



# 2015 REPORT ON ANNUAL INDICATORS

*University Performance Measurement System*

*July 2015*

**THE UNIVERSITY OF MASSACHUSETTS**

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## HEADLINES FROM THE 2015 ANNUAL INDICATORS

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### ACADEMIC QUALITY

*The Top American Research Universities (TARU - The Center)* identifies nine performance indicators as measures of academic quality to evaluate the comparative performance of public and private research universities that generate over \$40 million in federal research annually. Included in this group are ten public research universities with a Carnegie classification of very high research activity (RU/VH) with which UMass Amherst is comparing its progress on these and other indicators. All but two of the peers, the Universities of Connecticut and Delaware, are among the 62 members of the Association of American Universities (AAU). AAU institutions are recognized for their excellence in research and education. Therefore, the benchmark for the Amherst campus is quite high. In 2013, the University of Oregon, an AAU institution, replaced the University of Nebraska among UMass Amherst's institutional peers. Historical data have been adjusted to reflect this change.

**Student Academic Quality.** The academic profile of entering students has made impressive gains in recent years, evidenced by growth in both high school GPA and SAT scores. The high school GPA of entering students increased from 3.61 in 2010 to 3.78 in 2014. Virtually all (99%) students entered UMass Amherst with a high school GPA of 3.0 and above. Average SAT scores improved by 51 points over the five-year period (and continue to rise) and are converging on the peer group at the 75<sup>th</sup> percentile. Further, seniors report high satisfaction with their undergraduate experience. Results from the 2014 National Survey of Student Engagement (NSSE) show that 88% of seniors rated their UMass Amherst educational experience positively, and increasing numbers rated it as excellent.

**Advanced Training.** The campus has demonstrated strength in the education and training of pre- and post-doctoral researchers. UMass Amherst is below the peer median for the number of doctoral degrees awarded. The number of post-doctorates receiving training has declined, some of which can be attributed to the 2012 implementation of the campus's first post-doc collective bargaining agreement, which narrowed the definition of the post-doc category and increased salary and benefits.

**Research and Creative Activity.** Total and federal research dollars (R&D) are key measures of an institution's commitment to, and success in research. UMass Amherst faculty have been successful in competing for these dollars. Total R&D spending increased by 18%, and per faculty expenditures

increased by 1% in the past five years. Recent decreases were primarily reflective of federal and state budget restrictions as well as the expiration of most American Recovery and Reinvestment Act (ARRA) grants, but the numbers are now rebounding, exceeding \$200 million for the first time.

The number of academic honors and awards earned by the faculty is another indicator of an institution's quality. The number of National Academy members has remained fairly stable, but below the peer median. A more comprehensive view of awards from Academic Analytics, another source of awards data, shows a steady increase in prestigious awards received by UMass Amherst faculty, up to 345 in FY 2014.

In recent years, the campus invested in tenure-system faculty, and the number of faculty has grown by 7% since 2010. Nevertheless, it is considerably smaller than top public research universities. Continued growth in the tenure-system faculty will be required for the campus to make significant progress in improving academic quality and research productivity, and to advance in the research university rankings.

### ACCESS AND AFFORDABILITY

Providing an affordable and accessible education of high quality is central to the University's mission. In AY 2013-14, 28% of full-time, in-state students qualified for Pell grants. Eighty-two percent of financial need was met for in-state students who applied for aid. The campus continues to recognize its commitment to students with financial need, and has increased institutional need-based aid accordingly.

### STUDENT SUCCESS AND SATISFACTION

Most UMass Amherst students have a positive educational experience. Ninety percent of students return for their sophomore year, 76% graduate within six years from UMass Amherst, the highest graduation rate since the campus began tracking this statistic. The campus has seen rapid improvement in the four-year graduation rate which has increased from 54% for the Fall 2006 cohort to 67% for the Fall 2010 cohort. Retention and graduation rate improvement have closed much of the gap with peer institutions. The campus is implementing and expanding programs that will enrich the college experience with a goal of increasing retention and graduation rates. The **Exploratory Track** program will begin in September with all undeclared first-year students placed in one of eight academic advising tracks each affiliated with an academic school

or college. This new program is expected to give students a stronger sense of belonging within the schools and colleges while still encouraging them to explore options across campus. The students will receive more defined advising assistance and support to help them in their exploration of a major. The campus has also instituted **First Year Seminars** for all incoming freshmen this Fall. All incoming first-year students will select a first year seminar to take their very first semester on campus as part of their transition to the university. This will provide them with an opportunity to explore interesting topics and connect with the campus community including faculty, graduate students and peers. The **Excellence through Student Enhanced Learning (ExSEL)** program is being launched in nine STEM gateway courses and applies the peer-led team learning model that promotes deeper learning and true mastery of problem-solving. Students participating in ExSEL will develop their skills in discipline-based problem solving that will translate into improved performance in the course, and will learn from each other the habits of mind and discipline needed for success in their courses. The **STEM Ambassadors Program** invites students during their freshman first semester to learn about life in the laboratory and engage in research projects together. The STEM Ambassadors also engage in diverse offerings of workshops and participate in community service activities. Through these offerings the STEM Ambassadors strengthen the skills needed to succeed in STEM coursework while building connections with other UMass Amherst students. The University is partnering with the Education Advisory Board (EAB), a best-practices research and consulting firm through its **Student Success Collaborative**. The Collaborative provides access to the predictive analytics advising platform, best practice research studies and collaborative projects that will enhance our ability to understand and improve student advising, retention and degree completion. The project was fully implemented during AY 2014-15. **UMatter at UMass** continues to be an important initiative intended to increase students' connection to campus by affirming the values the university set in motion over 150 years ago: care, compassion and active engagement. Expanded research and scholarship opportunities are also available for undergraduates. Changes in the design and delivery of the General Education curriculum, including an integrative experience requirement for all upper division students also serve to enhance and enrich the student academic experience.

The campus has made progress in increasing the diversity of the student body. The Fall 2014 entering class was the most diverse group of students in history (24% ALANA); overall, over 22% of enrolled undergraduates were students of color. Also, around

one-quarter are the first in their families to pursue a college degree. The campus will continue to attract a diverse student body and encourage greater appreciation for diverse populations.

## SERVICE TO THE COMMONWEALTH

UMass Amherst has invested in programs to promote the enrollment and graduation of undergraduate and graduate students in the sciences and mathematics. In Fall 2014, over one-third of baccalaureate and 29% of graduate students were enrolled in Science, Technology, Engineering and Mathematics (STEM) programs, and over one-quarter of degrees awarded at the undergraduate and graduate levels were in STEM programs. The STEM Diversity Institute (SDI), established in 2012 at UMass Amherst, facilitates the diversification of the science, technology, engineering, and mathematics (STEM) workforce. SDI activities serve undergraduate students, graduate students, postdoctoral fellows, and faculty. These investments will continue.

## FINANCIAL HEALTH

The financial indicators of the Amherst campus demonstrate a commitment to prudent use and investment of state appropriation, student tuition and fees, and other income streams. The campus continues to support the academic enterprise by increasing growth in net revenues from graduate students, increasing summer and continuing and professional education revenue, attracting more donor support, and increasing out-of-state enrollment. Investment in capital infrastructure, faculty growth, and student success initiatives remain cornerstones of the campus strategic plan. The strategic plan identifies three overarching themes: 1) establish the campus as a “destination of choice” for the best and brightest students; 2) establish the campus as an “investment of choice” with a broad range of stakeholders vital to the campus; 3) mobilize resources to achieve these goals. The campus is currently engaged in implementing specific action plans emanating from these themes. Continued state support for general operations and capital remains critical to achieve these goals and to remain financially healthy.

The campus launched **UMass Rising**, a comprehensive fundraising campaign with a goal of \$300 million in 2013. The campaign is designed to enhance excellence and contribute to the long-term sustainability of the campus. To date, the campus has raised \$310 million, exceeding the goal more than a year ahead of schedule. The campaign continues with three priorities: student scholarships, faculty endowments, and restoration of the Old Chapel.

## 2015 ANNUAL INDICATORS AT A GLANCE

## ACADEMIC QUALITY

• Average HS GPA of Freshmen	3.78
• Average SAT Scores of Freshmen	
<i>Arithmetic Mean</i>	1218
25 <sup>th</sup> – 75 <sup>th</sup> Percentile	1130 – 1300
• Average GPA of Entering Transfer Students	3.32
• Student Satisfaction with Educational Experience	88%
• Student-Faculty Ratio	17:1
• Technology-Enhanced Classrooms	288
• No. of Doctoral Degrees Awarded	306
• No. of Postdoctoral Appointees	153
• Total R&D Expenditures	\$200.2M
• Total R&D Expenditures Ranking	105
• Total R&D Expenditures Ranking among Carnegie Peers, US Publics, Non-Medical	9
• Federal R&D Expenditures	\$110.2M
• Total R&D Expenditures per Tenure System Faculty	\$170,270
• Patent Applications	40
• License Income	\$753,000
• Percent Tenured/Tenure-Track Faculty	74%
• New Tenured/Tenure-Track Faculty Hired	68
<i>As Percent of Total T/TT Faculty</i>	6%
• Change in Tenured/Tenure-Track Faculty	+21
• Change in Faculty FTE	+60
• Full-Time Instructional Faculty	
<i>Percent Faculty-of-Color</i>	21%
<i>Percent Women Faculty</i>	43%
• Faculty Awards	8
• National Academy Members	8

## ACCESS AND AFFORDABILITY

• Percent In-State Pell Grant Recipients	28%
• Percent of Need Met for In-State Students Awarded Need-Based Aid	82%
• Average Debt of Students ( <i>UG Graduating Class</i> )	\$30,453
• Percent Graduating Class with Debt (UG)	72%
• Percent Undergraduates from Massachusetts	77%
• Online Course Enrollments	22,139
• Annual Growth in Online Course Enrollments	13%

## STUDENT SUCCESS AND SATISFACTION

• Percent Undergraduates who are Students of Color	22%
• Percent Undergraduates who are First Generation in College	25%
• Percent Undergraduates with English as a Second Language	11%
• Percent Undergraduates who are International	3%
• Number of Students who Participated in a Study Abroad Program	1,194
• Freshmen One-Year Retention Rate	90%
• Freshmen Four-Year Graduation Rate	67%
• Freshmen Six-Year Graduation Rate	76%
• Transfer (Full-time) One-Year Retention Rate	86%
• Transfer (Upper Division) Four-Year Graduation Rate	76%
• Alumni Participation Rate	10%

## SERVICE TO THE COMMONWEALTH

• Incoming Class	5,800
<i>Percent Freshmen</i>	80%
<i>Percent Transfers</i>	20%

- Degree Completions 7,389
  - Bachelor's* 5,674
  - Master's* 1,409
  - Doctorates* 306
- Percent Alumni who Remain in MA 54%
- Enrollment in STEM Programs 9,477 (34%)
  - Undergraduate* 7,775 (36%)
  - Graduate* 1,702 (29%)
- Degrees Awarded in STEM Fields 2,118 (29%)
  - Undergraduate* 1,631 (29%)
  - Graduate* 487 (28%)
- Degrees Awarded in Healthcare Fields 587
  - Undergraduate* 420
  - Graduate* 167
- MTEL Science and Math Test-Takers 25

## FINANCIAL HEALTH

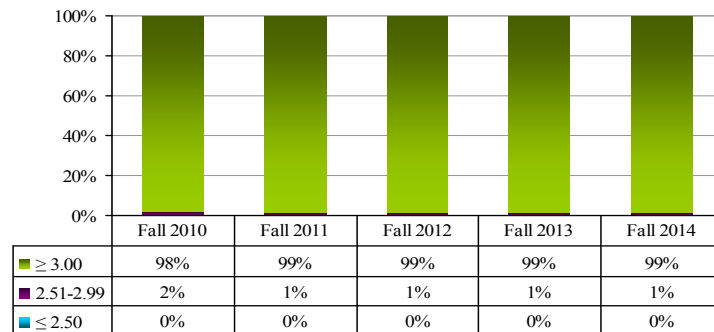
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- Total Endowment \$307.1M
- Annual Growth in Endowment 13%
- Endowment per Annualized Student FTE \$11,107
- Private Funds Raised Annually \$45.7M
- Primary Reserve 27.9%
- Debt Ratio 6.2%
- Deferred Maintenance per GSF \$143

## ACADEMIC QUALITY

### High School GPA of Freshmen

UMass Amherst entering first-year students are strong academically with an average high school GPA of 3.78. The Fall 2014 entering class was at a historical high with 99% of students earning a GPA of 3.0 and above. This was the eighth consecutive year of increases. There were 4,642 students in the Fall 2014 entering class.



Average HS GPA	2010	2011	2012	2013	2014
	3.61	3.64	3.66	3.73	<b>3.78</b>

### Average SAT Scores of Freshmen

First-year students entered UMA with a mean SAT of 1218, posting a 5-year increase of 51 points. This is another historical high for the campus. SAT scores have improved by 50 points at both the 25th and 75th percentile since Fall 2010. The campus is above the Fall 2014 median of the peer group at the 25th percentile, but still lags behind the peers at the 75th.

Average SAT Scores of Freshmen	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014
75th Percentile	1250	1270	1280	1290	<b>1300</b>
25th Percentile	1080	1100	1110	1120	<b>1130</b>
Peer Median					
75th Percentile	1305	1310	1305	1315	1325
25th Percentile	1075	1085	1075	1075	1085
UMA Rank					
75th Percentile	10	8	8	7	7
25th Percentile	8	5	4	4	4

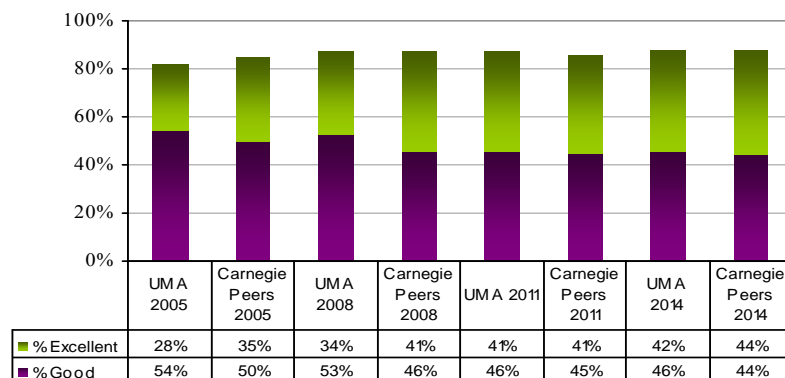
### Average GPA of Entering Transfer Students

The transfer GPA remains high. It consistently surpasses the mandated Department of Higher Education minimum of 2.00 for transfer students.

Avg. GPA Entering Transfers	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014
	3.25	3.29	3.27	3.32	<b>3.32</b>

### Student Satisfaction with Educational Experience

Seniors evaluate their UMA educational experience quite positively in the National Survey of Student Engagement (NSSE). In 2014, almost 90% of students rated their experience as good or excellent. These rates were comparable with other Carnegie RUVH schools. The proportion of students who rated the experience as excellent has shown strong gains since 2005, increasing from 28% in 2005 to 42% in 2014. The next administration of NSSE will be in 2017.



## Student-Faculty Ratio

The student-faculty ratio has been slowly trending downward in recent years. Since 2010 the ratio has improved from 19:1 to 17:1 in 2014.

<i>Student-Faculty Ratio</i>	2010	2011	2012	2013	2014
<i>UMA</i>	19:1	18:1	18:1	18:1	<b>17:1</b>

## Technology-Enhanced Classrooms

### Basic classroom technology:

All 288 classrooms scheduled by the UMA campus registrar, IT, and Isenberg School of Management have projectors and media players available.

### Medium classroom technology:

In addition to Basic technology, more than three-quarters of classrooms at UMA have a digital projector (or large screen), HDMI & VGA connections for laptop projection, audio connection and room speakers. 205 of these rooms are considered to be Medium Plus and also include a blu-ray player, wireless microphone and AV control cabinet.

### High classroom technology:

In addition to Medium and Medium Plus technology, nearly a third of UMA teaching spaces are equipped with technology to record lectures. These rooms include lecture capture (Echo360), 1-2 motion-tracking cameras (for speaker & students), and audience microphones (portable or installed). Twenty-one of these rooms are considered to be High Plus and also include a point-to-point video conferencing unit and large screen monitors.

### Very High classroom technology:

Team-based classrooms include the features of High technology rooms, an instructor podium with document camera, touchscreen AV controls and the following technology at each table of nine students: 3 laptops, 1 large screen, 3 built-in microphones with “talk” button, AV connections for student laptops, and 1 whiteboard camera and microphone.

Computer Classrooms contain 20-39 seats with desktop computers (Mac & Windows) and an instructor desktop with projector connection.

<i>Technology-Enhanced Classrooms</i>	<i>AY 2013-2014</i>	
	<i>No of Classrooms</i>	<i>Percent of Total</i>
Basic	288	100%
Medium	226	78%
High	90	31%
Very High	16	6%
<b><i>Total Classrooms Teaching Spaces</i></b>	<b>288</b>	<b>100%</b>

## Doctoral Degrees Awarded

The number of doctorates awarded at UMA, both research scholarship and professional practice degrees, decreased in 2013-14, after an unusually high number of degrees awarded the previous year. Professional practice doctorates have decreased for the first time since the campus began reporting this award. UMA remains well below the peer median on the research/scholarship measure.

<i>UMA Doctoral Degrees Awarded</i>	2009-10	2010-11	2011-12	2012-13	2013-14
<i>Research/Scholarship Doctorates</i>	259	258	268	295	<b>287</b>
<i>Professional Practice Doctorates</i>	22	24	37	39	<b>19</b>
<b><i>Total Doctoral Degrees Awarded</i></b>	<b>281</b>	<b>282</b>	<b>305</b>	<b>334</b>	<b>306</b>
<i>Research/Scholarship Doctorates</i>	2009-10	2010-11	2011-12	2012-13	2013-14
<i>UMA</i>	259	258	268	295	<b>287</b>
<i>Peer Median</i>	301	359	345	363	<b>354</b>
<i>Rank</i>	9	9	8	9	<b>9</b>

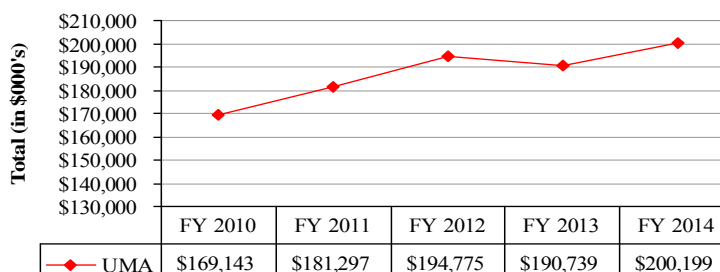
### Postdoctoral Appointees

UMass Amherst senior faculty mentor recent PhDs with science and engineering degrees. The number of post-doctoral scholars dropped in the past few years, and continues its slide. This can be explained in part by the 2012 implementation of the campus's first postdoc union contract. The negotiated stipend increases and benefits resulted in some postdoc layoffs, non-reappointments, and, for some PIs, a decrease in the number of new hires.

<i>Postdoctoral Appointees</i>	2009-10	2010-11	2011-12	2012-13	2013-14
<i>UMA</i>	209	215	209	165	<b>166</b>
<i>Peer Median</i>	167	196	177	233	<b>NA</b>
<i>Rank</i>	5	6	5	7	<b>NA</b>

### Total Research & Development (R&D) Expenditures

Total R&D spending for the campus in FY 2014 was about \$200 million, of which over \$183 million was in science and engineering (S&E). S&E spending has increased 11% in total dollars and 13% in federal dollars since FY 2010.



<i>Total R&amp;D Expenditures (\$000's)</i>	2010	2011	2012	2013	2014
<i>S&amp;E UMA</i>	\$164,854	\$176,545	\$178,207	\$172,217	<b>\$183,210</b>
<i>S&amp;E Peer Median</i>	\$209,899	\$232,565	NA	NA	NA
<i>Rank</i>	7	8	NA	NA	NA

<i>Federal R&amp;D Expenditures (\$000's)</i>	2010	2011	2012	2013	2014
<i>UMA</i>	\$97,937	\$107,683	\$115,280	\$111,448	<b>\$110,189</b>
<i>S&amp;E UMA</i>	\$88,860	\$101,940	\$106,470	\$103,233	<b>\$102,682</b>
<i>S&amp;E Peer Median</i>	\$114,136	\$128,714	NA	NA	NA
<i>Rank</i>	9	9	NA	NA	NA

### Total R&D Expenditures Rankings

Over the past five years, UMA has remained stable for overall R&D expenditure rankings and in relation to our peers.

<i>Total R&amp;D Expenditures Rank</i>	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
<i>Overall Ranking</i>	105	105	107	104	<b>105</b>
<i>Ranking based on Carnegie Peers</i>	9	9	9	8	<b>9</b>

*n.b.* Ranking based on Carnegie Peers is further standardized by US Publics and Non-Medical Schools.



### Total R&D Expenditures per Tenure System Faculty

The total R&D expenditures dollars per faculty increased by 1% between FY 2010 and FY 2014. Federal dollars per faculty increased by 7% during the same period.

<i>Total R&amp;D Per Tenure System Faculty</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
<i>Total</i>	\$168,805	\$173,253	\$172,681	\$163,239	<b>\$170,270</b>
<i>Federal</i>	\$89,235	\$105,675	\$103,169	\$97,851	<b>\$95,429</b>

### Patent Applications

In FY 2014, UMass Amherst filed 1 patent application for every \$5 million in research expenditures.

<i>Patent Applications</i>	<i>FY 2010</i>	<i>FY 2011</i>	<i>FY 2012</i>	<i>FY 2013</i>	<i>FY 2014</i>
	28	29	26	32	<b>40</b>

### License Income

After two years of gains, license income has dipped back down to about \$750K. (Note: FY 2010 licensing income included a large one-time payment for a paid-up license).

<i>License Income</i>	<i>FY 2010</i>	<i>FY 2011</i>	<i>FY 2012</i>	<i>FY 2013</i>	<i>FY 2014</i>
	\$2,353,519	\$513,500	\$952,738	\$1,200,000	<b>\$753,000</b>

### Percent Tenured/Tenure-Track Faculty

The percent of tenured/tenure-track faculty (full-time and part-time) has been steadily decreasing over the past five years. This is explained by the steady expansion of the non-tenure stream faculty at UMA.

<i>Percent Tenured/Tenure-track Faculty</i>	<i>Fall 2010</i>	<i>Fall 2011</i>	<i>Fall 2012</i>	<i>Fall 2013</i>	<i>Fall 2014</i>
<i>% Tenured/Tenure-track</i>	77.2%	76.3%	76.3%	76.1%	74.3%
<i>% Non Tenure-track/PT</i>	22.8%	23.7%	23.7%	23.9%	25.7%

### New Tenured/Tenure-Track Faculty Hired

The campus has made significant investments in tenure system faculty hires in recent years. There were 68 such hires in FY 2014. The campus remains committed to supporting the strongest faculty possible and increasing the number of tenure-system faculty.

<i>New Tenured/Tenure-Track Faculty Hired</i>	<i>AY 2010-11</i>	<i>AY 2011-12</i>	<i>AY 2012-13</i>	<i>AY 2013-14</i>	<i>AY 2014-15</i>
	34	59	55	60	<b>68</b>

### New Tenured/Tenure-Track Faculty Hired as Percent of All Tenured/Tenure-Track Faculty

Over the past several years the new hires have hovered around 6% of the total T/TT faculty. When compared to Fall 2010, the Fall 2014 number of new hires doubled, while the total count only experienced a 7% percent change.

<i>New T/TT Faculty as Percent of Total</i>	<i>Fall 2010</i>	<i>Fall 2011</i>	<i>Fall 2012</i>	<i>Fall 2013</i>	<i>Fall 2014</i>
<i>Total T/TT Faculty</i>	978	993	1,009	1,026	<b>1,047</b>
<i>Total New Hires</i>	34	59	55	60	<b>68</b>
<i>Percent of Total</i>	3%	6%	5%	6%	<b>6%</b>

### Change in Tenured/Tenure-Track Faculty

Fall 2014 saw a one-year increase of 21 in the tenure-system faculty, and an increase of 69 since Fall 2010. Investment in faculty is required to maintain the campus as a nationally competitive public research university.

<i>Change in T/TT Faculty</i>	<i>Fall 2010</i>	<i>Fall 2011</i>	<i>Fall 2012</i>	<i>Fall 2013</i>	<i>Fall 2014</i>
	978	993	1,009	1,026	<b>1,047</b>

### Change in Faculty FTE

Faculty full-time equivalent (both full and part-time) showed a one-year increase of 60 and has grown by 142 since Fall 2010. About three-fifths of the growth has been accounted for by tenure system faculty.

<i>Change in Faculty FTE</i>	<i>Fall 2010</i>	<i>Fall 2011</i>	<i>Fall 2012</i>	<i>Fall 2013</i>	<i>Fall 2014</i>
	1,264	1,300	1,320	1,346	<b>1,406</b>

### Faculty by Race and Gender

The number and percent of both faculty of color and women faculty have been steadily increasing. The number of faculty of color has shown a 20% increase since fall 2010, and now comprises over one-fifth of all faculty. The number of women faculty has increased by 21% in the last five years.

<b>Full-Time Instructional Faculty</b>					
<i>Faculty Of Color</i>	<i>Fall 2010</i>	<i>Fall 2011</i>	<i>Fall 2012</i>	<i>Fall 2013</i>	<i>Fall 2014</i>
<i>Number</i>	209	222	225	233	<b>251</b>
<i>Percent</i>	19.2%	19.5%	19.8%	20.1%	<b>21.1%</b>
<i>Women Faculty</i>	<i>Fall 2010</i>	<i>Fall 2011</i>	<i>Fall 2012</i>	<i>Fall 2013</i>	<i>Fall 2014</i>
<i>Number</i>	456	487	507	527	<b>552</b>
<i>Percent</i>	38.9%	39.9%	41.1%	41.8%	<b>42.6%</b>

*n.b. Faculty-of-Color based on US Citizens/Permanent Residents reporting Race/Ethnicity according to new IPEDS definitions.  
Does not include Unknowns and Non Resident Aliens.*

### Faculty Awards

UMass Amherst faculty members are recipients of many prominent awards in the arts, humanities, science, engineering and health fields. The number of awards remained stable in 2013, but the UMA rank remains near the bottom of the peer group. Another source, *Academic Analytics*, which defines awards more broadly shows that the number of awards has increased steadily from 239 in FY 2010 to 345 in FY 2014.

<i>Faculty Awards</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>
	12	8	6	8	<b>8</b>
<i>Peer Median</i>	14	13	11	11	<b>N/A</b>
<i>Rank</i>	6	8	8	9	<b>N/A</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, and the Institute of Medicine. These are some of the highest honors academic faculty can receive. This number remained stable in 2013. The campus ranks below its peers on this measure. The absence of a medical school limits the ability of UMA faculty to be elected to the IOM.

<i>National Academy Members</i>	2009	2010	2011	2012	2013
	9	9	9	8	<b>8</b>
<i>Peer Median</i>	11	11	11	12	<b>12</b>
<i>Rank</i>	7	7	7	8	<b>7</b>

## ACCESS AND AFFORDABILITY

### Percent (In-State) Pell Grant Recipients

The proportion of full-time, in-state students receiving Pell Grants dipped in Fall 2012 to 28% and has stayed there for Fall 2013. The campus has significantly increased its need-based institutional grant aid to support students from families with the lowest income. This rate is competitive with other flagship campuses.

<i>Percent (In-State) Pell Grant Recipients</i>	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013
	28%	31%	31%	28%	<b>28%</b>

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

The campus remains committed to providing need-based aid for in-state undergraduates as it strives to provide a quality and affordable education.

<i>Percent Need Met (In-State)</i>	2009-10	2010-11	2011-12	2012-13	2013-14
	91%	87%	86%	84%	<b>82%</b>

### Student Debt Load of Graduating Class

The percentage of students graduating from UMA with debt is gradually trending upward. Since 2010, there has been an increase of 4% of the graduating class that has a debt load and the average debt load has increased by almost 20%.

	2010	2011	2012	2013	2014
<i>Average Debt Load</i>	\$25,420	\$26,893	\$27,945	\$28,999	<b>\$30,453</b>
<i>Percent Graduating Class with Debt</i>	68%	69%	71%	70%	<b>72%</b>

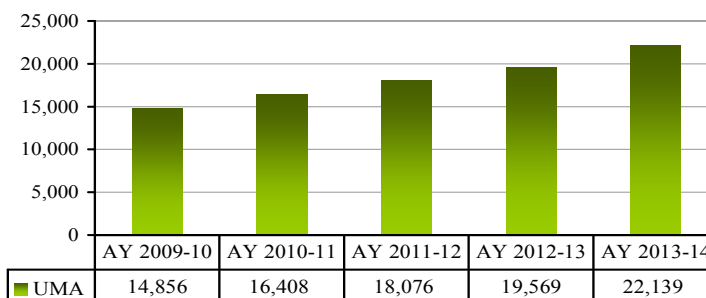
### Percent Undergraduates from Massachusetts

The campus is committed to maintaining access to a quality education for residents of the Commonwealth. Over three-fourths of UMass Amherst students enrolled in state-supported programs are residents of the state. The percent has declined in recent years as the campus strives to increase enrollment of out-of-state and international students.

<i>Percent Undergraduates from Massachusetts</i>	<i>Fall 2010</i>	<i>Fall 2011</i>	<i>Fall 2012</i>	<i>Fall 2013</i>	<i>Fall 2014</i>
<i>Number</i>	16,046	16,211	16,090	15,999	<b>16,016</b>
<i>Percent</i>	80%	79%	78%	77%	<b>77%</b>

### Online Course Enrollments

The Amherst campus offers eight undergraduate, eight graduate degrees and five certificate programs that can be completed partially or fully online. These programs range from certificates in Sustainable Business Practice to a B.S. in Hospitality and Tourism Management, a Master's in Business Administration and a Doctorate in Nursing Practice. In addition, a variety of other courses are offered. Online course enrollments grew by 13% in the most recent year, and 49% since AY 2009-10.



### Annual Growth in Online Course Enrollments

There has been considerable growth in online course enrollment on the Amherst campus in recent years. Enrollments have almost doubled since 2007-08. Online programs afford students flexibility in course-taking.

<i>Annual Growth in Online Course Enrollments</i>	<i>AY 2009-10</i>	<i>AY 2010-11</i>	<i>AY 2011-12</i>	<i>AY 2012-13</i>	<i>AY 2013-14</i>
	10%	10%	10%	8%	<b>13%</b>

## STUDENT SUCCESS AND SATISFACTION

### Percent Undergraduates who are Students of Color

The Amherst campus is committed to enrolling a diverse student body. This is evidenced by the growth in the proportion of undergraduates (including CPE) who are students of color. Undergraduates enrolled in the past year were the most diverse group of students in recent history.

<i>Percent UGs Students of Color</i>	<i>Fall 2010</i>	<i>Fall 2011</i>	<i>Fall 2012</i>	<i>Fall 2013</i>	<i>Fall 2014</i>
<i>Number</i>	3,924	3,943	3,960	4,117	<b>4,332</b>
<i>Percent</i>	20.9%	20.9%	21.0%	21.9%	<b>22.4%</b>

### Percent Undergraduates who are First Generation in College

Although most entering students have parents who are college-educated, many UMass Amherst students will be the first in their families to earn the baccalaureate. About one-fourth of entering first-year students are first generation according to information reported on the Common Application.

<i>Percent UGs First Generation in College</i>	<i>Fall 2010</i>	<i>Fall 2011</i>	<i>Fall 2012</i>	<i>Fall 2013</i>	<i>Fall 2014</i>
<i>Percent</i>	27%	29%	27%	25%	<b>25%</b>

### Percent Undergraduates with English as a Second Language

English is not the first language of about 11% of first-year students entering UMass Amherst. This is another indicator of the diversity of the campus.

<i>Percent UGs ESL</i>	<i>Fall 2010</i>	<i>Fall 2011</i>	<i>Fall 2012</i>	<i>Fall 2013</i>	<i>Fall 2014</i>
<i>Percent</i>	9%	10%	10%	12%	<b>11%</b>

### Percent Undergraduate Students who are International

The Amherst campus attracts a small number of undergraduate international students, some of whom are studying on the campus as part of an international exchange program. The numbers have more than doubled since Fall 2010 as the campus has increased its recruitment of international students. In contrast, almost one-fourth (1,546) of graduate students are international.

<i>Percent UGs International</i>	<i>Fall 2010</i>	<i>Fall 2011</i>	<i>Fall 2012</i>	<i>Fall 2013</i>	<i>Fall 2014</i>
<i>Number</i>	304	378	421	537	<b>681</b>
<i>Percent</i>	1%	2%	2%	2%	<b>3%</b>

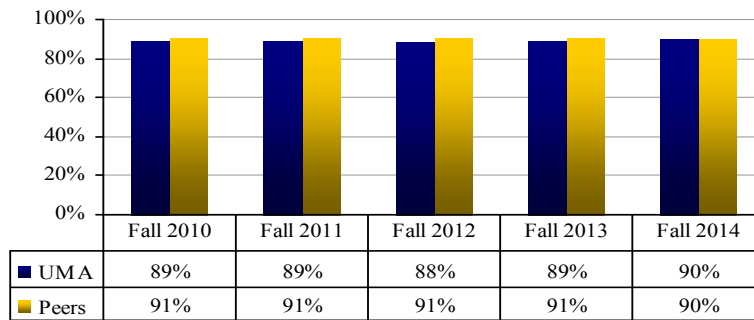
### Total Number of Students who Participated in a Study Abroad Program

1,194 UMass students participated in a study abroad experience during the 2013-14 academic year. The campus encourages students to take advantage of these enriching global learning opportunities.

<i>Total Number of Students who participated in Study Abroad</i>	<i>Fall 2009-Summer 10</i>	<i>Fall 2010-Summer 11</i>	<i>Fall 2011-Summer 12</i>	<i>Fall 2012-Summer 13</i>	<i>Fall 2013-Summer 14</i>
	1,023	1,143	1,074	1,128	<b>1,194</b>

### Freshmen One-Year Retention Rate

The one-year retention rate has been consistently high, and the relative position of UMass with respect to its peers in Fall 2014 improved by two positions. New strategies are being developed and implemented to improve the first-year experience and hence student retention.



<i>Freshmen One-Year Retention Rate Peer Rank</i>	<i>Fall 2010</i>	<i>Fall 2011</i>	<i>Fall 2012</i>	<i>Fall 2013</i>	<i>Fall 2014</i>
	7	7	7	8	6

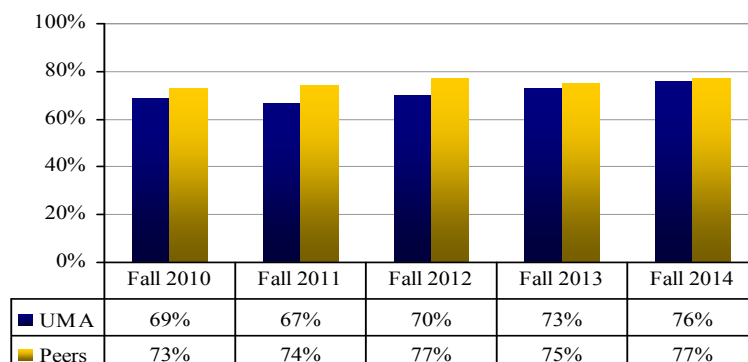
### Four -Year Graduation Rates

The four-year graduation rate continues to improve every year at UMA. In fact, the 2014 rate is 12.4 percentage points higher than the 2010 rate of 54.2%. Currently two-thirds of entering first-time first-year students are graduating in four years or less.

<i>4-Yr Graduation Rates</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
<i>Cohort Entering Year</i>	(2006)	(2007)	(2008)	(2009)	(2010)
<i>4-Year Graduation Rate</i>	54%	59%	63%	66%	<b>67%</b>

### Freshmen Six-Year Graduation Rate

Seventy-six percent of full-time Amherst campus students graduate within six years of entrance, and another 10% receive their degree from another institution. This is the third consecutive year in which the rate has exceeded 70% since the campus began tracking graduation rates beginning with the Fall 1984 entering cohort (64%). The 2014 rate remains just slightly below the peer median; but improvements in the four-year graduation rates (67% for the 2010 cohort) suggest that the 6-year rates will continue to improve. Numbers reflect rates for the Fall 2004-Fall 2008 entering cohorts. The campus implemented a Student Success Collaborative in partnership with the Educational Advisory Board in AY 2014-15. This is a predictive analytics advising platform that will enhance our ability to understand and improve student advising, retention and degree completion.



<i>Freshmen Six-Year Graduation Rate</i>	<i>Fall 2010</i>	<i>Fall 2011</i>	<i>Fall 2012</i>	<i>Fall 2013</i>	<i>Fall 2014</i>
	8	9	8	6	6

### Transfers (Full-Time) One-Year Retention Rate

The one-year retention rate for transfers has remained steady at 86%. This includes a small number of students who graduate in one year. Transfer students represent approximately one-fifth of the entering fall class.

<i>Transfers (Full-time) One-Year Retention Rate</i>	<i>Fall 2010</i>	<i>Fall 2011</i>	<i>Fall 2012</i>	<i>Fall 2013</i>	<i>Fall 2014</i>
	86%	86%	86%	86%	<b>86%</b>

### Transfers (Upper Division) Four-Year Graduation Rate

Approximately three quarters of upper division transfers who enroll complete the baccalaureate degree within four years of entry. Many have already earned an Associate's degree. This matches the freshman six-year graduation rate. Upper Division transfers represent less than half of total transfer students. The rate has remained fairly stable over time. Numbers are reported for the Fall 2006-2010 cohorts.

<i>Transfers (Upper Division) Four-Year Graduation Rate</i>	<i>Fall 2010</i>	<i>Fall 2011</i>	<i>Fall 2012</i>	<i>Fall 2013</i>	<i>Fall 2014</i>
	73%	74%	74%	74%	<b>76%</b>

### Student Achievement Measure (SAM Data - Bachelor's Seeking Model)

The Student Achievement Measure tracks entering first-time first-year students, by cohort, throughout their college careers. After 4 years, 68% graduated from UMA or another institution, 18% were still enrolled at UMA, and 9% were enrolled at another institution. This means that 95% of the entering cohort either earned a degree or were still actively seeking one. After 6 years, 86% earned a degree and an additional 5% were still working toward one.

<b>FIRST-TIME FULL-TIME FRESHMEN</b>						
<i>Number of Students in Cohort: 4,131</i>			<b>GRADUATED</b>			
<i>Outcomes for Student Starting at UMass Amherst in Fall 2008 by Summer 2014</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>WITHIN 4 YRS.</i>	<i>WITHIN 5 YRS.</i>	<i>WITHIN 6 YRS.</i>
<i>Bachelor's degree from UMass Amherst</i>	0%	0%	1%	63%	74%	<b>76%</b>
<i>Associate degree from UMass Amherst</i>	0%	0%	0%	0%	0%	<b>0%</b>
<b><i>Total Graduated from UMass Amherst</i></b>	<b>0%</b>	<b>0%</b>	<b>1%</b>	<b>63%</b>	<b>74%</b>	<b>76%</b>
<i>Bachelor's degree from another Institution</i>	0%	0%	0%	4%	7%	<b>9%</b>
<i>Associate degree from another Institution</i>	0%	0%	0%	1%	1%	<b>1%</b>
<b><i>Total Graduated from another Institution</i></b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>5%</b>	<b>8%</b>	<b>10%</b>
<b><i>Enrolled at UMass Amherst</i></b>	<b>98%</b>	<b>88%</b>	<b>81%</b>	<b>18%</b>	<b>4%</b>	<b>1%</b>
<i>Enrolled at Another 4-yr Institution</i>	0%	7%	10%	7%	4%	<b>3%</b>
<i>Enrolled at Another 2-yr Institution</i>	0%	3%	3%	2%	2%	<b>1%</b>
<b><i>Total Transferred and Enrolled at another Institution</i></b>	<b>1%</b>	<b>10%</b>	<b>13%</b>	<b>9%</b>	<b>6%</b>	<b>4%</b>
<b><i>Current Status Unknown</i></b>	<b>1%</b>	<b>2%</b>	<b>5%</b>	<b>5%</b>	<b>8%</b>	<b>9%</b>

### Alumni Participation Rate

The alumni participation rate is slowly declining for UMA. Since 2010 there has been a full 2% decline in the percent of alumni giving to the university.

<i>Alumni Participation Rate</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
	12%	11%	11%	10%	10%

### SERVICE TO THE COMMONWEALTH

#### Incoming Class Composition

The split between freshman and transfers in the incoming class remains stable at 80% freshman and 20% transfers. Despite slight fluctuations in 2011 and 2012, the composition is the same this year as it was in Fall 2010.

<i>Incoming Class Composition</i>	<i>Fall 2010</i>	<i>Fall 2011</i>	<i>Fall 2012</i>	<i>Fall 2013</i>	<i>Fall 2014</i>
<i>Total Incoming Class</i>	5,597	5,815	5,628	5,773	<b>5,800</b>
<i>Entering Freshmen</i>	4,469	4,688	4,592	4,621	<b>4,642</b>
<i>Percent Entering Freshmen</i>	80%	81%	82%	80%	<b>80%</b>
<i>Transfers</i>	1,128	1,127	1,036	1,152	<b>1,158</b>
<i>Percent Transfers</i>	20%	19%	18%	20%	<b>20%</b>

*n.b. State-supported only.*

#### Degree Completions

The total number of degrees continues to increase every year. The largest gains are at the bachelor's and master's levels. There has been more fluctuation in the number of doctoral degrees, but they have grown by 9% since 2009-10.

<i>Degree Completions</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>
<i>Bachelor's degrees</i>	4,851	5,036	5,203	5,363	<b>5,674</b>
<i>Masters degrees</i>	1,221	1,361	1,334	1,362	<b>1,409</b>
<i>Doctoral degrees</i>	281	282	305	334	<b>306</b>
<i>Res./Sch. Doctorates</i>	256	258	268	295	<b>287</b>
<i>Professional Practice</i>	25	24	37	39	<b>19</b>
<i>Total Degrees</i>	6,353	6,679	6,842	7,059	<b>7,389</b>

#### Percent Alumni Who Live in Massachusetts

Over half of the undergraduate students who earned a degree from UMA, and about two-fifths of the recipients of the master's and doctorate degrees reside in Massachusetts. The overall proportion increased to 54% in 2013 and stayed steady for 2014, but it is too soon to determine if this is an upward trend.

<i>Percent Alumni Who Live in MA</i>	<i>Fall 2010</i>	<i>Fall 2011</i>	<i>Fall 2012</i>	<i>Fall 2013</i>	<i>Fall 2014</i>
<i>Undergraduate</i>	56%	56%	54%	57%	<b>57%</b>
<i>Graduate</i>	41%	41%	39%	41%	<b>42%</b>
<i>All</i>	53%	53%	51%	54%	<b>54%</b>



## Enrollment in STEM Programs

There are several initiatives on the Amherst campus to promote the enrollment and graduation of students in science, technology, engineering and mathematics (STEM) fields. Another goal is to increase the enrollment and persistence of underrepresented minorities in STEM. There has been an upward trend in the number and percent of undergraduates in STEM programs. Presently, 36% of undergraduate and 29% of graduate students are enrolled in such programs.

### Undergraduate

	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014
<i>Total</i>	20,791	21,265	21,448	21,672	<b>21,864</b>
<i>STEM</i>	6,062	6,588	7,070	7,429	<b>7,775</b>
<i>Percent STEM</i>	29%	31%	33%	34%	<b>36%</b>

### Graduate

	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014
<i>Total</i>	5,677	5,770	5,792	5,848	<b>5,808</b>
<i>STEM</i>	1,601	1,677	1,729	1,749	<b>1,702</b>
<i>Percent STEM</i>	28%	29%	30%	30%	<b>29%</b>

### Total Enrollment

	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014
<i>STEM</i>	7,663	8,265	8,799	9,178	<b>9,477</b>
<i>Percent STEM</i>	29%	31%	32%	33%	<b>34%</b>

## Degrees and Certificates Awarded in STEM Fields

The upward trend in STEM enrollment has been mirrored in the number of degrees and certificates awarded. Over one fourth of the almost 5,700 undergraduate degree recipients and 1,700 graduate degree recipients are awarded degrees in STEM fields. The number of students pursuing STEM certificates has leveled off in the area of 280, up from 181 in 2009-10.

### Undergraduate Degrees

	2009-10	2010-11	2011-12	2012-13	2013-14
<i>Total Degrees</i>	4,851	5,036	5,203	5,363	<b>5,674</b>
<i>STEM</i>	1,119	1,162	1,387	1,436	<b>1,631</b>
<i>Percent STEM</i>	23%	23%	27%	27%	<b>29%</b>

### Graduate Degrees

	2009-10	2010-11	2011-12	2012-13	2013-14
<i>Total Degrees</i>	1,502	1,643	1,639	1,696	<b>1,715</b>
<i>STEM</i>	361	380	437	448	<b>487</b>
<i>Percent STEM</i>	24%	23%	27%	26%	<b>28%</b>

### All Degrees

	2009-10	2010-11	2011-12	2012-13	2013-14
<i>STEM</i>	1,480	1,542	1,824	1,884	<b>2,118</b>
<i>Percent STEM</i>	23%	23%	27%	27%	<b>29%</b>

### Certificates

	2009-10	2010-11	2011-12	2012-13	2013-14
<i>Total Certificates</i>	181	234	311	283	<b>280</b>
<i>STEM</i>	1	12	33	46	<b>36</b>
<i>Percent STEM</i>	1%	5%	11%	16%	<b>13%</b>

### Degrees and Certificates Awarded in Healthcare Fields

The total number of health care degrees has shown a 45% increase since 2009-10. The bulk of this has come at the bachelor's level due to the new Public Health Sciences program that started being offered in fall 2007. There has been fluctuation, but no sustained increase at the graduate level. UMA started offering a certificate program in Nursing Education in Fall 2014.

<i>Health Care Degrees and Certificates</i>	2009-10	2010-11	2011-12	2012-13	2013-14
<i>Bachelor's degrees</i>	256	290	252	355	<b>420</b>
<i>Masters degrees</i>	124	129	116	159	<b>145</b>
<i>Doctoral degrees</i>	25	31	48	44	22
<i>Res./Sch. Doctorates</i>	3	7	11	5	<b>3</b>
<i>Professional Practice</i>	22	24	37	39	<b>19</b>
<b>Total Degrees</b>	<b>405</b>	<b>450</b>	<b>416</b>	<b>558</b>	<b>587</b>

<i>Total Certificates</i>	0	0	0	0	0
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### FINANCIAL HEALTH

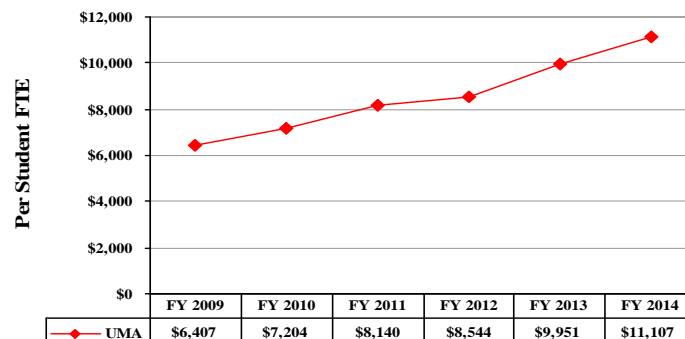
#### Endowment Assets and Annual Growth in Endowment

The campus endowment is one of the lowest in the country for a public flagship campus. In FY 2014 the endowment increased due to gifts and better investment performance. The campus is in the midst of a fundraising campaign that has raised over \$310 million and expects to see growth in the endowment from increased gifts.

<i>Endowment Assets and Growth in Endowment</i>	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
<i>Total Endowment</i>	\$181.6M	\$210.1M	\$230.6M	\$272.1M	<b>\$307.1M</b>
<i>Annual Growth</i>	12%	16%	10%	18%	<b>13%</b>

#### Endowment per Annualized Student FTE

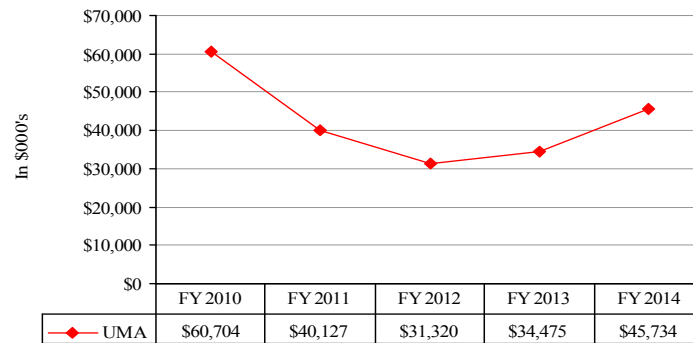
The campus endowment is one of the lowest in the country for a public flagship campus. The campus average per student continues to increase as the market value outpaces student FTE growth.



<i>Endowment per Annualized Student FTE</i>	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
<i>Peers</i>	\$10,840	\$12,309	\$14,226	\$13,548	N/A

### Private Funds Raised Annually

The impact of the “UMass Rising: Campaign for UMass Amherst” is reflected starting in FY2010 punctuated with eight-figure gift commitments in FY 2010, FY 2011, and FY2014. Annual fluctuations can be expected through the course of the campaign when such large non-repeating gifts are received. Significant estate commitments are being solicited and received during the campaign period and are not reflected in this report.



### Primary Reserve

Primary reserve, or financial cushion, represents an institution's capacity to sustain itself during difficult financial times. Although lower than its peers, the ratio for the Amherst campus still compares favorably. The primary reserve will decline over the next several years as accumulated unrestricted funds designated for capital improvements are spent on these projects and the net asset converts to Net Investment in Plant.

Primary Reserve	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
UMA	25.9%	24.1%	24.8%	26.7%	<b>27.9%</b>
Peers	27.2%	31.2%	31.2%	29.7%	N/A

### Debt Service to Operations

The debt service ratio for the campus has grown as the campus continues its investment in infrastructure improvements. This ratio will approach 8% over the next five years as the campus invests in new classroom space and science laboratories.

Debt Service to Operation	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
UMA	5.8%	5.7%	5.5%	6.1%	<b>6.2%</b>
Peers	5.7%	5.8%	6.0%	5.5%	N/A

### Deferred Maintenance per GSF

This ratio tracks the progress the campus anticipates making in reducing its deferred maintenance backlog over the next few years. It is based on currently identified projects in the capital plan with \$270 million of spending included in the five year projection for infrastructure improvements.

Deferred Maintenance per GSF	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
UMA	\$149	\$164	\$162	\$151	<b>\$143</b>

## DEFINITIONS AND SOURCES

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### ACADEMIC QUALITY INDICATORS

**Average 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.

**Average SAT Scores of Freshmen.** Average SAT Scores of freshmen are based on the Arithmetic Mean. The 25<sup>th</sup> & 75<sup>th</sup> percentiles are based on combined SAT scores of all first-year students. Peer data are from IPEDS.

**Average GPA of Entering Transfer Students.** Cumulative GPA for college-level courses transferred to UMass Amherst according to admissions policy.

**Student-Faculty Ratio.** The ratio of FTE students to FTE instructional faculty. Faculty and students in stand-alone graduate or professional programs such as medicine, law, veterinary, dentistry, social work, business, and public health in which faculty teach virtually only graduate-level students are excluded. Teaching assistants are not counted as faculty. Data and definition are from CDS.

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

**Technology-Enhanced Classrooms.** Classification of the campus’s total classroom capacity in terms of the level of technology-support. Categories of classification are campus-specific.

**Doctoral Degrees Awarded.** Number of Doctorates awarded each academic year, which includes September, February, and May award dates (e.g. AY 2013-14 includes Sept. 2013, February and May 2014). These include both Research/Scholarship and Professional Practice Doctorates. Peer comparison data are based on Research/Scholarship doctorates only.

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

**Total R&D 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 reported in The Top American Research Universities. Beginning 2010 data are from NSF. Peer comparison data are based on S&E R&D.

**Federal R&D Expenditures.** R&D expenditures in all academic fields from all federal sources, as reported to NSF.

**Total R&D Expenditures Ranking.** Annual NSF ranking of Total R&D expenditures, for all postsecondary institutions participating in the NSF HERD Survey. Data source NCES WebCaspar/NSF HERD data tables.

**Total R&D Expenditures Ranking Among Carnegie Peers, US Publics, Non-Medical Institutions.** UMass Amherst’s rank in the annual NSF ranking of Total R&D expenditures among public institutions of higher education with a Carnegie classification of “Research University/Very High” and with no medical school. Data source NCES WebCaspar/NSF HERD data tables. Ranking computed by campus.

**Total Research Expenditures per Tenure System Faculty.** R&D expenditures in all academic fields from all sources (federal, state, local governments, industry, private and institutional) as reported to NSF, divided by total tenure system faculty as reported to IPEDS. Peer data reported in The Top American Research Universities. Beginning in 2010, data reported by NSF.

**Patent Applications.** Number of U.S. Patent applications filed per year. Data Source: Data reported by campuses to UMass President’s Office, Office of CVIP.

**License Income.** Amount of annual income from license agreements. Data Source: Data reported by campuses to UMass President’s Office, Office of CVIP.

**Percent Tenured/Tenure-Track Faculty.** Percent based on the ratio of Tenured/Tenure-Track Faculty FTE to Total Faculty FTE.

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

**New Tenured/Tenure-Track Faculty Hired as Percent of Total Tenured/Tenure-Track Faculty.** Definition of 'New' Hires per IPEDS Definitions. Number of 'Newly hired' Tenured/Tenure-track faculty divided by Total Tenured/Tenure-track Faculty of an IPEDS reporting cycle.

**Change in Tenured/Tenure-Track Faculty.** The difference in the number of tenured/tenure-track faculty from one Fall semester to the next. Includes faculty members who are on paid leave. Does not include individuals whose primary responsibility is administrative. For the 2015 PMS report, the difference will be between the figure for Fall 2014 and Fall 2013.

**Change in Faculty FTE.** The difference in the total FTE, from one Fall semester to the next, for all full-time and

part-time instructional faculty teaching state-supported courses. Includes faculty members who are on paid leave. Does not include individuals whose primary responsibility is administrative. For the 2015 PMS report, the difference will be between the figure for Fall 2014 and Fall 2013. Definition of Faculty FTE is per the Common Data Set, and includes all faculty teaching credit courses, including credit courses offered via Continuing Education.

**Percent Faculty-of-Color (based on Full-time Instructional Faculty).** The proportion of full-time instructional faculty who are U.S. citizens or permanent residents and report their race/ethnicity to be one or more of the following: Hispanic/Latino, American Indian or Alaska Native, Asian, Black or African-American, Native Hawaiian or Other Pacific Islander, or Two or More Races. Race/ethnicity definition is based on IPEDS.

**Percent Women Faculty (based on Full-time Instructional Faculty).** The proportion of full-time instructional faculty who identify themselves as female.

**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 Fellows, National Endowment for the Humanities Fellows, NSF Career Awards, Sloan Research Fellows). Data reported in The Top American Research Universities and were obtained from directories or web based listings.

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

#### ACCESS AND AFFORDABILITY INDICATORS

**Percent (In-State) Pell Grant Recipients.** Federal Pell Grants are awarded to low-income undergraduates based on their expected family contribution. Data as reported by campuses to the UMass President's Office of in-state, full-time students with Pell Grants in the Financial Aid Template.

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

**Average Debt of Students for Graduating Class (UG).** The average debt load is based on the total debt borrowed by an Institution's UG graduating class divided by the

number of students of that graduating class that carried any amount of debt. It does not include those students with no debt load. Data is from CDS.

**Percent Graduating Class (UG) with Debt.** The total number of students in the UG graduating class that carried a debt load at the institution divided by the total number of graduating students in that institution. Data is from CDS.

**Percentage Undergraduates from Massachusetts.** Percentage of total undergraduate students who currently reside in Massachusetts based on tuition residency and/or permanent address for continuing education students.

**Online Course Enrollments (Registrations).** Enrollments or course registrations for the academic year for online credit courses. Academic year includes Summer, Fall, intersession, and Spring. These do not include hybrid courses, but fully online only offered via *UMassOnline*.

**Annual Growth in Online Course Enrollments (Registrations).** Percentage rate of growth in enrollments or course registrations for the fiscal year for online credit courses. Fiscal year includes Summer, Fall, intersession, and Spring. These do not include hybrid courses, but fully online only offered via *UMassOnline*.

#### STUDENT SUCCESS AND SATISFACTION INDICATORS

**Percent Undergraduates who are Students of Color.** Undergraduates who are African American/Black, American Indian/Alaska Native, Asian, Hawaiian/Pacific Islander, More than One Race, or Hispanic/Latino divided by total U.S. citizens and permanent residents who report race/ethnicity. Due to recent changes in IPEDS race and ethnicity classifications, trend data on students of color should be viewed with caution.

**Percent Undergraduates who are First Generation in College.** First-generation college students are defined as those students with neither parent having earned a bachelor's degree. Data are reported on the Fall 2014 Common Application form required of all entering first year students who apply to UMass Amherst.

**Percent Undergraduates with English as a Second Language.** Percentage of undergraduates whose first language was not English. Data are from the 2014 Common Application form.

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

**Number of Students who Participated in a Study Abroad Program.** Data are for the total number of students who participated in a credit bearing, study abroad program as reported on the Institute of International Education Open Doors survey for Fall 2013 through Summer 2014.

**Freshmen One-Year Retention Rate.** Percent of first-time, full-time freshmen who entered in the previous Fall and were still enrolled at UMass Amherst as of the next Fall. Peer data as reported to IPEDS.

**Freshmen Four-Year Graduation Rate.** Percent of first-time, full-time freshmen who entered in a given Fall term and who graduated within four years from UMass Amherst.

**Freshmen Six-Year Graduation Rate.** Percent of first-time, full-time freshmen who entered in a given Fall and had graduated within six years from UMass Amherst. Peer data as reported to IPEDS.

**Transfer (Full-Time) One-Year Retention Rate.** Percent of full-time transfer students at any level who entered in the prior Fall and were still enrolled at UMass Amherst or graduated as of the next Fall.

**Transfer (Upper-Division) 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 from UMass Amherst.

**Student Achievement Measure (SAM Data – Bachelor’s Seeking Module).** Report on first-time, full-time freshmen cohort based on data sent to National Student Clearinghouse and reported to the Student Achievement Measure project.

**Alumni Participation Rate.** Average alumni giving rate: The average percentage of undergraduate alumni of record who donated money to the college or university. Alumni of record are former full- or part-time students who received an undergraduate degree and for whom the college or university has a current address. The alumni giving rate is calculated by dividing the number of alumni donors during a given academic year by the number of alumni of record for that same year. These two separate alumni giving rates are then averaged for the last two academic years. Graduates who earned only a graduate degree are excluded. Undergraduate alumni donors are alumni with undergraduate degrees from an institution who made one or more gifts for either current operations or capital expenses during the specified academic year. The percentage of alumni giving serves as a proxy for how satisfied students are with the school. A higher average alumni giving rate percentage scores better in the ranking model than a lower average alumni giving rate. Data is from US News and World Report.

## SERVICE TO THE COMMONWEALTH INDICATORS

**Percent of Incoming Class that are Transfers/Freshmen.** The percent of an incoming degree-seeking undergraduate class that is entering freshmen vs. transfers.

**Degree Completions.** The number of degrees (not including certificates) awarded in the previous academic year, by degree level. As reported to IPEDS.

**Percent Alumni Who Remain in Massachusetts.** Percentage of total alumni who currently reside in Massachusetts based on alumni records.

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

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

**Degrees and Certificates Awarded in Healthcare Fields.** Health Care designation as defined by Campus IR; and based on CIP classification. All of CIP 51 and specific 6-digit CIPs unique to each campus. Certificates data also included separately.

**MTEL Science & Math Test-Takers.** Total number of students who took the Massachusetts Tests for Educator Licensure (MTEL) subject tests in science and math fields.

## FINANCIAL HEALTH INDICATORS

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

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

**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.

**Primary Reserve.** Unrestricted net assets as a percentage of total operating expenditures. Peer data are from published financial statements.

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

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

**PEER INSTITUTIONS FOR UMASS AMHERST**

Indiana University-Bloomington

\*Iowa State University

\*Rutgers University System

Stony Brook University

\*University of California-Santa Barbara

\*University of Colorado-Boulder

\*University of Connecticut System

University of Delaware

\*University of Maryland-College Park

University of Oregon

**\*Financial Peer**

*Please Note: Unless otherwise specified, all data are from the UMass Amherst Office of Institutional Research.*