2020 Report on Annual Indicators

University Performance Measurement System
November 2020





University of Massachusetts



2020 REPORT ON ANNUAL INDICATORSUniversity Performance Measurement System

Message from the President November 2020

I am pleased to present the University of Massachusetts 2020 Annual Indicators Report, which illustrates our steadfast commitment to assessment, accountability and continuous improvement across the five-campus university system.

This annual report documents the university's progress toward achieving strategic priorities approved by the UMass Board of Trustees. It compares the university's performance – primarily during fiscal year 2019 and academic year 2018-2019 – with peer institutions across the country on a range of metrics related to academic quality, access and affordability, student success and satisfaction, service to the Commonwealth, and financial health.

Major highlights of this report include the following:

Academic quality

- UMass continues to admit high-quality students with average first-year student SAT scores ranging from 1084 to 1296 across the four undergraduate campuses and average high school GPAs ranging from 3.25 to 3.90.
- The UMass research enterprise, the third largest in the Commonwealth, grew to \$684 million.

Access and affordability

- Roughly four out of five (79 percent) UMass first-year students are Massachusetts residents, compared with one-fifth (24 percent) at the university's private peers in the state.
- UMassOnline continued to break down the barriers of time and distance to educational opportunity with online course registrations growing six percent to 83,985.

Student success and satisfaction

- Nearly four in 10 (38 percent) UMass undergraduates are students of color. As a point of comparison, approximately 32 percent of Massachusetts public high school graduates are students of color.
- International students comprise about 10 percent (nearly 7,200) of the total student population, adding to the rich diversity of our campuses.

Service to the Commonwealth

- Nearly one-third (32 percent) of all Massachusetts residents enrolling in four-year universities in the Commonwealth as first-time undergraduates attend UMass.
- UMass awarded more than 19,000 degrees and certificates in academic year 2018-19, including 18,216 degrees, representing 16 percent of all undergraduate and graduate degrees awarded in the Commonwealth.
- Three in 10 (32 percent) of the university's total degrees were awarded in STEM fields.
- Six of 10 (60 percent) UMass graduates remain in the Commonwealth after graduation.

Financial health

- The market value of the university's endowment improved by 12 percent to \$973 million.
- Private giving to UMass increased by 11 percent to \$134 million.
- Bond rating agencies, in assigning strong rates to the university (Aa2 rating by Moody's; AA- rating by S&P; AA rating by Fitch) cited our strong management practices.

While it is important to recognize that the data contained here pre-date the onset of the COVID-19 pandemic, which has created enormous challenges for the university, this report also makes clear that UMass has a strong foundation that is reinforced by a statewide community of talented and innovative faculty, staff, students, alumni and benefactors. I have full confidence that UMass will continue to excel.

Sincerely,

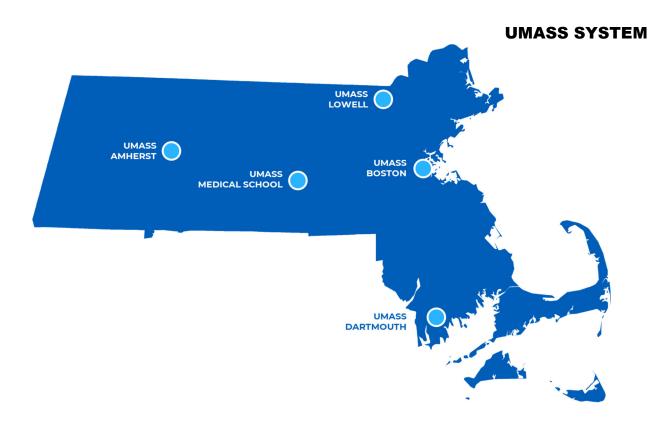
Martin T. Meehan

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President

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| | UMASS LOWELL | |
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THE 2020 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 2020 Report on Annual Indicators is the 22nd annual report of the University of Massachusetts Performance Measurement System.

This report provides trustees, legislators, and state-level policymakers with information by which they can assess the University as compared with similar institutions and its 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

UMASS SYSTEM

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 a leadership role in public service
- Increase endowment
- Improve administrative and IT services
- Develop the 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 2020 Report on Annual Indicators is in the fifth year of the current cycle and thus, is expected to be reviewed in the coming academic year.

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 selected medical schools in the United States, while their 'endowment' peer group consists of all public medical schools. 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 the relevant financial group peers (a small group of public university systems in other states or Bond-rating peer group).

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

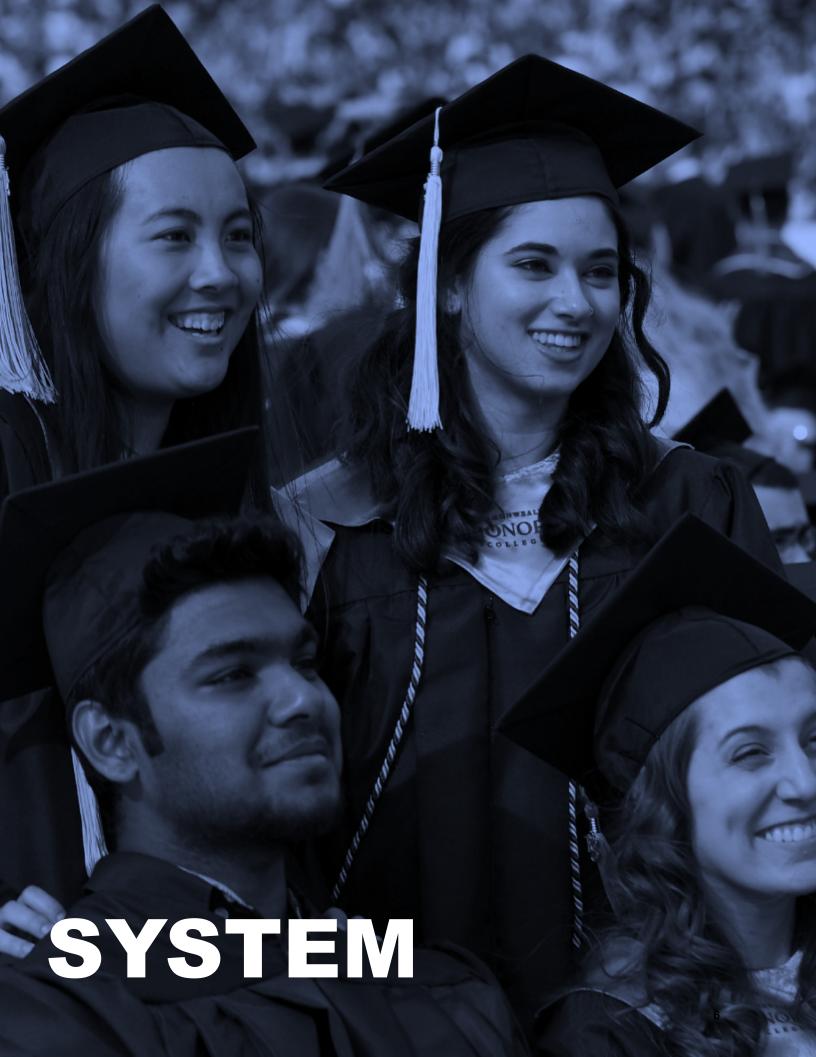
- Headlines from the 2020 Annual Indicators
- 2020 Annual Indicators at a Glance
- Infographics and Charts
- Definitions and Sources
- List of Institutional Peers

| Legislative Priorities | UMass Strategic Priorities | 2020 ANNUAL INDICATORS |
|-----------------------------|---|---|
| | Improve student learning experience | Average High-School GPA of Freshmen SAT Scores of Freshmen 25th - 75th Percentile Average Average GPA of Entering Transfer Students Mean MCAT Scores of Entering Students (UMMS Only) Student Satisfaction with Educational Experience Student-Faculty Ratio Technology-Enhanced Classrooms Doctoral Degrees Awarded |
| ACADEMIC QUALITY | Strengthen research and development Imp | Postdoctoral Appointees Total R&D Expenditures 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 FT Faculty Federal R&D Expenditures per FT Faculty Sponsored Instruction/Outreach per Faculty NIH Funding Among Medical Schools (UMMS Only) US News Ranking in Primary Care Medicine (UMMS Only) Patent Applications License Income |
| | Renew faculty | Utilization of Shared High-Performance Computing Research Resources Percent Tenured/Tenure-Track Faculty FTE New Tenured/Tenure-Track Faculty Hired New Tenured/Tenure-Track Faculty Hired as Percent of All Tenured/Tenure-Track Faculty Tenured/Tenure-Track Faculty Faculty FTE Faculty-of-Color Women Faculty 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 |

| Legislative Priorities | UMass Strategic Priorities | 2020 ANNUAL INDICATORS | | | | | |
|----------------------------------|---|--|--|--|--|--|--|
| | | Percent UGs who are Students of Color | | | | | |
| Z | | Percent First-Time UGs who are First Generation in College | | | | | |
| OIT: | | Percent First-Time UGs who have English as Second Language | | | | | |
| SFAC | mate | Percent UGs who are International | | | | | |
| МАТІ | e clii | Number of Students who participated in Study Abroad program | | | | | |
| S Q | sitiv | Freshmen One-Year Retention Rate | | | | | |
| STUDENT SUCCESS AND SATISFACTION | Diversity and positive climate | Freshmen Four-Year Graduation Rate | | | | | |
| CC | y an | Freshmen Six-Year Graduation Rate | | | | | |
| ı su | ersit | Transfer One-Year Retention Rate | | | | | |
| EN L | Dive | Transfer Four-Year Graduation Rate | | | | | |
| ļ | | Student Achievement Measure | | | | | |
| S | | Alumni Participation Rate | | | | | |
| | Alumni Participation Rate Match Rate/Choice of Residency (UMMS Only) | Match Rate/Choice of Residency (UMMS Only) | | | | | |
| _ | | Degree Completions | | | | | |
| <u> </u> | ıblic | Percent Mass Residents Attending UMass | | | | | |
| VEA | η r | In-State UG Enrollment by Region | | | | | |
| NO NO | le ii | Total Degrees and Certificates Awarded | | | | | |
| Σ | Develop a leadership role in public service | UMass as Percent of all Massachusetts Degrees | | | | | |
| ပ္ပ | | Percent Alumni who Remain in MA | | | | | |
| SERVICE TO THE COMMONWEALTH | se | Enrollment in Science, Technology, Engineering, and Mathematics (STEM) programs (Graduate/Undergraduate) | | | | | |
| 0 | a le | Degrees Awarded in STEM fields (Graduate/Undergraduate) | | | | | |
| NG N | dole | Service to State Agencies (\$) | | | | | |
| SER, |)eve | Health Care Awards (Undergraduate, Graduate Degrees; Certificates) | | | | | |
| | | Test Takers in MTEL Science and Math subject tests | | | | | |
| | Endowment | Endowment Assets and Annual Growth in Endowment | | | | | |
| | lown | Total Endowment per Annualized Student FTE | | | | | |
| | End | Private Funds Raised Annually | | | | | |
| 픋 | П | Primary Reserve* | | | | | |
| FINANCIAL HEALTH | and | Operating Margin (%) * | | | | | |
| H H | tion ices | Spendable Cash & Investments to Op Expenses (x)* | | | | | |
| NC! | istration Services | Campus Safety | | | | | |
| N A | Admin | Procurement Savings/Enhanced Services* | | | | | |
| ш | | Bond Ratings (Moody's, S&P, Fitch) | | | | | |
| | | Debt Service Burden | | | | | |
| | Infra- structure | Deferred Maintenance per GSF* | | | | | |
| *! | | ore no longer reported. *Indicators in Blue have been added. | | | | | |

^{*}Indicators in Red are no longer reported. *Indicators in Blue have been added

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ACADEMIC QUALITY

UMass continues to admit high-quality students. UMass attracts highly qualified applicants. Freshmen average SAT scores ranged from 1084 to 1296 across the four undergraduate campuses. Average high school GPA increased slightly from the previous year, ranging from 3.25-3.90.

UMass research capacity remains strong. In FY 2019, the system generated \$684 million in research expenditures, reflecting five consecutive years of over \$600 million in research funding. Furthermore, in 2018-19, the five campuses awarded a total of 920 doctoral degrees across various disciplines. These include 624 research/scholarship doctoral degrees and 296 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 1,200 researchers. The efficiency of facility operations equates to significant cost savings for power with a reduced environmental footprint.

UMass Medical School retains top 10% ranking in primary care. In the 2020 US News ranking, UMass Medical School ranked 15th among 152 medical schools and 33 schools of osteopathic medicine with an emphasis in primary care medicine.

Commercialization of UMass research expands. In FY 2019, license income for the University exceeded \$49 million. UMass ranks among the top US universities in license income.

ACCESS AND AFFORDABILITY

UMass serves citizens of the Commonwealth.Roughly four out of five (79%) UMass freshmen are Massachusetts residents, compared with one-fifth (24%) at its private peers in the state.

UMassOnline expands educational access.

UMassOnline reaches diverse and geographically dispersed learners. In AY 2018-19, course registrations for UMassOnline were at 83,985, representing a 6% increase over the previous year.

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, nearly four in ten (38%) UMass undergraduates are students of color. At UMass Boston, 60% of undergraduates (more than 6,300) are students of color, making it the most diverse public university in all of New England. As a point of comparison, approximately 32% of Massachusetts public high school graduates are students of color.

International enrollment are near all-time highs. There is a growing international presence among UMass students. There are 3,747 international

undergraduates' students (7%) across the five campuses. The University's graduate program has a stronger international presence, by comparison, representing 20% of all graduate students. International students comprise about 10% (nearly 7,200) of the total student population - including all undergraduates, graduates, and medical students.

Medical school graduates secure top choice residencies. Ninety-six percent 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

UMass remains a top destination for residents. Well over one-third (32%) 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' contributes to creating an educated citizenry and workforce. UMass awarded over 19,000 degrees and certificates in AY 2018-19. These include a total of 18,216 degrees (bachelor's and above), that represent 16% of all baccalaureate and graduate degrees (21% of bachelor's, 10% of master's degrees and 11% of doctoral and first professional degrees) awarded in the Commonwealth. 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 2018-2019, three in ten (32%) or 5,805 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 an 6% increase over this period.

Alumni reside and work in Massachusetts. Six of ten (60%) graduates overall of the University remain in the Commonwealth after graduation.

FINANCIAL HEALTH

Total Endowment stands at \$973 million. The market value of the University's endowment improved by 12% between FY 2018 and FY 2019.

Private Funds raised a total of \$134 million. The private giving to UMass increased by 11% in FY 2019 versus last year, this was the third year in a

row (and fourth in the last five) that annual private giving exceeded \$120 million.

Bond Ratings remain high. The University's high agency bond ratings for FY 2019 (Aa2 rating by Moody's; AA- rating by S&P; AA rating by Fitch) reflects continuing confidence in the institution's overall financial health.

AT-A-GLANCE

ACADEMIC QUALITY

| • | No. of Doctoral Degrees Awarded | 920 | • | License Income | \$50M |
|---|---------------------------------|--------|---|---|-------|
| • | Total R&D Expenditures | \$684M | • | Number of Active Labs/ Researchers using Shared Cluster | 3036 |
| • | Patent Applications | 203 | • | CPU Utilization | 9409 |

ACCESS AND AFFORDABILITY

| • | Percent of First-year Undergraduates from Massachusetts | 79 % | Online Course Registrations | 83,985 |
|---|---|-------------|---|--------|
| • | Percent of Undergraduates from Massachusetts | 83% | Annual Growth in Online Course Registrations | 6% |

STUDENT SUCCESS AND SATISFACTION

| • | Percent Undergraduates who are Students of Color | 38% | • | Total Students who Participated in a Study Abroad Program | 1,738 |
|---|---|-------|---|--|-------|
| • | Undergraduates who are International | 3,747 | | | |

SERVICE TO THE COMMONWEALTH

| • | Enrollment by Massachusetts Region | | • | Percent Alumni who Remain in MA | 60% |
|---|------------------------------------|--------|---|--------------------------------------|--------------|
| | Undergraduates from Greater Boston | 36% | • | Enrollment in STEM Programs | 41,216 (37%) |
| | Undergraduates from Northeast | 26% | | Undergraduate | 20,608 (37%) |
| | Undergraduates from Southeast | 19% | | Graduate | 20,608 (37%) |
| | Undergraduates from Central | 11% | • | Degrees Awarded in STEM Fields | 5,805 (32%) |
| | Undergraduates from Western | 7% | | Undergraduate | 4,253 (32%) |
| • | Degree Completions | 18,265 | | Graduate | 1,552 (30%) |
| | Bachelor's | 13,157 | • | Certificates Awarded in STEM Fields | 258 (20%) |
| | Master's | 4,188 | • | Degrees Awarded in Healthcare Fields | 2,145 |
| | Doctorates | 920 | • | MTEL Science and Math Test-Takers | 254 |

UMASS SYSTEM

AT-A-GLANCE

FINANCIAL HEALTH

| • | Total Endowment | \$973M | • | Debt Service Burden | 6.6% |
|---|-------------------------------|--------|---|---|------|
| • | Annual Growth in Endowment | 11.6% | • | Operating Margin (%) | 2.7% |
| • | Private Funds Raised Annually | \$134M | • | Spendable Cash & Investments to Operating Expenses | 0.47 |

ACADEMIC QUALITY

DOCTORAL DEGREES AWARDED

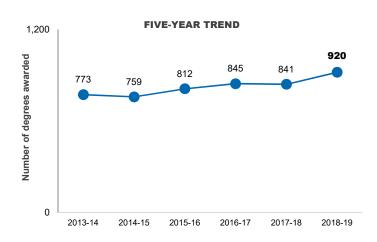
920

Degrees Awarded in 2018-19 **10%**

One-year % change (vs. 2017-18)

19%

Five-year % change (vs. 2013-14)



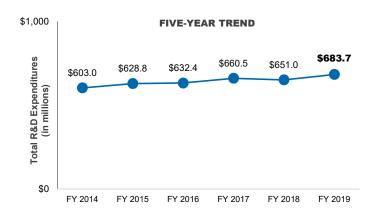
TOTAL R&D EXPENDITURES

\$683.7

Million in FY 2019 **5%**

One-year % change (vs. FY 2018) **13%**

Five-year % change (vs. FY 2014)



PATENT APPLICATIONS

203

Patent Applications in FY 2019 **11%**

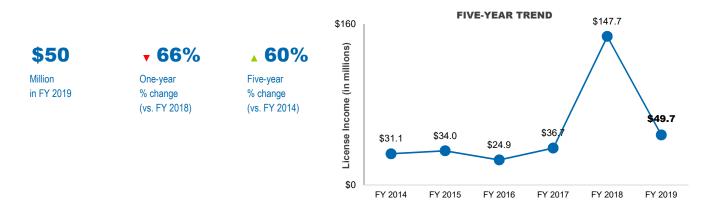
One-year % change (vs. FY 2018) 29%

Five-year % change (vs. FY 2014)

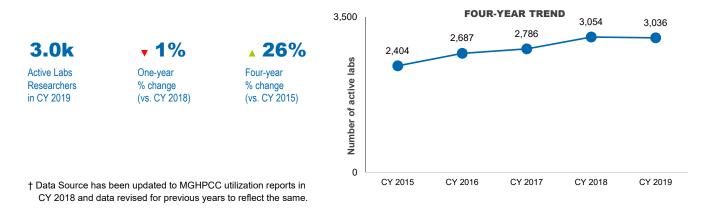


ACADEMIC QUALITY

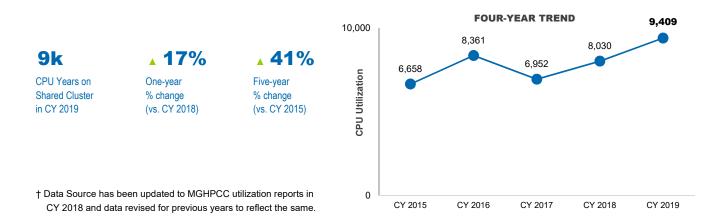
LICENSE INCOME



UTILIZATION OF SHARED HIGH PERFORMANCE COMPUTING RESEARCH RESOURCES[†] NUMBER OF ACTIVE LABS/RESEARCHERS USING SHARED HPC CLUSTER



CPU UTILIZATION (CPU YEARS USED ON SHARED HPC CLUSTER)

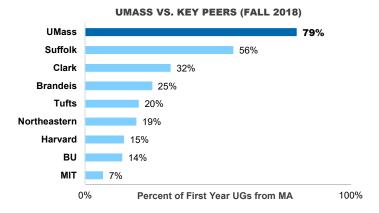


ACCESS AND AFFORABILITY

UNDERGRADUATE ENROLLMENT FROM MASSACHUSETTS

PERCENT OF FIRST YEAR UNDERGRADUATE STUDENTS

79%UMass first-year
UGs from MA
in Fall 2018



UMASS UNDERGRADUATES: ALL STUDENTS

47.8k

UMass UGs from MA in Fall 2019

83%

UMass % UGs from MA in Fall 2019 **1%**

One-year % change (vs. Fall 2018)

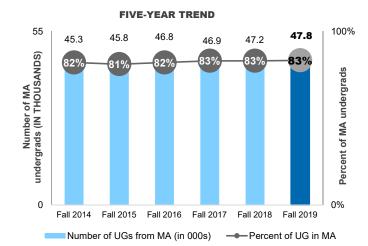
. 0

One-year % point change (vs. Fall 2018) **√** 5%

Five-year % change (vs. Fall 2014)

1

Five-year % point change (vs. Fall 2014)



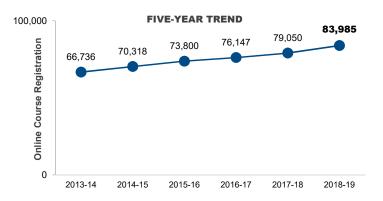
ACCESS AND AFFORABILITY

ONLINE COURSE REGISTRATIONS



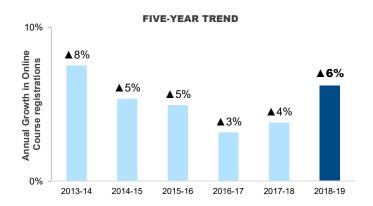






ANNUAL GROWTH IN ONLINE COURSE REGISTRATIONS

6%Annual Growth Online Course Registrations in 2018-19



STUDENT SUCCESS AND SATISFACTION

UNDERGRADUATE STUDENTS OF COLOR

UMASS Fall 2019 VS. MA PUBLIC HS CLASS OF 2016





A 12%

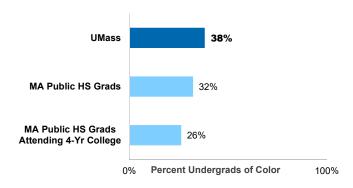
Comparison vs.

MA Public HS

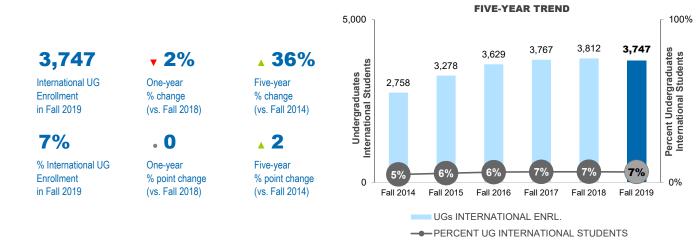
Graduates

Attending 4-Yr

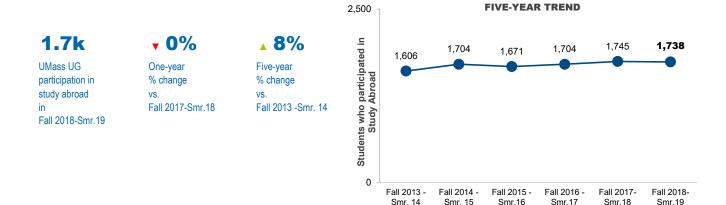
College Class of 2016



INTERNATIONAL UNDERGRADUATES



TOTAL STUDENTS WHO PARTICIPATED IN A STUDY ABROAD PROGRAM



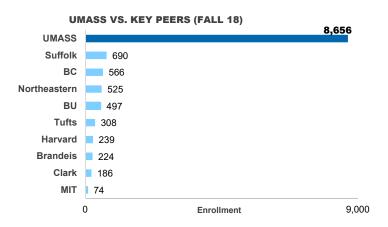
ENROLLMENT OF MASSACHUSETTS RESIDENTS*

72%
Of all MA FY* UGS
enrolled at UMass or
key private peers
are enrolled at UMass
(Fall 2016)

32%
Of all MA FY* UGS
enrolled at a MA
4 year college/university
are enrolled at UMass
(Fall 2016)

(Fall 2016)

*Undergraduate first-year (FY) students



ENROLLMENT BY MASSACHUSETTS REGION*

36%

Of all MA UGs enrolled at UMass come from Greater Boston

62%

Of all MA UGs enrolled at Dartmouth come from Southeast MA **31%**

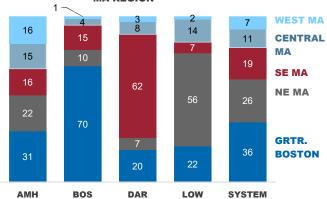
Of all MA UGs enrolled at Amherst come from Greater Boston

56%

Of all MA UGs enrolled at Lowell come from Northeast MA **70%**

Of all MA UGs enrolled at Boston come from Greater Boston





DEGREE COMPLETIONS

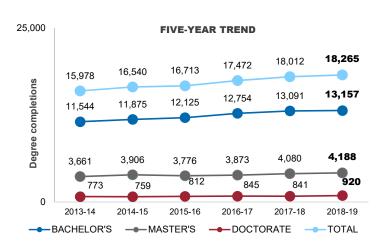
18k

Total degree completions in 2018-19

1%

One-year % change in total degree completions (vs. 2017-18) 14%

Five-year % change in total degree completions (vs. 2013-14)



AWARDS CONFERRED BY FIELD

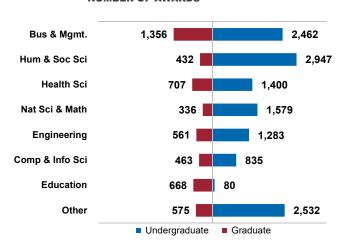
NUMBER OF AWARDS

21%

Of all UMass degree completions are in Bus & Mgmt. in 2018-19 19%

Of all UMass degree completions are in Hum & Soc Sci in 2018-19 **12%**

Of all UMass degree completions are in Health Sci in 2018-19



UMASS DEGREES AS PERCENTAGE OF ALL MASSACHUSETTS DEGREES

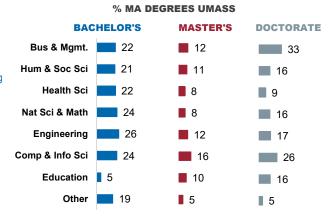
Of all MA degree completions awarded by UMass in 2018-19

16%

17%

Of all MA business degree completions awarded by UMass in 2018-19 20%

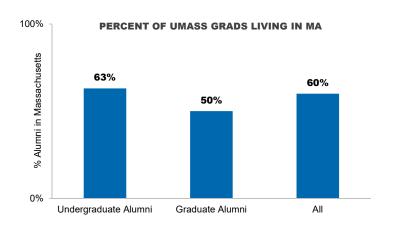
Of all MA engineering degree completions awarded by UMass in 2018-19



PERCENT OF GRADUATES WHO LIVE IN MASSACHUSETTS

60%

Of all UMass Alumni live in the Commonwealth



ENROLLMENT IN STEM PROGRAMS

20.6k
UG enrollment in

UG enrollment in STEM fields in Fall 2019

37%

Percent of total UG enrollment in STEM fields in Fall 2019 **1%**

One-year % change (vs. Fall 2018)

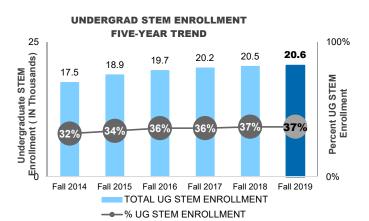
. 0

One-year % point change (vs. Fall 2018) **18%**

Five-year % change (vs. Fall 2014)

_5

Five-year % point change (vs. Fall 2014)



20.6k

Grad enrollment in STEM fields in Fall 2019

37%

Percent of total GR Enrollment in STEM fields in Fall 2019 1%

One-year % change (vs. Fall 2018)

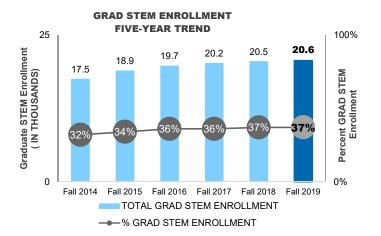
. 0

One-year % point change (vs. Fall 2018) **18%**

Five-year % change (vs. Fall 2014)

4

Five-year % point change (vs. Fall 2014)



^{*} Data for Years Prior to Fall 2018 been updated to reflect UMass Boston historical updates

41.2k

Total enrollment in STEM fields in Fall 2019

37%

Percent of total enrollment in STEM fields in Fall 2019 1%

One-year % change (vs. Fall 2018)

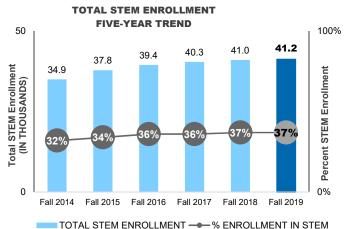
. 0

One-year % point change (vs. Fall 2018) **18%**

Five-year % change (vs. Fall 2014)

4

Five-year % point change (vs. Fall 2014)



DEGREES AWARDED IN STEM FIELDS





in 2018-19



5 Five-year % point change (vs. 2013-14)

Five-year

% change

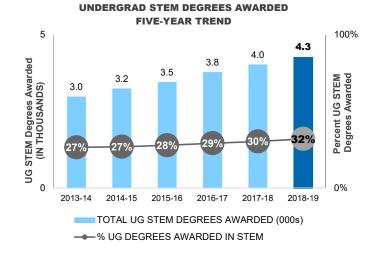
0

Five-year

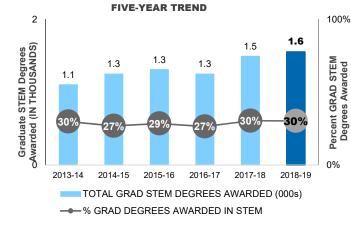
% point change

(vs. 2013-14)

(vs. 2013-14)



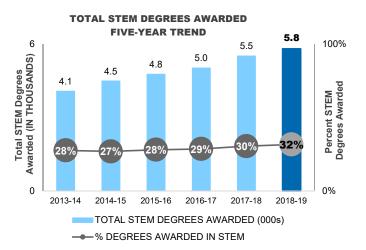
4% 1.6k 41% GR degrees awarded One-year in STFM fields % change in 2018-19 (vs. 2017-18) 30% O Percent of Total Grad One-year degrees awarded in % point change STEM fields (vs. 2017-18)



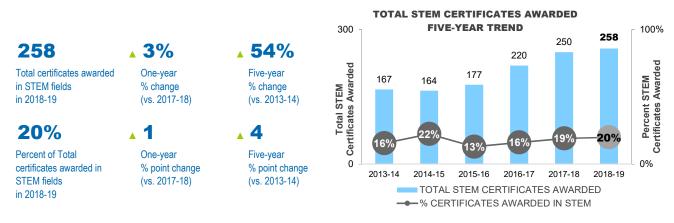
GRAD STEM DEGREES AWARDED

^{*} Data for Years Prior to 2017-18 been updated to reflect Boston Restate

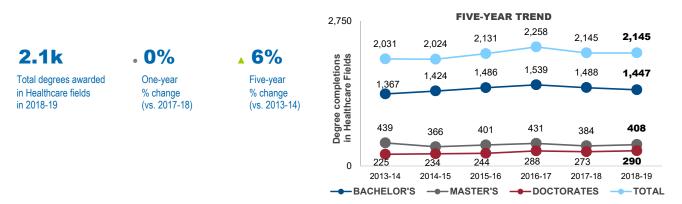




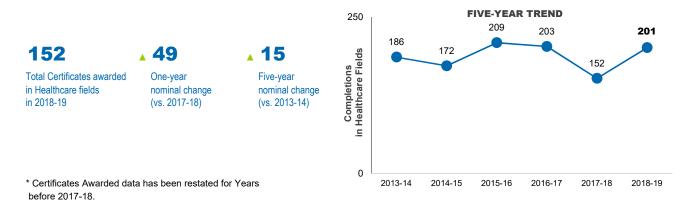
CERTIFICATES AWARDED IN STEM FIELDS



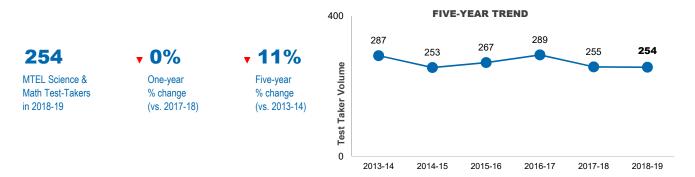
DEGREES AWARDED IN HEALTHCARE FIELDS



CERTIFICATES AWARDED IN HEALTHCARE FIELDS

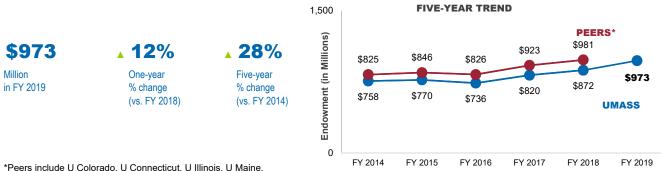


MTEL SCIENCE AND MATH TEST-TAKERS



FINANCIAL HEALTH

ENDOWMENT ASSETS

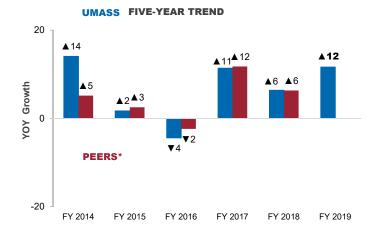


^{*}Peers include U Colorado, U Connecticut, U Illinois, U Maine, U Maryland, U Missouri, and U New Hampshire. Peer endowment changed in FY15. Peer FY19 data not available.



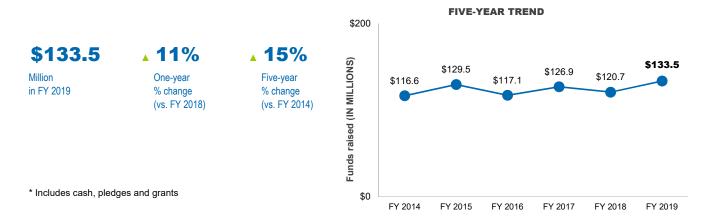
(vs. FY 2018)

(vs. FY 2014)

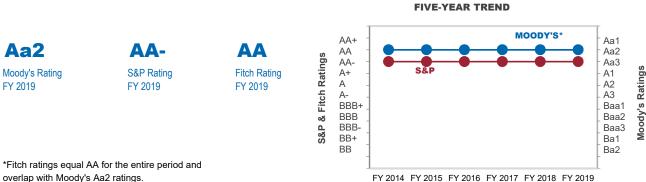


FINANCIAL HEALTH

PRIVATE FUNDS RAISED ANNUALLY*

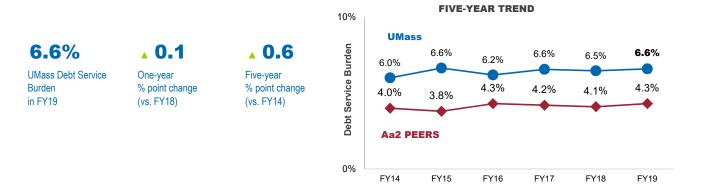


LONG-TERM BOND CREDIT RATINGS



overlap with Moody's Aa2 ratings.

DEBT SERVICE BURDEN



FINANCIAL HEALTH

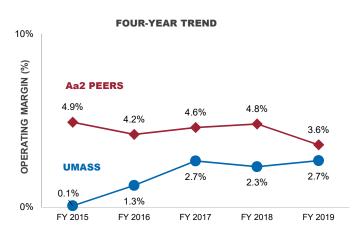
OPERATING MARGIN (%)

2.7%

UMass Operating Margin in FY 2019 **▲ 0.3**

One-year % point change (vs. FY 2018) **2.6**

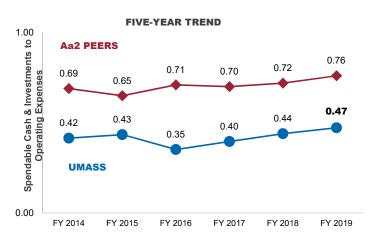
Four-year % point change (vs. FY 2015)



SPENDABLE CASH & INVESTMENTS TO OPERATING EXPENSES

0.47

Spendable Cash & Investments to Operating Expenses in FY 2019



ACADEMIC QUALITY INDICATORS

Doctoral Degrees Awarded. Total number of Doctorates awarded by UMass campuses for the academic year 2016-17, which includes August/September, January/February and May award dates. These include both research/scholarship and professional practice doctorates. Aggregated across all UMass campuses for System total.

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.

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

Number of Active Labs. The total number of MGHPCC active user counts across the five UMass campuses.

ACCESS AND AFFORDABILITY INDICATORS

Percentage of Undergraduate Students from Massachusetts. Percentage of total undergraduate students who are residents of Massachusetts.

Online Course Registrations and Annual Growth Rate. Total course enrollments in online

courses. Percentage rate of growth in annual course registrations. Academic Year 2017-18 represents Fall 2017, Winter 2018, Spring 2018, and Summer 2018 enrollments. Data are for fully online (100%). Source: UMassOnline.

STUDENT SUCCESS AND SATISFACTION INDICATORS

Undergraduate 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.

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

permanent residents, refugees, or US citizens. Aggregated across all UMass campuses for System total.

Total Students Who Participated in a Study Abroad Program. Number of students who participated in a credit-bearing study abroad program outside of the U.S. over the most recent academic year, either at UMass or elsewhere.

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 Massachusetts 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.

Awards 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
undergrad and grad degree recipients who currently
reside in Massachusetts based on alumni records.

Enrollment in STEM Programs. 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 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 and Annual Growth in

Endowment. The total value of the endowment (includes true and quasi-endowments) at the end of the fiscal year as reported in the UMass Annual BOT report, and the percent change from the previous year. Comparative data are from IPEDS, financial statements, and the 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.

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.

FINANCIAL HEALTH INDICATORS

Debt Service Burden. Compares the relative cost of borrowing to overall expenditures.

Debt service (P&I) / Total expenses

Operating Margin (%). Indicates the excess margin (or deficit) by which annual revenues cover annual expenses (excluding unrealized gains or losses).

(Total revenues - Total expenses)/Total revenues

Spendable Cash & Investments to Operating

Expenses. Measures the extent to which the University can rely on wealth that can be accessed over time or for a specific purpose to operate.

(Cash & investments – debt service reserve funds + permanently restricted pledges receivable – permanently restricted Net Assets)/Total expenses

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

Moody's Aa2 Peers

Alamo Community College District, TX

Arizona State University, AZ

Auburn University, AL

Board of Regents of The University System of

Georgia, GA

California State University, CA

City University of New York, NY

Clemson University, SC

Cuyahoga Community College District, OH

Florida State University, FL

Houston Community College System, TX

Iowa State University of Science & Technology, IA

Michigan State University, MI

Mississippi Institutions of Higher Learning, MS

Nevada System of Higher Education, NV

State University of New York, NY

State University System of Florida, FL

Texas State University System, TX

University of Alabama at Birmingham, AL

University of Massachusetts 2020 Performance Measurement System

PEER INSTITUTIONS FOR UMASS SYSTEM

University of Kansas, KS **Moody's Aa2 Peers**

University of Kentucky, KY University of Alabama, AL

University of Massachusetts, MA University of Arizona, AZ

University of North Texas System, TX University of Arkansas, AR

University of Oregon, OR University of California, CA

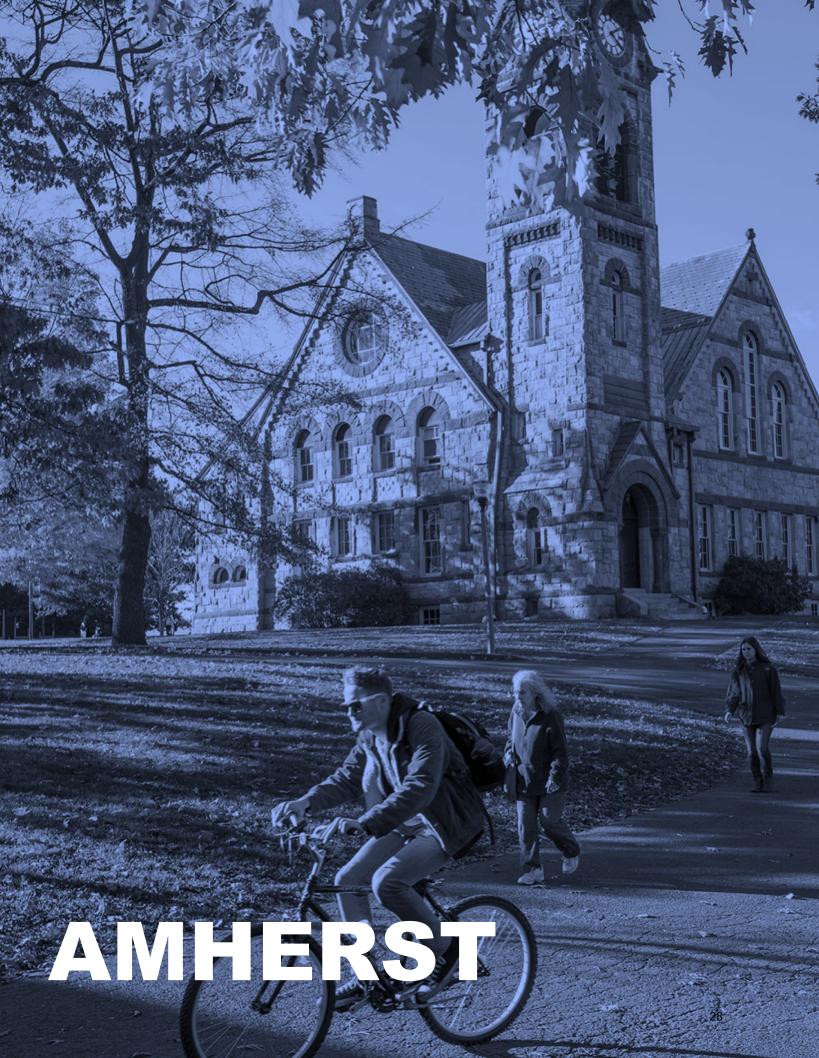
University of South Carolina, SC University of Florida, FL

University of Wyoming, WY University of Georgia, GA

University of Hawaii, HI

Please Note: Unless otherwise specified, all data are University of Houston System, TX

from the UMPO - Office of Institutional Research.



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 highest research activity 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 65 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.

Student Academic Quality. The academic profile of entering students has made impressive gains in recent years, evidenced by the growth in high school GPA and test scores. The high school GPA of entering students increased from 3.64 in 2011 to 3.90 in 2019. Virtually all (99%) students entered UMass Amherst with a high school GPA of 3.0 and above. Average SAT and ACT scores continue to increase. The SAT score exceeds the peer group at both the 25th and 75th percentiles for the fall 2019 entering class. Further, seniors report high satisfaction with their undergraduate experience. Results from the 2017 National Survey of Student Engagement (NSSE) show that 90% of seniors rated their UMass Amherst educational experience positively, and increasing numbers rated it as excellent.

Advanced Training. The campus has demonstrated strength in the education and training of pre- and post-doctoral researchers. UMass Amherst is below the peer median for the number of doctoral degrees awarded. The number of post-doctorates receiving training has now

increased back to levels from four years ago. Some of the decreases 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 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 11% over the last five years to over \$223 million. Per faculty expenditures increased after several years of decline; increasing by 5% in the past five years.

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 stable but continues to be below the peer median. The number of prominent grant and fellowship program awards has increased over the last three years remains above the peer median for 2018. A more comprehensive view of awards from Academic Analytics, another source of awards data, shows that UMass Amherst faculty have received over 1,000 nationally or internationally competitive awards.

In recent years, the campus invested in tenuresystem faculty, and the number of faculty has grown by 4% since 2014. Nevertheless, it is considerably smaller than other top public research universities. Continued growth in the tenuresystem 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 Fall 2018, 27% of full-time, in-state students qualified for Pell grants. Eighty-four 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. The proportion of students graduating with debt continues to decrease.

STUDENT SUCCESS AND SATISFACTION

Most UMass Amherst students have a positive educational experience. Ninety-one percent of students return for their sophomore year and 82% graduate within six years from UMass Amherst, the highest graduation rate observed since the campus began tracking this metric. The campus has seen a rapid improvement in the four-year graduation rate, which has increased from 63% for the Fall 2008 cohort to 77% for the Fall 2015 cohort. Retention and graduation rate improvements have closed the gap with peer institutions with the graduation rate now exceeding the median peer rate.

The campus continues to take important and coordinated action steps to support undergraduate student success, engaging across departments and varied partnerships. The Student Success unit coordinates programs and cross-disciplinary teams to focus efforts on student onboarding, retention, degree completion, and direct support for our most vulnerable populations.

Integrated and holistic academic advising remains a key component of student support toward degree completion. Student Success works with the Schools and Colleges through the Success@UMass professional development series on advising best practices. Our partnership with EAB provides access to the predictive analytics and coordinated care, best practice research studies, and strategic consulting to enhance the University's ability to understand and improve student academic pathways and decrease barriers to degree progress. Through EAB's Navigate platform, the Student Success unit oversees the Academic Alert program which allows instructors to reach out to students struggling in their courses and connect those students in a coordinated manner with academic supports and success strategies. Among these are the Learning Resource Center's course-based supplemental instruction (tutoring and study groups) and the Student Success Toolkit study skills series.

A sense of belonging is a key component to college student persistence, and the Student Success unit delivers supplemental resources for First Year student seminars and Residential Academic Programs courses to increase student engagement. Student Success programs emphasize support of priority populations: First

Generation College Students, transfer students, students historically marginalized in higher education, and students experiencing financial insecurity. Extending the EAB Navigate platform to departments in Student Affairs and Campus Life, specifically the Center for Multiculturalism and Student Success, has integrated success coaching touch points for students of color and foster youth.

To support particularly vulnerable students considering withdrawal or re-enrollment after time away, the Dean of Students Office coordinates with schools and colleges via their case management structure and offers short-term loans, micro-grants. and supply closets to assist students in financial crisis. The Senior Completion Committee reviews students who are very close to graduating and are having difficulty meeting their final financial need to complete their degree. The committee works with students on an integrated completion plan and can provide emergency grants to help support the student in their final semester or year toward degree completion. More broadly, Student Success provides trained peer financial coaching for any student through the Smart About Money program. and all entering students are introduced to money management during New Student Orientation.

UMatter at UMass continues to be an important initiative that includes particular attention to student wellbeing. In 2019-2020, UMass Amherst joined the JED Campus Program, 4-year planning initiative targeting mental health and resilience. A Healthy Minds Study was conducted to develop a baseline assessment of student wellbeing and mental health. The multidisciplinary JED committee of 50 members is now focused on fostering interpersonal connection and strengths-based programs and infrastructures. A 2020 campus-wide self-study and will inform an action plan to span over the next three years.

The campus has made progress in increasing the diversity of the student body. The Fall 2019 entering class was the most diverse group of students in history (33% ALANA); overall, three in ten undergraduates were students of color. Also, over one-fifth 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.

STUDENT SUCCESS AND SATISFACTION

Under the leadership of the new (appointed June 1, 2020) Associate Provost for Career and Professional Development, career development programs focused on three main areas: student career readiness, employer relations and career analytics. Taking a holistic approach, the range of career readiness needed was considered across developmental levels from first year through graduating senior. Programming included career exploration, skills-building and networking. The

campus hosted over 20 career fairs and 150 employer recruiting events over the past year. One priority was measuring career outcomes and a campus-wide First Destination Survey (FDS) was initiated to understand the future plans of the graduating seniors. The results of this survey are being used to develop a strategic plan for reaching out to employers within the Commonwealth and beyond to provide more opportunities for internships co-ops and full-time positions.

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 2019, 40% of baccalaureate and over one-third of graduate students were enrolled in Science, Technology, Engineering and Mathematics (STEM) programs, and 34% of degrees awarded at the undergraduate and 35% 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 programs, increasing summer and continuing and professional education revenue, attracting more donor support and targeting small increases in outof-state enrollment. Investment in capital infrastructure, strategic 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 academically accomplished students; 2) establish the campus as a "partner of choice" with a broad range of stakeholders vital to the campus; 3) establish the campus as a community of choice that attracts and retains contributors of all kinds. Mobilizing resources to achieve these goals remains a key strategy, and annual unit plans must demonstrate they are aligned with these campus objectives.

The Office of Advancement has been working closely with our campaign consultant, Grenzebach, Glier & Associates (GG+A), to prepare the division

for the next comprehensive campaign. Several changes were implemented, many recommended by GG+A in its campaign readiness report. We began work to prepare a comprehensive case for support and commence a feasibility study, including preparing for feasibly briefings, feasibility interviews, and preparing data to survey 2,500 or our most loyal constituency. In consultation with GG+A, we paused on the feasibility study to allow time for the stock market to stabilize and economic recovery. Work continues on the case for support, campaign priorities, and the campaign goal and timeline.

In preparation for the campaign, we enhanced homecoming and other in person events in the fall and created a virtual community and opportunities for alumni to connect with each other in the spring. We hosted several meetings and virtual town halls where alumni, students, faculty, and staff could interact directly with the chancellor.

Also in preparation for the campaign, we continued work on a donor relationship management data conversion. We have enhanced our alumni and donor communications, implemented donor retention efforts, and expanded our gift planning outreach.

UMASS AMHERST

HEADLINES

FINANCIAL HEALTH

In response, we have seen an increase in alumni participation to donor conversion, an improvement in donor retention, and an increase in planned giving commitments creating a pipeline to help sustain the campaign efforts and thus the University well into the future.

AT-A-GLANCE

ACADEMIC QUALITY

| • | Average HS GPA of Freshmen | 3.90 | • | Total R&D Expenditures per Tenure System Faculty | \$198,380 |
|---|--|-----------|---|---|-----------|
| • | Average SAT Scores of Freshmen | | • | Patent Applications | 26 |
| | Arithmetic Mean | 1292 | • | License Income | \$739,749 |
| | 25 th – 75 th Percentile | 1190-1390 | • | Percent Tenured/Tenure-Track Faculty FTE | 69% |
| • | Average GPA of Entering Transfer Students | 3.40 | • | New Tenured/Tenure-Track Faculty Hired | 68 |
| • | Student Satisfaction with Educational Experience | 90% | • | As Percent of Total T/TT Faculty | 6% |
| • | Student-Faculty Ratio | 17:1 | • | Change in Tenured/Tenure-Track Faculty | 1% |
| • | Technology-Enhanced Classrooms | 303 | • | Change in Faculty FTE | 3% |
| • | No. of Doctoral Degrees Awarded | 389 | • | Full-Time Instructional Faculty | |
| • | No. of Research Doctoral Degrees Awarded | 350 | | Percent Faculty-of-Color | 25% |
| • | No. of Postdoctoral Appointees | 153 | | Percent Women Faculty | 45% |
| • | Total R&D Expenditures | \$223M | • | Faculty Awards | 15 |
| • | Total R&D Expenditures Ranking | 111 | • | National Academy Members | 8 |
| • | R&D Expenditures Ranking: Carnegie Peers, US Publics, Non-Medical | 11 | | | |

ACCESS AND AFFORDABILITY

| • | Percent In-State Pell Grant Recipients | 27% | • | Percent Undergraduates students from MA | 77 % |
|---|---|----------|---|--|-------------|
| • | Percent of Need Met for In-State Students Awarded Need-Based Aid | 04 /0 | • | Online Course Registrations | 26,797 |
| • | Average Debt of Students (UG Graduating Class) | \$31,755 | • | Annual Growth in Online Course Registrations | -1% |
| • | Percent Graduating Class with Debt (UG) | 62% | | | |

AT-A-GLANCE

STUDENT SUCCESS AND SATISFACTION

| • | Percent Undergraduates who are Students of Color | 30% | • | Freshmen Four-Year Graduation Rate | 77% |
|---|--|-------|---|---|-----|
| • | Percent First-Time Undergraduates who are First Generation in College | 22% | • | Freshmen Six-Year Graduation Rate | 82% |
| • | Percent First-time Undergraduates with English as a Second Language | 14% | • | Transfer (Full-time) One-Year Retention Rate | 90% |
| • | Percent Undergraduates who are International | 7% | • | Transfer (Upper Division) Four-Year Graduation Rate | 78% |
| • | Total Students who Participated in a Study Abroad Program | 1,197 | • | Alumni Participation Rate | 8% |
| • | Freshmen One-Year Retention Rate | 91% | | | |

SERVICE TO THE COMMONWEALTH

| • | Degree Completions | 8,446 • | Degrees Awarded in STEM Fields | 2,901 (34%) |
|---|---------------------------------|---------------|--------------------------------------|-------------|
| | Bachelor's | 6,356 | Undergraduate | 2,163 (34%) |
| | Master's | 1,701 | Graduate | 738 (35%) |
| | Doctorates | 389 • | Degrees Awarded in Healthcare Fields | 713 (9%) |
| • | Percent Alumni who Remain in MA | 54% | Undergraduate | 514 (9%) |
| • | Enrollment in STEM Programs | 11,991 (39%) | Graduate | 199 (12%) |
| | Undergraduate | 9,642 (40%) • | MTEL Science and Math Test-Takers | 23 |
| | Graduate | 2,349 (36%) | | |

FINANCIAL HEALTH

| • | Total Endowment | \$363.2M | • | Spendable Cash & Investments to Operating Expenses | 0.46 |
|---|--------------------------------------|----------|---|--|------|
| • | Annual Growth in Endowment | 4.7% | • | Debt Service Burden | 6.5% |
| • | Endowment per Annualized Student FTE | \$12,502 | • | Operating Margin (%) | 2.7% |
| • | Private Funds Raised Annually | \$42.2M | | | |

AVERAGE HIGH-SCHOOL GPA OF FIRST-TIME FRESHMEN

3.90

Average HS GPA in Fall 2019

. 0.00

One-year nominal change (vs. Fall 2018)

0.12

Five-year nominal change (vs. Fall 2014)



SAT SCORES OF FRESHMEN

2017

1390

75th Percentile

in Fall 2019

SAT Scores of Freshmen

. 0 One-year nominal change (vs. Fall 2018)

6

75th Percentile Rank in Fall 2019

1190

SAT Scores of Freshmen One-year 25th Percentile in Fall 2019

nominal change (vs. Fall 2018)

6

25th Percentile Rank in Fall 2019

1395 1390 1385 1390 1385 1400 75 1360 %ile Range 25 1200 SAT Score %ile 1190 1180 1180 1175 1175 **UMA PEERS** 900 Fall Fall Fall

2018

2019

1292

Average SAT Scores of Freshmen in Fall 2019

One-year nominal change (vs. Fall 2018)



AVERAGE GPA OF ENTERING TRANSFER STUDENTS

3.40 Average transfer **GPA**

in Fall 2019

0.02

One-year nominal change (vs. Fall 2018)

0.08

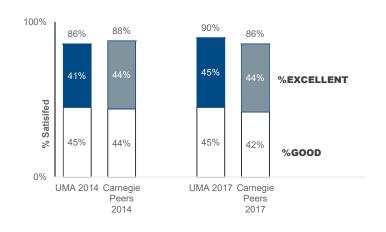
Five-year nominal change (vs. Fall 2014)



STUDENT SATISFACTION WITH EDUCATIONAL EXPERIENCE

90% Student Satisfaction as Good or Excellent in UMA 2017

Three-year % point change (vs. UMA 2014)



STUDENT-FACULTY RATIO

17:1 Student-Faculty

Ratio in Fall 2019 . 0

One-year nominal change (vs. Fall 2018)

. 0

Five-year nominal change (vs. Fall 2014)



TECHNOLOGY-ENHANCED CLASSROOMS

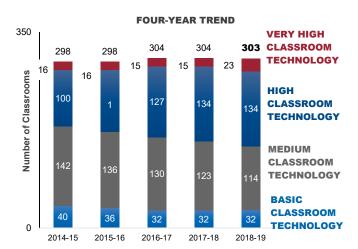
303

Total Technology Enhanced Classrooms in 2018-19 .0%

One-year % change (vs. 2017-18)

2%

Four-year % change (vs. 2014-15)



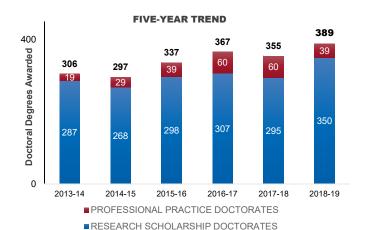
DOCTORAL DEGREES AWARDED

389

Doctoral Degrees Awarded in in 2018-19 34

One-year nominal change (vs. 2017-18) **83**

Five-year nominal change (vs. 2013-14)



350

8

Research Doctoral Degrees Awarded in 2018-19

Research Doctorate Ranking out of 11 in 2018-19 **55**

One-year nominal change (vs. 2017-18)

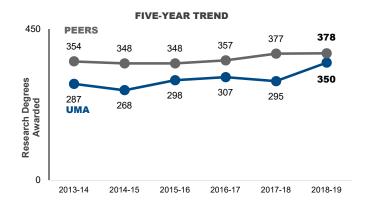
4

One-year Rank change (vs. 2017-18) 63

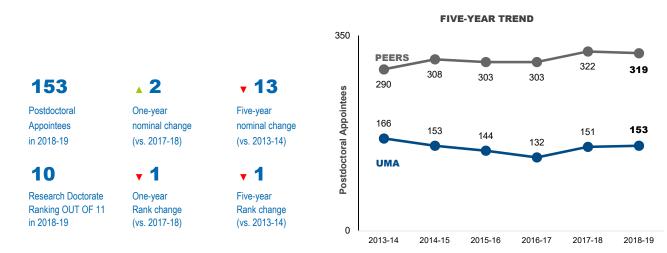
Five-year nominal change (vs. 2013-14)

1

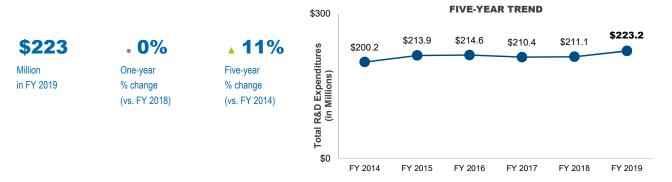
Five-year Rank change (vs. 2013-14)



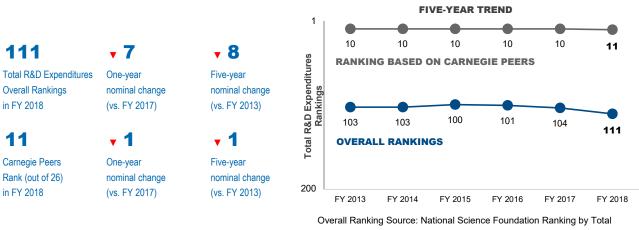
POSTDOCTORAL APPOINTEES



TOTAL R&D EXPENDITURES



TOTAL R&D EXPENDITURES RANKINGS



R&D Expenditures.

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

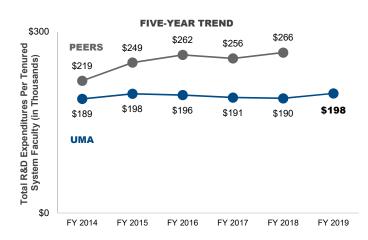
TOTAL R&D EXPENDITURES PER TENURED SYSTEM FACULTY

\$198k
Total R&D Expenditure

Total R&D Expenditure Per Tenured System Faculty in FY 2019 **4%**

One-year % change (vs. FY 2018) **▲ 5**%

Five-year % change (vs. FY 2014)



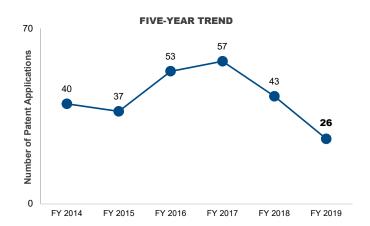
NUMBER OF PATENT APPLICATIONS

26

Patent Applications in FY 2019 **17**

One-year nominal change (vs. FY 2018) **14**

Five-year nominal change (vs. FY 2014)



LICENSE INCOME

\$740k

License Income in FY 2019

5%

One-year % change (vs. FY 2018) **2**%

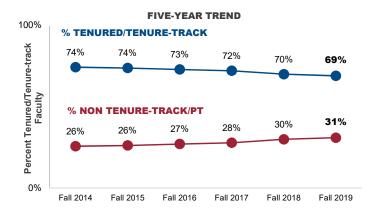
Five-year % change (vs. FY 2014)



^{*} Peer data for FY 2019 is currently not available.

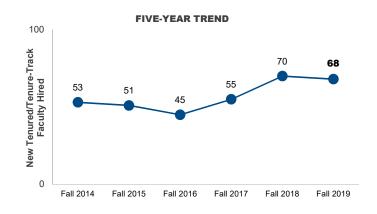
PERCENT TENURED/TENURE-TRACK FACULTY FTE





NEW TENURED/TENURE-TRACK FACULTY HIRED

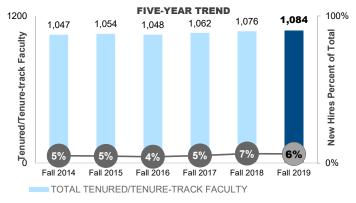




Data for "New Hires" is based on IPEDS definitions from 2016

NEW TENURED/TENURE-TRACK FACULTY HIRED AS PERCENT OF ALL TENURE-TRACK FACULTY





Data for "New Hires" is based on IPEDS definitions from 2016

--- NEW HIRES % OF TOTAL TENURED/TENURE-TRACK FACULTY

TENURED/TENURE-TRACK FACULTY

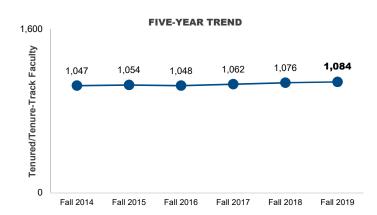
1,084
Total Tenured/
Tenure-track Faculty

in Fall 2019

1%

One-year % change (vs. Fall 2018) **4**%

Five-year % change (vs. Fall 2014)



FACULTY FTE

1,579

Faculty FTE in Fall 2019

Faculty Of Color

in Fall 2019

▲ 3%

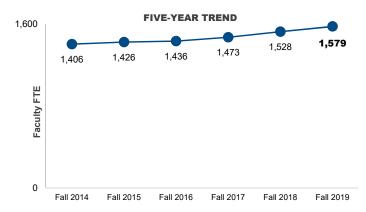
One-year % change (vs. Fall 2018)

12%

Five-year % change (vs. Fall 2014)

% point change

(vs. Fall 2014)



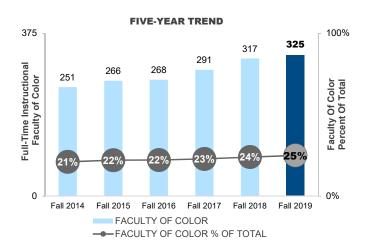
FACULTY-OF-COLOR

325 **74 8** Faculty Of Color One-year Five-year in Fall 2019 nominal change nominal change (vs. Fall 2018) (vs. Fall 2014) 25% <u>,</u> 4 Percent of One-year Five-year

% point change

(vs. Fall 2018)

Faculty-of-Color based on US Citizens/Permanent Residents reporting Race/Ethnicity according to new IPEDS definitions.



WOMEN FACULTY

664

Women Faculty in Fall 2019

45%

Percent of Faculty Of Color in Fall 2019 **19**

One-year nominal change (vs. Fall 2018)

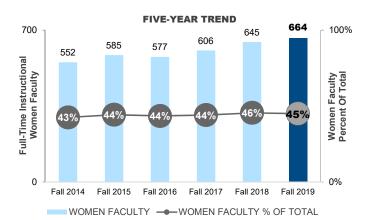
• 1

One-year % point change (vs. Fall 2018) 112

Five-year nominal change (vs. Fall 2014)

2

Five-year % point change (vs. Fall 2014)



FACULTY AWARDS

15

Faculty Awards in 2018

3

Peers Rank (out of 26) in 2018 **2**

One-year nominal change (vs. 2017)

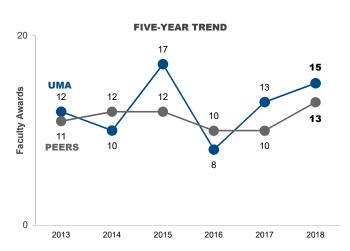
2

One-year nominal change (vs. 2017) **3**

Five-year nominal change (vs. 2013)

<u> 1</u>

Five-year nominal change (vs. 2013)



Source : The Top American Research Universities

NATIONAL ACADEMY MEMBERS

8

National Academy Members in 2018

10

Peers Rank (out of 26) in 2018 . 0

One-year nominal change (vs. 2017)

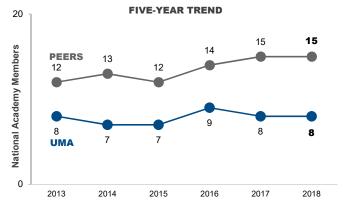
- 1

One-year nominal change (vs. 2017) . 0

Five-year nominal change (vs. 2013)

v 3

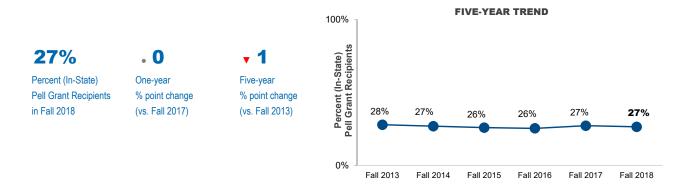
Five-year nominal change (vs. 2013)



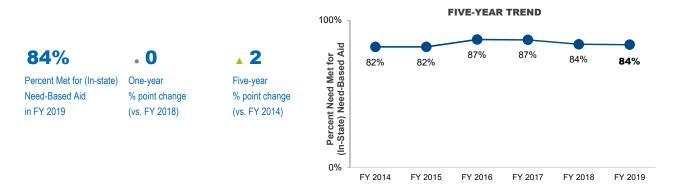
Source : The Top American Research Universities

ACCESS AND AFFORABILITY

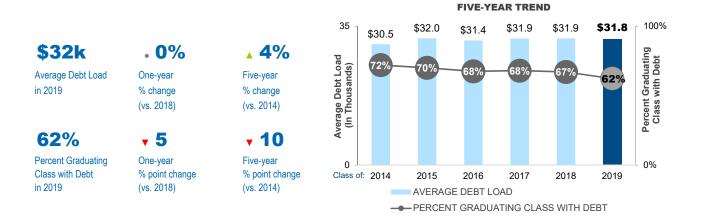
PERCENT IN-STATE PELL GRANT RECIPIENTS



PERCENT NEED MET FOR IN-STATE STUDENTS AWARDED NEED-BASED AID

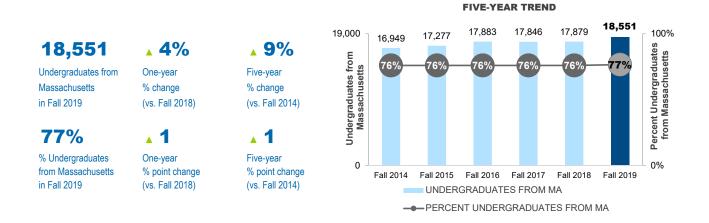


UNDERGRADUATE STUDENT DEBT LOAD OF GRADUATING CLASS

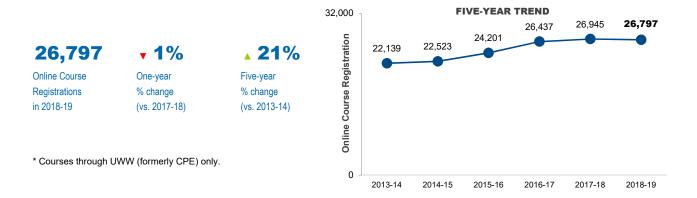


ACCESS AND AFFORABILITY

PERCENT UNDERGRADUATES FROM MASSACHUSETTS

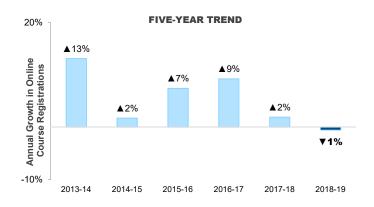


ONLINE COURSE REGISTRATIONS

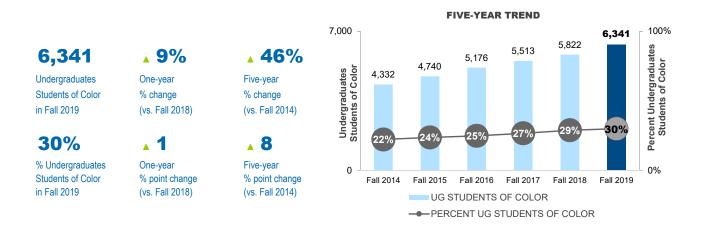


ANNUAL GROWTH IN ONLINE COURSE REGISTRATIONS

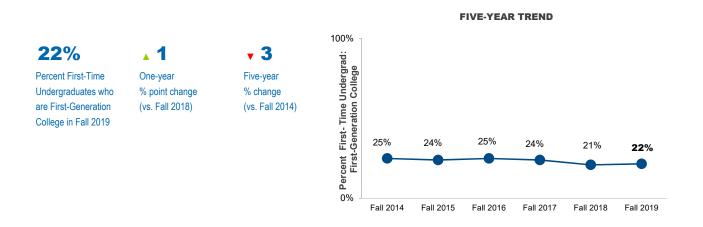
-1%Annual Growth Online Course Registrations in 2018-19



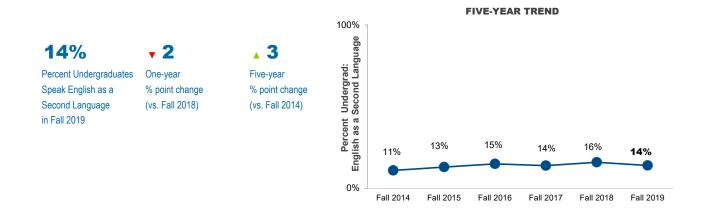
UNDERGRADUATE STUDENTS OF COLOR



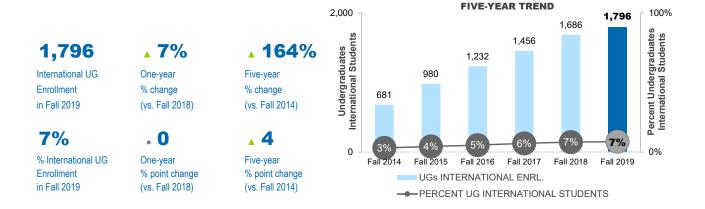
PERCENT FIRST-TIME UNDERGRADUATES WHO ARE FIRST-GENERATION IN COLLEGE



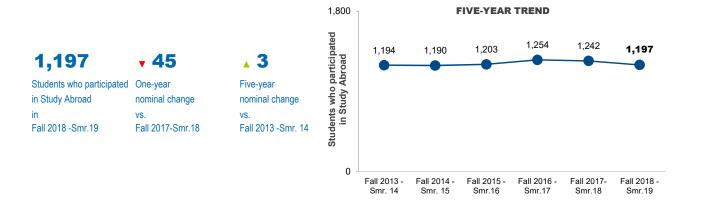
PERCENT FIRST-TIME, FULL-TIME UNDERGRADUATES WITH ENGLISH AS A SECOND LANGUAGE



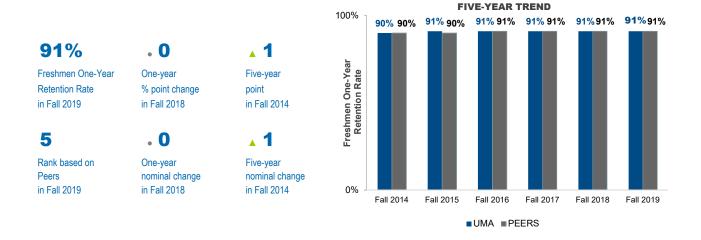
INTERNATIONAL UNDERGRADUATES



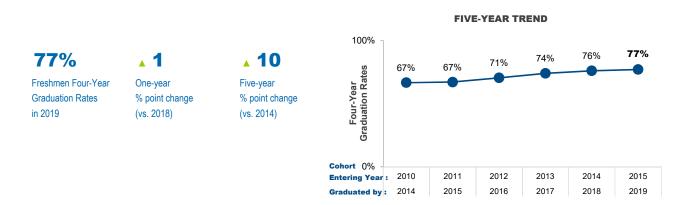
TOTAL STUDENTS WHO PARTICIPATED IN A STUDY ABROAD PROGRAM



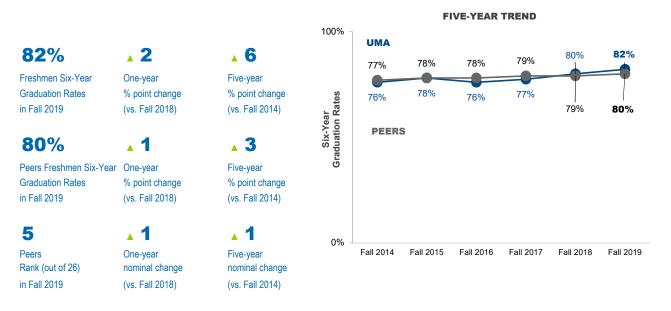
FRESHMEN ONE-YEAR RETENTION RATE



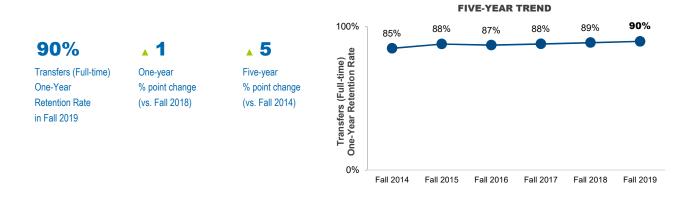
FRESHMEN FOUR-YEAR GRADUATION RATES



FRESHMEN SIX-YEAR GRADUATION RATE



TRANSFER (FULL-TIME) ONE-YEAR RETENTION RATE



TRANSFER (UPPER DIVISION) FOUR-YEAR GRADUATION RATE

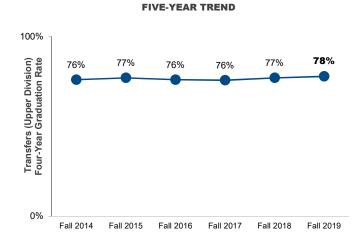
78%

Transfers (Upper Division) Four-Year **Graduation Rates** in Fall 2019

One-year % point change (vs. Fall 2018)

2

Five-year % point change (vs. Fall 2014)



STUDENT ACHIEVEMENT MEASURE

Cohort Starting in 2013-14

Bachelor's Degree within 4-years from any institution

78%

any institution

74%

Bachelor's Degree within 4-years from **UMass Amherst**

88% Bachelor's Degree

within 5-years from

81%

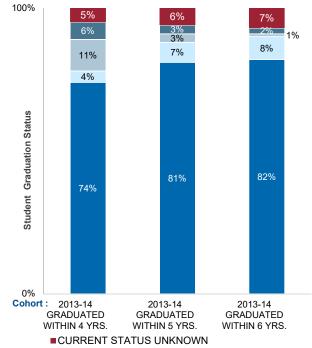
Bachelor's Degree within 5-years from **UMass Amherst**

90%

Bachelor's Degree within 6-years from any institution

82%

Bachelor's Degree within 6-years from **UMass Amherst**



- ENROLLED AT ANOTHER INSTITUTION
- ENROLLED AT UMASS AMHERST
- GRADUATED FROM ANOTHER INSTITUTION
- GRADUATED FROM UMASS AMHERST

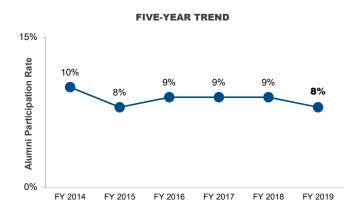
Source: Student Achievement Measure (SAM)

ALUMNI PARTICIPATION RATE



One-year
% point change
(vs. FY 2018)

Five-year % point change (vs. FY 2014)



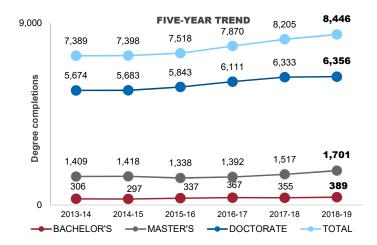
DEGREE COMPLETIONS

8,446Total degree completions 2018-19

3%

One-year % change in total degree completions (vs. 2017-18) **▲ 14%**

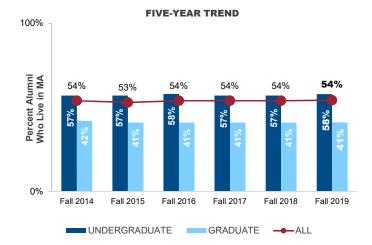
Five-year % change in total degree completions (vs. 2013-14)



PERCENT ALUMNI WHO LIVE IN MASSACHUSETTS

54%Of all UMass Alumni Iive in the Commonwealth % point change in Fall 2019 (vs. Fall 2018)

Five-year % point change (vs. Fall 2014)



ENROLLMENT IN STEM PROGRAMS

9,642 UG enrollment in STEM fields in Fall 2019

40%

Percent of total

STEM fields

in Fall 2019

UG enrollment in

One-year % change (vs. Fall 2018)

One-year

% point change

(vs. Fall 2018)

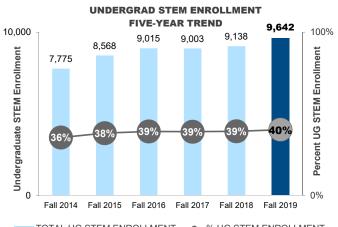
6%

Five-year % change (vs. Fall 2014)

24%

4 Five-year

% point change (vs. Fall 2014)



TOTAL UG STEM ENROLLMENT → % UG STEM ENROLLMENT

2,349

Grad enrollment in STEM fields in Fall 2019

% change (vs. Fall 2018)

One-year

2%

30%

Five-year % change (vs. Fall 2014)

36%

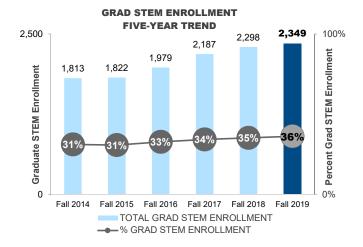
Percent of total Grad enrollment in STEM fields in Fall 2019

, 1

One-year % point change (vs. Fall 2018)

4 5

Five-year % point change (vs. Fall 2014)



11,991

Total enrollment in STEM fields in Fall 2019

in Fall 2019

5%

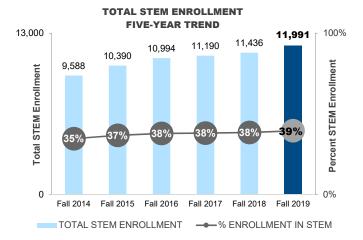
One-year % change % change (vs. Fall 2018) (vs. Fall 2014)

25% Five-year

4

39% Percent of total One-year enrollment in % point change STEM fields (vs. Fall 2018)

Five-year % point change (vs. Fall 2014)



DEGREES AWARDED IN STEM FIELDS

2,163

UG degrees awarded in STEM fields in 2018-19

One-year % change (vs. 2017-18)

4%

33%

% change (vs. 2013-14)

Five-year

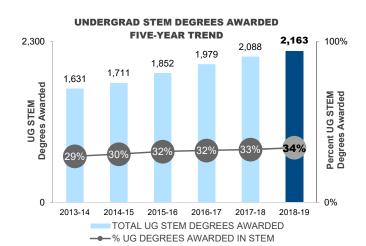
5

Percent of total UG degrees awarded in STEM fields in 2018-19

34%

One-year % point change (vs. 2017-18)

Five-year % point change (vs. 2013-14)



738

Grad degrees awarded in STEM fields in 2018-19

One-year % change (vs. 2017-18)

Five-year % change (vs. 2013-14)

52%

35%

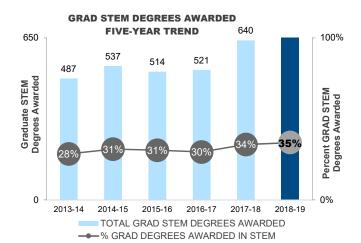
Percent of total Grad degrees awarded in STEM fields in 2018-19

One-year % point change (vs. 2017-18)

15%

7

Five-year % point change (vs. 2013-14)



2,901

Total degrees awarded in STEM fields in 2018-19

6% 37%

> Five-year % change (vs. 2013-14)

34%

One-year % point change

One-year

% change

(vs. 2017-18)

(vs. 2017-18)

Five-year % point change (vs. 2013-14)

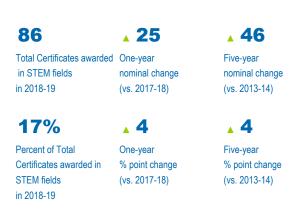


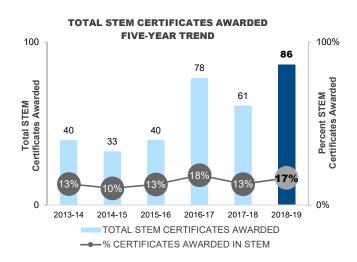
FIVE-YEAR TREND 3,100 2.901 100% 2,728 2,500 2 366 2,248 2,118 **Degrees Awarded** Percent STEM Degrees Awarded Total STEM 33% 32% 31% 30% 29% 0 0% 2013-14 2014-15 2015-16 2016-17 2017-18 2018-19 TOTAL STEM DEGREES AWARDED

TOTAL STEM DEGREES AWARDED

Percent of Total degrees awarded in STEM fields in 2018-19

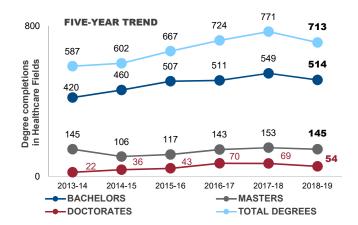
CERTIFICATES AWARDED IN STEM FIELDS



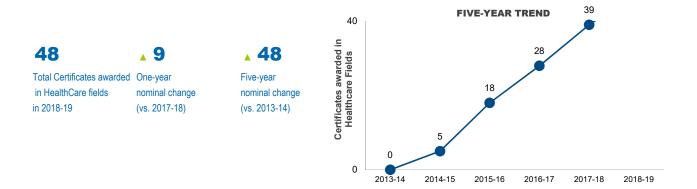


DEGREES AWARDED IN HEALTHCARE FIELDS



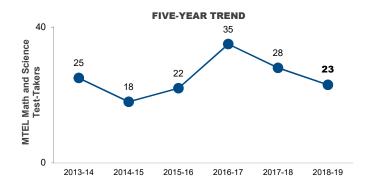


CERTIFICATES AWARDED IN HEALTHCARE FIELDS



MTEL SCIENCE AND MATH TEST-TAKERS





▼5.5%

FY 2016

FY 2017

FY 2018

FINANCIAL HEALTH

ENDOWMENT ASSETS AND ANNUAL GROWTH IN ENDOWMENT

FIVE-YEAR TREND 400 **Endowment (In Millions)** \$363.2 \$347.0 \$323.6 \$307.1 **18%** \$363M **5%** \$304.0 \$287.2 **Endowment Assets** One-year Five-year in FY 2019 % change % change (vs. FY 2018) (vs. FY 2014) FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **FIVE-YEAR TREND** 50% 4.7% YOY Growth **2.5 8.2** Annual Growth One-year Five-year ▲12.9% ▲12.7% in FY 2019 % point change % point change ▲7.2% **▲4.7%** (vs. FY 2018) (vs. FY 2014) ▼1.0%

-10%

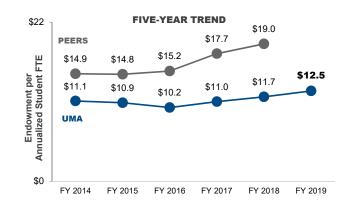
FY 2014

FY 2015

FY 2019

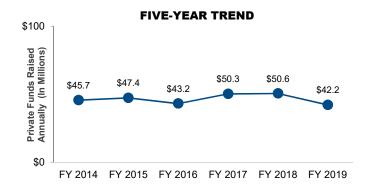
FINANCIAL HEALTH

ENDOWMENT PER ANNUALIZED STUDENT FTE



^{*} Peer data for FY 2019 not available for reporting purposes

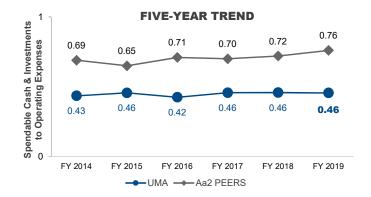
PRIVATE FUNDS RAISED ANNUALLY



SPENDABLE CASH & INVESTMENTS TO OPERATING EXPENSES

0.46

Spendable Cash & Investments to Operating Expenses in FY 2019



FINANCIAL HEALTH

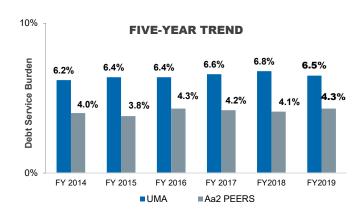
DEBT SERVICE BURDEN

6.5%

Debt Service Burden in FY2019 **v** 0.3

One-year % point change (vs. FY2018) **▲ 0.3**

Five-year % point change (vs. FY 2014)



OPERATING MARGIN (%)

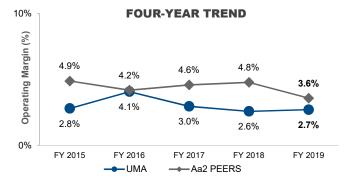
2.7%

Operating Margin (%) in FY 2019

▲ 0.1

One-year % point change (vs. FY 2018) **0.1**

Four-year % point change (vs. FY 2015)



ACADEMIC QUALITY INDICATORS

Average High School GPA of First-Time

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

SAT Scores of Freshmen. SAT scores of Freshmen. All reported SAT scores are based on the sum of the SAT MSS and the ERWS for entering freshmen. A redesigned SAT was used for Fall 2017 admissions; therefore, scores for Fall 2016 and before cannot be compared to scores for Fall 2017 and later. The average is the arithmetic mean of these SAT scores. Compare to Peer median and 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 most recently conducted National Survey of Student Engagement (NSSE).

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.

Doctoral Degrees Awarded. Number of doctorates awarded during an academic year, which includes September, February and May 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 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.

Total R&D Expenditures Ranking. Annual NSF ranking of Total R&D expenditures, for all postsecondary institutions participating in the NSF HERD Survey. 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.

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 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/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

University of Massachusetts 2020 Performance Measurement System

ACADEMIC QUALITY INDICATORS

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 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.

Faculty-of-Color. 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.

Women Faculty. The proportion of full-time instructional faculty who identify themselves as female.

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

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

ACCESS AND AFFORDABILITY INDICATORS

Percent (In-State) Pell Grant Recipients.

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

Percent 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 in-state undergraduate 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.

ACCESS AND AFFORDABILITY INDICATORS

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.

Percentage Undergraduates from

Massachusetts. Percentage of total undergraduate students who are "In State" or residents of Massachusetts based on tuition residency. For state-supported (day) students, tuition classification is used, whereas for CPE

students, the actual residency at time of matriculation is used.

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 self-identify as either African American/Black, Hispanic/ Latino, Asian, Hawaiian/Pacific Islander, American Indian/Alaskan Native, and/or Two or more races. Hispanic students who list one or more additional groups will be coded as Hispanic. Cape Verdean students who identify solely as Cape Verdean will be coded as Not Reported. Included only for U.S. Citizens and Permanent Residents who report race and ethnicity divided by total undergraduate U.S. citizens and permanent residents who report race/ethnicity.

Percent Undergraduates who are First Generation in College. Percent of first-time, full-time undergraduates where neither parent has earned a bachelor's degree. The source of this data field is the Common Application.

Percent first-time, full-time Undergraduates with English as a Second

Language. Percent of first-time, full-time undergraduates who speak another language at home. The source of this data field will be from the Common Application.

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 permanent residents, refugees, or US citizens.

Number of Students who Participated in a Study Abroad Program. Number of students who participated in a credit-bearing study abroad program outside of the U.S. over the most recent academic year, either at UMass or elsewhere.

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

Freshmen Four-Year Graduation Rate.

Percent of first-time, full-time, degree-seeking freshmen who entered UMass in a given Fall term and graduated from the institution by the end of their fourth year. Associates degree and CPE students are excluded.

Freshmen Six-Year Graduation Rate.

Percent of first-time, full-time freshmen who entered UMass in a given Fall term and had graduated from the institution within six years. Peer data are based on median as reported to IPEDS. Associates degree and CPE students are excluded.

University of Massachusetts 2020 Performance Measurement System

STUDENT SUCCESS AND SATISFACTION INDICATORS

Transfer (Full-Time) One-Year Retention

Rate. Percent of full-time transfer students at any level who entered UMass 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 in a given Fall term and had graduated from the institution within four years.

Student Achievement Measure. SAM tracks student movement across postsecondary institutions to provide a more complete picture of undergraduate

student progress and completion within the higher education system. SAM is an alternative to the federal graduation rate, which is limited to tracking the completion of first-time, full-time students at one institution.

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.

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. Unduplicated count of students enrolled in Science, Technology, Engineering, & Math (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. Number of undergraduate and graduate degrees 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 quasi-endowments) 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).

FINANCIAL HEALTH INDICATORS

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.

Debt Service Burden. Compares the relative cost of borrowing to overall expenditures. Debt service (P&I) / Total expenses

Operating Margin (%). Indicates the excess margin (or deficit) by which annual revenues cover annual expenses (excluding unrealized gains or losses). (Total revenues – total expenses)/Total revenues

Spendable Cash & Investments to Operating

Expenses. Measures the extent to which the University can rely on wealth that can be accessed over time or for a specific purpose to operate.

(Cash & investments – debt service reserve funds + permanently restricted pledges receivable – permanently restricted Net Assets)/Total expenses

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

Moody's Aa2 Peers

Alamo Community College District, TX

Arizona State University, AZ

Auburn University, AL

Board of Regents of The University System of

Georgia, GA

California State University, CA

City University of New York, NY

Clemson University, SC

Cuyahoga Community College District, OH

Florida State University, FL

Houston Community College System, TX

Iowa State University of Science & Technology, IA

Michigan State University, MI

Mississippi Institutions of Higher Learning, MS

Nevada System of Higher Education, NV

State University of New York, NY

State University System of Florida, FL

Texas State University System, TX

University of Alabama at Birmingham, AL

University of Alabama, AL

University of Arizona, AZ

University of Arkansas, AR

University of California, CA

University of Florida, FL

University of Georgia, GA

University of Hawaii, HI

University of Houston System, TX

University of Kansas, KS

University of Kentucky, KY

PEER INSTITUTIONS FOR UMASS AMHERST

Moody's Aa2 Peers

University of Massachusetts, MA
University of North Texas System, TX
University of Oregon, OR
University of South Carolina, SC
University of Wyoming, WY

Please Note: Unless otherwise specified, all data are from UMass Amherst University Analytics and 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 emphasize the high school GPA for admissions decisions and have successfully maintained an average GPA of over 3.15 for the last five entering classes, rising to 3.38 in Fall 2019. The mean SAT score of incoming freshmen was 1113.

UMass Boston continues to stand out as a model of excellence for urban universities, ranked No. 109 among the public schools, No. 228 in national universities, and No. 27 in top performers on social mobility in the *U.S. News & World Report*. Our online graduate education programs rose 19 spots to rank 35th nationwide and online bachelor's program ranked 93rd in the nation by *U.S. News & World Report*.

Five UMass Boston graduate programs were in the top 100 on *U.S. News & World Report's* 2021 Best Graduate Schools List. Guide to Online School ranked UMass Boston's online master's in history program No. 1 for the Best Online Master's in History Degrees.

UMass Boston was ranked 9th in Massachusetts and 79th in the US in the *QS World University Rankings* with diversity, employability, and internationalization being the key factors. The CEO Magazine has rated the College of Management's Graduate MBA program as a "Tier One" degree.

Strengthen Research and Development

UMass Boston continues to advance as an increasingly sophisticated research university. Between FY 2015 and FY 2019, UMass Boston's Total R&D expenditures reported to NSF have remained above \$62 million. In terms of sponsored instruction and outreach per faculty, this figure has increased to nearly \$45,000 per faculty member.

Assistant Professor of Computer Science Xiaohui Liang is leading a four-year \$1.18 million National Institute on Aging-funded research project to use voice assistant systems, such as Amazon's Alexa and Google Home, to detect early cognitive impairment. Early diagnosis of Alzheimer's disease and related dementias in older adults living alone is essential for developing, planning, and ensuring adequate support at home for patients and their

families. The core team will conduct an 18-month laboratory evaluation and a 28-month home evaluation that will focus on whether a voice assistant system's tasks and features can measure and predict an individual's cognitive decline in the home over time.

The School for the Environment received an initial \$380,000 grant from the James M. and Cathleen D. Stone Foundation to begin planning for a living laboratory on one of the Boston Harbor Islands. The Stone Living Lab will support the development of innovative coastal resilience strategies for the natural and built environments through experiments and public engagement, education, and policy development. The outcomes of the Stone Living Lab will directly support adaptation to climate change in metro Boston and provide transferable and critical knowledge for national and international benefit.

Assistant Professor of Exercise and Health Sciences Huimin Yan was awarded an American Heart Association Institutional Research Enhancement Award to support her study entitled "Effect of Exercise Training on Microvascular Function and Sympathetic Reactivity in African American and Caucasian Women." Her research examines the interaction of diet and exercise on vascular function in health, disease, and disability throughout the human lifespan, with a special focus on health disparities. Findings from her work will improve the mechanistic understanding of the microvascular function in hypertensive African Americans and may inform different/additional strategies to prevent and treat hypertension in African Americans and Caucasians.

UMass Boston Assistant Professor of environment and public health in the School for the Environment, Lorena Estrada-Martinez was the recipient of an \$800,000 three-year grant from the US Environmental Protection Agency (EPA) to conduct a study called "Community Driven Assessment of Environmental Health Risks in Vieques, Puerto Rico." In addition, Assistant Professor of Counseling and School Psychology Lindsay Fallon was one of the recipients of the Lightner Witmer Award.

ACADEMIC QUALITY

Director of the Sustainable Solutions Lab (SSL) at UMass Boston, Rebecca Herst, was awarded the

2020 Zuckerberg Endowed Leadership Prize for her work in climate adaptation, preparing marginalized communities for the effects of climate change, and developing sustainable and equitable solutions that prioritize their needs. The Sherry H. Penney Chair in Leadership in the College of Management, Maureen A. Scully won the Academy of Management Organization and Management Theory (OMT) Division 2020 Joanne Martin Trailblazer Award.

Assistant Professor Jason Green is in the first year of a three-year \$435,001 National Science Foundation (NSF) grant and his research team is working to develop mathematical equations and computational methods that, together with computer code, will predict the pathways a system will take in order to assemble a particular structure.

Associate Professor and Chair of Physics, Rahul Kulkarni was awarded a three-year \$309,998 grant

for his project, "Large Deviations and Driven Processes for Stochastic Models of Gene Expression and Its Regulation." By the National Science Foundation's Divisions of Mathematical Sciences and Molecular and Cellular Biology.

Professor of Physics Maxim Olchanyi also received a three-year NSF grant worth \$237,700 for his project, "Ways to Mitigate Decoherence in Solitonic Schrödinger Cats."

Renew Faculty

In AY 2018-19 UMass Boston was successful in recruiting 17 tenured or tenure-track faculty while sustaining the high proportion of full-time instructional faculty that are persons of color at 28percent and are female at 50 percent. Tenure-stream faculty growth slowed during the past years, based on enrollment performance. Tenure-stream faculty, which represents 57 percent 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 (86%) 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 proportion of international students has remained at 10 percent over the past five years. The total number of students who participated in a study abroad program increased by 16 percent from the previous year.

The social and economic diversity of our students is illustrated by the fact that 48 percent of our full-time undergraduate students from Massachusetts receive Pell grants, federal funds targeted toward students in greatest financial need. The

undergraduate student debt load of the recent graduating class was only 54 percent, down from 73 percent six years ago.

UMass Boston's College of Advancing and Professional Studies continued to see large numbers of online course registrations, with over 16,450, marking the sixth consecutive fiscal year with more than 14,000 course registrations. The annual growth in online course registration was 16 percent in FY2018-19.

The College of Education and Human Development was awarded a sub-contract from nonprofit human development organization FHI 360 for a program sponsored by the United States Department of State titled "Youth, Education, and Closing the Skills Gap: Study of the U.S. Institutes for Student Leaders." The grant provides \$226,310 to enable four cohorts of 20 undergraduate students from Europe to attend an intensive academic program focused on youth, education, and closing the skills gap.

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 6,300 undergraduates of color, UMass Boston has the most diverse undergraduate student population of any four-year research university in New England schools. In Fall 2019, 60 percent of our U.S. undergraduate students were students of color. Freshmen one-year retention rates have remained

comparable to our peers over the past five years, 75 percent for those students who entered in Fall 2018. The 81 percent retention rate for entering transfer students was comparable to first-year students during the same period. The six-year graduation rate for the Fall 2013 cohort was 49 percent. The four-year graduation rate for the Fall 2014 cohort was 27 percent, a substantial increase over the past six years from the 16 percent rate for the Fall 2008 cohort.

SERVICE TO THE COMMONWEALTH

Nearly three-quarters of our alumni (72%) 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.

School for the Environment Interim Dean Bob Chen has put ostriches on the MBTA to tell people about climate change, and he lets kids do the talking through their artwork on the T. Now the National Science Foundation has awarded a four-year, \$3 million grant to Chen and his collaborators to create a climate change education model that can be replicated across the country and even internationally.

The Institute for Community Inclusion (ICI) has been awarded a two-year, \$600,000 grant from the Department of Education's Institute of Education Sciences National Center for Special Education Research. The grant will fund a study titled "Moving Transition Forward: Exploration of College-based and Conventional Transition Practices for Students with Intellectual Disability

and Autism." The grant will enable ICI staff to examine how currently provided transition services reflect research-based practices and identify interventions that support employment and college preparation for youth with intellectual disability and autism.

The Massachusetts Department of Public Health's Bureau of Substance Addiction Services awarded UMass Boston's Institute for New England Native American Studies a contract for over \$600,000 to provide outreach and activities in the Native American community for youth affected by alcohol and opioid misuse. Native American youth will participate in digital storytelling, sports activities, wellness retreats, and other approaches to enhance capacity for Native communities in the battle against substance misuse.

Enrollments continue to grow steadily in Science, Technology, Engineering, and Mathematics (STEM), with nearly 4,000 students in these disciplines in Fall 2019, with 28 percent of undergraduate students pursuing a STEM discipline. The number of STEM degrees and certificates awarded has increased 59 percent from AY 2013-14 to AY 2018-19

FINANCIAL HEALTH

Endowment assets totaled \$88.8 million in FY 2019. Endowment per annualized student FTE grew from \$5,242 in FY 2013 to \$6,702 in FY 2019, an increase of 28%. While total private funds raised has declined over the past five years, the campus surpassed its ambitious goal of raising \$100 million through the Just Imagine campaign that commenced in 2011.

FY20 began with continued progress toward alignment of operating revenues and expenses to reach the university system's operating margin requirement of 2% by 2023 combined with a capital plan to use cash generated from depreciation, state funds and campus debt to invest in small and large infrastructure projects that will reduce the backlog of deferred maintenance. The introduction

FINANCIAL HEALTH

of the COVID19 pandemic has brought challenges to the FY20 operating budget plan with losses in auxiliary funds such as parking and meal plan revenue because of operating the campus remotely for the second half of the spring semester and the summer term. Despite this unprecedented challenge, the campus is currently projecting to end the year with a small surplus due to savings in non-personnel expenses such as utilities and with the use of federal CARES Act funding to offset forgone revenue. UMB is required to plan for a balanced budget for FY21 and is presently evaluating projected revenue losses from enrollment, state appropriations, and auxiliary sources against plans to reduce costs in many areas of the university as well as utilize remaining CARES Act funds.

FY20 construction included commencement of enabling projects in support of the \$156.9M Substructure Demolition and Quadrangle Development ("SDQD") project that will demolish the Science Center, pool building and much of the

substructure to build a new quadrangle and surface parking. This project is funded with the Commonwealth paying \$78M and the Campus funding the remaining over a four-year period. FY20 enabling projects include those that serve to vacate the Science Building for demolition and include; the revised scope of the Realignment of Existing Academic Buildings ("REAB") project (included in the total cost above) which includes renovation of space in existing buildings to accommodate Science Building-based labs, classrooms and staff, and, new IT infrastructure hub, machine shop, and greenhouse facilities among other smaller projects.

The university, in partnership with the UMass Building Authority and the UMass President's Office has completed negotiations for the development of its bayside property, with the accepted to generate a minimum of \$192M in revenue for qualified capital projects. The project has recently entered into the permitting phase with the City of Boston after COVID19-driven delays.

AT-A-GLANCE

ACADEMIC QUALITY

| • | Average HS GPA of Freshmen | 3.38 | • | Total R&D Expenditures per Tenure System Faculty Sponsored Instruction & | \$130,840 |
|---|--|-----------|---|--|-----------|
| • | Average SAT Scores of Freshmen | | • | Outreach/Faculty | \$44,618 |
| | Arithmetic Mean | 1113 | • | Patent Applications | 5 |
| | 25 th – 75 th Percentile | 1020-1200 | • | License Income | \$2,383 |
| • | Average GPA of Entering Transfer Students | 3.02 | • | Percent Tenured/Tenure-Track Faculty FTE | 57% |
| • | Student Satisfaction with Educational Experience | 75% | • | New Tenured/Tenure-Track Faculty Hired | 17 |
| • | Student-Faculty Ratio | 16:1 | | As Percent of Total T/TT Faculty | 3% |
| • | Technology-Enhanced Classrooms | 253 | • | Change in Tenured/Tenure-Track Faculty | -3% |
| • | Number of Students Enrolled in For- Credit Internships | 964 | • | Change in Faculty FTE | -3% |
| • | No. of Doctoral Degrees Awarded | 86 | • | Full-Time Instructional Faculty | |
| • | No. of Postdoctoral Appointees | 15 | | Percent Faculty-of-Color | 28% |
| • | Total R&D Expenditures | \$62M | | Percent Women Faculty | 50% |
| • | Total R&D Expenditures Ranking | 182 | • | Faculty Awards | 3 |
| • | Total R&D Expenditures Ranking among Carnegie Peers, US Publics, Non-Medical | 27 | • | National Academy Members | 1 |

ACCESS AND AFFORDABILITY

| • | Percent In-State Pell Grant Recipients | 48% | • | Percent Undergraduates from Students from MA | 86% |
|---|---|----------|---|--|--------|
| • | Percent of Need Met for In-State Students Awarded Need-Based Aid | 84% | • | Online Course Registrations | 16,473 |
| • | Average Debt of Students+A1 (UG Graduating Class) | \$25,645 | • | Annual Growth in Online Course Registrations | 16% |
| • | Percent Graduating Class with Debt (UG) | 54% | | | |

AT-A-GLANCE

STUDENT SUCCESS AND SATISFACTION

| • | Percent Undergraduates who are Students of Color | 60% | • | Freshmen Four-Year Graduation Rate | 27% |
|---|---|-----|---|---|-----|
| • | Percent Undergraduates who are First Generation in College | 57% | • | Freshmen Six-Year Graduation Rate | 49% |
| • | Percent Undergraduates with English as a Second Language | 51% | • | Transfer (Full-time) One-Year Retention Rate | 81% |
| • | Percent Undergraduates who are International | 10% | • | Transfer (Upper Division) Four-Year Graduation Rate | 74% |
| • | Total Students who Participated in a Study Abroad Program | 224 | • | Alumni Participation Rate | 4% |
| • | Freshmen One-Year Retention Rate | 75% | | | |

SERVICE TO THE COMMONWEALTH

| • | Degree Completions | 3,431 | • | De | grees Awarded in STEM Fields | 618 (17%) |
|---|---------------------------------|-------------|---|----|------------------------------------|-----------|
| | Bachelor's | 2469 | | | Undergraduate | 507 (20%) |
| | Master's | 876 | | | Graduate | 111 (11%) |
| | Doctorates | 86 | • | De | grees Awarded in Healthcare Fields | 570 (17%) |
| • | Percent Alumni who Remain in MA | 72 % | | | Undergraduate | 433 (18%) |
| • | Enrollment in STEM Programs | 3,968 (25%) | | | Graduate | 137 (14%) |
| | Undergraduate | 3,550 (28%) | • | MT | EL Science and Math Test-Takers | 205 |
| | Graduate | 418 (12%) | | | | |

FINANCIAL HEALTH

| • | Total Endowment | \$88.8M | • | Spendable Cash & Investments to Operating Expenses | 0.24 |
|---|--------------------------------------|---------|---|--|------|
| • | Annual Growth in Endowment | 4.6% | • | Debt Service Burden | 6.9% |
| • | Endowment per Annualized Student FTE | \$6,702 | • | Operating Margin (%) | 0.9% |
| • | Private Funds Raised Annually | \$23.8M | | | |

AVERAGE HIGH-SCHOOL GPA OF FIRST-TIME FRESHMEN

3.38

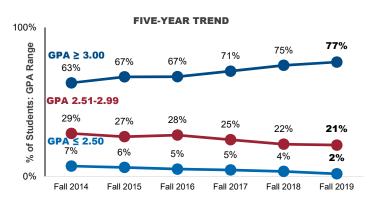
Average HS GPA in Fall 2019

0.04

One-year nominal change (vs. Fall 2018)

0.19

Five-year nominal change (vs. Fall 2014)



SAT SCORES OF FRESHMEN

1200

10

SAT Scores of Freshmen One-year 75th Percentile in Fall 2019

nominal change (vs. Fall 2018)

1020

10

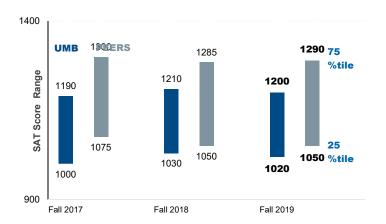
SAT Scores of Freshmen One-year 25th Percentile in Fall 2019

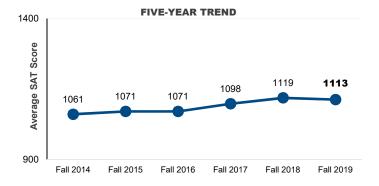
nominal change (vs. Fall 2018)

1113

Average SAT Scores of Freshmen in Fall 2019

One-year nominal change (vs. Fall 2018)





AVERAGE GPA OF ENTERING TRANSFER STUDENTS

3.02

Average transfer GPA in Fall 2019 0.02

One-year nominal change (vs. Fall 2018) **• 0.10**

Five-year nominal change (vs. Fall 2014)

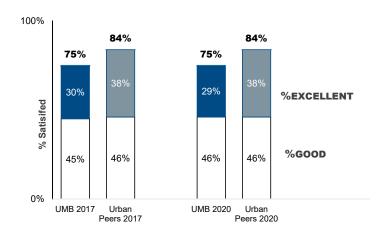


STUDENT SATISFACTION WITH EDUCATIONAL EXPERIENCE

75%

Student Satisfaction as Good or Excellent in UMB 2017 . 0

Three-year % point change (vs. UMB 2015)



STUDENT-FACULTY RATIO

16:1

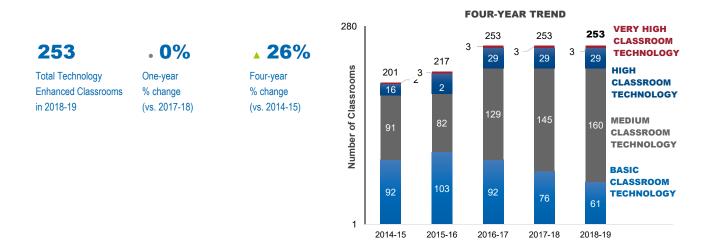
Student-Faculty Ratio in Fall 2019 . 0

One-year nominal change (vs. Fall 2018) . 0

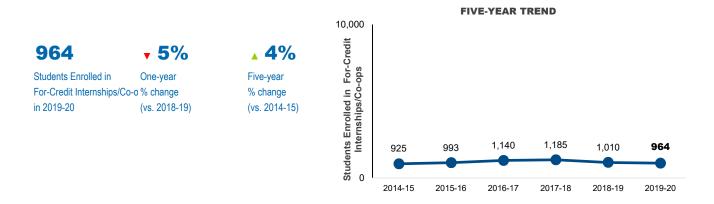
Five-year nominal change (vs. Fall 2014)



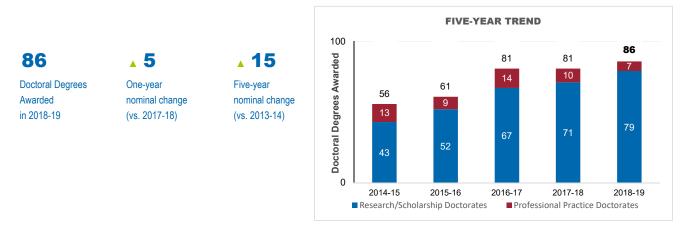
TECHNOLOGY-ENHANCED CLASSROOMS



NUMBER OF STUDENTS ENROLLED IN FOR-CREDIT INTERNSHIPS/CO-OPS



DOCTORAL DEGREES AWARDED



145

79

143

ACADEMIC QUALITY

DOCTORAL DEGREES AWARDED

200

79

Research Doctoral Degrees Awarded in 2018-19 **8**

One-year nominal change (vs. 2017-18) ▲ 18
Five-year

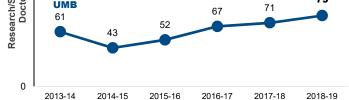
Five-year nominal change (vs. 2013-14) Doctorates 130 134 142 130 134 142 130 134 143 52

145

Peer Average Research/ Scholarship Doctoral Degrees Awarded in 2018-19 **2**

One-year nominal change (vs. 2017-18) **▲ 15**

Five-year nominal change (vs. 2013-14)



FIVE-YEAR TREND

143

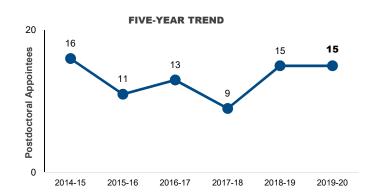
POSTDOCTORAL APPOINTEES

15

Postdoctoral Appointees in 2019-20 . 0

One-year nominal change (vs. 2018-19) **1**

Five-year nominal change (vs. 2014-15)



TOTAL R&D EXPENDITURES

\$62.0

Million in FY 2019

1%

One-year % change (vs. FY 2018)

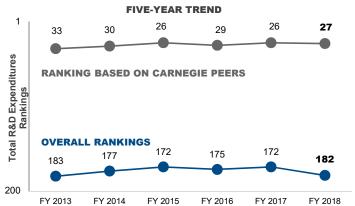
1%

Five-year % change (vs. FY 2014)



TOTAL R&D EXPENDITURES RANKINGS



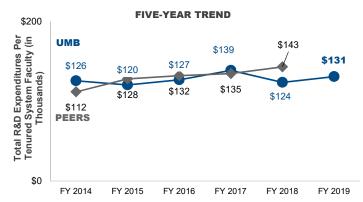


Overall Ranking Source: National Science Foundation Ranking by Total R&D Expenditures.

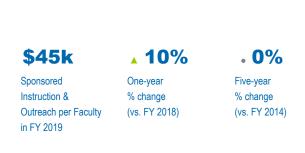
Ranking based on Carnegie Peers is further standardized by US Publics and Non-Medical Schools.

TOTAL R&D EXPENDITURES PER TENURED SYSTEM FACULTY





SPONSORED INSTRUCTION & OUTREACH PER FACULTY





^{*} Peer data for FY 2019 is currently not available.

NUMBER OF PATENT APPLICATIONS

5

Patent Applications in FY 2019 **2**

One-year nominal change (vs. FY 2018) **1**

Five-year nominal change (vs. FY 2014)



LICENSE INCOME

\$2.4k

License Income in FY 2019

49%

One-year % change (vs. FY 2018)

63%

Five-year % change (vs. FY 2014)



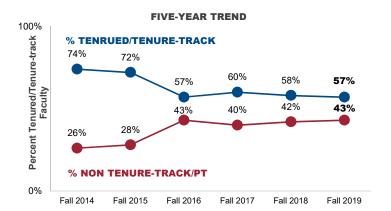
PERCENT TENURED/TENURE-TRACK FACULTY FTE

57%

Percent Tenured/ Tenure-track Faculty in Fall 2019 _ 4

One-year % point change (vs. Fall 2018) **• 17**

Five-year % point change (vs. Fall 2014)



NEW TENURED/TENURE-TRACK FACULTY HIRED

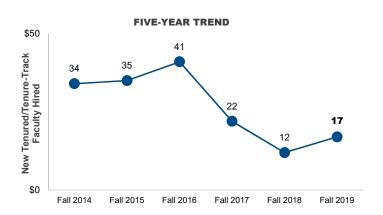
17

New Tenured/ Tenure-Track Faculty Hired

in Fall 2019

4 5

One-year nominal change (vs. Fall 2018)



Data for "New Hires" is based on IPEDS definitions from 2016

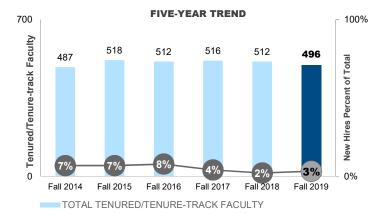
NEW TENURED/TENURE-TRACK FACULTY HIRED AS PERCENT OF ALL TENURE-TRACK FACULTY

3%
Percent New Tenured/
Tenure-Track Faculty
Hired
in Fall 2019

One-year % point change

(vs. Fall 2018)

Five-year %point change (vs. Fall 2014)



Data for "New Hires" is based on IPEDS definitions from 2016

ions from 2016 ——NEW HIRES % OF TOTAL TENURED/TENURE-TRACK FACULTY

TENURED/TENURE-TRACK FACULTY

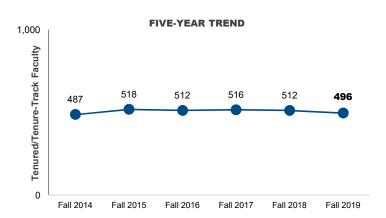
496

Total Tenured/ Tenure-track Faculty in Fall 2019 **3**%

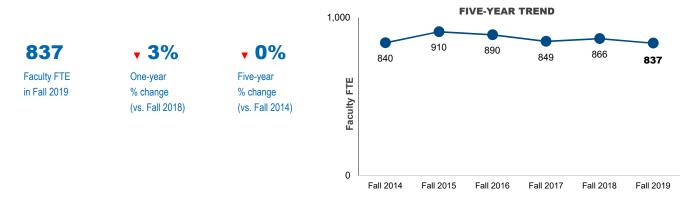
One-year % change (vs. Fall 2018)

2%

Five-year % change (vs. Fall 2014)

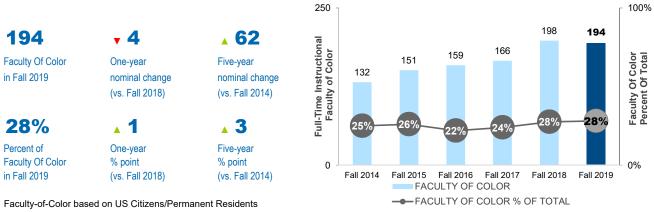


FACULTY FTE



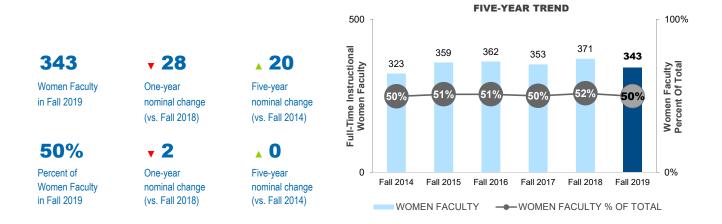
FACULTY-OF-COLOR

FIVE-YEAR TREND



reporting Race/Ethnicity according to new IPEDS definitions.

WOMEN FACULTY



FACULTY AWARDS





(vs. 2017)





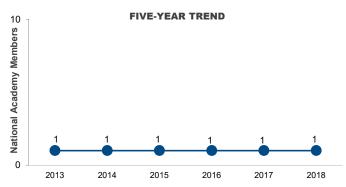
Source: The Top American Research Universities

NATIONAL ACADEMY MEMBERS

National Academy Members in 2018

• **O**One-year
nominal change
(vs. 2017)

Five-year nominal change (vs. 2013)



Source: The Top American Research Universities

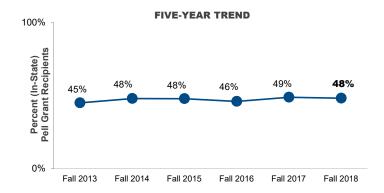
ACCESS AND AFFORABILITY

PERCENT IN-STATE PELL GRANT RECIPIENTS

48%
Percent (In-State)
Pell Grant Recipients

in Fall 2018

One-year % point change (vs. Fall 2017) Five-year % point change (vs. Fall 2013)



ACCESS AND AFFORABILITY

PERCENT NEED MET FOR IN-STATE STUDENTS AWARDED NEED-BASED AID

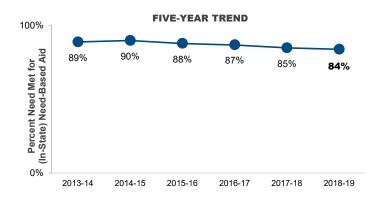
84%Percent Need Met for (In-State) Need-Based Aid in 2018-19

▼ 1One-year

% point change

(vs. 2017-18)

Five-year % point change (vs. 2013-14)



UNDERGRADUATE STUDENT DEBT LOAD OF GRADUATING CLASS

\$25.6k Average Debt Load in 2019 ▲ 1%
One-year
% change
(vs. 2018)

% change (vs. 2014)

6%

Five-year

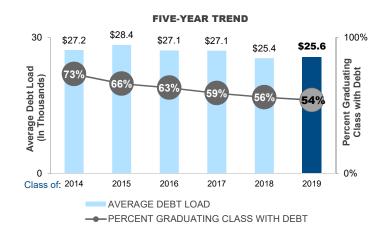
54%Percent Graduating Class with Debt

in 2019

One-year % point change (vs. 2018)

2

▼ **19**Five-year
% point change
(vs. 2014)



PERCENT UNDERGRADUATES FROM MASSACHUSETTS

10,851
Undergraduates from Massachusetts in Fall 2019

▼ 0%
One-year
% change
(vs. Fall 2018)

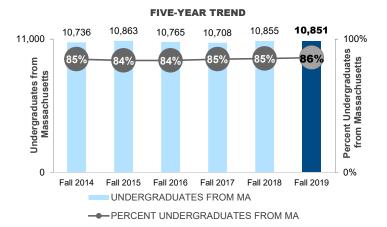
Five-year % change (vs. Fall 2014)

1%

86%

% Undergraduates from Massachusetts in Fall 2019 One-year % point change (vs. Fall 2018)

Five-year % point change (vs. Fall 2014)



ACCESS AND AFFORABILITY

ONLINE COURSE REGISTRATIONS

16,473

Online Course Registrations in FY 2018-19 **16%**

One-year % change (vs. FY 2017-18) **▲ 13%**

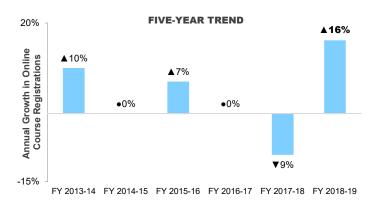
Five-year % change (vs. FY 2013-14)



ANNUAL GROWTH IN ONLINE COURSE REGISTRATIONS

16%

Annual Growth Online Course Registrations in FY 2018-19



STUDENT SUCCESS AND SATISFACTION

UNDERGRADUATE STUDENTS OF COLOR

6,379Undergraduates
Students of Color in Fall 2019

60%% Undergraduates
Students of Color
in Fall 2019

2%

One-year % change (vs. Fall 2018)

One-year % point change (vs. Fall 2018)

21%

Five-year % change (vs. Fall 2014)

Five-year % point change (vs. Fall 2014)

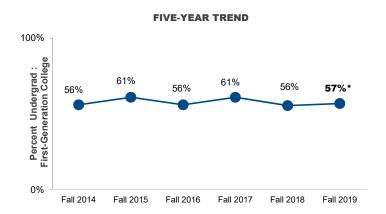
FIVE-YEAR TREND 7.000 100% 6,379 6,282 6,040 5,819 Percent Undergraduates Students of Color 5,592 5,256 Undergraduates Students of Color 60% 60% . 59% 57% . 55% 52% Fall 2014 Fall 2015 Fall 2016 Fall 2017 Fall 2018 Fall 2019

PERCENT UNDERGRADUATES WHO ARE FIRST-GENERATION IN COLLEGE

57%

Percent Undergraduates who are First-Generation College in Fall 2019

*The data source from Fall 2018 updated to Common Application responses.

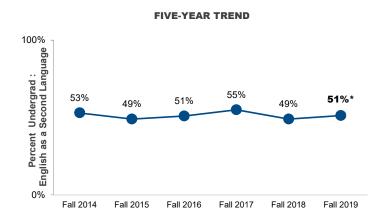


PERCENT FIRST-TIME, FULL-TIME UNDERGRADUATES WITH ENGLISH AS A SECOND LANGUAGE

51%

Percent Undergraduates Speak English as a Second Language in Fall 2019

*The data source from Fall 2018 updated to Common Application responses.



PERCENT UNDERGRADUATES WHO ARE INTERNATIONAL

1,297
International UG
Enrollment
in Fall 2019

10%

Enrollment

in Fall 2019

% International UG

▼ **1**One-year

% point change

(vs. Fall 2018)

▼ 6%

One-year
% change
(vs. Fall 2018)

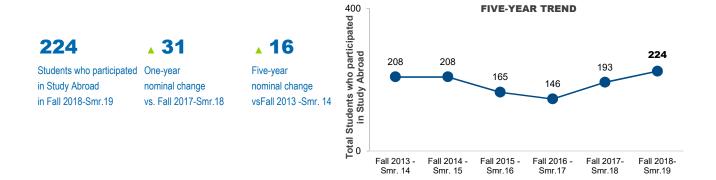
▼ 10%

Five-year
% change
(vs. Fall 2014)

▼ **1**Five-year
% point change
(vs. Fall 2014)

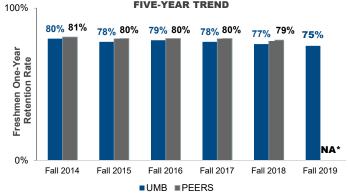
FIVE-YEAR TREND 2,000 100% 1,565 1,570 Percent Undergraduates International Students 1,511 Undergraduates International Students 1,441 1,384 1,297 12% 12% . 12% **11**% 10% 0% Fall 2014 Fall 2015 Fall 2016 Fall 2017 Fall 2018 Fall 2019 UGs INTERNATIONAL ENRL. --- PERCENT UG INTERNATIONAL STUDENTS

TOTAL STUDENTS WHO PARTICIPATED IN A STUDY ABROAD PROGRAM



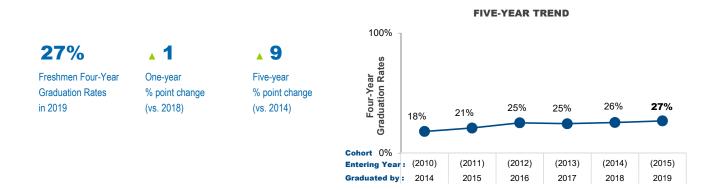
FRESHMEN ONE-YEAR RETENTION RATE





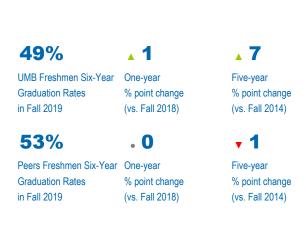
FIVE-YEAR TREND

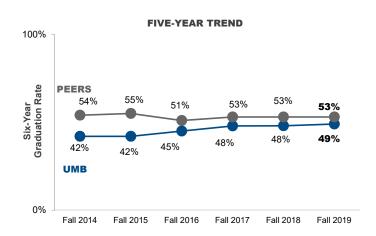
FRESHMEN FOUR-YEAR GRADUATION RATES



^{*} Peer data for Fall 2019 not available for reporting purposes.

FRESHMEN SIX-YEAR GRADUATION RATE



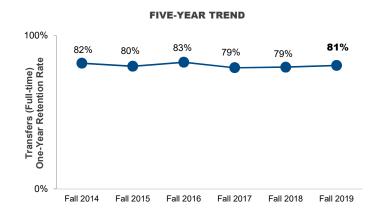


TRANSFER (FULL-TIME) ONE-YEAR RETENTION RATE









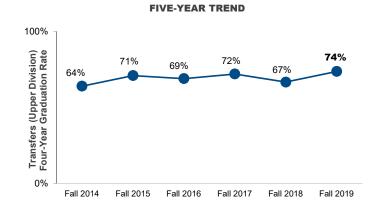
TRANSFER (UPPER DIVISION) FOUR-YEAR GRADUATION RATE

74%Transfers (Upper Division) Four-Year Graduation Rates in Fall 2019

ne-vear

One-year % point change (vs. Fall 2018) ▲ **10**

Five-year % point change (vs. Fall 2014)



STUDENT ACHIEVEMENT MEASURE



30%

Bachelor's Degree Within 4 Yrs. from any institution

25%

Bachelor's Degree Within 4 Yrs. from UMass Boston **54%**

Bachelor's Degree Within 5 Yrs. From any institution

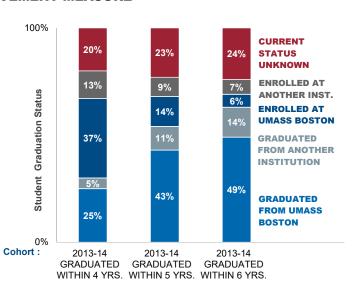
43%

Bachelor's Degree Within 5 Yrs. From UMass Boston **63%**

Bachelor's Degree Within 6 Yrs. From any institution

49%

Bachelor's Degree Within 6 Yrs. From UMass Boston



Source: Student Achievement Measure (SAM)

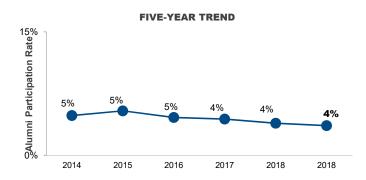
ALUMNI PARTICIPATION RATE

4%

Alumni Participation Rate in 2018 . 0

One-year % point change (vs. 2018) **• 1**

Five-year % point change (vs. 2014)



SERVICE TO THE COMMONWEALTH

DEGREE COMPLETIONS

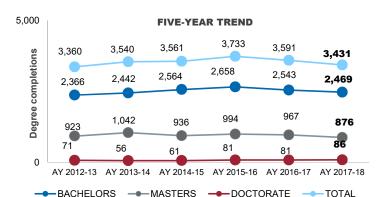
3,431

Total degree completions AY 2017-18

4%

One-year % change in total degree completions (vs. AY 2016-17) **2**%

Five-year % change in total degree completions (vs. AY 2012-13)



ENROLLMENT IN STEM PROGRAMS

3,550

UG enrollment in STEM fields % change in Fall 2019 (vs. Fall 2018)

One-year

% point change

(vs. Fall 2018)

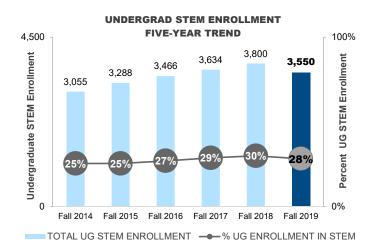
28%
Percent of total

UG enrollment in STEM fields in Fall 2019 **7%** ▲ **16%** e-year Five-year

Five-year % change (vs. Fall 2014)

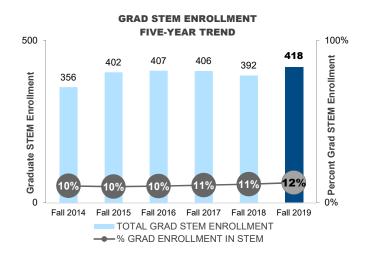
3

Five-year % point change (vs. Fall 2014)



418 7% **17%** Grad enrollment in One-year Five-year STEM fields % change % change in Fall 2019 (vs. Fall 2018) (vs. Fall 2014) 12% **2** Percent of total One-year Five-year Grad enrollment in % point change % point change STEM fields (vs. Fall 2018) (vs. Fall 2014)



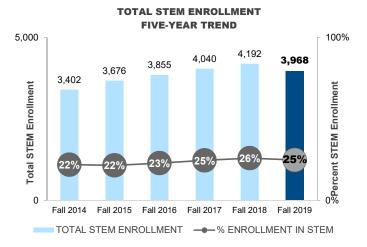




(vs. Fall 2018)

STEM fields

in Fall 2019



(vs. Fall 2014)

DEGREES AWARDED IN STEM FIELDS



in 2018-19

20%

Percent of total UG degrees awarded in STEM fields in 2018-19

5%

One-year % change (vs. 2017-18)

One-year

% point change

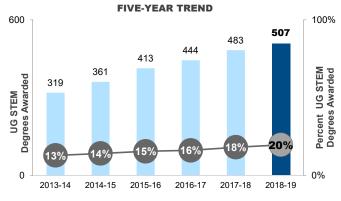
(vs. 2017-18)

Five-year % change (vs. 2013-14)

59%

7

Five-year % point change (vs. 2013-14)



UNDERGRAD STEM DEGREES AWARDED

TOTAL UG STEM DEGREES AWARDED ---- % UG DEGREES AWARDED IN STEM

GRAD STEM DEGREES AWARDED FIVE-YEAR TREND

111

Grad degrees awarded in STEM fields in 2018-19

11%

Percent of total Grad degrees awarded in STEM fields in 2018-19

18%

One-year % change (vs. 2017-18)

1.7

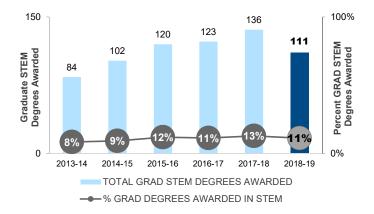
One-vear % point change (vs. 2017-18)

32%

Five-year % change (vs. 2013-14)

3

Five-year % point change (vs. 2013-14)



* Data for Years Prior to Fall 2018 been updated to include Marine Science and Technology Major .

618

Total degrees awarded in STEM fields in 2018-19

17%

Percent of Total degrees awarded in STEM fields in 2018-19

• 0%

One-year % change (vs. 2017-18)

0.7

One-year % point change (vs. 2017-18)

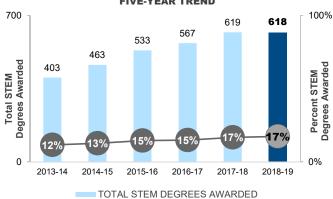
53%

Five-year % change (vs. 2013-14)

₄ 6

Five-year % point change (vs. 2013-14)

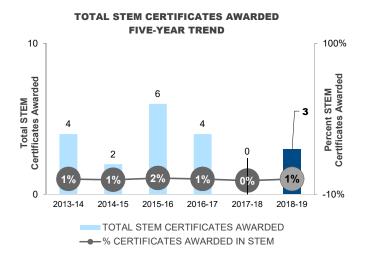
TOTAL STEM DEGREES AWARDED FIVE-YEAR TREND



→ % DEGREES AWARDED IN STEM

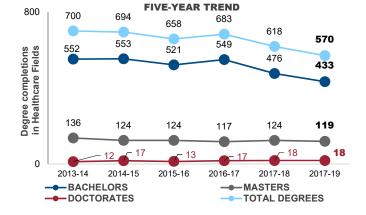
CERTIFICATES AWARDED IN STEM FIELDS





DEGREES AWARDED IN HEALTHCARE FIELDS

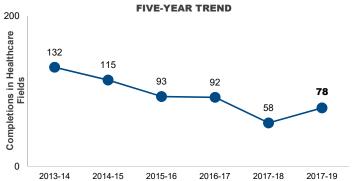




CERTIFICATES AWARDED IN HEALTHCARE FIELDS







^{*} Certificates Awarded data has been restated for Years before AY 2017-18.

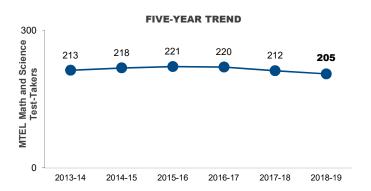
MTEL SCIENCE AND MATH TEST-TAKERS

205MTEL Math and
Science Test-Takers
in 2018-19

in Fall 2019

One-year nominal change (vs. 2017-18)

Five-year nominal change (vs. 2013-14)



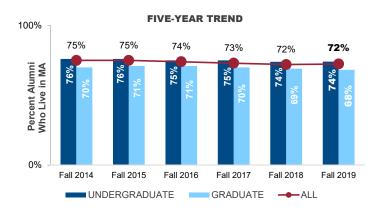
PERCENT ALUMNI WHO LIVE IN MASSACHUSETTS

72%Of all UMass Alumni

live in the Commonwealth

% point change

▼ **3**Five-year
% point change
(vs. Fall 2014)



FINANCIAL HEALTH

(vs. Fall 2018)

ENDOWMENT ASSETS AND ANNUAL GROWTH IN ENDOWMENT

\$88.8M Endowment Assets in FY 2019

One-year % change (vs. FY 2018)

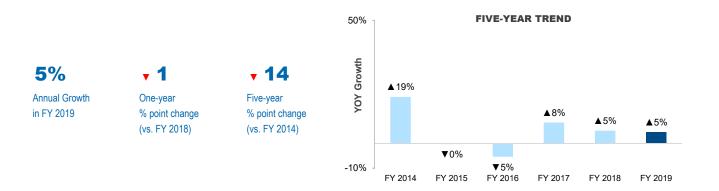
5%

▲ **13%**Five-year
% change
(vs. FY 2014)

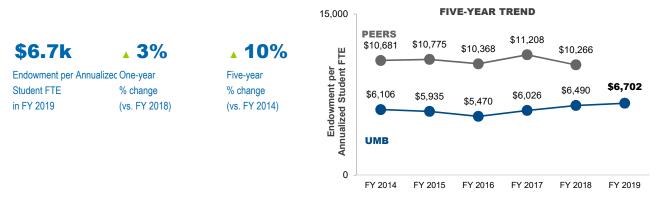


FINANCIAL HEALTH

ENDOWMENT ASSETS AND ANNUAL GROWTH IN ENDOWMENT

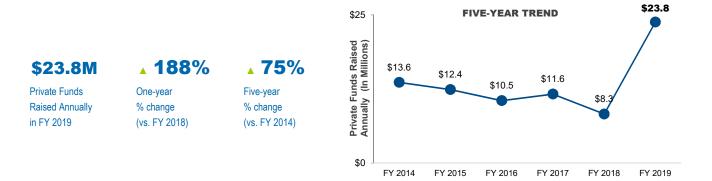


ENDOWMENT PER ANNUALIZED STUDENT FTE



^{*} Peer data for FY 2019 not available for reporting purposes.

PRIVATE FUNDS RAISED ANNUALLY

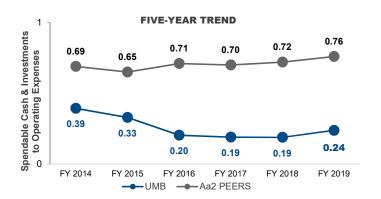


FINANCIAL HEALTH

SPENDABLE CASH & INVESTMENTS TO OPERATING EXPENSES

0.24

Spendable Cash & Investments to Operating Expenses in FY 2019



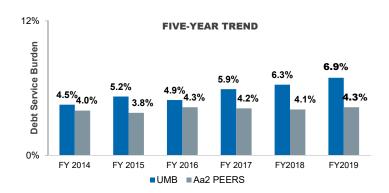
DEBT SERVICE BURDEN

6.9%

Debt Service Burden in FY2019 0.6

One-year % Point change (vs. FY2018) **2.4**

Five-year % Point change (vs. FY 2014)



OPERATING MARGIN (%)

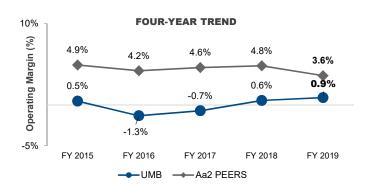
0.9%

Operating Margin (%) in FY 2019

. 0.0

One-year % Point change (vs. FY 2018) 0.4

Four-year % Point change (vs. FY 2015)



ACADEMIC QUALITY INDICATORS

Average High School GPA of First-Time

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

SAT Scores of Freshmen. All reported SAT scores are based on the sum of the SAT MSS and the ERWS for entering freshmen. A redesigned SAT was used for Fall 2017 admissions; therefore, scores for Fall 2016 and before cannot be compared to scores for Fall 2017 and onwards. The average is the arithmetic mean of these SAT scores. Peer data are from IPEDS.

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 most recently conducted National Survey of Student Engagement (NSSE).

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. Students enrolled in For-Credit Internships/Co-Ops for the academic year. The class must be for-credit and exclude practicums such as in nursing and teacher education. **Doctoral Degrees Awarded.** Number of doctorates awarded for AY 2017-18, which includes August/September, January/February and May 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 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.

Total R&D Expenditures Ranking. Annual NSF ranking of Total R&D expenditures, for all postsecondary institutions participating in the NSF HERD Survey. 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.

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 full-time 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.

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

ACADEMIC QUALITY INDICATORS

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/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 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 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 Fulltime 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 of in-state, full-time students with Pell Grants in the Financial Aid Template.

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

Undergraduate Student Debt Load of

Graduating Class. 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 Undergraduates from

Massachusetts. Percentage of total undergraduate students who are 'In-State' or residents of Massachusetts based on tuition residency. For day students, use tuition classification, whereas for CE students, use actual residency at time of matriculation.

Online Course Registrations. Course registrations for the academic year for online credit courses. The 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. The percentage rate of growth in course registrations for the fiscal year for online credit courses. The 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

Undergraduate Students of Color.

Undergraduates who self-identify as either African American/Black, Hispanic/ Latino, Asian, Hawaiian/Pacific Islander, American Indian/Alaskan Native, and/or Two or more races. Hispanic students who list one or more additional groups will be coded as Hispanic. Cape Verdean students who identify solely as Cape Verdean will be coded as Black/African American. Included only for U.S. Citizens and Permanent Residents who report race and ethnicity divided by total undergraduate U.S. citizens and permanent residents who report race/ethnicity.

Percent Undergraduates who are First Generation in College. Percent of first-time, full-time undergraduates where neither parent has earned a bachelor's degree. The source of this data field is the Common Application.

Percent first-time, full-time Undergraduates with English as a

Second Language. Percent of first-time, full-time Undergraduates who speak a language other than English at home. The source of this data field will be from the Common Application.

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 permanent residents, refugees, or US citizens.

Total Students Who Participated in a

Study Abroad Program. Number of students who participated in a credit-bearing study abroad program outside of the U.S. over the most recent academic year, either at UMass or elsewhere.

STUDENT SUCCESS AND SATISFACTION INDICATORS

Freshmen One-Year Retention Rate.

Percent of first-time, full-time, degree-seeking freshmen who entered UMass in a given Fall and were still enrolled at the institution in the following Fall. Peer data as reported to IPEDS.

Freshmen Four-Year Graduation Rate.

Percent of first-time, full-time, degree-seeking freshmen who entered UMass in a given Fall term and graduated from the institution by the end of their fourth year. Do not include associate's or CE students in the calculation.

Freshmen Six-Year Graduation Rate.

Percent of first-time, full-time freshmen who entered UMass in a given Fall term and had graduated from the institution within six years. Peer data are based on the median as reported to IPEDS. Do not include associate's or CE students in the calculation.

Transfer (Full-Time) One-Year Retention

Rate. Percent of full-time transfer students at any level who entered UMass 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 in a given Fall term and had graduated from the institution within four years.

Student Achievement Measure. SAM tracks student movement across postsecondary institutions to provide a complete picture of undergraduate student progress and completion within the higher education system. SAM is an alternative to the federal graduation rate, which is limited to tracking the completion of first-time, full-time students at one institution.

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.

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.

Unduplicated count of students enrolled in Science, Technology, Engineering, & Math (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. Number of undergraduate and graduate degrees 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 and 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 quasi-endowments) at the end of the fiscal year as reported in the UMass Annual BOT report, and the percent change from the previous year. Comparative data are from IPEDS, financial statements, and the NACUBO survey.

Endowment per Annualized Student

(FTE). Total endowment (includes true and quasiendowments) per annualized FTE student, where FTE of peer institutions is standardized to UMass formulae. Peer data are for comparative peers from financial statements (current year) and IPEDS (prior years).

Private Funds Raised Annually. Private funds raised include 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.

Debt Service Burden. Compares the relative cost of borrowing to overall expenditures. Debt service (P&I) / Total expenses

Operating Margin (%). Indicates the excess margin (or deficit) by which annual revenues cover annual expenses (excluding unrealized gains or losses). (Total revenues – total expenses)/Total revenues

Spendable Cash & Investments to Operating Expenses. Measures the extent to which the University can rely on wealth that can be accessed over time or for a specific purpose to operate.

(Cash & investments – debt service reserve funds + permanently restricted pledges receivable – permanently restricted Net Assets)/Total expenses

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

Moody's Aa2 Peers

Alamo Community College District, TX

Arizona State University, AZ

Auburn University, AL

Board of Regents of The University System of Georgia, GA

California State University, CA

City University of New York, NY

Clemson University, SC

Cuyahoga Community College District, OH

Florida State University, FL

Houston Community College System, TX

Iowa State University of Science & Technology, IA

PEER INSTITUTIONS FOR UMASS BOSTON

Moody's Aa2 Peers

Michigan State University, MI

Mississippi Institutions of Higher Learning, MS

Nevada System of Higher Education, NV

State University of New York, NY

State University System of Florida, FL

Texas State University System, TX

University of Alabama at Birmingham, AL

University of Alabama, AL

University of Arizona, AZ

University of Arkansas, AR

University of California, CA

University of Florida, FL

University of Georgia, GA

University of Hawaii, HI

University of Houston System, TX

University of Kansas, KS

University of Kentucky, KY

University of Massachusetts, MA

University of North Texas System, TX

University of Oregon, OR

University of South Carolina, SC

University of Wyoming, WY

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



HEADLINES

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, the fourth year being ranked in this category.

The indicators highlighted below reflect the successes of the campus in the past few years. Also highlighted are areas of change.

UMass Dartmouth maintains a strong student quality profile while also fostering access. The average high school GPA of entering students includes the alternative admissions programs of College Now/START and continues to steadily increase. The Law School saw a 21.5% first year enrollment increase. The Law School's total enrollment growth from 2017-2019 (39.6%; 202 to 282) ranked 3rd out of over 200 law schools nationally.

Faculty numbers are stable. Recent trends include the hiring of clinical and research faculty who are not on the tenure track. Both the number of women and faculty of color have increased by one percentage point over the previous year.

UMass Dartmouth continued to strengthen its research and engagement by hiring faculty in critical areas of growth. The University has worked to expand the portfolio of funded research activity, with particular emphasis on multi-disciplinary

research. New initiatives focused on community partnerships. The study of asymmetric warfare and marine science and technology have started to generate new proposal activities. The 76,000 gross square foot SMAST East building in New Bedford offers offices, classrooms, research labs, and an expanded seawater research facility that is just beginning to be fully utilized.

FY2018 is the third year that UMass Dartmouth has been classified as Doctoral Research University-Higher Research by Carnegie. The overall research and development expenditures are level compared to last year, the patent office continues to increase its activities, and faculty engagement is growing.

UMass Dartmouth was #1 for social mobility among universities in New England with nationally-ranked engineering colleges, and third overall among all colleges and universities in MA (2019 US News and World Report).

UMass Dartmouth was # 5 for percentage of women tenured/tenure-track faculty among nationally-ranked engineering colleges with a PhD program in the US (2019 ASEE).

ACCESS AND AFFORDABILITY

UMass Dartmouth continues to realize its mission to serve the region and the Commonwealth by providing a wide range of capable students access to a high-quality education.

The indicators for Pell grants (41%), percent of need met (83%), percent undergraduate students of color (37%), percent from Massachusetts (89%), and percent of undergraduates where English is their second language (10%) demonstrate UMass Dartmouth's strong commitment to the region,

access, and opportunity. Online course registrations had an annual increase of 13%, almost reaching 8,900. This is a 104% increase since AY14. UMass Dartmouth is succeeding in its goal of maintaining a strong student quality profile, while also fostering access and diversity. The University continues to globalize its curriculum and student body.

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HEADLINES

STUDENT SUCCESS AND SATISFACTION

The one-year retention rate has declined from 71% last year to 70% in 2019, and the four-year graduation was 39% compared to 34% last year. The six-year graduation rate of 59% is a new record high for UMass Dartmouth, beating last year's record of 56%. The indicators for transfer student retention at 78% and the 4-year upper-division transfer graduation rate of 60% fill in the picture that is left incomplete by the standard measure for freshman success. The Student Achievement Measurement (SAM) reveals that an additional 14% of our fall 2013

freshmen cohort graduated from another institution. Even though students may not have graduated from UMass Dartmouth, UMass Dartmouth contributed to their success at other institutions.

Less than four years since receiving full accreditation, the law school's July 2019 MA first-time pass rate (82.6%) was 5th, and the law school's February 2020 MA first-time pass rate (80%) was 3rd, among the 8 ABA-accredited Massachusetts law schools.

SERVICE TO THE COMMONWEALTH

In AY2019, UMass Dartmouth graduated approximately 1,970 students, awarding 2,055 degrees and certificates. Because 72% of our graduates remain in Massachusetts, the degrees granted make a direct and significant contribution to the Commonwealth's economy. 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.

Professional practice doctoral enrollments have grown steadily, enhanced by the addition of the Juris Doctorate and Doctorate of Nursing Practice.

Additional Research/Scholarship doctoral programs are also being developed.

The 2018 Nursing graduates achieved a significantly higher first-time pass-rate (98%) than the national average (88%) and the state of Massachusetts' average (89%) on their first-attempt national RN licensure exam (NCLEX).

Over the past five years, the Law School has placed the highest percentage of graduates in public service employment (27%) among the 15 ABA-accredited law schools in New England.

FINANCIAL HEALTH

A set of fiscal controls and processes are in place to ensure the achievement of full fiscal stability. 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. The primary reserve has contributed to more financial strength and flexibility.

The University, in partnership with non-profit Provident, plans to open a \$134 million, 267,500 sq. ft., 1210-bedroom resident hall and a state of the art 38,000 sq. ft., 800 seat dining facility. This facility is on track to be opened on time for fall 2020 and completed on budget.

UMASS DARTMOUTH

AT-A-GLANCE

ACADEMIC QUALITY

| • | Average HS GPA of Freshmen | 3.29 | • | Federal Research Expenditures | \$7.4M |
|---|--|-----------|---|---|------------|
| • | Average SAT Scores of Freshmen | | • | Patent Applications | 10 |
| | Arithmetic Mean | 1091 | • | License Income | \$65,100 |
| | 25 th – 75 th Percentile | 1000-1180 | • | Percent Tenured/Tenure-Track Faculty FTE | 62% |
| • | Average GPA of Entering Transfer Students | 3.22 | • | New Tenured/Tenure-Track Faculty Hired | 14 |
| • | Student Satisfaction with Educational Experience | 72% | | As Percent of Total T/TT Faculty | <i>5</i> % |
| • | Student-Faculty Ratio | 16:1 | • | Change in Tenured/Tenure-Track Faculty | -2% |
| • | Technology-Enhanced Classrooms | 142 | • | Change in Faculty FTE | 0% |
| • | No. of Doctoral Degrees Awarded | 83 | • | Full-Time Instructional Faculty | |
| • | No. of Postdoctoral Appointees | 2 | | Percent Faculty-of-Color | 25% |
| • | Total R&D Expenditures | \$28.0M | | Percent Women Faculty | 47% |
| • | Total R&D Expenditures Ranking | 245 | • | Faculty Awards | 0 |
| • | Total R&D Expenditures Ranking among Carnegie Peers, US Publics, Non-Medical | 40 | • | National Academy Members | 0 |
| • | Total R&D Expenditures per Tenure System Faculty | \$97,010 | | | |

ACCESS AND AFFORDABILITY

| • | Percent In-State Pell Grant Recipients | 41% | • | Percent Undergraduates Students from MA | 89% |
|---|---|----------|---|--|-------|
| • | Percent of Need Met for In-State Students Awarded Need-Based Aid | 83% | • | Online Course Registrations | 8,899 |
| • | Average Debt of Students (UG Graduating Class) | \$34,824 | • | Annual Growth in Online Course Registrations | 13% |
| • | Percent Graduating Class with Debt (UG) | 84% | | | |

AT-A-GLANCE

STUDENT SUCCESS AND SATISFACTION

| • | Percent Undergraduates who are Students of Color | 37% | • | Freshmen Four-Year Graduation Rate | 39% |
|---|--|-----|---|---|-----|
| • | Percent First-Time Undergraduates who are First Generation in College | 50% | • | Freshmen Six-Year Graduation Rate | 59% |
| • | Percent First-time Undergraduates with English as a Second Language | 10% | • | Transfer (Full-time) One-Year Retention Rate | 78% |
| • | Percent Undergraduates who are International | 2% | • | Transfer (Upper Division) Four-Year Graduation Rate | 60% |
| • | Total Students who Participated in a Study Abroad Program | 62 | • | Alumni Participation Rate | 2% |
| • | Freshmen One-Year Retention Rate | 70% | | | |

SERVICE TO THE COMMONWEALTH

| • | Degree Completions | 1,959 | • | Deg | rees Awarded in STEM Fields | 489 (26%) |
|---|---------------------------------|-------------|---|-----|-----------------------------------|-----------|
| | Bachelor's | 1,469 | | | Undergraduate | 331 (23%) |
| | Master's | 407 | | | Graduate | 158 (33%) |
| | Doctorates | 83 | • | Deg | rees Awarded in Healthcare Fields | 211 (11%) |
| • | Percent Alumni who Remain in MA | 72 % | | | Undergraduate | 198 (14%) |
| • | Enrollment in STEM Programs | 1,860 (24%) | | | Graduate | 13 (3%) |
| | Undergraduate | 1,446 (23%) | • | MTE | EL Science and Math Test-Takers | 13 |
| | Graduate | 414 (26%) | | | | |

FINANCIAL HEALTH

| • | Total Endowment | \$58.3M | • | Spendable Cash & Investments to Operating Expenses | 0.27 | |
|---|--------------------------------------|---------|---|---|------|--|
| • | Annual Growth in Endowment | 3% | • | Debt Service Burden | 7.8% | |
| • | Endowment per Annualized Student FTE | \$7,839 | • | Operating Margin (%) | 1.4% | |
| • | Private Funds Raised Annually | \$3.0M | | | | |

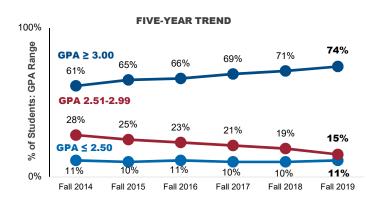
AVERAGE HIGH-SCHOOL GPA OF FIRST-TIME FRESHMEN

3.29

Average HS GPA in Fall 2019 **▲ 0.04**

One-year nominal change (vs. Fall 2018) ▲ 0.14

Five-year nominal change (vs. Fall 2014)



SAT SCORES OF FRESHMEN

1180 . 0

SAT Scores of Freshmen One-year
75th Percentile nominal change
in Fall 2019 (vs. Fall 2018)

1000 . 7

SAT Scores of Freshmen One-year 25th Percentile nominal change in Fall 2019 (vs. Fall 2018)

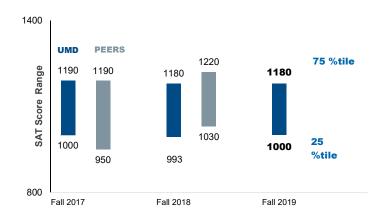
* Peer data for Fall 2019 not available for reporting purposes. SAT Test had major revisions starting in 2017



7

Average SAT Scores One-year of Freshmen nominal change in Fall 2019 (vs. Fall 2018)

SAT Test had major revisions starting in 2017





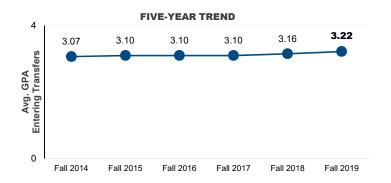
AVERAGE GPA OF ENTERING TRANSFER STUDENTS

3.22

Average transfer GPA in Fall 2019 0.06

One-year nominal change (vs. Fall 2018) ▲ 0.15

Five-year nominal change (vs. Fall 2014)



STUDENT SATISFACTION WITH EDUCATIONAL EXPERIENCE

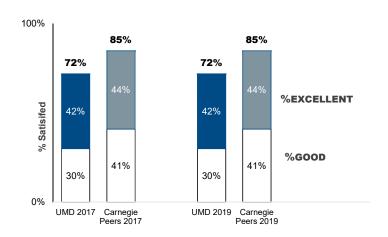
72%

Student Satisfaction as Good or Excellent in UMD 2019

. 0

Three-year % point change (vs. UMD 2017)

Survey is conducted every three years



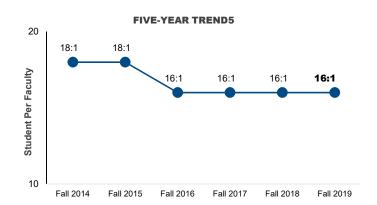
STUDENT-FACULTY RATIO

16:1

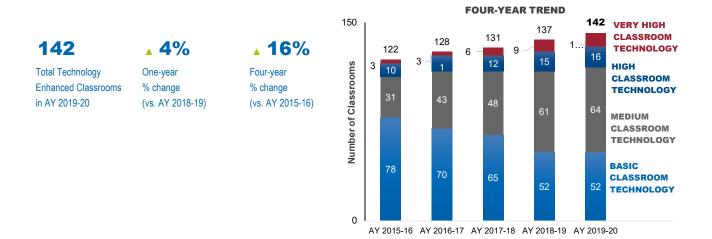
Student-Faculty Ratio in Fall 2019 . 0

One-year nominal change (vs. Fall 2018) **~ 2**

Five-year nominal change (vs. Fall 2014)

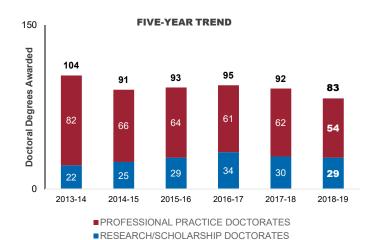


TECHNOLOGY-ENHANCED CLASSROOMS



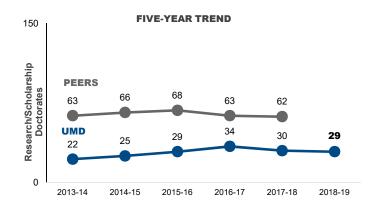
DOCTORAL DEGREES AWARDED

2012-2014 conferrals included the teach-out of SNESL students.





^{*} Peer data for 2018-19 not available for reporting purposes.



POSTDOCTORAL APPOINTEES

Postdoctoral Appointees in 2019-20 ▼ **1**One-year
nominal change

(vs. 2018-19)

Five-year nominal change (vs. 2014-15)



TOTAL R&D EXPENDITURES

\$28.0

Million in FY 2019

5%

One-year % change (vs. FY 2018)

1%

Five-year % change (vs. FY 2014)



TOTAL R&D EXPENDITURES RANKINGS

245

Total R&D Expenditures Overall Rankings in FY 2018 One-year nominal change (vs. FY 2017) Five-year nominal change (vs. FY 2013)

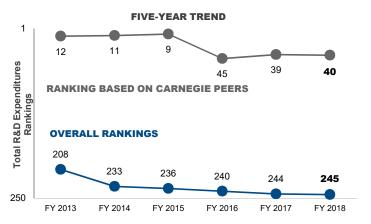
37

40

Rankings based on Carnegie Peers in FY 2018 **1**

One-year nominal change (vs. FY 2017)

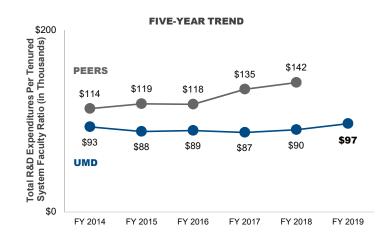
Carnegie Classification changed in FY2016.



Overall Ranking Source: National Science Foundation Ranking by Total R&D Expenditures.

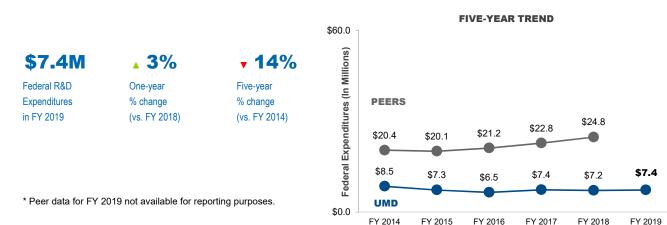
Ranking based on Carnegie Peers is further standardized by US Publics and Non-Medical Schools.

TOTAL R&D EXPENDITURES PER TENURED SYSTEM FACULTY

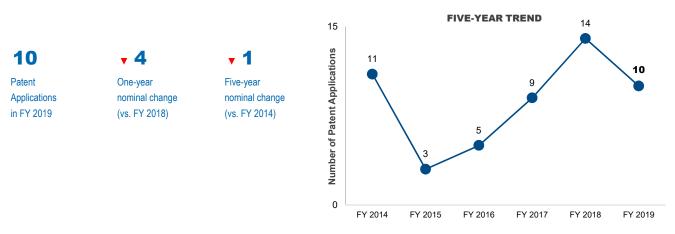


^{*} Peer data for Fall 2019 not available for reporting purposes.

FEDERAL RESEARCH EXPENDITURES



NUMBER OF PATENT APPLICATIONS



University of Massachusetts 2020 Performance Measurement System

LICENSE INCOME

\$65.1k

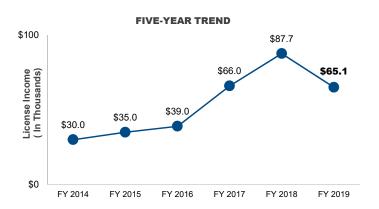
License Income in FY 2019

26%

One-year % change (vs. FY 2018)

117%

Five-year % change (vs. FY 2014)



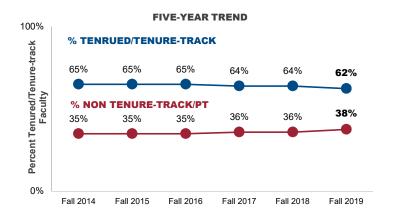
PERCENT TENURED/TENURE-TRACK FACULTY

62%

Percent Tenured/ Tenure-track Faculty in Fall 2019 **~ 2**

One-year % point change (vs. Fall 2018) **√** 3

Five-year % point change (vs. Fall 2014)



NEW TENURED/TENURE-TRACK FACULTY HIRED

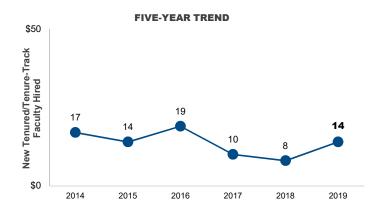
14

in 2019

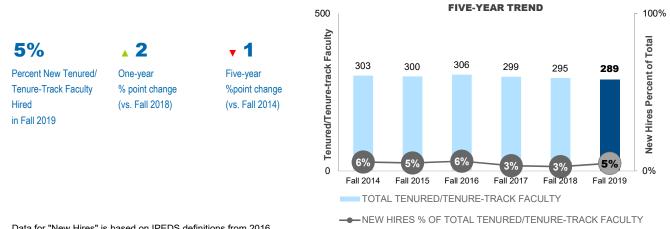
New Tenured/ Tenure-Track Faculty Hired ₄ 6

One-year nominal change (vs. 2018)

Data for "New Hires" is based on IPEDS definitions from 2016

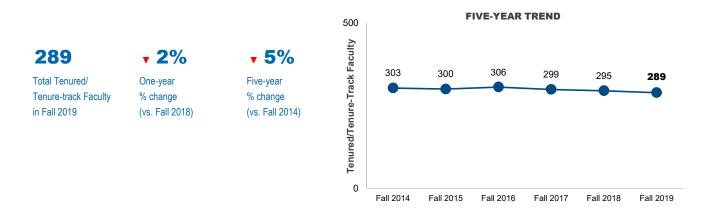


NEW TENURED/TENURE-TRACK FACULTY HIRED AS PERCENT OF ALL TENURE-TRACK FACULTY

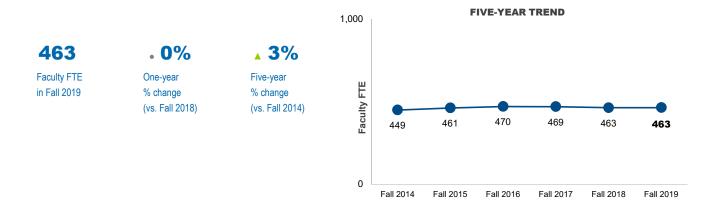


Data for "New Hires" is based on IPEDS definitions from 2016

TENURED/TENURE-TRACK FACULTY



FACULTY FTE

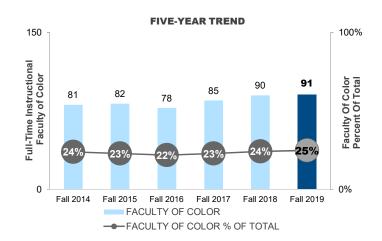


University of Massachusetts 2020 Performance Measurement System

FACULTY-OF-COLOR

91 Faculty Of Color Five-year One-year in Fall 2019 nominal change nominal change (vs. Fall 2018) (vs. Fall 2014) 25% Percent of One-year Five-year Faculty Of Color % point change % point change in Fall 2019 (vs. Fall 2018) (vs. Fall 2014)

Faculty-of-Color based on US Citizens/Permanent Residents reporting Race/Ethnicity according to new IPEDS definitions.



WOMEN FACULTY

187Women Faculty in Fall 2019

47%
Percent of

Percent of Women Faculty in Fall 2019 **4**

One-year nominal change (vs. Fall 2018)

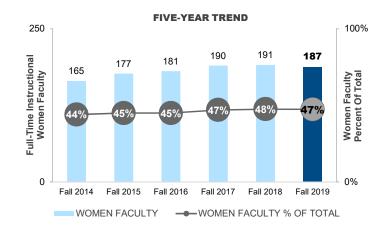
v 0

One-year % point change (vs. Fall 2018) **22**

Five-year nominal change (vs. Fall 2014)

3

Five-year % point change (vs. Fall 2014)



FACULTY AWARDS

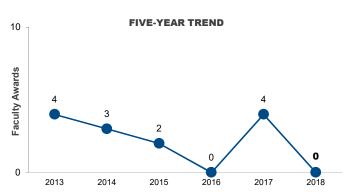
O

Faculty Awards in 2018

4

One-year nominal change (vs. 2017) **4**

Five-year nominal change (vs. 2013)



Source: The Top American Research Universities

NATIONAL ACADEMY MEMBERS

FIVE-YEAR TREND 10 National Academy Members . 0 0 . 0 National Academy One-year Five-year Members nominal change nominal change in 2018 (vs. 2014) (vs. 2018) 0 n 0 0 2014 2015 2018 2018 2016

Source : The Top American Research Universities

FIVE-YEAR TREND

ACCESS AND AFFORABILITY

PERCENT IN-STATE PELL GRANT RECIPIENTS

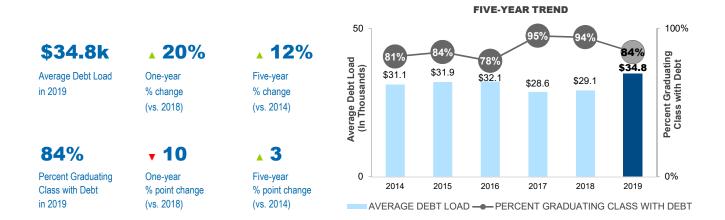
FIVE-YEAR TREND 100% Percent (In-State) Pell Grant Recipients 41% 2 Percent (In-State) One-year Five-year 42% 41% 41% 40% 40% **Pell Grant Recipients** % point change % point change 39% in Fall 2018 (vs. Fall 2017) (vs. Fall 2013) 0% Fall 2013 Fall 2014 Fall 2015 Fall 2016 Fall 2017 Fall 2018

PERCENT NEED MET FOR IN-STATE STUDENTS AWARDED NEED-BASED AID

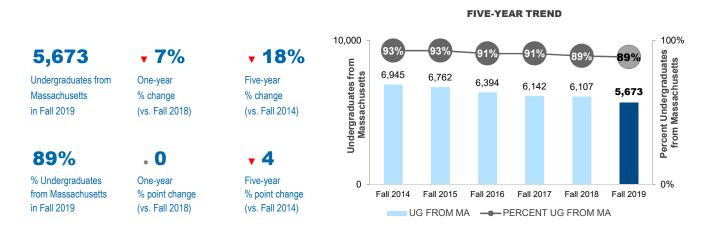
100% Percent Need Met for (In-State) Need-Based Aid 91% 90% 90% 83% **7** 82% 82% 83% Percent Need Met for One-year Five-year (In-State) Need-Based % point change % point change Aid in 2018-19 (vs. 2017-18) (vs. 2013-14) 0% 2013-14 2014-15 2015-16 2016-17 2017-18 2018-19

ACCESS AND AFFORABILITY

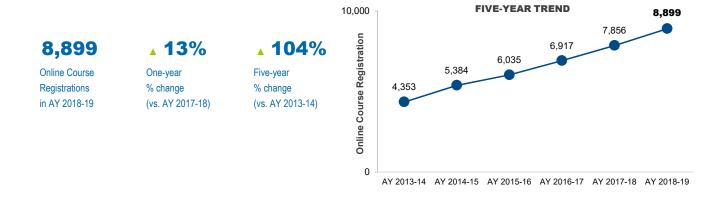
UNDERGRADUATE STUDENT DEBT LOAD OF GRADUATING CLASS



PERCENT UNDERGRADUATES FROM MASSACHUSETTS



ONLINE COURSE REGISTRATIONS

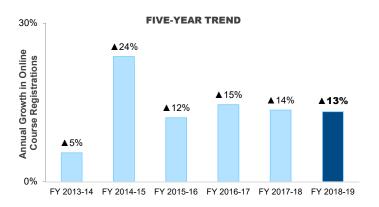


ACCESS AND AFFORABILITY

ANNUAL GROWTH IN ONLINE COURSE REGISTRATIONS

13%

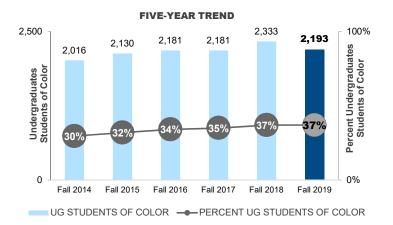
Annual Growth Online Course Registrations in FY 2018-19



STUDENT SUCCESS AND SATISFACTION

UNDERGRADUATE STUDENTS OF COLOR

2,193 **6%** 9% Undergraduates One-year Five-year Students of Color % change % change in Fall 2019 (vs. Fall 2018) (vs. Fall 2014) **37%** . 0 **7** % Undergraduates One-year Five-year Students of Color % point change % point change in Fall 2019 (vs. Fall 2018) (vs. Fall 2014)

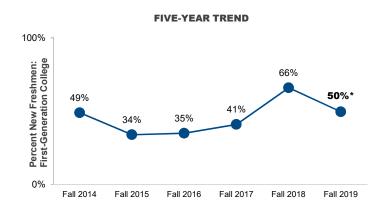


PERCENT FIRST-TIME UNDERGRADUATE WHO ARE FIRST-GENERATION IN COLLEGE

50%

Percent First-time Undergraduate who are First-Generation College in Fall 2019

*Definition changed in 2018 from Neither Parent has postsecondary degree to Neither Parent has bachelor's degree. Source for data changed in 2018 from CIRP survey to Common Application response.

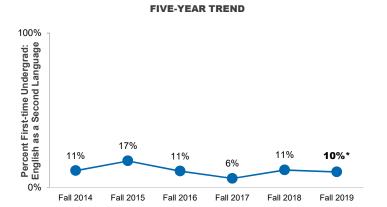


PERCENT FIRST-TIME UNDERGRADUATES WITH ENGLISH AS A SECOND LANGUAGE

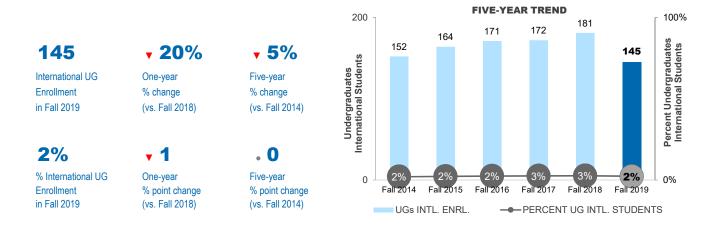
10%

Percent First-time Undergraduates Speak English as a Second Language in Fall 2019

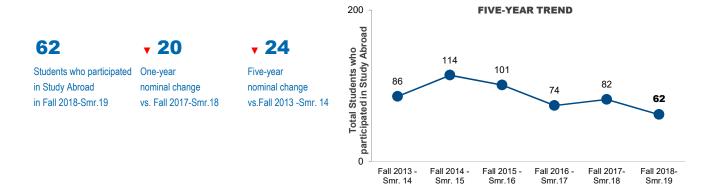
*Source for data changed in 2018 from CIRP survey to Common Application response.



PERCENT UNDERGRADUATES WHO ARE INTERNATIONAL



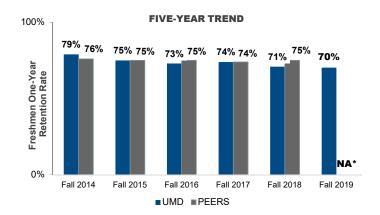
TOTAL STUDENTS WHO PARTICIPATED IN A STUDY ABROAD PROGRAM



FRESHMEN ONE-YEAR RETENTION RATE

70% v 1 v 9

Freshmen One-Year One-year Five-year
Retention Rate % point change % point change in Fall 2019 (vs. Fall 2018) (vs. Fall 2014)

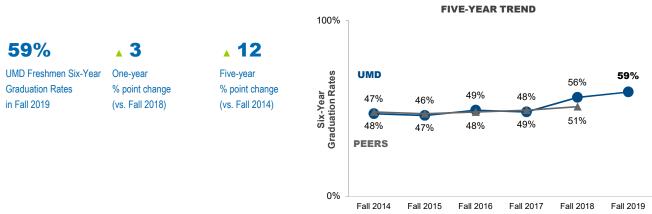


^{*} Peer data for Fall 2019 not available for reporting purposes.

FRESHMEN FOUR-YEAR GRADUATION RATES

FIVE-YEAR TREND 100% 39% Four-Year Graduation Rates Five-year Freshmen Four-Year One-year **Graduation Rates** % point change % point change 39% 37% 37% 34% 30% 28% in 2019 (vs. 2018) (vs. 2014) Cohort 0% Entering Year: (2010) (2012) (2013) (2014) (2015) (2011)Graduated by: 2014 2015 2016 2017 2018 2019

FRESHMEN SIX-YEAR GRADUATION RATE



^{*} Peer data for Fall 2019 not available for reporting purposes.

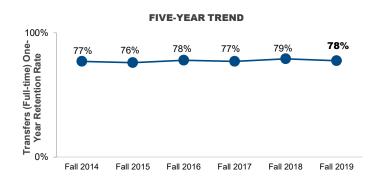
TRANSFER (FULL-TIME) ONE-YEAR RETENTION RATE

78%

Transfers (Full-time) One-Year Retention Rate in Fall 2019 **1**

One-year % point change (vs. Fall 2018) **1**

Five-year % point change (vs. Fall 2014)



TRANSFER (UPPER DIVISION) FOUR-YEAR GRADUATION RATE

60%

Transfers (Upper Division) Four-Year Graduation Rates in Fall 2019 **v** 5

One-year % point change (vs. Fall 2018) **• 11**

Five-year % point change (vs. Fall 2014)



STUDENT ACHIEVEMENT MEASURE

Cohort starting in: 2013-14

46%Bachelor's Degree
Within 4 Yrs. from
any institution

67%

Bachelor's Degree Within 5 Yrs. From any institution **73%**Bachelor's Degree

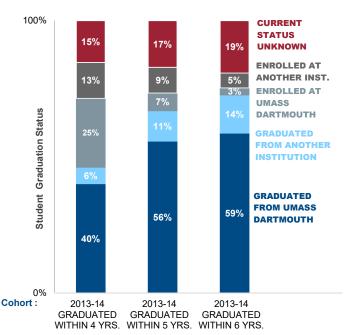
Within 6 Yrs. From any institution

40%

Bachelor's Degree Within 4 Yrs. from UMass Dartmouth **56**%

Bachelor's Degree Within 5 Yrs. From UMass Dartmouth **59%**

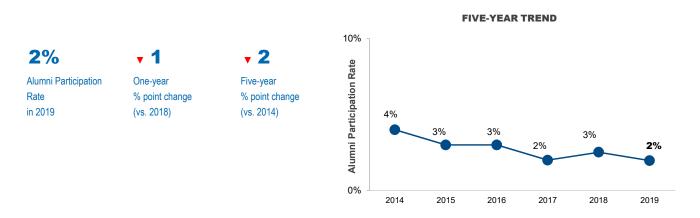
Bachelor's Degree Within 6 Yrs. From UMass Dartmouth



Source: Student Achievement Measure (SAM)

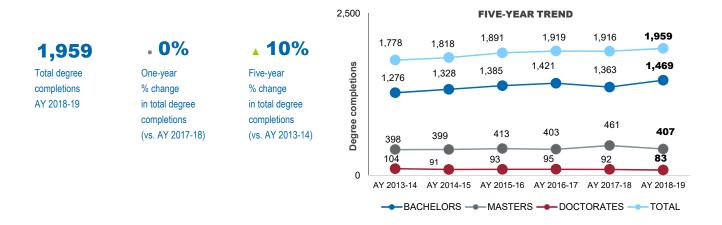
University of Massachusetts 2020 Performance Measurement System

ALUMNI PARTICIPATION RATE

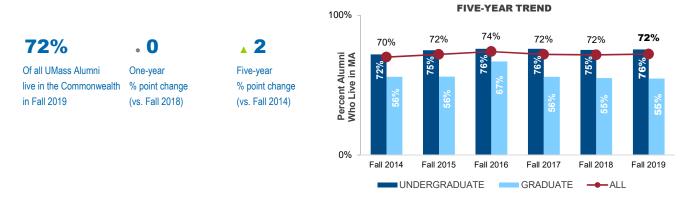


SERVICE TO THE COMMONWEALTH

DEGREE COMPLETIONS



PERCENT ALUMNI WHO LIVE IN MASSACHUSETTS



University of Massachusetts 2020 Performance Measurement System

ENROLLMENT IN STEM PROGRAMS

1,446

UG enrollment in STEM fields in Fall 2019

23%

Percent of total UG enrollment in STEM fields in Fall 2019 **11%**

One-year % change (vs. Fall 2018)

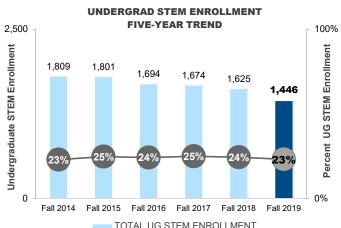
- 1

One-year % point change (vs. Fall 2018) **20%**

Five-year % change (vs. Fall 2014)

. 0

Five-year % point change (vs. Fall 2014)



TOTAL UG STEM ENROLLMEN

W UG ENROLLMENT IN STEM

414

Grad enrollment in STEM fields in Fall 2019

26%

Percent of total Grad enrollment in STEM fields in Fall 2019 **2%**

One-year % change (vs. Fall 2018)

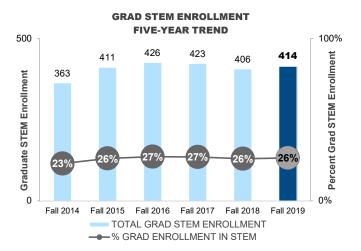
. 0

One-year % point change (vs. Fall 2018) **14%**

Five-year % change (vs. Fall 2014)

3

Five-year % point change (vs. Fall 2014)



1,860

Total enrollment in STEM fields in Fall 2019

24%

Percent of total enrollment in STEM fields in Fall 2019 **8%**

One-year % change (vs. Fall 2018)

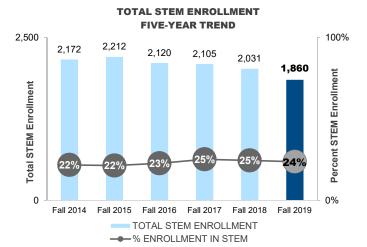
- 1

One-year % point change (vs. Fall 2018) **14%**

Five-year % change (vs. Fall 2014)

2

Five-year % point change (vs. Fall 2014)



DEGREES AWARDED IN STEM FIELDS

331

UG degrees awarded in STEM fields in 2018-19

23%

Percent of total UG degrees awarded in STEM fields in 2018-19

2%

One-year % change (vs. 2017-18)

One-year % point change (vs. 2017-18)

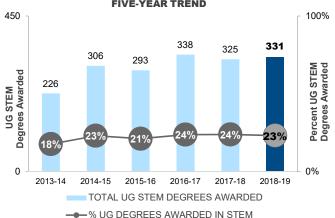
46%

Five-year % change (vs. 2013-14)

5

Five-year % point change (vs. 2013-14)

UNDERGRAD STEM DEGREES AWARDED FIVE-YEAR TREND



158

Grad degrees awarded in STEM fields in 2018-19

33%

Percent of total Grad degrees awarded in STEM fields in 2018-19

12%

One-year % change (vs. 2017-18)

8

One-year % point change (vs. 2017-18)

88%

Five-year % change (vs. 2013-14)

16

Five-year % point change (vs. 2013-14)

GRAD STEM DEGREES AWARDED FIVE-YEAR TREND



→ % GRAD DEGREES AWARDED IN STEM

489

Total degrees awarded in STEM fields in 2018-19

26%

Percent of Total degrees awarded in STEM fields in 2018-19

5%

One-year % change (vs. 2017-18)

2

One-year % point change (vs. 2017-18)

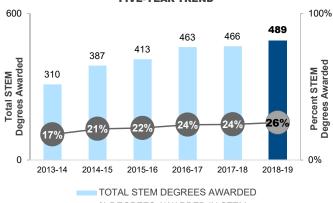
▲ 58%

Five-year % change (vs. 2013-14)

4 9

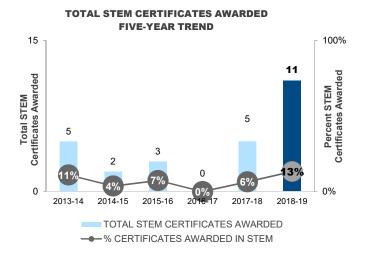
Five-year % point change (vs. 2013-14)

TOTAL STEM DEGREES AWARDED FIVE-YEAR TREND

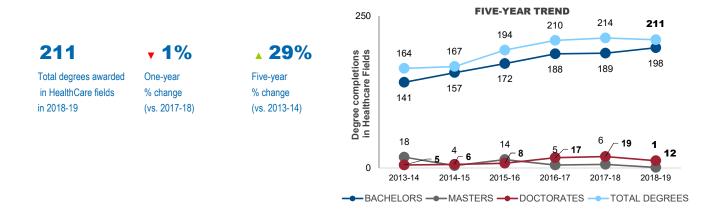


CERTIFICATES AWARDED IN STEM FIELDS

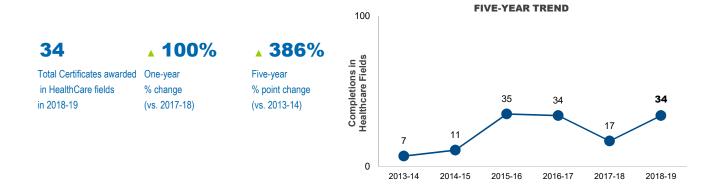




DEGREES AWARDED IN HEALTHCARE FIELDS



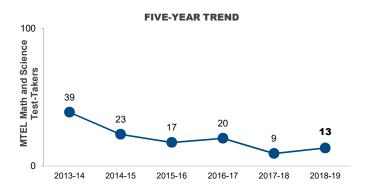
CERTIFICATES AWARDED IN HEALTHCARE FIELDS



University of Massachusetts 2020 Performance Measurement System

MTEL SCIENCE AND MATH TEST-TAKERS

13
MTEL Math and One-year Five-year nominal change in 2018-19 (vs. 2017-18) (vs. 2013-14)



FINANCIAL HEALTH

ENDOWMENT ASSETS AND ANNUAL GROWTH IN ENDOWMENT



3% • 0

Annual Growth One-year
in FY 2019
% point change
(vs. FY 2018)

9

Five-year

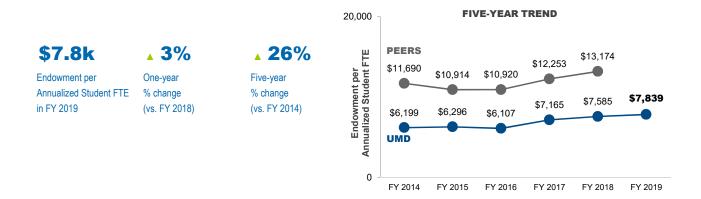
% point change

(vs. FY 2014)

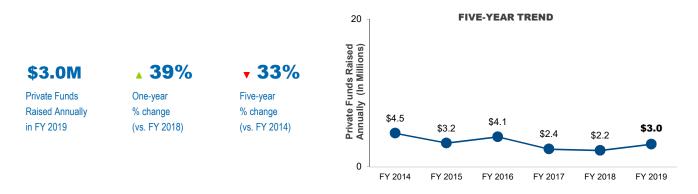


FINANCIAL HEALTH

ENDOWMENT PER ANNUALIZED STUDENT FTE

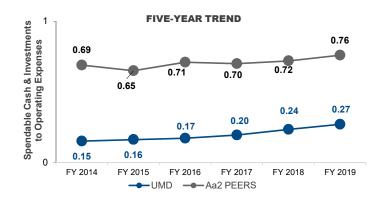


PRIVATE FUNDS RAISED ANNUALLY



SPENDABLE CASH & INVESTMENTS TO OPERATING EXPENSES

0.27Spendable Cash &
Investments to Operating Expenses in FY 2019



FINANCIAL HEALTH

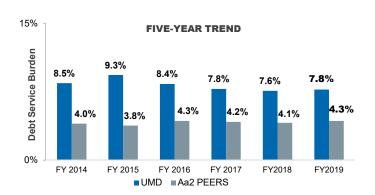
DEBT SERVICE BURDEN

7.8%

Debt Service Burden in FY2019 0.2

One-year % Point change (vs. FY2018) **v** 0.7

Five-year % Point change (vs. FY 2014)



OPERATING MARGIN (%)

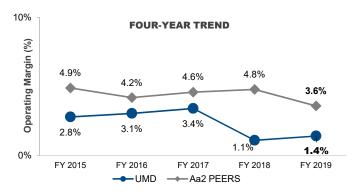
1.4%

Operating Margin (%) in FY 2019

₄ 0.3

One-year % Point change (vs. FY 2018) **2.9**

Four-year % Point change (vs. FY 2015)



DEFINITIONS AND SOURCES

ACADEMIC QUALITY INDICATORS

Average High School GPA of First-Time

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

SAT Scores of Freshmen. SAT scores of Freshmen. All reported SAT scores are based on the sum of the SAT MSS and the ERWS for entering freshmen. A redesigned SAT was used for Fall 2017 admissions; therefore, scores for Fall 2016 and before cannot be compared to scores for Fall 2017 and onward. The average is the arithmetic mean of these SAT scores. Peer data are from IPEDS.

Average GPA of Entering Transfer

Students. 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 most recently conducted National Survey of Student Engagement (NSSE).

Student-Faculty Ratio. The ratio of FTE students to FTE instructional faculty. Faculty and students in stand-alone graduate or professional programs such as law, education, public policy, and marine science 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.

Doctoral Degrees Awarded. Number of doctorates awarded for AY 2017-18, which includes August/September, January/February and May 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 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.

Total R&D Expenditures Ranking. Annual NSF ranking of Total R&D expenditures, for all postsecondary institutions participating in the NSF HERD Survey. 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" (prior to FY16) and "Doctoral Universities: High Research Activity" (FY16-present) and with no medical school. Data source NCES /NSF HERD data tables.

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.

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.

Number of 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.

Percent based on the ratio of Tenured/Tenure-Track Faculty FTE to Total Instructional Faculty FTE. Does not include Research only Faculty.

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

University of Massachusetts 2020 Performance Measurement System

DEFINITIONS AND SOURCES

ACADEMIC QUALITY INDICATORS

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.

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.

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.

Faculty-of-Color. 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.

Women 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 reported in *The Top American Research Universities*.

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

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 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 in-state undergraduate students.
Data as reported to the UMass President's Office in
the Financial Aid Template.

Undergraduate Student Debt Load of

Graduating Class. 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.

DEFINITIONS AND SOURCES

ACCESS AND AFFORDABILITY INDICATORS

Percent Undergraduates from

Massachusetts. Percentage of total undergraduate students who are 'In-State' or residents of Massachusetts based on tuition residency. For day students, tuition classification is used, whereas for CE students, actual residency at time of matriculation is used

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

Undergraduate Students of Color.

Undergraduates who self-identify as either African American/Black, Hispanic/ Latino, Asian, Hawaiian/Pacific Islander, American Indian/Alaskan Native, and/or Two or more races. Hispanic students who list one or more additional groups will be coded as Hispanic. Cape Verdean students who identify solely as Cape Verdean will be coded as Black/African American. Included only for U.S. Citizens and Permanent Residents who report race and ethnicity divided by total undergraduate U.S. citizens and permanent residents who report race/ethnicity.

Percent First-Time Undergraduates who are First Generation in College. Percent of
first-time undergraduates where neither parent has
earned a bachelor's degree. The source of this data
field is the Common Application. Prior years'
percentages were from the CIRP survey and
definition was neither parent has postsecondary
degree.

Percent First-Time Undergraduates with English as a Second Language. Percent of first-time undergraduates who speak another language at home. The source of this data field will be from the Common Application. Prior years' percentages were from the CIRP survey.

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 permanent residents, refugees, or US citizens.

Total Students who participated in a Study Abroad Program. Number of students who participated in a credit-bearing study abroad program outside of the U.S. over the most recent academic year, through UMass or other institution.

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

Freshmen Four-Year Graduation Rate.

Percent of first-time, full-time, degree-seeking freshmen who entered UMass in a given Fall term and graduated from the institution by the end of their fourth year.

Freshmen Six-Year Graduation Rate.

Percent of first-time, full-time freshmen who entered UMass in a given Fall term 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 in a given Fall and were still enrolled at, or graduated from the institution as of the following Fall.

University of Massachusetts 2020 Performance Measurement System

DEFINITIONS AND SOURCES

STUDENT SUCCESS AND SATISFACTION INDICATORS

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

Student Achievement Measure. SAM tracks student movement across postsecondary institutions to provide a more complete picture of undergraduate student progress and completion within the higher education system. SAM is an alternative to the federal graduation rate, which is limited to tracking

the completion of first-time, full-time students at one institution.

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.

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. Unduplicated count of students enrolled in Science, Technology, Engineering, & Math (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. 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 quasi-endowments) 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 quasiendowments) 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.

DEFINITIONS AND SOURCES

FINANCIAL HEALTH INDICATORS

Debt Service Burden. Compares the relative cost of borrowing to overall expenditures. Debt service (P&I) / Total expenses

Operating Margin (%). Indicates the excess margin (or deficit) by which annual revenues cover annual expenses (excluding unrealized gains or losses). (Total revenues – total expenses)/Total revenues

Spendable Cash & Investments to Operating

Expenses. Measures the extent to which the University can rely on wealth that can be accessed over time or for a specific purpose to operate.

(Cash & investments – debt service reserve funds + permanently restricted pledges receivable – permanently restricted Net Assets)/Total expenses

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 Texas 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

Clemson University, SC

Cuyahoga Community College District, OH

Florida State University, FL

Houston Community College System, TX

Iowa State University of Science & Technology, IA

Michigan State University, MI

Mississippi Institutions of Higher Learning, MS

Nevada System of Higher Education, NV

State University of New York, NY

State University System of Florida, FL

Texas State University System, TX

University of Alabama at Birmingham, AL

University of Alabama, AL

University of Arizona, AZ

University of Arkansas, AR

University of California, CA

University of Florida, FL

University of Georgia, GA

University of Hawaii, HI

University of Houston System, TX

University of Kansas, KS

University of Kentucky, KY

University of Massachusetts, MA

Moody's Aa2 Peers

Alamo Community College District, TX

Arizona State University, AZ

Auburn University, AL

Board of Regents of The University System of

Georgia, GA

California State University, CA

City University of New York, NY

DEFINITIONS AND SOURCES

PEER INSTITUTIONS FOR UMASS DARTMOUTH

Moody's Aa2 Peers

University of Wyoming, WY

University of North Texas System, TX

University of Oregon, OR

University of South Carolina, SC

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

Research and Assessment.



HEADLINES

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 has remained strong. The Fall 2019 cohort's average high school GPA was 3.60, and the average SAT score was 1232. UML's transfer students posted an average entering GPA of 3.18, steady with last year. Since 2010, undergraduate enrollment has increased by a third. The Honors College at UMass Lowell has over quadrupled in size since 2010, to 1,879 students in Fall 2019.

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 2019, the average amount of R&D expenditures per tenure-stream faculty member was \$181,419. UMass Lowell's goal is to reach \$155,500 per tenure-stream faculty member by FY 2020.

UMass Lowell ranked 171 in R&D Expenditures in FY 2018, up two spots from the prior year. When compared to public Carnegie class peers without a medical school, UMass Lowell increased by ten spots from last year, ranked 17th.

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 to 643; 25 of these were tenured or tenure-track new hires. Similarly, the overall faculty FTE increased to 807 in Fall 2019, up from 795 in Fall 2018. In keeping with faculty diversity goals in the 2020 Strategic Plan, the proportion of faculty of color in Fall 2019 was 28%, increasing slightly from last year.

ACCESS AND AFFORDABILITY

UMass Lowell strives to provide 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. On average 88% of instate undergraduate students need was met in FY19. Almost one in three (30%) 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. Thirty-eight percent of UMass Lowell undergraduates self-identified as the first in their family to attend college. Thirty-seven percent of undergraduates identify themselves as students of color.

STUDENT SUCCESS AND SATISFACTION

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

Student success indicators decreased slightly this year for our students. For those who entered directly out of high school, UMass Lowell's one-

year retention rate was 83%. The four-year graduation rate improved to 47%, and the six-year graduation rate jumped three percentage points, to 66%, representing the University's highest six-year graduation rate. For students who entered as transfers, 84% returned for their second year at UMass Lowell while the comparable graduation rate (four-year) for transfer students was 64%.

HEADLINES

STUDENT SUCCESS AND SATISFACTION

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 2019-20, UMass Lowell will have a total of 36 LLCs: 12 LLCs for first-year students, 18 for upper-class and transfer students, and six open to all 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 2016 was \$921.9 million. 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 2019 was in STEM fields. Likewise, over one-third of all degrees awarded at UMass Lowell in AY 2018-19 were in STEM fields. Over ten 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 campusbased 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, often onsite. The result is continued significant growth in the number of online course enrollments at UMass Lowell. AY 2018-19 saw an increase of three percent over the previous year, continuing an eight-year trend of growth in online course registrations. AY 2018-19 also saw the largest number of online course registrations to date, at 31.816.

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 increased 9% this year, to \$99.9 million. This affected the endowment per annualized FTE metric, which increased in turn to \$6,737. Private funds raised annually increased from last year, to \$21M. UMass Lowell's primary reserve declined to 14.9%.

UMass Lowell's alumni giving rate this year is 10%, more than twice the national benchmark for public universities. Forty-five percent of UMass Lowell faculty and staff give to the University, almost two and a half times the national average. The

University's first-ever comprehensive fundraising campaign, *Our Legacy, Our Place: The Campaign for UMass Lowell* is well on its way, having already raised more than \$143.8 million of the 2020 goal of \$150 million.

n.b. All peer comparisons throughout the 2020 "Annual Indicators" document were generated using UMass Lowell's peers as of 2012. These are listed at the end of the "Definitions" section.

AT-A-GLANCE

ACADEMIC QUALITY

| • | Average HS GPA of Freshmen | 3.60 | • | Total R&D Expenditures per Tenure System Faculty | \$181,419 |
|---|--|-----------|---|--|-----------|
| • | Average SAT Scores of Freshmen | | • | Patent Applications | 35 |
| | Arithmetic Mean | 1232 | • | License Income | \$313,849 |
| | 25 th – 75 th Percentile | 1150-1300 | • | Percent Tenured/Tenure-Track Faculty FTE | 55% |
| • | Average GPA of Entering Transfer Students | 3.18 | • | New Tenured/Tenure-Track Faculty Hired | 25 |
| • | Student Satisfaction with Educational Experience | 85% | | As Percent of Total T/TT Faculty | 1 |
| • | Student-Faculty Ratio | 17:1 | • | Change in Tenured/Tenure-Track Faculty | 1% |
| • | Technology-Enhanced Classrooms | 195 | • | Change in Faculty FTE | 2% |
| • | No. of Doctoral Degrees Awarded | 154 | • | Full-Time Instructional Faculty | |
| • | No. of Research Doctoral Degrees Awarded | 114 | | Percent Faculty-of-Color | 28% |
| • | No. of Postdoctoral Appointees | 39 | | Percent Women Faculty | 45% |
| • | Total R&D Expenditures | \$84M | • | Faculty Awards | 1 |
| • | Total R&D Expenditures Ranking | 171 | • | National Academy Members | 0 |
| • | Total R&D Expenditures Ranking among Carnegie Peers, US Publics, Non-Medical | 17 | | | |

ACCESS AND AFFORDABILITY

| • | Percent In-State Pell Grant Recipients | 30% | • | Percent Undergraduates from Students from MA | 88% |
|---|---|----------|---|--|--------|
| • | Percent of Need Met for In-State Students Awarded Need-Based Aid | 00 /0 | • | Online Course Registrations | 31,816 |
| • | Average Debt of Students (UG Graduating Class) | \$32,317 | • | Annual Growth in Online Course Registrations | 3% |
| • | Percent Graduating Class with Debt (UG) | 74% | | | |

AT-A-GLANCE

STUDENT SUCCESS AND SATISFACTION

| • | Percent Undergraduates who are Students of Color | 37% | • | Freshmen Four-Year Graduation Rate | 47% |
|---|--|-----|---|---|-------|
| • | Percent First-Time Undergraduates who are First Generation in College | 38% | • | Freshmen Six-Year Graduation Rate | 66% |
| • | Percent First-Time Undergraduates with English as a Second Language | NA | • | Transfer (Full-time) One-Year Retention Rate | 84% |
| • | Percent Undergraduates who are International | 4% | • | Transfer (Upper Division) Four-Year Graduation Rate | 64% |
| • | Total Students who Participated in a Study Abroad Program | 255 | • | Alumni Participation Rate | 10.0% |
| | Freshmen One-Year Retention Rate | 83% | | | |

SERVICE TO THE COMMONWEALTH

| Degree Completions | 4,187 | Degrees Awarded in STEM Fields | 1,742 (41%) |
|---------------------------------|-------------|--------------------------------------|-------------|
| Bachelor's | 2863 | Undergraduate | 1,252 (43%) |
| Master's | 1170 | Graduate | 490 (37%) |
| Doctorates | 154 • | Certificates Awarded in STEM Fields | 158 (35%) |
| Percent Alumni who Remain in MA | 61% | Degrees Awarded in Healthcare Fields | 464 (11%) |
| Enrollment in STEM Programs | 7,318 (43%) | Undergraduate | 302 (10%) |
| Undergraduate | 5,970 (44%) | Graduate | 162 (12%) |
| Graduate | 1,348 (37%) | MTEL Science and Math Test-Takers | 13 |
| Certificate | 136 | | |

FINANCIAL HEALTH

| • | Total Endowment | \$99.9M | • | Spendable Cash & Investments to Operating Expenses | 0.29 |
|---|--------------------------------------|---------|---|---|------|
| • | Annual Growth in Endowment | 8.9% | • | Debt Service Burden | 8.0% |
| • | Endowment per Annualized Student FTE | \$6,737 | • | Operating Margin (%) | 1.3% |
| | Private Funds Raised Annually | \$21.0M | | | |

AVERAGE HIGH-SCHOOL GPA OF FIRST-TIME FRESHMEN

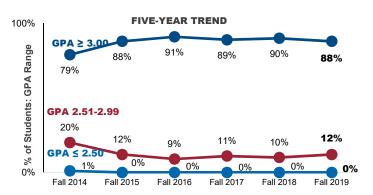
3.60

Average HS GPA in Fall 2019 .0.00

One-year nominal change (vs. Fall 2018)

0.17

Five-year nominal change (vs. Fall 2014)



SAT SCORES OF FRESHMEN

1300

. 0

SAT Scores of Freshmen One-year 75th Percentile in Fall 2019

nominal change (vs. Fall 2018)

1150

0

25th Percentile in Fall 2019

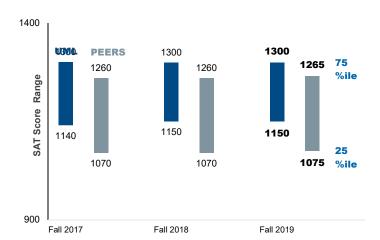
SAT Scores of Freshmen One-year nominal change (vs. Fall 2018)

3

75th Percentile Rank

Rank

25th Percentile



1232

Average SAT Scores of Freshmen in Fall 2019

One-year nominal change (vs. Fall 2018)



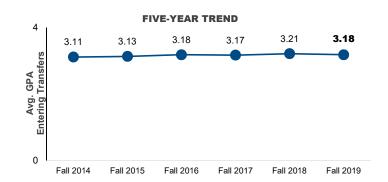
AVERAGE GPA OF ENTERING TRANSFER STUDENTS

3.18

Average HS GPA in Fall 2019 **v** 0.03

One-year nominal change (vs. Fall 2018) **▲ 0.07**

Five-year nominal change (vs. Fall 2014)



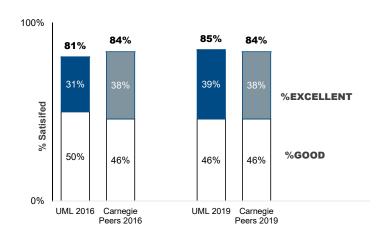
STUDENT SATISFACTION WITH EDUCATIONAL EXPERIENCE

85%

Student Satisfaction as Good or Excellent in UML 2016

^ 2

One-year % point change (vs. UML 2015)



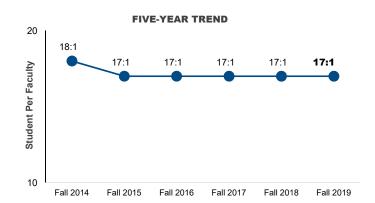
STUDENT-FACULTY RATIO

17:1

Student-Faculty Ratio in Fall 2019 . 0

One-year nominal change (vs. Fall 2018) _ 4

Five-year nominal change (vs. Fall 2014)



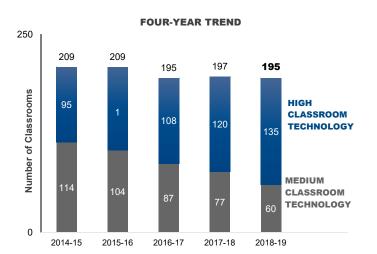
TECHNOLOGY-ENHANCED CLASSROOMS

195Total Technology
Enhanced Classrooms
in 2018-19

1%

One-year % change (vs. 2017-18) **▼ 7%**

Four-year % change (vs. 2014-15)



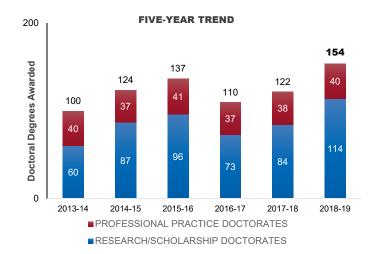
DOCTORAL DEGREES AWARDED

154

Doctoral Degrees Awarded in in 2018-19 **32**

One-year nominal change (vs. 2017-18) **54**

Five-year nominal change (vs. 2013-14)



114

Research Degrees Awarded in in 2018-19 **30**

One-year nominal change (vs. 2017-18) _^ 54

Five-year nominal change (vs. 2013-14)



^{*} UML does not presently have Very High or Basic level classrooms.

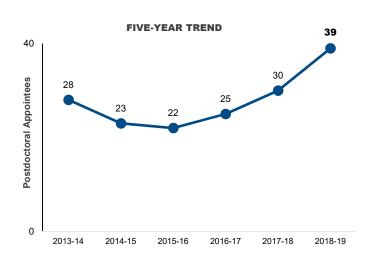
POSTDOCTORAL APPOINTEES

39Postdoctora

Postdoctoral Appointees in 2018-19 **4** 9

One-year nominal change (vs. 2017-18) ₄ 11

Five-year nominal change (vs. 2013-14)



TOTAL R&D EXPENDITURES

\$84.0

Million in FY 2019

16%

One-year % change (vs. FY 2018) **30%**

Five-year % change (vs. FY 2014)



TOTAL R&D EXPENDITURES RANKINGS

171

Total R&D Expenditures Overall Rankings in FY 2018

17

Rankings based on Carnegie Peers in FY 2018 2

One-year nominal change (vs. FY 2017)

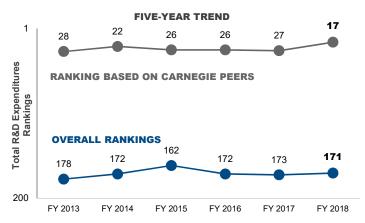
10

One-year nominal change (vs. FY 2017) **7**

Five-year nominal change (vs. FY 2013)

<u>^ 11</u>

Five-year nominal change (vs. FY 2013)



Overall Ranking Source: National Science Foundation Ranking by Total R&D Expenditures.

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

TOTAL R&D EXPENDITURES PER TENURED SYSTEM FACULTY

\$181k

13%

20%

Total R&D Expenditure Per Tenured System Faculty in FY 2019 One-year % change (vs. FY 2018) Five-year % change (vs. FY 2014)



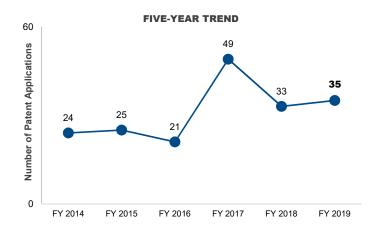
NUMBER OF PATENT APPLICATIONS

35

Patent Applications in FY 2019 **2**

One-year nominal change (vs. FY 2018) **11**

Five-year nominal change (vs. FY 2014)



LICENSE INCOME

\$314k

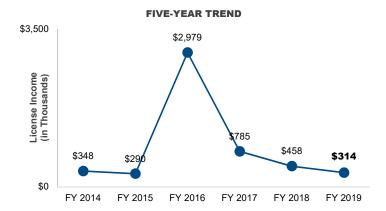
License Income in FY 2019

31%

One-year % change (vs. FY 2018)

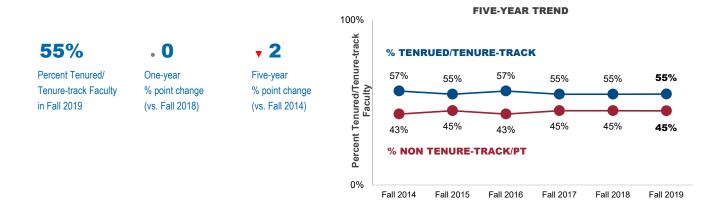
10%

Five-year % change (vs. FY 2014)



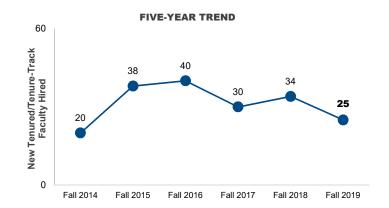
^{*} Peer data for FY 2017 is currently not available.

PERCENT TENURED/TENURE-TRACK FACULTY FTE



NEW TENURED/TENURE-TRACK FACULTY HIRED

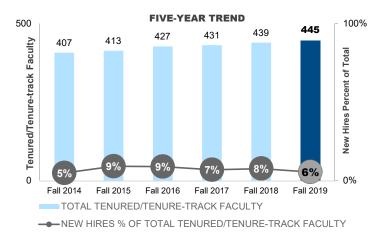




Data for "New Hires" is based on IPEDS definitions from 2016

NEW TENURED/TENURE-TRACK FACULTY HIRED AS PERCENT OF ALL TENURE-TRACK FACULTY





Data for "New Hires" is based on IPEDS definitions from 2016

TENURED/TENURE-TRACK FACULTY

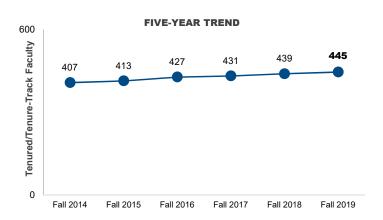
445 Total Tenured/ Tenure-track Faculty

in Fall 2019

1%

One-year % change (vs. Fall 2018) 9%

Five-year % change (vs. Fall 2014)



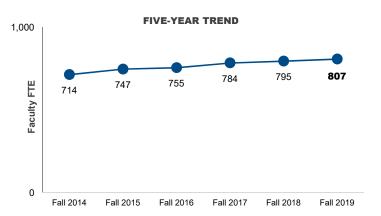
FACULTY FTE

807

Faculty FTE in Fall 2019 2%

One-year % change (vs. Fall 2018) **13%**

Five-year % change (vs. Fall 2014)



FIVE-YEAR TREND

148

160

FACULTY-OF-COLOR

200

177

Faculty Of Color in Fall 2019

28% Percent of Faculty Of Color in Fall 2019

12

One-year nominal change (vs. Fall 2018)

2 One-year % point (vs. Fall 2018)

57 Five-year

nominal change (vs. Fall 2014)

5 Five-year

% point (vs. Fall 2014) Full-Time Instructional Faculty of Color . 26% 26% . 25% 23% 0 Fall 2015 Fall 2016 Fall 2017 Fall 2018 Fall 2019 Fall 2014 FACULTY OF COLOR **─** FACULTY OF COLOR % OF TOTAL

133

120

Faculty-of-Color based on US Citizens/Permanent Residents reporting Race/Ethnicity according to new IPEDS definitions.

100%

Faculty Of Color Percent Of Total

0%

177

28%

165

WOMEN FACULTY

288

Women Faculty in Fall 2019

45%

Percent of Faculty Of Color in Fall 2019

^2

One-year nominal change (vs. Fall 2018)

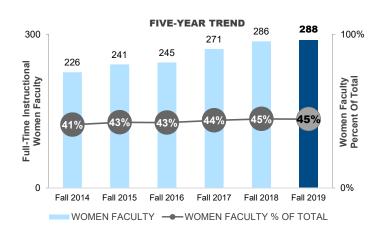
. 0 One-year % point

(vs. Fall 2018)

Five-year nominal change (vs. Fall 2014)

62

4 Five-year % point (vs. Fall 2014)



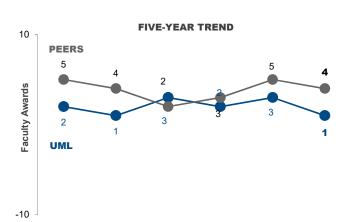
FACULTY AWARDS

Faculty Awards in 2018

2

One-year nominal change (vs. 2017)

Five-year nominal change (vs. 2013)



Source: The Top American Research Universities

NATIONAL ACADEMY MEMBERS

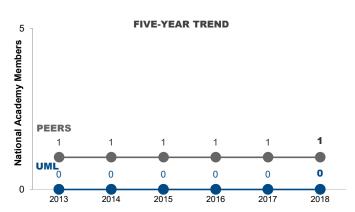
National Academy Members in 2018

. 0

One-year nominal change (vs. 2017)

. 0

Five-year nominal change (vs. 2013)



Source: The Top American Research Universities

ACCESS AND AFFORDABILITY

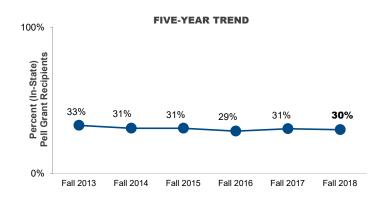
PERCENT IN-STATE PELL GRANT RECIPIENTS





(vs. Fall 2017)





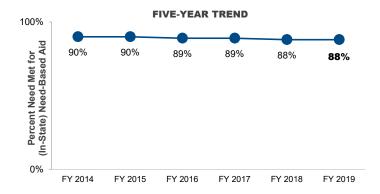
PERCENT NEED MET FOR IN-STATE STUDENTS AWARDED NEED-BASED AID



. 0

Percent Met for (In-state) Need-Based Aid in FY 2019 One-year % point change (vs. FY 2018) **~ 2**

Five-year % point change (vs. FY 2014)



UNDERGRADUATE STUDENT DEBT LOAD OF GRADUATING CLASS

\$32kAverage Debt Load in 2019

74%

Percent Graduating

Class with Debt

in 2019

• 0% One-year % change (vs. 2018)

▼ **3**One-year
% point change
(vs. 2018)

Five-year % change (vs. 2014)

Five-year % point change (vs. 2014)



---- PERCENT GRADUATING CLASS WITH DEBT

ACCESS AND AFFORDABILITY

PERCENT UNDERGRADUATES FROM MASSACHUSETTS

12,128

Undergraduates from Massachusetts in Fall 2019

88%

% Undergraduates from Massachusetts in Fall 2019 **2%**

One-year % change (vs. Fall 2018)

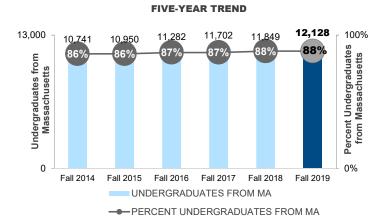
. 0

One-year % point change (vs. Fall 2018) 13%

Five-year % change (vs. Fall 2014)

2

Five-year % point change (vs. Fall 2014)



ONLINE COURSE REGISTRATIONS

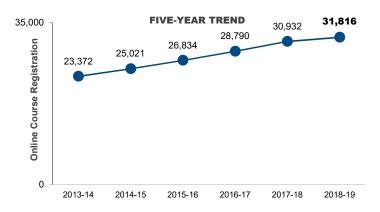
31,816

Online Course Registrations in 2018-19 **3%**

One-year % change (vs. 2017-18)

36%

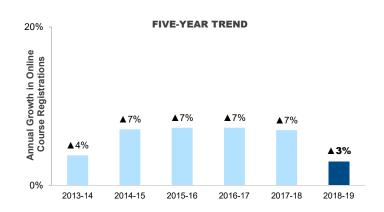
Five-year % change (vs. 2013-14)



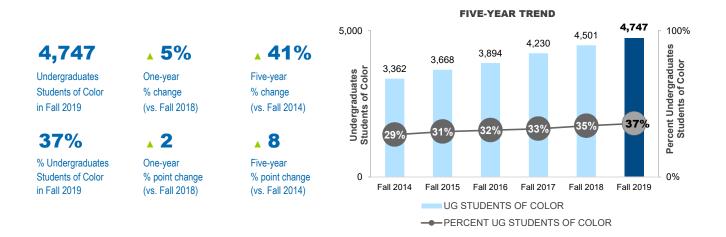
ANNUAL GROWTH IN ONLINE COURSE REGISTRATIONS

3%

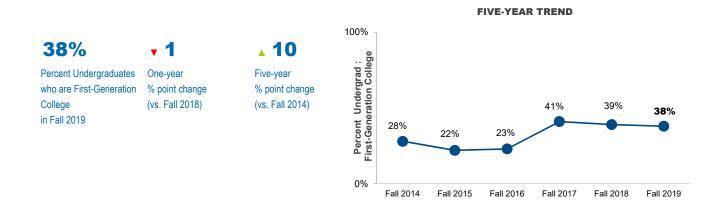
Annual Growth Online Course Registrations in 2018-19



UNDERGRADUATE STUDENTS OF COLOR

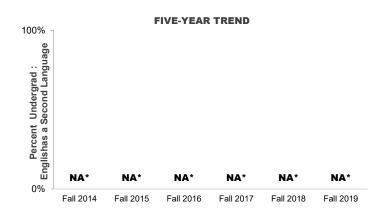


PERCENT FIRST-TIME UNDERGRADUATES FIRST-GENERATION IN COLLEGE

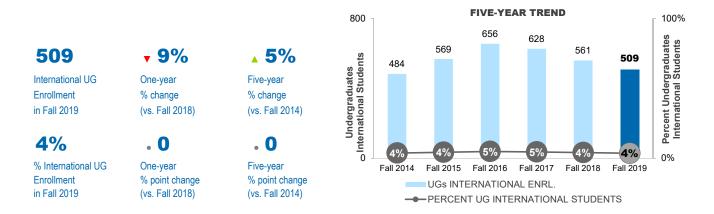


PERCENT FIRST-TIME, FULL-TIME UNDERGRADUATES WITH ENGLISH AS A SECOND LANGUAGE

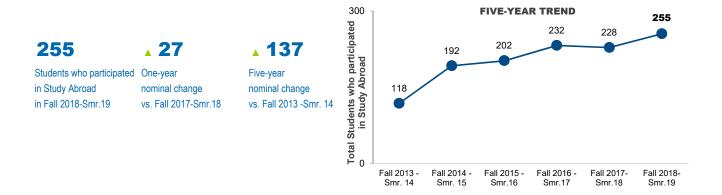




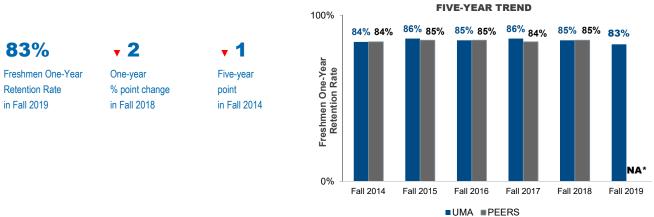
PERCENT UNDERGRADUATES WHO ARE INTERNATIONAL



TOTAL STUDENTS WHO PARTICIPATED IN A STUDY ABROAD PROGRAM

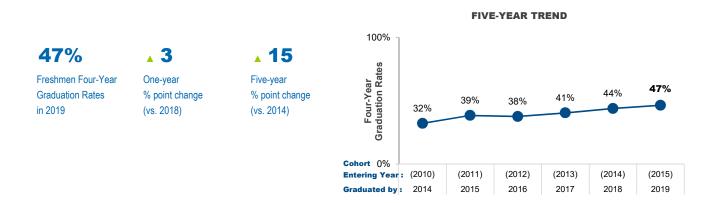


FRESHMEN ONE-YEAR RETENTION RATE

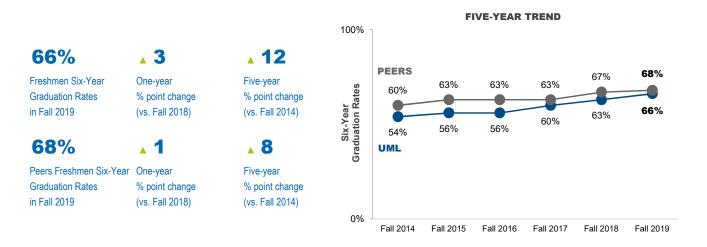


^{*} Peer data for Fall 2019 not available for reporting purposes.

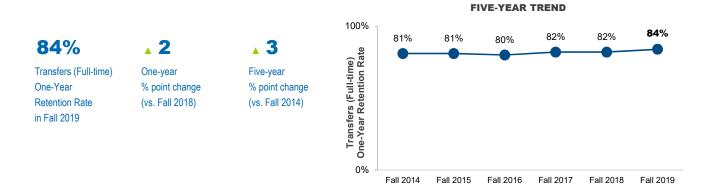
FRESHMEN FOUR-YEAR GRADUATION RATES



FRESHMEN SIX-YEAR GRADUATION RATE



TRANSFER (FULL-TIME) ONE-YEAR RETENTION RATE



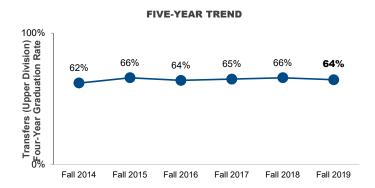
TRANSFER (UPPER DIVISION) FOUR-YEAR GRADUATION RATE

64%

Transfers (Upper Division) Four-Year Graduation Rates in Fall 2019 **v** 2

One-year % point change (vs. Fall 2018) **2**

Five-year % point change (vs. Fall 2014)



STUDENT ACHIEVEMENT MEASURE

Cohort starting in: 2013-14

45%

Bachelor's Degree within 4-years from any institution

40%

Bachelor's Degree within 4-years from UMass Lowell

68%

Bachelor's Degree within 5-years from any institution

61%

* Five UML graduates were not found by NSC

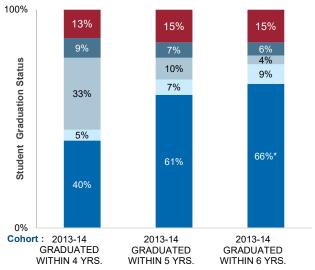
Bachelor's Degree within 5-years from UMass Lowell

75%

Bachelor's Degree within 6-years from any institution

66%

Bachelor's Degree within 6-years from UMass Lowell



- ■CURRENT STATUS UNKNOWN
- ENROLLED AT ANOTHER INSTITUTION
- ENROLLED AT UMASS LOWELL
- GRADUATED FROM ANOTHER INSTITUTION
- GRADUATED FROM UMASS LOWELL

Source:Student Achievement Measure (SAM)

ALUMNI PARTICIPATION RATE

10%

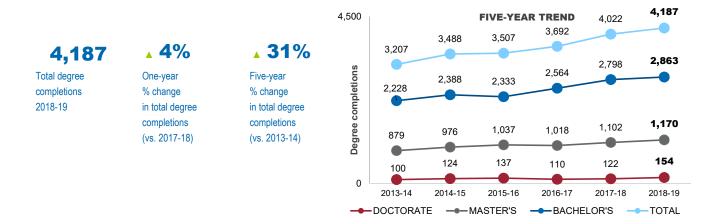
Alumni Participation Rate in FY 2019 . 0

One-year % point change (vs. FY 2018) **~ 2**

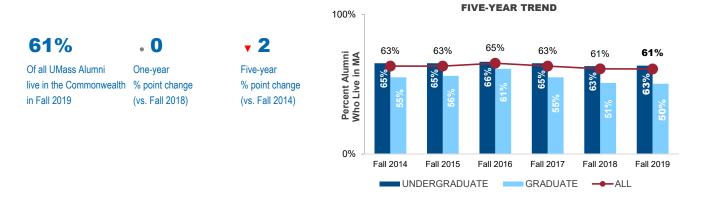
Five-year % point change (vs. FY 2014)



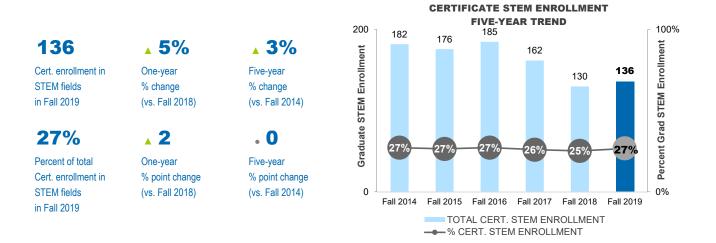
DEGREE COMPLETIONS



PERCENT ALUMNI WHO LIVE IN MASSACHUSETTS



ENROLLMENT IN STEM PROGRAMS



University of Massachusetts 2020 Performance Measurement System

ENROLLMENT IN STEM PROGRAMS

5,970UG enrollment in

UG enrollment STEM fields in Fall 2019

44%

Percent of total UG enrollment in STEM fields in Fall 2019 **1%**

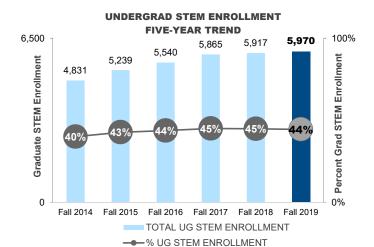
One-year % change (vs. Fall 2018)

One-year % point change (vs. Fall 2018) **24%**

Five-year % change (vs. Fall 2014)

4

Five-year % point change (vs. Fall 2014)



1,348

Grad enrollment in STEM fields in Fall 2019

37%

Percent of total Grad enrollment in STEM fields in Fall 2019 **2%**

One-year % change (vs. Fall 2018)

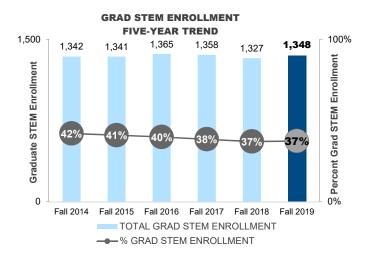
. 0

One-year % point change (vs. Fall 2018) ▲ 0%

Five-year % change (vs. Fall 2014)

√ 5

Five-year % point change (vs. Fall 2014)



7,318

Total enrollment in STEM fields in Fall 2019

43%

Percent of total enrollment in STEM fields in Fall 2019 1%

One-year % change (vs. Fall 2018)

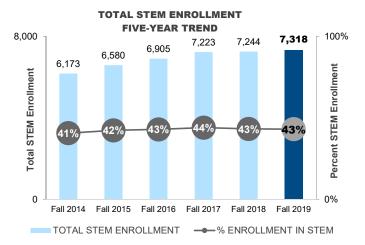
. 0

One-year % point change (vs. Fall 2018) **19%**

Five-year % change (vs. Fall 2014)

2

Five-year % point change (vs. Fall 2014)



DEGREES AWARDED IN STEM FIELDS

1,252

UG degrees awarded in STEM fields in 2017-19

43%

Percent of total UG degrees awarded in STEM fields in 2017-19

11%

One-year % change (vs. 2017-18)

One-year

% point change

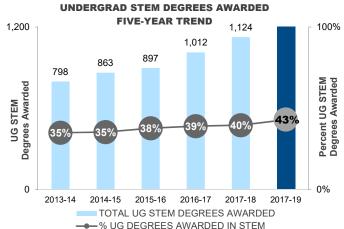
(vs. 2017-18)

Five-year % point change (vs. 2013-14)

57%

Five-year % change (vs. 2013-14)

0 2013-14 2014-15



490

Grad degrees awarded in STEM fields in 2018-19

37%

Percent of total Grad degrees awarded in STEM fields in 2018-19

3%

One-year % change (vs. 2017-18)

4

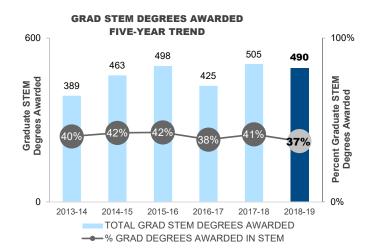
One-year % point change (vs. 2017-18)

26%

Five-year % change (vs. 2013-14)

3

Five-year % point change (vs. 2013-14)



1,742

Total degrees awarded in STEM fields in 2017-19

41%

Percent of Total degrees awarded in STEM fields in 2017-19

7%

One-year % change (vs. 2017-18)

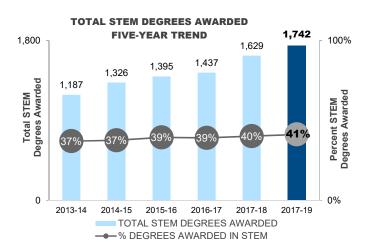
One-year % point change (vs. 2017-18)

47%

Five-year % change (vs. 2013-14)

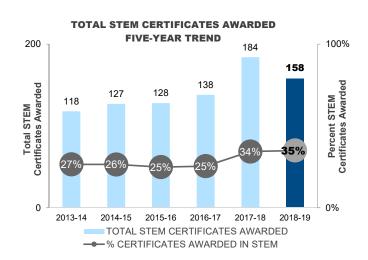
4

Five-year % point change (vs. 2013-14)

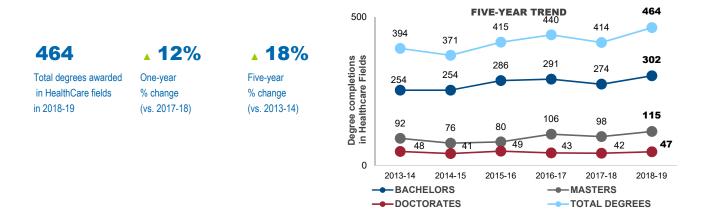


CERTIFICATES AWARDED IN STEM FIELDS

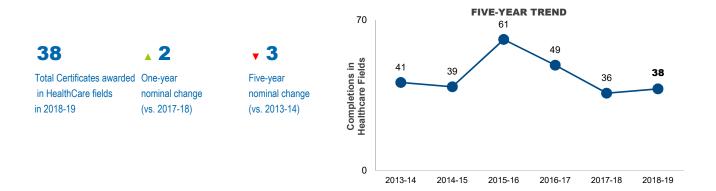




DEGREES AWARDED IN HEALTHCARE FIELDS



CERTIFICATES AWARDED IN HEALTHCARE FIELDS



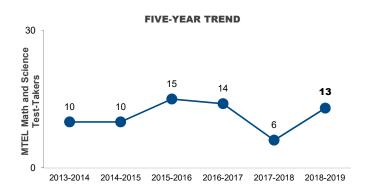
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MTEL SCIENCE AND MATH TEST-TAKERS

13MTEL Math and
Science Test-Takers
in 2018-2019

One-year nominal change (vs. 2017-2018)

Five-year nominal change (vs. 2013-2014)



FINANCIAL HEALTH

ENDOWMENT ASSETS AND ANNUAL GROWTH IN ENDOWMENT

\$99.9M Endowment Assets in FY 2019

One-year % change (vs. FY 2018)

9%

39%

Five-year % change (vs. FY 2014)



8.9%

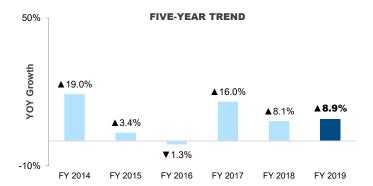
Annual Growth in FY 2019

▲ 0.7

One-year % point change (vs. FY 2018)

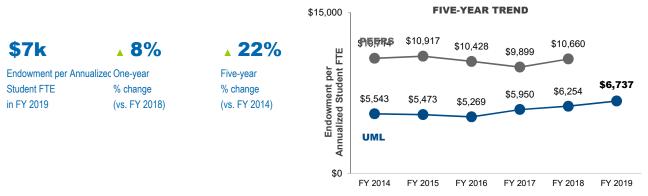
10.2

Five-year % point change (vs. FY 2014)



FINANCIAL HEALTH

ENDOWMENT PER ANNUALIZED STUDENT FTE



^{*} Peer data for FY 2019 not available for reporting purposes.

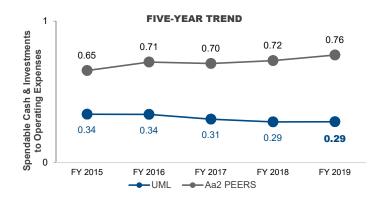
PRIVATE FUNDS RAISED ANNUALLY

FIVE-YEAR TREND \$30 Private Funds Raised Annually (In Thousands) \$21.0 \$21.5 \$21.4 \$21.0 \$20.6 \$21M **35% 2%** \$15.6 Private Funds One-year Five-year Raised Annually % change % change in FY 2019 (vs. FY 2018) (vs. FY 2014) \$0 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

SPENDABLE CASH & INVESTMENTS TO OPERATING EXPENSES (X)

0.29

Spendable Cash & Investments to Operating Expenses (x) in FY 2019



FINANCIAL HEALTH

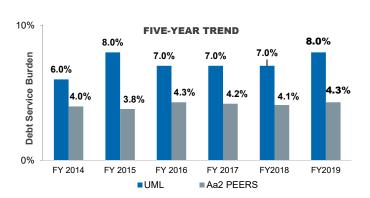
DEBT SERVICE BURDEN

8.0%

Debt Service Burden in FY2019 0.3

One-year % Point change (vs. FY2018) **▲ 1.4**

Five-year % Point change (vs. FY 2014)



OPERATING MARGIN (%)

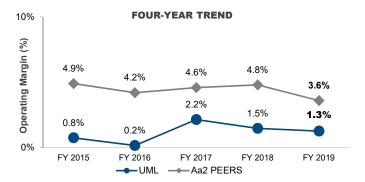
1.3%

Operating Margin (%) in FY 2019

v 0.2

One-year % Point change (vs. FY 2018) **₄ 0.2**

FOUR-year % Point change (vs. FY 2015)



ACADEMIC QUALITY INDICATORS

Average High School GPA of First-Time

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

SAT Scores of Freshmen. All reported SAT scores are based on the sum of the SAT MSS and the ERWS for entering freshmen. A redesigned SAT was used for Fall 2017 admissions; therefore, scores for Fall 2016 and before cannot be compared to scores for Fall 2017 and onwards. The average is the arithmetic mean of these SAT scores. Peer data are from IPEDS.

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 most recently conducted National Survey of Student Engagement (NSSE).

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.

Doctoral Degrees Awarded. Number of doctorates awarded for AY 2018-19, which includes August/September, January/February and May 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 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.

Total R&D Expenditures Ranking. Annual NSF ranking of Total R&D expenditures, for all postsecondary institutions participating in the NSF HERD Survey and 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.

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 full-time 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 reported by campuses to UMass President's Office 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/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

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ACADEMIC QUALITY INDICATORS

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 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.

Faculty-of-Color 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.

Women 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 of in-state, full-time students with Pell Grants in the Financial Aid Template.

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

University of Massachusetts 2020 Performance Measurement System

ACCESS AND AFFORDABILITY INDICATORS

Undergraduate Student Debt Load of

Graduating Class. 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 Undergraduates from

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

residency. For day students, use tuition classification, whereas for CE students, use actual residency at time of matriculation.

Online Course Registrations. Course registrations for the academic year for online credit courses. The 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. The percentage rate of growth in course registrations for the fiscal year for online credit courses. The 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

Undergraduate Students of Color.

Undergraduates who self-identify as either African American/Black, Hispanic/ Latino, Asian, Hawaiian/Pacific Islander, American Indian/Alaskan Native, and/or Two or more races. Hispanic students who list one or more additional groups will be coded as Hispanic. Cape Verdean students who identify solely as Cape Verdean will be coded as Black/African American. Included only for U.S. Citizens and Permanent Residents who report race and ethnicity divided by total undergraduate U.S. citizens and permanent residents who report race/ethnicity.

Percent Undergraduates who are First Generation in College. Percent of first-time, full-time undergraduates where neither parent has earned a bachelor's degree. The source of this data field is the Common Application.

Percent first-time, full-time Undergraduates with English as a Second Language. Percent of first-time, fulltime Undergraduates who speak a language other than English at home. The source of this data field will be from the Common Application.

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 permanent residents, refugees, or US citizens.

Total Students Who Participated in a Study Abroad Program. Number of students who participated in a credit-bearing study abroad program outside of the U.S. over the most recent academic year, either at UMass or elsewhere.

Freshmen One-Year Retention Rate.

Percent of first-time, full-time, degree-seeking freshmen who entered UMass in a given Fall and were still enrolled at the institution in the following Fall. Peer data as reported to IPEDS.

Freshmen Four-Year Graduation Rate.

Percent of first-time, full-time, degree-seeking freshmen who entered UMass in a given Fall term and graduated from the institution by the end of their fourth year. Do not include associate's or CE students in the calculation.

STUDENT SUCCESS AND SATISFACTION INDICATORS

Freshmen Six-Year Graduation Rate.

Percent of first-time, full-time freshmen who entered UMass in a given Fall term and had graduated from the institution within six years. Peer data are based on the median as reported to IPEDS. Do not include associate's or CE students in the calculation.

Transfer (Full-Time) One-Year Retention

Rate. Percent of full-time transfer students at any level who entered UMass 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 in a given Fall term and had graduated from the institution within four years.

Student Achievement Measure. SAM tracks student movement across postsecondary institutions to provide a complete picture of undergraduate student progress and completion

undergraduate student progress and completion within the higher education system. SAM is an alternative to the federal graduation rate, which is limited to tracking the completion of first-time, full-time students at one institution.

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.

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.

Unduplicated count of students enrolled in Science, Technology, Engineering, & Math (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. Number of undergraduate and graduate degrees 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 and 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 quasi-endowments) at the end of the fiscal year as reported in the UMass Annual BOT report, and the percent change from the previous year. Comparative data are from IPEDS, financial statements, and the NACUBO survey.

Endowment per Annualized Student

(FTE). Total endowment (includes true and quasiendowments) per annualized FTE student, where FTE of peer institutions is standardized to UMass formulae. Peer data are for comparative peers from financial statements (current year) and IPEDS (prior years).

Private Funds Raised Annually. Private funds raised include 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.

Debt Service Burden. Compares the relative cost of borrowing to overall expenditures. Debt service (P&I) / Total expenses

Operating Margin (%). Indicates the excess margin (or deficit) by which annual revenues cover annual expenses (excluding unrealized gains or losses). (Total revenues – total expenses)/Total revenues

Spendable Cash & Investments to

Operating Expenses. Measures the extent to which the University can rely on wealth that can be accessed over time or for a specific purpose to operate.

(Cash & investments – debt service reserve funds + permanently restricted pledges receivable – permanently restricted Net Assets)/Total expenses

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

Moody's Aa2 Peers

Alamo Community College District, TX

Arizona State University, AZ

Auburn University, AL

Board of Regents of The University System of Georgia, GA

California State University, CA

City University of New York, NY

Clemson University, SC

Cuyahoga Community College District, OH

Florida State University, FL

Houston Community College System, TX

Iowa State University of Science & Technology, IA

Michigan State University, MI

Mississippi Institutions of Higher Learning, MS

Nevada System of Higher Education, NV

State University of New York, NY

State University System of Florida, FL

Texas State University System, TX

University of Alabama at Birmingham, AL

University of Massachusetts 2020 Performance Measurement System

PEER INSTITUTIONS FOR UMASS LOWELL

Moody's Aa2 Peers

University of Alabama, AL

University of Arizona, AZ

University of Arkansas, AR

University of California, CA

University of Florida, FL

University of Georgia, GA

University of Hawaii, HI

University of Houston System, TX

University of Kansas, KS

University of Kentucky, KY

University of Massachusetts, MA

University of North Texas System, TX

University of Oregon, OR

University of South Carolina, SC

University of Wyoming, WY



HEADLINES

The University of Massachusetts Medical School (UMMS) continues to perform effectively in areas critical to its mission, particularly notable in a time when the COVID-19 pandemic profoundly changed the campus operational, educational and research environment. The need to nimbly adjust teaching, research, service delivery and virtually all academic activities has no precedent; the ability to do so has been extraordinary. Many existing constraints currently facing academic health science centers have not gone away, but UMMS continues to achieve exceptional successes in research, academic programming, and fundraising initiatives.

A new strategic plan, IMPACT 2025 provides a new future vision for the campus and will capitalize on investments in the educational program, the research enterprise, workforce development, information technology, and organizational development.

The IMPACT 2025 process included more than one hundred members of the academic health sciences community, working in five principal areas: Education, Basic Science Research, Translational Research, Community & Global Impact and Operational Excellence & Financial Stewardship.

Goals for IMPACT 2025 commit UMMS to:

- Advance practice, learning and leading by engaging fully with our communities to be the destination of choice for learners interested in interprofessional, team-based care and biomedical entrepreneurship;
- Enable the engine of discovery to generate groundbreaking scientific knowledge, with continued focus on areas of world-class strength;
- Measurably improve the health and welfare
 of the residents of Massachusetts and the
 citizens of the world by investing in an
 enhanced social mission that engages
 community partners, advances health equity
 research and promotes public health
 interventions for the benefit of those greatest
 in need;
- Enhance innovation and increase impact by advancing the science of translation and channeling more discoveries into development and practice;
- Establish models for outstanding support services, vibrant working environments and

highly efficient infrastructure to propel UMMS to new heights.

The campus is well positioned for this new vision, as research and faculty achievement and intense efforts in resource maximization and operational efficiencies continue. Financial pressures, including limited state support as compared to peer institutions, still require UMMS to prioritize educational and research initiatives. Nonetheless, an unyielding commitment to education, research, service, innovation, and training remains the hallmark of the commonwealth's great public medical school.

UMMS expects COVID-19 to profoundly impact the campus research and teaching enterprise for the foreseeable future. While many research labs limited activity during the height of the pandemic, nearly two dozen research programs specifically focused on coronavirus research and therapeutic development were established and aggressively moved forward. In parallel, educational leadership in all three schools adjusted teaching, learning and evaluation practices to accommodate remote and alternative learning modalities: all students expected to graduate were able to successfully complete their work and receive their diplomas. The research and development experience during COVID-19 has demonstrated why it is world-renowned as a foundation for the generation of new knowledge, scientific discoveries, novel therapeutics, innovation, and economic activity: new research funding awards specific to COVID and to infectious disease generally are supporting a wide range of new research projects Licensing of UMMS intellectual property and research discoveries related to COVID-19 reflects keen national and international interest in the work of faculty. UMMS researchers continue to compete at an exceptionally high level for federal funding, even in a shrinking federal research pool and attract investment from a wide range of new and long-established biotechnology research and manufacturing entities.

• Academic quality: UMMS continues to attract outstanding students to the School of Medicine (SOM), as judged by admission test scores, residency match results, and performance on licensing exams, even in a time of unusual upheaval and uncertainty; the quality of the incoming class remains on a par with previous years. The increase in SOM class size has been successful, increasing the number of physicians in training with no negative

HEADLINES

impact on student quality, performance, or satisfaction. The applicant pool for the limited number of spaces for highly qualified out-of-state students is robust; the "Population-based Urban and Rural Community Health" (PURCH) track students are distinguished by their passion for this targeted curricular offering. SOM graduates continue to rank their educational experience as highly satisfactory literally in the 100th percentile in some categories. Agreements with Baystate Health (for PURCH) and Cape Cod Healthcare not only create superb clinical opportunities for the SOM but increase the school's profile in new regions. 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 practice, research, and education for the campus and the region; a significant number of GSN faculty and students played key roles in pandemic planning, care and management, including support at the state level for vulnerable populations. The Graduate School of Biomedical Sciences (GSBS) continues to track favorably to peer institutions: student achievement is notable; a group of GSBS students created a program to manufacture hundreds of gallons of hand sanitizer using repurposed lab equipment and readily available reagents, supporting the return to research for hundreds of faculty and staff. The GSBS is recognized for its efforts to prepare students for nontraditional and multidisciplinary careers, a nationally-renowned effort; a new dean is deeply versed in the opportunities this provides for graduates.

- The quality and reputation of the UMMS faculty continue to impress, attracting new investments and resources to the campus. Professor Thoru Pederson was elected to the American Academy of Arts & Sciences; Professor Celia Schiffer was named an ELAM Fellow; Professor Katherine Fitzgerald was named to the Royal Irish Academy.
- 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, rare diseases, and neurosciences are creating exciting opportunities for research growth and faculty recruitment. Licensing and sponsored research agreements in gene therapy, vaccine development, RNA biology, and drug development support research activity across all basic science disciplines.

- 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. For the SOM, applicants are incredibly 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. Out-of-state students compare favorably to historical student profiles.
- 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 2021 *US News* ranking places the SOM 26th in the nation for primary care; and 47th among research institutions. UMMS also ranked 38th among all US medical schools in NIH funding, according to the Blue Ridge Institute for Medical Research. 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 all institutions in the coming year, will face unknowable challenges and decisions in the face of the COVID-19 pandemic; as a consequence, the campus expects likewise to face difficult decisions in financing the support of strategic priorities. 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 remains exceptionally well-positioned to respond.

AT-A-GLANCE

ACADEMIC QUALITY

| • | Mean MCAT Score | 513.7 | • | NIH Funding among Medical Schools | \$155,485 |
|---|---|-----------|---|--|-----------|
| • | USMLE Step 1 Pass Rate | 100% | • | US New & World Report Ranking | 26 |
| • | USMLE Step 2 (CK) Pass Rate | 98% | • | Patent Applications | 127 |
| • | USMLE Step 2 (CS) Pass Rate | 97% | • | License Income | \$48,572 |
| • | Nursng Board Certification Pass Rate | 93% | • | AUTM Ranking of License Income | 5 |
| • | Student Satisfaction with Medical Education Quality | 97%ile | • | Percent Tenured/Tenure-Track Faculty FTE | 18% |
| • | Technology-Enhanced Classrooms | 78 | • | New Tenured/Tenure-Track Faculty Hired | 8 |
| • | No. of Doctoral Degrees Awarded | 208 | | As Percent of Total T/TT Faculty | 4% |
| • | No. of Research Doctoral Degrees Awarded | 52 | • | Change in Faculty FTE | -2% |
| • | No. of Postdoctoral Appointees | 279 | • | Full-Time Instructional Faculty | |
| • | Total R&D Expenditures | \$282M | | Percent Faculty-of-Color | 29% |
| • | Total R&D Expenditures Ranking | 86 | | Percent Women Faculty | 41% |
| • | Federal Research Support per Full-time Faculty | \$138,753 | • | Faculty Awards | 8 |
| • | Total R&D Expenditures per Full-time Faculty | \$216,045 | • | National Academy Members | 10 |

ACCESS AND AFFORDABILITY

• Tuition and Fees \$38,346

STUDENT SUCCESS AND SATISFACTION

• Residency Choice Acceptance Rate **96**% • Alumni Participation Rate **25**%

AT-A-GLANCE

• Private Funds Raised Annually

SERVICE TO THE COMMONWEALTH

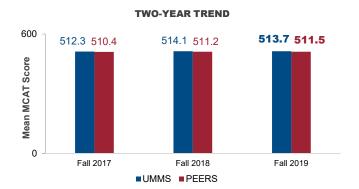
| • | Percent Alumni who Remain in MA | 54% | • | Degrees Awarded in STEM Fields | 55 (23%) | | | | |
|---|--|-----------|---|---|-----------|--|--|--|--|
| • | Enrollment in STEM Programs | 345 (29%) | • | Degrees Awarded in Healthcare Fields | 187 (77%) | | | | |
| | FINANCIAL HEALTH | | | | | | | | |
| | | | | | | | | | |
| • | Total Endowment | \$295.5M | • | Spendable Cash & Investments to Operating Expenses | 0.50 | | | | |
| • | Annual Growth in Endowment | 32.9% | • | Debt Service Burden | 5.5% | | | | |
| • | Endowment per Annualized Student FTE (Includes SOM, GSBS, & GSN) | \$259,780 | • | Operating Margin (%) | 3.5% | | | | |
| | | | | | | | | | |

\$43.5M

MEAN MCAT SCORE

Peer Source: AAMC Medical Schools.

Note: * Given transition from old to new score system, new scores are available in 2016-2019 only.



PASS RATES ON USMLE STEP 1 AND STEP 2 (CK)

100%

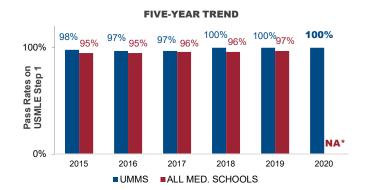
Pass Rate for USMLE Step 1 in 2020

. 0

One-year % Point change (vs. 2019) **2**

Five-year % Point change (vs. 2015)

2020 All Med. Schools data is not available



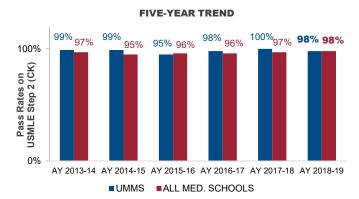
Source - National Board of Medical Examiners: Performance of Examinees.

98%

Pass Rate for USMLE Step 2 (CK) in AY 2018-19 **~ 2**

One-year % Point change (vs. AY 2017-18) **, 1**

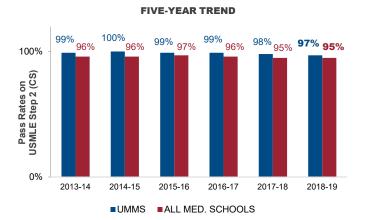
Five-year % Point change (vs. AY 2013-14)



Source - National Board of Medical Examiners: Performance of Examinees.

PASS RATES ON USMLE STEP 2 (CS)

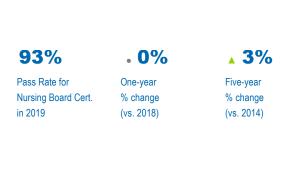


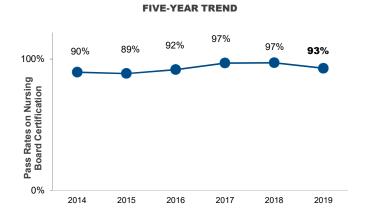


Peer Comparison - All U.S. and Canadian Medical Schools, Data by Academic Year.

PASS RATES ON NURSING BOARD CERTIFICATION

PASS RATES ON NORSING BOARD CERTIFICATION



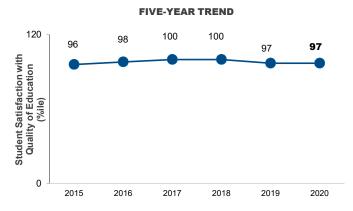


Peer Comparison - All U.S. and Canadian Medical Schools, Data by Calendar Year.

STUDENT SATISFACTION WITH QUALITY OF MEDICAL EDUCATION

97%ile . 0 . 100

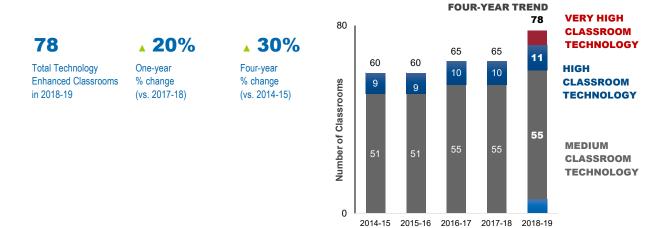
Student Satisfaction One-year Five-year with Education Quality % Point change in 2020 (vs. 2019) (vs. 2015)



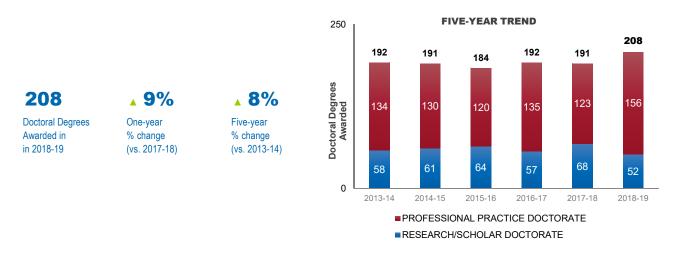
Source: AAMC MMT Report, Percentile reported annually

ACADEMIC QUALITY

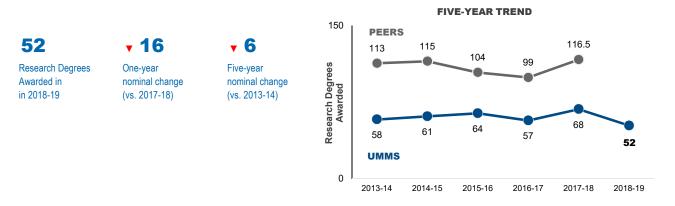
TECHNOLOGY-ENHANCED CLASSROOMS



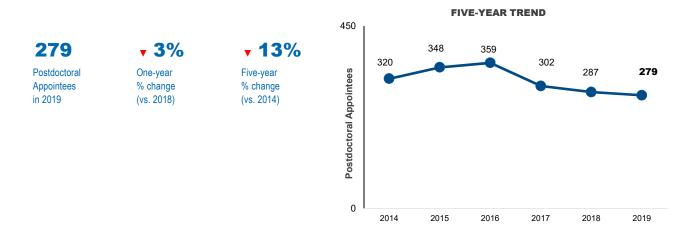
DOCTORAL DEGREES AWARDED



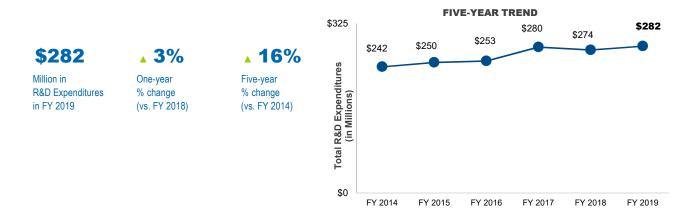
RESEARCH DOCTORAL DEGREES AWARDED



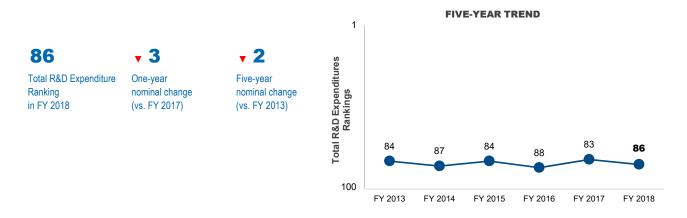
POSTDOCTORAL APPONTEES



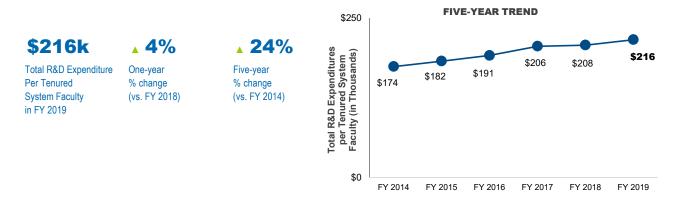
TOTAL R&D EXPENDITURES



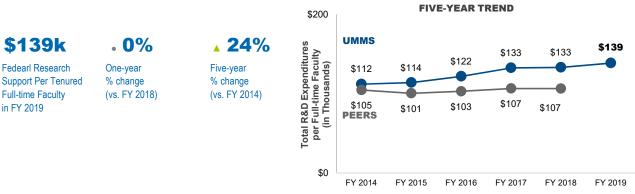
TOTAL R&D EXPENDITURES RANKINGS



TOTAL R&D EXPENDITURES PER FULL-TIME FACULTY

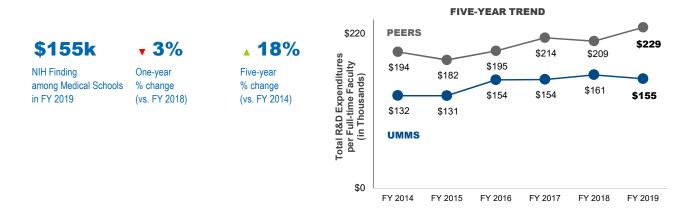


FEDERAL RESEARCH SUPPORT PER FULL-TIME FACULTY



FY 2019 Peer Median data is not available

NIH FUNDING AMONG MEDICAL SCHOOLS



US NEWS RANKING

26
Medical Schools
Ranking
in FY 2020

▼ 11
One-year
nominal change

(vs. FY 2019)

▼ 14

Five-year nominal change (vs. FY 2015)



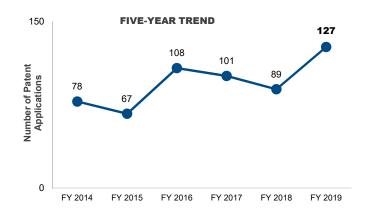
PATENT APPLICATIONS

127

Patent Applications in FY 2019 **38**

One-year nominal change (vs. FY 2018) **49**

Five-year nominal change (vs. FY 2014)



LICENSE INCOME

\$49k

License Income in FY2019

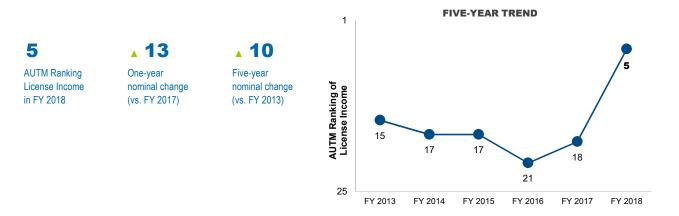
• 67%

One-year % change (vs. FY 2018) **62%**

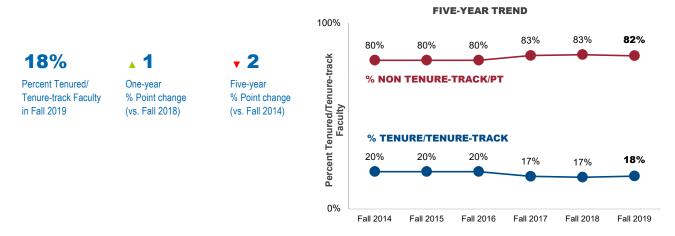
Five-year % change (vs. FY 2014)



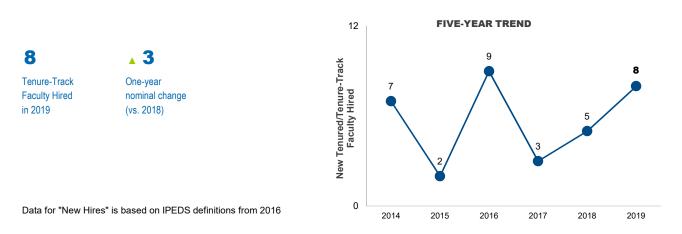
AUTM RANKING OF LICENSE INCOME



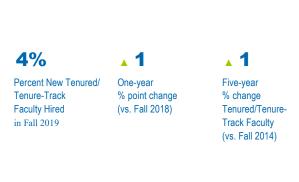
PERCENT TENURED/TENURE-TRACK FACULTY FTE



NEW TENURED/TENURE-TRACK FACULTY HIRED



NEW TENURED/TENURE-TRACK FACULTY HIRED AS PERCENT OF ALL TENURE-TRACK FACULTY



250 100% 215 212 210 190 188 186 New Hires % of Total Tenured/Tenure-track Faculty 0% 0 Fall 2014 Fall 2015 Fall 2016 Fall 2017 Fall 2018 Fall 2019

---Percent T/TT

T/TT Faculty

FIVE-YEAR TREND

In 2016 "New Hires" were expanded to include any faculty hired from November 1 and October 31.

FACULTY FTE

1,042 √2% .0%Total Tenured/ One-year Five-year
Tenure-track Faculty % change % change

(vs. Fall 2018)

in Fall 2019

In 2016 "New Hires" were expanded to include any faculty

hired from November 1 and October 31.

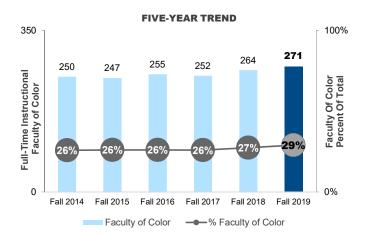


FACULTY-OF-COLOR

(vs. Fall 2014)



Faculty of Color based on 2010 IPEDS definitions Race/Ethnicity. Does not include Unknowns and Non Resident Aliens.



WOMEN FACULTY

406Women Faculty in Fall 2019

One-year nominal change (vs. Fall 2018) Five-year nominal change (vs. Fall 2014)

Five-year

(vs. Fall 2014)

% point

FIVE-YEAR TREND 100% 500 416 406 405 403 373 Full-Time Instructional Women Faculty 367 Women Faculty Percent Of Total 40% . 40% 38% 36% 0 0% Fall 2014 Fall 2015 Fall 2016 Fall 2017 Fall 2018 Fall 2019 Women Faculty → % Women Faculty

41%

Percent of Women Faculty in Fall 2019 One-year % point (vs. Fall 2018)

. 0

FACULTY AWARDS

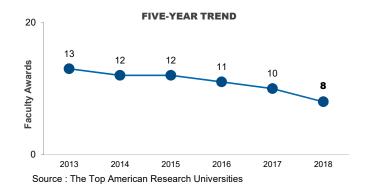
8

Faculty Awards in 2018

~ 2

One-year nominal change (vs. 2017) **√** 5

Five-year nominal change (vs. 2013)



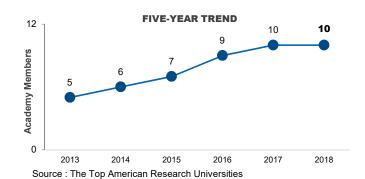
NATIONAL ACADEMY MEMBERS

10

National Academy Members in 2018 . 0

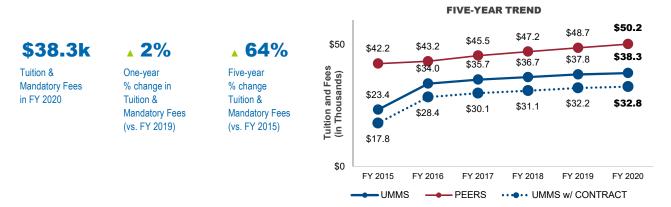
One-year nominal change (vs. 2017) 5

Five-year nominal change (vs. 2013)



ACCESS AND AFFORDABILITY

TUITION AND FEES (INCLUDES ADJUSTMENT FOR LEARNING CONTRACT)

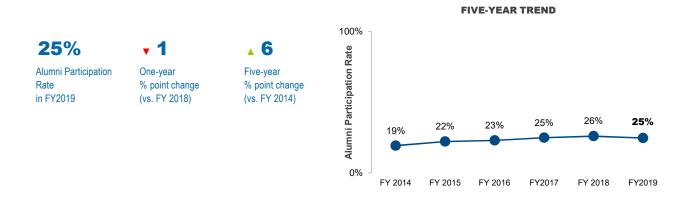


STUDENT SUCCESS AND SATISFACTION

ACCEPTANCE RATE TO CHOICE OF RESIDENCY

FIVE-YEAR TREND 97% _{94%} 97% _{94%} 97% _{94%} 96% _{94%} 96% _{94%} 96% . 0 . 0 100% Pass Rates on USMLE Residency Choice One-vear Five-vear Acceptance Rate % point change % point change in 2019-20 (vs. 2018-19) (vs. 2014-15) Step 1 0% 2014-15 2015-16 2016-17 2017-18 2018-19 2019-20 ■UMMS ■ALL MED. SCHOOLS

ALUMNI PARTICIPATION RATE



SERVICE TO THE COMMONWEALTH

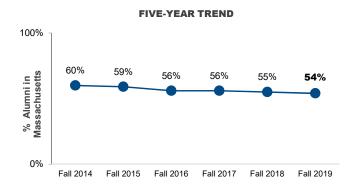
PERCENT ALUMNI WHO LIVE IN MASSACHUSETTS

54%Alumni Who Live in Massachusetts in Fall 2019

One-year
% point change

(vs. Fall 2018)

▼ **6**Five-year
% point change
(vs. Fall 2014)



ENROLLMENT IN STEM PROGRAMS

345
Enrollment in STEM fields in Fall 2019

29%

Percent of enrollment in STEM fields in Fall 2019 **1**%

One-year % change (vs. Fall 2018)

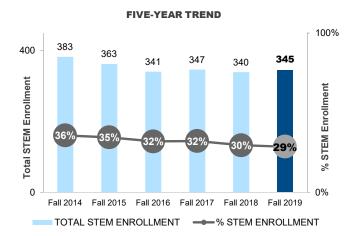
v 1

One-year % point change (vs. Fall 2018) **10%**

Five-year % change (vs. Fall 2014)

7

Five-year % point change (vs. Fall 2014)



DEGREES AWARDED IN STEM FIELDS

STEM Degrees Awarded in in 2018-19

23% Percent of

degrees in STEM fields in 2018-19 **23**%

One-year % change (vs. 2017-18)

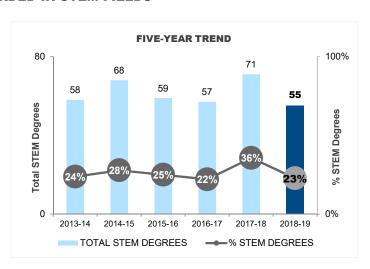
13

One-year % point change (vs. 2017-18) **5**%

Five-year % change (vs. 2013-14)

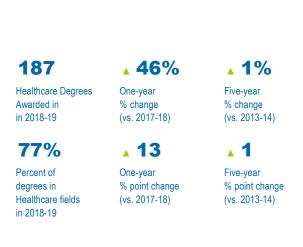
1

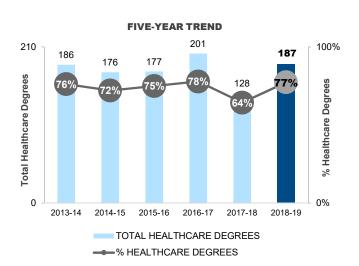
Five-year % point change (vs. 2013-14)



SERVICE TO THE COMMONWEALTH

DEGREES IN HEALTHCARE PROGRAMS





FINANCIAL HEALTH

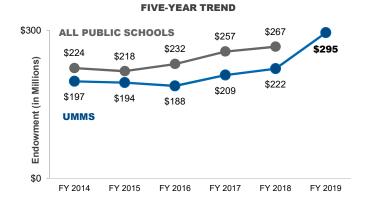
ENDOWMENT ASSETS

\$295M Endowment Assets in FY 2019 **▲ 33%** One-year

One-year % change (vs. FY 2018) ▲ **50%** Five-year

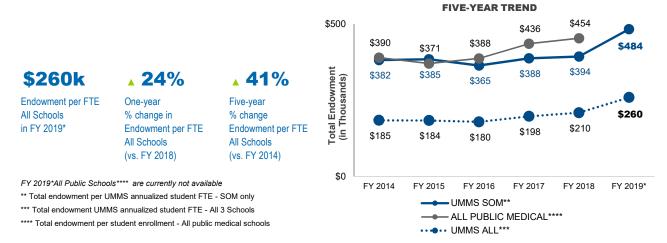
% change

(vs. FY 2014)



FY 2019 All Public Schools* data are not available

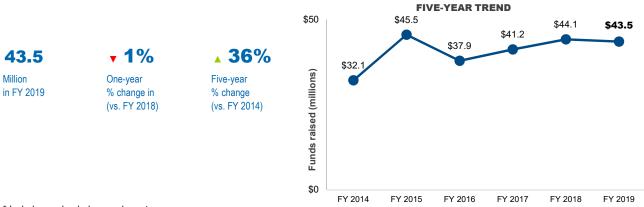
ENDOWMENT PER ANUALIZED STUDENT FTE



University of Massachusetts 2020 Performance Measurement System

FINANCIAL HEALTH

PRIVATE FUNDS RAISED ANNUALLY*

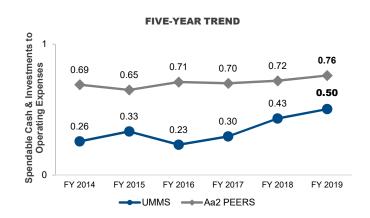


^{*} Includes cash, pledges and grants

SPENDABLE CASH & INVESTMENTS TO OPERATING EXPENSES

0.50

Spendable Cash & Investments to Operating Expenses in FY 2019



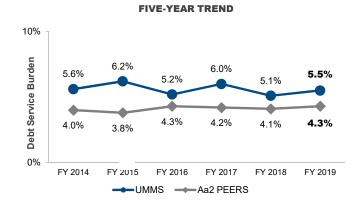
DEBT SERVICE BURDEN

5.5%

Debt Service Burden in FY 2019 0.4

One-year Point change (vs. FY 2018) **v** 0.1

Five-year Point change (vs. FY 2014)



FINANCIAL HEALTH

OPERATING MARGIN (%)

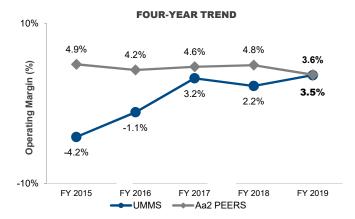
3.5%

Operating Margin (%) in FY 2019

1.3

One-year Point change (vs. FY 2018) **▲ 7.7**

Five-year Point change (vs. FY 2015)



DEFINITIONS AND SOURCES

ACADEMIC QUALITY INDICATORS

Mean MCAT Score. Mean biology MCAT score for new medical students. Peer data calculated from AAMC website.

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.

Technology-Enhanced Classrooms.

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

Doctoral Degrees Awarded. Number of doctorates awarded for 2017-18, which includes August/September, January/February and May 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 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.

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 emphasis in Primary Care.

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

License Income. Amount of annual income from license agreements. Data reported by each UMass campus to President's Office, 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. Percent based on the ratio of Tenured/Tenure-Track Faculty FTE to Total Faculty FTE.

DEFINITIONS AND SOURCES

ACADEMIC QUALITY INDICATORS

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 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/tenuretrack 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.

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.

Faculty-of-Color. 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.

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

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 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.

Acceptance Rate to Choice of Residency. Percent of graduating students

accepted to their choice of residency. National results provided by NRMP.

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.

DEFINITIONS AND SOURCES

SERVICE TO THE COMMONWEALTH INDICATORS

Percent Alumni Who Live in

Massachusetts. The percentage of UMMS alumni who live in Massachusetts.

Enrollment in STEM Programs.

Unduplicated count of students enrolled in Science, Technology, Engineering, & Math (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. 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.

FINANCIAL HEALTH INDICATORS

operate.

Endowment Assets and Annual Growth in

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

Endowment per Annualized Student

(FTE). Total endowment (includes true and quasiendowments) per annualized FTE student, where FTE of peer institutions is standardized to UMass formulae. Peer data are for comparative peers from financial statements (current year) and IPEDS (prior years).

Private Funds Raised Annually. Private funds raised include 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.

Debt Service Burden. Compares the relative cost of borrowing to overall expenditures. Debt service (P&I) / Total expenses

Operating Margin (%). Indicates the excess margin (or deficit) by which annual revenues cover annual expenses (excluding unrealized gains or losses). (Total revenues – total expenses)/Total revenues

Spendable Cash & Investments to Operating Expenses. Measures the extent to which the University can rely on wealth that can be accessed over time or for a specific purpose to

(Cash & investments – debt service reserve funds + permanently restricted pledges receivable – permanently restricted Net Assets)/Total expenses

DEFINITIONS AND SOURCES

PUBLIC MEDICAL SCHOOL PEER INSTITUTIONS

ARIZONA NEBRASKA UMDNJ NEW JERSEY

ARKANSAS NEVADA UT GALVESTON

BUFFALO NEW MEXICO UT HOUSTON

CINCINNATI NORTH DAKOTA UT SAN ANTONIO

COLORADO NORTHEASTERN OHIO UTAH

EAST CAROLINA - BRODY OKLAHOMA VERMONT

EAST TENNESSEE - QUILLEN OREGON VIRGINIA COMMONWEALTH

EASTERN VIRGINIA PENN STATE WEST VIRGINIA

FLORIDA STATE PUERTO RICO WRIGHT STATE - BOONSHOFT

GEORGIA SUNY DOWNSTATE WRIGHT STATE

HAWAII - BURNS SUNY UPSTATE ALABAMA

ILLINOIS SOUTH ALABAMA CONNECTICUT

KANSAS SOUTH CAROLINA FLORIDA

KENTUCKY SOUTH DAKOTA INDIANA
LSU NEW ORLEANS SOUTH FLORIDA IOWA - CARVER

LSU Shreveport Southern Illinois Maryland

LOUISVILLE STONY BROOK MICHIGAN

MU OHIO TENNESSEE NORTH CAROLINA

MU SOUTH CAROLINA TEXAS A & M OHIO STATE

MARSHALL - EDWARDS TEXAS TECH UC DAVIS

MASSACHUSETTS U WASHINGTON UT SOUTHWESTERN

MICHIGAN STATE UC IRVINE VIRGINIA

MINNESOTA TWIN CITIES UC SAN DIEGO WAYNE STATE

MISSISSIPPI UC SAN FRANCISCO WISCONSIN

UCLA - GEFFEN

MISSOURI KANSAS CITY UMDNJ - RW JOHNSON

MISSOURI COLUMBIA

University of Massachusetts 2020 Performance Measurement System

DEFINITIONS AND SOURCES

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

Moody's Aa2 Peers

Alamo Community College District, TX

Arizona State University, AZ

Auburn University, AL

Board of Regents of The University System of

Georgia, GA

California State University, CA

City University of New York, NY

Clemson University, SC

Cuyahoga Community College District, OH

Florida State University, FL

Houston Community College System, TX

Iowa State University of Science & Technology, IA

Michigan State University, MI

Mississippi Institutions of Higher Learning, MS

Nevada System of Higher Education, NV

State University of New York, NY

State University System of Florida, FL

Texas State University System, TX

University of Alabama at Birmingham, AL

University of Alabama, AL

University of Arizona, AZ

University of Arkansas, AR

University of California, CA

University of Florida, FL

University of Georgia, GA

University of Hawaii, HI

University of Houston System, TX

University of Kansas, KS

University of Kentucky, KY

University of Massachusetts, MA

University of North Texas System, TX

University of Oregon, OR

University of South Carolina, SC

University of Wyoming, WY

University of Massachusetts 2020 Performance Measurement System

| UMass Amherst - Clery Act Crime Statistics | | | | | | |
|--|---------------------|-----------------------|---------------------|-----------------------|---------------------|-----------------------|
| ENROLLMENTS/NUMBER OF RESIDENTS | Fall 2018 | | Fall 2017 | | Fall 2016 | |
| | Total Enrollment | # Living on Campus | Total Enrollment | # Living on Campus | Total Enrollment | # Living on Campus |
| UNDERGRADUATE STUDENTS | 23,515 | 13,551 | 23,388 | 13,181 | 23,373 | 13,281 |
| GRADUATE STUDENTS | 7,074 | 92 | 6,952 | 96 | 6,664 | 112 |

| | Calendar Year | | | |
|---|---------------|------|------|--|
| OFFENSE | 2018 | 2017 | 2016 | |
| MURDER / NON-NEGLIGENT MANSLAUGHTER | 0 | 0 | 0 | |
| NEGLIGENT MANSLAUGHTER | 0 | 0 | 0 | |
| RAPE | 23 | 18 | 20 | |
| FONDLING | 9 | 3 | 6 | |
| INCEST | 0 | 0 | 0 | |
| STATUTORY RAPE | 0 | 0 | 0 | |
| ROBBERY | 3 | 0 | 3 | |
| AGGRAVATED ASSAULT | 4 | 5 | 11 | |
| BURGLARY | 12 | 14 | 18 | |
| MOTOR VEHICLE THEFT | 2 | 4 | 1 | |
| ARSON | 2 | 1 | 4 | |
| DOMESTIC VIOLENCE*** | 9 | 8 | 11 | |
| DATING VIOLENCE*** | 0 | 0 | 0 | |
| STALKING*** | 1 | 2 | 4 | |
| 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. | 4 | 2 | 3 | |
| LIQUOR LAW ARRESTS** | 137 | 143 | 92 | |
| LIQUOR LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION | 211 | 196 | 216 | |
| DRUG LAW ARRESTS** | 4 | 11 | 7 | |
| DRUG LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION | 1 | 6 | 11 | |
| ILLEGAL WEAPONS POSSESSION ARRESTS | 1 | 0 | 1 | |
| ILLEGAL WEAPONS POSSESSION VIOLATIONS REFERRED FOR DISCIPLINARY ACTION | 0 | 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

^{*}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 | | | | | | |
|---|---------------------|-----------------------|---------------------|-----------------------|---------------------|-----------------------|
| ENROLLMENTS/NUMBER OF RESIDENTS | Fall 2018 | | Fall 2017 | | Fall 2016 | |
| | Total Enrollment | # Living on Campus | Total Enrollment | # Living on Campus | Total Enrollment | # Living on Campus |
| UNDERGRADUATE STUDENTS | 12714 | 1067 | 12,660 | 0 | 12,847 | 0 |
| GRADUATE STUDENTS | 3450 | N/A | 3,755 | 0 | 4,000 | 0 |

| | Calendar Year | | | |
|---|---------------|------|------|--|
| OFFENSE | 2018 | 2017 | 2016 | |
| MURDER / NON NEGLIGENT MANSLAUGHTER | 0 | 0 | 0 | |
| NEGLIGENT MANSLAUGHTER | 0 | 0 | 0 | |
| RAPE | 1 | 1 | 0 | |
| FONDLING | 1 | 0 | 0 | |
| INCEST | 0 | 0 | 0 | |
| STATUTORY RAPE | 0 | 0 | 0 | |
| ROBBERY | 0 | 0 | 0 | |
| AGGRAVATED ASSAULT | 0 | 2 | 2 | |
| BURGLARY | 1 | 0 | 2 | |
| MOTOR VEHICLE THEFT | 0 | 0 | 0 | |
| ARSON | 0 | 0 | 0 | |
| DOMESTIC VIOLENCE* | 0 | 0 | 2 | |
| DATING VIOLENCE* | 1 | 0 | 1 | |
| STALKING* | 8 | 8 | 7 | |
| 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 | |
| LIQUOR LAW ARRESTS | 0 | 0 | 0 | |
| LIQUOR LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION | 40 | 0 | 0 | |
| DRUG LAW ARRESTS | 3 | 3 | 8 | |
| DRUG LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION | 0 | 0 | 0 | |
| ILLEGAL WEAPONS POSSESSION ARRESTS | 2 | 0 | 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 adjacent to and accessible from the campus. UMB campus does not have residence halls.

UMass Dartmouth - Clery Act Crime Statistics Fall 2018 Fall 2017 Fall 2016 **ENROLLMENTS/NUMBER OF RESIDENTS** Total # Living on Total # Living on Total # Living on Enrollment Campus Enrollment Campus Enrollment Campus UNDERGRADUATE STUDENTS 6,999 6,841 6,763 3,538 3,773 **GRADUATE STUDENTS** 1,672 1,643 76 1,648 98

| | Calendar Year | | | |
|--|---------------|------|------|--|
| OFFENSE | 2018 | 2017 | 2016 | |
| MURDER / NON-NEGLIGENT MANSLAUGHTER | 0 | 0 | 0 | |
| NEGLIGENT MANSLAUGHTER | 0 | 0 | 0 | |
| RAPE | 7 | 1 | 10 | |
| FONDLING | 0 | 4 | 6 | |
| INCEST | 0 | 0 | 0 | |
| STATUTORY RAPE | 0 | 0 | 0 | |
| ROBBERY | 0 | 5 | 0 | |
| AGGRAVATED ASSAULT | 7 | 10 | 3 | |
| BURGLARY | 11 | 11 | 6 | |
| MOTOR VEHICLE THEFT | 0 | 0 | 4 | |
| ARSON | 1 | 0 | 5 | |
| DOMESTIC VIOLENCE* | 0 | 15 | 8 | |
| DATING VIOLENCE* | 11 | 0 | 0 | |
| STALKING* | 1 | 6 | 3 | |
| 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 | |
| LIQUOR LAW ARRESTS | 0 | 4 | 19 | |
| LIQUOR LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION | 126 | 161 | 180 | |
| DRUG LAW ARRESTS | 1 | 1 | 1 | |
| DRUG LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION | 4 | 1 | 3 | |
| ILLEGAL WEAPONS POSSESSION ARRESTS | 2 | 1 | 1 | |
| 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 from the campus.

UMass Lowell - Clery Act Crime Statistics Fall 2018 Fall 2017 Fall 2016 **ENROLLMENTS/NUMBER OF RESIDENTS** Total # Living on Total # Living on Total # Living on Enrollment Campus Enrollment Campus Enrollment Campus **UNDERGRADUATE STUDENTS** 14,005 14,013 13,642 4,379 4,105 3,632 **GRADUATE STUDENTS** 4,239 65 4,303 37 4,215 50

| | Calendar Year | | | |
|---|---------------|------|------|--|
| OFFENSE | 2018 | 2017 | 2016 | |
| MURDER / NON-NEGLIGENT MANSLAUGHTER | 0 | 0 | 0 | |
| NEGLIGENT MANSLAUGHTER | 0 | 0 | 0 | |
| RAPE | 12 | 4 | 4 | |
| FONDLING | 1 | 4 | 6 | |
| INCEST | 0 | 0 | 0 | |
| STATUTORY RAPE | 0 | 0 | 0 | |
| ROBBERY | 1 | 5 | 2 | |
| AGGRAVATED ASSAULT | 2 | 2 | 7 | |
| BURGLARY | 1 | 2 | 6 | |
| MOTOR VEHICLE THEFT | 1 | 3 | 3 | |
| ARSON | 0 | 0 | 0 | |
| DOMESTIC VIOLENCE* | 6 | 3 | 6 | |
| DATING VIOLENCE* | 0 | 0 | 0 | |
| STALKING* | 1 | 7 | 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. | 0 | 0 | 0 | |
| LIQUOR LAW ARRESTS | 0 | 0 | 3 | |
| LIQUOR LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION | 150 | 217 | 216 | |
| DRUG LAW ARRESTS | 8 | 5 | 3 | |
| DRUG LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION | 0 | 1 | 3 | |
| ILLEGAL WEAPONS POSSESSION ARRESTS | 0 | 1 | 1 | |
| ILLEGAL WEAPONS POSSESSION VIOLATIONS REFERRED FOR DISCIPLINARY ACTION | 0 | 1 | 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 wit the campus.

| UMass Medical School - Clery Act Crime Statistics | | | | | | |
|---|---------------------|-----------------------|---------------------|-----------------------|---------------------|-----------------------|
| ENROLLMENTS/NUMBER OF RESIDENTS | Fall 2018 | | Fall 2017 | | Fall 2016 | |
| | Total Enrollment | # Living on Campus | Total Enrollment | # Living on Campus | Total Enrollment | # Living on Campus |
| UNDERGRADUATE STUDENTS | 0 | 0 | 0 | 0 | 0 | 0 |
| GRADUATE STUDENTS | 1,185 | 0 | 1,095 | 0 | 1,108 | 0 |

| | Calendar Year | | | | |
|---|---------------|------|------|--|--|
| OFFENSE | 2018 | 2017 | 2016 | | |
| MURDER / NON-NEGLIGENT MANSLAUGHTER | 0 | 0 | 0 | | |
| NEGLIGENT MANSLAUGHTER | 0 | 0 | 0 | | |
| RAPE | 0 | 1 | 0 | | |
| FONDLING | 2 | 1 | 4 | | |
| INCEST | 0 | 0 | 0 | | |
| STATUTORY RAPE | 0 | 0 | 0 | | |
| ROBBERY | 0 | 0 | 0 | | |
| AGGRAVATED ASSAULT | 3 | 3 | 0 | | |
| BURGLARY | 1 | 2 | 2 | | |
| MOTOR VEHICLE THEFT | 5 | 1 | 4 | | |
| ARSON | 0 | 0 | 0 | | |
| DOMESTIC VIOLENCE* | 7 | 3 | 8 | | |
| DATING VIOLENCE* | 0 | 0 | 0 | | |
| STALKING* | 4 | 4 | 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 | 0 | | |
| LIQUOR LAW ARRESTS | 0 | 0 | 0 | | |
| LIQUOR LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION | 0 | 0 | 0 | | |
| DRUG LAW ARRESTS | 11 | 16 | 19 | | |
| DRUG LAW VIOLATIONS REFERRED FOR DISCIPLINARY ACTION | 0 | 0 | 0 | | |
| ILLEGAL WEAPONS POSSESSION ARRESTS | 1 | 1 | 0 | | |
| 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 adjacent to and accessible from the campus. UMW campus does not have residence halls.