundations. UMass Amherst is a world center for research in such areas as polymer science, artificial intelligence, microwave engineering, and the life sciences, with research and research related expenditures totaling \$114 million in fiscal year 2003. Many of the 1,078 full-time faculty members are nationally and internationally renowned for their expertise in their fields. In addition to research, the campus has a strong commitment to teaching and faculty development that is supported by its nationally recognized Center for Teaching.

Three-fourths of undergraduate students are Massachusetts residents and are drawn from all regions of the state. The campus also draws students from almost every state and 70 foreign countries. Approximately 5,200 new undergraduates entered in fall 2003 with about one-fifth enrolling as transfers. One-third of transfer students came from Massachusetts community colleges. The undergraduate population is largely full-time with most students enrolling within one year of high school graduation. The Amherst campus has one of the largest resi-

dence hall systems in the country and about three-fifths of students live on campus. The undergraduate population is diverse; 17% percent are African-American, Latino, Asian, or American Indian. The academic profile of entering first-year students is strong — in fall 2003 over three-quarters of students entered with high school grade point averages above 3.00. SAT scores have increased in recent years and the median scores was 1140 in fall 2003

Undergraduates are offered a wide range of curricular and co-curricular opportunities. Over 2,000 academically talented students are enrolled in the Commonwealth Honors College, a campus-wide program. Residential Academic Programs (RAP) provide first-year students with an academically supportive environment in which they can attend classes and study with other students from their residence hall. About one-third of first-year students participate in RAP. The University, one of the founding members of the Five College consortium, offers reciprocal student access among UMass Amherst and Amherst, Hampshire, Mount Holyoke, and Smith colleges. The campus also provides opportunities for undergraduates to be directly involved in research and get hands-on experience through internships and field experience. A wide range of service learning and volunteer opportunities are also available for students.

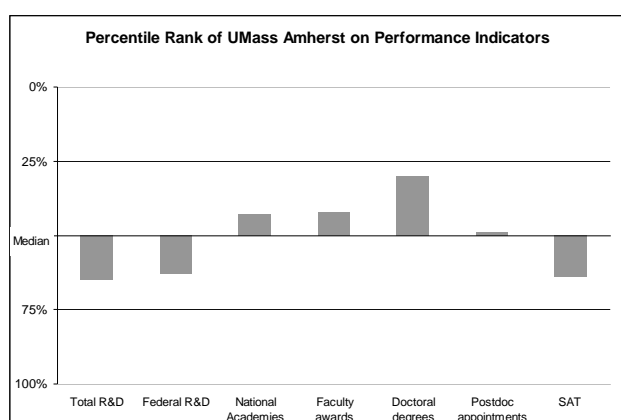
UMass has one of the most comprehensive student activities program in the country, including award-winning student-run businesses and over 200 registered student organizations. The campus participates in Division I athletics with 11 varsity sports for men and 12 for women. Students can also participate in intramural and club sports.

As part of the five-campus system, the University of Massachusetts Amherst complements its activities with outreach education, research, and service programs at sites throughout the Commonwealth, ranging from the Southeastern Massachusetts Agricultural Center in East Wareham to the Berkshire Medical Center in Pittsfield to the Small Business Development Center in Springfield, and the I-495 Center for Professional Education in Westborough.

## HEADLINES FROM THE 2004 ANNUAL INDICATORS

### Academic Quality

*The Top American Research Universities (TheCenter)* identifies nine performance indicators, seven of which reflect academic quality, to evaluate the comparative performance of the top research universities. These public and private institutions, which include UMass Amherst, generate over \$20 million in federal research annually. The Amherst campus is comparing its progress with respect to these measures with the 138 research institutions with undergraduate programs in this group.



Note. The *percentile rank* shows the relative standing of the campus in comparison to the Top 138 Research Universities. Percentiles range from 1 (high) to 99 with a percentile rank of 50 representing the median.

**Research.** Total and federal research dollars are key measures of an institution's commitment to and success in research. The Amherst campus faculty has been successful in competing for grants and contracts, and total R&D spending has increased by over 30% in the past five years. The Amherst campus' rank slipped in 2001 (the most recent available comparison), but has likely rebounded more recently. Large-scale faculty retirements have affected total dollars. Per faculty research dollars, however, have been climbing consistently. As faculty are replaced, total dollars should increase.

**Faculty Quality.** Another indicator of an institution's strength is the number of academic honors and awards received by the faculty. UMass Amherst's faculty has shown considerable strength in this area and received a wide range of awards. The campus is at the 42<sup>nd</sup> percentile for faculty awards and at the 43<sup>rd</sup> percentile for membership in the National Academies. Recent drops on these measures is likely a result of the shrinking tenure system faculty.

**Advanced Training.** Educating and training the next generation of research scholars is an indicator of academic performance. The number of doctorates awarded and postdoctoral appointees are measures of the strength of advanced training. Here, too, UMass Amherst's performance was strong. The campus ranked in the top third on the number of degrees awarded and at about the median for the number of post-doctorates.

**Undergraduate Quality.** Most research universities serve undergraduate student populations. SAT scores are used by most as an assessment of the quality of entering students. Scores for UMass students are below the median for research universities (64<sup>th</sup> percentile). However, like other public institutions, the campus mission includes providing access to an affordable education to students in the Commonwealth. SAT scores have increased by 30 points since 2001.

### Student Success and Satisfaction

UMass Amherst students have a positive educational experience. Retention of first-year students has remained high (84%), as have six-year graduation rates (64%). Both are comparable to other research extensive institutions. Additionally, UMass students report high satisfaction with their undergraduate experience based on results from three surveys: the National Survey of Student Engagement, the Amherst campus Senior Survey and the UMass Alumni Survey.

### 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. While the endowment and levels of private dollars raised in recent years increased, the campus is well below other research universities on these measures. UMass Amherst has begun to renew its focus on fundraising and is preparing for the next capital campaign; this pre-campaign period is a slower time for donations. Modest growth in the endowment is anticipated in the next few years. The goal will be to secure gift funding that can be used to offset campus operating costs for key student investments such as funding for scholarships. More information can be found in the Financial Indicators Report.

## 2004 ANNUAL INDICATORS AT A GLANCE

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### ACADEMIC QUALITY

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• Average HS GPA of Freshmen	3.28
• SAT Scores of Freshmen (Median)	1140
• Licensure/Certification Pass Rates	
<i>Massachusetts Teacher Test</i>	100%
<i>Registered Nurse</i>	89%
• Total R&D Expenditures (\$000)	\$113,512
• Federal R&D Expenditures (\$000)	\$60,839
• Total R&D/Faculty	\$122,319
• Federal R&D/Faculty	\$65,559
• No. of doctorates awarded	213
• No. of postdoctoral appointees	161
• Faculty Awards	10
• National Academy Members	9

### STUDENT SUCCESS AND SATISFACTION

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• Freshman One-Year Retention Rate	84%
• Freshman Six-Year Graduation Rate	64%
• % Seniors Rating their Educational Experience "Good" or "Excellent" (NSSE)	86%
• Satisfaction With Major (UMA Senior Survey)	95%
• % Alumni "Satisfied" or "Very Satisfied" with the overall quality of education received at UMA	95%
• % Alumni "Satisfied" or "Very Satisfied" with the way UMA prepared them for current or most recent job	87%
• % Alumni "Satisfied" or "Very Satisfied" with the way UMA prepared them for further education	90%

### FINANCIAL HEALTH

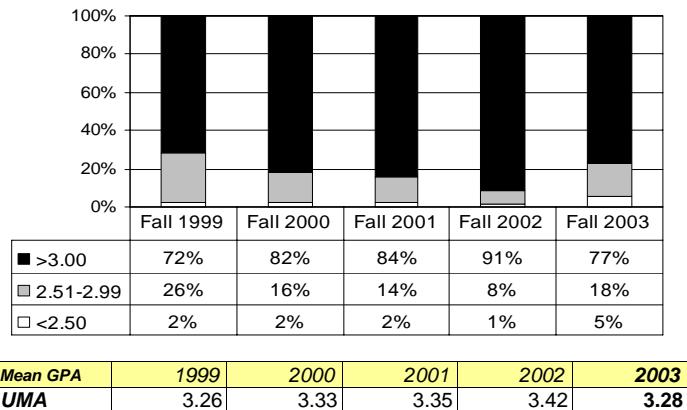
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• Operating Margin	1.0%
• Financial Cushion	16.1%
• Debt Ratio	5.9%
• Age of Facilities Ratio	11.7
• Endowment (\$000)	\$65,951
• Endowment per Student	\$2,940
• Private Funds Raised Annually (\$000)	\$35,259

## ACADEMIC QUALITY

### High School GPA of Freshmen

UMass Amherst entering first-year students are strong academically and consistently show a high school GPA of about 3.3. In fall 2003, the GPA dipped but SAT scores increased.



### SAT Scores of Freshmen

The SAT profile of UMass Amherst students is somewhat below that of other research universities. The campus has seen a 30-point increase in scores since fall 2001.

SAT Score	1999	2000	2001	2002	2003
<b>UMA</b>	1130	1130	1110	1120	<b>1140</b>
Peer Median	1150	1155	1165	N/A	N/A
%ile Rank	57%	63%	64%		

### Licensure and Certification Test Pass Rates

Pass rates on major licensure exams for Nursing and Education at the Amherst campus are consistently higher than national or state averages. The number of students taking these exams represent a small proportion of the campus's graduates.

Pass Rates	Educator Licensure		Registered Nurse	
	2002	2003	2002	2003
UMA Test Takers	214	218	70	84
UMA Pass Rate	98%	100%	89%	89%
State Pass Rate	95%	97%	N/A	88%
National Pass Rate	N/A	N/A	87%	88%

### Research Expenditures

Total R&D spending has increased by over 30% in total dollars and over 50% in federal dollars in the past five years. The Amherst campus' rank among the top American research universities for total research dollars slipped in 2001 (the most recent available comparison), but has likely rebounded more recently. Large-scale faculty retirements have affected total dollars. Per faculty research dollars, however, have been climbing consistently. As faculty are replaced, total dollars should increase.

Total Research (\$000's)	1999	2000	2001	2002	2003
<b>UMA</b>	86,576	97,052	97,976	109,332	113,512
Peer Median	116,362	135,449	148,821	N/A	N/A
%ile Rank	62%	61%	65%	N/A	N/A

Federal Research (\$000's)	1999	2000	2001	2002	2003
<b>UMA</b>	39,877	44,697	49,576	54,770	60,839
Peer Median	57,243	64,433	69,957	N/A	N/A
%ile Rank	64%	64%	63%	N/A	N/A

Per Tenure System Faculty	1999	2000	2001	2002	2003
<b>Total</b>	\$83,007	\$92,080	\$94,117	\$106,874	\$122,319
<b>Federal</b>	\$38,233	\$42,407	\$47,623	\$53,539	\$65,559

### Number of Doctorates Awarded

The number of doctorates awarded at UMA has been consistently high among the top American research universities that award the doctorate. However in 2003, the number dipped to its lowest in recent years. This number is also likely to rebound as tenure system faculty are replaced.

Doctorates	1998	2000	2001	2002	2003
<b>UMA</b>	299	276	261	287	<b>213</b>
Peer Median	204	200	192	184	N/A
%ile Rank	32%	32%	34%	30%	N/A



**Postdoctoral Appointees**

UMass Amherst senior faculty mentor recent PhDs with science and engineering degrees who wish to receive research training. UMass remained around the median on this measure. This, too, is a measure of advanced training.

Post-Docs	1999	2000	2001	2002	2003
<b>UMA</b>	143	131	134	142	<b>161</b>
Peer Median	141	135	133	N/A	N/A
%ile Rank	49%	51%	49%		

**Faculty Awards**

UMass Amherst faculty members are recipients of many prominent awards in the arts, humanities, science, engineering and health fields. This is an area of strength for the campus. The recent drop is likely a result of the shrinking tenure system faculty.

Awards	1999	2000	2001	2002	2003
<b>UMA</b>	10	13	14	<b>10</b>	N/A
Peer Median	9	9	10	<b>9</b>	
%ile Rank	43%	36%	34%	<b>42%</b>	

**National Academy Members**

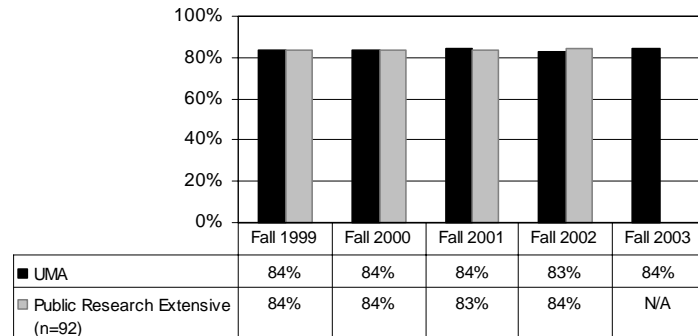
Several UMass faculty members have been elected to some of the most prestigious disciplinary organizations, the National Academy of Science, the National Academy of Engineering, or the Institute of Medicine. This is one of the highest honors academic faculty can receive. The campus is at about the median on this measure (tied with seven institutions).

Members	1999	2000	2001	2002	2003
<b>UMA</b>	12	10	9	<b>9</b>	N/A
Peer Median	10	10	7	<b>9</b>	
%ile Rank	38%	49%	44%	<b>43%</b>	

**STUDENT SUCCESS AND SATISFACTION**

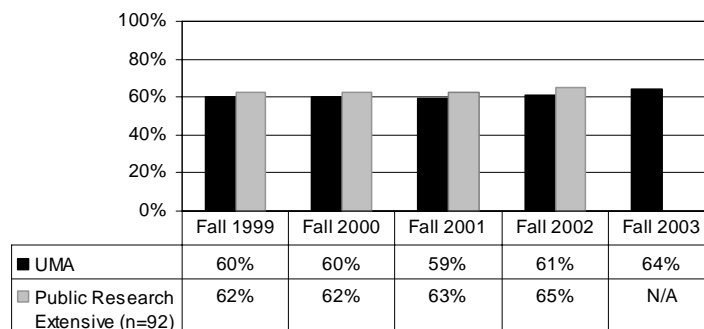
**Freshman One-Year Retention Rate**

The one-year retention rate has been consistently high during the past five years with over four-fifths of first-time freshmen returning for the second year. This rate is comparable to that of other public research extensive institutions.



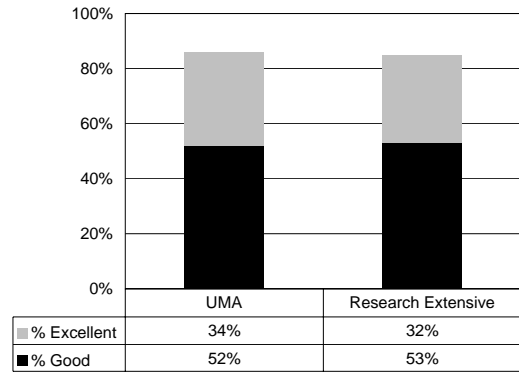
**Freshman Six-Year Graduation Rate**

Sixty-four percent of full-time Amherst campus students graduate within six years of entrance. This rate is close to the average for other public research extensive institutions. The six-year graduation rate is a lagging indicator in that it tends to reflect the academic profile of students entering six years earlier.



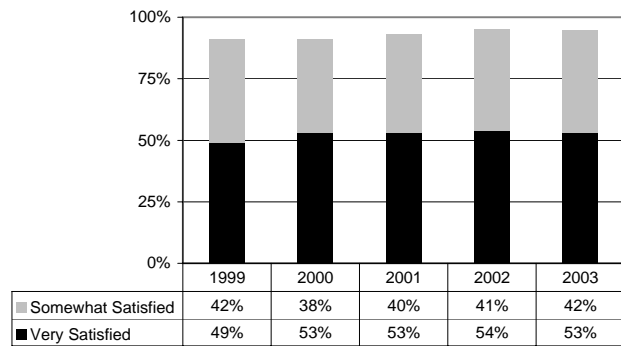
**% Seniors Rating Educational Experience "Good" or "Excellent"**

UMass Amherst seniors report a high level of satisfaction. Like their counterparts at Research Extensive institutions, more than four-fifths of Amherst campus seniors responding to the National Survey of Student Engagement (NSSE) report a positive educational experience.



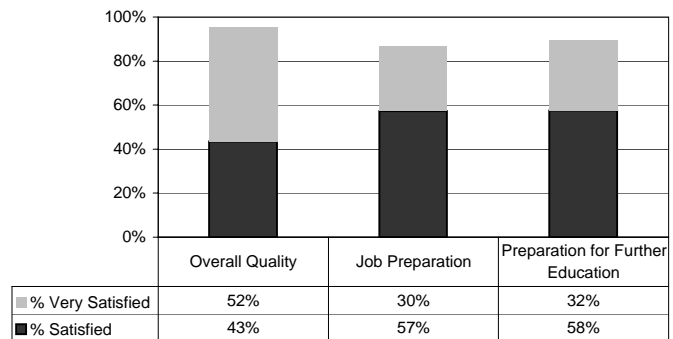
**Student Satisfaction with Major**

Results of the Amherst campus Senior Survey administered at time of graduation are further evidence of high student satisfaction. Satisfaction with the overall experience in the major has been consistently high. Over half reported being very satisfied.



**Alumni Satisfaction**

Similarly, a survey of UMass Amherst alumni shows high satisfaction. Most UMass Amherst students who graduated in 1997-98 were satisfied or very satisfied with the quality of the education received, their preparation for work and preparation for further education.



## FINANCIAL HEALTH

### Operating Margin

Operating margin measures an institution's ability to live within its financial means. The campus compares favorably with its peers on this measure. As the campus incurs more debt, operating margin will decrease slightly.

	FY 2002	FY 2003
<b>UMA</b>	-0.6%	1.0%
<b>Peers</b>	-1.1%	-0.1%

### Financial Cushion

Financial cushion represents an institution's ability to weather unusual downturns in on-going revenue or other financial crisis. The cushion for the Amherst campus is slightly lower than the peer average. It is expected to increase slightly in FY04 but will decrease in FY05-FY09 as debt payments increase and more of plant fund balances will be spent on needed repairs.

	FY 2002	FY 2003
<b>UMA</b>	15.5%	16.1%
<b>Peers</b>	19.6%	19.9%

### Debt Service to Operations

It is expected that the debt service ratio will decrease in FY04 as one bond issue ends. Beginning in FY05 the ratio will increase as debt is incurred for an energy conservation project and new undergraduate student housing.

	FY 2002	FY 2003
<b>UMA</b>	3.8%	5.9%
<b>Peers</b>	4.8%	4.8%

### Age of Facilities Ratio

A ratio of 10 or less is recommended for a research university. Projections show that even with an aggressive capital plan of over \$400 million over the next five years, the age of facilities ratio will increase from 11.7 to 15.0 years. An additional \$400 million investment is needed to reach a comparable age of facilities ratio with peers.

	FY 2002	FY 2003
<b>UMA</b>	15.0	11.7
<b>Peers</b>	10.8	10.7

### Endowment Per Student

The campus endowment is one of the lowest in the country for a public flagship campus. Only modest growth in the endowment is anticipated in the next few years. The goal will be to secure gift funding that can be used to offset campus operating costs for key student investments such as funding for scholarships.

Endowment per FTE	FY 2002	FY 2003
<b>UMA</b>	\$2,642	\$ 2,940
<b>Peers</b>	\$9,597	\$ 16,312

Endowment (in \$000)	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
<b>UMA</b>	\$50,563	\$55,637	\$59,526	\$59,793	\$ 65,951
<b>Annual % change</b>	36%	10%	7%	0%	10%

### Private Funds Raised Annually

FY03 was a banner year for private funds raised marked by an \$8 million gift. In addition, it was the end of the capital campaign and a number of outstanding pledges were paid. This high level of results is not expected to be repeated for a number of years as the campus prepares for the next campaign, which is a slower time for donations.

Private Funds (in \$000)	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
<b>UMA</b>	\$23,842	\$19,819	\$30,194	\$ 20,136	\$ 35,259

## DEFINITIONS AND SOURCES

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### ACADEMIC QUALITY INDICATORS

#### High school GPA of first-year students.

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

**SAT scores of first-year students.** The median (midpoint) SAT scores of all first-year students. Peer data are from *The Top American Research Universities*.

#### Licensure and certification test pass rates.

Pass rates on Massachusetts Tests for Educator Licensure (undergraduate and graduate) and Registered Nurse Licensure Exam.

**Research expenditures.** R&D expenditures in all academic fields, from all sources (federal, state, local governments, industry, private and institutional) as reported to NSF. Peer data are from *The Top American Research Universities* and adjusted for some institutions to exclude other campuses in a multi-campus system. **Total** and **Federal** dollars are reported.

**Sponsored research per faculty.** Total and Federal R&D expenditures, divided by total tenure system faculty.

**Doctorates awarded.** The Number of doctorates awarded as reported in the IPEDS Completions survey. Peer data from *The Top American Research Universities* as reported to IPEDS.

**Postdoctoral appointees.** The number of postdoctoral appointees as reported to NSF. Peer data are from *The Top American Research Universities*.

**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*.

**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.

### STUDENT SUCCESS AND SATISFACTION INDICATORS

**Freshman one-year retention rate.** Percent of first-time, full-time freshmen who entered in the previous fall and were still enrolled as of the next fall. Peer data are from the Consortium for Student Retention Data Exchange (CSRDE) and represent approximately 90 research extensive universities.

**Freshman 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 are from CSRDE and represent approximately 90 research extensive universities.

**Percent seniors rating educational experience “Good” or “Excellent.”** 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 (NSSE) administered in spring 2002. Data for other Research Extensive universities are from NSSE.

**Satisfaction with major.** Percent of seniors who responded “somewhat satisfied” or “very satisfied” to the question, “Please rate your satisfaction with your overall experience in your major” on the Amherst campus’s annual Senior Survey administered at the time of graduation.

**Alumni satisfaction.** Percent of alumni who responded “satisfied” or “very satisfied” to the questions, “Overall, how satisfied are you with the quality of the undergraduate education you received at UMass?” “How satisfied are you with the way UMass prepared you for your current, or most recent, job?”, and “How satisfied are you with the way UMass prepared you for pursuing any further education?” A telephone survey was administered in fall 2002 to students who received their baccalaureate degree during the 1997-98 academic year.

### FINANCIAL HEALTH INDICATORS

**Operating margin.** Operating surplus as a percentage of total operating revenues plus federal and state appropriations. Peer data from published financial statements.

## DEFINITIONS AND SOURCES

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**Financial cushion.** Unrestricted net assets as a percentage of operating expenditures and interest expense. Peer data from published financial statements.

**Debt service to operations.** Debt service payments as a percentage of operating expenditures and interest expense. Peer data from published financial statements.

**Age of facilities ratio.** The average age of plant as measured in years and defined as current year depreciation expense divided by accumulated depreciation. A lower number indicates a newer average age of facilities. Peer data from published financial statements.

### **Endowment per student.**

True and quasi-endowment per annualized FTE student, where FTE of peer institutions is standardized to UMass formula. Peer data from financial statements and IPEDS.

**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.

## PEER INSTITUTIONS FOR UMASS AMHERST

### **Academic Quality Indicators**

The peer group for the University of Massachusetts Amherst is comprised of the top American Research Universities, both public and private institutions, with at least \$20 million in federal research expenditures in fiscal year 2001. Excluded from the reference group of 138 universities are 34 institutions that do not have an undergraduate program (e.g., medical schools). These institutions are listed in *The Top American Research Universities, An Annual Report from The Lombardi Program on Measuring University Performance, 2003, TheCenter, University of Florida*. The percentile rank of UMass is shown with respect to these institutions. The *percentile rank* shows the relative standing of the campus. Percentiles range from 1 (high) to 99 with a percentile rank of 50 representing the median.

*The Top American Research Universities* does not report retention and graduation rates. An alternate source, the Consortium for Student Retention Data Exchange (CSRDE) was used. Retention and graduation rates for UMass students are compared with those of approximately 90 other Research Extensive universities that participated in the data exchange.

### **Financial Peers**

Iowa State University  
Rutgers University  
University of California\*  
University of Colorado\*  
University of Connecticut  
University of Maryland College Park

\*added in 2004



UNIVERSITY OF MASSACHUSETTS  
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# University of Massachusetts Boston

## **2004 Report on Annual Indicators** *University Performance Measurement System*

## ABOUT THE CAMPUS

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UMass Boston, founded in 1965 and merged with Boston State College in 1982, is nationally recognized as a model of excellence for urban universities. A comprehensive, doctoral-granting campus, we provide challenging teaching, distinguished research, and extensive service which particularly respond to the academic and economic needs of the state's urban areas and their diverse populations. We offer 73 Baccalaureate, 61 Masters & Certificate programs & 14 Doctoral programs.

UMass Boston is an unusual university, even among peer urban universities, in the diversity of those attending the institution. In terms of race and ethnicity, UMass Boston is the most diverse public university with over 2,500 undergraduates in New England. In Fall 2003, 40% of our undergraduate students were US students of color.

Among our undergraduates, 45% are 22 or younger, the 'traditional' age for undergraduates. An additional 34% are between 23 and 30. These are often people in the beginning stages of careers or looking for career changes, for whom an undergraduate degree will make a significant difference. A further 21% are 31 and over. These students range in age from retirees to mid-career professionals. The university offers classes during the day, evenings and weekends and online to meet the needs of all these students.

About two thirds of our entering UMass Boston students each Fall semester are transfer students while among our peers transfers make up an average of one half of the entering class. Almost one half of UMass Boston's transfer students transfer from four year colleges; the remainder from Massachusetts Community Colleges and other 2 year schools. Many bring academic credits from multiple academic institutions.

A further indicator of the diversity of our student body is their language diversity. Two fifths of our students speak languages other than English at home. These are not 'international students' attending UMass Boston on a visa -- although we have close to 800 such students -- but recent immigrants and the sons and daughters of immigrants from the communities surrounding the campus. An examination of these students by race and ethnicity showed language diversities crossed these lines, reflecting the immigration into the region from many different parts of the world.

The social and economic diversity of our students is shown by the Pell grant figures. Just over one third of

our fulltime undergraduate students from Massachusetts receive Pell grants, federal funds targeted for those students most in financial need. Two thirds of our in-state undergraduate students apply for financial aid. Of these, 86% are eligible for aid and we are able to offer aid to 97% of the eligible applicants. Thus, we meet 90% of the need of eligible instate applicants.

In addition to those students with significant financial need, we enroll many students who do not require financial assistance as they are supported by family or from their own work and savings. We also serve a substantial number of veterans on our campus.

The research mission of UMass Boston is one we take very seriously. The development of the McCormack Graduate School of Policy Studies in FY03 enables us to more efficiently promote our special strengths in public policy research. The new College of Science & Math will increase our existing strengths in environmental studies. We are rebuilding the infrastructure that will enable our faculty to succeed in obtaining external support for their research.

Our campus wide strategic planning process has been completed this year. The mission of the campus was reviewed and reaffirmed and in that context, a focus on improving retention, research and reputation was woven throughout the plan. We are currently preparing the self study required by NEASC for our accreditation review in 2005.

At the core of UMass Boston is a strong culture of commitment to undergraduate education. When questioned, students report that the dedication of the faculty to their success is the thing they value the most about UMass Boston. In our recent survey of 1997/98 alumni, 97% reported being satisfied or very satisfied with their undergraduate education and with their undergraduate major.

Serving such a large number of nontraditional students poses challenges that we are committed to addressing. Retention is one of the major focuses of our new Strategic Plan. With the new campus center opening this year and with our vigorous efforts to expand and enliven campus life and our increased efforts to accommodate our students' desire for residential life, we hope to enhance the connection students feel with the campus so that more of them will make UMass Boston their final destination for higher education.

## HEADLINES FROM THE 2004 ANNUAL INDICATORS

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Overall, the Boston campus performed well on the annual indicators. It showed improvement on some measures and reached or surpassed the level of its peer institutions on a number of others.

### Academic Quality

We continued to attract increasingly well-qualified freshmen in our entering classes and are more selective than our peers. In admissions, we are placing increasing emphasis on high school GPA and have successfully increased the average over the last 2 years. We have higher average entering SAT scores than our peers. The quality of our students' academic achievement is also demonstrated in the fact that, since 1999, we have had 4 Fulbright winners, one British Marshall scholar and 2 Rhodes semi-finalists.

Pass rates on nursing exams have improved significantly since 2000 and now exceed national averages. We are very pleased with this critically important improvement.

Research dollars per faculty member grew again this year from \$31,925 in FY02 to \$42,916 in FY03. Since FY1999, R&D expenditures have increased 42% to \$15.7 million.

Sponsored Instruction and Outreach has also shown significant growth, from \$17,420 per faculty member in FY1999 to \$41,495 in FY03. We are very pleased with this progress.

### Student Success and Satisfaction

Both alumni and seniors report high levels of approval and satisfaction with the educational experience they have had at UMass Boston.

We have developed and implemented a graduating senior survey integrated into the graduation process. This provides us a method for the regular assessment of student satisfaction with their UMass Boston experience. We also participate regularly in the National Survey of Student Engagement and have implemented the CIRP Freshmen Survey this year. These surveys will enable us to more precisely focus our improvement efforts around retention, a continuing challenge for our campus.

The opening of the campus center and the development of off-campus residence facilities are expected to increase retention by increasing the sense of community. Careful raising of admission standards and building the sense of community, with on-campus housing and other activities, are necessary to improve retention and graduation rates.

### Access and Affordability

We continue to serve residents of Greater Boston communities, fulfilling our mission of access to diverse populations. We serve large numbers of minority students, first-generation college students, and students with English as a Second Language.

### Service to the Commonwealth

Four-fifths of our alumni reside in Massachusetts. We continue to see an increase in online enrollments and we currently offer 36 credit & non-credit certificate programs and 4 Masters degrees to the Corporate and Professional Community. In addition to applied research addressed to the policy needs of the Boston area and the state, the campus is heavily engaged in a wide range of outreach activities, from economic impact studies to our partnership with Dorchester High.

### Financial Health

Our financial health grew vigorously during the four year period through FY2001. In FY02 & 03, we managed significant reductions in state appropriations and our financial architecture remained stable through other revenue increases, an early retirement program and a well developed cost reduction and restructuring process through both years. Although FY2003 financial indicators such as Operating Margin and Financial Cushion are not at optimal levels, we intend to move forward with our new Strategic Plan, and at the same time manage our resources in a way that insures financial stability. We expect to see a steady improvement in these indicators as a result. Debt Service, while modest by current standards at 4.58%, will rise as we open our new campus center and address many capital repairs and deferred maintenance needs.



## 2004 ANNUAL INDICATORS AT A GLANCE

### ACADEMIC QUALITY

- High School GPA of Freshmen 2.97
- SAT Scores of Freshmen (25<sup>th</sup>-75<sup>th</sup>) 950-1110
- Average GPA of entering transfer students 3.03
- Licensure/Certification Pass Rates
  - Mass Teacher Certification Test 88%
  - NCLEX (Nursing) 91%
- Research Per Faculty \$42,916
- Sponsored Instruction & Outreach/Faculty \$41,495

### STUDENT SUCCESS AND SATISFACTION

- Freshman One-Year Retention Rate 70%
- Freshman Six-Year Graduation Rate 34%
- Transfer one-year retention rate 71%
- Transfer four-year Graduation rate 69%
- % Seniors Rating Educational Experience "Good" or "Excellent" 82%
- % Graduates "Satisfied" or "Very Satisfied" with quality of education 97%
- % Graduates "Satisfied" or "Very Satisfied" with preparation for career further education
  - with preparation for career 88%
  - further education 91%
- % Undergraduates satisfied with their major 97%
- No. students enrolled in for-credit internships 658

### ACCESS AND AFFORDABILITY

- % Undergraduates ALANA Students 40%
- % First Generation College Students 56%
- % Undergraduates who Speak English as a Second Language 37%
- % Undergraduate Students from MA 91%

### SERVICE TO THE COMMONWEALTH

- % Graduates Who Live in MA 80%
- Rate of growth in distance education enrollments 78%
- Year to Date Enrollments in distance/online courses 1773

### FINANCIAL HEALTH

- Operating Margin -4.55%
- Financial Cushion 3.68%
- Debt Service to Operations 4.58%
- Endowment Per Student \$2,059
- Annual Growth in Endowment 6%
- Private Funds Raised Annually (millions) \$3,531
- Age of Facilities indicator(s) 11.78

## ACADEMIC QUALITY

### High School GPA of Freshmen

The average GPA of entering first time freshmen at UMB remained stable from 1998 through 2001. It increased to 2.92 for 2002 and 2.97 for 2003.

These first time freshmen are only one third of our new students each Fall, two thirds are transfer students.

	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003
> 3.00	35%	35%	34%	41%	48%
2.51 - 2.99	38%	37%	40%	43%	45%
<2.50	27%	28%	26%	16%	7%
Average	2.83	2.82	2.82	2.92	2.97

### SAT Scores of Freshmen

The mean SAT scores of entering freshmen increased steadily from 1019 in Fall 1998 to 1051 in Fall 2002. Fall 2003 means were slightly lower at 1042. In Fall 2001 (latest available data for peers), UMB scored above the peer mean by 25 points.

	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003	Fall 01 Peers
<b>75th %ile</b>	1110	1140	1150	1130	1110	1143
<b>25th %ile</b>	940	950	960	970	950	923
<b>Mean</b>	1033	1046	1058	1051	1042	1033

### Average GPA of entering transfer students

Two thirds of all new students entering in the Fall are transfer students. The average GPA of these students was stable from Fall '99 to Fall '01, rising to 2.95 in Fall '02, and to 3.03 in Fall '03. There are no comparable peer data for this indicator.

	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003
<b>UMB</b>	2.84	2.84	2.86	2.95	3.03

### Licensure and Certification Test Pass Rates

#### National Council Licensure Examination for Registered Nurses

First time test taker pass rates have increased 14% points in four years - to 91% in 2003  
87% is the National Pass Rate for NCLEX in 2003

	2000	2001	2002	2003
First Time Taker Pass Rate	77%	81%	88%	91%
			87%	87%

#### Mass Teacher Certification Pass Rate

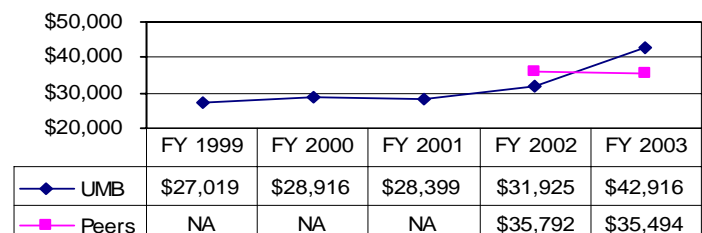
Our certification pass rates fell from 95% to 88% in the last year  
In 2001/2002 UMB pass rates were above the state average of 91%  
2002/2003 statewide figures are not available till October 2004.

	1999/00	2000/01	2001/2002	2002/2003
	80%	90%	95%	88%
			91%	NA

### Research Per Faculty

R&D per faculty member grew by 58.8% between FY99 and FY03 at UMB reaching \$42,916 per full-time tenured faculty in FY03, well above our peer average.

In calculating the peer data, we have excluded the University of Illinois Chicago, which has a Medical School and whose current Funds Revenue and Research Expenditures are 15 times larger than UMass Boston.

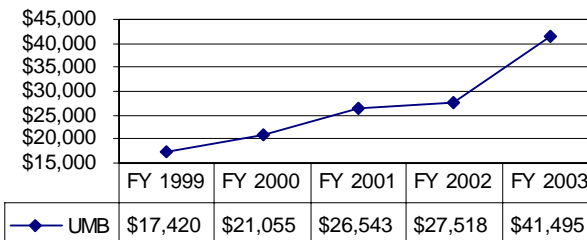


	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Total R&D Expenditures as reported in NSF Report in Millions	11,132	12,058	11,672	13,121	15,793

**Sponsored Instruction & Outreach/Faculty**

UMB's sponsored activity in Instruction and Public Service continues to grow rapidly. In FY03, we reached an average of \$41,495 per faculty member. This is a 138% increase since FY99, reflecting our commitment to training, education and public service.

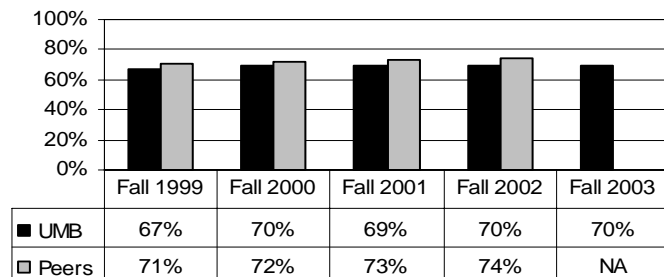
Financial information to calculate this measurement for our peers is not available because of the new GASB standards for financial reporting.



**STUDENT SUCCESS AND SATISFACTION**

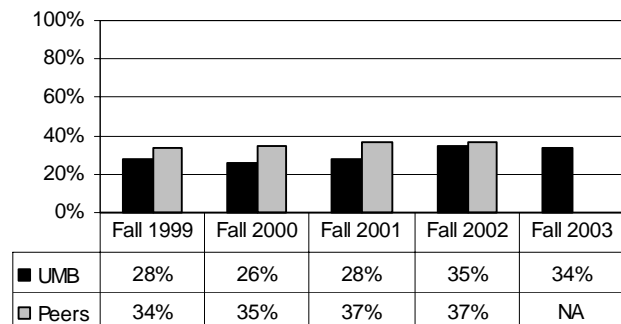
**Freshman One-Year Retention Rate**

The one year retention rate for freshmen has been relatively stable over the last five years. It remains lower than our peer average. Changes in our undergraduate curriculum will increase retention by creating learning communities. The opening of the campus center this year is expected to influence retention favorably in the future. The lack of residence halls continues to be a challenge to the university. Retention rates have remained relatively stable despite increases in costs.



**Freshman Six-Year Graduation Rate**

The 1997 cohort (reported as Fall 2003) retention rate was 34%, a very slight decline. The six year graduation rate of freshmen is lower than that of our peers and has not shown consistent increases. We anticipate for classes entering now, the opening of the campus center will have a long-term positive effect on graduation rates. Ongoing efforts to improve retention will also positively impact the graduation rate over time. Graduation rates, of necessity, reflect cohort histories and not the future.



**Transfer One-Year Retention Rate**

This shows the one year retention rate of all full-time transfer students, however many credits they are transferring into UMB. The rates cannot be compared nationally as no such data are available. Retention rates increased this year spite of increases in costs.

	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003
Percent	72%	68%	68%	66%	71%

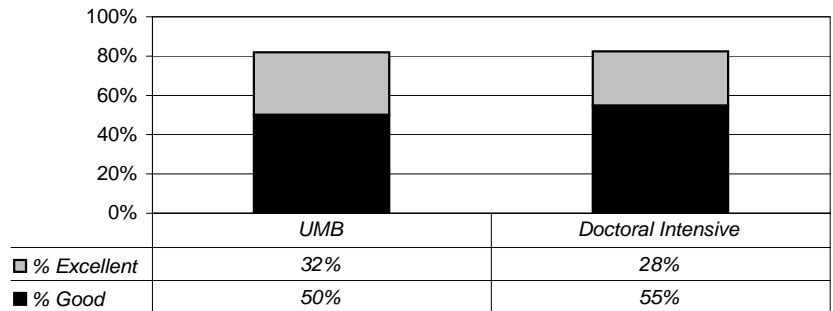
**Transfer Four Year Graduation Rate**

The four year transfer graduation rate rose to 69% in Fall 2003. There are no peer comparisons available for this indicator as these statistics are not collected nationally.

	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003
Percent	62%	66%	67%	66%	69%

**% Seniors Rating Educational Experience "Good" or "Excellent"**

Over 82% of the UMB seniors responding to the National Survey of Student Engagement rated their experience here as "good" or "excellent". This compares very favorably with the 82% of seniors at all responding Doctoral Intensive institutions who rated their experience similarly.



**% graduates "satisfied or very satisfied" with quality of education**

Alumni Survey: *The President's Office Alumni Survey* **2002**  
 Overall, how satisfied are you with the quality of the undergraduate education you received at UMass Boston? 97%

**% graduates "satisfied or very satisfied" with preparation for career/further education**

Alumni Survey **2002**  
 How satisfied are you with the way UMass Boston prepared you for your current, or most recent, job? 88%  
 How satisfied are you with the way UMass Boston prepared you for pursuing any further education? 91%

**% Undergraduates satisfied with their major**

Alumni Survey **2002**  
 Overall, how satisfied are you with the quality of your specific undergraduate major at UMass Boston? 97%

**Number of students enrolled in for-credit internships**

	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003
UMB	175	192	166	191	658

In spring 2003 the campus successfully instituted a centralized data collection system for tracking information regarding the number of students enrolled in for-credit internships. This system replaced the former decentralized one that captured only the information listed specifically under the designation "internship." It did not track information on internships that are integrated into the curriculum of majors.

**ACCESS AND AFFORDABILITY**

**% Undergraduate ALANA Students**

Two fifths of all undergraduates at UMB are students of color, while only one fifth of the population of the area from which we draw (Mass portion of the PMSA, Census 2000) are persons of color.

UMB continues to be the most diverse public university with over 2,500 undergraduates in New England.

	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003
<b>Number</b>	2781	2699	2773	2655	2608
<b>Percent</b>	38%	38%	39%	39%	40%
<b>Comp. %</b>	NA	20%	NA	NA	NA

**% First Generation College Students**

Question: *Did either of your parents receive a bachelor's degree?* 2002 **2003**

Alumni Survey: % reporting that neither of their parents had received a Bachelors degree. 64%  
 NSSE 2002: % reporting that neither of their parents had received a Bachelors degree. 56%  
 CIRP 2003: % reporting neither of their parents had received a Bachelors degree. 52%

**% Undergraduates who Speak English as a Second Language**

Three recent surveys contain data on the percentage of students who speak a language other than English at home

*Retention Study 2002* Fall 2000 First Time Full Time Freshmen  
*Graduating Senior Survey*, August 2002, May 2003  
*FullTime, First Time Freshmen Survey 2003 CIRP*: Is English your native language? 35% indicated No

2002	2003
42%	37%
39%	35%

**% Undergraduate Students from Massachusetts**

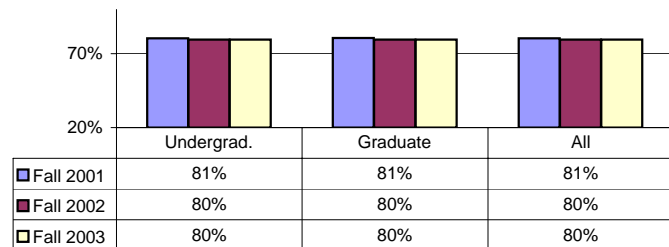
UMB serves primarily undergraduate students from Massachusetts. Although we have consistently attracted international and out-of-state students, in Fall 2003 9% of our undergraduates students were international or out-of-state students.

	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003
<b>Number</b>	8854	8528	8,711	8,217	7,975
<b>Percent</b>	90%	89%	90%	90%	91%

**SERVICE TO THE COMMONWEALTH**

**% Graduates Who Live in Massachusetts**

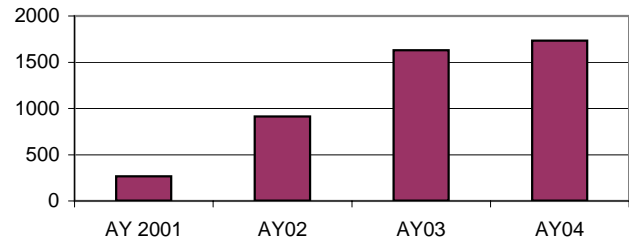
The majority (80%) of the undergraduate and graduate alumni of UMB stay, work, and pay taxes in Massachusetts.



**Rate of Growth in Distance Education Enrollments**

Enrollments have grown significantly from the first offerings of online instruction in Fall 2000.

AY04 figures not include Summer 2004 activity. The estimated summer 2004 enrollment is 897.



**Enrollments in Distance/Online Courses**

Online course enrollment has grown very rapidly over the last four years. The enrollments for AY04 do not include the summer 2004 activity - which is estimated at 897 students, giving an annual growth rate estimate of 61%

	AY01	AY02	AY03	AY04 to date
<b>UMB</b>	268	914	1631	1733
<b>Annual Rate of Growth</b>	1st year	241%	78%	6%

## FINANCIAL HEALTH

### Operating Margin

Changes in GASB accounting standards now require the recording of depreciation. This has had a dramatic effect on the FY03 figures. The FY03 Operating Margin under FY02 accounting standards would have been 3.58%. Additional factors also contributed to the small operation deficit - reductions in state appropriations, increases to interest on indebtedness because of increasing debt service and a small decline in enrollment.

	FY 2002	FY 2003
<b>UMB</b>	-5.35%	-4.55%
<b>Peers Average</b>	-5.43%	-4.01%

The FY04 Operations margin shows improvement and is close to the peer average.

### Financial Cushion

The Boston campus had extraordinary growth in financial cushion from FY98 through FY01. In FY02 & FY03 we experienced the reality of the state fiscal crisis. We were fortunate to have prudently accumulated financial cushion in the prior years. This financial cushion, while decreased somewhat in FY02, is still quite respectable. We find ourselves challenged when compared to our peers on the basis of financial cushion, as all of our peer institutions are more mature than UMass Boston, and several are aspirant peers.

	FY 2002	FY 2003
<b>UMB</b>	4.48%	3.68%
<b>Peers Average</b>	7.10%	10.71%

The FY2003 peer average was 10.71%.

### Debt Service to Operations

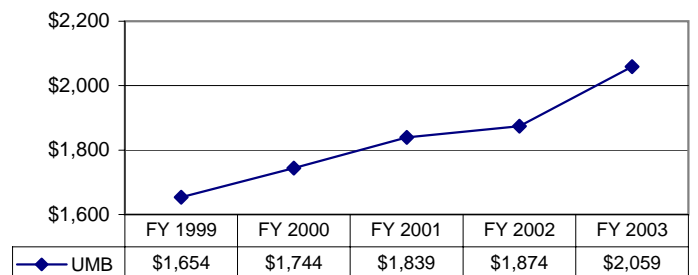
The debt service ratio shows a planned increase over FY02 due to UMB's aggressive capital plan and continuing investment in the infrastructure for science, technology and research. The debt service includes the new Campus Center, campus energy conservation, continuing scientific equipment needs, the Peoplesoft project developmental costs, campus rewiring and a number of deferred maintenance projects.

	FY 2002	FY 2003
<b>UMB</b>	2.17%	4.58%
<b>Peer Average</b>	3.08%	3.57%

### Endowment Per Student

The endowment balance continued to increase in FY03, showing a larger growth than in the previous two years. This reflects both Development office initiatives and a small increase in earnings.

Peer data are not available for this measure.



	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
<b>Total in Millions</b>	\$16,915	\$18,304	\$18,755	\$19,255	\$20,491

### Annual growth in endowment

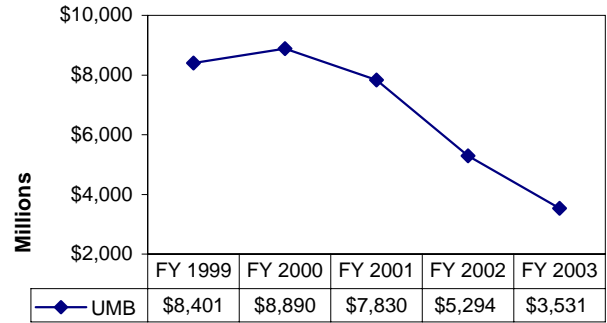
FY 2003 rate of endowment growth marked an upswing from the previous year, mirroring national trends. It is expected with the revitalization of our Advancement Office and the aggressive fund raising initiatives planned, we should achieve strong future endowment growth.

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
<b>Number</b>	\$2,567,408	\$1,388,953	\$451,015	\$499,711	\$1,235,916
<b>Percent</b>	18%	8%	2%	3%	6%

**Private Funds Raised Annually**

Private fund raising was extraordinarily successful in the years 1996-2001 resulting from the first ever capital campaign. As anticipated, this slowed down after 2001 marking "the downside of the curve" after the previous five years.

We anticipate that the current reorganization of the Advancement office and strong planning for future activities will increase our private fundraising.



**Age of Facilities indicator(s)**

The Age of Facilities for UMass Boston will be reduced in FY04 for the addition of capitalizable costs for improvements, and again in FY05 by the impact of the new campus center.

	FY2002	FY2003
UMB	11.53	<b>11.78</b>
Peers	11.95	13.16

## DEFINITIONS AND SOURCES

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### 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.** 25<sup>th</sup>, 75<sup>th</sup> percentiles and mean SAT scores 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 UMB according to admissions policy.

**Licensure and certification test pass rates.** Pass rate on Massachusetts Teacher Certification Test. Pass rate on National Council Licensure Examination for Registered Nurses.

**Research per 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.

**Sponsored instruction & outreach per faculty.** Restricted expenditures for instruction (e.g., training grants) and service per financial statements, divided by total tenure system faculty as reported to IPEDS. Peer data are from financial statements and IPEDS.

### STUDENT SUCCESS AND SATISFACTION INDICATORS

**Freshman 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 from U.S. News and represent 4-year averages.

**Freshman 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 are from US News and represent 4-year averages.

**Transfer one-year retention rate.** Percent of full-time transfer students at any level who entered in

the prior fall and were still enrolled or graduated as of the next fall.

**Transfer four-year graduation rate.** Percent of full-time upper division transfers (60+ credits) who entered in a given fall and had graduated within four years.

**Percent seniors rating educational experience “good” or “excellent.”** 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 2002. Peer data are from NSSE.

**Percent graduates “Satisfied” Or “Very Satisfied” with quality of education.** Percent of graduates who responded “satisfied” or “very satisfied” to the question, “Overall how satisfied are you with the quality of the undergraduate education you received at UMass Boston?” on the Alumni Survey of 1997-98 graduates in 2002.

**Percent graduates “Satisfied” or “Very Satisfied” with preparation for career/further education.** Percent of graduates who responded “satisfied” or “very satisfied” to the questions, “How satisfied are you with the way UMass Boston prepared you for your current, or most recent, job?” “How satisfied are you with the way UMass Boston prepared you for pursuing any further education?” on the Alumni Survey of 1997-98 graduates in 2002.

**Percent undergraduates satisfied with their major.** Percent of undergraduates who responded “satisfied” to the question, “Overall, how satisfied are you with the quality of your specific undergraduate major at UMass Boston?” on the Alumni Survey of 1997-98 graduates in 2002.

**Number of students enrolled in for-credit internships.** Data from annual reports of the Cooperative Education Office at UMB, College of Public and Community Service, College of Management; Career and Alumni Programs, and the University Advising Center.



## DEFINITIONS AND SOURCES

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### ACCESS AND AFFORDABILITY INDICATORS

#### **Percentage of undergraduate ALANA students.**

Undergraduates who are African-American, Hispanic/Latino, Asian and/or Native American, divided by total undergraduate U.S. citizens and permanent residents who report race/ethnicity. Data from Census 2000 for the Massachusetts portion of the Boston-MA-NH PMSA are used for comparison.

**Percent of first generation college students.** Data are from the Spring 2002 National Survey of Student Engagement.

**Percent undergraduates who speak English as a second language.** Data are from the Retention Study 2002 and the Graduating Senior Survey.

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

### SERVICE TO THE COMMONWEALTH INDICATORS

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

**Rate of growth in distance education enrollments.** Percentage rate of growth in annual online course registrations between AY2001 and AY2003. Does not represent headcount enrollments.

**Year to date enrollments in online courses.** The Division of Corporate, Distance and Continuing Education began offering online Education courses in Fall 2000. Count represents course registrations, not headcount enrollments, during a given academic year (Fall-Summer).

### FINANCIAL HEALTH INDICATORS

**Operating margin.** Operating surplus as a percentage of total operating revenue, plus state appropriations, plus gifts. 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.

**Endowment per student.** Total UMass Boston endowments per annualized FTE student, where FTE of peer institutions is standardized to UMass formula. Peer data are from IPEDS.

**Annual growth in endowment.** Annual growth in total UMass Boston endowment balance.

**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.

**Age of facilities indicator(s).** Age of facilities ratio calculates the relative age of plant in years. Age of facilities is determined by dividing accumulated depreciation by the annual depreciation.

### PEER INSTITUTIONS FOR UMASS BOSTON

University of Illinois at Chicago  
 Old Dominion University  
 Georgia State University  
 University of Memphis  
 University of Missouri-St Louis  
 Cleveland State University  
 Portland State University  
 CUNY-Queens  
 CUNY-Brooklyn  
 George Mason University



UNIVERSITY OF MASSACHUSETTS  
Amherst • Boston • Dartmouth • Lowell • Worcester

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# University of Massachusetts Dartmouth

## **2004 Report on Annual Indicators** *University Performance Measurement System*

## ABOUT THE CAMPUS

**Size** — The University of Massachusetts Dartmouth is in a rural environment situated on 710 acres, within an hour of four major population centers in the Commonwealth. The Dartmouth campus has been experiencing unprecedented student demand over the last five years, and we experienced a 2% increase in over-all enrollment for fall 2003. The enrollment for fall 2003 was 7,381 day-division students (773 of these are graduate students) and 903 continuing education students. Demand for housing is increasing, and we built two 400-bed dormitories for fall 2002. In the fall 2003, the full-time FTE faculty was 330 and the part-time FTE faculty was 78.

**Student Body** — Many of our students are first-generation college attendees, 50% of whom come from the south-coast region. About 40% of our students come from outside the region but within the Commonwealth. On average, our students work more than 20 hours per week in order to fund their education, and have a work ethic that serves them well when they graduate. Our students enjoy levels of success after graduation that are exemplary, and our small, intimate, regional campus offers an attractive alternative to the larger, national public campuses.

**Academic Programs** — We offer 58 undergraduate and graduate degree programs in five colleges and one school of Arts and Sciences, Business, Engineering, Visual and Performing Arts, Nursing, and Marine Science and Technology. Among the programs we offer are a strong group of nationally or internationally accredited programs (21): Nursing (2), Engineering (5), Visual Arts (6), Chemistry (1), Medical Laboratory Science (1), Business (6). We offer 19 Master's degree programs and 4 doctoral degree programs. We have an unusual program profile compared to other Master's Comprehensive Institutions. Most institutions have large, low-cost, high enrollment programs such as Teacher Education, Criminal Justice, and Journalism. Instead we emphasize high-cost programs including Visual and Performing Arts, Engineering, Marine Science and Technology, and Nursing.

**Degrees Granted** — UMass Dartmouth produces annually over 1,000 graduates, and that number will grow in future years due to recent enrollment increases. Because eighty percent of our graduates

remain in Massachusetts, the degrees we grant make a direct, important contribution to the Commonwealth. Although we are still small in doctoral education, we have now produced 14 PhDs at the UMass Dartmouth campus. We present here a table to display the range of degrees and their academic fields, awarded in 2003.

UMass DARTMOUTH DEGREES GRANTED IN 2003			
	BAC	MST	PhD
Arts & Sciences			
Humanities	121	12	0
Sciences	81	12	0
Social Sciences	197	11	0
Interdisciplinary	47	18	0
Business	270	51	0
Engineering	120	77	1
Nursing	59	17	0
Visual & Performing Arts	151	17	0
<b>TOTAL</b>	<b>1046</b>	<b>215</b>	<b>1</b>

**Evolution** — We are a campus in transition, building on a long and productive history of undergraduate teaching and learning and expanding certain graduate and outreach programs. We have been building a full research program, and have seen our research funding grow to \$16.5M per year from a base less than \$2M ten years ago. We are adding an MS in Civil/Environmental Engineering and an MA in Portuguese Studies and are targeting other areas for new graduate programs over the next 5 years to support the growing research activity and to enhance the overall educational environment for both undergraduate students and graduate students.

**Regional Factors** — UMass Dartmouth is ranked among the top-ten regional public universities in the North by U.S. News and World Report. UMass Dartmouth is *the* university in southeastern Massachusetts, and we are fully engaged. Expectation for outreach and the use of our intellectual resources is extremely high. We have a strong constituency among regional industry, the community, and the regional legislative delegation. Many of these delegates are alumni, as are the Mayors of Fall River and New Bedford. We have vigorous and productive major outreach centers both inside and outside the main campus boundaries.

## HEADLINES FROM THE 2004 ANNUAL INDICATORS

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The UMass Dartmouth indicators show overall strong performance. The campus has reached or exceeds the level of its peer institutions on many indicators. The indicators highlighted below are indicative of the campus's successes in the past few years. Also highlighted are areas of change.

*These indicators report on the status of the institution in Fiscal Year 2003.*

### Academic Quality

The Performance Measurement System's indicators for high school GPA and SAT scores help us gauge whether our admissions quality is matched in the academic experience that we deliver, and they reassure us that they are. UMass Dartmouth seeks students well prepared for college, and the campus works hard to recruit students across a relatively broad spectrum. In this way we help realize our mission to serve the region and the commonwealth by giving a wider range of capable students access to a high-quality education.

Academic quality is also indicated by the percent of undergraduate class sections that are under 20 and over 50. The trend across five years shows that UMass Dartmouth is moving to maximize utilization of instructional capacity while still retaining high academic quality. Early retirement programs have had the effect of somewhat increasing class sizes.

Our faculty are both teachers and scholars who bring the excitement of their research and creative work into the classroom. The Dartmouth indicator for Sponsored Research/Faculty has almost tripled in three years, going from \$19,769 per faculty member in FY 1999 to \$56,427 in FY 2003. The total sponsored research activity was \$16.48 million in FY 2003. At \$8.72 million, federally-funded research is well represented, indicating the Dartmouth campus' involvement in meeting national priorities through research and development; and the proportion of our R&D that is federally funded is growing. This indicator does not capture the many other kinds of scholarship at the university that are not funded by external sources, including artistic creation and much of the work in the humanities and social sciences.

### Student Success and Satisfaction

The one-year retention and six-year graduation rates for Dartmouth's freshmen compare well with those of our peers and are strong when seen in the light of research by such nationally-recognized experts as Alexander Astin. The indicators for transfer student retention and

graduation fill in the picture that is left incomplete by the standard measure for freshmen success.

Our graduates are very positive about their UMass Dartmouth experiences. The indicators from the 2002 UMass Survey of Baccalaureate Degree Recipients Graduating in 1997-1998 and the National Survey of Student Engagement reveal that the large majority of UMass Dartmouth's graduates are satisfied or very satisfied with how well their education prepared them for work and further education.

### Service to the Commonwealth

The two indicators in this category show that our impact on the Commonwealth is substantial.

The indicator on Enrollment in Corporate Education and Training helps to verify UMass Dartmouth's contributions to the Commonwealth and to Southeastern Massachusetts by giving a profile of activities and participants. In all, 4,030 individuals participated in professional development training; seminars for members of professional organizations; workforce training; and post-baccalaureate studies for professionals.

Under the heading "Regional Impact" are assembled examples of UMass Dartmouth's transformational impact in the region. The examples—including cultural, artistic, and intellectual events hosted; economic development, technology development, rehabilitation, and K-12 projects undertaken; library usage by the community; leadership development; and news citations—highlight the campus's extensive regional influence.

These categories help tell the story of UMass Dartmouth's successes in achieving our *mission* to "act as an intellectual catalyst for regional, economic, social, and cultural development."

### Financial Indicators

We have continued to address fiscal challenges. Progress was made on reducing a major structural deficit. A set of fiscal controls and processes are in place to ensure the achievement of full fiscal stability, and strategic planning has been linked to resources to better align academic goals and spending. Next steps include the reduction of accrued liability and building of fund balances. Funding sources have been diversified and planned enrollment growth has been adopted as a fiscal stabilizing strategy. Current and anticipated state allocation reductions, while challenging, are being dealt with effectively, keeping our core missions strong.

## 2004 ANNUAL INDICATORS AT A GLANCE

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### ACADEMIC QUALITY

- Average HS GPA of Freshmen 3.06
- SAT Scores of Freshmen (average) 1058
- SAT Scores of Freshmen (25<sup>th</sup>-75<sup>th</sup>) 980 - 1130
- Licensure/Certification Pass Rates
  - Mass Teacher Test* 96%
  - Nursing* 96%
- Sponsored Research/Faculty \$56,427
- Sponsored Research \$16,476,657
- Federal Research Support \$ 8,717,563
- Undergraduate Classes under 20 34.5%
- Undergraduate Classes of 50 or More 8.7%

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### STUDENT SUCCESS AND SATISFACTION

- Freshman One-Year Retention Rate 76%
- Transfer One-Year Retention Rate 78%
- Freshman Six-Year Graduation Rate 50%
- Transfer Six-Year Graduation Rate 77%
- Percent of Graduates "Satisfied or Very Satisfied" with Quality of Education 97.5%
- Percent of Graduates "Satisfied or Very Satisfied" with Preparation for Current Work 81.3%
- Percent of Graduates "Satisfied or Very Satisfied" with Preparation for Further Education 85.1%
- Percent of Seniors Rating Educational Experience "Good" or "Excellent" 79%

### SERVICE TO THE COMMONWEALTH

- Enrollment in Corporate Education & Training 4,030 participants
- Regional Impact
  - Activities of Centers 7,030 participants
  - Library use by surrounding community 2,427 inquiries /3,300 cards
  - Musical and artistic events 17,000 participants
  - News citations over 5,000
  - Regional leadership 12 legislators are alums

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### FINANCIAL HEALTH

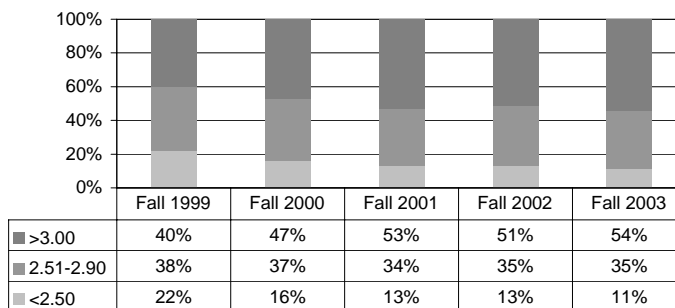
- Operating Margin 3.5%
- Financial Cushion -3.7%
- Debt Service to Operations 5.3%
- Endowment per Student \$1,808
- Endowment Assets \$12,893,454
- Private Funds Raised Annually \$3,417,341
- Age of Facilities Ratio 17.31 to one

*The indicators report on the status of the institution in Fiscal Year 2003.*

## ACADEMIC QUALITY

### High School GPA of Freshmen

A steady increase trend in our HS GPA profile over the past five years shows that UMass Dartmouth is succeeding in its goal of improving student quality. SATs have also risen.



	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003
Average	2.89	2.98	3.04	3.02	<b>3.06</b>

### SAT Scores of Freshmen

A steady increase trend in SAT scores together with improvement in GPAs show that UMass Dartmouth is succeeding in improving the quality of its incoming freshmen. Although our peers have higher SATs, given the competitive admissions environment in New England and our mission of access, our SATs are appropriate. The SAT data include Alternative Admission students. The peer data include aspirant as well as comparative peers.

	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003	Peers
<b>75th %ile</b>	1130	1130	1140	1130	<b>1130</b>	1183
<b>25th %ile</b>	950	960	970	970	<b>980</b>	985
<b>Avg</b>	1029	1043	1050	1047	<b>1058</b>	1084

### Licensure and Certification Test Pass Rates

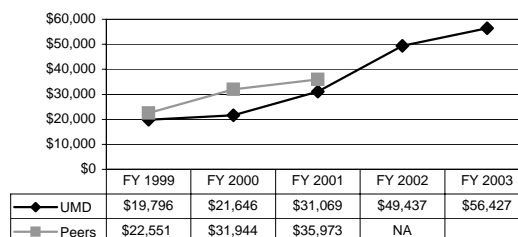
UMass Dartmouth Nursing students' performance on the licensure examination is strong, 4 points above the national average, with a 96% pass rate. Performance on the Massachusetts Tests for Educator Licensure is high, with an overall 96% of students passing all three portions—Basic Skills Reading, Basic Skills Writing, and the Academic Content Area. Students may not enter the teacher preparation program before passing the skills tests or advance to student teaching before passing the content test.

<b>Nursing Licensure</b>	2002	2003
Pass rate:	92%	<b>96%</b>
National Average:	87%	<b>87%</b>
Number Tested:	53	<b>50</b>
<b>Teacher Preparation</b>	2002	2003
Pass rate:	79%	<b>96%</b>
State Average:	91%	<b>97%</b>
Number Tested:	61	<b>48</b>

### Sponsored Research/Faculty

UMass Dartmouth has a strong overall upward trend in this indicator, which is \$56,427 in FY 2003. The increase between FY 1999 and FY 2003 is 185%. The total R&D value is \$16,476,657 for FY 2003. FY 2001 is the latest year for which peer comparisons are available.

Increasing research and scholarly activity is a key component in UMass Dartmouth's strategic plan. Heightened research agendas in the colleges and the School for Marine Science and Technology are important to UMass Dartmouth's plans for full UMass partnership. Increased income from indirect charges is also important to our future revenue stream.



Total R&D Value				
FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
\$5.820 M	\$6.905 M	\$9.881 M	\$15.721 M	\$16.477 M

**Federal Research Support**

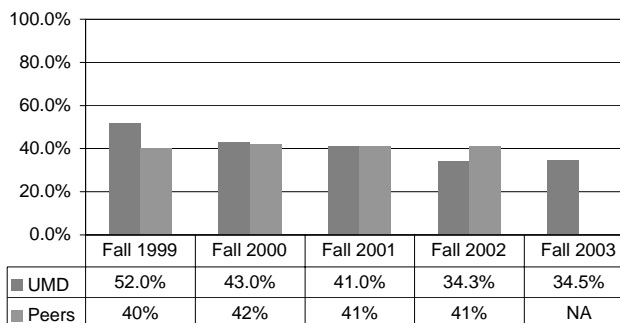
UMass Dartmouth continues to see increases in funded research supported by federal dollars, rising in FY 2003 to almost \$9 million. The institution is thus expanding its involvement in meeting national priorities through research and development. For comparability with peers, we report on federal research support in science and engineering only. The federally funded portion of overall R & D activity is growing at the Dartmouth campus.

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
<b>UMD</b>	\$3.983 M	\$3.228 M	\$4.928 M	\$7.142 M	<b>\$8.718 M</b>
<b>PEERS</b>	\$4.078 M	\$3.905 M	\$5.877 M	NA	NA

**% of Undergraduate Classes Under 20**

This indicator measures the percentage of undergraduate sections that have 20 or fewer students. Small class sizes, permitting individual attention to students, indicate academic quality. The trend across five years shows that UMass Dartmouth is moving to maximize utilization of instructional capacity while retaining academic quality.

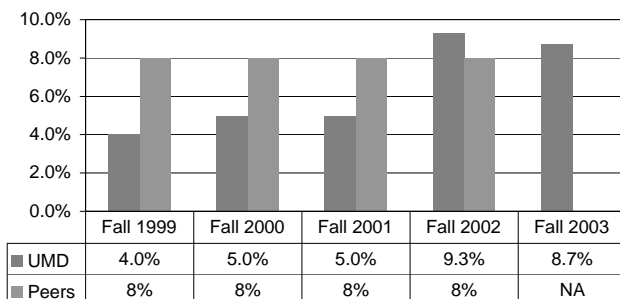
Early retirement programs have helped cause class sizes to rise. Maintaining balance in use of instructional resources with high academic quality is a campus goal.



**% of Undergraduate Classes 50 or Higher**

This indicator measures the percentage of undergraduate sections larger than 50; a smaller percentage is better. Small class sizes, permitting individual attention to students, indicate academic quality. Only 8.7% of the classes undergraduates take at the Dartmouth campus have 50 or more students. The trend is for the percentage of our undergraduate classes that are larger than 50 to increase, as we strive to maximize utilization of instructional capacity while retaining high academic quality.

Early retirement programs have helped cause class sizes to rise. This indicator is likely to increase more in Fall 2004, due to the second retirement incentive.



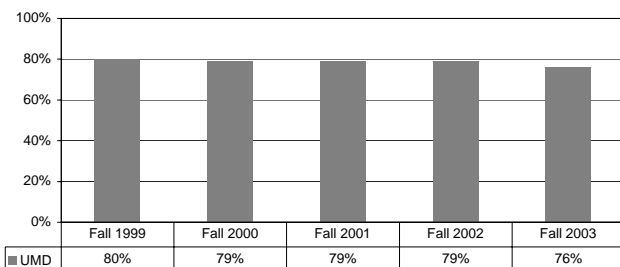
**STUDENT SUCCESS AND SATISFACTION**

**Freshman One-Year Retention Rate**

76% percent of last fall's first-time, full-time freshmen were still enrolled as of the next fall.

Research by higher-education scholars such as Alexander W. Astin shows that institutions with UMass Dartmouth's profile of on-campus residency, admissions quality, and institutional type do well if they achieve first-year retention rates above 75% and quite well at 80% or above. Our peers average 78% on this measure.

This year's number represents a set-back from our goal of exceeding 80% on this measure. We are studying the factors that led to a decline in retention.



2-yr average from US News 2004 Edition (Fall 2002): Peers 78%

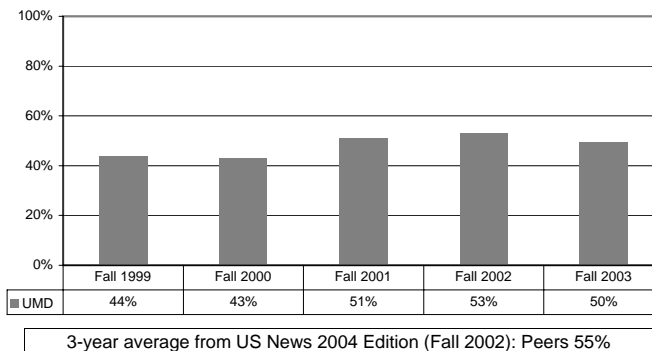
**Transfer One-Year Retention Rate**

This indicator shows that 78% percent of last fall's entering transfer students were either still enrolled as of the next fall or had completed their program. We are meeting the needs of the large proportion of these students. We also note that today's students have a wide range of reasons for transferring, and more and more do so readily. Transfer students are important in the university's enrollment and access goals.

	Fall 2000	Fall 2001	Fall 2002	Fall 2003
<b>Percent</b>	77%	79%	80%	<b>78%</b>

**Freshman Six-Year Graduation Rate**

50% of the first-time, full-time freshmen who entered in fall 1996 had graduated from UMass Dartmouth by the end of the 2003 calendar year. UMass Dartmouth continues a trend of recovery from a series of low years. The low values in 1999 and 2000 reflect relatively difficult circumstances in 1993 and 1994, when those freshman classes were accepted. Research by higher-education scholars such as Alexander W. Astin shows that institutions with UMass Dartmouth's profile of on-campus residency, admissions quality, and institutional type are doing well if they achieve graduation rates above 50%. We are performing as well as our comparative peers alone, who have together a 51% graduation rate.



**Transfer Four Year Graduation Rate**

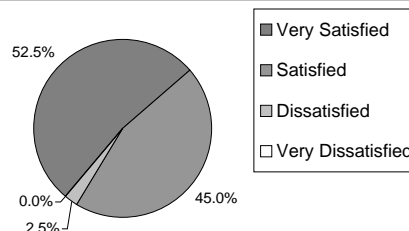
This indicator shows that 77% percent of the full-time upper division transfer students who entered in fall of 1999 had completed their program. Upper division students are those with 60 or more credits.

	Fall 2000	Fall 2001	Fall 2002	Fall 2003
<b>Percent</b>	75%	78%	69%	<b>77%</b>

That the rate of degree completion for transfer students is not much lower than the rate at which transfer students return for a second year suggests we are their school of choice for degree completion.

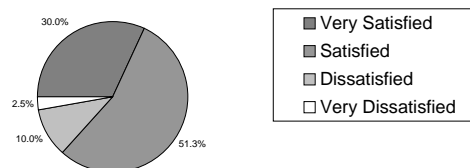
**% Graduates "Satisfied or Very Satisfied" with Quality of Education**

Over 97% of our graduates reported being satisfied or very satisfied with the quality of the education they received at UMass Dartmouth. Data are from the UMass Survey of Baccalaureate Degree Recipients Graduating in 1997-1998, conducted in 2002.



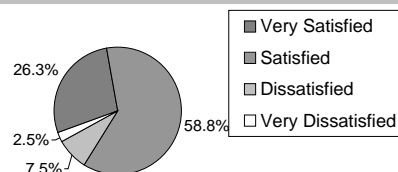
**% Graduates "Satisfied or Very Satisfied" with Preparation for Work**

81% of our graduates reported being satisfied or very satisfied with the way UMass Dartmouth prepared them for their current, or most recent, job. In a related question, 80% reported being satisfied or very satisfied with their career to date. Data are from the UMass Survey of Baccalaureate Degree Recipients Graduating in 1997-1998, conducted in 2002.



**% Graduates "Satisfied or Very Satisfied" with Preparation for Further Education**

85% of our graduates reported being satisfied or very satisfied with the way UMass Dartmouth prepared them for pursuing further education. Data are from the UMass Survey of Baccalaureate Degree Recipients Graduating in 1997-1998, conducted in 2002.

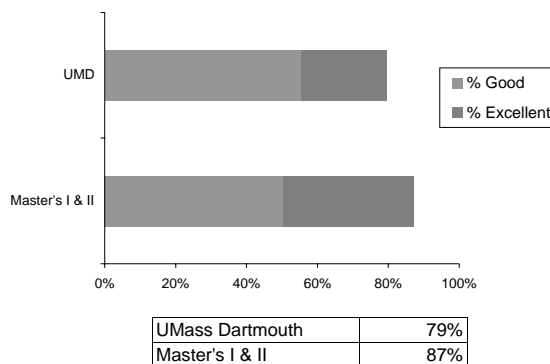




**% Seniors Rating Educational Experience "Good" or "Excellent"**

"How would you evaluate your entire educational experience at this institution?" —79 percent of UMass Dartmouth's seniors responded "good" or "excellent" to this question on the National Survey of Student Engagement administered in Spring 2002. We find this result good, but believe we should do better. The higher evaluation by recent graduates suggests they have had time to realize more fully the value of their education.

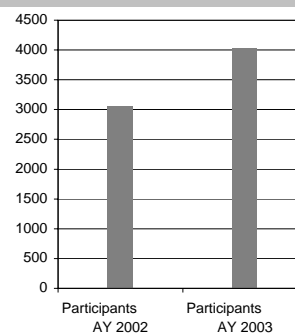
The peer data supplied with the NSSE survey instrument show that our rating is somewhat lower than that achieved by schools of the Master's I and II type. We question the applicability of the comparison group, for example, because it includes liberal arts colleges.



**Service to the Commonwealth**

**Enrollment in Corporate Education & Training**

This indicator counts AY 2003 participants in the corporate education and training activities offered through our Division of Continuing Education and Advanced Technology and Manufacturing Center. In all, 4,030 individuals participated in activities including professional development for health providers, forensics, agricultural business, information technology, small business entrepreneurship, manufacturing, quality assurance (through ISO 9000), seminars for professional organizations like the Institute of Electrical and Electronics Engineers and the Massachusetts Manufacturing Extension Partnership, workforce training, and post-baccalaureate certificates for computer/engineering/business professionals. The Division of Continuing Education had 31 active partnerships with public agencies and private companies.



**Regional Impact**

This summary highlights many activities. It is by no means exhaustive, but indicates the range and effect of programs, activities, and events. Less easy to tabulate is our *influence* on the region, but these data suggest it is considerable.

- In 2003 the Centers for Portuguese Language and Culture, Marine Science and Technology, Indic Studies, Teaching and Learning, Jewish Culture, and French Language and Culture together hosted 140 different events—including lectures, seminars, professional development workshops, and conferences—for 7,030 total participants. The Southcoast Economic Partnership and Southcoast Educational Compact provide development support for CEOs and superintendents in the region.
- The library had, last year, 2,427 reference inquiries from off campus and the historical and cultural archives had 85 community users in 2003. Over 3,300 community members have library privileges.
- The Centers for Marine Science and Technology, Advanced Technology and Manufacturing, and Policy Studies together conducted over 90 different major projects in economic and technology development and environmental management. The work of the Center for Policy Studies alone was cited in 103 different regional newspaper articles during 2002. The Slade's Ferry Bank Center for Business Research has had 168 different regional businesses as clients. The Advanced Technology and Manufacturing Center has 9 venture technology companies, 9 industry projects totaling \$232K, and 41 student interns working on a variety of real-world problems. The Center for Rehabilitation Engineering in 2003 assisted 255 people with disabilities (136 new clients) in 594 service transactions, installing 127 new systems; over the past 22 years, the Center has served 2,153 people with disabilities.
- In the arts in 2003, UMass Dartmouth hosted over 40 musical and 25 arts events, with over 17,000 total participants.
- UMass Dartmouth has among its graduates 12 current state legislators and 5 legislative staff, two sitting mayors, and many city councilors and members of town boards.
- In all, UMass Dartmouth was cited in over 5,000 news articles in 2002.

As the only university in Massachusetts, public or private, south of Boston, the Dartmouth campus of the University of Massachusetts makes a rich contribution to the southeastern Massachusetts region.

**Financial Health**

**Operating Margin**

This ratio measures an institution's ability to generate revenue in excess of expenditures and mandatory transfers. The construction of residence halls helped improve this indicator by generating sufficient revenues to cover the additional debt service as well as the necessary operating costs. It is customary for this indicator to fluctuate from year to year. New accounting methodologies prevent comparison before one previous year.

	FY 2002	FY 2003
UMD	-1.2%	3.5%
Peers	0.74%	

**Financial Cushion**

The financial cushion reflects long-term financial health of the institution and its ability to weather, or "cushion" itself from, short-term operational ups and downs. The campus is committed to a plan that will increase fund balances over the next five years; this year's number shows progress. The growth strategy undertaken by the campus is helping move us in that direction. New accounting methodologies prevent comparison before one previous year.

	FY 2002	FY 2003
UMD	-7.2%	-3.7%
Peers	16.8%	

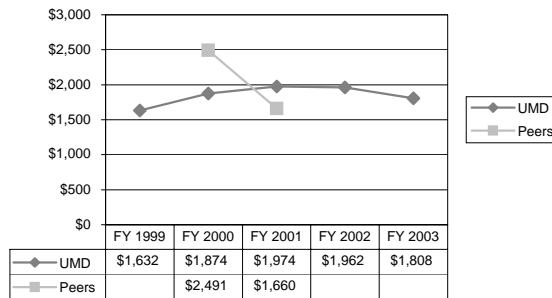
**Debt Service to Operations**

The Debt Service Ratio has improved in recent years, as the result of the expiration of two major capital leases. But this indicator rose in FY 2003, as a result of the construction of new residence halls. New accounting methodologies prevent comparison before one previous year.

	FY 2002	FY 2003
UMD	3.7%	5.3%
Peers	2.6%	

**Endowment Per Student**

This ratio reflects a base from which earnings can contribute to current operations. In addition, unrestricted endowments contribute to the non-expendable fund balance, which greatly affects the financial cushion. Although the absolute value of the endowment increased slightly, this indicator declined due to enrollment increases. The total endowment of \$12,893,454 in FY 2003 is projected to continue to grow. The total endowment has increased 75% since the FY 1998 figure of \$7,293,000. Peers performance declined somewhat on this indicator between FY 2000 and FY 2001.



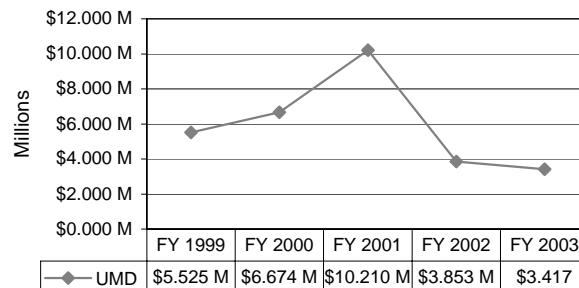
**Endowment Assets**

The UMass Dartmouth endowment continues to grow, recently at a moderate pace.

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
UMD	\$9.615 M	\$11.057 M	\$12.163 M	\$12.703 M	\$12.893 M

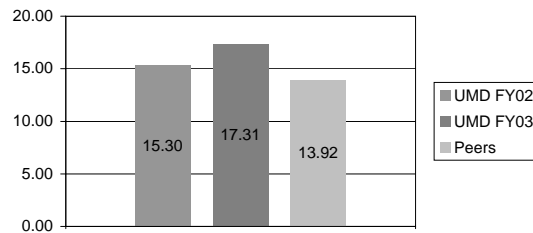
**Private Funds Raised Annually**

This indicator gauges UMass Dartmouth's success in raising funds from private sources (alumni and other individuals, foundations, corporations and other organizations) to support its mission. A one-time gift-in-kind of \$5 million was received in FY 2001. Several factors had a negative effect on fundraising capabilities during FY 2002, continuing into FY 2003. The state discontinued the matching gift program that had brought us two endowed chairs in FY 2001, and several perennial donors delayed large or long-term commitments due to market conditions.



**Age of Facilities Ratio**

The age of facilities ratio displays the accumulated depreciation of the campus facilities as a ratio of the depreciation expense in the year of concern. This indicator was new last year. The age of facilities ratio measures the accumulated depreciation of all physical assets as a ratio to the current year's depreciation expense. Over time, if one does not replace depreciable assets, one's ratio will be higher. The lower the number, the newer the assets.



## DEFINITIONS AND SOURCES

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### ACADEMIC QUALITY INDICATORS

#### High School GPA of First-year Students.

Cumulative GPA for college preparatory courses with additional weight to honors and AP courses, according to BHE admissions policy, reported on all first-year students.

**SAT scores of first-year students.** 25<sup>th</sup>, 75<sup>th</sup> percentiles and mean SAT scores of all first-year students. Peer data are from US News. Peer means are expressed as the average of 25<sup>th</sup> and 75<sup>th</sup> percentiles.

#### Licensure and Certification Test Pass Rates.

Pass rate on Massachusetts Teacher Test and pass rate on Nursing Licensure Exam. Official data as reported annually to the testing organizations. Data are for test administrations in 2003.

**Sponsored Research per 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.

**Federal Research Support.** R&D expenditures in all science and engineering fields, from all federal sources, as reported to NSF. Peer data are from NSF.

### STUDENT SUCCESS AND SATISFACTION INDICATORS

**Freshman 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 from U.S. News and represent 4-year averages.

**Transfer one-year retention rate.** Percent of full-time transfer students at any level who entered in the prior fall and were still enrolled or graduated as of the next fall.

**Freshman 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 are from US News and represent 4-year averages.

**Transfer Graduation rate.** Percent of full-time upper division transfers (60+ credits) who entered in a given fall and had graduated within four years.

**Percent of graduates “satisfied” or “very satisfied” with quality of education.** Percent of alumni graduating from UMass Dartmouth with a bachelor’s degree in 1997-1998 who responded “satisfied” or “very satisfied” to the question, “How satisfied are you with the quality of the undergraduate education you received at UMass Dartmouth?” These are results of a survey of UMass alumni conducted by the UMass Institutional Research Group in 2002.

**Percent of graduates “satisfied” or “very satisfied” with preparation for current job.** Percent of alumni graduating from UMass Dartmouth with a bachelor’s degree in 1997-1998 who responded “satisfied” or “very satisfied” to the question, “How satisfied are you with the way UMass Dartmouth prepared you for your current, or most recent, job?” These are results of a survey of UMass alumni conducted by the UMass Institutional Research Group in 2002.

**Percent of graduates “satisfied” or “very satisfied” with preparation for further education.** Percent of alumni graduating from UMass Dartmouth with a bachelor’s degree in 1997-1998 who responded “satisfied” or “very satisfied” to the question, “How satisfied are you with the way UMass Dartmouth prepared you for pursuing any further education?” These are results of a survey of UMass alumni conducted by the UMass Institutional Research Group in 2002.

**Percent of seniors rating educational experience “good” or “excellent.”** 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 Spring 2002. Peer data are from NSSE, comparing us to Master’s I and II schools that participated in the survey and to all schools responding.

### SERVICE TO THE COMMONWEALTH INDICATORS

#### Enrollment in Corporate Education and Training.

Count of individuals engaged in the fall semester in the range of corporate educational and training activities

## DEFINITIONS AND SOURCES

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sponsored at UMass Dartmouth through the Division of Continuing Education and at the Advanced Technology Center.

**Regional Impact.** Presented is a narrative of significant activities and programs, with a number of facts and statistics cited. Sources include annual reports, newspaper clipping services, and alumni records.

### FINANCIAL HEALTH INDICATORS

**Operating Margin.** Operating surplus as a percentage of total operating revenues plus federal and state appropriations. Peer data are 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.

**Debt Service to Operations.** Debt service payments as a percentage of operating expenditures and interest expense. Peer data are from published financial statements.

**Endowment per student.** True and quasi-endowment per annualized FTE student, where FTE of peer institutions is standardized to UMass formula. Peer data are from financial statements and IPEDS.

**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.

**Age of Facilities Ratio.** The average age of plant as measured in years and defined as current depreciation

expense divided by accumulated depreciation. Peer data are from published Carnegie benchmarks.

### PEER INSTITUTIONS FOR UMASS DARTMOUTH

Clarion University of Pennsylvania  
 College of William and Mary (VA)\*  
 Michigan Technological University\*  
 Murray State University (KY)  
 Slippery Rock University of Pennsylvania  
 Sonoma State University (CA)  
 South Dakota State University\*  
 The College of New Jersey  
 University of Central Arkansas  
 University of Minnesota, Duluth  
 University of North Carolina at Greensboro\*  
 University of Wisconsin, Eau Claire

*\*Aspirant Peers*



UNIVERSITY OF MASSACHUSETTS  
Amherst • Boston • Dartmouth • Lowell • Worcester

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# University of Massachusetts Lowell

## **2004 Report on Annual Indicators** *University Performance Measurement System*

## ABOUT THE CAMPUS

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### Lowell's Mission

Lowell's mission is to offer high-quality affordable education and to reach out to the broader community with programs of research and public service that assist sustainable regional economic and social development.

This mission was first established by a merger in 1975 (based on far-sighted legislation designed to create "more opportunity for our citizens") of Lowell Technological Institute and Lowell State College to create the University of Lowell.

Our second merger, in 1991, formed the new five-campus UMASS and enabled Lowell to tightly focus on programs meeting rigorous standards for quality, demand, cost, and centrality to our mission. This focusing process consumed Lowell's attention and energy for the seven-year period from 1993-2000 and consolidated the campus into four Colleges and a Graduate School of Education. (All teacher-preparation programs at Lowell are at the graduate level.)

### Campus Administrative Structure

In order to ensure strong intellectual and professional competence in its academic areas, to pursue its three primary goals--effective teaching and learning, diversity and pluralism, and assisting sustainable regional economic and social development--and to pursue its service/outreach mission, Lowell established a three-component administrative structure. The components are: 1) a limited number of traditional academic departments and colleges; 2) three faculty- and staff-driven councils, and 3) some thirty interdisciplinary Centers and Institutes.

### Student Body

Lowell awards about 1,700 degrees each year. Our goal, based on our mission, is to grant 60% of these degrees at the undergraduate level, 35% at the master's level, and 5% at the doctoral level. Lowell has been making steady progress toward this goal.

### Campus Classification

Lowell has been for ten years in Category I (the top step) of the institutional classifications of the American Association of University Professors.

In the Carnegie Classification of institutions, based on awarded doctoral degrees, Lowell is at the second step: Doctoral/Research-Intensive.

### Physical Plant

Of the five UMASS campuses Lowell is the only one embedded in the heart of its host city. UML North is at the very edge of the City's downtown area. UML South is about one mile away in a more residential urban setting. UML East is between the other two campus clusters and is home to residence halls, the Campus Recreation Center, and the LeLacheur Baseball Stadium.

Over the last decade, the Lowell Campus has been a partner with the City of Lowell in the building of the Tsongas Arena and the LeLacheur Baseball Park and the rebuilding of the old Lawrence Mill site at the junction of City and University property.

In recent years, Lowell has inaugurated an aggressive facilities campaign. We have completed all deferred maintenance on UML North, South, and East, as well sprucing up the campus to integrate it into its City surroundings.

## HEADLINES FROM THE 2004 ANNUAL INDICATORS

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### Academic Quality

Every program in Lowell's four professional colleges/schools for which a national professional accreditation agency exists is accredited by that agency. The average SAT score of incoming students continues to rise and reached 1093.

Externally sponsored research per faculty is important to Lowell both as one measure of faculty scholarship and as a measure of assisting innovation in the regional economy. Although we are encouraged by our growth to \$76,047 per year per faculty, we need to continue our efforts to meet our 1998-2005 plan goal of about \$90,000 per year per faculty.

### Student Success and Satisfaction

The most recent student satisfaction survey shows that 86 percent of seniors at Lowell find their educational experience good or excellent. This high percentage gives evidence of the comfort with higher education and the maturity that our students attain over their college career here. Many of our students come from lower socio-economic backgrounds with parents who did not attend college. It often takes them a while to acclimate to college routines and expectations.

### Access and Affordability

UMass Lowell works diligently with regional K-12 systems and the community colleges to make the transition from high school to community college to university as effective as possible. Lowell recognizes the importance of strong K-12 systems and supports those in the region through, literally, scores of partnerships and programs.

Lowell is pleased that the state has supported K-12 education thoroughly, but cautions that support from the state must be extended to include higher education to benefit those who cannot afford a private college. A significant drop-off in education support at high school graduation will not maintain the steady flow of skilled, educated citizens and innovation necessary for the Commonwealth's economic and social health.

### Service to the Commonwealth

The portion of Lowell's mission dealing with service and outreach is focused on four efforts: (1) to assist the region's enterprise to innovate, (2) to assist the region's K-12 system, (3) to assist the health of the region's environment and citizens, and (4) to assist in strengthening the vitality of the regional communities. A significant number of Lowell faculty from a wide variety of academic disciplines are engaged in these four areas and they have secured considerable funding from government agencies and private foundations. In order to enhance the campus ability to provide service to the Commonwealth, state support for higher education needs to be similar to support for K-12 systems.

### Financial Health

In recent years, Lowell has focused on increasing its financial cushion and decreasing its debt-service ratio while eliminating deferred maintenance and modernizing our plant, technology, and equipment. However, the recent sharp downturn in state support has prevented us from making our planned deposit to our quasi-endowment for the past two years--which would have further increased our financial cushion. In fact, we do not believe that we will be able to resume our transfers of the quasi-endowment until FY2008. Without significant restoration of the now dramatically reduced state support, we will not be able to reach our goal of raising our total endowment (real plus quasi) from \$13 million to \$100 million over a ten-year period. Now, our ability to increase the quasi-endowment rests solely on our ability to generate funds from three revenue streams: fund raising, continuing studies, and commercialization of research.

## 2004 ANNUAL INDICATORS AT A GLANCE

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### ACADEMIC QUALITY

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• Average high-school GPA of first-time freshmen	3.09
• Average combined SAT score of first-time freshmen	1093
• Licensure and certification test pass rates	
<i>Massachusetts Teacher Test</i>	100%
<i>Physical Therapy</i>	88%
<i>Nursing/NYCLEX</i>	70%
• Total research expenditures	\$27,301,000
• Research expenditures per faculty	\$76,047

### STUDENT SUCCESS AND SATISFACTION

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• Freshman one-year retention rate	75%
• Freshman six-year graduation rate	42%
• % of seniors rating educational experience "good" or "excellent"	86%
• % of graduates "satisfied" or "very satisfied" with quality of education	86%
• % of graduates "satisfied" or "very satisfied" with preparation for current job	89%
• % of graduates "satisfied" or "very satisfied" with preparation for further education	94%

### ACCESS AND AFFORDABILITY

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• Tuition and fees as % of feeder community incomes	10% to 25%
• % of undergraduate students who are ALANA	20%

### SERVICE TO THE COMMONWEALTH

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• Online course enrollments	6,814
• Rate of growth in online course enrollments	10%
• Annual course enrollments in corporate education and training	17,328
• Number of patent applications	12
• License income	\$105,000

### FINANCIAL HEALTH

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• Operating margin	-1.5%
• Financial cushion	6.3%
• Debt service to operations	3.8%
• Total endowment	\$16,596,000
• Endowment per student	\$1,869
• Annual growth in endowment	6%
• Private funds raised annually	\$43,700,000
• Age of Facilities Ratio	10.6



## ACADEMIC QUALITY

## High School GPA of First-time Freshmen

For the second consecutive year, Lowell's average weighted high-school GPA exceeded 3.0. This is due, in part, to the Massachusetts Board of Education's university admissions requirement of higher SATs for GPAs below 3.0.

	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003
> 3.00	47%	44%	45%	52%	54%
2.51-2.99	37%	41%	41%	40%	37%
< 2.5	15%	15%	14%	8%	9%
<b>Average</b>	2.99	2.96	2.98	3.07	3.09

## SAT Scores of First-time Freshmen

Lowell's scores, representing virtually all first time freshmen, increased again in fall 2003. Most peers and aspirants use ACT, and their SAT-equivalent scores were calculated using the ACT-SAT conversion table.

	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003	Peers Fall '02
<b>75th %ile</b>	1140	1150	1140	1150	1170	1146
<b>25th %ile</b>	930	980	980	960	1010	929
<b>Mean</b>	1043	1061	1056	1081	1093	1031

## Licensure and Certification Test Pass Rates

Lowell's students continue to perform well in exams for careers that require special certification. Their success is linked to UML's commitment to preparing its graduates for the workforce.

**Physical Therapy (2003)**  
**Nursing/NYCLEX (2003)**  
**MA Teacher Test (2002)**

Pass Rate	Test Takers	Passed	Nat. Ave.
88%	17	15	76%
70%	57	40	87%
100%	26	26	91% (MA)

## Research Expenditures and Expenditures per Faculty

Total Research Expenditures as reported to National Center for Education Statistics (IPEDS)  
Peer average includes peer aspirants. Faculty are total tenure-system instructional faculty in the fall semester of each fiscal year.

## Total Research Expenditures (in thousands)

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
<b>UML</b>	\$21,399	\$23,764	\$25,762	\$27,815	\$27,301
<b>Peers</b>	\$31,690	\$36,752	\$37,610	\$38,577	n/av

## Total Research Expenditures per Faculty

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
<b>UML</b>	\$51,564	\$57,820	\$63,610	\$69,712	\$76,047
<b>Peers</b>	\$65,678	\$76,180	\$77,964	\$77,926	n/av

## STUDENT SUCCESS AND SATISFACTION

## Freshman One-Year Retention Rate

Lowell's one-year retention rate has been relatively stable over the five-year period. A number of coordinated efforts have been launched to promote the persistence of more first-time freshmen at UMass Lowell.

	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003
<b>UML</b>	76%	74%	76%	74%	75%
<b>Peers</b>	69%	71%	71%	72%	n/av

## Freshman Six-Year Graduation Rate

Lowell's 2002 rate exceeds that of its peers (including aspirant peers) as of Fall 2002, the latest year available.

	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003
<b>UML</b>	43%	37%	37%	44%	42%
<b>Peers</b>	39%	40%	40%	42%	n/av

**% Seniors Rating Educational Experience "Good" or "Excellent"**

In 2002 a random sample of Lowell's seniors participated in the National Survey of Student Engagement. Their responses placed their satisfaction level above the average for all survey participants in the Carnegie Doctoral-Intensive group.

	UML	NSSE Doctoral-Intensive
Excellent	28%	22%
Good	58%	57%
Total	86%	79%

**% Graduates "Satisfied" or "Very Satisfied" with Quality of Education**

In 2002 the UMass system-wide survey of undergraduate alumni five years out demonstrated a high rate of satisfaction with the quality of their educational experience.

Very satisfied	53%
Satisfied	43%
Total	86%

**% Graduates "Satisfied" or "Very Satisfied" with Preparation for their Current Job**

The same survey of alumni showed a satisfaction total of 89% on the subject of job preparation, a major objective of Lowell's undergraduate programs.

Very satisfied	39%
Satisfied	50%
Total	89%

**% Graduates "Satisfied" or "Very Satisfied" with Preparation for Further Education**

While many Lowell alumni do not pursue additional degrees or certificates soon after graduation, of those who do the vast majority consider their undergraduate education valuable preparation for further study.

Very satisfied	31%
Satisfied	63%
Total	94%

**ACCESS AND AFFORDABILITY**

**Tuition and Fees as a Percentage of Feeder Community Incomes**

Annual tuition and fees as of the academic year 2003-04 totaled \$6,963 for in-state undergraduates, an amount that ranges from 10% to 25% of median income in the five communities from which Lowell draws the most undergraduates. By far the largest number (18%) are from the City of Lowell.

*Feeder community  
Median income (2000)  
Tuition & fees as %*

	Lowell	Lawrence	Methuen	Dracut	Chelmsford
Median income (2000)	\$39,000	\$28,000	\$50,000	\$58,000	\$70,000
Tuition & fees as %	18%	25%	14%	12%	10%

**% Undergraduate ALANA Students**

UML's proportion of students of color, especially those of Asian and Hispanic origin, reflects the area's changing demographics and feeder high schools. According to Fall 2000 census figures, the ALANA percentage for Northern Middlesex Co. was 15%. Lowell's figures represent % of U.S. citizens of known race.

	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003
Number	841	846	856	914	1023
Percent	17%	19%	20%	21%	20%

## SERVICE TO THE COMMONWEALTH

### Rate of Growth in Online Course Enrollments

Lowell's Continuing/Corporate Education online course registrations have risen from 3,888 in AY 2000 to 6,814 in AY 2004. Many additional courses incorporate some elements of distance learning, such as e-mail, online syllabi and links, and chat rooms.

	AY 2001	AY 2002	AY 2003	AY 2004
<b>UML</b>	33%	85%	17%	10%

### Enrollments in Corporate Education and Training

Continuing/Corporate Education runs courses twelve months a year in all formats--on-campus, off-campus, online--and regularly maintains one of the highest levels of course registrations in New England.

	AY 2002	AY 2003	AY 2004
<b>UML</b>	18,869	18,076	17,328

### Number of Patent Applications

The number of patent applications filed is an indicator of an institution's inventiveness and the commercial potential of its academic work.

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
<b>UML</b>	6	10	18	12	12

### License Income

License income is a measure of the economic value of an institution's inventiveness and a contributor to the University's economic health. It is difficult to predict when a license will begin to generate significant income, but FY 2003's income rose significantly.

#### In \$000's

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
<b>UML</b>	\$75	\$10	\$28	\$25	\$105

## FINANCIAL HEALTH

### Operating Margin

The FY03 operating margin decreased to -1.5% due to a decrease in the state appropriation. The FY03 operating margin was actually better than had been projected (-3.9%) due to actual expenses being lower than originally anticipated.

	FY 2003
<b>UML</b>	-1.5%
<b>Peers</b>	-0.1%

### Financial Cushion

The FY03 financial cushion decreased to 6.3% due to a decrease in the state appropriation. The FY03 financial cushion was actually better than had been projected (5.2%) due to actual expenses being lower than originally anticipated.

	FY 2003
<b>UML</b>	6.3%
<b>Peers</b>	12.7%

### Debt Service to Operations

The debt service ratio is expected to fluctuate between 3.6% and 4.4% in subsequent years. In FY04, the Campus began debt service payments related to the \$2m telephone system and the \$9m parking garage.

	FY 2003
<b>UML</b>	3.8%
<b>Peers</b>	2.9%

**Total Endowment and Endowment Per Student**

The total endowment and endowment per student increased slightly in FY03. Although the endowment increased, it was still less than what had been projected, due mostly to endowment cash gifts being less than what had been projected. The Campus remains far below the level of its peers.

In \$000's					
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
<b>UML total</b>	\$11,200	\$13,071	\$16,842	\$15,718	\$16,596
<b>Per student</b>	\$1,314	\$1,560	\$1,959	\$1,778	\$1,869
<b>Peer avg.</b>					\$4,534

**Annual Growth in Endowment**

The endowment is expected to grow approximately 7%-8% during FY04 to FY07. In FY08, the Campus expects to resume planned transfers to the quasi-endowment, transferring \$1.5m in FY08 and \$3m in FY09, resulting in endowment growth of 15% in FY08 and 21% in FY09.

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
<b>UML</b>	24%	17%	29%	-7%	6%

**Private Funds Raised Annually**

In FY03 the Campus was able to achieve its highest level of private fund raising due mostly to \$39.6m of equipment donations.

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
<b>UML</b>	\$9.7 M	\$22.6 M	\$40.1 M	\$32.5 M	\$43.7 M

**Age of Facilities**

The FY03 age of facilities ratio was significantly better because \$2.3m of depreciation expense was recorded related to the PeopleSoft project (go live in FY2003) and an additional \$.4m depreciation expense for the Student Center (opened in FY03). The age of facilities ratio measures the accumulated depreciation of all assets as a ratio to the current year's depreciation expense.

	FY 2003
<b>UML</b>	10.6
<b>Peers</b>	11.8

## DEFINITIONS AND SOURCES

### ACADEMIC QUALITY INDICATORS

#### High-school GPA of first-time 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 first-time freshmen.** 25<sup>th</sup> and 75<sup>th</sup> percentiles and mean SAT scores of all first-year students. ACT scores, used by most UML peers, have been converted to SAT using the ACT-SAT conversion table. Peer scores may not be comparable because percentage of freshmen represented is unknown

#### Licensure and certification test pass rates.

Pass rates on Massachusetts Teacher Test and on Nursing and Physical Therapy exams.

#### Research expenditures and expenditures per faculty.

Research expenditures as reported to National Center for Educational Statistics (IPEDS Financial). The "per faculty" figure is total research expenditure figure divided by total tenure-system instructional faculty as reported to IPEDS. Faculty are total tenure-system instructional faculty in the fall semester of each fiscal year.

### STUDENT SUCCESS & SATISFACTION INDICATORS

**Freshman one-year retention rate.** Percent of first-time, full-time freshmen who entered in the previous fall and were still enrolled in the following fall. Peer data are from U.S. News and represent 3-year averages.

**Freshman six-year graduation rate.** Percent of first-time, full-time freshmen who entered in a given fall and had graduated with six years. Peer data are from US News and represent 3-year averages.

#### Percent of seniors rating educational experience

"good" or "excellent." Seniors randomly sampled in the National Survey of Student Engagement in 2002 responded "good" or "excellent" to the question: "How would you evaluate your entire educational experience at this institution?" Peer data are from NSSE.

**Alumni satisfaction.** Responses from 2002 system-wide survey of undergraduate alumni five years out (1997-98).

### ACCESS AND AFFORDABILITY INDICATORS

#### Tuition and fees as a percentage of feeder

community income. Community median family income data from 2000 Census. Tuition and fees data represent fall and spring of the academic year 2003-04.

#### Percentage of undergraduate students who are

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

### SERVICE TO THE COMMONWEALTH INDICATORS

#### Rate of growth in online course enrollments.

Percentage increase in total annual online (distance education) course registrations between academic years 2000-01 and 2003-04.

#### Enrollments in corporate education and training.

Total annual course registrations in the Division of Continuing/Corporate/Distance Education in 2001-02 and 2003-04.

#### Number of patent applications.

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

**License income.** Amount of annual income from license agreements.

### FINANCIAL HEALTH INDICATORS

**Operating margin.** Operating surplus as a percentage of total current fund revenues. Peer data from audited financial statements.

**Financial cushion.** Expendable fund balance as a percentage of unrestricted expenditures and mandatory transfers. Peer data from audited financial statements.

**Debt service to operations.** Debt service as a percentage of unrestricted expenditures and mandatory transfers. Peer data from audited financial statements.

#### Total endowment and endowment per student.

True and quasi-endowment. The per-student ratio is based on total annualized FTEs, including large numbers of non-degree seeking students in Continuing Education.

**Annual growth in endowment.** Trends in total endowment, partially reflective of the changing economy.

**Private funds raised annually.** Private funds include restricted and unrestricted income from individuals, foundations, corporations and other organizations. Include 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.

**Age of facilities ratio.** Age of facilities ratio calculates the relative age of plant in years. Age of facilities is determined by dividing accumulated depreciation by the annual depreciation.

## DEFINITIONS AND SOURCES

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### PEER INSTITUTIONS FOR UMASS LOWELL

Idaho State University  
Montana State University - Bozeman  
New Mexico State University – Main campus\*  
Oakland University, Michigan  
University of Louisiana - Lafayette  
University of Maine – Orono\*  
University of Rhode Island\*  
Wichita State University, Kansas

\* *aspirant peer*



UNIVERSITY OF MASSACHUSETTS  
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# University of Massachusetts Worcester

## **2004 Report on Annual Indicators** *University Performance Measurement System*

## ABOUT THE CAMPUS

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The University of Massachusetts Worcester consists of three schools: the School of Medicine (opened 1970), the Graduate School of Biomedical Sciences (opened 1979) and the Graduate School of Nursing (opened 1986); an extensive basic science research enterprise (more than \$153 million in sponsored activity); a complex clinical partnership with a large health care system; and a range of public and health service initiatives as diverse as vaccine development and manufacture in an FDA-licensed facility to health care services in correctional settings and the administration of state-sponsored efficiency programs for health care financing.

The Lake Avenue campus is anchored by the original (ca. 1970) medical school and hospital complex and a new, 360,000 square foot research laboratory building, dedicated in August 2001. UMW also owns two buildings in the adjacent Massachusetts Biotechnology Research Park; operates laboratory and conference facilities on the campus of the former Worcester Foundation for Biomedical Research in Shrewsbury (which merged its operations with UMW in 1997), administers the Massachusetts Biological Laboratories and New England Newborn Screening Programs in Jamaica Plain; and since 2000, has operated the Eunice Kennedy Shriver Center for Mental Retardation Research in Waltham.

In the current year, after a careful multiyear planning effort, a significant series of capital investments in the Lake Avenue campus have begun including the replacement of the original, failed, building facade with an energy-efficient, weather-tight contemporary covering. This facade replacement effort will take place over the next 3 years, and result in a far more functional campus. Additional projects being done in conjunction with this Campus Modernization effort include a significant (264,000 GSF) addition to the hospital by UMass Worcester's clinical partner, UMass Memorial Health Care. Much effort is being made to keep the campus as functional as possible during these projects.

The student body consists of 400 medical students -- 100 in each 4 year class -- all Massachusetts residents; 276 students in the PhD programs in biomedical sciences, and approximately

74 graduate nursing students. For the current academic year (2003-2004) there are 27 students in a joint MD/PhD program, and 19 graduate nursing students in the PhD in nursing program administered jointly with the UMass Amherst campus. Degrees offered at UMass Worcester include: MD; MD/PhD; PhD in biomedical sciences; MS in nursing; advanced practice certification (Nurse Practitioner) in nursing; PhD in Nursing (jointly with UMass Amherst).

With approximately 5,000 employees at more than a dozen sites and centers across the state (as well as one site in Rhode Island), the UMass Worcester community is broadly diverse in every way except commitment to mission: achieving national distinction in health sciences education, research and public service. Many of UMass Worcester's most distinctive programs -- public sector psychiatry, health outcomes research; correctional health; pipeline collaboratives for underrepresented minorities; initiatives to increase the number of minority and generalist physicians; have grown out of the schools' commitment to community service. Its successful and growing research enterprise, with new work being done in the areas of neuropsychiatry, biochemistry, pharmacology, genetics, diabetes and cellular signaling, is the product of an award winning faculty committed to curing disease and alleviating human suffering.

The educational achievements of the campus are perennially recognized by top ten rankings in the US News "Best Graduate Schools" and by support from institutions such as the Macy Foundation, which funded an innovative curriculum in communication for medical students. And with its clinical partner, UMass Memorial Health Care (a ten hospital integrated health care delivery system which shares clinical faculty and educational resources with UMW), UMass Worcester is one of the largest and most respected employers in central Massachusetts, with an annual budget from all sources of approximately \$500 million, and an annual payroll of \$250 million.



## HEADLINES FROM THE 2004 ANNUAL INDICATORS

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The Worcester campus continues its aggressive phase of research growth and faculty recruitment, made possible in large measure by a continued successful focus on its core educational competencies. In March 2004, three key accreditation visits occurred: medical education (by the Liaison Committee on Medical Education (LCME), biological and chemical specimens, and animal care. Thus, even at a time where the campus key indicators continue to reflect an emphasis on educational benchmarks as a measure of success for the educational mission, there also continues a commitment to research growth and faculty research productivity (since these are key to the success of the research building business plan); and close attention to access and affordability issues for students across all three Worcester campus schools.

- Academic quality: The Worcester campus continues its trend of attracting better than average students to the School of Medicine as judged by admission test scores, residency match rates and performance on licensing exams; SOM graduates continues to rank the educational experience as highly satisfactory.
- Research growth, productivity and faculty recruitment: The Worcester campus is in the midst of predicted research enterprise expansion as space in the new building continues to fill with highly qualified new faculty and their research associates. Growth in real research dollars and non-federal research dollars (an indicator of diversity of funding sources) will be more challenging as the pool of federal research dollars grows at a slower rate than in previous years; new faculty recruitment will increase both productivity and total research support.
- Crucial to continued success of the Medical School is the ability to attract high quality students that will be able to meet the diverse cultural needs of under served populations in the state. Student access and affordability can be measured by tuition and fees. UMMS continues to be lower than the average for all public schools. In addition, when the learning contract option (deferment of tuition and fees) is factored in, UMMS compares even more favorably to peer.
- Anecdotal evidence, such as rankings in the US News annual ratings of medical schools, continues to reinforce the identity of the SOM as a high quality, affordable institution.
- New programs in the Graduate School of Biomedical Sciences and the Graduate School of Nursing respond to crucial community needs, and enhance the ability for these schools to reach key constituencies.

Overall, the next year clearly gives the Worcester campus the opportunity to continue to execute its business plan for research growth while preserving the quality of the student body and the quality of the educational experience. As Massachusetts, like much of the country, continues to struggle under the current economic downturn, non-research related state funding has become tight. These cutbacks will have a disproportionate impact on public medical schools, like UMass Worcester, as compared to our private competitors.

## 2004 ANNUAL INDICATORS AT A GLANCE

### ACADEMIC QUALITY

• Average Biology MCAT Scores for New Students	10.50
• Licensure/Certification Pass Rates	
<i>USMLE Step 1</i>	88%
<i>USMLE Step 2</i>	96%
GSN State Certification	97%
• Rank in US News (primary care)	3
• Rank in NIH funding for Medical Schools	40
• Federal Research Support per Faculty	\$125,050
• Sponsored Research Total Dollars	\$148,823,000
• Sponsored Research per Faculty	\$185,333

### STUDENT SUCCESS AND SATISFACTION

• % students "Very Satisfied" with quality of their medical Education	61%
• Match Rate/ Choice of Residency	96%

### ACCESS AND AFFORDABILITY

• Tuition & fees	\$13,102
• Tuition & fees (including adj. for learning contract)	\$ 7,534

### SERVICE TO THE COMMONWEALTH

• Patent applications per year	92
• License income per year	\$19,161,000
• Licensing income/AUTM ranking	16
• Service to State Agencies	148,660

### FINANCIAL HEALTH

• Operating Margin	1.2%
• Financial Cushion	28.8%
• Debt Service to Operations	4.9%
• Total Endowment	\$38,589,000
• Endowment per student	\$56,832
• Annual Growth in Endowment	28.66%
• Private Funds Raised Annually	\$6.8m
• Age of Facilities Ratio	7.3

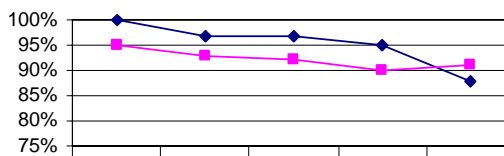
## ACADEMIC QUALITY

### Pass Rates on USMLE Step 1 and Step 2

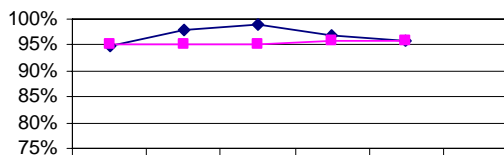
The USMLE (United States Medical Licensing Examination) is a national licensing examination for physicians and is the single path to medical licensure in the United States.

Step 1 exam covers basic science information and is taken in most medical schools at the end of the second year; Step 2 covers clinical science information and is usually taken during the fourth year.

Rates reflect the level of knowledge of UMMS students in comparison to students from other medical schools.



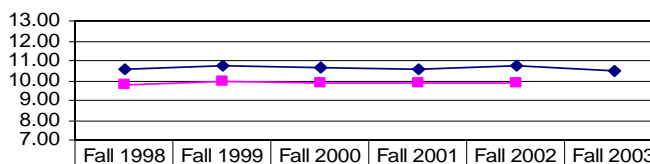
	2000	2001	2002	2003	2004
UMW-Step 1	100%	97%	97%	95%	88%
All Schools-Step 1	95%	93%	92%	90%	91%



	1999	2000	2001	2002	2003	2004
UMW-Step 2	95%	98%	99%	97%	96%	NA
All Schools-Step 2	95%	95%	95%	96%	96%	NA

### Mean Biology MCAT Score

The MCAT score provides a rough predictor of a student's success in medical school. It is widely used in the admissions process, but rarely as the principal indicator of a student's academic preparation. It is, however, the only indicator that is available to compare incoming students across institutions. MCAT scores range from 1 to 15, with 15 being the highest possible score. For the past five years, the mean MCAT score for 1st year medical students has been consistently higher than the peer average.

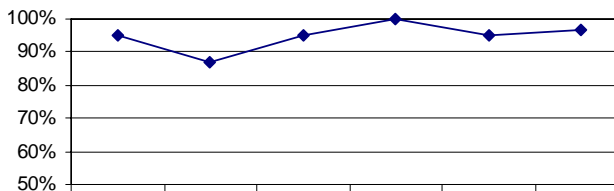


	Fall 1998	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003
UMW	10.55	10.77	10.65	10.54	10.72	10.5
Peers	9.80	10.00	9.83	9.86	9.91	NA

### Pass Rates on Nursing Board Certification

Board certification signifies advanced practice clinicians who have met requirements for clinical and functional practice in a specialized field, pursued education beyond basic preparation, and received the endorsement of their peers. After meeting these criteria, health care professionals take certification examinations based on nationally recognized standards of practice to demonstrate their knowledge, skills and abilities within the defined specialty.

All nurse practitioners who wish to practice in Massachusetts must pass the certification examination. Several other states have a similar requirement. GSN has maintained very high pass rates compared to the national average, which ranges from 83-86%.

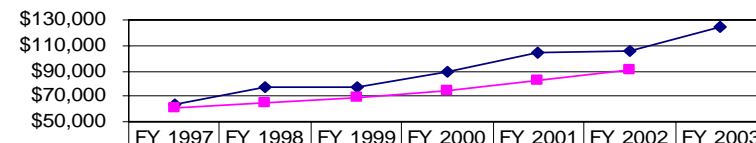


	1998	1999	2000	2001	2002	2003
UMW	95%	87%	95%	100%	95%	97%

Class Year

### Federal Research Support Per Faculty

Federal Research Support per Faculty is a rough measure of faculty involvement in research. The amount of funding through federal research grants and contracts is a standard for measuring the success of a medical institution's faculty in achieving research goals. UMMS federal research continues to grow as predicted, with the addition of the new Lazare Research Building and the continued recruitment of new faculty with a research focus.

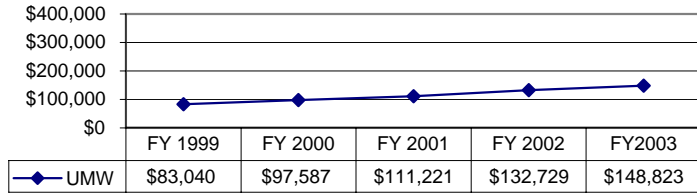


	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
UMW	\$63,033	\$77,042	\$77,762	\$88,752	\$104,908	\$105,477	\$125,050
Peers	\$60,768	\$64,532	\$68,830	\$73,780	\$83,114	\$91,248	NA

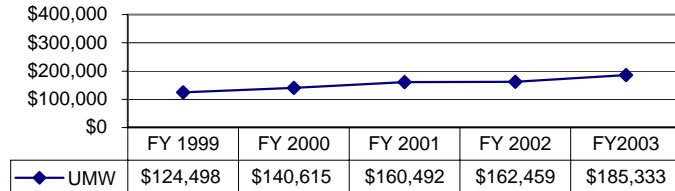
**Sponsored Research**

The Worcester Campus continues to be in the midst of predicted research enterprise expansion with the addition of the Lazare Research Building (LRB) and the continued hiring of new faculty with a research focus. Real research dollars and non-federal research dollars (an indicator of diversity of funding sources) continues to grow. There has been a 79% increase in R & D expenditures since FY99. New faculty recruitment will continue to increase both productivity and total research support. Peer comparison is not available due to size of peer group.

**Sponsored Research Total Dollars in \$000's**



**Sponsored Research Per Faculty**



**NIH Ranking among Medical Schools**

The National Institutes of Health ranks recipients of NIH funds on annual basis, reflecting awards made during the federal fiscal year, October 1 to September 30th. The ranking of medical schools segments approximately 125 medical schools and ranks them in order of total NIH funds received during the preceding fiscal year. The ranking provides a benchmark to compare growth of NIH funded research in terms of other medical schools. For FY2002, only 24 public medical schools out of a total of 75 (or 32%) ranked in the top 50. FY2003 ranking is not yet available.

	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
UMW	41	40	39	37	40	NA

**US News Ranking**

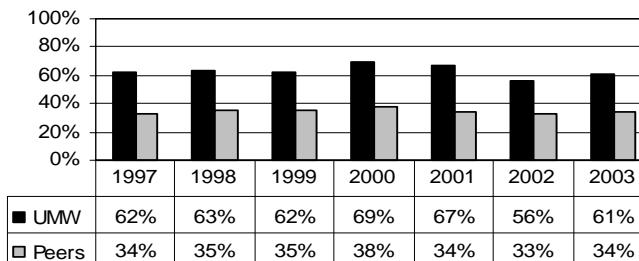
Ranking of Medical Schools with special emphasis in Primary Care. The UMMS Ranking is based on 144 schools comprised of 125 medical schools and 19 schools of osteopathic medicine. UMMS is consistently ranked in the top ten percent and has held a spot near the top of the category since the magazine began its rankings in 1994.

	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
UMW Rank	6	4	5	12	3

## STUDENT SUCCESS AND SATISFACTION

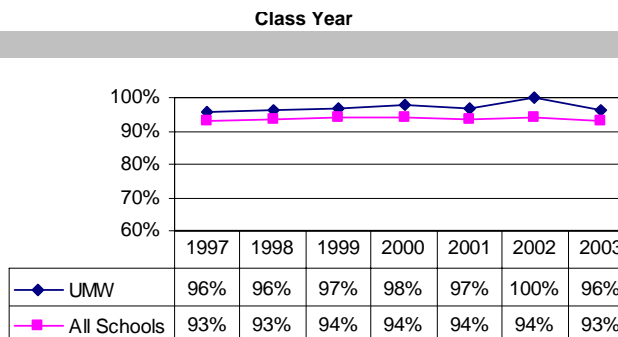
### % of Graduates Indicating "Very Satisfied" with Quality of Medical Education

From the *Graduation Questionnaire*, the percentage of graduating students that responded very satisfied with the overall quality of their medical education. The level of satisfaction can be influenced by several factors, including time devoted to instruction and preparation for residency. Measures reported compare UMMS to responses of students graduating from all public medical schools. Results show UMMS students continue to be much more satisfied with the quality of their education than students from other public medical schools.



### Acceptance Rate to Choice of Residency

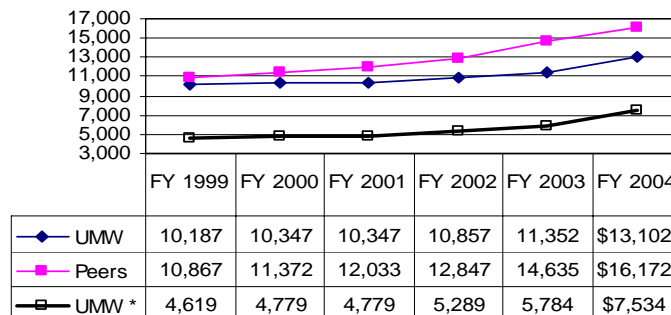
This indicator measures the percent of potential graduates who were matched to one of their choices of residency. Rates reflect the competitive strength of UMMS students in comparison to students graduating from all other medical schools. UMMS has consistently shown a higher percentage of graduates accepted to their residency over the last five years. UMMS students have done very well in the match: in 2003 of the students going through the NRMP, 96% were matched to their choice of residency.



## ACCESS AND AFFORDABILITY

### Tuition & Fees (includes adjustment for learning contract)

This indicator measures and compares the annual medical school tuition and mandatory fees. UMMS's tuition and fees continue to be lower than the average for all public schools. In addition, at UMMS 94% of our current medical students opt for the learning contract. Under the learning contract, students may defer two-thirds of their tuition. The deferral is to be paid upon completion of residency, internship or fellowship. The deferral can be repaid either by 4 years of service in the Commonwealth of Massachusetts in a primary care practice, other specialty practice in an underserved area of public or by repaying the deferred amount with interest over 8 years.



\* UMW Tuition and Fees adjusted for learning contract

## SERVICE TO THE COMMONWEALTH

### Number of Patent Applications

The number of patent applications filed is an indicator of an institution's inventiveness and the commercial potential of its academic work. In FY03 UMMS had a significant increase in the number of invention disclosures, resulting in a large increase in the number of patent applications filed.

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
<b>UMW</b>	24	27	50	44	92

### License Income

License income is a measure of the economic value of an institution's inventiveness and a contributor to the University's economic health. It is difficult to predict when or for what products or processes a license will begin to generate significant income. At UMMS, there has been a significant steady increase in licensing revenues received from the sale of products invented.

	In \$000's				
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
<b>UMW</b>	\$6,724	\$8,801	\$11,678	\$14,516	\$19,161

### AUTM Ranking/Licensing Income

Ranking of licensing income/technology performance as reported on the Association of University Technology Managers (AUTM) Annual Survey. Total respondents include US & Canadian Academic and Non-profit institutions and Patent Management Firms. Measures reported reflect UMMS system ranking; however UMMS represents 95% of UMMS System total licensing revenue. FY2001 is the most recent data available.

	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
<b>UMW</b>	43	29	21	16	NA	NA
<b>Total</b>	133	140	142	198	NA	NA

### Service to State Agencies

This indicator measures the annual amount expended for state sponsored grant and contracts and the sale of public service activities to other Massachusetts state agencies. This number is significantly larger than that of peer institutions because of increased contracts for policy analysis and programmatic development with Commonwealth Medicine, a specialized organization within UMMS that focuses solely on providing health care consulting services to state agencies.

	In \$000's					
	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
<b>UMW</b>	\$34,346	\$48,552	\$59,230	\$81,654	\$102,842	\$148,660
<b>Peers</b>	\$4,997	\$5,129	\$5,996	\$6,374	\$7,121	NA

## FINANCIAL HEALTH

### Operating Margin

This ratio measures an institution's ability to generate revenue in excess of expenditures and mandatory transfers. Operating margin will fluctuate from year to year, being higher in years the institution sets money aside for future needs and lower or negative in years in which the funds set aside in previous years are used to invest in new programs. (Note: The calculation of this ratio changed in FY02 with the change in financial reporting standards and is not directly comparable to prior years.)

	FY 2002	FY 2003
<b>UMW</b>	0.4%	1.2%

### Financial Cushion

The financial cushion reflects long-term financial health of the institution and its ability to weather or "cushion" itself from short-term operations ups and downs. (Note: The calculation of this ratio changed in FY02 with the change in financial reporting standards and is not directly comparable to prior years.)

	FY 2002	FY 2003
<b>UMW</b>	34.1%	28.8%

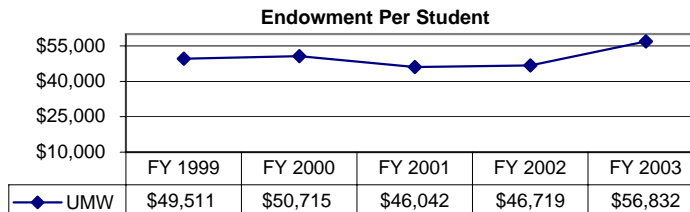
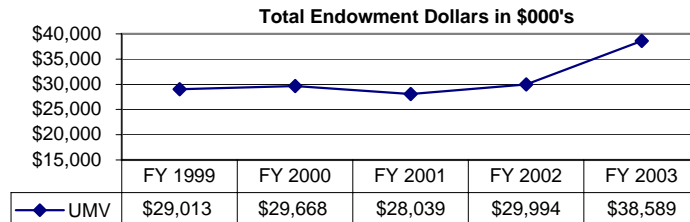
### Debt Service to Operations

The debt ratio measures the demand that annual commitments to creditors place on the institution's unrestricted operating funds. (Note: The calculation of this ratio changed in FY02 with the change in financial reporting standards and is not directly comparable to prior years.)

	FY 2002	FY 2003
<b>UMW</b>	3.8%	4.9%

### Endowment

The ratio provides a measure of the long term financial health of the institution, relative to the number of student. This indicator is not readily comparable to other UMass campuses. The size of the Medical School's research and public service programs in relation to its small student base skews the ratio. Total endowment continued to increase in FY2003.

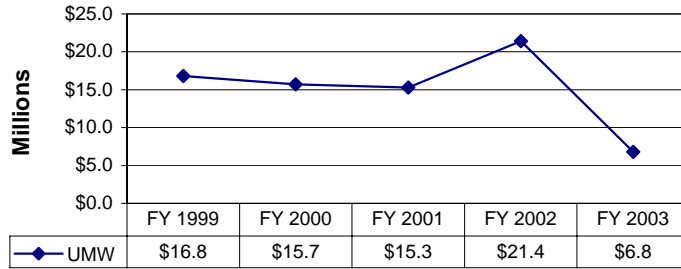


**Annual Growth in Endowment**

	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
<b>UMW</b>	31.48%	67.24%	2.26%	-5.49%	6.97%	28.66%

**Private Funds Raised Annually**

This indicator measures the success of the institution in raising support from private sources. Strong performance in this area provides the institution with funds to support new programs, investments in infrastructure and other activities for which funds may not otherwise be available from other funding sources. This number decreased in FY2003 as a result of being a non-campaign year.



**Age of Facilities**

This ratio calculates the average age of plant as measured in years. A low age of plant ratio indicates recent investments, while a high age (ratio) may indicate a large deferred maintenance burden. Continuous investments in plant including building renovations, infrastructure improvements, new construction, and (capitalizable) equipment upgrades all add to and improve the capital assets of the University and can reduce the average age of facilities ratio

	FY 2002	FY 2003
UMW	7.7	7.3



## DEFINITIONS AND SOURCES

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### ACADEMIC QUALITY INDICATORS

**Pass rate on USMLE.** The percentage of medical students passing Step 1 and Step 2 on the first attempt. Peer data represents national results from National Board of Examiners (NBE).

**Pass rate on Nursing Board Certification.** The percentage of nursing graduates who passed the board certification examination on their first attempt. National results (provided by the American Nurses Association Credentialing Center) represent pass rates by nurse practitioner graduates from all graduate nursing schools in the United States.

**MCAT scores.** Mean biology MCAT score for new medical students. Peer data provided by AAMC.

**Federal research support per faculty.** Federal research direct plus federal research facilities and administration divided by all full-time faculty as reported by the AAMC.

**NIH ranking among medical schools.** The National Institute of Health annual ranking of NIH extramural funding for Medical Schools.

**Sponsored research per faculty.** R&D expenditures from all sources (federal, state, local governments, industry, private, and institutional) and in all academic fields, as reported to NSF, divided by all full-time faculty as reported by the AAMC. Peer data not accessible given the size of peer group.

**US News ranking.** US News annual ranking of medical schools with special emphasis in Primary Care.

### ACCESS AND AFFORDABILITY INDICATORS

**Tuition and fees as adjusted for learning contract.** Annual tuition and mandatory fees for medical students. Also reported is UMW tuition and fees adjusted for learning contract. Peer data from AAMC.

### FINANCIAL HEALTH INDICATORS

**Operating margin.** Total operating revenues (including state appropriations and gifts) less total operating expenditures (including interest expense) divided by total operating revenues. Peer data is not available.

**Financial Cushion.** Unrestricted net assets divided by total operating expenses (including interest expense).

**Debt service to operations.** Interest payments plus principal payments divided by total operating expenses (including interest expense). Peer data is not available.

**Endowment per student.** UMass endowments plus Foundation endowments plus quasi endowments divided by FY2003 annualized FTE students. Peer data is not available

**Private funds raised annually.** Includes restricted and unrestricted income from individuals, foundations, corporations, and other organizations. These amounts include private grant revenues but not private contract revenues. Total for each year include cash (not in-kind) and asset additions made in that year. Peer data is not available.

**Age of facilities ratio.** Accumulated depreciation divided by (annual) depreciation expense.

### SERVICE TO THE COMMONWEALTH INDICATORS

**Number of patent applications.** Number of U.S. patent applications filed per year. Peer data are from the Association of University Technology Managers.

**License income.** Annual amount of income from license agreements. Peer data are from the Association of University Technology Managers.

**AUTM ranking/licensing income.** Ranking of licensing income as reported on the Association of University Technology Managers (AUTM) Annual Licensing Survey.

**Service to state agencies.** Annual amount expended for state sponsored grants and contracts and the sale of public service activities to other Massachusetts state agencies. Peer data are from AAMC

### STUDENT SUCCESS AND SATISFACTION INDICATORS

**Percent of graduates indicating "Very Satisfied" with the quality of their medical education.**

Percent of graduating medical students who responded "Strongly Agree" to this statement, "Overall, I am satisfied with the quality of my medical education" found on the Graduation Questionnaire that is prepared by AAMC.

## DEFINITIONS AND SOURCES

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### PEER INSTITUTIONS FOR UMASS WORCESTER

#### School Name

East Carolina University School of Medicine	University of Michigan
East Tennessee State University	University of Minnesota - Duluth (2 yr.)
Florida State (1 yr.)	University of Minnesota-Minneapolis
Indiana University School of Medicine	University of Mississippi School of Medicine
Louisiana State University- School of Medicine in New Orleans	University of Missouri - Columbia School of Medicine
Louisiana State University-School of Medicine in Shreveport	University of Missouri - Kansas City
M.C. of Ohio	University of Nebraska College of Medicine
Marshall University	University of Nevada School of Medicine
Medical College of Georgia	University of New Mexico School of Medicine
Medical University of South Carolina	University of North Carolina
Michigan State University	University of North Dakota
New Jersey Medical School	University of Oklahoma College of Medicine
Northeastern Ohio	University of Puerto Rico
Ohio State	University of South Alabama
Oregon Health Sciences University	University of South Carolina
Pennsylvania State University College of Medicine	University of South Dakota School of Medicine
Robert Wood Johnson Medical School (Rutgers)	University of South Florida
Southern Illinois University	University of Tennessee
SUNY Brooklyn	University of Texas Houston Medical School
SUNY Buffalo	University of Texas Medical School at Galveston
SUNY Stony Brook	University of Texas Medical School at San Antonio
SUNY Syracuse	University of Texas Southwestern Medical School
Texas A&M University Health Science Center	University of Utah School of Medicine
Texas Tech University Health Sciences Center	University of Vermont
Uniformed Services University of the Health Sciences	University of Virginia
University of Alabama School of Medicine	University of Washington
University of Arizona	University of Wisconsin -Madison Medical School
University of Arkansas	Virginia Commonwealth University
University of California - Davis School of Medicine	Wayne State
University of California - Irvine	West Virginia
University of California - Los Angeles	Wright State
University of California - San Diego	
University of California - San Francisco	
University of Cincinnati	
University of Colorado	
University of Connecticut School of Medicine	
University of Florida College of Medicine	
University of Hawaii	
University of Illinois	
University of Iowa	
University of Kansas	
University of Kentucky	
University of Louisville	
University of Maryland School of Medicine	
University of Massachusetts Medical School	