



2017 REPORT ON ANNUAL INDICATORS

University Performance Measurement System

July 2017

The University of Massachusetts

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Message from the President

June 30, 2017

I am pleased to present the University of Massachusetts' 2017 Report on Annual Indicators, an effort that illustrates our unwavering commitment to accountability, assessment and improvement.

This report documents the continued growth of the UMass system and its individual campuses and compares the university's performance with like institutions across the country on a range of indicators related to academic quality, student success and satisfaction, access and affordability, service to the Commonwealth, and financial health. The report measures our progress towards achieving the strategic priorities approved by the UMass Board of Trustees and embedded in the university's mission: "to provide an affordable and accessible education of high quality and to conduct programs of research and public service that advance knowledge and improve the lives of the people of the Commonwealth, the nation and the world."

We undertake this comprehensive self-analysis each year as a means of knowing what we do well, in what areas we would like to grow, and how — with our excellence in education, research and service — we can better serve the Commonwealth of Massachusetts. In order to ensure that the university's self-evaluation process is current and in alignment with emerging issues of salience, the *Report on Annual Indicators* undergoes a system-wide review process every five years. Several new indicators were recently added to the existing repertoire of metrics, including agency bond ratings; key IT metrics; procurement cost savings; student-faculty ratios; faculty composition; alumni participation rates; four-year graduation rates; entering class composition and student achievement measures.

As the attached 2017 Annual Indicators Report demonstrates, the university continues to make significant progress toward achieving its long-term goals and fulfilling its special role as the Commonwealth's public research university. As part of that unique mission, UMass is transforming students' lives, shaping the future of the Commonwealth and addressing key state needs. During the past year, UMass provided an accessible and affordable education to 75,000 students, the vast majority of whom are sons and daughters of the Commonwealth. We conducted more than \$632 million in research that led to groundbreaking discoveries and spin-off companies that create jobs and fuel economic growth. Furthermore, the majority of our graduates remained in Massachusetts, entering the workforce in critical fields such as nursing, primary care medicine, computer science, the life sciences and education. All of these activities contribute to an annual statewide economic impact of \$6.2 billion.

Major highlights of this report include:

***** UMass continues to be accessible and affordable.

UMass average tuition and fees remain affordable relative to median family income. In FY 2016, UMass tuition and fees averaged 15 percent of statewide median family income, compared with an average of 50 percent for the state's private universities as well as an

average of 18 percent for other New England public universities. In FY 2016, UMass financial aid increased to \$260.1 million — up 10 percent from the previous year — and is projected to grow another 19.5 percent in FY 2017. Over the last decade, university-funded institutional aid has increased by \$189.4 million, or 268 percent.

UMass serves the citizens of the Commonwealth.

Eighty percent of UMass undergraduate freshmen are Massachusetts residents, compared with 21 percent at private peer institutions in the state.

UMass research capacity continues to grow.

In FY 2016, the system generated \$632.4 million in research expenditures. UMass is one of the top three universities in R&D spending in the state and fourth in New England. The university is a national leader in patents awarded on the basis of its faculty research and in converting those innovative products into licensing revenue. Furthermore, in 2016, the five campuses awarded 812 doctoral degrees across various disciplines, including 539 research/scholarship doctoral degrees and 273 professional practice doctoral degrees.

What States of Contribution to an educated citizenry and workforce remains high.

UMass awarded 16,713 bachelor's and graduate degrees in AY 2015-16, which represents 16 percent of all such degrees awarded in the state. The university's impact is particularly high in the following fields: computer and information sciences, engineering, and health (bachelor's level); natural sciences and engineering (master's level); education, computer and information sciences, and math and natural sciences (doctoral level).

UMass has saved more than \$20 million.

Collective efforts by the campuses to leverage cost savings, enhanced service offerings and efficiencies through the work of the Procurement Council, IT Leveraged Procurement Committee and the Strategic Energy Committee have resulted in reported cost savings of more than \$20 million in FY 2016 and more than \$61 million in the last three years.

UMass has maintained high bond ratings.

The university's high agency bond ratings for FY 2016 (Aa2 rating by Moody's; AA- rating by S&P; AA rating by Fitch) reflected continuing confidence in the institution's bright future and overall financial health. Specifically, S&P assessed the university system's financial profile as "very strong," noting enrollment growth and freshmen demand as two metrics that outperform peer institutions. Acknowledging the university's leading role in the Massachusetts public higher education system as well as the comprehensive nature of the five-campus system, S&P also cited UMass' strong online educational presence and its "robust" research programs as significant credit factors.

WH Martin T. Meehan

UNIVERSITY OF MASSACHUSETTS

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2017 REPORT ON ANNUAL INDICATORS University Performance Measurement System

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THE 2017 REPORT ON ANNUAL INDICATORS

The University of Massachusetts Annual Indicators Report measures progress toward achieving the strategic priorities approved by the Trustees and embedded in its mission - 'to provide an affordable and accessible education of high quality and to conduct programs of research and public service that advance knowledge and improve the lives of the people of the Commonwealth, the nation, and the world.' The 2017 Report on Annual Indicators is the 20th annual report of the University of Massachusetts Performance Measurement System.

This report provides trustees, legislators, and state-level policy makers with information by which they can assess the University 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
- Financial Health

Encompassed within these five areas are nine strategic priorities of the University. The strategic priorities are:

- Improve student learning experience
- Strengthen research and development
- Renew faculty
- Continue a focus on diversity and positive climate
- Maintain and improve access and affordability
- Develop leadership role in public service
- Increase endowment
- Improve administrative and IT services
- Develop first-rate infrastructure

In order to ensure that the University's self-evaluation process is current and in alignment with emerging issues of salience, the Report on Annual Indicators undergoes a system-wide review process every five years. The 2017 Report on Annual Indicators is in the third year of the current cycle. Several new indicators have been added to the existing repertoire of metrics, including *agency bond ratings; key IT metrics; procurement cost-savings; student-faculty ratios; faculty composition; alumni participation rates; four-year graduation rates; student achievement measures,* and *student debt load.* The metric for *Incoming class composition,* also a recent addition, is currently under review; therefore, it has not been included in this report.

This 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 UMass Medical School, the peer group consists of 20 medical schools in the United States (public and private). For all the other UMass 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, in particular 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.

UMASS SYSTEM

The System report is followed by individual reports for each campus. Each report has the following format:

- Headlines from the 2017 Annual Indicators
- 2017 Annual Indicators at a Glance
- Data Tables and Charts
- Definitions and Sources
- List of Institutional Peers

Legislative Priorities	UMass Strategic Priorities	2017 ANNUAL INDICATORS
P E	Improve student learning experience	Average HS GPA of Freshmen Average SAT Scores of Freshmen Mean 25 th – 75 th Percentile Average GPA of Entering Transfer Students MCAT Scores of Entering Students (UMMS Only) Student Satisfaction with Educational Experience Student-Faculty Ratio Technology-Enhanced Classrooms Doctoral Degrees Awarded Postdoctoral Appointees Total R&D Expenditures
ACADEMIC QUALITY	Strengthen research and development	Total R&D Expenditures Rankings Total R&D Expenditures Rankings among Carnegie Peers, US Publics, Non-Medical Federal R&D Expenditures (Optional) Total R&D Expenditures per Tenured/Tenure-track Faculty Total R&D Expenditures per Tenured/Tenure-track Faculty Total R&D Expenditures per FT Faculty Federal R&D Expenditures per FT Faculty Sponsored Instruction/Outreach per Faculty Rank in NIH Funding Among Medical Schools (UMMS Only) US News Ranking in Primary Care Medicine (UMMS Only) Patent Applications License Income Utilization of Shared High Performance Computing Research Resources
	Renew faculty	Percent Faculty that are Tenured/Tenure-Track New Tenured/Tenure-Track Faculty Hired New Tenured/Tenure-Track Faculty Hired as Percent of All Tenured/Tenure-Track Faculty Change in Tenured/Tenure-Track Faculty Change in Total Faculty FTE Full-Time Instructional Faculty - Percent Faculty-of-Color Faculty Awards National Academy Members
ACCESS AND AFFORDABILITY	Access and Affordability	Tuition & Fees as Percent of Statewide Family Income Percent (In-State) Pell Grant Recipients Percent of Need Met for In-State Students Awarded Need-Based Aid Average Debt of Students for Graduating Class Percent Graduating Class with Debt Percent UGs from Massachusetts Online Course Enrollments Annual Growth in Online Course Enrollments

UMASS SYSTEM

Legislative Priorities	UMass Strategic Priorities	2017 ANNUAL INDICATORS
		Percent UGs who are Students of Color
Z		Percent UGs who are First Generation in College
TIOI		Percent UGs who have English as Second Language
STUDENT SUCCESS AND SATISFACTION	nate	Percent UGs who are International
ATIS	e clin	Number of Students who participated in Study Abroad program
S QN	sitiv	Freshmen One-Year Retention Rate
SS A	Diversity and positive climate	Freshmen Four-Year Graduation Rate
ICCE	ity a	Freshmen Six-Year Graduation Rate
IT SU	ivers	Transfer One-Year Retention Rate
DEN	Q	Transfer Four-Year Graduation Rate
STU		Student Achievement Measure
		Alumni Participation Rate
		Match Rate/Choice of Residency (UMMS Only)
		**Incoming Class Composition – Percent Entering Freshmen vs. Transfers
HI	vice	(Currently under review) Degree Completions
AL'	ıblic serv	Percent Mass Residents Attending UMass
WE		In-State UG Enrollment by Region
ION	nd u	Total Degrees and Certificates Awarded
VIMC	velop a leadership role in public service	UMass as Percent of all Massachusetts Degrees
ECC		Percent Alumni who Remain in MA
SERVICE TO THE COMMONWEALTH	adersh	Enrollment in Science, Technology, Engineering, and Mathematics (STEM) programs (Graduate/Undergraduate)
CE 1	ale	Degrees Awarded in STEM fields (Graduate/Undergraduate)
RVI	elop	Service to State Agencies (\$)
SEI	Deve	Health Care Awards (Undergraduate, Graduate Degrees; Certificates)
		Test Takers in MTEL Science and Math subject tests
	nent	Endowment Assets and Annual Growth in Endowment
	Endowment	Total Endowment per Annualized Student FTE
HT.	End	Private Funds Raised Annually
EAI	on Ses	Primary Reserve
НЛ	Administration and IT Services	Campus Safety
NCIA		Procurement Savings/Enhanced Services
FINANCIAL HEALTH	Adı and	Bond Ratings (Moodys, S&P, Fitch)
H	astr ıre	Debt Service to Operations
	Infrastr ucture	Deferred Maintenance per GSF

NOTE: The indicators in red have been added to the Annual Indicators Report following the System-wide five-year review process, conducted in June 2014.**Percent of Incoming Class that are Transfers/Freshmen: Since this metric is currently under review, it does not appear in the 2017 report.

HEADLINES FROM THE 2017 ANNUAL INDICATORS

ACADEMIC QUALITY

* UMass continues to admit high quality students.

UMass attracts highly qualified applicants. Freshmen average SAT scores ranged from 1022 to 1225 across the four undergraduate campuses. Average high school GPA increased slightly from the previous year, ranging from 3.21-3.83.

* UMass research capacity continues to grow.

In FY 2016, the system generated \$632 million in research expenditures, reflecting three consecutive years of over \$600 million in research funding. Furthermore, in 2016, the five campuses awarded a total of 812 doctoral degrees across various disciplines. These include 539 research/scholarship doctoral degrees and 273 professional practice doctoral degrees.

* MA Green High Performance Computing Center.

The MGHPCC is receiving national attention as a model for collaborative research computing. At UMass, the shared cluster now supports the computational needs of over 1,400 researchers. The efficiency of facility operations equates to significant cost savings for power with a reduced environmental footprint.

UMass Medical School is consistently ranked in the top 10% of medical schools with an emphasis in primary care.

In the 2017 US News ranking, UMass Medical School ranked 14th among 156 medical schools with emphasis in primary care medicine.

Commercialization of UMass research continues to grow.

In FY 2016, license income for the University totaled \$25 million. UMass ranks among the top US universities in license income. Based on the most current ranking data of the AUTM Survey (FY 2015), the University is ranked 15th nationwide among institutions in terms of licensing income generated form technology transfer.

ACCESS AND AFFORDABILITY

♦ UMass continues to be accessible and affordable. UMass tuition and fees average 15% of statewide median family income, a percent much lower than that for the state's private universities (50%) and other New England public universities (18%).

* UMass serves citizens of the Commonwealth.

Four out of five (80%) UMass freshmen are Massachusetts residents, compared with one-fifths (21%) at its private peers in the state.

UMassOnline expands programs to provide educational access.

UMassOnline reaches diverse and geographically dispersed learners. In AY 2015-16, course registrations for UMassOnline were at 70,318, representing a 5% increase over AY 2015-16.

STUDENT SUCCESS AND SATISFACTION

* UMass educates a diverse citizenry.

The number of students of color enrolling at UMass has increased over the last five years. Currently, well over one-third (or 35%) of UMass undergraduates are students of color. At UMass Boston, 57% of undergraduates (more than 5,800) are students of color, making it the most diverse public university in all of New England. As a point of comparison, approximately 31% of Massachusetts public high school graduates are students of color.

* International Presence among UMass Students.

There is a growing international presence among UMass students. There are 3,629 international undergraduates students (6%) across the five campuses. The University's graduate program has a stronger international presence by comparison, representing 19% of all graduate students. International students comprise about 10% (or over 7,000) of the total student population - including all undergraduates, graduates, and medical students.

Medical school graduates get their choice of residency.

Ninety-seven percent (97%) of UMass Medical School graduates were accepted to their choices of residency, a match rate that is consistently higher than the peer institutions.

SERVICE TO THE COMMONWEALTH

* Majority of Massachusetts residents attend UMass.

Well over one-fourth (28%) of all Massachusetts residents enrolling in any of the four-year universities in the Commonwealth as first-time undergraduates, attend UMass. The University's students come from every region of the state.

UMass' contribution to an educated citizenry and workforce remains high.

UMass awarded over 18,000 degrees and certificates in AY 2015-16. These include a total of 16,713 degrees (bachelor's and above), that represent 16% of all baccalaureate and graduate degrees (20% of bachelor's, 11% of master's degrees and 10% of doctoral and first professional degrees) awarded in the State. UMass has increased its share of doctorate degrees awarded in the

UMASS SYSTEM

State over the past year. The University's impact is particularly high in the following fields: computer & information sciences, engineering, and health (bachelor's level); natural sciences and engineering (master's level); education, computer and information sciences, and math and natural sciences (doctoral level).

In 2015-2016, well over one-fourth (28%) or 4,742 of the University's total degrees were awarded in STEM fields. The University's impact in the Healthcare field has also grown over the past five years, reflecting a 32% increase over this period.

* Majority of UMass alumni reside and work in Massachusetts.

Nearly two out of three (64%) of all graduates of the University remain in the Commonwealth after graduation.

FINANCIAL HEALTH

✤ Total Endowment at \$735.8 million.

The market value of the University's endowment declined by 4% between FY 2015 and FY 2016. In comparison, peer institutions reflected a slightly higher growth rate in endowment over the same period at 2%.

* Private Funds grow to \$117.1 million.

Private giving to UMass also saw a robust increase in FY 2016, reflecting a 9.5% decrease from last year.

* Financial indicators compare favorably to peers.

In FY 2016, the University's primary reserve and debt service to operations were all within the range of peer systems.

* Collaborative savings over \$20 million.

In FY 2016, the University reported cost savings of over \$20 million through the work of the Procurement Council, IT Leveraged Procurement Committee, and the Strategic Energy Committee.

* High Bond Ratings.

The University's high agency bond ratings for FY 2016 (*Aa2* rating by *Moodys*; *AA*- rating by *S&P*; *AA* rating by *Fitch*) reflects continuing confidence in the institution's overall financial health.

2017 ANNUAL INDICATORS AT A GLANCE

ACADEMIC QUALITY

• Total R&D Expenditures	\$632M
License Income	\$25M
• Patent Applications	189
• Utilization of Shared HPC Research Resource	
(CY2016)	
No. of Active Researchers	1,471
• Number of Doctoral Degrees	812

ACCESS AND AFFORDABILITY

- Tuition & Fees as Percent of Family Income 15%
- Percent Undergraduates from Massachusetts 82%
- Percent of all Undergraduate Freshmen enrolled in four-year institutions in MA, at UMass 28%
- Online Course Registrations 70,318
- Annual Growth in Online Course Registrations 5%

STUDENT SUCCESS AND SATISFACTION

•	Percent Undergraduates who are		
	Students of Color	35%	
•	Percent Undergraduates who are International	6%	

SERVICE TO THE COMMONWEALTH

- Percent MA Residents (Freshmen) Attending the University and its Private Peers, enrolled in UMass 70%
- Enrollment of In-State Undergraduates by Region:

 Greater Boston 	45%
 Northeastern Mass 	20%
 Southeastern Mass 	18%
Central Mass	9%
 Western Mass 	8%
Degrees and Certificates Awarded	18,023
Degree Completions	16,713

	Bachelor's	12,125
	Master's	3,776
	Doctorate	812
•	UMass Degrees as Percent of all MA De	egrees 16%
•	Percent Graduates who Remain in MA	64%
•	MTEL Science and Math Test-Takers	267
•	Enrollments in STEM Fields	24,147 (34%)
	Undergraduate	19,715 (36%)
	Graduate	4,432 (28%)
•	Degrees Awarded in STEM Fields	4,742 (28%)
	Undergraduate	3.455 (28%)
	Graduate	1,287 (28%)
•	Degrees Awarded in Healthcare Fields	2,131
	Undergraduate	1,486
	Graduate	645

FINANCIAL HEALTH

•	Total Endowment Assets	\$735.8M
•	Annual Growth in Endowment	-4.4%
•	Private Funds Raised Annually	\$117.1M
•	Primary Reserve	16.9%
•	Procurement savings (FY 2016)	\$20M
•	Agency Bond Ratings	
	Moodys	Aa2
	S&P	AA-
	Fitch	AA
•	Debt Service to Operations	6.4%
•	Total Deferred Maintenance Cost	\$3.3B
•	Deferred Maintenance per GSF	\$165

ACADEMIC QUALITY

Number of Doctoral Degrees Awarded

UMass campuses awarded a total of 812 doctoral degrees in the 2015-16 academic year, reflecting a seven percent increase over the previous year, and a 20% increase over the last five years. These include both research/scholarship doctorates (539) and professional practice degrees (273). The top five areas with the highest number of doctoral degrees awarded were: Health Professions and Related Sciences (252), Engineering (102), Biological/Life Sciences (90), Education (44), and Physical Sciences (62). A total of 119 MD degrees were awarded by UMMS. UMass Dartmouth awarded 53 Juris Doctor degrees in its Law program.

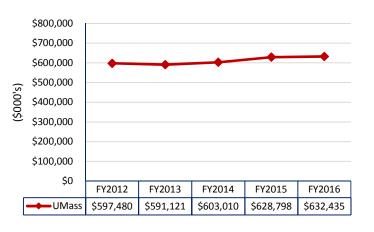
Number of Doctoral Degrees Awarded	2011-12	2012-13	2013-14	2014-15	2015-16
UMass Total	678	765	773	759	812

Total Research & Development Expenditures

The University's Total Research and Development Expenditures increased by one percent to \$632 million in FY 2016, from \$629 million in FY 2015.

In FY 2016, federal funding dropped from 57% to 56% of all R&D expenditures over the previous year.

Despite this significant decline in federal funding, UMass's performance in R&D has continued to hold strong, close to and even well over the \$600 million mark for five consecutive years now. The millions of research dollars pouring into all five campuses is testament to the University's stature as a world-class institution.



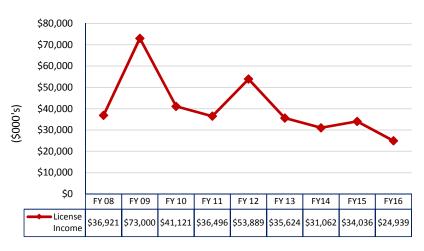
Number of Patent Applications

Number U.S. Patent					
Applications	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
UMass Total	87	119	157	138	189

In FY 2016, UMass campuses submitted a total of 189 US Patent applications, reflecting the highest number of patent applications submitted by the University in the last 13 years. With the exception of FY 2012, US Patent applications have numbered over 100 over this period, with some years significantly better than others.

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. License income for UMass totaled \$25 million in FY 2016, reflecting a 27% decrease from FY 2015. It is important to note that FY 2009 represented a unique year as it includes an upfront payment to UMMS from Merck and Company for the licensing of a human monoclonal antibody combination, developed at the Massachusetts Biologic Laboratories. FY 2012 saw another significant payment of \$20 million from Merck and Company. Based on the most current ranking data (FY 2015) of the AUTM (Association of University Technology Managers) survey, the university is ranked 15th nationwide among academic institutions in terms of licensing income generated from its technology transfer operation.



Utilization of Shared High Performance Computing Research Resources

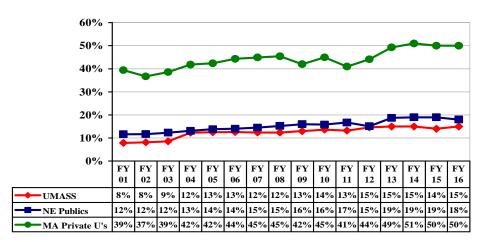
The Massachusetts Green High Performance Computing Center continues to receive national attention as a model for collaborative research computing. The facility Power Usage Efficiency continues to improve with monthly measures as low as 1.17 and a CY16 annual average of 1.24. UMass continues to see an increase in the number of researchers using the five campus shared HPC resources and a dramatic increase in the amount of computing completed by the researchers. Additional hardware has been installed to support the increased usage.

Additionally, the member universities are working collaboratively to secure funding to expand the available resources. One example is a proposal led by Harvard that resulted in an award of nearly \$4 million by the National Science Foundation. The Northeast Storage Exchange (NESE) project, started in November 2016, will add a new dimension to shared resources at the MGHPCC by creating a large storage pool with simple and secure access, common methods for protection of sensitive data, and support for management of information that is subject to NSF data retention requirements. UMass' role in this project is cybersecurity.

Utilization of Shared HPC Cluster at MGHPCC	CY 2014	CY 2015	CY 2016
No. of Active Labs/Researchers Using the Shared HPC Cluster	701	1300	1471
*CPU Utilization	3372	NA	8574

* CPU Years used on the shared HPC Cluster

ACCESS AND AFFORDABILITY





Percent Undergraduate Students from Massachusetts

Four out of five (80%) of UMass undergraduate freshmen are also residents of the Commonwealth. By contrast, 21% of undergraduate freshmen enrolled in the state's private universities come from Massachusetts. Data shows a slight drop for both UMass and MA Privates compared to prior year.

UMass average tuition

affordable relative to median family income.

In FY 2016, UMass tuition and fees

income, compared with an average of 50% for

universities as well as an

averaged 15% of statewide median family

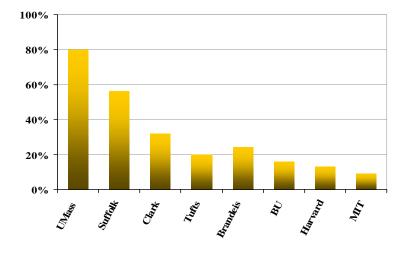
the state's private

average of 18% for

other New England

public universities.

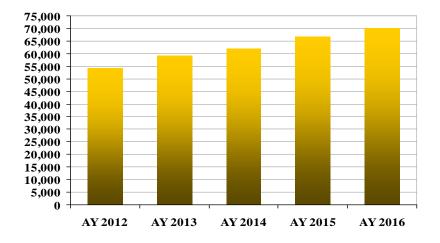
and fees remain



The University continues to attract MA residents as an affordable institution that provides high quality educational opportunities in the state. Over fourfifths (82%) of all undergraduate students attending UMass campuses are MA residents.

UGs from MA	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Number	44,914	45,064	45,312	45,817	46,784
Percent	83%	82%	82%	81%	82%

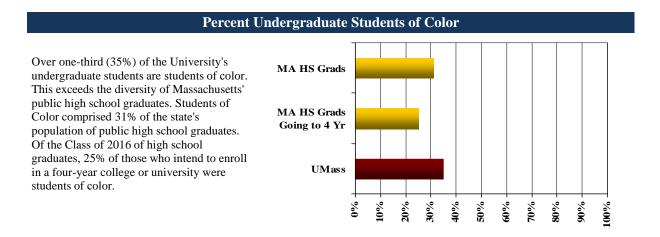
Online Course Registrations



UMassOnline currently delivers 157 programs to diverse and geographically dispersed learners. Course registrations in UMassOnline continue to grow at a steady rate. Last year showed an 5% increase in online course registrations (AY 2015-16).

Online Course Registrations (Number and Growth Rate)	AY 2012	AY 2013	AY 2014	AY 2015	AY 2016
Online Course Registrations	54,086	59,165	62,066	66,736	70,318
Annual Growth Rate	7%	9%	5%	8%	5%

STUDENT SUCCESS AND SATISFACTION



Percent Undergraduates who are International

In Fall 2016, the UMass System had a total of 7,312 international students, comprising 10% of the total student population - including all undergraduates, graduates, and medical students. Six percent of the University's undergraduate students are international students. International undergraduate students enrollment grew by 8%, from 3,278 to 3,629. The University's graduate program has a much stronger international presence by comparison, at 21% of all graduate students.

Percent UG who are International	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Number	1,746	2,239	2,758	3,278	3,629
Percent	3%	4%	5%	4%	6%

Number of Students that Participated in a Study Abroad Program

In 2015-16, over 1,600 UMass students participated in a Study Abroad program. This is a 2% decrease from the previous year, and a 12% increase over the past five years.

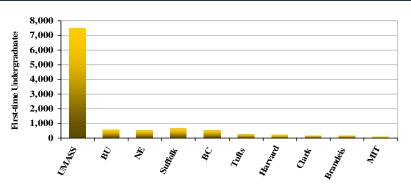
Numberof Students in a Study Abroad Program	Fall 2011- Summer 2012	Fall 2012- Summer 2013	Fall 2013- Summer 2014	Fall 2014- Summer 2015	Fall 2015- Summer 2016
Number	1,491	1,572	1,606	1,704	1,671

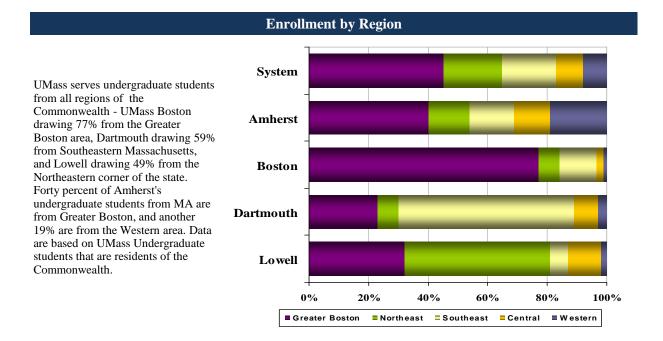
SERVICE TO THE COMMONWEALTH



Seven of ten (70%) In-State undergraduate freshmen attending the University or its Private Peers, is enrolled at a UMass campus.

Twenty eight percent (28%) of all first-time in-state undergraduates attending any four-year institution in the Commonwealth go to UMass.





Degree Completions

In 2015-16, 16,713 degrees were conferred by the University, reflecting a one percent increase from the previous year, and an impressive 15% increase over the past five years.

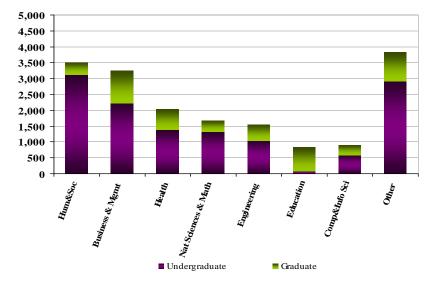
Of the degrees awarded in 2015-16, 73% were at the undergraduate level and 27% were at the graduate level. Twenty-three percent of all degrees were master's degrees and 5% were doctoral degrees.

In 2015-16, the University awarded an additional 85 Associate's degrees in the fields of Agriculture, Business, Management, CIS, and Engineering Technology. These data are not included in the four-plus degree categories presented here.

Degree Completions	2011-12	2012-13	2013-14	2014-15	2015-16
Bachelor's degrees	10,440	10,910	11,544	11,875	12,125
Master's degrees	3,459	3,536	3,661	3,906	3,776
Doctoral degrees	678	765	773	759	812
Res./Sch. Doctorates	439	457	488	484	539
Prof. Practice Doctorates	239	308	285	275	273
Total Degrees	14,577	15,211	15,978	16,540	16,713

Awards Conferred by Field

Approximately one in every ten degree (bachelor's or higher) was in the Health Sciences and Professions for a total of 2,041 degrees. In Education, a total of 832 degrees were awarded, 90% of which were at the graduate level. Over one-fifth (21%) of all the awards were in the Humanities and Social Sciences. Business/Management comprised one-fifth (20%) of all awards. The University conferred 901 degrees (5%) in Computer and Information Sciences (bachelor's or higher), 1,561 (9%) awards in Engineering and Enginereering-related Technologies, and 1,677 (10%) awards in Math and Natural Sciences.

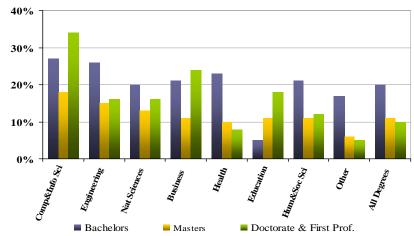


UMass Degrees as Percent of Massachusetts Degrees

The University of Massachusetts awarded 16% of all baccalaureate and graduate degrees last year (20% of bachelor's, 11% of master's degrees and 10% of doctoral and first professional degrees) in the State.

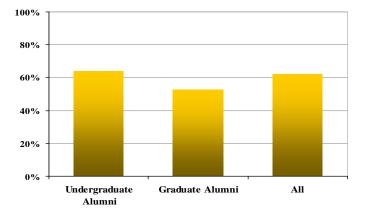
The University's impact is particularly high in the following fields: computer & information sciences, engineering, and health (bachelor's level); natural sciences and engineering (master's level); education, computer and information sciences, and math and natural sciences (doctoral level).

Every third doctoral degree awarded in CIS within the Commonwealth is from a UMass campus. Similarly one in five engineering degrees (21%) is awarded at a UMass campus.



Percentage of Graduates Who Live in Massachusetts

Almost two out of three (64%) undergraduate alumni and over half (53%) of graduate alumni of the University live and work in the Commonwealth of Massachusetts. In all, 62% of UMass graduates continue to live and work in the Commonwealth.



Enrollments in STEM Fields

The upward trend in STEM enrollment has continued over the past five years, reflecting an impressive 27% growth over this period.

Undergraduate Enrollment							
	2011-12	2012-13	2013-14	2014-15	2015-16		
Total UG Enrollment	51,621	52,392	53,765	54,881	55,450		
STEM Enrollment	15,542	16,595	17,470	18,896	19,715		
Percent STEM	30%	32%	32%	34%	36%		

In 2015-2016, over one-third (34%) of
the University's total enrollment were
in STEM fields. The University's
strong impact in this area was
reflected at both the undergraduate
and the graduate levels, with 36% of
all undergraduate enrollments and
28% of all graduate enrollments being
in STEM fields.

Graduate Enrollment								
2011-12 2012-13 2013-14 2014-15 2015-1								
Total Graduate Enrollment	14,492	15,077	15,130	15,884	16,086			
STEM Enrollment	3,869	4,124	4,186	4,260	4,432			
Percent STEM	27%	27%	28%	27%	28%			

All Enrollment									
2011-12 2012-13 2013-14 2014-15 2015-1									
Grand Total Enrollment	66,113	67,469	68,895	70,765	71,536				
Grand Total STEM Enrollment	19,411	20,719	21,656	23,156	24,147				
Grand Total Percent STEM	29%	31%	31%	33%	34%				

Degrees and Certificates Awarded in STEM Fields

The upward trend in STEM enrollment
has naturally been mirrored in the
number of degrees and certificates
awarded over the past five years.

Undergraduate Degrees								
2011-12 2012-13 2013-14 2014-15 2015-1 6								
Total Degrees	10,523	11,073	11,696	12,006	12,268			
STEM	2,483	2,659	3,087	3,242	3,455			
Percent STEM	24%	24%	27%	27%	28%			

Graduate Degrees							
2011-12 2012-13 2013-14 2014-15 2015-16							
Total Degrees	4,137	4,301	4,461	4,647	4,588		
STEM	957	960	1,100	1,233	1,287		
Percent STEM	23%	22%	30%	27%	28%		

In 2015-2016, well over one-fourth (28%) or 4,742 of the University's total degrees were awarded in STEM fields. Twenty-eight percent of all undergraduate degrees and 28% of all graduate degrees were in STEM fields.

All Degrees								
2011-12 2012-13 2013-14 2014-15 2015-16								
Grand Total Degrees	14,660	15,374	16,157	16,653	16,856			
Grand Total STEM	3,443	3,620	4,421	4,474	4,742			
Percent STEM	23%	24%	27%	27%	28%			

Certificates								
2011-12 2012-13 2013-14 2014-15 2015-16								
Total Certificates	1,112	1,119	1,073	822	773			
STEM	156	173	167	107	98			
Percent STEM	14%	15%	16%	13%	13%			

Degrees and Certificates Awarded in Healthcare Fields

The University's impact in the Healthcare field has grown over the past five years. Between 2011-12 and 2015-16, the total number of Healthcare degrees awarded across the five UMass campuses increased from 1,611 to 2,131, reflecting a 32% growth.

In 2015-16, 12% of the University's total degrees were awarded in Healthcare fields. An increasing numbers of students are pursuing Healthcare certificates as well. In the last five years, Healthcare certificates awarded by UMass campuses grew by 50%.

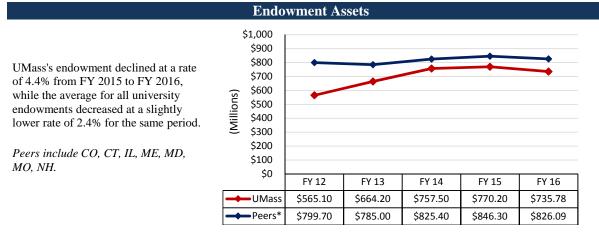
Healthcare Degrees and Certs.	2011-12	2012-13	2013-14	2014-15	2015-16
Bachelor's degrees	1,030	1,277	1,367	1,424	1,486
Master's degrees	355	440	439	369	401
Doctoral degrees	226	220	225	234	244
Res./Sch. Doctorates	30	15	19	23	32
Professional Practice Doctorates	196	205	206	211	212
Total Degrees	1,611	1,937	2,031	2,027	2,131
		1	1		
Total Certificates	139	173	187	174	209

MTEL Science and Math Test-Takers

In 2015-16, 267 of the students completing the University's teacher preparation programs took the Massachusetts Tests for Educator Licensure (MTEL) in Science and Math subjects. This reflects a 30% increase over the past five years, and is a clear reflection of the successes achieved by campuses in their STEM initiatives in the long run.

2011-12	2012-13	2013-14	2014-15	2015-16
205	298	287	253	267

FINANCIAL HEALTH



*The reporting of peer endowment information changed in FY15. The FY15 data presented in this chart was adjusted in order to maintain consistency with prior year data.

Annual Growth Rate	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
UMass	6.8%	17.5%	14.0%	1.7%	-4.4%
Peers	48.8%	-1.8%	5.1%	2.5%	-2.4%

Private Funds Raised Annually

\$200 \$180 \$160 \$140 \$120 (Millions) \$100 \$80 \$60 \$40 \$20 \$0 FY 12 FY 13 FY 15 FY 14 FY 16 UMass \$94.00 \$103.70 \$116.60 \$129.50 \$117.11

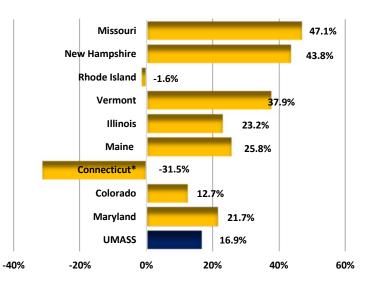
* Includes cash, pledges and grants

Private giving saw a decrease in FY 2016 at \$117.1 million. Between FY 2015 and FY 2016, total private funds for the University declined by 9.5%.

Primary Reserve

Primary Reserve is the total unrestricted net assets divided by total operating expenditures.

The primary reserve reflects the long-term financial health of an institution and its ability to weather itself from short-term operational ups and downs. This indicator compares our reserves to our annual operating expenditures plus interest payments on our debt. The University builds reserves for strategic use. If ones looks at this metric in conjunction with the Operating Margin, one will see that even though margins are low, the University's overall reserve remains strong over the projection period meaning we are not exhausting reserves to meet overall spending needs.



Collaborative Savings/Efficiencies Earned

The collective efforts of the campuses to leverage cost savings, enhanced service offerings, and efficiencies through the work of the Procurement Council, IT Leveraged Procurement Committee, and the Strategic Energy Committee has resulted in reported cost savings of over \$11.1M in FY14, \$17.0M in FY15, and over \$20M in FY16. A Facilties Management Committee was formed during FY16 to help further these efforts. In addition to cost savings, there have been improvements made in the areas of energy efficiency, sustainability, and access to software products.

A grade provided by an independent financial institution that is determined by examining an array of factors such as the credit worthiness, ability to pay principal and interest, overall financial strength, etc. The ratings are vital metrics used to determine interest rates on University debt.

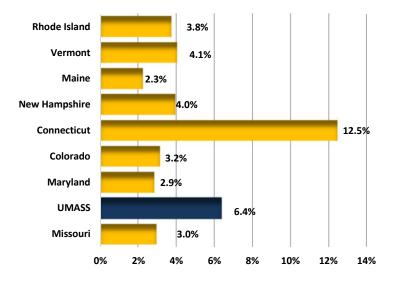
Procurement Savings/	FY 2014	FY 2015	FY 2016
Enhanced Services	\$11.1M	\$17.0M	\$20.0M

Bond Ratings

Bor Ratin		FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Moo	odys	Aa2	Aa2	Aa2	Aa2	Aa2
S&1	Р	na	AA-	AA-	AA-	AA-
Fitc	h	AA	AA	AA	AA	AA

Debt Service to Operations

This is the debt service payment (interest and principle) as percent of total operating expenditures. The debt ratio measures the demand that annual commitments to creditors' places on an institution's operating commitments. This indicator simply tells us how much of the annual operating budget must be set aside for long-term debt payments. The bond rating agencies believe that committing more than 10% of current revenues annually for payments to bond holders or other creditors is very risky for creditors. As planned, the University's investment in its capital program shows almost every campus approaching the 8% cap. Overall, we will not exceed this cap and the current capital plan is fully considered in these calculations.



Total Deferred Maintenance Cost

Total Deferred

There are two components to deferred maintenance: *Keep-Up Costs* – the annual investment needed to ensure buildings will properly perform and reach their useful life and *Catch-Up Costs* – the accumulated backlog of repair/modernization needs and the definition of resource capacity to correct them.

Maintenance Cost	\$3.44B	\$3.42B	\$3.53B	\$3.49B	\$3.30B

FY 2014

FY 2015

FY 2016

FY 2012 FY 2013

Deferred Maintenance per GSF

This is the total dollar amount of need over the next ten years including immediate need, renewal need, and remaining need divided by the total gross square feet of the campus.

*Includes Auxiliary Facilities

Deferred Maintenance	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
per GSF	\$209	\$198	\$190	\$186	\$165

ACADEMIC QUALITY INDICATORS

Number of Doctoral Degrees Awarded. Total number of Doctorates awarded by UMass campuses for the academic year 2015-16, which includes September 2015, January 2016, and May 2016 award dates. The data includes both research/scholarship and first-professional doctoral degrees. Aggregated across all UMass campuses for System total.

Total Research Expenditures. Data as reported to the National Science Foundation (NSF) by UMass campuses via the Higher Education Research and Development (HERD) Survey.

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

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

Utilization of Shared HPC Cluster at MGHPCC.

- CPU Years. A CPU Year is simply the amount of computing work done by a 1 GFLOP reference machine in a year of dedicated service (8760 hours). FLOPS is a standard measure of computing power --"Floating Point Operations Per Second". A GigaFlop (or Gflop) is a billion FLOPS. A 1 GFlop machine will do a billion operations in a second. A G-hour is the measure of computing work done by a one GFLOP machine in an hour (i.e., a G-hour is one billion FLOPS per second times 3,600 seconds in an hour which equals 3.6 trillion floating point operations). 3372 cpu years x 8770 hours/Gflop x 3,600,000 Gflop/hour = 106,460,784,000,000 floating point operations completed by UMass researchers in 2015.
- (2) Number of Active Labs. The total number of MGHPCC active user counts across the five UMass campuses.

ACCESS AND AFFORDABILITY INDICATORS

Tuition and Fees as a Percentage of Family Income. Tuition and mandatory fees for in-state undergraduates (FY 2016) as a percentage of state-wide median family income as reported by US Census in 2016 inflationadjusted dollars (latest available). Comparative data are from IPEDS and US Census.

Percentage of Undergraduate Students from Massachusetts. Percentage of total undergraduate students who are "In State" or residents of Massachusetts. Online Course Registrations and Rate of Growth in Online Course Registrations. Total course enrollments in online courses. Percentage rate of growth in annual course registrations. Academic Year 2015-16 represents Fall 2015, Winter 2016, Spring 2016, and Summer 2016 enrollments. Data are for fully online (100%) and blended courses. Source: UMassOnline.

STUDENT SUCCESS AND SATISFACTION INDICATORS

Percentage Undergraduates who are Students of

Color. Percent undergraduates who are Black/African American, Hispanic/Latino, Asian and/or Native American, divided by total U.S. citizens and permanent residents who report race/ethnicity. Comparative data for 2016 public high school graduates are from the MA Department of Education.

Percentage Undergraduates who are International.

Percentage of all undergraduates with eligible visa types, and enrolled in credit courses. Does not include US citizens, permanent residents, or refugees. Aggregated across all UMass campuses for System total.

Number of Students that 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 2015 through Summer 2016. Aggregated across all UMass campuses for System total.

SERVICE TO THE COMMONWEALTH INDICATORS

Enrollment of Massachusetts Residents. Number of first-year undergraduates enrolling at each institution who are residents of Massachusetts. Data are from the Fall IPEDS Enrollment student residency table.

Enrollment by Region. In-state undergraduate enrollment by region. Data are from the DHE.

Degree Completions. The total number of degrees (not including associates and certificates) awarded in the academic year, by degree level. As reported to IPEDS. Aggregated across all UMass campuses for System total.

Degrees Conferred by Field. Degrees conferred by UMass campuses by field. As reported to IPEDS.

UMass Degrees as Percent of all Massachusetts Degrees. Degrees awarded by UMass as percent of total degrees awarded by colleges and universities in the state, based on IPEDS Completions data.

Percent of Graduates who Live in Massachusetts.

Percentage of total UMass undergraduate and graduate degree recipients who currently reside in Massachusetts based on alumni records.

Enrollment in STEM Fields. Number of undergraduate and graduate enrollments 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. Aggregated across all UMass campuses for System total.

Degrees and Certificates Awarded in STEM Fields.

Number of undergraduate and graduate degrees and certificates awarded in STEM fields. STEM fields are those defined in the National Science & Mathematics Access to Retain Talent (SMART) Grant with the exclusion of foreign languages. Aggregated across all UMass campuses for System total.

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. Aggregated across all UMass campuses for System total.

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

FINANCIAL HEALTH INDICATORS

Endowment Assets. Market value of true and quasiendowment assets. Data from the UMass Foundation Advancement Report to the Board of Trustees. 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. Data from the UMass Foundation Advancement Report to the Board of Trustees.

Primary Reserve. Unrestricted net assets as a percentage of total operating expenditures (operating expenditures and interest expense). Peer data are from published financial statements.

Procurement Savings. Procurement savings/enhanced services includes reduction in costs vs. previous year/contract and cost avoidance of projected cost increases as a result of the work of the Administrative E&E committee. Additionally, more features and services are offered to faculty, students and staff.

Bond Ratings. A grade provided by an independent financial institution that is determined by examining an array of factors such as the credit worthiness, ability to pay principal and interest, overall financial strength, etc. Agency bond ratings are from Moodys, S&P, and Fitch.

Debt Service to Operations. Debt service payments as a percentage of total operating expenditures (operating expenditures plus interest expense). Peer data from published financial statements.

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

DM Cost per Square Foot. The total deferred maintenance cost per square foot of space. This ratio quantifies the average dollar level of deferred maintenance work needed per square foot of space. Adjusted each year for inflation.

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

Please Note: Unless otherwise specified, all data are from the UMPO - Office of Institutional Research.

HEADLINES FROM THE 2017 ANNUAL INDICATORS

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 3.64 in 2011 to 3.83 in 2015, where it has stayed stable for 2016. Virtually all (99%) students entered UMass Amherst with a high school GPA of 3.0 and above. Average SAT scores improved by 28 points over the five-year period and exceed the peer group at both the 25th and 75th 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 postdoctoral 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 10%, and per faculty expenditures

increased by 3% 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 \$214 million.

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; however, the number of prominent grant and fellowship program awards has moved above the peer median for 2015. 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 4% since 2012. 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 2015-16, 26% of full-time, in-state students qualified for Pell grants. Eighty-seven 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-one percent of students return for their sophomore year, 76% graduate within six years from UMass Amherst, a slight dip from last year's highest graduation rate observed since the campus began tracking this statistic. The campus has seen rapid improvement in the four-year graduation rate, which has increased from 63% for the Fall 2008 cohort to 71% for the Fall 2012 cohort. Retention and graduation rate improvement have closed much of the gap with peer institutions. In recent years, the campus has made a major commitment to promoting student success, including the creation of the **Office of Student Success** during 2016-17 and newly created role Associate Provost for Student Success. The Associate

UMASS AMHERST

Provost for Student Success marks an important step in developing a cross-collaborative, coordinated approach within the Student Affairs and Campus Life unit and the Academic Affairs unit (the Associate Provost is a dual report to the Vice Chancellor for Student Affairs and Campus Life and the Vice Provost and Dean of Undergraduate Education). The Student Success unit will take a leadership role with: academic and career advising and assistance provided to students including academic pathways and opportunities in their preparation for future employment and advanced education; increased educational access and mitigation of financial, academic, administrative barriers that hinder degree attainment; better advocacy, prevention and education to equip students to manage both their physical and mental health needs; and implementation of a stronger network of services that address the holistic needs that are unique to often marginalized students. The campus has provided strategic investment funding in support of enhancing and elevating the Academic and Career Advising provided to students. This includes the support of additional professional advisors and counselors within the Schools and Colleges, piloting an ePortfolio program to assist students in clear identification of academic pathways leading toward career preparation, and partnering with the Education Advisory Board (EAB) 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. Assessment of the Exploratory Track program, which began in September 2015 with all undeclared first-year students placed in one of eight academic advising tracks, each affiliated with an academic school or college, shows initial positive results including a slight increase in first-year retention along with earlier selection of a primary major by these incoming undeclared students. 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 and passage of new General Education Diversity learning outcomes (to take effect Fall 2018) 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 2016 entering class was the most diverse group of students in history

(29% ALANA); overall, more than a quarter of enrolled undergraduates were students of color. Also, onequarter 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 2016, nearly 40% of baccalaureate and nearly onethird of graduate students were enrolled in Science, Technology, Engineering and Mathematics (STEM) programs, and 31% of degrees awarded at the undergraduate and 29% of degrees awarded at the 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 2010. The campaign was designed to enhance excellence and contribute to the long-term sustainability of the campus. The campus exceeded its goal more than a year ahead of schedule and raised \$379 million at its completion in FY 2016.

2017 ANNUAL INDICATORS AT A GLANCE

ACADEMIC QUALITY

•	Average HS GPA of Freshmen	3.83
•	Average SAT Scores of Freshmen	
	Arithmetic Mean	1225
	$25^{th} - 75^{th}$ Percentile 11	130 – 1330
•	Average GPA of Entering Transfer Student	s 3.31
•	Student Satisfaction with Educational Expe	rience 88%
•	Student-Faculty Ratio	18:1
•	Technology-Enhanced Classrooms	298
•	No. of Doctoral Degrees Awarded	337
•	No. of Postdoctoral Appointees	144
•	Total R&D Expenditures	\$214.6M
•	Total R&D Expenditures Ranking	100
•	Total R&D Expenditures Ranking	
	among Carnegie Peers, US Publics, Non-M	edical 11
•	Total R&D Expenditures per	
	Tenure System Faculty	\$196,603
•	Patent Applications	53
•	License Income	\$1,000,075
•	Percent Tenured/Tenure-Track Faculty FTE	E 73%
•	New Tenured/Tenure-Track Faculty Hired	48
	As Percent of Total T/TT Faculty	5%
•	Change in Tenured/Tenure-Track Faculty	-1%
•	Change in Faculty FTE	1%
•	Full-Time Instructional Faculty	
	Percent Faculty-of-Color	22%
	Percent Women Faculty	43%
•	Faculty Awards	17
•	National Academy Members	7
۸ſ	CCESS AND AFFORDABILITY	
110		

Percent In-State Pell Grant Recipients •

•	Percent of Need Met for In-State Students Av	warded
	Need-Based Aid	87%
•	Average Debt of Students	\$31,397
	(UG Graduating Class)	
•	Percent Graduating Class with Debt (UG)	68%
•	Percent Undergraduates from Massachusetts	76%
•	Online Course Registrations	24,201

Annual Growth in Online Course Registrations • 7%

STUDENT SUCCESS AND SATISFACTION

•	Percent Undergraduates who are Students of	
	Color	25%
٠	Percent Undergraduates who are First	
	Generation in College	25%
•	Percent Undergraduates with English as a	
	Second Language	15%
•	Percent Undergraduates who are International	5%
•	Number of Students who Participated in a	
	Study Abroad Program	1,203
•	Freshmen One-Year Retention Rate	91%
•	Freshmen Four-Year Graduation Rate	71%
٠	Freshmen Six-Year Graduation Rate	76%
•	Transfer (Full-time) One-Year Retention Rate	87%
•	Transfer (Upper Division) Four-Year	
	Graduation Rate	76%
٠	Alumni Participation Rate	9%
G -		

SERVICE TO THE COMMONWEALTH

•	Degree Completions	7,518
	Bachelor's	5,843
	Master's	1,338
_	Doctorates	337
•	Percent Alumni who Remain in MA	54%
•	Enrollment in STEM Programs	10,926 (38%)

26%

	Undergraduate	9,015 (39%)
	Graduate	1,911 (32%)
•	Degrees Awarded in STEM Fields	2,346 (31%)
	Undergraduate	1,852 (32%)
	Graduate	494 (29%)
•	Degrees Awarded in Healthcare Fields	687
	Undergraduate	507
	Graduate	180
•	MTEL Science and Math Test-Takers	22

FINANCIAL HEALTH

•	Total Endowment	\$287.2M
٠	Annual Growth in Endowment	-6%
•	Endowment per Annualized Student FTE	\$10,202
•	Private Funds Raised Annually	\$43.1M
•	Primary Reserve	28.9%
•	Debt Ratio	6.4%
•	Deferred Maintenance per GSF	\$127

3.83

3.83

ACADEMIC QUALITY

High School GPA of Freshmen

UMass Amherst entering first-year students are strong academically with an average high school GPA of 3.83. The Fall 2016 entering class matched the previous year's historical high with 99% of students earning a GPA of 3.0 and above. The average high school GPA had been increasing for nine consecutive years. There were 4,643 students in the entering class.

100%								-
80%		-					-	-
60%	-	-			-	-	-	-
40%		-			-		-	H
20%					-		-	H
0%	Fall 2012	Fall 202	12 Fall	2014	Fall 2	015	Fall 20	16
	1 811 2012	1 all 20.		2014	1 all 2	.015	1 811 20	10
≥3.00	99%	99%	9	9%	99	%	99%	
2.51-2.99	1%	1%		1%	19	6	1%	
≤2.50	0%	0%	()%	0%	6	0%	
	201	2	2013	20	14	20	15	20

Average HS GPA 2012 2013 2014 3.66 3.73 3.78

First-year students entered UMA with a mean SAT of 1225, a 1-point drop from the historic high of the previous year, but a 5-year increase of 28 points. SAT scores have improved by 40 points at both the 25th and 75th percentiles since Fall 2012. The score for the campus is considerably above the Fall 2016 median of the peer group at the 25th percentile, and for the first time, ahead of the peers at the 75th percentile as well.

Average SAT Scores of Freshmen	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
75th Percentile	1290	1310	1310	1310	1330
25th Percentile	1090	1110	1120	1130	1130
Average	1197	1208	1218	1226	1225
Peer Median					
75th Percentile	1305	1315	1325	1325	1325
25th Percentile	1075	1075	1085	1085	1090
UMA Rank		-	-	-	
75th Percentile	8	7	7	7	7
25th Percentile	4	4	4	2	2

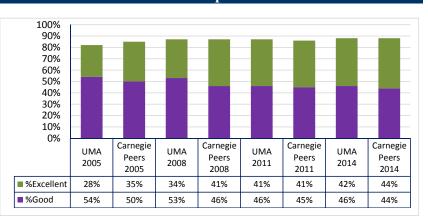
Average GPA of Entering Transfer Students

The transfer GPA has held steady for the last four years with a slight dip this year. It consistently surpasses the mandated Department of Higher Education minimum of 2.00 for transfer students.

11.8. 01.11 2.110.1118	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Transfers	3.27	3.32	3.32	3.33	3.31

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. NSEE was administered this spring (2017) and results should be available over the summer.



Student-Faculty Ratio

The student-faculty ratio has been fairly consistent. Since 2011, the ratio has hovered around 18:1. The campus is committed to providing students with small classroom experiences like the first-year seminar and integrative experience for upper division students.

Student-Faculty Ratio	2012	2013	2014	2015	2016
UMA	18:1	18:1	17:1	18:1	18:1

Technology-Enhanced Classrooms

Technology- Enhanced	AY 2013-2014		AY 201	4-2015	AY 2015-2016		
Classrooms	No of Classrooms	Percent of Total	No of Classrooms	Percent of Total	No of Classrooms	Percent of Total	
Basic	40	14%	40	13%	36	12%	
Medium	142	49%	142	48%	136	46%	
High	90	31%	100	34%	110	37%	
Very High	16	6%	16	5%	16	5%	
Total Classrooms Teaching Spaces	288	100%	298	100%	298	100%	

Basic classroom technology: All 298 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, almost 88% of the classrooms at UMA have a digital projector (or large screen), HDMI & VGA connections for laptop projection, audio connection and room speakers. In 2015-16, 137 of these rooms were considered to be Medium Plus or better and also include a blu-ray player, wireless microphone and AV control cabinet.

High classroom technology:

In addition to Medium and Medium Plus technology, over two-fifths of all 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). In 2015-16, 12 rooms were 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: three laptops, one large screen, three built-in microphones with "talk" button, AV connections for student laptops, and one whiteboard camera and microphone. Computer Classrooms contain 20-39 seats with desktop computers (Mac & Windows) and an instructor desktop with projector connection.

Doctoral Degrees Awarded

Both the number of Research/ Scholarship and Professional Practice doctorates awarded have made upward turns after a short decline. Professional practice doctorates have rebounded from their first decrease since the campus began reporting this award. Research/scholarship doctorates awarded at UMA remain below the peer median in 2015-16.

UMA Doctoral Degrees Awarded	2011-12	2012-13	2013-14	2014-15	2015-16
Research/Scholarship					
Doctorates	268	295	287	268	298
Professional Practice					
Doctorates	37	39	19	29	39
Total Doctoral Degrees					
Awarded	305	334	306	297	337
Research/Scholarship Doctorates	2011-12	2012-13	2013-14	2014-15	2015-16
UMA	268	295	287	268	298
Peer Median	345	363	354	348	348
Rank	8	9	9	9	9

Postdoctoral Appointees

UMass Amherst senior faculty
mentor recent PhDs with science and
engineering degrees. The number of
post-doctoral scholars has been
declining for the past four years. This
can be explained in part by the 2012
implementation of the campus' first
postdoc union contract which resulted
in some layoffs, non-reappointments,
and, for some PIs, a decrease in the
number of new hires. It may be
compounded further by reduced
federal funding due to the sequester
and Budget Control Act of 2011.

Postdoctoral Appointees	2011-12	2012-13	2013-14	2014-15	2015-16
UMA	209	165	166	153	144
Peer Median	177	272	290	308	303
Rank	5	8	9	10	9

Total Research & Development (R&D) Expenditures

Total R&D spending for the campus in FY 2016 was approximately \$214.5 million, of which almost \$194 million (90%) was in science and engineering (S&E). This is an overall increase of 5% over the last five years. Federal spending rebounded slightly from four years of straight decreases. UMA was below the Peer Median for both Total R&D and Federal S&E Expenditures in FY 2015.

The overall R&D rank for the campus has held steady and continues to be in the top half of the Carnegie peer

group.

(r 000t)	\$250,000 \$225,000 \$200,000 \$175,000 \$150,000 \$125,000 \$100,000 \$75,000 \$50,000 \$25,000	•	•		-	•
	\$0	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
		\$194,775	\$190,739	\$200,199	\$213,902	\$214,576

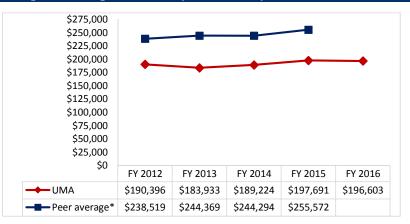
Total R&D Expenditures Rankings

Total R&D Expenditures Rank	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Overall Ranking	107	104	105	102	100
Ranking based on					
Carnegie Peers	11	11	10	11	11

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

Total R&D spending per faculty increased by 3% between FY 2012 and FY 2016, with a slight dip over the previous year. This measure continues to lag over the peer average.



*Peer data for FY2016 is currently not available.

Patent Applications							
In FY 2016, the Technology Transfer Office (TTO) received 75 Invention	Patent Applications	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	
Disclosures - the same as was received in FY 2015. Fifty-three new patent		26	32	40	37	53	
applications were filed, the highest number in the last five years.	T						
License Income							
In FY 2016, TTO received \$1,000,075 in		FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	
license income, a rebound to the levels observed in FY 2012 and 2013	License Income	\$952,738	\$1,200,000	\$753,000	\$711,000	\$1,000,075	

Percent Tenured/Tenure-Track Faculty FTE

The percent of tenured/tenure-track faculty (full-time and part-time) has been decreasing slowly over the past five years. Fall 2016 showed a small decrease in the number of tenure system faculty after solid growth in the previous four years. The growth of the non-tenure system faculty had exceeded that of the tenure-system group.

observed in FY 2012 and 2013.

Percent Tenured/Tenure-track Faculty	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
% Tenured/Tenure-					
track	76.3%	76.1%	74.3%	73.8%	72.9%
% Non Tenure-					
track/PT	23.7%	23.9%	25.7%	26.2%	27.1%

New Tenured/Tenure-Track Faculty Hired

The campus has made significant investments in tenure system faculty hires in recent years. There were 45 such hires in 2016 (an additional 16 faculty were hired to the tenure system and started in spring 2017). The campus remains committed to supporting the strongest faculty possible and increasing the number of tenure-system faculty.

New Tenured/Tenure-	2012	2013	2014	2015	2016
Track Faculty Hired	46	54	58	56	48

n.b. Data for "New Hires" is based on IPEDS definitions. Prior to 2016, "New Hires" were based on all those on payroll as of November 1 of the reporting year who were hired for fulltime employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year.

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

Over the past several years the new hires have represented around 5% of the total T/TT faculty in the fall. There has been a slighly lesser corresponding increase of four percent in the number of tenuresystem faculty since fall 2012. Year to year increases are relatively small due to faculty retirements and resignations.

	New T/TT Faculty as	F. 11.0.010	E 11 2010	E. 11. 201.4	E 11 2015	E HOOIC
	Percent of Total	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Ī	Total T/TT Faculty	1,009	1,026	1,047	1,054	1,048
	Total New Hires	46	54	58	56	48
Ī	Percent of Total	5%	5%	6%	5%	5%

n.b. Data for "New Hires" is based on IPEDS definitions. Prior to 2016, "New Hires" were based on all those on payroll as of November 1 of the reporting year who were hired for fulltime employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year.

Change in Tenured/Tenure-Track Faculty

Fall 2016 saw a one-year decrease of six tenure-system faculty, but an overall increase of 39 since Fall 2012. Investment in faculty is essential to maintain the campus as a nationally competitive public research university.

Change in T/TT Faculty	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
	1,009	1,026	1,047	1,054	1,048

1-Year Change Fall 2015-16				
Number	Percent			
-6	-1%			

Change in Faculty FTE

Faculty full-time equivalent (both full and part-time and tenure and non-tenure system) showed a oneyear decrease of 10 but an overall increase of nearly 100 since 2012. Over four-tenths of the growth has been accounted for by the tenure system faculty.

Change in Faculty FTE	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
	1,320	1,346	1,406	1,426	1,436

2015-16						
Number	Percent					
10	1%					

Faculty by Race and Gender

The number and percent of both faculty of color and women faculty decreased slightly after a sustained increase over the previous five years. In Fall 2016, faculty of color represented 22% of instructional faculty, and almost half of these individuals were underrepresented minorities. The number of women faculty has increased by 12% in the last five years.

Full-Time Instructional Faculty							
Faculty Of Color Fall 2012 Fall 2013 Fall 2014 Fall 2015 Fall 2016							
Number	225	233	251	298	268		
Percent	19.8%	20.1%	21.1%	24.8%	22.2%		

Women Faculty	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Number	507	527	552	585	577
Percent	41.1%	41.8%	42.6%	44.3%	43.5%

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.

UMass Amherst faculty members are recipients of many prominent awards in the arts, humanities, science, engineering and health fields. In 2015, the campus was above the peer median in the number of prominent grant and fellowship program awards. In 2016-17, the campus had four Fulbright Scholars. Another source, *Academic Analytics*, which defines awards more broadly shows that the number of awards has increased steadily to 345 in FY 2014.

Faculty Awards

UMA Faculty Awards	2011	2012	2013	2014	2015
	6	8	12	10	17
Peer Median	12	11	11	12	12
Rank	8	9	4	7	5

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 2015. 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.

National Academy	2011	2012	2013	2014	2015
Members	9	8	8	7	7
Peer Median	11	12	12	13	12
Rank	7	8	7	8	9

ACCESS AND AFFORDABILITY

Percent (In-State) Pell Grant Recipients

The proportion of full-time, in-state students receiving Pell Grants is falling gradually and was 26% for Fall 2015. 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.

Percent (In-State) Pell	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015
Grant Recipients	31%	28%	28%	27%	26%

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

The campus remains committed to providing need-based aid for instate undergraduates as it strives to provide a quality and affordable education. A portion of tuition and fee increases is dedicated to needbased financial aid for qualified students.

Percent Need Met (In-	2011-12	2012-13	2013-14	2014-15	2015-16
State)	86%	84%	82%	82%	87%

Student Debt Load of Graduating Class

The proportion of the graduating class with debt has dipped below 70%. The average debt load has increased by 12% since 2012.

	2012	2013	2014	2015	2016
Average Debt Load	\$27,945	\$28,999	\$30,453	\$31,958	\$31,397
Percent Graduating	710/	700/	700/	700/	(00/
Class with Debt	71%	70%	72%	70%	68%

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 are residents of the state. The percent has remained relatively stable in the last few years as enrollment of out-ofstate and international students has stabilized. The proportion of international students has been on the uprise as the out of state domestic population has declined.

Percent Undergraduates from Massachusetts	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Number	16,952	16,900	16,949	17,277	17,883
Percent	77%	76%	76%	76%	76%

Online Course Registrations

The Amherst campus offers one Associate's, nine undergraduate, nine graduate degree programs, and nine certificate programs that can be completed partially or fully online. The programs range from a certificate in Criminal Justice to a B.S. in Hospitality and Tourism Management, to an MBA, and a Doctorate in Nursing Practice. In addition, a variety of other courses are offered. Online course registrations grew by 7% in the most recent year and substantially (34%) since AY 2011-12.



Annual Growth in Online Course Registrations

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

Annual Growth in Online Course	AY 2011-12	AY 2012-13	AY 2013-14	AY 2014-15	AY 2015-16
Enrollments	10%	8%	13%	2%	7%

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 (ALANA). The Fall 2016 student body was the most diverse in recent history, and students of color comprised over one fourth of the population.

Percent UG Students of Color	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Number	3,960	4,117	4,332	4,740	5,176
Percent	21.0%	21.9%	22.4%	23.8%	25.4%

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. One-fourth of entering first-year students are first generation according to data collected from the Common Application.

Percent UGs First Generation in College	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Percent	27%	25%	25%	24%	25%

Percent Undergraduates with English as a Second Language

English is not the first language of about 15% of first-year students entering UMass Amherst. This is another indicator of the diversity of the campus.

Percent UGs ESL	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Percent	10%	12%	11%	13%	15%

Percent Undergraduate Students who are International

The Amherst campus attracts an increasing number of undergraduate international students, some of whom are studying on the campus as part of an international exchange program. The numbers have almost tripled since Fall 2012 as the campus has increased its recruitment of international students. In contrast, over one-fourth (1,755) of graduate students are international.

Percent UGs International	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Number	421	537	681	980	1,232
Percent	2%	2%	3%	4%	5%

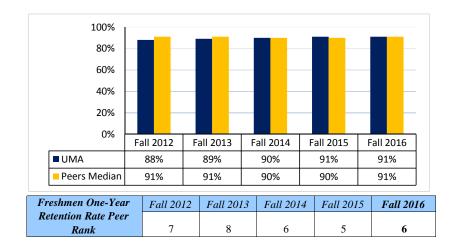
Total Number of Students who Participated in a Study Abroad Program

1,203 UMass students participated in a study abroad experience during the 2015-16 academic year. The campus encourages students to take advantage of these enriching global learning opportunities. An additional 50 students participated in a domestic exchange.

Students who			Fall 2013- Summer 14		Fall 2015- Summer 16
Abroad	1,074	1,128	1,194	1,190	1,203

Freshmen One-Year Retention Rate

The one-year retention rate for the Amherst campus has been consistently high, and is currently at the median of the peers. New strategies are being developed and implemented to improve the firstyear experience and hence student retention.



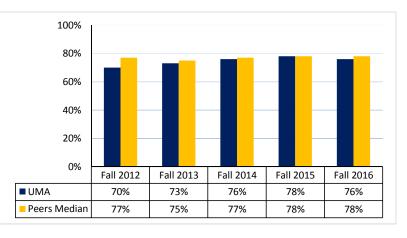
Four-Year Graduation Rates

The four-year graduation rate continues its upward climb. In fact, the 2016 rate is eight percentage points higher than the 2012 rate of 63%. Currently, over seven-tenths of entering first-time first-year students are graduating in four years or less from the Amherst campus.

4-Yr Graduation Rates	2012	2013	2014	2015	2016
Cohort Entering Year	(2008)	(2009)	(2010)	(2011)	(2012)
4-Year Graduation Rate	63%	66%	67%	67%	71%

Freshmen Six-Year Graduation Rate

Over three-quarters of full-time Amherst campus students graduated within six years of entrance, and another 9% completed their degree at another institution. The campus first began tracking graduation rates in Fall 1984. Since that time, UMA's six year graduation rate increased by 12 percentage points from 64% to 76% (slight dip over last year). The 2016 rate slipped below the peer median; however, numbers for more recent cohorts suggest that this rate will remain stable or increase. The campus implemented a predictive analytics advising platform in AY 2014-15 whose goal is to improve student advising, retention and degree completion. Rates are reported for the Fall 2006-Fall 2010 entering cohorts.



Freshmen Six-Year	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Graduation Rate - Peer Rank	8	6	6	6	7

Transfers (Full-Time) One-Year Retention Rate

The one-year retention rate for transfers is 87%. This includes a small number of students who graduate in one year. Transfer students represent approximately one-fifth of the entering fall class.

Transfers (Full-time)	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
1-Year Retention Rate	86%	86%	85%	88%	87%

Transfers (Upper Division) Four-Year Graduation Rate

Over 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 compares favorably with the freshman six-year graduation rate. Upper Division transfers represent less than half of total transfer students. The rate has held steady for the last three years. Rates are reported for the Fall 2008-Fall 2012 entering cohorts.

Transfers (Upper	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Division) Four-Year					
Graduation Rate	74%	74%	76%	77%	76%

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

The Student Achievement Measure tracks entering first-time first-year students by cohort. 93% of the entering cohort was accounted for after four years-70% completed a degree at UMA or another institution, 14% were still enrolled at UMA, and 9% were enrolled at another institution. After 6 years, 86% had earned a degree and an additional 5% were still enrolled at UMass or elsewhere.

	FIRST-TIME FULL-TIME FRESHMEN									
Number of Students in Cohort: 4,456				GRAD	UATED					
<i>Outcomes for Student Starting at UMA in</i> <i>Fall 2010 by Summer 2016</i>	2010-11	2011-12	2012-13	WITHIN 4 YRS.	WITHIN 5 YRS.	WITHIN 6 YRS.				
Bachelor's degree from UMass Amherst	0%	0%	1%	66%	74%	76%				
Associate's degree from UMass Amherst	0%	0%	0%	0%	0%	0%				
Total Graduated from UMass Amherst	0%	0%	1%	66%	74%	76%				
Bachelor's degree from another Institution	0%	0%	0%	4%	8%	9%				
Associate degree from another Institution	0%	0%	0%	0%	0%	1%				
Total Graduated from another Institution	0%	0%	0%	4%	8%	10%				
Enrolled at UMass Amherst	96%	86%	80%	14%	3%	1%				
Enrolled at Another 4-yr Institution	0%	6%	9%	7%	4%	3%				
Enrolled at Another 2-yr Institution	0%	2%	3%	2%	2%	1%				
Total Transferred and Enrolled at another Institution	0%	8%	12%	9%	6%	4%				
Current Status Unknown	4%	6%	7%	7%	9%	9%				

Alumni Participation Rate

Large graduating classes in recent years have resulted in a larger than normal addition to our alumni participation rate denominator in proportion to young alumni donors. This has the effect of reducing our participation rate.

Alumni Participation	2012	2013	2014	2015	2016
Rate	11%	10%	10%	8%	9%

SERVICE TO THE COMMONWEALTH

Degree Completions

The total number of degrees awarded continues to increase. The largest gains are at the bachelor's level. There has been greater fluctuation in the number of doctoral degrees, which has rebounded to the peak attained in 2012-13. The number of master's degrees has declined since its peak in 2014-15.

Degree Completions	2011-12	2012-13	2013-14	2014-15	2015-16
Bachelor's degrees	5,203	5,363	5,674	5,683	5,843
Masters degrees	1,334	1,362	1,409	1,418	1,338
Doctoral degrees	305	334	306	297	337
Res./Sch. Doctorates	268	295	287	268	298
Professional Practice	37	39	19	29	39
Total Degrees	6,842	7,059	7,389	7,398	7,518

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 master's and doctorate degrees reside in Massachusetts. The overall proportion of MA residents increased back to 54% in 2016.

Percent Alumni Who Live in MA	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Undergraduate	54%	57%	57%	57%	58%
Graduate	39%	41%	42%	41%	41%
All	51%	54%	54%	53%	54%

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. A related goal is to increase the enrollment and persistence of underrepresented minorities in STEM. Increases in the number and percent of undergraduates in STEM programs have been realized. (In Fall 2015, the increase is inflated due to the introduction of exploratory tracks in a designated school or college, some of which offer STEM programs.) Presently, 39% of undergraduate and 32% of graduate students are enrolled in such programs.

Undergraduate									
	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016				
Total	21,448	21,672	21,864	22,405	22,958				
STEM	7,070	7,429	7,775	8,568	9,015				
Percent STEM	33%	34%	36%	38%	39%				

Graduate									
	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016				
Total	5,792	5,848	5,808	5,908	6,033				
STEM	1,780	1,799	1,751	1,757	1,911				
Percent STEM	31%	31%	30%	30%	32%				

Total Enrollment							
	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016		
STEM	8,799	9,178	9,477	10,325	10,926		
Percent STEM	32%	33%	34%	36%	38%		

Degrees and Certificates Awarded in STEM Fields

The upward trend in STEM enrollment has been mirrored in the number of degrees and certificates awarded. Of the over 5,800 undergraduate degrees and (nearly) 1,700 graduate degrees awarded, 31% were in STEM fields. The number of students pursuing STEM certificates is relatively small.

Undergraduate Degrees									
	2011-12	2012-13	2013-14	2014-15	2015-16				
Total Degrees	5,203	5,363	5,674	5,683	5,843				
STEM	1,387	1,436	1,631	1,711	1,852				
Percent STEM	27%	27%	29%	30%	32%				

Graduate Degrees									
	2011-12	2012-13	2013-14	2014-15	2015-16				
Total Degrees	1,639	1,696	1,715	1,715	1,675				
STEM	437	448	487	520	494				
Percent STEM	27%	26%	28%	30%	29%				

All Degrees							
	2011-12	2012-13	2013-14	2014-15	2015-16		
STEM	1,824	1,884	2,118	2,231	2,346		
Percent STEM	27%	27%	29%	30%	31%		

Certificates									
	2011-12	2012-13	2013-14	2014-15	2015-16				
Total Certificates	312	288	307	319	314				
STEM	33	47	40	33	40				
Percent STEM	11%	16%	13%	10%	13%				

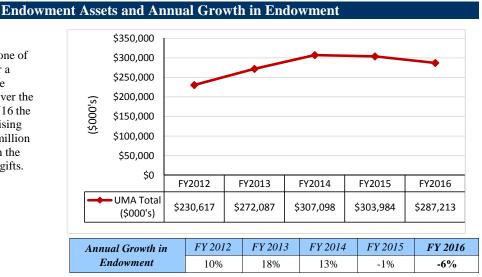
Degrees and Certificates Awarded in Healthcare Fields

The total number of health care degrees awarded has increased by two-thirds since 2011-12. Much of the growth has been at the bachelor's level due to the new Public Health Sciences program that began in Fall 2007. There has been fluctuation, but no sustained increase at the graduate level. UMA started offering certificate programs in Global Health and Nursing Education in Fall 2014.

Health Care Degrees and Certificates	2011-12	2012-13	2013-14	2014-15	2015-16
Bachelor's degrees	252	355	420	460	507
Masters degrees	116	159	145	122	135
Doctoral degrees	48	44	22	37	45
Res./Sch. Doctorates	11	5	3	8	6
Professional Practice	37	39	19	29	39
Total Degrees	416	558	587	619	687
					к. Г.
Total Certificates	0	0	0	5	18

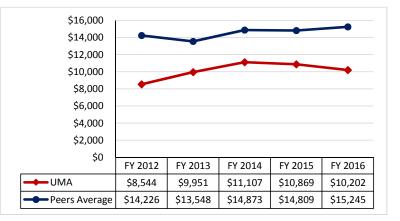
FINANCIAL HEALTH

The campus endowment is one of the lowest in the country for a public flagship campus. The endowment has decreased over the past two fiscal years. In FY16 the campus completed a fundraising campaign that raised \$379 million and expects to see growth in the endowment from increased gifts.



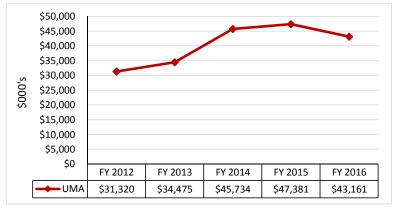
Endowment per Annualized Student FTE

The campus endowment is one of the lowest in the country for a public flagship campus. The campus average per student has decreased the last two tears as the market value has dropped while student FTEs have continued to grow.



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 FY2014, and FY2016. 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. The Amherst campus now has more reserve than its peers. 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 2012	FY 2013	FY 2014	FY 2015	FY 2016
UMA	24.8%	26.7%	27.9%	29.4%	28.9%
Peers	31.2%	29.7%	23.5%	25.7%	26.3%

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 Operations	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
UMA	5.5%	6.1%	6.2%	6.4%	6.4%
Peers	6.0%	5.5%	5.0%	4.7%	4.7%

Deferred Maintenance per GSF

Deferred Maintenance per GSF	FY 2012 FY 2013		FY 2014	FY 2015	FY 2016	
UMA	\$162	\$151	\$143	\$133	\$127	

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 over \$150 million of spending included in the five year projection for infrastructure improvements.

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 DHE admissions policy, reported on all first-time students.

Average SAT Scores of Freshmen. Average SAT Scores of freshmen are based on the Arithmetic Mean. The 25th & 75th percentiles are based on the sum of the percentiles of the verbal and quantitative SAT scores of all first-year students. Peer data are from IPEDS.

Average GPA of Entering Transfer Students. Average Cumulative GPA of entering transfer students according to DHE admissions policy.

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.

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.

Technology-Enhanced Classrooms. Classification of the campus's total classroom capacity in terms of the level of technology-support.

Number of Doctoral Degrees Awarded. Number of Doctorates awarded each academic year, which includes September, February, and May award dates (e.g. AY 2015-16 includes Sept. 2015, February and May 2016). 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.

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 "Highest Research" 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 by NSF and IPEDS.

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

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

Percent Tenured/Tenure-Track Faculty (FTE). 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. Data for "New Hires" is based on IPEDS definitions. Prior to 2016, "New Hires" were based on all those on payroll as of November 1 of the reporting year who were hired for full-time employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year.

New Tenured/Tenure-Track Faculty Hired as Percent of Total Tenured/Tenure-Track Faculty. Data for 'New Hires' is based on IPEDS Definitions. Prior to 2016, "New Hires" were based on all those on payroll as of November 1 of the reporting year who were hired for fulltime employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year.

Change in Tenured/Tenure-Track Faculty. The difference in the number of tenured/tenure-track faculty from one Fall semester to the next. Includes faculty members who are on paid leave. Does not include

UMASS AMHERST

individuals whose primary responsibility is administrative.

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. Includes faculty members who are on paid leave. Does not include individuals whose primary responsibility is administrative. 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, fulltime 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). Average debt load is based on the total debt borrowed by an Institution's graduating class (bachelor's, first-time only) divided by the number of students of that cohort that carried any amount of debt. It does not include those students with no debt load. It does not include students who have transferred in. The graduating class includes those that graduated between July 1 and June 30 of the reporting year. Data is from CDS.

Percent Graduating Class (UG) with Debt. The total number of students in the graduating class (bachelor's, first-time only) that carried a debt load at the institution divided by the total number of graduating (bachelor's, first-time only) students in that institution. It does not include students who have transferred in. The graduating class includes those that graduated between July 1 and June 30 of the reporting year. Data is from CDS.

Percentage Undergraduates from Massachusetts.

Percentage of total undergraduate students who are "In State" or residents of Massachusetts.

Online Course Registrations. 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 Registrations.

Percentage rate of growth in 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.

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 2016 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 2016 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 2015 through Summer 2016.

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

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

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

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

Transfer (Upper-Division) Four-Year Graduation Rate. Percent of full-time upper division transfers (60+ credits) who entered UMass Amherst in a given Fall and had graduated from the institution within four years from.

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. The 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. Graduates who earned only a graduate degree are excluded. The percentage of alumni giving serves as a proxy for how satisfied students are with the school. Data as reported to US News and World Report.

SERVICE TO THE COMMONWEALTH INDICATORS

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 6digit 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. The total value of the endowment (includes true and quasiendowments) at the end of the fiscal year as reported in the UMass Annual BOT report, and the percent change from previous year. Comparative data are from IPEDS, financial statements, and the NACUBO survey.

Endowment per Annualized Student FTE. Total UMass Amherst endowments per annualized FTE student, where FTE of peer institutions is standardized to UMass formula. Peer data are for the comparative peers from financial statements (current year) and IPEDS (prior years).

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.

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Primary Reserve. Unrestricted net assets as a percentage of total operating expenditures (operating expenditures plus interest expense). Peer data are from published financial statements.

Debt Service to Operations. Debt service as a percentage of total operating expenditures (operating expenditures plus interest expense). 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. Adjusted each year for inflation.

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.

ACADEMIC QUALITY

Improve Student Learning Experience

We continue to attract well-qualified freshmen and transfers to our entering classes in greater numbers. We place emphasis on the high school GPA for admissions decisions and have successfully maintained an average GPA over 3.00 for the last five entering classes, rising to 3.25 in Fall 2016. Sixty-seven percent of incoming freshmen had a GPA of 3.00 or greater. The mean SAT score of incoming freshmen was 1071.

UMass Boston continues to stand out as a model of excellence for urban universities, ranked by U.S. News & World Report in the first tier of "national universities" in the United States for the first time, with favorable ranks for admissions rate, retention rate, and class sizes. One graduate student earned a fellowship from the National Academies of Sciences, Engineering and Medicine to study Gulf Coast resilience. Assistant Professor of Economics Guy Numa is one of just two researchers worldwide to receive the 2016 Young Researcher Award from the European Society for the History of Economic Thought.

Strengthen Research and Development

UMass Boston continues to advance as an increasingly sophisticated research university. Between FY 2012 and FY 2016, UMass Boston's Total R&D expenditures reported to NSF increased from \$60.0 million to \$64.2 million. In terms of R&D expenditure per tenure stream faculty, this figure has increased to nearly \$127,000 per tenured/tenure-track faculty member.

UMass Boston reached a major milestone, through the ingenuity of physics professors Rao and Yelleswarapu, by landing its first licensing deal for the development of an innovative new microscope. Researchers have earned fellowships for making a testing device for contagious diseases that is as small and fast as a drugstore pregnancy test, as well as to find new ways to track the hemlock woolly adelgid, assess its impacts, and hopefully contribute to efforts to slow its proliferation. The Nantucket Field Station has become a hub of cutting-edge research projects undertaken by students and faculty alike, bringing together inspiring scientists, policy experts, and activists who are at the forefront of efforts to defend our planet against climate change.

Professor Kevin Wozniak was awarded a fellowship from the National Institute of Justice to study the public's appetite for a particular brand of reform called justice reinvestment. Professor Arthur Eisenkraft received the National Science Board Public Service Award for his exemplary public service in promoting public understanding of science and engineering. In addition, the National Science Foundation has awarded a grant to Assistant Professor of Engineering Matthew Bell to further his research into quantum limited amplifiers.

Renew Faculty

In AY 2015-16 UMass Boston was successful in recruiting 41 tenured or tenure-track faculty, while sustaining the high proportion of full-time instructional faculty that are persons of color at 22%, and are female at 51%.

Tenure-stream faculty growth slowed during the past year, based on enrollment performance. Tenure-stream faculty, which still represents more than 70% of all full-time instructional faculty, is a critical factor in ensuring the continued success of our students.

ACCESS AND AFFORDABILITY

We continue to serve residents of Greater Boston communities and communities throughout the Commonwealth, fulfilling our mission of access to diverse populations. Many (84%) of our undergraduates are from Massachusetts. UMass Boston serves large numbers of minority students, first-generation college students, transfers, and students who are immigrants or children of immigrants who speak languages other than English at home or with families. Our students are also diverse in age and national origin. In keeping with UMass Boston's strategic goal of global engagement, the number of international students attending as undergraduates has increased by 65% between Fall 2012 and Fall 2016 and it is anticipated to increase further over the next five years.

UMass Boston continued to increase enrollment of its newly established Honors College, with 624 students enrolled this year. One of the principal objectives of the Honors College curriculum is to give students an opportunity to study alongside academically committed peers. As such, a memorandum of understanding was signed with Roxbury Prep High School to create an admissions pipeline for talented RPHS students into the Honors College.

The social and economic diversity of our students is illustrated by our Pell grant figures. Forty-eight percent of our full-time undergraduate students from Massachusetts receive Pell grants, which are federal funds targeted toward students in greatest financial need.

UMass Boston's College of Advancing and Professional Studies continued to see large numbers of online course registrations, with over 15,000, marking the fifth consecutive fiscal year with more than 13,000 course registrations. U.S. News & World Report selected UMass Boston as part of its annual list of Best Online Programs.

UMASS BOSTON

STUDENT SUCCESS AND SATISFACTION

Diversity and Positive Climate

UMass Boston serves a vital function in the region as the only public research university in Boston. The campus is well known for the diversity of its student population, which exceeds the population diversity of the region. With more than 5,800 undergraduates of color, UMass Boston has the most diverse undergraduate student population of any four-year research university in New England schools. In Fall 2016, 57% of our U.S. undergraduate students were students of color. The diversity of our student population has continued to increase along with increases in admissions quality indicators and substantial increases in enrollment. As one of only three institutions in Massachusetts, UMass Boston received the Higher Education Excellence in Diversity (HEED) Award from *INSIGHT Into Diversity* magazine.

Freshmen one-year retention rates have remained comparable to our peers over the past five years, reaching 79% for those students who entered in Fall 2015. The retention rate of entering transfer students increased to 83% for those entering in Fall 2015.

The six-year graduation rate for the Fall 2010 cohort was 45%. This marks the highest six-year graduation rates for UMass Boston in the past 20 years, whereby the six-year graduation rate for the Fall 1992 freshmen cohort was 27%. Many of the initiatives focused on student success have been implemented in the last six years and increasing retention and graduation rates are expected for the coming years.

SERVICE TO THE COMMONWEALTH

Over three-quarters of our alumni reside in Massachusetts, where they contribute to the economy and civic life of the Commonwealth.

UMass Boston devotes a high proportion of research and public service activities to the cultural, social, and economic development of the Commonwealth and global community. In addition to research, which addresses policy needs, the campus is heavily engaged in a wide range of outreach activities, including our partnerships with the Boston Public Schools, the Dana Farber Harvard Cancer Consortium, and Children's Hospital. We are recognized by the Carnegie Foundation, the Association of Public Land-grant Universities, and the American Association of State Colleges and Universities for our outreach and partnerships and for curricular community engagement.

Among the many examples of UMass Boston's outreach and partnerships are projects to improve the lives of Bostonians. Two professors from UMass Boston's School for the Environment were honored for their work on the environment at the sixth annual Norman B. Leventhal Awards for Excellence in City Building for their work on identifying likely impacts of climate change on the city, from sea level rise to rising temperatures to extreme precipitation. The university is home to nearly 600 student veterans and named to Victory Media Inc.'s Military Friendly School list for the third straight year. Recognized as one of the Best Values in Massachusetts by SmartAsset.com, UMass Boston ranked number five among Massachusetts schools based on an evaluation of scholarship opportunities, average starting salaries for graduates, and student retention rat against tuition and living costs. Enrollments continue to grow steadily in Science, Technology, Engineering, and Mathematics (STEM) as overall enrollments also rise, with over 3,800 students in these disciplines in Fall 2016. This is an increase of 23% from Fall 2012 to Fall 2016. The number of STEM degrees and certificates awarded has increased 70% from AY 2011-12 to AY 2015-16. Opening for classes and research in the Spring 2015 semester, the Integrated Sciences Complex has further strengthened this focus of the university.

FINANCIAL HEALTH

Endowment assets totaled \$74.4 million in FY 2016. Endowment per annualized student FTE grew from \$4,202 in FY 2012 to \$5,679 in FY 2016, an increase of 35%, in spite of the significant increase in enrollment over the time period. Total private funds raised has declined over the past five years at \$10.5 million.

This year has been marked by fiscal challenge and renewed resolve to rebuild long-term financial stability. The fiscal year began with UMass Boston projecting a \$2.3 million budget surplus, but a variety of factors including an enrollment decrease after many years of enrollment growth brought about a shortfall, causing the campus to implement \$20.4 million in deficit-solution steps. As FY 2017 was concluding, UMB was projecting a deficit of \$7 million and was working on a comprehensive solution to its structural budget problems.

In keeping with the 25-Year Master Plan, the campus is undergoing exciting physical changes. The state-of-the-art \$130 million University Hall was officially opened in October. Construction commenced for the parking garage and residence hall. The residence hall project used a publicprivate partnership which has emerged as a potential model for other campuses within the UMass System. The roadway and utilities replacement/enhancement project proceeds. Major traffic pattern changes occurred this past year to accommodate work on this utility corridor, which will support future buildings and provide reliable and redundant utility services to the campus. The future two-way roadway network will also incorporate bike lanes, tree lawns, and sidewalks throughout the campus.

2017 ANNUAL INDICATORS AT A GLANCE

ACADEMIC QUALITY

•	Average High School GPA of Freshmen	3.25
•	Average SAT Scores of Freshmen	
	Arithmetic Mean	1071
	25 th - 75 th Percentile	70 - 1160
•	Average GPA of Entering Transfers	3.10
•	Student Satisfaction with Educational Experience	ce 78%
•	Student-Faculty Ratio	16:1
•	Technology-Enhanced Classrooms	201
•	Number of Students Enrolled in For-Credit	
	Internships	5,265
•	Number of Doctoral Degrees Awarded	61
•	Postdoctoral Appointees	13
•	Total R&D Expenditures	\$64.2M
•	Total R&D Expenditures Ranking	172
•	Total R&D Expenditures Ranking among Carnegie Peers, US Publics, Non-Medic	cal 24
•	Total R&D Expenditures per	
	Tenure System Faculty	\$126,923
•	Sponsored Instruction & Outreach/Faculty	\$34,522
•	Patent Applications	2
•	License Income	\$2,129
•	Percent Tenured/Tenure-Track Faculty FTE	71%
•	New Tenured/Tenure-Track Faculty Hired	41
	As Percent of Tenured/Tenure-Track Fact	ulty 8%
•	Change in Tenured/Tenure-Track Faculty	-2%
•	Change in Total Faculty FTE	-2%
•	Full-Time Instructional Faculty	
	Percent of Color	22%
	Percent Women	51%
•	Faculty Awards	3
•	National Academy Members	1

ACCESS AND AFFORDABILITY

• Percent In-State Pell Grant Recipients	48%
• Percent of Need Met for In-State Students Awarded Need-Based Aid	88%
• Average Debt of Students (UG)	\$27,142
(UG Graduating Class)	
• Percent Graduating Class with Debt (UG)	63%
• Percent Undergraduate Students from MA	84%
Online Course Registrations	15,556
• Annual Growth in Online Course Registrations	7%
STUDENT SUCCESS AND SATISFACTION	
• Percent Undergraduate who are Students of Cold	or 57%
Percent First-Generation College Students	56%
 Percent Undergraduates with English as a Second Language (2014 Freshmen) 	51%
Percent International Undergraduates	12%
 Total Students who Participated in a Study Abro Program Freshmen One-Year Retention Rate 	ad 165 79%
• Freshman Four-Year Graduation Rate	25%
• Freshmen Six-Year Graduation Rate	45%
• Transfer (Full-time) One-Year Retention Rate	83%
• Transfer (Upper Division) Four-Year Graduation Rate	69%
Alumni Domining Data	1 60/

• Alumni Participation Rate 4.6%

SERVICE TO THE COMMONWEALTH

Degree Completions	3,561
Bachelors	2,564
Masters	936
Doctorates	61
• Percent Alumni who Live in Massachusetts	74%
• Enrollment in STEM Programs	3,855 (23%)
Undergraduate	3,466 (27%)

UMASS BOSTON

Graduate	389 (10%)
• Degrees Awarded in STEM Fields	529 (14%)
Undergraduate	413 (15%)
Graduate	116 (12%)
• Degrees Awarded in Healthcare Fields	658
Undergraduate	521
Graduate	137
• MTEL Science and Math Test-Takers	221

FINANCIAL HEALTH

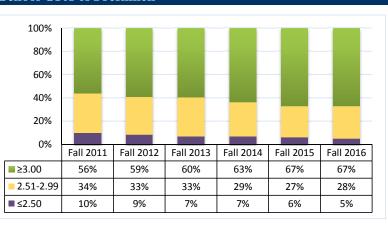
•	Total Endowment	\$74.4 M
•	Annual Growth in Endowment	-5%
•	Total Endowment per Annualized Student FTE	\$5,679
•	Private Funds Raised Annually	\$10.5M
•	Primary Reserve	9.8%
•	Debt Service to Operations	4.9%
•	Deferred Maintenance per GSF	\$242.90

ACADEMIC QUALITY

High School GPA of Freshmen

Despite substantial growth in enrollment of first-time freshmen, the selectivity of admitted students has not been sacrificed, with twothirds having a high school GPA of 3.0 or higher. There has been a steady increase in the percentage of enrolled students with a high school GPA 3.0 or higher. Percentage of students with 2.5 or lower GPA has been decreasing as well (from 10% in Fall 2011 to 5% in Fall 2016). Admissions selection weighs high school GPA more than SAT scores, as high school GPA tends to be a better predictor of student success.

Average high school GPA of first-time freshmen in Fall 2016 was 3.25.



Average HS GPA	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
	3.15	3.16	3.19	3.23	3.25

Average SAT Scores of Freshmen

The average SAT score of first-time freshmen has been increasing since 2013. Average SAT score is the arithmetic mean that was calculated based on the critical reading and math points. Similarly, critical reading and math points were used to calculate 75th and 25th percentile for our peers. A majority of students at five of our peer institutions primarily submit ACT scores. Yet, we used the SAT scores reported by a small percentage of students at these institutions instead of a converted ACT to SAT score as the conversion is not meaningful due to the different structure of these tests.

Average SAT Scores of Freshmen	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
75th Percentile	1160	1130	1130	1140	1160
25th Percentile	980	970	960	970	970
Average	1072	1058	1057	1061	1071
Average SAT Scores of Freshmen (Peers)	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
75th Percentile	1235	1200	1245	1250	1235
25th Percentile	985	980	1000	995	980

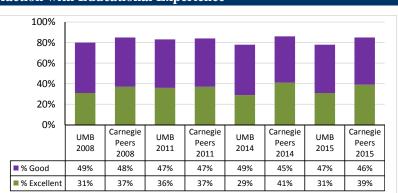
Average GPA of Entering Transfer Students

About half of all new students entering in the fall are transfer students. The average GPA of these students has remained steady over the last five years.

Avg. GPA Entering	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Transfers	3.11	3.11	3.12	3.13	3.10

Student Satisfaction with Educational Experience

Seventy-eight percent of seniors rated their overall experience at UMass Boston as "good" or "excellent" in the National Survey of Student Engagement (NSSE) in 2015. This is seven percentage point lower than the Carnegie Class. 2015 NSSE response rates were low, which limits the generalizability of the results.



Student-Faculty Ratio

The student-to-faculty ratio has remained at 15 or
16 for the past five years. The growing
enrollment has been accompanied by a
commitment to hiring faculty, which explains the
relatively constant student-faculty ratio.

Student-Faculty Ratio	2012	2013	2014	2015	2016
	15:1	15:1	16:1	16:1	16:1

Technology-Enhanced Classrooms

Technology-Enhanced	AY 2013-2014		AY 201	4-2015	AY 2015-2016	
Classrooms	No. of Classrooms	Percent of Total	No of Classrooms	Percent of Total	No of Classrooms	Percent of Total
Basic	97	53%	92	46%	103	47%
Medium	78	43%	91	45%	82	38%
High	5	3%	16	8%	29	13%
Very High	2	1%	2	1%	3	1%
Total Classrooms Teaching Spaces	182	100%	201	100%	217	100%

Basic classroom technology:

All 217 classrooms scheduled by the UMB campus registrar have Projectors or Large Flat Panel TV Monitors for Computer Display.

Medium classroom Technology:

In addition to Basic technology, almost 38% of the classrooms at UMB have a teaching podium, resident computer and a large screen projector), they also contain HDMI & VGA connections for laptop projection. These rooms are also equipped with wireless microphones for public address and program room speakers.

High classroom Technology:

In addition to Medium Classroom Technology almost 14% of all UMB teaching spaces are equipped with technology to record lectures.

High classroom Technology (cont'd):

These rooms are equipped with Echo360 Classroom Capture Systems, fixed cameras and wireless microphones (for Faculty/Speaker Recording) In 2015-16, 17 rooms were considered to be High Classroom Technology.

Very High classroom Technology:

UMB has 3 High Technology Classrooms two of the classrooms are equipped with multiple cameras and microphones for two way distance learning facilitation and one of the classrooms is equipped with student PODS with resident computers and Mersive Collaboration software for student station collabortion and projection.

Number of Students Enrolled in For-Credit Internships/Co-ops

The number of undergraduate and graduate students participating in for-credit internships, co-ops, or practicum student teaching has been decreasing for the past five years but remained well above 5,000 students per academic year.

For-Credit	2012-13	2013-14	2014-15	2015-16	2016-17
Internships/Co-ops	6,115	5,372	6,069	5,591	5,265

Doctoral Degrees Awarded

UMass Boston has awarded an average of 45 doctoral degrees annually over the past five years. Professional practice doctorates have maintained a steady increase from the academic year 2011-12 to 2014-15, but, slightly decreased in 2015-16.

UMB Doctoral Degrees Awarded	2011-12	2012-13	2013-14	2014-15	2015-16
Research/Scholarship Doctorates	40	31	61	43	52
Professional Practice Doctorates	5	6	10	13	9
Total Doctoral Degrees Awarded	45	37	71	56	61

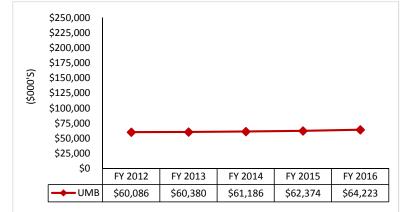
Research/Scholarship Doctorates	2011-2012	2012-13	2013-14	2014-15	2015-16
UMB	40	31	61	43	52
Peer Average	130	130	129	130	134

Postdoctoral Appointees

UMass Boston continues to invest in	Postdoctoral	2011-12	2012-13	2013-14	2014-15	2015-16
postdoctoral appointees to support growing research and development programs.	Appointees	15	13	16	11	13

Total Research and Development (R&D) Expenditures

Between FY 2012 and FY 2016, UMass Boston's R&D Expenditures reported to NSF increased by 7% to more than \$64 million.



Total R&D Expenditures Rankings

UMass Boston's total R&D Expenditures overall ranking has been improving over the past five years. Ranking among the Carnegie peers went slightly down from last year, but still better than FY 2011 to FY 2013.

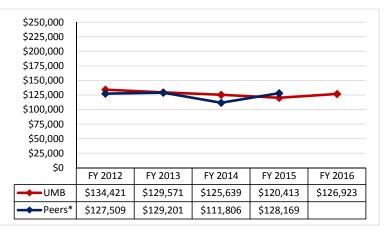
Total R&D Expenditures Rankings	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Overall Ranking	191	185	183	177	172
Ranking based on Carnegie Peers	34	31	30	22	24

Overall Ranking Source: National Science Foundation*Ranking by Total R&D Expenditures* Note: Ranking based on Carnegie Peers is further standardized by US Publics and Non-Medical Schools.

Total R&D Expenditures per Tenured System Faculty

The strategic plan implementation continues to support increased R&D. Total R&D Expenditures has been increasing every year since FY2012. The total number of full-time tenure system faculty had also been increasing every year until FY 2016. Hence, UMass Boston observed a steady decrease in R&D expenditure per tenure system faculty until 2016. However, a decrease in full-time tenure system faculty bumped up the Total R&D expenditure per faculty in FY 2016.

Peer institutions with medical schools were excluded in calculating the peer average (University of Illinois at Chicago, University of Nevada at Reno, and University of Louisville).

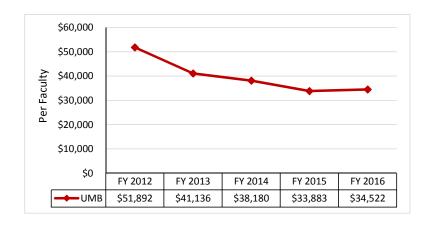


* Peer data for FY 2016 is currently not available.

Sponsored Instruction & Outreach per Faculty

Total Sponsored Instruction & Outreach Dollars per faculty member decreased 33% between FY 2012 and FY 2015. Please note that in keeping with our strategic plan, the number of our tenured and tenure-track faculty has been growing in those years.

In FY 2016, with a decline in tenured system full-time faculty, we saw an increase in per faculty sponsored instruction and outreach.



Patent Applications

In FY16, the number of patent applications had		FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	1
decreased from prior years.	Patent Applications	1	1	4	6	2	

License Income

License Income	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
License Income	\$2,474	\$2,797	\$1,464	\$1,091	\$2,129

Licenses and licensing income are related to the number of invention disclosures. Therefore, we expect an increase in licensing revenue coming from inventions in some of our science departments, namely physics, engineering, and chemistry.

Percent Tenured/Tenure-Track Faculty FTE

Percent of full-time instructional faculty who are tenured/tenure-track has been decreasing for the past five years but has remained above 70%

Percent Tenured/Tenure- track Faculty	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
% Tenured/Tenure- track	75%	76%	74%	72%	71%
% Non Tenure- track/PT	25%	24%	26%	28%	29%

New Tenured/Tenure-Track Faculty Hired

In keeping with strategic planning goals, UMass Boston was successful in recruiting 39 tenured or tenure-track faculty in 2016.

New Tenured/Tenure-	2012	2013	2014	2015	2016
Track Faculty Hired	33	31	34	35	41

n.b. Data for "New Hires" is based on IPEDS definitions. Prior to 2016, "New Hires" were based on all those on payroll as of November 1 of the reporting year who were hired for full-time employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year.

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

UMass Boston has continued its efforts to increase the percentage of the tenured/tenuretrack faculty.

New T/TT Faculty as Percent of Total	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Total T/TT Faculty	447	466	487	518	506
Total New Hires	33	31	34	35	41
Percent of Total	7%	7%	7%	7%	8%

n.b. Data for "New Hires" is based on IPEDS definitions. Prior to 2016, "New Hires" were based on all those on payroll as of November 1 of the reporting year who were hired for full-time employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year.

Change in Tenured/Tenure-Track Faculty

There has been a 2% decrease in the full-time tenured/tenure-track	Change in T/TT	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	
faculty from Fall 2015 to Fall 2016.	Faculty	447	466	487	518	506	
						1-Year	Change
						Fall 2	015-16
						Number	Percent
						-12	-2%

Change in Faculty FTE

Faculty FTE had a 2% decrease in Fall 2016.

Change in Faculty	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	
FTE	789	791	840	910	890	
					1-Year	Change
					Fall 2	015-16
					Number	Percent
					-20	-2%

Faculty by Race and Gender

The percent of faculty of color has remained above 20% for the past five years. This percentage is of U.S. faculty of the known race. More than half (51%) of the faculty at UMass Boston are female.

Full-Time Instructional Faculty									
Faculty Of Color Fall 2012 Fall 2013 Fall 2014 Fall 2015 Fall 20									
Number	122	121	132	151	159				
Percent	23%	24%	25%	26%	22%				
	2370	2170	2370	2070					

Women Faculty	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Number	287	294	323	359	362
Percent	49%	49%	50%	51%	51%

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. Based on full-time instructional faculty

Faculty Awards

Faculty Awards	2011	2012	2013	2014	201
Facuny Awaras	0	0	4	6	3
	·			•	

National Academy Members

"The Top American Research Universities" shows one faculty membership for UMass Boston at the Institute of Medicine in 2015.

"The Top American Research Universities" shows three faculty awards for UMass Boston in the most recent publication which

reflects 2015 data.

National Academy	2011	2012	2013	2014	2015
Members	1	1	1	1	1

ACCESS AND AFFORDABILITY

Percent In-State Pell Grant Recipients

Nearly half (48%) of our in-state Fall 2015 Fall 2011 Fall 2012 Fall 2013 Fall 2014 Percent (In-State) Pell undergraduate applicants for financial aid Grant Recipients 44% 44% 45% 48% 48% are eligible for Pell Grants. Pell Grants are available only to those students with the lowest family incomes. The number of Pelleligible students is an indicator of the socioeconomic diversity of the student population.

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

The university has a goal of meeting 88% of the demonstrated financial need of all financial aid applicants using federal, state, institutional, and private funds.

Percent Need Met for	2011-12	2012-13	2013-14	2014-15	2015-16
(In-State) Need-Based Aid	90%	89%	89%	90%	88%

Student Debt Load of Graduating Class (UG)

The average debt load of graduating students has decreased this year from a steady increase for the past four years. The percent of the class graduating with debt has also decreased to 63%. This is the lowest in the past five years.

3		2012	2013	2014	2015	2016
e						
	Average Debt Load	\$25,499	\$26,078	\$27,229	\$28,368	\$27,142
	Percent Graduating					
	Class with Debt	74%	68%	73%	66%	63%

Percent Undergraduate Students from Massachusetts

UMass Boston primarily serves undergraduate students from Massachusetts. We also attract international and out-of-state students. The percentage of students with in-state tuition residency has been declining in keeping with strategic planning goals of increasing the geographic diversity of our students.

Annual online course registrations experienced a rapid growth at UMass Boston, 34% in the last

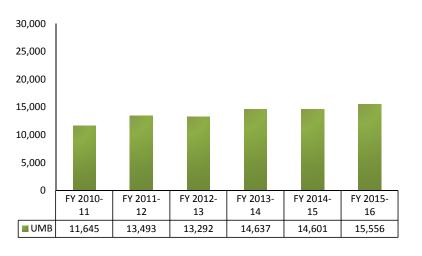
Fiscal Year (FY) course registrations credit courses include summer, fall, winter, and spring

five year.

semesters.

Percent Undergraduates from Massachusetts	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Number	10,610	10,639	10,736	10,863	10,765
Percent	88%	86%	85%	84%	84%

Online Course Registrations



Annual Growth in Online Course Registrations

Rates of growth in online registrations have varied from year to year. From FY2014-15 to FY 2015-16, there has been a 7% growth in online course registration.

Annual Growth in Online Course	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Registrations	16%	-1%	10%	0%	7%

STUDENT SUCCESS AND SATISFACTION

Percent Undergraduate Students of Color

Based on undergraduates who are Cape Verdean, African-American/Black, Hispanic/Latino, Asian, Native American, and/or two or more races divided by total undergraduate U.S. citizens and permanent residents who report race, UMass Boston continues to be the most diverse four-year university in New England in terms of undergraduate students, with over 5,800 undergraduate students of color. For the past five years, the percentage of undergraduate student of colors increased nearly ten percentage points.

Percent UG Students of Color	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Number	4,873	5,069	5,256	5,592	5,819
Percent	48%	50%	52%	55%	57%

Percent First Time, Full Time Undergraduates who are First-Generation College Students

Question: Did either of your parents receive a bachelor's degree?	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
<i>NSSE:</i> % reporting neither of their parents had received a bachelor's degree.	NA	NA	57%	53%	NA
<i>CIRP/BCSSE*</i> : % reporting neither of their parents had received a bachelor's degree.	49%*	NA	NA	NA	NA
<i>Freshmen Orientation Survey</i> **: % reporting neither of their parents had received a bachelor's degree.	NA	56%	56%	61%	56%***

*In Fall 2012, the BCSSE survey was not administered to many Directions for Student Potential (DSP) incoming freshmen.

This group has a very high proportion of students who are first-generation college students.

In years when BCSSE survey is not administered, a brief survey is administered at freshman orientation that includes questions about parent education. *Response rate was less than 6%

Percent Undergraduates who Speak English as a Second Language

UMass Boston enrolls significant numbers of students for whom English is a second language. This is another dimension of the diversity of our students.	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Do you usually speak a language other than English at home or with family? NSSE : Combined Freshmen and Seniors	NA	NA	NA	NA	NA
Do you usually speak a language other than English at home or with family? Freshmen Orientation Survey: % of incoming freshmen responding 'Yes.'	NA	52%	53%	49%	51%*

*Response rate was less than 6%

Percent International Undergraduates

The number of international students is steadily increasing at UMass Boston. International students now amount to more than 12% of undergraduate enrollment. There has been a 65% growth since Fall 2012. This number will continue to increase as UMass Boston pursues its strategic goal of global engagement.

Percent UGs International	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Number	950	1,180	1,441	1,565	1,570
Percent	7.8%	9.5%	11.3%	12.1%	12.2%

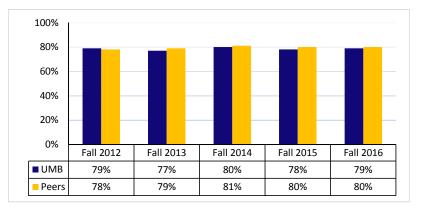
Total Students who Participate in a Study Abroad Program

Study abroad figures are reported to the Institute of International Education's Annual Survey. There has been a sharp decrease in the number of students participating in a study abroad program.

Total Number of Students who	Fall 2011- Summer 12	Fall 2012- Summer 13	Fall 2013- Summer 14	Fall 2014- Summer 15	Fall 2015- Summer 16
participated in Study					
Abroad	203	231	208	208	165

Freshmen One-Year Retention Rate

There has been one percentage point increase from last year in the first-time full-time oneyear retention rate. Peer averages are based on Fall 2015 data. All peer institutions have oncampus housing.



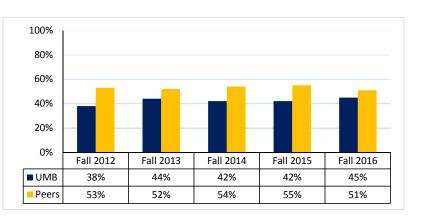
Four -Year Graduation Rates

The four-year graduation rate for first-time full-time undergraduates has reached a new high of 25%. Ongoing efforts to improve retention may have positively impacted graduation rates over time. Increasing graduation rates is a major focus of the strategic plan.

4-Yr. Graduation Rates	2012	2013	2014	2015	2016
Cohort Entering Year	(2008)	(2009)	(2010)	(2011)	(2012)
4-Year Graduation Rate	16%	17%	18%	21%	25%

Freshmen Six-Year Graduation Rate

The six-year graduation rate for first-time, fulltime freshmen entering in fall 2010 is 45%. Peer averages are based on full-time, first-time, 2007 cohort. The Fall 2010 cohort precedes many of the initiatives focused on student success: Start on Track/Stay on Track, the Honors program (now the Honors College), the CSM Freshmen Success program, the CLA First! program, the CM LEAD program, the Student Support Services program, MAP-Works, and Success Boston (for Boston Public School students). All of these programs have contributed to increasing retention rates and student success over the past four years. Graduation rates reflect cohort histories and not the future.



Transfer (Full-Time) One-Year Retention Rate

The one-year retention rate of all entering fulltime transfer students was 83%, highest in the past five years, for the cohort entering in Fall 2015.

Transfers (Full-time) One-Year Retention	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Rate	80%	81%	82%	80%	83%

Transfer (Upper Division) Four-Year Graduation Rate

The four-year upper-division transfer graduation rate was 69% for those who entered	Transfers (Upper Division) Four-Year	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
in Fall 2012.	Graduation Rate	70%	71%	64%	71%	69%

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

Number of Students in Cohort: 1065		GRADUATED				
<i>Outcomes for Student Starting at UMB in Fall 2010 by Summer 2016</i>	2010-11	2011-12	2012-13	WITHIN 4 YRS.	WITHIN 5 YRS.	WITHIN 6 YRS.
Bachelor's degree from UMass Boston	0%	0%	1%	18%	38%	44%
Associate degree from UMass Boston	0%	0%	NA	0%	0%	0%
Total Graduated from UMass Boston	0%	0%	1%	18%	38%	44%
					I	Π
Bachelor's degree from another Institution	0%	0%	0%	5%	9%	12%
Associate degree from another Institution	0%	0%	0%	2%	2%	2%
Total Graduated from another Institution	0%	0%	1%	7%	11%	14%
Enrolled at UMass Boston	92%	72%	59%	41%	17%	8%
	I				1	1
Enrolled at another 4-yr Institution	0%	7%	12%	11%	8%	5%
Enrolled at another 2-yr Institution	1%	7%	8%	6%	6%	5%
Total Transferred and Enrolled at another Institution	1%	14%	20%	17%	14%	10%
					Π	I
Current Status Unknown	7%	14%	19%	17%	20%	24%

The Student Achievement Measure tracks students throughout their college careers. After six years, 58% of first-time first-year students graduated from UMB or another institution, 8% were still enrolled at UMB, and 10% were enrolled at another institution.

Alumni Participation Rate

The university has a five-year target of achieving an 8.0% alumni participation rate by FY2019.

Alumni Participation	2012	2013	2014	2015	2016
Rate	5.3%	5.0%	4.8%	5.4%	4.6%

SERVICE TO THE COMMONWEALTH

Degree Completions

The number of degrees awarded has been increasing every year since 2011-12. The total number of degrees conferred increased by 13% in the past five years. There has been a 22% increase in bachelor's degree awards.

Degree Completions	2011-12	2012-13	2013-14	2014-15	2015-16
Bachelor's degrees	2,109	2,275	2,366	2,442	2,564
Masters degrees	988	1,017	923	1,042	936
Doctoral degrees	45	37	71	56	61
Res./Sch. Doctorates	40	31	61	43	52
Professional Practice Doctorates	5	6	10	13	9
Total Degrees	3,142	3,329	3,360	3,540	3,561

Percent Alumni Who Live in Massachusetts

Nearly three quarters (74%) of the alumni of UMass Boston stay, work, and pay taxes in Massachusetts.

Percent Alumni Who Live in MA	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Undergraduate	76%	76%	76%	76%	75%
Graduate	71%	71%	70%	71%	71%
All	75%	75%	75%	75%	74%

Enrollment in STEM Programs

UMass Boston's Science, Technology, Engineering and Mathematics (STEM) undergraduate programs are located within the College of Science and Mathematics, College of Management, the School for the Environment, and College of Public and Community Service.

Enrollments continue to increase steadily in STEM programs in both undergraduate and graduate programs. The number of total STEM students (undergraduate and graduate) has increased 41% from fall 2012 to fall 2016.

Fall 2016 number of enrolled in STEM graduate program does not include Marine Science due to CIP change.

Undergraduate									
Enrollment	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016				
Total UG Degree- seeking	11,386	11,721	12,048	12,949	12,847				
STEM	2,489	2,821	3,055	3,288	3,466				
Percent STEM	22%	24%	25%	25%	27%				

Graduate									
Enrollment	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016				
Total Degree-seeking	3,225	3,397	3,445	4,081	4,000				
STEM	241	298	347	388	389				
Percent STEM	7%	9%	10%	10%	10%				

Total Enrollment								
Enrollment	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016			
STEM	2,730	3,119	3,402	3,676	3,855			
Percent STEM	19%	21%	22%	22%	23%			

Degrees and Certificates Awarded in STEM Fields

The number of STEM degrees awarded (undergraduate and graduate) has increased substantially (72%) over the past five years. Further increases are anticipated, aligned with growth in enrollment of STEM students.

Undergraduate 2011-12 2012-13 2013-14 2014-15 2015-16 2,197 2,390 2,481 2,558 2,666 Total Degrees **STEM** 245 303 319 361 413 Percent STEM 11% 13% 13% 14% 15%

Total certificates include undergraduate, graduate, and CAGS/post-Masters certificates.

Fall 2016 number of enrolled in STEM graduate program does not include Marine Science due to CIP change.

Graduate									
	2011-12	2012-13	2013-14	2014-15	2015-16				
Total Degrees	1,033	1,054	994	1,098	997				
STEM	65	52	82	101	116				
Percent STEM	6%	5%	8%	9%	12%				

Total Degrees							
2011-12 2012-13 2013-14 2014-15 2015-16							
STEM	310	355	401	462	529		
Percent STEM	10%	10%	12%	13%	14%		

Certificates						
Certificates	2011-12	2012-13	2013-14	2014-15	2015-16	
Total Certificates	254	230	326	336	321	
STEM	2	4	4	2	6	
Percent STEM	1%	2%	1%	1%	2%	

Health Care Awards

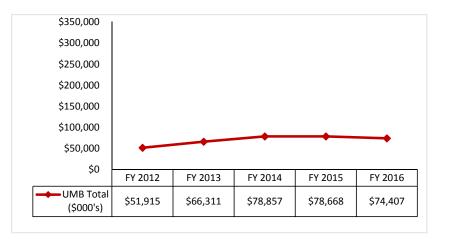
In 2015-16, there has been a decrease in almost all levels of healthcare awards. The number of total degrees including bachelor's, master's, and doctoral has decreased by 5% in 2015-16 than 2014-15.

Health Care Awards	2011-12	2012-13	2013-14	2014-15	2015-16	
Bachelor's degrees	443	543	552	553	521	
Masters degrees	85	125	136	124	124	
Doctoral degrees	10	9	12	17	13	
Res./Sch. Doctorates	5	3	2	4	4	
Professional Practice Doctorates	5	6	10	13	9	
Total Degrees	538	677	700	694	658	
Total Certificates	95	86	133	117	93	

FINANCIAL HEALTH

Endowment Assets and Annual Growth in Endowment

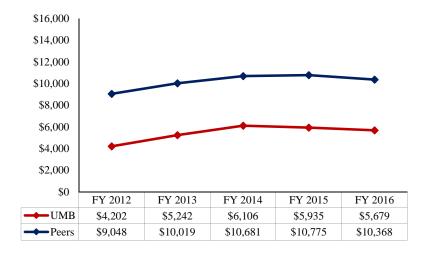
Endowment assets have decreased to \$74.4 million in FY 2016, from \$78.7 million in FY 2015. This represents a 5% decrease in the total endowment assets.



Growth in	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Endowment	9%	28%	19%	0%	-5%

Endowment per Annualized Student FTE

The endowment per Annual FTE student count has decreased, as the total endowment has decreased by 5%. One of our peers, the University of Louisville, has a substantial endowment that skews the peer average; therefore, the median value is used for the Peer Average. Peer average was calculated based on FY 2015 (most recent year available).



Private Funds Raised Annually



Primary Reserve

UMass Boston's primary reserve had a sharp decrease in FY 2016. Construction for a 1,000bed residence hall, a \$120 million project, has begun in fall 2016.

Primary Reserve	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
UMB	28.2%	27.7%	25.6%	19.1%	9.8%
Peer Average	21.2%	19.0%	20.8%	4.6%	15.7%

Debt Service to Operations

The debt service ratio has remained in a relatively tight range over the last five fiscal years. Borrowing has increased slowly and interest rates have remained low. With the Master Plan being implemented, debt is planned to rise over the next few years.

Debt Service to Operations	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
UMB	5.0%	6.0%	4.5%	5.2%	4.9%
Peer Average	6.3%	6.9%	4.1%	5.2%	8.9%

Deferred Maintenance per GSF

Deferred maintenance 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.

Deferred Maintenance	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
per GSF	\$189.02	\$194.97	\$193.88	\$219.04	\$242.90

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 DHE admissions policy, reported on all first-time students.

Average SAT Scores of Freshmen. Average SAT Scores of freshmen are based on the arithmetic mean calculated based on the critical reading and math points. The 25th and 75th percentiles are based on the critical reading and math points of all first-year students. Peer data are based on the median from Integrated Postsecondary Education Data System.

Average GPA of Entering Transfer Students.

Cumulative GPA of entering transfer students according to DHE admissions.

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 (NSSE) administered in Spring 2015. Peer data are from NSSE 2015.

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.

Technology-Enhanced Classrooms. Classification of the campus's total classroom capacity in terms of the level of technology-support.

Number of Students Enrolled in For-Credit

Internships/Co-Ops. Data are from the Office of the Registrar and the Office of Career Services and Internships. Totals are academic year enrollment totals. Data prior to AY 2011-12 used a different methodology and is not comparable more recent data.

Number of Doctoral Degrees Awarded. Number of doctorates awarded for AY 2015-16, which includes August 2015, January 2016, and May 2016 award dates. These include both research/scholarship and professional practice doctorates. Peer comparison data are based on research/scholarship doctorates only that were reported to IPEDS.

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.

Total R&D Expenditures Ranking. Annual NSF ranking of Total R&D expenditures, for all postsecondary institutions with any federal R&D expenditures 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 Boston'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/High Activity" and with no medical school. Data source NCES WebCaspar/NSF HERD data tables. Ranking computed by campus.

Total R&D 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 fulltime tenure system faculty as reported to IPEDS. Peer data are from NSF/IPEDS.

Sponsored Instruction and Outreach per Faculty.

Total of Instruction (A00) and Public Service (C00) from the FY final grants schedule, divided by total tenure system faculty as reported to IPEDS.

Patent Applications. Number of U.S. Patent applications filed per year. Data source: Data reported by campuses to UMass President's Office, Office of OTCV.

License Income. Amount of annual income from license agreements. Data source: Data reported by campuses to UMass President's Office, Office of OTCV.

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

New Tenured/Tenure-Track Faculty Hired. The number of new tenured/tenured-track faculty members hired to start their new positions in the academic year. Data for "New Hires" is based on IPEDS definitions. Prior to 2016, "New Hires" were based on all those on payroll as of November 1 of the reporting year who were hired for full-time employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year. **New Tenured/Tenure-Track Faculty Hired as Percent of All Tenured/Tenure-Track Faculty.** Number of "Newly hired" Tenured/Tenure-track faculty divided by Total Tenured/Tenure-track Faculty of an IPEDS reporting cycle. Data for "New Hires" is based on IPEDS definitions. Prior to 2016, "New Hires" were based on all those on payroll as of November 1 of the reporting year who were hired for full-time employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year.

Change in Tenured/Tenure-Track Faculty. The difference in the number of tenured/tenure-track faculty from one Fall semester to the next. Includes faculty members who are on paid leave. Does not include individuals whose primary responsibility is administrative.

Change in Total Faculty Full Time Equivalent (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. Definition of faculty FTE is per the Common Data Set, and includes all faculty teaching credit courses, including non-state-supported courses.

Percent Faculty-of-Color (based on Full-time

Instructional Faculty). The proportion of full-time instructional staff 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 staff 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 are from *The Top American Research Universities report*.

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 in the Financial Aid Template.

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

Average Debt of Students for Graduating Class (UG). Average debt load is based on the total debt borrowed by an Institution's graduating class (bachelor's, first-time only) divided by the number of students of that cohort that carried any amount of debt. It does not include those students with no debt load. It does not include students who have transferred in. The graduating class includes those that graduated between July 1 and June 30 of the reporting year. Data is from CDS.

Percent Graduating Class with Debt (UG). The total number of students in the graduating class (bachelor's, first-time only) that carried a debt load at the institution divided by the total number of graduating (bachelor's, first-time only) students in that institution. It does not include students who have transferred in. The graduating class includes those that graduated between July 1 and June 30 of the reporting year. Data is from CDS.

Percent Undergraduate Students from Massachusetts. Percentage of total undergraduate students who are 'In-State' or residents of Massachusetts.

Online Course Registrations. 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 Registrations.

Percentage rate of growth in 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 Undergraduate who are Students of Color. Undergraduates who are Cape Verdean, African-American/Black, Hispanic/Latino, Asian, Native American, and/or two or more races divided by total undergraduate U.S. citizens and permanent residents who report race/ethnicity.

Percent First-Time, Full-Time Undergraduates who are First Generation College Students. First-generation college students are defined as those students with neither parent having obtained a bachelor's degree. Fall 2012 data are from the Beginning College Survey of Student Engagement (BCSSE). In years when the BCSSE survey is not administered, a brief survey is administered at freshmen orientation that includes questions about parent education. Previous years' data are from Cooperative Institutional Research Program (CIRP) Freshmen Survey.

Percent Undergraduates Who Speak English as a Second

Language. Percentage of incoming students at freshmen orientation who speak a language other than English at home or with family. In previous years, the percentage was of first-year and senior students combined who responded that they spoke another language at home or with family on the National Survey of Student Engagement (NSSE). Fall 2016 numbers were reported from Freshman Orientation Survey.

Percent International Undergraduates. Percentage of all undergraduates who are non-resident aliens, studying at the university on an eligible visa types, and enrolled in credit courses. Does not include US citizens, permanent residents, or refugees.

Total Number of Students Who Participated in a Study Abroad Program. Data are numbers of students who participated in a credit bearing, study abroad program as reported on the Institute of International Education Open Doors survey for Fall 2015 through Summer 2016.

Freshmen Four-Year Graduation Rate. Percent of firsttime, full-time, degree-seeking freshmen who entered UMass Boston in a given Fall and graduated from the institution by the end of their fourth year.

Freshmen One-Year Retention Rate. Percent of first-time, full-time freshmen who entered UMass Boston in the previous Fall and were still enrolled at the institution as of the next Fall. Peer data are based on median as reported to IPEDS or CDS.

Freshmen Six-Year Graduation Rate. Percent of firsttime, full-time freshmen who entered UMass Boston in a given Fall and had graduated from the institution within six years. Peer data are based on median as reported to IPEDS.

Transfer (Full-time) One-Year Retention Rate. Percent

of full-time transfer students at any level who entered UMass Boston in the prior Fall and were still enrolled or graduated from the institution as of the next Fall.

Transfer (Upper-Division) Four-Year Graduation Rate.

Percent of full-time upper division transfers (60+ credits) who entered UMass Boston in a given Fall and had graduated from the institution within four years.

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. The 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. Graduates who earned only a graduate degree are excluded. Data as reported to US News and World Report.

SERVICE TO THE COMMONWEALTH INDICATORS

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 Live in Massachusetts. Percentage of total alumni who currently reside in Massachusetts based on alumni records.

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

Degrees 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 Awarded in Healthcare Fields. Number of undergraduate and graduate degrees and certificates

awarded in Health Care fields. Healthcare 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. The total value of the endowment (includes true and quasiendowments) at the end of the fiscal year as reported in the UMass Annual BOT report, and the percent change from previous year. Comparative data are from IPEDS, financial statements, and the NACUBO survey.

Endowment per Annualized Student Full Time Equivalent (FTE). Total endowment (includes true and

quasi-endowments) per annualized FTE student, where FTE of peer institutions is standardized to UMass formulae. Peer data are for the comparative peers from financial statements (current year) and IPEDS (prior years).

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 (operating expenditures plus interest expense). Peer data are from published financial statements.

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

Deferred Maintenance per GSF. Deferred Maintenance 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. Adjusted each year for inflation.

PEER INSTITUTIONS FOR UMASS BOSTON

Cleveland State University University of Memphis University of Illinois at Chicago University of Louisville University of Nevada-Reno University of Missouri-Kansas City University of Maryland Baltimore County University of Massachusetts Lowell

Please Note: Unless otherwise specified, all data are coordinated by the UMass Boston Office of Institutional Research, Assessment, and Planning.

HEADLINES FROM THE 2017 ANNUAL INDICATORS

ACADEMIC QUALITY

UMass Dartmouth continues to maintain the quality of its academic programs. Notably, US News cited UMass Dartmouth in their top tier of National Universities. This is the first year being ranked in this category. US News listed the Graduate Fine Arts programs as number 82 on their list.

The indicators highlighted below reflect the campus's successes in the past few years. Also highlighted are areas of change. UMass Dartmouth achieved the Doctoral Research University status of Carnegie classification in 2016, as we acknowledge our achievements and look forward to new developments.

ACCESS AND AFFORDABILITY

UMass Dartmouth continues to realize our mission to serve the region and the Commonwealth by providing a wide range of capable students with access to a highquality education.

The indicators for Pell grants (40%), percent of need met (90%), percent undergraduate students of color (34%), percent from Massachusetts (91%), and percent of freshmen who are first generation (25%), demonstrate UMass Dartmouth's strong commitment to access and opportunity. Additionally, the enrollment of undergraduate international students has increased by 50% in four years as the University continues to globalize its curriculum and student body. UMass Dartmouth is succeeding in its goal of maintaining a strong student quality profile while also fostering access and diversity.

RESEARCH AND ENGAGEMENT

UMass Dartmouth continued to strengthen its research and engagement by hiring faculty in critical areas of growth. An increased number of faculty have secured externally funded grants. New laboratories opened as part of a \$12 million renovation project on the main campus to support interdisciplinary research, particularly in the areas of bioengineering and data sciences.

UMass Dartmouth has repeatedly been acknowledged on the President's Higher Education General Community Service Honor Finalist list and our students performed more than 232,500 hours of community service.

STUDENT SUCCESS AND SATISFACTION

The one-year retention rate has improved from 70% in 2010 to 73% in 2016. UMass Dartmouth has developed an assertive program of interventions. The indicators for transfer student retention at 78% and improved graduation rates fill in the picture that is left incomplete by the standard measure for freshman success. The 4-year graduation rate increase by seven percentage points shows promise that the 6-year graduation rate will increase to greater than the 50% goal. The Student Achievement Measurement (SAM) reveals that an additional 15% of our Fall 2010 freshmen cohort graduated from another institution. Even though students may not have graduated from UMass Dartmouth, we contributed to their success at other institutions.

DEGREES GRANTED

In 2016, UMass Dartmouth graduated approximately 1,900 students with over 2,000 degrees/certificates. Because 74% of our graduates remain in Massachusetts, the degrees granted make a direct, important contribution to the Commonwealth. The indicators for enrollments and degrees granted in Science, Technology, Engineering, and Mathematics and Health Care show our commitment to educating students in these fields.

UMass Dartmouth is still relatively new to doctoral education; overall, 131 Research/Scholarship doctoral degrees have been granted since 1997. The number does not include the Professional Practice doctoral degrees. With new doctoral programs now added, our goal to graduate more than 20 per year has been achieved and will continue. Professional practice doctoral enrollments have grown steadily, enhanced by the addition of the Juris Doctor degree and Doctorate of Nursing Practice. More Research/Scholarship doctoral programs are being developed.

FINANCIAL HEALTH

A set of fiscal controls and processes are in place to ensure the achievement of full fiscal stability. A strategic plan, *UMassDTransform2020* was completed in FY 2014 and implementation began in Summer 2014. The plan will ensure that resources are aligned with academic goals and spending. UMass Dartmouth continues to explore new ways to grow revenues and control spending to create efficiencies. UMass Dartmouth has achieved a positive financial cushion during a time of constrained resources.

2017 ANNUAL INDICATORS AT A GLANCE

ACADEMIC QUALITY

•	Average HS GPA of Freshmen	3.21
•	Average SAT Scores of Freshmen	
	Arithmetic Mean	1022
	25 th -75 th Percentile	920 - 1120
•	Average GPA of Entering Transfers	3.1
•	Student Satisfaction with Educational	
	Experience	80%
•	Student-Faculty Ratio	16:1
•	Technology-Enhanced Classrooms	119
•	Number of Doctoral Degrees Awarded	93
•	Postdoctoral Appointees	1
•	Total R&D Expenditures	\$26.8M
•	Total R&D Expenditures per Faculty	\$89,413
•	Total R&D Expenditures Ranking-Overall	236
•	Total R&D Expenditures Ranking among Peers/US Publics/Non-Medical	Carnegie 9
•	Federal Research Expenditures	\$6.5M
•	Patent Applications	5
•	License Income	\$39,000
•	Percent Tenured/Tenure-Track Faculty FT	E 56
•	New Tenured/Tenure-Track Faculty Hired	19
	As Percent of T/TT Faculty	6%
•	Change in Tenured/Tenure-Track Faculty	2%
•	Change in Faculty FTE	2%
•	Full-time Instructional Faculty	
	Percent Faculty-of-Color	22%
	Percent Women	45%
•	Faculty Awards	NA
•	National Academy Members	0

•	Percent of Need Met for In-State Students Av	vordod
•	reicent of Need Met for In-State Students Av	warueu
	Need-Based Aid	90%
•	Average Student Debt Load (UG)	\$32,099
•	Percent Graduating Class with Debt (UG)	78%
•	Percent Undergraduates from MA	91%
•	Online Course Registrations	6,035
•	Annual Growth in Online Course Registration	ons 12.1%
S 1	FUDENT SUCCESS AND SATISFACTION	

•	Percent Undergraduates who are	
	Students of Color	34.1%
•	Percent Undergraduates First Generation in Co	ollege
	Seniors, Parents High School or less	30%
	Seniors, Neither Parent has Bachelors	56%
	Freshmen, Parents High School or less	25%
	Freshmen, Neither Parent has Bachelors	34%
•	Percent Undergraduates with English as a Seco	ond
	Language	6.5%
•	Percent Undergraduates who are International	2.4%
•	Total Number of Students who Participated in	a Study
	Abroad Program	101
•	Freshmen One-Year Retention Rate	73%
•	Freshmen Four-Year Graduation Rate	37%
•	Freshmen Six-Year Graduation Rate	49%
•	Freshmen Six-Year Graduation Rate from ano	ther
	Institution (SAM) addition	nal 15%
•	Transfer (Full-time) One-Year Retention Rate	78%
•		
•	Transfer (Upper Division) Four-Year Graduati	
	Rate	69%
•	Alumni Participation Rate	3%

ACCESS AND AFFORDABILITY

•	Percent	(In-state)	Pell Grant	Recipients	40%
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SERVICE TO THE COMMONWEALTH

Degree Completions	
Bachelor's	1385
Master's	413
Doctorates	93
• Percent Alumni who Live in MA	74%
• Enrollment in STEM Programs	2,120 (25%)
Undergraduate	1,694 (24%)
Graduate	426 (27%)
Degrees Awarded in STEM Fields	413 (22%)
Undergraduate	293 (21%)
Graduate	120 (24%)
• Degrees Awarded in Healthcare Fields	194
Undergraduate	172
Graduate	22
• MTEL Science and Math Test-Takers	9

FINANCIAL HEALTH

• Total Endowment Assets	\$48.1M
• Annual Growth in Endowment Assets	-5%
• Endowment per Annualized Student FTE	\$6,107
• Private Funds Raised Annually	\$4.1M
Primary Reserve	6.9%
• Debt Service to Operations	8.7%
• Deferred Maintenance per GSF	\$182

ACADEMIC QUALITY

High School GPA of Freshmen

UMass Dartmouth maintains a strong student quality profile while also fostering access. These statistics include students who have entered through the long-standing and well-recognized alternative access program, College Now/START (127) and University Extension alternative admission program, CONNECT (100).

100%		_			
80%	_		_		_
60%			_		_
40%					_
20%					
0%					
	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
■ 3.00=>	62%	64%	61%	65%	66%
2.51-2.99	27%	28%	28%	25%	23%
2.50=<	11%	8%	11%	10%	11%

Average HS GPA	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	
Ŭ	3.20	3.31	3.15	3.20	3.21]

Average SAT Scores of Freshmen

The decrease in SAT composite average was as a result of a combination of the increase in the number of students admitted into the two UMass Dartmouth alternative admissions programs, College Now and CONNECT and a change in the benefit awarded to Commonwealth Scholars that resulted in a smaller cohort.

Average SAT Scores of Freshmen (UMD)	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
75th Percentile	1140	1140	1130	1130	1120
25th Percentile	960	950	940	930	920
Average	1045	1042	1029	1029	1022
Average SAT Scores of Freshmen (Peers)	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
75th Percentile	1193	1203	1194	1188	1190
25th Percentile	991	997	982	960	1009

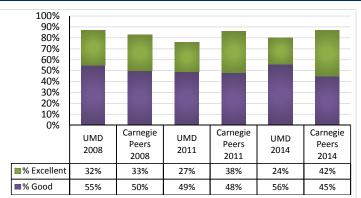
Average GPA of Entering Transfer Students

The transfer grade point average has been maintained at a high level that is well above the Massachusetts Department of Higher Education minimum of 2.0.

Avg. GPA Entering	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Transfers	3.0	3.1	3.1	3.1	3.1

Student Satisfaction with Educational Experience

Presented are responses to a survey question about the overall educational experience in the NSSE nationwide survey. The increase in the overall percentage of students satisfaction of excellent/good from the 2011 to 2014 administration is encouraging.



Student-Faculty Ratio

The student faculty ratio portrays the smaller classroom sizes and the impact of decreasing student numbers. The calculation is based on the full time equivalent (FTE) of both students and faculty, excluding graduate only programs and teaching assistants. School of Law, Marine Science & technology, and Education are excluded.

Student-Faculty Ratio	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
UMD	18:1	18:1	18:1	18:1	16:1

Technology-Enhanced Classrooms

	AY 201	3-2014	AY 2014-2015		AY 2015-2016	
Technology-Enhanced Classrooms	Number of Classrooms	Percent of Total	Number of Class - rooms	Percent of Total	Number of Class - rooms	Percent of Total
Basic	81	66%	79	65%	78	64%
Medium	31	25%	31	25%	31	25%
High	9	7%	9	7%	10	8%
Very High	1	1%	3	2%	3	2%
Total Classrooms	122	100%	122	100%	122	100%

Basic classroom technology: All rooms used for classes projectors or displays, most of them document cameras and media players available.

Medium classroom technology:

In addition to Basic technology, upgraded classrooms have a Crestron digital instructor AV control panel, digital projector (or large screen), modern document camera, HDMI & VGA connections for laptop projection, audio connection and room speakers. They are generally equipped with an instructor podium.

High classroom technology:

In addition to Medium technology, these spaces feature multiple screens that can be used mirrored or independently, Crestron AirMedia for wireless content delivery, or Echo360 lecture capture, or any combination of these features.

Very High classroom technology:

Team-based classrooms include the features of High technology rooms, with laptops, a digital screen and whiteboard for each team added.

Note: The rooms are categorized by the level of technology available to the instructor to leverage for the instructional design of the course contents. Computer labs are counted as standard classrooms for this purpose, and specialty lab classrooms are excluded.

Doctoral Degrees Awarded

UMass Dartmouth is focused on the expansion of doctoral education. The professional practice doctoral degrees include Juris Doctor law degrees and Doctorate of Nursing Practice. The goal of awarding 20 research/scholarship doctorates per year has been achieved and should continue to solidify the University's recently received Doctorate Research University Carnegie designation.

UMD Doctoral Degrees Awarded	2011-12	2012-13	2013-14	2014-15	2015-16
Research/Scholarship Doctorates	7	13	22	25	29
Professional Practice Doctorates	43	103	82	66	64
Total Doctoral Degrees Awarded	50	116	104	91	93
Research/Scholarship Doctorates	2011-12	2012-13	2013-14	2014-15	2015-16
UMD	7	13	22	25	29

63

63

Peer Average

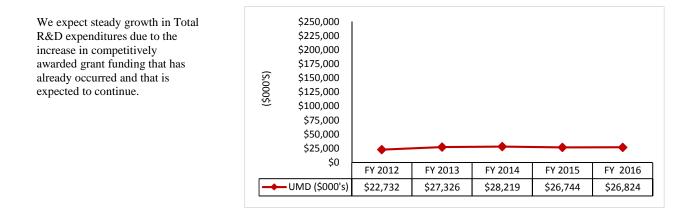
60

68

66

Postdoctoral Appointees							
UMass Dartmouth has a faculty union position entitled Research	Postdoctoral Appointees	2011-12	2012-13	2013-14	2014-15	2015-16	
Associate into which most recent	UMD	3	2	3	3	1	
PhD researchers are hired, currently at 16. The title							
"Postdoc" does not encompass the scope of our research							

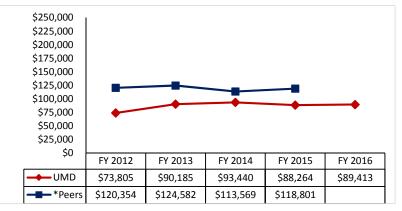
Total Research and Development (R&D) Expenditures



Total R&D Expenditures per Tenure System Faculty

The percentage of tenure system faculty who secure externally funded grants has grown in recent years. This metric is expected to increase as our researchers mature into their most productive years. Comparative and aspirant peers are included here.

involvement of new PhDs.



*FY 2016 data for peers is not currently available.

R&D Expenditures Rankings

Our rank in the overall national rankings of US public schools has improved significantly and we are maintaining our Top 20 status within the *Master's - Larger Program* Carnegie Classification. Next year, our rankings will reflect our new *Doctoral Research University -Higher* Carnegie Classification.

Total R&D Expenditures Rank	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Overall Ranking	224	229	208	233	236
Ranking based on					
Carnegie Peers	16	15	12	11	9

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

Federal Research Expenditures

After the recent decline in federal funding
resulting from the end of earmarks, this
year's federal R&D expenditures
continued to reflect the effect of the end
of the multi-year federal earmarks. With
the increase in competitive grants, we
expect the trend to stabilize and increase
in the next few years. Excluding the
influence of the outliers, the peer median
is \$11,738 for FY 2015.

Federal R&D Expenditures (\$000's)	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
UMD	\$10,979	\$8,860	\$8,549	\$7,321	\$6,548
Peers	\$24,932	\$23,080	\$20,447	\$20,126	NA

* FY 2016 data for peers is not currently available.

Patent Applications

Patent Applications	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
**	1	4	11	3	5

The increased number of patent applications filed is an indicator of an institution's inventiveness and the commercial potential of its academic work. We expect patent activity to increase going forward.

Increased license income is a measure of the economic value of an institution's inventiveness and a contributor to the University's economic health. Three patents were issued in 2015. The increased patent activity is expected to result in more license income in the coming years.

License Income

License Income	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
	\$31,000	\$34,000	\$30,000	\$35,000	\$39,000

Percent Tenured/Tenure-Track Faculty FTE

The university has been reducing						
part-time lecturers as well as	Percent					
investing more in full-time tenure	Tenured/Tenure-track	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
system faculty.	Faculty FTE					
	% Tenured/Tenure-	66%	67%	65%	65%	65%
	track	0070	0770	0570	0570	0370
	% Non Tenure-	34%	33%	35%	35%	35%
	track/PT	3470	33%	3370	3370	3370

New Tenured/Tenure-Track Faculty Hired

UMass Dartmouth's ongoing goal is to strengthen faculty by matching instructional need while building multidisciplinary research strengths in Science, Health, and Engineering.

New Tenured/Tenure-	2012	2013	2014	2015	2016
Track Faculty Hired	10	12	17	14	19

n.b. Data for "New Hires" is based on IPEDS definitions. Prior to 2016, "New Hires" were based on all those on payroll as of November 1 of the reporting year who were hired for full-time employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year.

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

Six percent of the current tenure system faculty were hired this fall. This year's increase reflects our commitment to more tenure track faculty.

New T/TT Faculty as Percent of Total	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Total T/TT Faculty	303	302	303	300	306
Total New Hires	10	12	17	14	19
Percent of Total	3%	4%	6%	5%	6%

n.b. Data for "New Hires" is based on IPEDS definitions. Prior to 2016, "New Hires" were based on all those on payroll as of November 1 of the reporting year who were hired for full-time employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year.

Change in Tenured/Tenure-Track Faculty

Growth in our tenure and tenure-track faculty is critical for achieving the University's research and engagement goals.

This indicator shows the difference in the total FTE of instruction from one fall semester to the next. Not included are individuals whose primary responsibility is administrative or teaching assistants.

Change in T/TT	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Faculty	303	302	303	300	306

1-Year Change				
Fall 2015-16				
Number	Percent			
6	2%			

Change in Faculty FTE

Change in	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Faculty FTE	470	458	449	461	470

1-Year Change				
Fall 2015-16				
Number Percent				
9	2%			

Faculty by Race and Gender

This metric reflects the demographic percentages of our full time faculty both tenure/tenure track and full time lecturers.

Full-Time Instructional Faculty						
Faculty of Color	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	
Number	90	71	81	82	78	
Percent	25%	22%	24%	23%	22%	

Women Faculty	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Number	166	158	165	177	181
Percent	44%	42%	44%	45%	45%

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 Dartmouth in 2010 was named a		2011	2012	2013	2014	2015	
"Fulbright Top-Producing Institution."	Faculty Awards	5	2	4	3	2	
Although this indicator regards faculty,						r	
three UMass Dartmouth students also have							
Although this indicator regards faculty,		5	2	–	5	2	

Although this indicator regards faculty, three UMass Dartmouth students also have earned Fulbright fellowships. If we used the larger list of awards from *Academic Analytics*, this number would increase. These numbers reflect the number of new awards each year.

National Academy Members							
UMass Dartmouth does not yet have any	National Academy	2011	2012	2013	2014	2015	
members in the National Academies.	Members	0	0	0	0	0	

ACCESS AND AFFORDABILITY

Percent (In-State) Pell Grant Recipients

This indicator represents the access that UMass Dartmouth offers to in-state low-income undergraduate students. The results show a steady proportion of these students among our freshman entering class, reflecting our increasing mission of access.

Percent (In-State) Pell Grant Recipients	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015
Grani Kecipienis	37%	39%	39%	41%	40%

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

To support access and affordability, UMass Dartmouth has dedicated a significant percentage of institutional funding to provide and maintain needbased aid to undergraduate students.

Percent Need Met (In-State)	2011-12	2012-13	2013-14	2014-15	2015-16
(In-State)	88%	86%	90%	91%	90%

Student Debt Load of Graduating Class (UG)

An increase in debt but a decrease in the percentage of students means the number of students who are borrowing dropped but the amounts that the students who are still borrowing have increased.

	2012	2013	2014	2015	2016
Average Debt Load	\$32,349	\$29,311	\$31,070	\$31,926	\$32,099
Percent Graduating Class with Debt	76%	81%	81%	84%	78%

Percent Undergraduates From Massachusetts

UMass Dartmouth has predominately served an in-state population with only nine percent from out-of-state. The institutional goal is to increase the percentage of out-of-state students. Most students come from the southeastern region of Massachusetts.

Percent Undergraduates from Massachusetts	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Number	7,120	6,975	6,945	6,762	6,394
Percent	94%	94%	93%	93%	91%

Online Course Registrations

30,000

UMD

UMass Dartmouth continues to	25,000		
experience increases in online registrations. The campus has made a	20,000		
large investment in online degree	15,000		
program development to accelerate our growth in this critical area. Key	10,000		
programs include the Accelerated BS in Nursing, MS in Nursing, and	5,000		
BS in Accounting.	0		
bo m riccounting.	0	AY 2011-12	AY 2012-13

Annual Growth in Online Course Registrations

4,127

3,455

Although there was a drop in annual growth in 2015-16, the increase of online registrations continues an upward trend. A large investment is being made in online recruitment, infrastructure, and support.

Annual Growth in Online Course	AY 2011-12	AY 2012-13	AY 2013-14	AY 2014-15	AY 2015-16
Enrollments	25.6%	19.5%	5.5%	23.7%	12.1%

AY 2013-14

4,353

AY 2014-15

5,384

AY 2015-16

6,035

STUDENT SUCCESS AND SATISFACTION

Percent Undergraduates who are Students of Color

The diversity of UMass Dartmouth's undergraduate student body continues to expand, with 34.1% students of color. This reflects the University's ability to recruit and enroll highly qualified and diverse students.

Percent UGs Students of Color	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Number	1,755	1,886	2,016	2,130	2,181
Percent	25.0%	27.3%	29.6%	31.9%	34.1%

Percent Un	dergraduates	who are First	Generation	in College

Over half of the graduating seniors are the first generation of their family to complete a four-year degree. Senior students percentages, which includes transfers, demonstrate success in persistence to graduation. Freshman students percentages show the access UMass Dartmouth provides to a college education. Thirty-five percent come from households in which neither parent has completed a four-year degree. Note the response rate for the online CIRP survey was only nine percent. Prior to Fall 2015, CIRP administration was not online and response rates were 85-98%.

Percent UGs First Generation in College	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
1st Generation Seniors (Parents HS or less)	27%	27%	30%	30%	30%
1st Generation Seniors (Neither Parent has Bachelors)	55%	55%	56%	56%	56%
1st Generation Freshmen (Parents HS or less)	25%	25%	29%	25%	19%
1st Generation Freshmen (Neither Parent has Bachelors)	43%	42%	49%	34%	35%

Percent Undergraduates with English as a Second Language

With growth in the diversity of the student population, 10.7% of the new freshmen for 2016 reported that they were from a home in which English is not the primary language spoken. Note: CIRP had low response rates.

Percent UGs ESL	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Percent	8.1%	11.1%	11.0%	17.3%	10.7%

Percent Undergraduates who are International

Strategic efforts to increase the global diversity of our campus continue to result in an increase of international undergraduate students, 50% in four years. This trend is expected to continue with increased agreements with international universities and our new intensive English program.

UMass Dartmouth also sponsors additional students in a growing number of travel/work/service activities that do not award credit. Graduate students, although limited,

are included here.

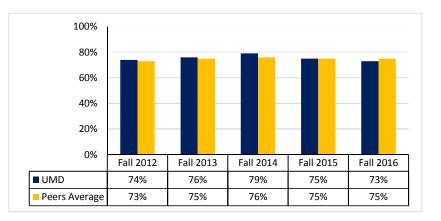
Percent UGs International	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Number	114	127	152	164	171
Percent	1.5%	1.7%	2.0%	2.2%	2.4%

Number who Participated in a Study Abroad Program

One percent of UMass Dartmouth's undergraduates study abroad,	Total Number of	Fall 11 -	Fall 12 -	Fall 13 -	Fall 14 -	Fall 15 -
matching the nationwide average.	Students who participated in Study	Summer 12 119	<i>Summer 13</i> 106	<i>Summer 14</i> 86	<i>Summer 15</i> 114	<i>Summer 16</i> 101
These data include only study abroad that directly awards credit.	Abroad	119	100	80	114	101

Freshman One-Year Retention Rate

Fall 2016, retention rate was 73%, declining by two percentage points. Our peers experienced no growth in their rates. New and enhanced interventions will continue to assist with achieving the long-range goal of 80% on this measure.



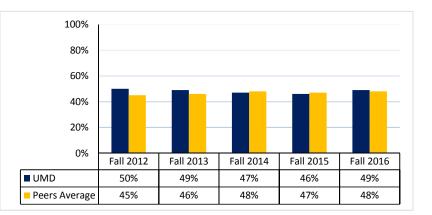
Four -Year Graduation Rates

The metric displays the most current cohorts to have completed degrees in four years. Four-year graduate rates increased by seven percent. This reflects increased attention to identifying students who are off track for graduating providing them with intensive advising interventions. This further indicates that the six-year graduation rates should increase over the next several years.

4-Yr Graduation Rates	2012	2013	2014	2015	2016
Cohort Entering Year	(2008)	(2009)	(2010)	(2011)	(2012)
4-Year Graduation Rate	28%	28%	28%	30%	37%

Freshman Six-Year Graduation Rate

Unlike our peers, UMass Dartmouth's six-year graduation rates also improved from the previous year by three percentage points. UMass Dartmouth continues to strive for higher graduation rates for its undergraduates. Excluding the influence of outliers, the peer median for Fall 2016 is 47%.



Transfer (Full-Time) One-Year Retention Rate

UMass Dartmouth's transfer one-year retention rate has increased by two percentage points. Improved transfer advising and support will continue to improve the retention and success of this increasingly important student group.

Transfers (Full-time) One-Year Retention	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Rate	80%	78%	77%	76%	78%

Transfer (Upper Division) Four-Year Graduation Rate

This indicator shows that 69% of the full-time upper division transfer students who entered with 60 or more credits in Fall 2012 (128 students) had completed their program by Fall 2016. The total number of students in the full-time group is small and generally less than 30% of the entire entering transfer cohort.

Transfers (Upper	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Division) Four-Year	63%	600/	71%	£40/	69%
Graduation Rate	05%	69%	/1%	64%	0970

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

The SAM data is an overall indication of how the university is serving our students. Even though students may not have graduated from UMass Dartmouth, we contributed to their success at other institutions.

FIRST-TIME FULL-TIME FRESHMEN									
Number of Students in Cohort: 1,667				GRADUATI	ED WITHIN				
Outcomes for Student Starting at UMassD in Fall 2010 by Summer 2016	2010-11	2011-12	2012-13	4 YRS.	5 YRS.	6 YRS.			
Bachelor's degree from UMassD	0%	0%	0%	28%	45%	49%			
Associate degree from UMassD	0%	0%	0%	0%	0%	0%			
Total Graduated from UMassD	0%	0%	0%	28%	45%	49%			
Bachelor's degree from another Institution Associate degree from another Institution Total Graduated from another	0% 0%	0% 0% 0%	0% 1%	4% 2%	9% 2%	12% 3%			
Institution Enrolled at UMassD	96%	73%	60%	29%	9%	3%			
Enrolled at Another 4-yr Institution	0%	9%	12%	10%	7%	5%			
Enrolled at Another 2-yr Institution	0%	9%	10%	7%	6%	4%			
Total Transferred and Enrolled at another Institution	0%	18%	22%	17%	13%	9%			
Current Status Unknown	4%	9%	17%	20%	22%	24%			

Alumni Participation Rate

Alumni Participation	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Rate	6%	6%	4%	3%	3%

The data show the alumni participation rates as reported to the US News World and Report Best Colleges publication. The expectation is to increase the participation rate (donors) in the upcoming years. The alumni participation rate will differ from that reported in US News since it is not a two-year average, but based on most recent annual data.

SERVICE TO THE COMMONWEALTH

Degree Completions

The total number of degree completions increases each year especially in the Research/Scholarship Doctorate category. We have reached the goal of 20 Research/Scholarship Doctorates and will sustain this number to sustain the Carnegie classification of Doctorate Research University. Certificates are not included here.

Degree Completions	2011-12	2012-13	2013-14	2014-15	2015-16
Bachelor's degrees	1292	1267	1329	1362	1385
Masters degrees	346	361	415	417	413
Doctoral degrees	50	116	104	91	93
Res./Sch. Doctorates	7	13	22	25	29
Professional Practice Doctorates	43	103	82	66	64
Total Degrees	1688	1744	1848	1870	1891

Percent Alumni who Live in Massachusetts

This indicator demonstrates our commitment to educational achievement in the Commonwealth. UMass Dartmouth maintains a strategic balance between regional, state, national, and international alumni, appropriate to our mission.

Percent Alumni Who					
Live in MA	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Undergraduate	76%	72%	72%	75%	76%
Graduate	61%	67%	56%	56%	67%
All	75%	69%	70%	72%	74%

Enrollment in STEM Fields

This indicator demonstrates our steady commitment to educating students in Science, Technology, Engineering, and Mathematics (STEM) fields. The Steps Toward Abstract Reasoning and Thinking (START) program and appropriate certificates are also included here.

Undergraduate									
Enrollment	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016				
Total	7,532	7,402	7,879	7,266	6,978				
STEM	1,648	1,772	1,809	1,801	1,694				
Percent STEM	22%	24%	23%	25%	24%				

Graduate									
Enrollment	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016				
Total	1,524	1,542	1,579	1,572	1,565				
STEM	324	326	363	411	426				
Percent STEM	21%	21%	23%	26%	27%				

Total Enrollment										
Enrollment	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016					
STEM	1,972	2,098	2,172	2,212	2,120					
Percent STEM	22%	23%	23%	25%	25%					

Certificates									
Enrollment	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016				
Total	154	109	114	78	104				
STEM	21	9	2	2	3				
Percent STEM	14%	8%	2%	3%	3%				

Degrees and Certificates Awarded in STEM Fields

Science, Technology, Engineering, and Mathematics (STEM) graduates enter the workforce or pursue further education across the range of science, engineering, and mathematics fields.

Note that the addition of new non-STEM graduate programs, such as Law, has lowered the percentage of graduate STEM within the total, although the number of STEM graduate degrees are holding relatively steady.

Undergraduate									
Degrees	2011-12	2012-13	2013-14	2014-15	2015-16				
Total Degrees	1,251	1,241	1,276	1,328	1,385				
STEM	228	220	226	306	293				
Percent STEM	18%	18%	18%	23%	21%				

Graduate									
Degrees	2011-12	2012-13	2013-14	2014-15	2015-16				
Total Degrees	395	473	502	490	506				
STEM	75	94	84	81	120				
Percent STEM	19%	20%	17%	17%	24%				

Total Degrees										
	2011-12	2012-13	2013-14	2014-15	2015-16					
STEM	303	314	310	387	413					
Percent STEM	18%	18%	17%	21%	22%					

Certificates									
	2011-12	2012-13	2013-14	2014-15	2015-16				
Total Certs.	46	85	44	54	41				
STEM	3	6	5	2	3				
Percent STEM	7%	7%	11%	4%	7%				

University of Massachusetts 2017 Performance Measurement System

Degrees and Certificates Awarded in Healthcare Fields

Along with the STEM professions, healthcare is another prospering career that is generating attention nationwide. Nursing and Medical Laboratory Science are shown here. Certificates reflect the Pre-Med and Mental Health for undergraduates and phasing out of Nursing on the graduate level.

Health Care Degrees and Certificates	2011-12	2012-13	2013-14	2014-15	2015-16
Bachelor's degrees	134	151	141	157	172
Masters degrees	27	25	18	4	14
Doctoral degrees	1	1	5	6	8
Res./Sch. Doctorates	1	1	2	4	5
Professional Practice Doctorates	0	0	3	2	3
Total Degrees	162	177	164	167	194
Total Certificates	0	25	7	11	35

FINANCIAL HEALTH

Endowment Assets and Annual Growth in Endowment

With additional funds allocated to fundraising, the campus anticipates endowment growth. Due to a focused effort on fundraising activities, endowment has shown steady growth over the last three fiscal years.



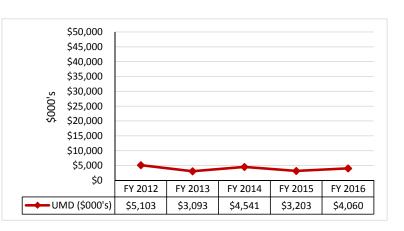
Endowment per Annualized Student FTE

The endowment per student 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.



Private Funds Raised Annually

The private funds indicator gauges UMass Dartmouth's success in raising philanthropic support from non-governmental sources (individuals, foundations, and corporations) to support its mission. The seesawing of fundraising totals are related to staffing and yearly shifts in Advancement leadership. Successful fundraising requires building relationships with potential donors, usually over several years, so advancement organizations are extremely sensitive to frequent staff and leadership turnover. UMass Dartmouth has had both. From Fiscal 2015 to 2016 the staff level went from 23 to 15, in an organization with 25.5 approved positions. In each of fiscal 2013, 2014, 2015 and 2016 there was a different leader for Advancement. Fiscal 2017 has seen a reinvestment in Advancement. Staff size for the first half of 2017 was 15 but is currently 22 and growing towards the 29 budgeted positions.



Primary Reserve

Primary Reserve	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
UMD	4.8%	4.5%	0.3%	4.1%	6.9%
Peers	10.1%	9.8%	11.8%	-9.8%	-10.7%

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 current ratio continues to improve a result of the concerted effort of management to build "Unrestricted Net Assets" needed to fund campus operations. The campus reported \$16.3M, an increase of \$7.2M over FY 2015. The campus has succeeded in providing itself a little more financial strength and flexibility.

Debt Service to Operations

The campus is making strides in managing debt needed to improve the campus' physical plant including the completion of the new Charlton College of Business' 22,000 square foot Learning Pavilion that contains critically needed space including technology enhanced classrooms, meeting spaces, and an auditorium. While the debt service coverage ratio is important to both creditors and investors, UMass Dartmouth is on track to maintain an appropriate amount of debt even with the construction of the new SMAST research facility. A project that will integrate the entire SMAST teaching and research program in one location. The retirement of old housing related debt has made this possible.

Debt Service to Operations	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
UMD	7.6%	8.7%	8.5%	9.3%	8.7%
Peers		7.2%	3.4%	3.7%	3.6%

Deferred Maintenance per GSF

This ratio quantifies the average dollar level of deferred maintenance work needed per square foot of space. This ratio uses cost information of deferred and other maintenance dollars needed to address maintenance and code work that would be mandated to allow the campus to continue to use the space once the repairs were complete. As our buildings age and deteriorate, deferred maintenance cost per square foot will continue to rise unless spending in this area keeps pace with deterioration.

Deferred Maintenance	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
per GSF	\$176	\$175	\$179	\$174	\$182

DEFINITIONS AND SOURCES

ACADEMIC QUALITY INDICATORS

Average High School GPA of Freshmen. Cumulative GPA for college preparatory courses with additional weight to honors and AP courses, according to DHE admissions policy, reported on all first-time students.

Average SAT Scores of Freshmen. Arithmetic Mean of SAT scores of all first-year students, and 25th, 75th percentiles. Peer data are from IPEDS. Peer means are expressed as the average of 25th and 75th percentiles.

Average GPA of Entering Transfer Students.

Cumulative GPA of entering transfer students according to DHE 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 administered in Spring 2014. Peer data are the Carnegie Classification-Master's Colleges and Universities (larger programs) that participated in NSSE.

Technology-Enhanced Classrooms. Classification of the campus's total classroom capacity in terms of the level of technology-support.

Number of Doctoral Degrees Awarded. Number of Doctorates awarded for AY 2015-16, which includes September 2015, January 2016, and May 2016 award dates. 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 Research and Development Expenditures. R&D expenditures in all academic fields, from all sources (federal, state, local governments, industry, private and institutional) as reported to NSF.

Total R&D Expenditures per Tenure System Faculty.

R&D expenditures in all academic fields, from all sources (federal, state, local governments, industry, private and institutional) as reported to NSF, divided by total tenure system faculty as reported to IPEDS. Peer data are from NSF/IPEDS and include aspirant peers.

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 Dartmouth's rank in the annual NSF ranking of Total R&D expenditures among public institutions of higher education with a Carnegie classification of "Masters Colleges and Universities" and with no medical school. Data source NCES WebCaspar/NSF HERD data tables. Ranking computed by campus.

Federal Research Expenditures. R&D expenditures in all academic fields, from all federal sources, as reported to NSF. Peer data are from NSF and include aspirant peers.

Patent Applications. Number of U.S. Patent applications filed per year. Data reported by campuses to UMass President's Office, Office of OTCV.

License Income. Amount of annual income from license agreements. Data reported by campuses to UMass President's Office, Office of OTCV.

Percent Tenured/Tenure-Track Faculty (FTE) -Percentage based on ratio of Tenure-stream 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. Data for "New Hires" is based on IPEDS definitions. Prior to 2016, "New Hires" were based on all those on payroll as of November 1 of the reporting year who were hired for full-time employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year.

New Tenured/Tenure-Track Faculty Hired as Percent of All Tenured/Tenure-Track Faculty. Number of "Newly hired" Tenured/Tenure-track faculty divided Total Tenured/Tenure-track Faculty of an IPEDS reporting cycle. Definition of "New Hires" per IPEDS Definitions. Prior to 2016, "New Hires" were based on all

those on payroll as of November 1 of the reporting year who were hired for full-time employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year.

Change in Tenured/Tenure-Track Faculty. The difference in the number of tenured and tenure tack faculty from one Fall semester to the next. Counts include faculty on paid leave but not those whose responsibilities are primarily administrative.

Change in Total 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 courses. Includes faculty members who are on paid leave. Does not include individuals whose primary responsibility is administrative. Definition of Faculty FTE is per the Common Data Set, and includes all faculty teaching credit courses, including credit courses offered via University Extension.

Percent Faculty-of-Color (based on Full-time

Instructional Faculty). The proportion of full-time instructional staff 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 staff who identify themselves as female.

Faculty Awards. Number of faculty with new 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 in the Financial Aid Template.

Percent of Need Met for In-State Students Awarded

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

Average Debt of Students for Graduating Class (UG).

Average debt load is based on the total debt borrowed by an institution's graduating class (bachelor's, first-time only) divided by the number of students of that cohort that carried any amount of debt. It does not include those students with no debt load. It does not include students who have transferred in. The graduating class includes those that graduated between July 1 and June 30 of the reporting year. Data is from CDS.

Percent Graduating Class with Debt (UG). The total number of students in the graduating class (bachelor's, first-time only) that carried a debt load at the institution divided by the total number of graduating (bachelor's, first-time only) students in that institution. It does not include students who have transferred in. The graduating class includes those that graduated between July 1 and June 30 of the reporting year. Data is from CDS.

Percent Undergraduates from Massachusetts.

Percentage of total undergraduate students who are 'In-State' or residents of Massachusetts.

Online Course Registrations. 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 courses only offered via UMassOnline.

Annual Growth in Online Course Registrations.

Percentage rate of growth in 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, Hispanic/ Latino, Asian, Hawaiian/Pacific Islander, American Indian/Alaskan Native, and/or Two or more races, divided by total U.S. citizens and permanent residents who report race/ethnicity.

Percent Undergraduates who are First Generation in College. First-generation college students are defined as those students with neither parent having attended college.

We also give data for neither parent having a bachelor's degree. Data are from the Cooperative Institutional Research Program (CIRP) Freshmen Survey 2016, and Senior data are from NSSE (2014).

Percent Undergraduates with English as a Second

Language. Percentage of undergraduates whose first language is not English. Data are from Cooperative Institutional Research Program (CIRP) Freshmen Survey 2016. Current Year data from Common Application.

Percent Undergraduates who are International. Percentage of all undergraduates with eligible visa types, and enrolled in credit courses. Does not include US citizens, permanent residents, or refugees.

Number of Students who Participated in a Study Abroad

Program. Data are numbers of students who participated in a credit bearing study abroad program as reported on the Institute of International Education Open Doors survey for Fall 2015 through Summer 2016.

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

Freshman Four-Year Graduation Rate. Percent of firsttime, full-time freshmen who entered UMass Dartmouth in a given Fall and had graduated from the institution within four years.

Freshman Six-Year Graduation Rate. Percent of firsttime, full-time freshmen who entered UMass Dartmouth in a given Fall and had graduated from the institution within six years. Peer data as reported to IPEDS.

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

Transfer (Upper Division) Four-Year Graduation Rate. Percent of full-time upper division transfers (60+ credits) who entered UMass Dartmouth in a given Fall and had graduated from the institution within four years.

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. Data reflects additional educational activity and attainment after leaving campus.

Alumni Participation Rate. The 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. Graduates who earned only a graduate degree are excluded. Data is from US News and World Report.

SERVICE TO THE COMMONWEALTH INDICATORS

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

Percent of Alumni who Live in Massachusetts. Percentage of total alumni who currently reside in Massachusetts based on alumni records.

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

Number of undergraduate and graduate degrees and certificates awarded in Health Care 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. The total value of the endowment (includes true and quasiendowments) at the end of the fiscal year as reported in the UMass Annual BOT report, and the percent change from previous year. Comparative data are from IPEDS, financial statements, and the NACUBO survey.

Endowment per Annualized Student FTE. Total

endowment (includes true and quasi-endowments) per annualized FTE student, where FTE of peer institutions is standardized to UMass formulae. Peer data are for the

comparative peers from financial statements (current year) and IPEDS (prior years).

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 (operating expenditures plus interest expense). Peer data are from published financial statements.

Debt Service to Operations. Debt service payments as a percentage of total operating expenditures (operating expenditures plus interest expense). Peer data are from published financial statements.

Deferred Maintenance per GSF. Deferred Maintenance 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. Adjusted each year for inflation.

PEER INSTITUTIONS FOR UMASS DARTMOUTH

Cleveland State University (OH)* Idaho State University Louisiana Tech University Marshall University (WV) SUNY at Binghamton (NY)* The University of Montana* The University of Montana* University of Arkansas at Dallas* University of Arkansas at Little Rock University of Idaho University of New Orleans (LA) University of North Dakota* University of South Dakota University of Southern Maine Wichita State University (KS)*

*Aspirant Peers

Please Note: Unless otherwise specified, all data are from UMass Dartmouth Office of Institutional Research and Assessment.

ACADEMIC QUALITY

UMass Lowell continues to distinguish itself for quality of student learning and excellence of academic programs. As set out in its 2020 Strategic Plan, UMass Lowell has increased academic quality while simultaneously increasing enrollment.

Fall 2016 saw the introduction of the No Test Option for first-year students, and the quality of the incoming class was stronger than ever. Their average high school GPA increased to 3.59, which marks the fifteenth straight year of increases in this metric for UMass Lowell's first-years. Their average SAT score remained stable, at 1171, and represents an increase of more than 100 points since 2008. UML's transfer students posted the highest average GPA of any before them, with this metric being 3.18. Since 2008, undergraduate enrollment has increased 41%.

Externally sponsored research per faculty member is important to UMass Lowell both as a measure of faculty scholarship and as a measure of assisting innovation in the regional economy. In FY 2016, the average amount of R&D expenditures per tenure-stream faculty member was \$159,289. UMass Lowell's goal is to reach \$175,000 per tenure-stream faculty member by FY 2020. UMass Lowell ranked 162nd in R&D Expenditures in FY 2015, up 10 spots from the year before. When compared to public Carnegie class peers without a medical school, UMass Lowell ranked 26th.

UMass Lowell has placed a strategic emphasis on research partnerships that feature co-location with industry and government, with examples including the Raytheon-UMass Lowell Research Institute (RURI), the Printed Electronics Research Collaborative (PERC), and the Harnessing Emerging Research Opportunities to Empower Soldiers (HEROES) partnership with the U.S. Army Natick Soldier Research Development and Engineering Center (NSRDEC).

UMass Lowell's focus on strengthening research and building new academic programs has been assisted by the increased size of the faculty. The overall number of full-time faculty increased by 11 this year, to 576; forty of these were tenured or tenure-track new hires. Similarly, the overall faculty FTE increased to 755 in Fall 2016, up from 747 in Fall 2015. In keeping with faculty diversity goals in the *2020 Strategic Plan*, the proportion of faculty of color increased to 27%, up two percentage points from Fall 2015.

ACCESS AND AFFORDABILITY

UMass Lowell strives to provide an affordable, accessible and experience-based education. By providing financial need assistance and increasing merit awards for new freshmen and grants for transfer students, UMass Lowell aims to maintain affordability and increase accessibility. In FY 2016, 79% of undergraduate students demonstrated financial need, and on average 89% of their need was met. One in three (31%) UMass Lowell undergraduate students receive Federal Pell Grants, which are based on student need.

In alignment with the diversity goals set out in the 2020 Strategic Plan, UMass Lowell has increased access to college for those populations that do not traditionally consider attending a postsecondary institution. Twenty-three percent of UMass Lowell undergraduates self-identified as the first in their family to attend college. Thirty-two percent of undergraduates identify themselves as students of color.

STUDENT SUCCESS AND SATISFACTION

UMass Lowell is committed to providing a world-class student experience that promotes healthy, responsible, and civically engaged students who are prepared to lead in the 21st century.

Student success indicators held stable this year for our students. For those who entered directly out of high school, UMass Lowell's one-year retention rate was 85%; the four-year graduation rate was 38%; and the six-year graduation was 56%. For students who entered as transfers, four-fifths (80%) returned for their second year at UMass Lowell while the comparable graduation rate (four-year) for transfer students was 64%.

UMass Lowell students report being very satisfied with their academic experience. The 2016 NSSE survey found that 81% of seniors rate their experience at UMass Lowell as "good" or "excellent." This is on par with the ratings given by their immediate predecessors, and with the responses from seniors attending UMass Lowell's Carnegie class peers.

The recent opening of a \$95 million, centrally located student engagement center, a \$34 million redesign and renovation of the South Campus student center, continual improvements to dining facilities, the near doubling of the number of student clubs (220), and the ongoing transition to Division I sports have had a positive effect on student satisfaction. UMass Lowell also offers a growing number of Living Learning Communities (LLCs), which provide purposeful links between the academic and co-curricular components of the student experience. In AY 2017-18, UMass Lowell will have a total of 34 LLCs, 19 LLCs for first-year students and 14 for upper-class and transfer students. The *DifferenceMaker* program, which engages students in creative problem solving through entrepreneurship, has logged thousands of student interactions in recent years.

SERVICE TO THE COMMONWEALTH

UMass Lowell's *2020 Strategic Plan* calls for a comprehensive approach to economic and community engagement in its host city and throughout the Merrimack Valley, the Commonwealth, and beyond.

According to the UMass Donahue Institute, UMass Lowell's annual economic impact in FY 2015 was \$930 million. In AY 2014-15, the University tracked some 215,000 hours of academic and non-academic service to communities locally and abroad. In recognition of this work, the Carnegie Foundation designated UMass Lowell as a "Community Engaged University," and since 2009 UMass Lowell has appeared each year on the President's Higher Education Community Service Honor Roll. More than 50 UMass Lowell courses each academic year have a service learning component, giving students the opportunity to contribute to the work of community organizations.

UMass Lowell's contribution to workforce development in the Commonwealth is also evidenced in the number of students it graduates in STEM and Healthcare programs. Forty-three percent of total enrollment in Fall 2016 was in STEM fields. Likewise, over one-third of all degrees awarded at UMass Lowell in AY 2015-16 were in STEM fields. Twelve percent of all degrees awarded were in health-care fields. UMass Lowell's Division of Online and Continuing Education (OCE) provides high-quality professional studies in innovative formats including campus-based classes, online education and customized corporate training. Numerous OCE programs serve various economic sectors, partnering with companies to deliver customized education and training programs for their employees, oftentimes on-site. The result is continued significant growth in the number of online course enrollments at UMass Lowell. AY 2015-16 saw an increase of seven percent over the previous year, continuing a seven-year trend of growth in online course registrations. AY 2015-16 also saw the largest number of online course registrations to date, at 26,834.

FINANCIAL HEALTH

New efforts to grow revenues and control expenditures are implemented each year. Growth in revenues will further contribute to UMass Lowell's primary reserve and improving financial health. The endowment decreased slightly this year, to \$73.1 million. This affected the endowment per annualized FTE metric, which decreased in turn to \$5,284. Private funds raised annually continued to increase, posting a 2.3% increase this year to \$21.5 million, the eighth consecutive year of increase. UMass Lowell's primary reserve declined slightly this year, to 21.4%, coming in less than one percentage point below the FY 2016 peer average..

n.b. All peer comparisons throughout the 2017 "Annual Indicators" document were generated using UMass Lowell's peers as of 2012. These are listed at the end of the "Definitions" section.

UMASS LOWELL

2017 ANNUAL INDICATORS AT A GLANCE

ACADEMIC QUALITY

•	Average HS GPA of First-Time Freshmen	3.59
•	Average SAT Scores of First-Time Freshmer	n
	Arithmetic Mean	1171
	$25^{th} - 75^{th}$ Percentile 10	080-1250
•	Average GPA of Entering Transfer Students	3.18
•	Student Satisfaction with Educational	
	Experience	81%
•	Student-Faculty Ratio	17:1
•	Technology Enhanced Classrooms	209
•	Number of Doctoral Degrees Awarded	137
•	Postdoctoral Appointees	22
•	Total R&D Expenditures	\$68.5M
•	Total R&D Expenditures Ranking	162
•	Total R&D Expenditures Ranking among Carnegie Peers (RU-H, Public, Non-Medical) 26
•	Federal R&D Expenditures	\$27.7M
•	Total R&D/Tenure-Stream Faculty	\$159,289
•	Number of Patent Applications	21
•	License Income	\$298,000
•	Percent Tenured/Tenure-Track Faculty	57%
•	New Tenured/Tenure-Track Faculty Hired	40
	As Percent of T/TT Faculty	9%
•	Change in Tenured/Tenure-Track Faculty	+14
•	Change in Total Faculty FTE	+ 8
•	Full-time Instructional Faculty	
	Percent Faculty-of-Color	27%
	Percent Women Faculty	43%
•	Faculty Awards	3 (FY15)
•	National Academy Members	0 (FY15)

ACCESS AND AFFORDABILITY

•	Percent Pell Grant Recipient	s a	31%
•	i ciccini i ch Orani Recipicini	.0 .	JI /0

 Percent of Need Met for In-State Students Awarded Need-Based Aid
 89%

•	Average Student Debt Load (UG)	\$31,432
•	Percent Graduating Class with Debt (UG)	78%
•	Percent of Undergraduates from MA	87%
•	Online Course Registrations	26,834
		7.00/

• Rate of Growth in Online Course Registrations 7.3%

STUDENT SUCCESS AND SATISFACTION

•	Percent of Undergraduates who are	
	Students of Color	32%
•	Percent Undergraduates First Generation	23%
•	Percent Undergraduates with English as Second Language	n/a
•	Percent Undergraduates who are International	4.8%
•	Number of Students who Participated in UML-Sponsored Study Abroad Program	202
•	Freshmen One-Year Retention Rate	85%
•	Freshmen Four-Year Graduation Rate	38%
•	Freshmen Six-Year Graduation Rate	56%
•	Transfer (Full-time) One-Year Retention Rate	80%
•	Transfer (Upper Division) Four-Year Graduation Rate	64%
•	Alumni Participation Rate	12%

SERVICE TO THE COMMONWEALTH

•	Percent Alumni who live in Massachusetts	65%
•	Degree Completions	3,507
	Bachelor's	2,333
	Master's	1,037
	Doctorates	137
•	Enrollment in STEM Programs	6,905 (43%)
	Undergraduate	5,540 (44%)
	Graduate	1,365 (40%)
•	Degrees Awarded in STEM Fields	1,395 (39%)
	Undergraduate	897 (38%)
	Graduate	498 (42%)

•	Degrees Awarded in Healthcare Fields	415
	Undergraduate	286
	Graduate	129
•	MTEL Science and Math Test-Takers	15

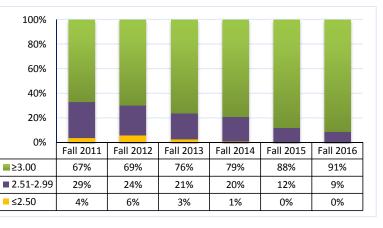
FINANCIAL HEALTH

Total Endowment	\$73.1M
Annual Growth In Endowment	-1%
Endowment per Annualized Student FTE	\$5,284
Private Funds Raised Annually	\$21.5M
Primary Reserve	21.4%
Debt Service To Operations	7.7%
Deferred Maintenance per GSF	\$230
	Annual Growth In Endowment Endowment per Annualized Student FTE Private Funds Raised Annually Primary Reserve Debt Service To Operations

ACADEMIC QUALITY

High School GPA of Freshmen

The Average Weighted High School GPA for Fall 2016 of 3.59 is the highest since UMass Lowell began tracking the metric, and has increased for fifteen straight years. Over 90% of UML's incoming class had a High School GPA greater than 3.00, up from almost two-thirds from just five years ago.



Average HS GPA	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Average IIS OF A	3.29	3.36	3.43	3.54	3.59

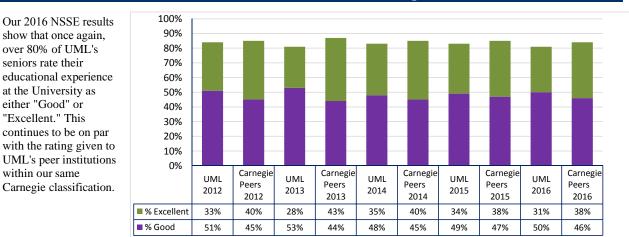
Average SAT Scores of Freshmen

UML's Average SAT Score is down slightly by two points, from 1173 to 1171. Fall 2016 was the first year that UML implemented the "No Test Plan" option which may have contributed to this slight decrease. This represents an increase of 46 points in five years, and an increase of 88 points since 2009. UML's 25th and 75th percentiles easily outstrip the peer median for both of these metrics.

Average SAT Scores of Freshmen (UML)	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
75th Percentile	1210	1210	1230	1240	1250
25th Percentile	1030	1040	1060	1090	1080
Average	1125	1134	1150	1173	1171
Peer Median					
75th Percentile	1200	1210	1205	1210	1200
25th Percentile	990	1000	1000	1010	990
UML Rank					
75th Percentile	2	2	2	2	2
25th Percentile	2	2	2	2	2

Average GPA of Entering Transfer Students

The Average GPA for entering	L			-		
transfer students has seen a	Avg. GPA Entering	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
steady upward trend in the past five years. The Fall 2016 figure	Transfers	3.08	3.09	3.11	3.13	3.18
of 3.18 is the highest in recent						
memory.						



Student Satisfaction with Educational Experience

Student-Faculty Ratio

UMass Lowell has maintained its student-faculty ratio this year at 17:1. Compared to its peers, UML ranks in the top half of the group.

Student-Faculty Ratio	2012	2013	2014	2015	2016
UML	17:1	18:1	18:1	17:1	17:1

Technology-Enhanced Classrooms

	AY2	AY 2013-2014		4-2015	AY2015-2016		
UML Technology-Enhanced Classrooms	Number of Classrooms	Percent of Total	Number of Classrooms	Percent of Total	Number of Classrooms	Percent of Total	
Basic	0	0%	0	0%	0	0%	
Medium	90	49%	114	55%	104	50%	
High	95	51%	95	45%	105	50%	
Very High	0	0%	0	0%	0	0%	
Total Classrooms	185	100%	209	100%	209	100%	

Basic classroom technology:

All 209 classrooms at UML are Medium or High.

Medium classroom technology:

All UML classroom include Medium classroom technology including; teaching podium, podium computer, VGA and HDMI connectivity, Document Camera and integrated sound. Additionally, 140 of these classrooms include a Smart Podium touch screen for content markup, these rooms are considered to be Medium Plus.

High classroom technology:

In addition to Medium and Medium Plus technology, half of the classrooms include Lecture Capture technology including a capture appliance, camera and microphone - either wired or wireless. Ninety-five rooms are equipped with Echo360 and 10 rooms with MediaSite.

Very High classroom technology:

UML currently does not have any Very High active learning classrooms. There are plans to add some of these rooms in the Coburn Hall renovation project.

Doctoral Degrees Awarded

UML awarded 137 doctoral degrees in 2015-16, up 13 from the previous year, and exceeding our 2020 goal of 130 doctorates awarded per year.

Beginning with FY 2010, IPEDS has assigned professional practice doctorates to include firstprofessional doctorates associated with professional schools (JD, MD, PharmD). UML has adjusted the peers IPEDS totals to remain consistent in reporting comparable data.

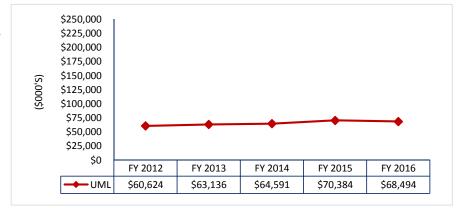
UML Doctoral Degrees Awarded	2011-12	2012-13	2013-14	2014-15	2015-16
Research/ Scholarship Doctorates	58	66	60	87	96
Professional Practice Doctorates	35	36	40	37	41
Total Doctoral Degrees Awarded	93	102	100	124	137
Research/ Scholarship Doctorates	2011-12	2012-13	2013-14	2014-15	2015-16
UML	58	66	60	87	96
Peer Average	81	96	102	120	91

Postdoctoral Appointees

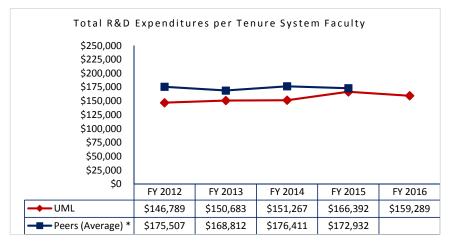
The number of postdoctoral						
appointments fell slightly this	Postdoctoral	2011-12	2012-13	2013-14	2014-15	2015 16
year, from 23 to 22. Eighteen of	Appointees	2011-12	2012-15	2015-14	2014-15	2015-16
these 22 appointments were	UML	23	22	28	23	22
11						
funded by grants.						

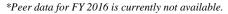
Total Research and Development (R&D) Expenditures

UMass Lowell's total research and development expenditures as reported to the National Science Foundation (NSF) decreased in FY 2015 to \$68.5M.



In FY 2015, the average amount of R&D expenditures per tenurestream faculty member decreased by 4% to \$159,289. UML's goal is to reach \$175,000 per tenurestream faculty member by FY 2020.





R&D Expenditures Rankings

UMass Lowell faculty and researchers have been steadily increasing their R&D expenditures, earning a national rank of 162 out of the 637 ranked institutions in FY 2015. Similarly, when we compare ourselves to our closest peers (same Carnegie classification, public control and no medical school), UMass Lowell earned a national rank of 26 in FY 2015, down four spots from the FY 2014 rank.

Total R&D Rank	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Overall Ranking	184	184	178	172	162
Ranking based on Carnegie Peers	30	31	28	22	26

n.b. Ranking based on Carnegie Peers is further standardized by U.S. public institutions without medical schools.

Patent Applications

The number of patent applications filed is an indicator of an institution's	Patent Applications	FY 2012	FY 201
inventiveness and the commercial		19	20
potential of its academic work In FY			
2016, 21 U.S. patent applications			
were filed by UMass Lowell faculty			
and researchers. Additionally, UMass			
Lowell applies for foreign/			

filed is an indicator of an institution's inventiveness and the commercial potential of its academic work.. In FY 2016, 21 U.S. patent applications were filed by UMass Lowell faculty and researchers. Additionally, UMass Lowell applies for foreign/ international patents that are not reflected in these totals. FY2016 saw 12 of these filed by UML. Overall, 33 total patent applications were filed by UML, compared to 34 in FY2015, and 46 in FY2014. Source: Vice Chancellor for Research and Innovation.

Patent Applications	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
	19	20	24	25	21

License Income

License Income	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
(000's)	\$261	\$579	\$348	\$290	\$298

currently under development come to market, the share of total license income attributable to royalty payments will increase, thus providing a more stable year-overyear baseline for this measure. Until that time, a more representative indicator is the three-year rolling average calculated by the campus, which for FY 2016 is \$312K, a decrease from last year's \$406K.

The license income shown represents total revenues (licensing fees and royalties plus patent reimbursements). Over the next few years, as more technologies that are

Percent Tenured/Tenure-Track Faculty FTE

In Fall 2016, instructional faculty at UMass Lowell were comprised of 57% tenure-stream faculty and 43% non-tenuretrack or part-time faculty. The share made up by tenure-stream faculty has decreased since Fall 2012, however the Fall 2016 figure rebounds from the previous year's low of 55%.

Percent Tenured/Tenure-track Faculty	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
% Tenured/Tenure- track	59%	59%	57%	55%	57%
% Non Tenure- track/PT	41%	41%	43%	45%	43%

New Tenured/Tenure-Track Faculty Hired

UMass Lowell continues to fill open tenure-track faculty positions to maintain capacity and to strengthen centers of excellence. In addition to adding 40 new tenure-stream faculty this year, UML also added one new NTT lecturer, two clinical faculty and nine visiting faculty in AY 2017.

New tenure-stream faculty hiring has maintained at 9% compared to Fall 2015.

The number of tenure-stream, full-time instructional faculty increased slightly in Fall 2016, and the overall number of fulltime instructional faculty (without regard to tenure status and including clinical faculty and NTT Lecturers) showed a strong increase again this year, up from 565 in Fall 2015 to 576 in Fall 2016. UMass Lowell remains strongly committed to strengthening the faculty.

New Tenured/Tenure- Track Faculty Hired	2012	2013	2014	2015	2016
Track Faculty Hirea	26	21	20	38	40

n.b. Data for "New Hires" is based on IPEDS definitions. Prior to 2016, "New Hires" were based on all those on payroll as of November 1 of the reporting year who were hired for full-time employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year.

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

New T/TT Faculty as Percent of Total	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Total T/TT Faculty	406	413	407	413	427
Total New Hires	26	21	20	38	40
Percent of Total	6%	5%	5%	9%	9%

n.b. Data for "New Hires" is based on IPEDS definitions. Prior to 2016, "New Hires" were based on all those on payroll as of November 1 of the reporting year who were hired for full-time employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year.

Change in Tenured/Tenure-Track Faculty

Change in T/TT	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Faculty	406	413	407	413	427

ĺ	Fall 2015-2016					
	1-Year Change					
	Number	Percent				
	14	3%				

Change in Faculty FTE

Channa in Frankti	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Change in Faculty FTE	683	695	714	747	755

Fall 2015-2016						
1-Year (1-Year Change					
Number	Percent					
8	1%					

The significant increase in faculty FTE since 2012 is due to UML's emphasis on strengthening research and building new academic programs.

This figure includes full-time tenured and tenure-track faculty as well as NTT Lecturers, and Clinical and visiting faculty. Research faculty are not included in this metric.

Faculty by Race and Gender

UMass Lowell has steadily increased the number of faculty of color among its full-time instructional faculty. Since Fall 2012, their proportion has increased by eight percentage points. In the same vein, the proportion of women faculty has steadily increased in the past five years, reaching close to 43% in Fall 2016.

Full-time Instructional Faculty								
Faculty Of Color*	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016			
Number	99	113	120	133	148			
Percent	19.7%	22.0%	23.3%	25.4%	27.2%			
Women Faculty	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016			
Number	216	225	226	241	245			
Percent	40.8%	41.6%	41.2%	42.7%	42.5%			

*Includes U.S. Citizens and Permanent Residents; excludes Non-Resident Aliens and "Unknown" race/ethnicity.

Faculty Awards

This figure presents the number of faculty awarded prominent grants and/or fellowships, based on the list compiled annually by the Arizona Center for Measuring University Performance (MUP). If one also takes into consideration the awards compiled by *Digital Measures*, however, UML faculty received 81 prominent awards in FY 2016. Of note, one UML faculty member has been named a Guggenheim Fellow, and another, a Fulbright Scholar.

The Arizona Center for Measuring University Performance (MUP) annually compiles the number of faculty who are members of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine. UMass Lowell welcomed a new faculty member in 2015 who has been named a member of the National Academy of Engineering. Due to the time lag in MUP's data collection procedures, this won't be reflected in our numbers for several years.

Faculty Awards	2011	2012	2013	2014	2015
UML	1	2	2	1	3
Peers (Median)	5	5	5	4	2

National Academy Members

National Academy Members	2011	2012	2013	2014	2015
UML	0	0	0	0	0
Peers (Median)	1	1	1	1	1

ACCESS AND AFFORDABILITY

Percent (In-State) Pell Grant Recipients

Percent (In-State) Pell	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015
Grant Recipients	35%	33%	33%	31%	31%

This figure represents the percentage of *in-state* degreeseeking undergraduates receiving Federal Pell Grants, which are based on a student's need. In Fall 2015, approximately one-third of UML's in-state undergraduates qualified for and received a Pell Grant, a proportion that has remained steady since 2011.

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

UMass Lowell remains	Percent Need Met	2011-12	2012-13	2013-14	2014-15	2015-16
committed to affordability.	(In-State)	92%	91%	90%	90%	89%
Fully 89% of the need shown			r.	L		<u> </u>
by in-state students was met by						
UML again in AY 2016.						

Student Debt Load of Graduating Class (UG)

Mirroring national trends, UMass Lowell has seen the average amount of student debt of its graduating class climb since 2012. In 2016, the increase was just over \$500.

	2012	2013	2014	2015	2016
Average Debt Load	\$29,212	\$28,482	\$30,505	\$30,915	\$31,432
Percent Graduating Class with Debt	77%	79%	81%	78%	78%

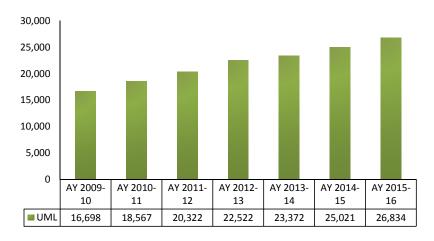
Percent Undergraduates From Massachusetts

Massachusetts residents continue to comprise the vast majority of UMass Lowell undergraduate students. Continuing this trend, more than five out of every six students hailed from Massachusetts in Fall 2016.

Percent Undergraduates from Massachusetts	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Number	10,200	10,532	10,741	10,950	11,282
Percent	85%	85%	86%	86%	87%

Online Course Registrations

UMass Lowell's Division of Online and Continuing Education (OCE) online course registrations continue to increase, despite an increasingly competitive marketplace. Online course registrations were at their highest ever in AY16, at 26,834. In addition, many other courses across the University incorporate online elements using Blackboard LMS tools such as e-mail, online syllabi, chat, and discussion forums.



Annual Growth in Online Course Registrations

UMass Lowell's efforts to expand our online course offerings continue to show positive results. Despite a competitive marketplace, UML's online course registrations continued to climb, reaching an impressive 7.3% year-over-year growth in AY 2015-16.

recruiting and

2016.

students. Their numbers increased again this year, to 32% of our undergraduates in Fall

Annual Growth in Online Course	AY 2011-12	AY 2012-13	AY 2013-14	AY 2014-15	AY 2015-16
Enrollments	9.5%	10.8%	3.8%	7.1%	7.3%

STUDENT SUCCESS AND SATISFACTION

Percent Undergraduates who are Students of Color

The substantial proportion of UMass Lowell's domestic	Percent UGs Students of Color	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
undergraduates who describe	Number	3,211	3,235	3,362	3,668	3,894
themselves as students of color	Percent	29%	28%	29%	31%	32%
demonstrates our success in recruiting and retaining diverse						<u>.</u>

University of Massachusetts 2017 Performance Measurement System

Percent Undergraduates who are First Generation in College

This year saw the proportion of freshmen and senior respondents to the NSSE survey who reported that neither parent had attended nor graduated from college increased slightly, to 23%.

Percent UGs First Generation in College	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Percent	21%	28%	28%	22%	23%

Percent Undergraduates with English as a Second Language

n.b. This indicator is based on responses to the Cooperative Institutional Research Program's (CIRP) "Freshman Survey," which is not fielded at UMass Lowell.

in Fall 2016.

Percent UGs ESL	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Percent	n/a	n/a	n/a	n/a	n/a

Percent Undergraduates who are International

The proportion of UMass Lowell's undergraduates who are	Percent UGs International	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
neither a U.S. citizen nor a	Number	259	399	484	569	656
permanent resident reached 4.8%	Percent	2.1%	3.1%	3.7%	4.3%	4.8%
in Fall 2016. UML's						
undergraduate and graduate						
student population included 1,436						
international students in Fall						
2016, an increase of 8.7% over						
Fall 2015. These 1,436						
international students represented						
8.0% of the overall student body						

Number who Participated in a Study Abroad Program

The number of students (both Undergraduate and Graduate) choosing to study abroad increased by 5%, to 202 students in AY 2015-16, a result of the University's efforts to engage students in international programs.

The actual number of students studying abroad may be higher than presented here because this figure only captures students who made arrangements through UML's Office of Study Abroad and International Experiences. Students advised elsewhere, or who made their own arrangements and returned to UML with additional earned credits, are not included in these figures.

Fall 11-	Fall 12-	Fall 13-	Fall 14-	Fall 15-
Summer 12	Summer 13	Summer 14	Summer 15	Summer 16
05	107	118	102	202
95	107	110	192	202
		Summer 12 Summer 13	Summer 12 Summer 13 Summer 14	Summer 12 Summer 13 Summer 14 Summer 15

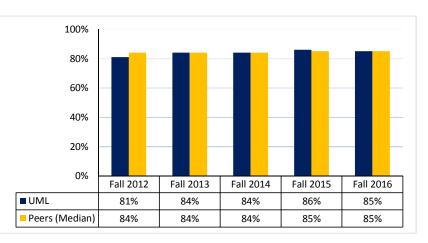
Since the creation of the Office of Study Abroad & International Experiences in 2012, the number of students studying abroad has increased

substantially. Through international partnerships and faculty-led programming, students now have over 800 program options to choose from, allowing the diverse needs of our student population to be met.

Freshman One-Year Retention Rate

UML's freshman retention rate decreased slightly this year to 85%. It's now equal with the median of our peers.

(*n.b.* The cohort reported for Fall 2016 is the Fall 2015 freshman cohort).



Four-Year Graduation Rates

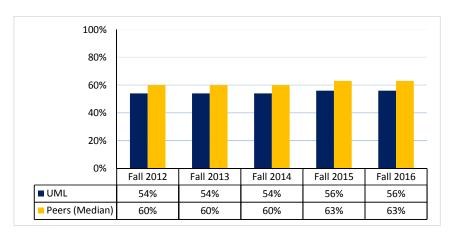
The proportion of students who enter UMass Lowell in a given Fall semester and graduate within four years -- the four-year graduation rate -- has been climbing steadily since 2012. For the class that entered in Fall 2012, 37.7% had earned their Bachelor's degree by Fall 2016.

4-Year Graduation Rates	2012	2013	2014	2015	2016
Cohort Entering Year	(2008)	(2009)	(2010)	(2011)	(2012)
4-Year Graduation Rate	27.1%	31.0%	32.2%	38.5%	37.7%

Freshman Six-Year Graduation Rate

UMass Lowell's six-year graduation rate held steady this year, at a high of 56%. This metric has increased by two percentage points since Fall 2012. Compared to the median of its peers, however, UML continues to lag. Given the strong increase in the four-year graduation rate metric (see above), subsequent years should see a comparable increase in the six-year graduation rate metric.

(*n.b.* The cohort reported for Fall 2016 is the Fall 2010 freshman cohort).



Transfer (Full-Time) One-Year Retention Rate

Transfers made up 43% of UMass Lowell's new undergraduate student pool in Fall 2015. Their one-year retention rate has remained relatively steady since 2012; approximately four-fifths return for a second year of study at UMass Lowell.

64%.

Transfers (Full-time)	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
One-Year Retention	700/	700/	910/	910/	900/
Rate	79%	79%	81%	81%	80%

Transfer (Upper Division) Four-Year Graduation Rate

The four-year graduation rate for upper-level transfer	Transfers (Upper Division) Four-Year	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
students remains steady,	Graduation Rate	70%	63%	62%	66%	64%
down slightly this year to						

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

The official Six-Year Graduation Rate measures the proportion of students who complete their degree <u>at the same institution</u> <u>where they began</u> their education. For UMass Lowell's Fall 2010 entering cohort, the official rate is 56%. However, as this table shows, another 14% of those students earned a degree within six years, albeit from another institution. Taken together, 70% of the students who entered UMass Lowell in Fall 2010 had earned a Bachelor's degree by the Summer of 2016. This is on par with last year's figure of 69%.

FIRST-TIME FULL-TIME FRESHMEN								
Number of Students in Coho	rt: 1,598*			GRADUAT	ED WITHIN			
Outcomes for Students Starting at UML in Fall 2010 by Summer 2016	2009-10	2010-11	2011-12	4 YRS.	5 YRS.	6 YRS.		
Bachelor's degree from UMassL	0	0%	0%	32%	52%	56%		
Associate degree from UMassL	0	0%	0%	0%	0%	0%		
Total Graduated from UMassL	0	0%	0%	32%	52%	56%		
Bachelor's degree from another Institution	0	0%	0%	4%	9%	10%		
Associate degree from another Institution	0	0%	1%	2%	3%	4%		
Total Graduated from another Institution	0	0%	1%	6%	12%	14%		
Enrolled at UMassL	1,569	87%	78%	34%	13%	6%		
Enrolled at Another 4-yr Institution	1	5%	8%	7%	3%	2%		
Enrolled at Another 2-yr Institution	1	3%	4%	6%	5%	4%		
Total Transferred and Enrolled at another	2	8%	12%	13%	8%	6%		
Current Status Unknown	27	6%	9%	14%	15%	19%		

*The Fall 2010 cohort comprised 1,598 students, but just 1,594 were found by the National Student Clearinghouse. The figures presented here are based upon the latter number, and so will differ from officially reported retention and graduation rates.

Alumni Participation Rate

This year's Alumni Participation
Rate has held steady, at 12%,
despite the fact that the number of
alumni/ae is rapidly increasing, a
direct result of the University's
enrollment growth and improved
graduation rate.

Alumni Participation	FY2012	FY2013	FY2014	FY2015	FY2016
Rate	11%	12%	12%	12%	12%

SERVICE TO THE COMMONWEALTH

Degree Completions

Across all degree award categories, UMass Lowell has seen remarkable increases in the past five years. Since 2011-12, the number of Bachelor's degrees awarded has jumped 27%, Master's degrees 40%, and Doctoral degrees 47%. The University is well on its way to achieving its 2020 goals for degree completions in each of these categories.

Degree Completions	2011-12	2012-13	2013-14	2014-15	2015-16
Bachelor's degrees	1,836	2,031	2,228	2,388	2,333
Masters degrees	739	745	879	976	1,037
Doctoral degrees	93	102	100	124	137
Res./Sch.	58	66	60	87	96
Doctorates	50	00	00	07	90
Professional					
Practice	35	36	40	37	41
Doctorates					
Total Degrees	2,668	2,878	3,207	3,488	3,507

Percent Alumni who Live in Massachusetts

Approximately two-thirds of UML alumni/ae reside in Massachusetts. This proportion has remained steady for the past five years.

Percent Alumni Who Live in MA	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Undergraduate	64%	63%	65%	65%	66%
Graduate	54%	54%	55%	56%	61%
All	62%	61%	63%	63%	65%

Enrollment in STEM Fields

UMass Lowell has increased the number of students enrolling in STEM programs at both the undergraduate and graduate level. The percentage of all students in STEM programs has steadily increased since Fall 2012, comprising 43% of UML's student body in Fall 2016. Enrollment in STEM certificates continues to hold steady, at over one-quarter of all certificates.

		Undergradu	iate		
Enrollment	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Total	11,255	11,597	11,974	12,261	12,667
STEM	4,335	4,573	4,831	5,239	5,540
Percent STEM	39%	39%	40%	43%	44%

		Graduate	e		
Enrollment	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Total	2,845	3,199	3,230	3,275	3,426
STEM	1,126	1,316	1,342	1,341	1,365
STEM Master's	680	824	869	892	905
STEM Doctoral	446	492	473	449	460
Percent STEM	40%	41%	42%	41%	40%

Total Enrollments								
Enrollment	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016			
STEM	5,461	5,889	6,173	6,580	6,905			
Percent STEM	39%	40%	41%	42%	43%			

		Certificate	es		
Enrollment	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Total	801	723	669	664	678
STEM	184	182	182	176	185
Percent STEM	23%	25%	27%	27%	27%

Degrees and Certificates Awarded in STEM Fields

More than one-third of UMass Lowell's degrees are consistently awarded in STEM fields, and the absolute number of both degrees and certificates awarded in STEM fields continues to increase. The University's wide variety of undergraduate and graduate certificate programs serve as pathways for students into STEM careers.

		Undergradu	ate		
Degrees	2011-12	2012-13	2013-14	2014-15	2015-16
Total Degrees	1,872	2,079	2,265	2,437	2,374
STEM	626	701	798	863	897
Percent STEM	33%	34%	35%	35%	38%

		Graduat	e		
Degrees	2011-12	2012-13	2013-14	2014-15	2015-16
Total Degrees	832	847	979	1,100	1,174
STEM	316	311	389	463	498
STEM Master's	278	258	340	403	427
STEM Doctoral	38	53	49	60	71
Percent STEM	38%	36%	40%	42%	42%

		Total Degre	ees		
Degrees	2011-12	2012-13	2013-14	2014-15	2015-16
STEM	942	1,012	1,187	1,326	1,395
Percent STEM	35%	35%	37%	37%	39%

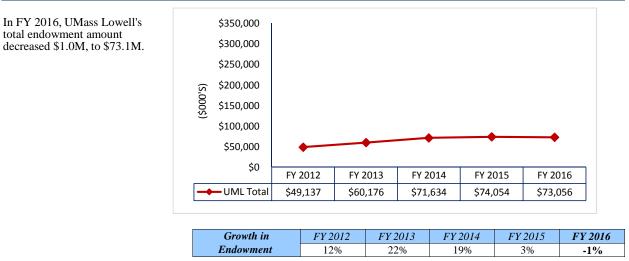
		Certificat	es		
Certificates	2011-12	2012-13	2013-14	2014-15	2015-16
UG Total Certs.	110	124	116	113	97
STEM	68	71	63	70	49
Percent STEM	62%	57%	54%	62%	51%
G Total Certs.	390	392	329	367	418
STEM	50	45	55	57	79
Percent STEM	13%	11%	17%	16%	19%

UML continues to see a rise in the overall number of degrees awarded	Health Care Awards	2011-12	2012-13	2013-14	2014-15	2015-16
generally and in STEM and	Bachelor's degrees	201	228	254	254	286
Healthcare disciplines in particular.	Masters degrees	78	81	92	76	80
The number of Bachelor's degrees	Doctoral degrees	42	40	48	41	49
in Healthcare fields increased by 32, to 286 in AY 2015-16, and the	Res./Sch. Doctorates	7	4	8	4	8
numbers of graduate degrees increased by 10%.	Professional Practice Doctorates	35	36	40	37	41
	Total Degrees	321	349	394	371	415
				-	-	-
	Total Certificates	39	60	41	39	61

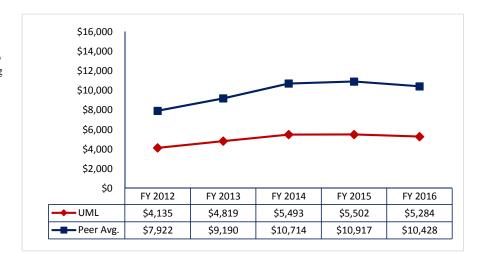
Degrees and Certificates Awarded in Healthcare Fields

FINANCIAL HEALTH





Endowment per Annualized Student FTE



The Endowment Per Annualized Student FTE decreased slightly this year, to \$5,284. UML continues to lag behind its Peer Average.

Private Funds Raised Annually

In FY 2016, the amount of private funds raised increased 2.2% over the previous year, to \$21.5 M.



n.b. These figures represent cash and commitments.

Primary Reserve

UMass Lowell's FY 2016 primary reserve, which measures available unrestricted resources, decreased slightly this year, to 21.4%. A portion of these reserves will be tapped in the coming years for critical capital projects.

Primary Reserve	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
UML	21.9%	23.1%	22.8%	22.1%	21.4%
Peers	23.4%	25.0%	25.6%	26.3%	22.3%

In FY15, the peer average only includes UMaine and UNH. Our other peers have been excluded as these peers recorded pension information (GASB 68) in their statements.

Debt Service to Operations

Debt Service to Operations	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
UML	4.7%	5.8%	6.0%	7.6%	7.7%
Peers	4.2%	4.7%	4.9%	6.9%	5.5%

Deferred Maintenance per GSF

Deferred Maintenance per GSF	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
	\$195	\$189	\$162	\$228	\$230

The FY 2016 Debt Service to Operations ratio was 7.7%, a slight increase from the prior year. UMass Lowell continues to review our financial capacity to take on more debt against the facility needs being identified through the Master Planning effort, while also holding this ratio under the 8.0% policy threshold.

This ratio provides a relative measure of the amount of deferred maintenance at a campus. The focus of campus efforts in the coming years is on improving space utilization, addressing deferred maintenance and making ADA-related improvements to all

our facilities.

ACADEMIC QUALITY INDICATORS

Average High-School GPA of First-Time Freshmen. Cumulative GPA for college preparatory courses with additional weight to honors and AP courses, according to DHE admissions policy. Reported on all first-time students.

Average SAT Scores of First-Time Freshmen. Average SAT scores of freshmen are based on the arithmetic mean. The 25th and 75th percentiles and mean SAT scores are based on combined SAT scores of all first-year students. Peer scores may differ in percentage reporting because of the conversion from fixed ACT scores to SAT ranges. (Source: IPEDS)

Average GPA of Entering Transfer Students.

Cumulative GPA of entering transfer students according to DHE admissions policy.

Student-Faculty Ratio. The ratio of FTE students to FTE instructional faculty. Faculty and students in standalone 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 administered in Spring 2016. Peer data are from NSSE.

Technology-Enhanced Classrooms. Classification of the campus's total classroom capacity in terms of the level of technology support.

Number of Doctoral Degrees Awarded. Number of doctoral degrees awarded for AY 2015-16, which includes the August 2015, February 2016 and May 2016 award dates. These include both Research/Scholarship and Professional Practice doctorates. Peer comparison data is based on Research/Scholarship doctorates only.

Postdoctoral Appointees. The number of postdoctoral appointees as reported to the National Science Foundation (NSF).

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

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 is NCES WebCaspar/NSF HERD data tables.

Total R&D Expenditures Ranking Among Carnegie Peers, US Publics, Non-Medical Institutions. UMass Lowell'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/High Activity" and with no medical school. Data source NCES WebCaspar/NSF HERD data tables. Ranking computed by campus.

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

Number of Patent Applications. Number of U.S. Patent applications filed per year. Data source: Data reported by campuses to UMass President's Office, Office of OTCV.

License Income. Amount of annual income from license agreements. Data source: Data reported by campuses to UMass President's Office, Office of OTCV.

Percent Tenured/Tenure-Track Faculty (FTE). Percentage based on ratio of Tenure-stream Faculty FTE to Total Faculty FTE.

New Tenured/Tenured-Track Faculty Hired. The number of new Tenured/Tenure-track Instructional Faculty members hired to start their new positions in the academic year. Data for "New Hires" is based on IPEDS definitions. Prior to 2016, "New Hires" were based on all those on payroll as of November 1 of the reporting year who were hired for full-time employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year.

New Tenured/Tenure-Track Faculty Hired as Percent of All Tenured/Tenure-Track Faculty. Number of "Newly hired" Tenured/Tenure-track faculty divided Total Tenured/Tenure-track faculty of an IPEDS reporting cycle. Data for "New Hires" is based on IPEDS definitions. Prior to 2016, "New Hires" were based on all those on payroll as of November 1 of the reporting year who were hired for full-time employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year.

Change in Tenured/Tenure-Track Faculty. The difference in the number of tenured/tenure-track faculty from one Fall semester to the next. Faculty members who are on paid leave are included. Does not include individuals whose primary responsibility is administrative.

Change in Total 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 and non-state-supported courses. Includes faculty members who are on paid leave. Does not include individuals whose primary responsibility is administrative.

Percent Faculty-of-Color (based on Full-time

Instructional Faculty). The proportion of full-time instructional staff 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 staff 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, sciences, 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*. Source: Arizona Center for Measuring University Performance.

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 in the Financial Aid Template. **Percentage 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 needbased aid to full-time students. Data as reported to the UMass President's Office in the Financial Aid Template.

Average Student Debt Load of Graduating Class (UG).

Average debt load is based on the total debt borrowed by an Institution's graduating class (bachelor's, first-time only) divided by the number of students of that cohort that carried any amount of debt. It does not include those students with no debt load. It does not include students who have transferred in. The graduating class includes those that graduated between July 1 and June 30 of the reporting year. Data is from CDS.

Percent Graduating Class with Debt (UG).

The total number of students in the graduating class (bachelor's, first-time only) that carried a debt load at the institution divided by the total number of graduating (bachelor's, first-time only) students in that institution. It does not include students who have transferred in. The graduating class includes those that graduated between July 1 and June 30 of the reporting year. Data is from CDS.

Percent Undergraduates from Massachusetts.

Percentage of total undergraduate students who are "In State" or residents of Massachusetts.

Online Course Registrations. 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 Registrations.

Percentage rate of growth in 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

Percentage Undergraduates Who are Students of Color. Undergraduates who are African-American/Black, Hispanic/Latino, Asian, Native American, Hawaiian/Pacific Islander, and Two or More Races, divided by total U.S. citizens and permanent residents who report their race/ethnicity.

Percentage Undergraduates Who are First-Generation

in College. First-generation college students are those neither of whose parents attended a postsecondary institution. This estimate is drawn from the National Survey for Student Engagement (NSSE), which is administered only to freshmen and senior students.

Percent Undergraduates with English as a Second

Language. Percentage of undergraduates whose first language was not English. The survey which captures this information, the Cooperative Institutional Research Program's (CIRP) Freshman Survey, was not fielded at UMass Lowell this year.

Percent Undergraduates who are International.

Percentage of all undergraduates who are non-resident aliens, studying at the university on an eligible visa types, and enrolled in credit courses. Does not include U.S. citizens, permanent residents, or refugees.

Number of Students who Participated in a Study Abroad

Program. The number of students who were reported as having taken for-credit instruction. It should be noted that only those students who accessed such programs through the UMass Lowell Office of Study Abroad and International Experiences are included here.

Freshman One-Year Retention Rate. Percent of firsttime, full-time, degree-seeking freshmen who entered UMass Lowell in a given Fall and were still enrolled at the institution in the following Fall. Peer data as reported to IPEDS.

Freshman Four-Year Graduation Rate. Percent of firsttime, full-time, degree-seeking freshmen who entered UMass Lowell in a given Fall and graduated from the institution by the end of their fourth year. Peer data as reported to IPEDS.

Freshman Six-Year Graduation Rate. Percent of firsttime, full-time, degree-seeking freshmen who entered UMass Lowell in a given Fall and graduated from the institution by the end of their sixth year. Peer data as reported to IPEDS.

Transfer (Full-Time) One-Year Retention Rate. Percent of full-time transfer students at any level who entered UMass Lowell in a given Fall and were still enrolled at, or graduated from the institution as of the following Fall.

Transfer (Upper-Division) Four-Year Graduation

Rate. Percent of full-time upper division transfers (60+ credits) who entered UMass Lowell in a given Fall and graduated from the institution within four years.

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

Alumni Participation Rate. The percentage of undergraduate alumni of record who donated money to the university. Alumni of record are former full- or parttime 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. Graduates who earned only a graduate degree are excluded. Data as reported to *U.S. News & World Report*.

SERVICE TO THE COMMONWEALTH INDICATORS

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 Live in Massachusetts. Percentage of total alumni who currently reside in Massachusetts, based on alumni records.

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

Number of undergraduate and graduate degrees and certificates awarded in Health Care 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

Total Endowment, Endowment Growth, and Endowment per Annualized Student FTE. The total value of the endowment at the end of the most recent fiscal year and the percent change from previous year is reported. The per-student ratio is based on total annualized FTEs as reported to IPEDS.

Private Funds Raised Annually. Private funds include restricted and unrestricted income from individuals, foundations, corporations, and other organizations. Private grant revenues are included, while private contract revenues are excluded. 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 (operating expenditures plus interest expense). Peer data are from published financial statements.

Debt Service to Operations. Debt service payments as a percentage of total operating expenditures (operating expenditures and interest expense). 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. Adjusted each year for inflation.

PEER INSTITUTIONS FOR UMASS LOWELL

Georgia State University San Diego State University University of Maine (Orono) University of Maryland -- Baltimore County University of New Hampshire* University of Rhode Island* University of Wisconsin – Milwaukee Virginia Commonwealth University

* aspirant peer

HEADLINES FROM THE 2017 ANNUAL INDICATORS

The University of Massachusetts Medical School (UMMS) continues to perform effectively in areas critical to its mission and in the execution of its current strategic plan. Resource constraints common to all academic health science centers and limited real growth in federal research expenditures require the campus to constantly balance demands for investment with competing priorities. Ongoing successes in basic, clinical and translational research, the competencybased medical education curriculum, class size expansion efforts and fundraising initiatives continue.

As called for in the "Vision 2020" Strategic Plan, research and faculty achievement and strong efforts in resource maximization and operational efficiencies continue. Financial pressures, including limited state support, require UMMS to prioritize educational and research initiatives. Nonetheless, the commitment to education, research, service, innovation, and training initiatives remain the hallmarks of the UMMS mission.

The research and development enterprise serves as a foundation for the generation of new knowledge, scientific discoveries, novel therapeutics, innovation, economic activity. Although generally flat, federal funding for the NIH has affected growth, UMMS research faculty continues to compete at an exceptionally high level for federal funding, even in a shrinking federal research pool.

• Academic quality: UMMS continues to attract exceptionally qualified students to the School of Medicine (SOM), as judged by admission test scores, residency match results, and performance on licensing exams. The increase in SOM class size has been an exceptionally successful initiative, increasing the number of physicians in training with no negative impact on student quality, performance or satisfaction. The applicant pool for the limited number of spaces for highly-qualified out of state students was exceptionally robust in its second year; the new "Population-based Urban and Rural Community Health" (PURCH) track admits its first students in 2017. SOM graduates continue to rank their educational experience as highly satisfactory. New agreements with Baystate Health (for PURCH) and Cape Cod Healthcare will provide highquality clinical opportunities for the SOM. The Graduate School of Nursing (GSN) is capably managing its curriculum, course offerings, and cross-disciplinary involvement in a changing academic and practice environment. Graduates from the Doctorate of Nursing Practice degree program, the Graduate Entry Pathway, and the doctoral program are meeting important needs in areas of both practice and education for the campus and the region. The Graduate School of Biomedical

Sciences (GSBS) continues to track favorably to peer institutions; student achievement is notable. The GSBS reputation, enhanced by the presence of faculty with national and international achievements, continues to attract top-quality students and faculty. The GSBS continues to be recognized for its efforts to prepare students for nontraditional and multidisciplinary careers, a nationally-renowned effort.

• The quality and reputation of the UMMS faculty continues to impress, attracting new investments and resources to the campus. The new Cryo-Electron Microcscopy facility, supported by more than \$9M in outside funding, is now open and provides a key scientific resource to both academic and industry scientists. The Howard Hughes Medical Institute, in providing \$4M, specifically acknowledged the quality of the UMMS research faculty as key to the success of the proposal. Professor Melissa Moore was elected to the National Academy of Sciences; Professors Samuel Behar, Robert Finberg and Katherine Ruiz De Luzuriaga were named to the American Academy of Microbiology. Professor Job Dekker received the International Award of the British Biochemical Society.

• Research growth, productivity, and faculty recruitment: Research productivity is significant across the departments, in part because of continued recruitment and investment in the clinical and translational sciences. Multidisciplinary programs in RNA therapeutics, systems biology, and neurotherapeutics are creating new opportunities for research growth and faculty recruitment. Industry, venture and philanthropic support for the research enterprise continues to increase, with support for research programs in ALS, diabetes, neuroscience and cancer all supporting innovative work.

• Crucial to the continued success of the Medical School is the ability to attract high quality students who will be able to meet the diverse cultural needs of underserved populations in the state. The five-campus baccalaureate to MD pathway program has begun to graduate a limited number of highly qualified undergraduate candidates from within the system into the SOM students who might otherwise pursue medical careers elsewhere. For the SOM, applicants are extremely competitive and match or exceed class profiles of previous years. Student access and affordability can be measured and supported by the learning contract option, which in relation to tuition and fees, continues to track favorably for the current year. The addition of a limited number of out of state students is in its second year; applicants were exceptionally qualified and the applicant pool was robust.

UMASS MEDICAL SCHOOL

• Anecdotal evidence, such as rankings in the US News & World Report "Best Graduate Schools" continues to reinforce the reputation of the SOM as a high quality, affordable institution: the 2018 US News ranking places the SOM 14th in the nation for primary care - the top public medical school in New England; and 50th among research institutions. UMMS also ranked 29th among all US medical schools in NIH funding, according to the Blue Ridge Institute for Medical Research—an increase of four places from the previous year. Performance of medical students on benchmark exams and nursing students on board certification, along with residency program match results, are good supporting indicators of quality.

UMMS, like its peer institutions, continues to face difficult decisions in financing the support of strategic priorities. The campus is committed to mapping and achieving new and ambitious strategic goals, supported by a realistic plan for its vision: to remake life sciences education, research, and care in the Commonwealth. As achievements and discoveries in the life sciences portend an exciting future—one where the fruits of research positively impact human lives and at a time when the need for highly talented physicians, scientists and advanced practice nurses is projected to grow dramatically—UMMS is well positioned to respond.

2017 ANNUAL INDICATORS AT A GLANCE

ACADEMIC QUALITY

•	Average Biology MCAT Scores	
	[old score system ranged from 1 to 15]	11.0
	[new score system ranged from 118 to 132]	127.0
•	Student Satisfaction (percentile)	
	With Quality of Medical Education	100 th
•	Technology-Enhanced Classrooms	60
•	Doctorates Awarded	184
•	Postdoctoral Appointees	359
•	Blue Ridge Institute for Medical Research	NIH
	Ranking (BRIMR)	29 th
•	Total R&D Expenditures	\$253.1M
•	Total R&D Expenditures Rankings	84
•	Total R&D Expenditures Per FT Faculty	\$191,307
•	Federal Research Support Per FT Faculty	\$122,078
•	NIH Funding For Medical Schools	\$153.9M
•	Rank in US News (Primary Care)	14 th
•	Patent Applications	108
•	License Income	\$20.9M
•	AUTM Ranking of Licensing Income	17^{th}
•	Percent Tenured/Tenure Track Faculty FTE	20%
•	New Tenured/Tenure-Track Faculty Hired	9
	As Percent of Total T/TT Faculty	4.19%
•	Change in Tenured/Tenure-Track Faculty	2%
•	Change in Faculty FTE	4%
•	Full-time Instructional Faculty	
	Percent Faculty of Color	26%
	Percent Women Faculty	40%
•	Faculty Awards	11
•	National Academy Members	7
•	Howard Hughes Investigators	6

ACCESS AND AFFORDABILITY

•	Tuition & Fees	\$35,657
•	Tuition & Fees	

(Including Adjustment for Learning Contract) \$30,089

STUDENT SUCCESS AND SATISFACTION

٠	Match Rate/Choice of Residency	97%
٠	Licensure/Certification Pass Rates	
	USMLE Step 1	100%
	USMLE Step 2 (CK)	96%
	USMLE Step 2 (CS)	99%
	GSN State Certification	92%
٠	Alumni Participation Rate	23.0%

SERVICE TO THE COMMONWEALTH

٠	Percent Alumni who Live in MA	56%
٠	Enrollment in STEM Programs	341 (32%)
•	Degrees Awarded in STEM Fields	59 (25%)
•	Service to State Agencies	\$446.3M

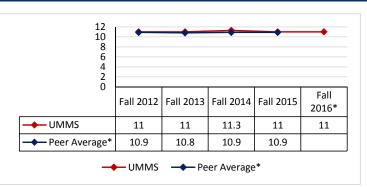
FINANCIAL HEALTH

• '	Total Endowment	\$187.7M
•]	Endowment Per Student	\$179,794
•]	Private Funds Raised Annually	\$37.9M
•]	Primary Reserve	25.2%
•]	Debt Service to Operations	5.2%
•]	Deferred Maintenance per GSF	\$132

ACADEMIC QUALITY

Mean Biology MCAT Score

MCAT scores provide a predictor of a student's success in medical school. It is widely used in the admissions process, but never as the only principal indicator of a student's academic preparation. It is, however, an indicator that is available to compare incoming students across institutions. MCAT scores ranged on old scale from 1 to 15, and new scale from 118 to 132. UMMS=127 for Fall 2016. For the past five years, the mean MCAT score for first year UMMS medical students has been consistently higher than the peer average. Peer data are all AAMC Medical Schools.



Peer Source: AAMC Medical Schools.

* Note: Given transition from old to new score system, only old scores are graphed this year. FY2016 peer data not currently available.

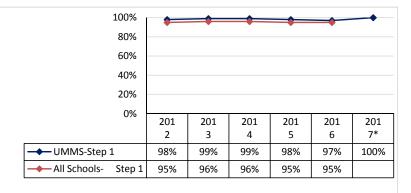
Pass Rates on USMLE Step 1 and Step 2 (CK, CS)

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.

The Step One exam covers basic science information and is taken in most medical schools at the end of the second year; Step Two (CK, CS) 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 all U.S. and Canadian medical schools. Typically, UMMS pass rates are at or above national pass rates.

*1st-time test-takers (n=53) who took Step 2 (CK) between 7/1/16-2/17/17. Data from NBME preliminary report released on 3/16/17; Peer Comparison - All U.S. and Canadian Medical Schools, Data by Academic Year.



Source - National Board of Medical Examiners: Performance of Examinees *1st-time test-takers (n=99) who took Step 1 between 1/1/17-4/22/17. Raw data pulled on 5/10/17 from NBME website, awaiting preliminary report with UMMS and National data.

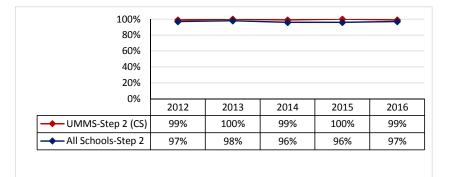
** All Schools-Step 1 data is currently not available.

Peer Comparison - All U.S. and Canadian Medical Schools, Data by Academic Year

100%	+					
80%						
60%						
40%						
20%						
0%						
0,0	2012	2013	2014	2015	2016	2017*
	98%	98%	99%	99%	95%	96%
All Schools-Step 2	98%	98%	97%	95%	96%	95%

Source - National Board of Medical Examiners: Performance of Examinees.

Pass Rates on USMLE Step 1 and Step 2 (CK, CS) (Cont'd)

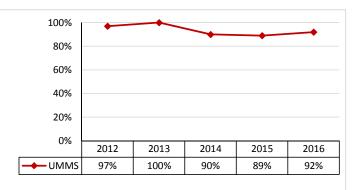


Peer Comparison - All U.S. and Canadian Medical Schools, Data by

Academic Year.

Pass Rates on Nursing Board Certification

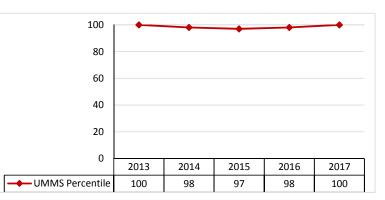
Nursing Board certification signifies advanced registered nurses who have met requirements for clinical and functional practice in a specialized field, pursued education beyond basic preparation, and received the endorsement of their peers. After meeting these criteria, health care professionals take certification examinations based on nationally recognized standards of practice to demonstrate their knowledge, skills, and abilities within the defined specialty. All registered nurses who wish to practice in Massachusetts must pass the certification examination (NCLEX-RN). Several other states have a similar requirement. GSN has maintained high pass rates compared to the national average.



Data by Calendar Year

Student Satisfaction With Quality of Medical Education

From AAMC Mission Management Tool (MMT) annual report, each annual percentile reflects a three-year average of GQ student responses to overall satisfaction with the quality of medical education. This annual percentile is calculated by AAMC based on all participating medical schools (2017: N=130).



Source: AAMC MMT Report, Percentile reported annually

Technology-Enhanced Classrooms

UMMS Technology-Enhanced	AY 20	013-2014	AY 20	14-2015	AY 2015-2016	
Classrooms	No of	Percent of	No of	Percent of	No of	Percent of
	Classrooms	Total	Classrooms	Total	Classrooms	Total
Basic	0	0%	0%	0%	0	0%
Medium	48	84%	51	85%	51	85%
High	9	16%	9	15%	9	15%
Very High	0	0%	0%	0%	0	0%
Total Classrooms Teaching	57	100%	60	100%	60	100%
Spaces	57	100%	00	100%	00	10076

Basic classroom technology:

All 60 classrooms at UMass Medical School are equipped with projectors and media players.

Medium classroom technology:

In addition to basic technology, 51 classrooms (85%) at UMMS are equipped with a teaching podium, a computer, document camera, dvd/vcr player, laptop connection, power conditioner, and an Extron/Crestron controller.

High classroom technology:

In addition to the medium technology, UMMS has nine teaching spaces (15%) are equipped with technology to record lectures. These rooms include lecture capture (Echo SafeHD recording appliance),

camera, microphone, a mixer and video conferencing technology.

Very High classroom technology:

In AY 2017/18, to accommodate the increased class size, UMMS will expand and reconfigure to include four very high classroom technology rooms that include the features of high technology and large screen monitors at each of 24 team based small groups, motion-tracking cameras and directional ceiling tile microphones. In addition two classrooms have been built at our satellite Baystate campus.

Doctoral Degrees Awarded

In 2016, 184 doctorates were awarded, including 64 research/scholarship and 120 professional practice doctorates. Enrollment and the number of PhD programs offered continues to expand. Median from 20-school peer list includes only research/scholarship (PhD) doctorates.

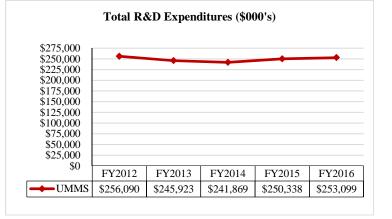
UMMS Doctoral Degrees Awarded	2011-12	2012-13	2013-14	2014-15	2015-16
Research/Scholarship Doctorates	66	52	58	61	64
Professional Practice Doctorates	119	124	134	130	120
Total Doctoral Degrees Awarded	185	176	192	191	184
UMMS Research/ Scholarship Doctorates	2011-12	2012-13	2013-14	2014-15	2015-16
UMMS	66	52	58	61	64
Peer Median	103	108	113	115	104

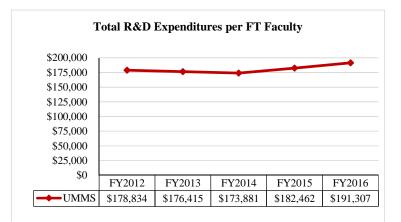
Postdoctoral Appointees

The number of post-doctoral appointees is an indicator of the size		2012	2013	2014	2015	2016
and quality of the research	Postdoctoral Appointees	325	394	320	348	359

Total Research & Development (R&D) Expenditures

The Worcester Campus remains committed to research growth in a number of key areas, especially in the clinical and 'bench to bedside' arenas. New faculty recruitment will positively impact productivity and total research support. Peer data for medical schools separate from parent university are not readily available.





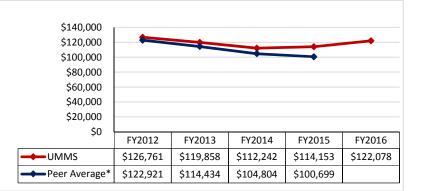
Total R&D Expenditures Rankings

Total R&D Rank	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Overall Ranking	79	81	84	87	84

n.b. Ranking based on Carnegie Peers is further standardized by US Publics.

Federal Research Support per Full-Time Faculty

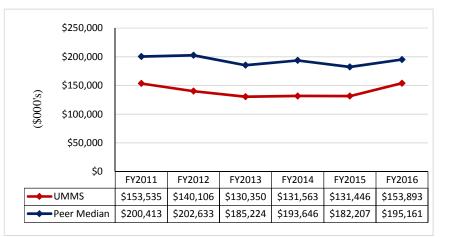
Federal Research Support per Faculty is a rough measure of faculty involvement in research. The amount of funding through federal research grants and contracts is a standard for measuring the success of a medical institution's faculty in achieving research goals. The 20-school peer average comes from AAMC Ad Hoc report.



* FY2016 Peer Average data is currently not available.

NIH Funding Among Medical Schools

The National Institutes of Health (NIH) awards funds on an annual basis to investigators throughout the U.S. and abroad. NIH funded research provides a benchmark to compare the level of funding for research.



US News Ranking

The ranking by U.S. News & World Report is based on 170 schools, comprising accredited medical schools and schools of osteopathic medicine, identifying those with a focus on primary care education. 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.

US News	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Ranking	9	5	12	16	14

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. These numbers are expected to increase in the future as our newly hired investigators begin to make their invention disclosures.

License income is a measure of the economic value of an institution's inventiveness and contributes 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 steady flow of licensing revenues received from the sale of products invented.

Par	tent	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Applic	cations	39	62	78	67	108

License Income

(In \$000's)

License	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Income	\$52,642	\$33,823	\$29,930	\$32,998	\$20,919

AUTM Ranking of License Income

This indicator reports the ranking of licensing income/technology performance as reported on the Association of University Technology Managers (AUTM) Annual Survey. Total respondents include U.S. & Canadian academic and non-profit institutions and Patent Management Firms. Measures reported reflect UMass system ranking; however UMMS represents 97% of UMass System total licensing revenue for FY 2015. FY2015 is the most recent data available.

AUTM Rank	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016*
UMMS	11	15	17	17	N/A
Total	155	162	155	165	N/A

*FY 2016 data is currently not available.

Percent Tenured/Tenure-Track Faculty FTE

This indicator reflects stability across the past five years.

Percent T/TT Faculty	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
% T/TT	19%	20%	20%	20%	20%
% Non TT	81%	80%	80%	80%	80%

New Tenured/Tenure-Track Faculty Hired

In FY 2016, UMMS hired nine new instructional tenured/tenure-track faculty as the campus continues to recruit new faculty in support of the on-going growth of the research enterprise.

New T/TT	2012	2013	2014	2015	2016
Faculty Hired	6	4	7	2	9

"New Hires" as defined by IPEDS. Prior to 2016, "New Hires" were based on all those on payroll as of November 1 of the reporting year who were hired for employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year.

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

This indicator reflects stability across the past five years.

	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Total T/TT Faculty	210	215	212	210	215
Total New Hires	6	4	7	2	9
Percent of Total	3%	2%	3%	1%	4%

"New Hires" as defined by IPEDS. Prior to 2016, "New Hires" were based on all those on payroll as of November 1 of the reporting year who were hired for employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year.

Change in Tenured/Tenure-Track Faculty

While there were five more							
instructional tenured/tenure-							
track faculty as of	Change in	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
November 1st, 2016	T/TT Faculty						
compared to November 1st,	1/11 Faculty	192	210	215	212	210	215
2015 UMMS continues to							
grow its faculty in support					Fall 20	15-2016	

Fall 2015-2016					
1-Year Change					
Number	Percent				
5	2%				

Change in Faculty FTE

Change in	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Faculty FTE	887	1,067	1,061	1,054	1,035	1,076

Fall 2015-2016				
1-Year Change				
Number	Percent			
41	4%			

The total instructional faculty, with both tenured/tenure-track status and non-tenure status, is stable as of November 1st, 2016, as the campus continues the support of its on-going plan to grow the clinical and research enterprises.

of the on-going growth of the basic and translational research enterprises.

Faculty by Race and Gender

This indicator reflects stability across the past five years.

	Full-Time Instructional Faculty							
Faculty Of Color	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016			
Number	239	251	250	247	255			
Percent	25%	26%	26%	26%	26%			
Women Faculty	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016			
Number	346	362	367	373	405			
Percent	34%	36%	36%	38%	40%			

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

Based on most recent up-to-date data available in the Top American Research Universities, 2015 Annual Report; public and private institutions ranked separately; Peer data for medical schools separate from parent university are not readily available.

	2011	2012	2013	2014	2015
UMMS	16	15	13	12	11

National Academy Members

The Top American Research Universities Annual Report; public and private institutions ranked separately; peer data for medical schools separate from parent university are not readily available.

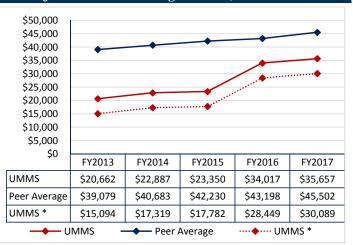
	2011	2012	2013	2014	2015
UMMS	5	5	5	6	7

*Note: National Academy includes Royal Society.

ACCESS AND AFFORDABILITY

Tuition & Fees (includes adjustment for learning contract)

This indicator measures the annual medical school tuition and mandatory fees for Class of 2019 and forward compared to peer institutions. The annual medical school tuition and mandatory fees for class of 2018 and prior are \$27,899. UMMS' tuition and fees continue to be significantly lower than the average for 20-school peer list. Under the learning contract, students may defer a portion of their tuition. The deferral is to be paid upon completion of residency, internship, or fellowship. The deferral can be repaid either by four years of service in the Commonwealth of Massachusetts in a primary care practice, other specialty practice in an underserved area of public need, or by repaying the deferred amount with interest over eight years.



* UMMS Tuition and Fees adjusted for learning contract Peers Source: From AAMC, 20-school peer list

STUDENT SUCCESS AND SATISFACTION

Acceptance Rate to Choice of Residency

This indicator measures the percent of 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 U.S. and Canadian medical schools. UMMS students have done very well in the match, consistently showing a higher percentage of graduates accepted to their residency choice. In 2017, of the students going through the NRMP, 97% were matched to their choice of residency.

ance Rate to C	choice o	f Reside	ency			
100%	-				•	•
90%		-	•	•	•	•
80%						
70%						
60%						
50%						
50%	2012	2013	2014	2015	2016	2017
	96%	98%	97%	98%	97%	97%
All Schools	98%	94%	94%	94%	94%	94%
L I					•	

Alumni Participation Rate

The number of alumni donors divided by the number of alumni of record where alumni of record is defined as all living alumni.

Alumni Participation	2014	2015	2016
Rate	19.3%	22.2%	23.0%

SERVICE TO THE COMMONWEALTH

Percent Alumni Who Live in Massachusetts										
Fifty-six percent of UMMS alumni live in Massachusetts as	Percent	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016				
of Fall 2016.	Alumni Who Live in MA	51%	59%	60%	59%	56%				

Enrollment in STEM Programs

Total number of students enrolled in STEM (Science, Technology, Engineering and Mathematics) Programs at UMMS that contribute to the Commonwealth's workforce in the STEM areas.

	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Total Enrollment	1,106	1,091	1,068	1,048	1,062
STEM Enrollment	398	385	383	363	341
Percent STEM	36%	35%	36%	35%	32%

Degrees Awarded in STEM Fields

Total number of students enrolled in STEM (Science, Technology, Engineering and Mathematics) Programs at UMMS that have received degrees in the STEM fields.

	Graduate									
	2011-12	2012-13	2013-14	2014-15	2015-16					
Total	238	231	244	244	236					
STEM	64	55	58	68	59					
Percent STEM	27%	24%	24%	28%	25%					

Service to State Agencies

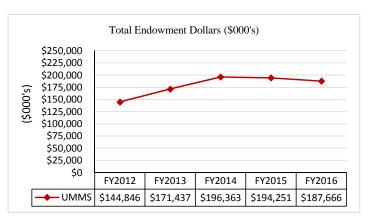
This indicator measures the annual amount expended for state sponsored grants and contracts and the provision of public service activities to other Massachusetts state agencies. This number is significantly larger than that of peer institutions as a result of the contracts for policy analysis and programmatic development within Commonwealth Medicine. Commonwealth Medicine is a specialized organization within UMMS that focuses solely on providing health care consulting services to state agencies. Peer data are not available.

(In \$000's)					
	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
UMMS	\$332,180	\$364,482	\$399,393	\$267,113	\$446,270

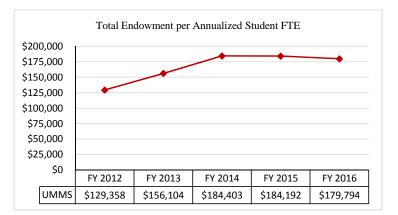
FINANCIAL HEALTH

Total Endowment Assets and Annual Growth in Endowment

The endowment has grown significantly over the last several years as available cash has been transferred into quasi-endowment. The ratio provides a measure of the long term financial health of the institution, relative to the number of students. 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 informs the ratio. Peer data for medical schools separate from parent university are not readily available.



	Annual Growth in Endowment									
FY 2012 FY 2013 FY 2014 FY 2015 FY 2016										
UMMS	5.15%	18.36%	14.54%	-1.08%	-3.39%					



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. Peer data for medical schools separate from parent university are not readily available.



Primary Reserve

The financial cushion reflects longterm financial health of the institution and its ability to weather or "cushion" itself from short-term operations ups and downs. Peer data for medical schools separate from parent university are not readily available.

Primary Reserve	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
•	26.0%	27.1%	28.2%	31.6%	25.2%

Debt Service to Operations

The debt ratio measures the demand that annual commitments to creditors place on the institution's unrestricted operating funds. Peer data for medical schools separate from parent university are not readily available.

Debt Service to	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Operations	3.9%	5.8%	5.6%	6.1%	5.2%

Deferred Maintenance per GSF

Deferred maintenance per square foot provides a measure of the overall condition of the physical plant. It expresses the cost of the backlog of building maintenance on a per square foot basis. As buildings age and deteriorate, deferred maintenance per square foot will rise unless spending keeps pace with it.

Deferred Maintenance per	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
GSF	\$69	\$80	\$84	\$132	\$132

ACADEMIC QUALITY INDICATORS

Average Biology MCAT Score (Mean). Mean biology MCAT score for new medical students. Peer data calculated from AAMC website.

Doctoral Degrees Awarded. Number of Doctorates awarded for which includes September, January, May award dates.

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

Total R&D Expenditures. Total R&D expenditures in all academic fields, from all sources (federal, state, local governments, industry, private and institutional) 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 per Full-Time 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 available.

Federal Research Support per Full-Time Faculty.

Federal research direct plus federal research facilities and administration divided by all full-time faculty as reported by the AAMC Ad Hoc Report, 20 school peer list.

NIH Funding Among Medical Schools. Annual amount of NIH Funding. UMMS and peer data are from NIH Ad Hoc Report, 20 school peer list.

US News Ranking. U.S. News annual ranking of medical schools with special emphasis in Primary Care.

Number of Patent Applications. Number of U.S. Patent applications filed per year. Data reported by each UMass campus to President's Office, Office of OTCV.

License Income. Amount of annual income from license agreements. Data reported by each UMass campus to President's Office, Office of OTCV.

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

Percent Tenured/Tenure-Track Faculty FTE.

Percentage based on ratio of instructional Tenure-stream Faculty FTE to Total Faculty FTE.

New Tenured/Tenured-Track Faculty Hired. The number of new instructional tenured/tenured-track faculty members hired to start their new positions in the academic year. Prior to 2016, "New Hires" were based on all those on payroll as of November 1 of the reporting year who were hired for employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year.

New Tenured/Tenure-Track Faculty Hired as Percent of All Tenured/Tenure-Track Faculty. Definition of "New Hires" per IPEDS Definitions. Number of "Newly hired" instructional Tenured/Tenure-track faculty divided Total Tenured/Tenure-track Faculty of an IPEDS reporting cycle. Prior to 2016, "New Hires" were based on all those on payroll as of November 1 of the reporting year who were hired for employment between July 1 and October 31; 2016 and onwards, IPEDS expanded the hire date to include those that were hired between November 1 of the previous year and October 31 of the reporting year.

Change in Tenured/Tenure-Track Faculty. The difference in the number of instructional tenured/tenure-track faculty from one Fall semester to the next. This number includes faculty members who are on paid leave and does not include individuals whose primary responsibility is administrative.

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. FTE is based upon standard hours per week (40). Includes faculty members who are on paid leave and does not include individuals whose primary responsibility are administrative.

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

UMASS MEDICAL SCHOOL

Faculty Awards. Number of faculty 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 awards for 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

Tuition and Fees. Annual tuition and mandatory fees for in-state students including adjustment for learning contracts. Peer data from AAMC.

STUDENT SUCCESS AND SATISFACTION INDICATORS

Acceptance (Match) Rate to Choice of Residency.

Percent of graduating students accepted to their choice of residency. National results provided by NRMP.

Pass Rates on USMLE Step 1 and Step 2 (CK, CS). The percentage of medical students passing Step 1 and Step 2 on their first attempt. Peer data represents national results from National Board of Medical Examiners (NBME).

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 registered nursing graduates from all graduate nursing schools in the United States. Peer data not available.

Student Satisfaction With Quality of Medical Education.

The percentile of graduating medical students indicating "very satisfied" with the quality of their medical education. UMMS percentile compares to national peer data from AAMC MMT Annual Report.

Alumni Participation Rate. The number of alumni donors divided by the number of alumni of record where alumni of record is defined as all living alumni.

SERVICE TO THE COMMONWEALTH INDICATORS

Percent Alumni Who Live in Massachusetts. The percentage of UMMS alumni who live in Massachusetts.

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

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

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 not available.

FINANCIAL HEALTH INDICATORS

Total Endowment Assets and Annual Growth in Endowment. UMMS endowments including Foundation endowments and quasi-endowments. Data is from annual BOT Advancement Report.

Endowment per FTE Student. UMass endowments including Foundation endowments and quasi-endowments divided by matriculated annualized FTE.

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 includes cash (not in-kind) and asset additions made in that year. Peer data is not available. Data is from annual BOT Advancement Report.

Primary Reserve. Unrestricted net assets divided by total operating expenses (operating expenditures plus interest expense). Peer data is not available.

Debt Service to Operations. Interest payments plus principal payments divided by total operating expenses (operating expenditures plus interest). Peer data is not available.

Deferred Maintenance per GSF. Deferred Maintenance 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. Adjusted each year for inflation.

PEER INSTITUTIONS FOR UMMS

School Name - All Public

Arizona Arkansas Buffalo Cincinnati Colorado East Carolina - Brody East Tennessee - Quillen Eastern Virginia Florida State Georgia Hawaii - Burns Illinois Kansas Kentuckv LSU New Orleans LSU Shreveport Louisville MU Ohio MU South Carolina Marshall - Edwards Massachusetts Michigan State Minnesota Twin Cities Mississippi Missouri Columbia Missouri Kansas City Nebraska Nevada New Mexico North Dakota Northeastern Ohio Oklahoma Oregon Penn State Puerto Rico SUNY Downstate SUNY Upstate South Alabama South Carolina

South Dakota South Florida Southern Illinois Stonv Brook Tennessee Texas A & M Texas Tech U Washington UC Irvine UC San Diego UC San Francisco UCLA - Geffen UMDNJ - RW Johnson UMDNJ New Jersey UT Galveston UT Houston UT San Antonio Utah Vermont Virginia Commonwealth West Virginia Wright State - Boonshoft Wright State Alabama Connecticut Florida Indiana Iowa - Carver Maryland Michigan North Carolina Ohio State UC Davis UT Southwestern Virginia Wayne State Wisconsin

Selected Peer Institutions

Regional/Competitor:

Harvard University Boston University Tufts University Dartmouth College University of Vermont Brown University State University of New York, Stonybrook University of Maryland - Baltimore

Public Aspirant:

University of Texas, SW University of Iowa University of North Carolina at Chapel Hill University of Alabama, Birmingham University of Michigan - Ann Arbor University of Washington - Seattle University of California, San Francisco

Private Aspirant:

Washington University in St. Louis Johns Hopkins University Yale University University of Pennsylvania University of Pittsburgh - Pittsburgh

UMass Amherst - Clery Act Crime Statistics

	Fall	2015	Fall 2014		Fall 2013	
ENROLLMENTS/NUMBER OF RESIDENTS	Total Enrollment	# Living on Campus	Total Enrollment	# Living on Campus	Total Enrollment	# Living on Campus
UNDERGRADUATE STUDENTS	22,748	13,281	22,252	13,127	22,134	12,933
GRADUATE STUDENTS	6,521	112	6,383	108	6,383	127
			Calend	ar Year	-	
OFFENSE	20	15	20	14	20	13
MURDER / NON-NEGLIGENT MANSLAUGHTER	(C	()	()
NEGLIGENT MANSLAUGHTER	(D	()	()
RAPE	1	7	1	1	2	1
FONDLING	ť	5	2	2		l
INCEST	(D	()	()
STATUTORY RAPE	(0	()	()
ROBBERY	(0	4	4	0	
AGGRAVATED ASSAULT	-	7	1	3	6	
BURGLARY	9	9	1	7	2	1
MOTOR VEHICLE THEFT		1	2	1	2	
ARSON		5	Ę	5	2	
DOMESTIC VIOLENCE***	-	7	1	6	11	
DATING VIOLENCE***	()	()	()
STALKING***		4	()	1	
HATE CRIMES Any of the aforementioned offenses, and other crime involving bodily injury, that manifest evidence of prejudice based on race, religion, sexual orientation, gender, disability or ethnicity are also reported as hate crimes		1	2	2	2	
LIQUOR LAW ARRESTS**	16	62	23	34	18	33
LIQUOR LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION	32	323		76	78	30
DRUG LAW ARRESTS**	13		3 17		2	2
DRUG LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION	3	6	4	2	5	7
ILLEGAL WEAPONS POSSESSION ARRESTS		1	2	2	2	2
ILLEGAL WEAPONS POSSESSION VIOLATIONS REFERRED FOR DISCIPLINARY ACTION	(0	()	()

Note: Total count for each category includes crimes that occurred on campus, in or on a non-campus building or property, or on public property within or immediately adjacent to and accessible from the campus.

*Forcible Sex Offenses include those reported to UMPD and those reported to other Campus agencies.

**UMPD arrests involving both drug law and liquor law violations are counted only as a drug law violation, which is the more serious offense.

UMass Boston - Clery Act Crime Statistics

	Fall	2015	Fall	2014	Fall	2013
ENROLLMENTS/NUMBER OF RESIDENTS	Total Enrollment	# Living on Campus	Total Enrollment	# Living on Campus	Total Enrollment	# Living on Campus
UNDERGRADUATE STUDENTS	12,949					
GRADUATE STUDENTS	4,081	0	4,056	0	3,911	0
			Calend	ar Year		
OFFENSE	20	15	20	14	20)13
MURDER / NON NEGLIGENT MANSLAUGHTER		0	Ú	0		0
NEGLIGENT MANSLAUGHTER		0	Ú	0		0
RAPE		2		1		2
FONDLING		C	Ū	0		0
INCEST		0	(0		0
STATUTORY RAPE		D	(0		0
ROBBERY		0	:	3	5	
AGGRAVATED ASSAULT		6	2			3
BURGLARY		D	4			0
MOTOR VEHICLE THEFT		D	0			1
ARSON		0 0		0		1
DOMESTIC VIOLENCE*	:	5	:	3		1
DATING VIOLENCE*		D	(0		0
STALKING*		7	(0		5
HATE CRIMES Any of the aforementioned offenses, and other crime involving bodily injury, that manifest evidence of prejudice based on race, religion, sexual orientation, gender, disability or ethnicity are also reported as hate crimes.		2 0		0		2
LIQUOR LAW ARRESTS		D	(D		2
LIQUOR LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION		0	:	2		1
DRUG LAW ARRESTS	10		10 2		2	27
DRUG LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION	0			1		1
ILLEGAL WEAPONS POSSESSION ARRESTS		2		1		2
ILLEGAL WEAPONS POSSESSION VIOLATIONS REFERRED FOR DISCIPLINARY ACTION		0	(0		3

Note: Total count for each category includes crimes that occurred on campus, in or on a non-campus building or property, or on public property within or immediately adjacent to and accessible from the campus. UMB campus does not have residence halls.

UMass Dartmouth - Clery Act Crime Statistics

ENROLLMENTS/NUMBER OF RESIDENTS	Fall	Fall 2015		Fall 2014		Fall 2013	
	Total	# Living on	Total	# Living on	Total	# Living on	
	Enrollment	Campus	Enrollment	Campus	Enrollment	Campus	
UNDERGRADUATE STUDENTS	7,295	4,073	7,454	4,085	7,437	3,974	
GRADUATE STUDENTS	1,621	95	1,657	112	1,616	105	

	Calendar Year				
OFFENSE	2015	2014	2013		
MURDER / NON-NEGLIGENT MANSLAUGHTER	0	0	0		
NEGLIGENT MANSLAUGHTER	0	0	0		
RAPE	7	11	10		
FONDLING	4	2	0		
INCEST	0	0	0		
STATUTORY RAPE	0	0	0		
ROBBERY	0	2	3		
AGGRAVATED ASSAULT	5	10	14		
BURGLARY	7	7	7		
MOTOR VEHICLE THEFT	1	1	2		
ARSON	6	7	8		
DOMESTIC VIOLENCE*	15	8	7		
DATING VIOLENCE*	0	0	0		
STALKING*	3	3	10		
HATE CRIMES Any of the aforementioned offenses, and other crime involving bodily injury, that manifest evidence of prejudice based on race, religion, sexual orientation, gender, disability or ethnicity are also reported as hate crimes.	0	1	0		
LIQUOR LAW ARRESTS	19	67	63		
LIQUOR LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION	180	289	327		
DRUG LAW ARRESTS	1	5	7		
DRUG LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION	3	120	149		
ILLEGAL WEAPONS POSSESSION ARRESTS	1	0	2		
ILLEGAL WEAPONS POSSESSION VIOLATIONS REFERRED FOR DISCIPLINARY ACTION	1	0	2		

Note: Total count for each category includes crimes that occurred on campus, in or on a non-campus building or property, or on public property within or immediately adjacent to and accessible from the campus.

UMass Lowell - Clery Act Crime Statistics

ENROLLMENTS/NUMBER OF RESIDENTS	Fall	2015 Fall		2014	Fall 2013	
	Total	# Living on	Total	# Living on	Total	# Living on
	Enrollment	Campus	Enrollment	Campus	Enrollment	Campus
UNDERGRADUATE STUDENTS	13,266	4,083	12,986	3,894	12,734	3,593
GRADUATE STUDENTS	4,184	47	4,198	56	4,198	52

	Calendar Year				
OFFENSE	2015	2014	2013		
MURDER / NON-NEGLIGENT MANSLAUGHTER	0	0	0		
NEGLIGENT MANSLAUGHTER	0	0	0		
RAPE	6	5	1		
FONDLING	2	3	1		
INCEST	0	0	0		
STATUTORY RAPE	0	0	0		
ROBBERY	1	3	11		
AGGRAVATED ASSAULT	2	14	7		
BURGLARY	3	5	8		
MOTOR VEHICLE THEFT	1	1	14		
ARSON	2	0	0		
DOMESTIC VIOLENCE*	2	18	6		
DATING VIOLENCE*	0	0	0		
STALKING*	0	0	0		
HATE CRIMES Any of the aforementioned offenses, and other crime involving bodily injury, that manifest evidence of prejudice based on race, religion, sexual orientation, gender, disability or ethnicity are also reported as hate crimes	0	0	1		
LIQUOR LAW ARRESTS	6	7	3		
LIQUOR LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION	357	447	303		
DRUG LAW ARRESTS	7	11	14		
DRUG LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION	16	57	31		
ILLEGAL WEAPONS POSSESSION ARRESTS	3	4	2		
ILLEGAL WEAPONS POSSESSION VIOLATIONS REFERRED FOR DISCIPLINARY ACTION	4	8	1		

Note: Total count for each category includes crimes that occurred on campus, in or on a non-campus building or property, or on public property within or immediately adjacent to and accessible from the campus.

UMass Medical School - Clery Act Crime Statistics

ENROLLMENTS/NUMBER OF RESIDENTS	Fall 2015		Fall 2014		Fall 2013	
	Total Enrollment	# Living on Campus	Total Enrollment	# Living on Campus	Total Enrollment	# Living on Campus
UNDERGRADUATE STUDENTS	0					0
GRADUATE STUDENTS	1,108	0	1,071	0	1,161	0
	Calendar Year					
OFFENSE	2015		2014		2013	
MURDER / NON-NEGLIGENT MANSLAUGHTER		0	0		1	
NEGLIGENT MANSLAUGHTER		0	0		0	
RAPE		0	0		0	
FONDLING		1	1		1	
INCEST		0	0		0	
STATUTORY RAPE	0		0		0	
ROBBERY	0		0		1	
AGGRAVATED ASSAULT		3	1		3	
BURGLARY	7		7		2	
MOTOR VEHICLE THEFT	1		1		2	
ARSON	0		0		0	
DOMESTIC VIOLENCE*	3		5		2	
DATING VIOLENCE*	0		0		0	
STALKING*	0		0		6	
HATE CRIMES Any of the aforementioned offenses, and other crime involving bodily injury, that manifest evidence of prejudice based on race, religion, sexual orientation, gender, disability or ethnicity are also reported as hate crimes.	0 0		0	0		
LIQUOR LAW ARRESTS	0		0		0	
LIQUOR LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION	0		0		0	
DRUG LAW ARRESTS	13		15		5	
DRUG LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION	0		0 0			0
ILLEGAL WEAPONS POSSESSION ARRESTS	1		1 1		3	
ILLEGAL WEAPONS POSSESSION VIOLATIONS REFERRED FOR DISCIPLINARY ACTION	0		0		0	

Note: Total count for each category includes crimes that occurred on campus, in or on a non-campus building or property, or on public property within or immediately adjacent to and accessible from the campus. UMW campus does not have residence halls.