

UMASS AT A CROSSROADS

# **PART 3: UMASS' GROWING DEPENDENCY ON TUITION AND FEES AND STRATEGIC RECRUITMENT OF OUT-OF-STATE STUDENTS**

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## EXECUTIVE SUMMARY

This paper is the third in Pioneer Institute's *UMass at a Crossroads* series. In this report, we take a closer look at the university's growing dependency on increases in tuition and fees and expansion of out-of-state and international student enrollment to support continued expansion of the university. Over the last decade, UMass has increased student enrollment by 27.3 percent and made \$3.8 billion in capital additions at its five campuses. To address the financial strain brought on by its expansion initiative, the university has increased tuition and fees from \$9,278 for in-state and \$18,397 for out-of-state undergraduate students at UMass-Amherst in 2005-2006 to \$14,171 and \$30,504, respectively, in 2015-2016.

Our first report examined whether UMass' continuing strategy of enrollment expansion makes sense given forecasts by the Western Interstate Commission for Higher Education of an 11.4 percent decline in Massachusetts high school graduates over the next twelve years. This study examines more closely the university's strategy of increasing out-of-state and international enrollment as a means of increasing revenue through higher tuition rates paid by this group of students. As this paper will explain, UMass-Amherst made offers of admission to more out-of-state and international applicants to its 2015-2016 freshman class than it did to Massachusetts applicants for the first time in university history. By contrast, during the 2005-2006 application cycle, in-state applicants comprised nearly two-thirds of those offered acceptance letters by UMass-Amherst.

As a result of the university's program of out-of-state and international recruitment, 27.9 percent of the current freshman class at UMass-Amherst in 2015-2016 is from outside of Massachusetts. Across all UMass campuses, out-of-state enrollment has increased by 84.5 percent since 2008-2009, with increases ranging from 54 percent to 220 percent on the four undergraduate campuses. In comparison, in-state student enrollment grew by only 8.8 percent over the same period. The number of in-state applicants given offers of admission by UMass-Amherst grew by only 1,023 from 2005 to 2015 (increasing from 10,628 to 11,651), while offers given to out-of-state students increased by 6,044 over the same period (increasing from 5,613 to 11,657).

The growth of out-of-state admissions at state universities has become a contentious issue elsewhere in the country. The University of North Carolina at Chapel Hill, for example, rigidly enforces an 18 percent cap on out-of-state students in its first-year class. Both the University of California-Los Angeles (UCLA) and University of California-Berkeley (UC-Berkeley) recently introduced a

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cap on out-of-state enrollment to 2014-2015 levels<sup>1</sup> at the two campuses in response to public outcry from advocacy groups and state government officials that the influx of non-California residents to the UC system was harming applicants from in-state. The out-of-state freshman enrollment levels that generated the controversy at UCLA and UC-Berkeley in 2014-2015 (28.1 percent and 29.1 percent respectively) are almost the same as UMass-Amherst's 27.9 percent out-of-state freshman admission level in 2015-2016.

Growing out-of-state enrollment is not limited to undergraduate programs at UMass. Overall, in-state students are in the minority in UMass graduate programs, representing 30 percent of the total master's degree student population. Massachusetts residents also comprise a minority of doctoral candidates at UMass—just 22.5 percent; international students make up 40 percent and out-of-state U.S. residents 37.5 percent.

This study also examines state funding as measured by state support per full-time equivalent student (FTE), showing that Massachusetts' higher education institutions (including UMass, the state colleges and community colleges) receive the second highest level of state financial support of New England higher education systems by this metric, and also receive more than the national average.

Pioneer questions whether UMass' current strategy of increasing out-of-state and international enrollment is consistent with its primary mission of serving in-state students. Furthermore, we raise the question of whether it makes sense to provide UMass with additional state funding for capital expansion if the intent of the expansion is in large part intended to attract and educate a rising percentage of out-of-state students. The recommendations of this report call for the Governor, state education leaders, the state legislature, and university leaders to consider whether

UMass' current strategy of expanding the university's facilities and enrollment capacity in order to serve a growing percentage of out-of-state students serves the financial and educational interest of Massachusetts residents.

## INTRODUCTION

UMass has undergone a major transition in the last decade. Since 2005, the university system has expanded its enrollment at a rate that greatly exceeds that of all other public universities in New England. This expansion has been accompanied by substantial capital expansion and a resultant rise in debt service costs as well as operating costs. Despite this financial strain, UMass has adopted a \$6.9 billion capital plan for 2015-2019, which fails to adequately address \$3.3 billion in deferred maintenance costs and focuses largely on new construction throughout the five-campus system.

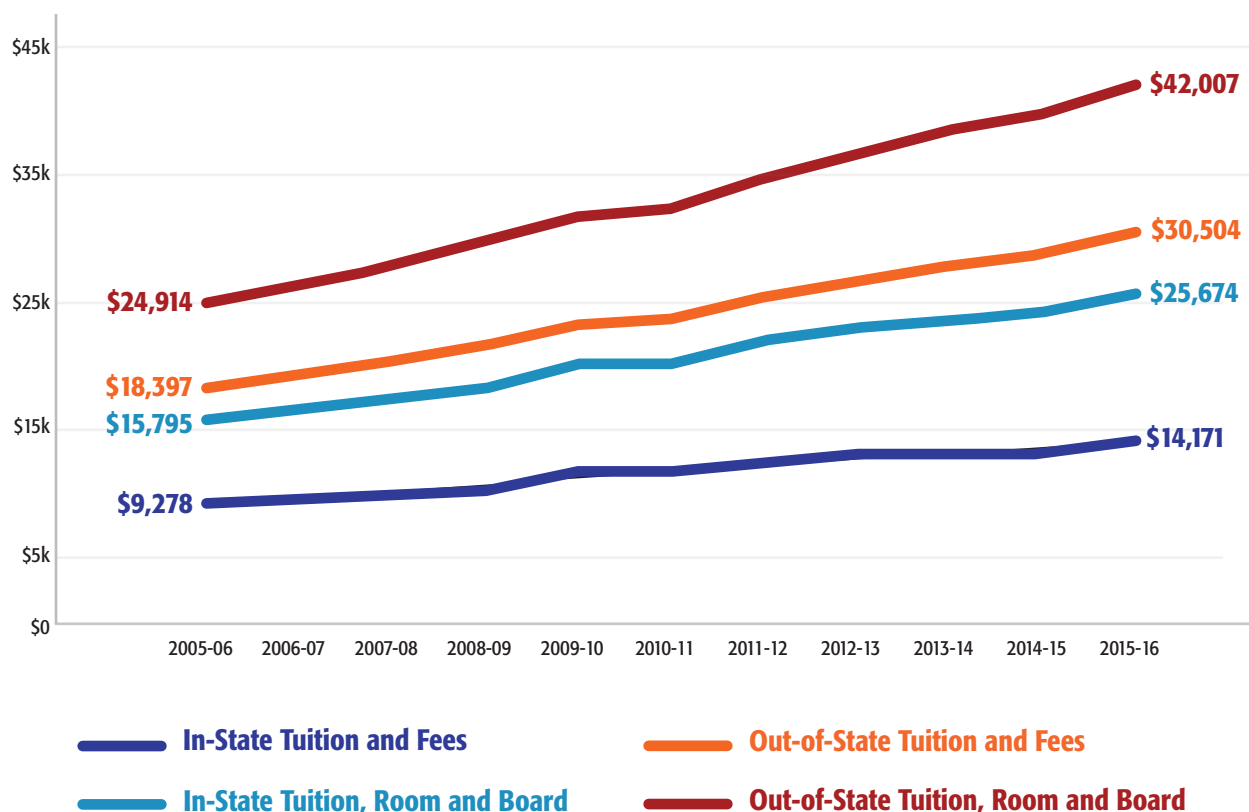
In order to address the growing gap between operating revenue and expenses, UMass has turned to two main sources of income: increases in tuition and fees and state funding. UMass' dependency on these two forms of

revenue to fund its aggressive expansion has put the university in the precarious position of relying on increasing levels of state and raising the cost of education through tuition and fee hikes.

## UMASS' GROWING DEPENDENCY ON TUITION AND FEE INCREASES

Financial strain at UMass is attributable in large part to expansion of student enrollment and capital facilities. One of the principal sources upon which UMass has become increasingly dependent, largely due to growing debt service obligations and operating expenses, is net increases in tuition and fees. From 2005-06 to 2015-16, we can observe a steady rise in in-state and out-of-state tuition, fees, and room and board charges at UMass-Amherst, as shown in Figure 1.<sup>2</sup> Over this period, in-state tuition, fees, and room and board at UMass-Amherst increased from \$15,795 to \$25,674. Comparatively, these same expenses for out-of-state students increased from \$24,914 to \$42,007. Today, in-state students pay an additional \$9,879 towards these expenses relative to what they paid ten years ago—out-of-state students pay \$17,093 more.

Figure 1. UMass-Amherst tuition, fees, room & board, academic years 2005-2006 to 2015-2016.



## UMASS IN-STATE AND OUT-OF-STATE TUITION AND FEES COMPARED TO THOSE OF OTHER NEW ENGLAND STATE FLAGSHIP CAMPUSES

A comparison of tuition and fees at New England state university flagship campuses for the 2015-2016 academic year, shown in Figure 2,<sup>3</sup> shows that UMass is charging in-state undergraduate students slightly more than the average of other New England state flagship campuses (\$14,171 for UMass compared to \$14,112 for the average of the others) while it is charging out-of-state undergraduates less (\$30,504 for UMass compared to \$32,504

for the average of the other campuses). The University of Vermont (UVM) is currently charging 28.3 percent more for out-of-state undergraduate tuition and fees than is UMass (\$39,130 for UVM compared to \$30,504 for UMass). The University of Connecticut is charging out-of-state students 4.4 percent more than UMass (\$34,908 for UConn compared to \$30,504 for UConn compared to \$30,504 for UMass).

Figure 2. In-state tuition and fees at New England flagship campuses: 2015-2016 academic year

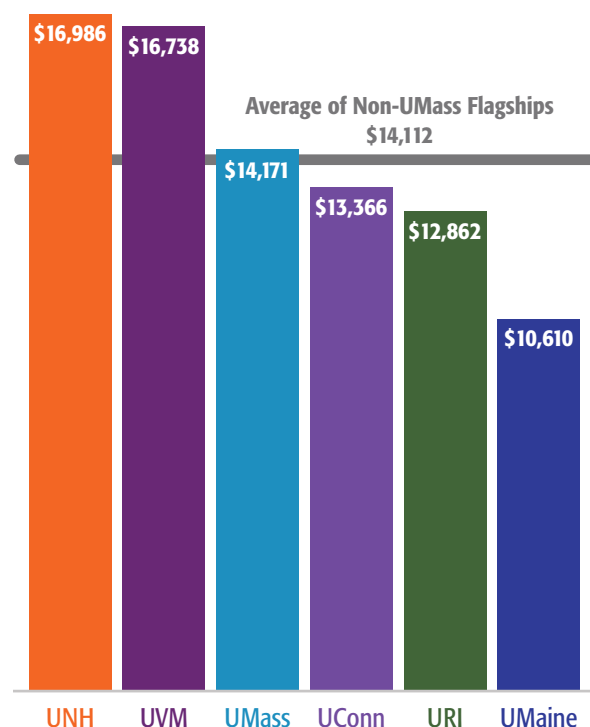


Figure 3. Tuition, room & board at New England state flagship campuses: 2015-2016 academic year

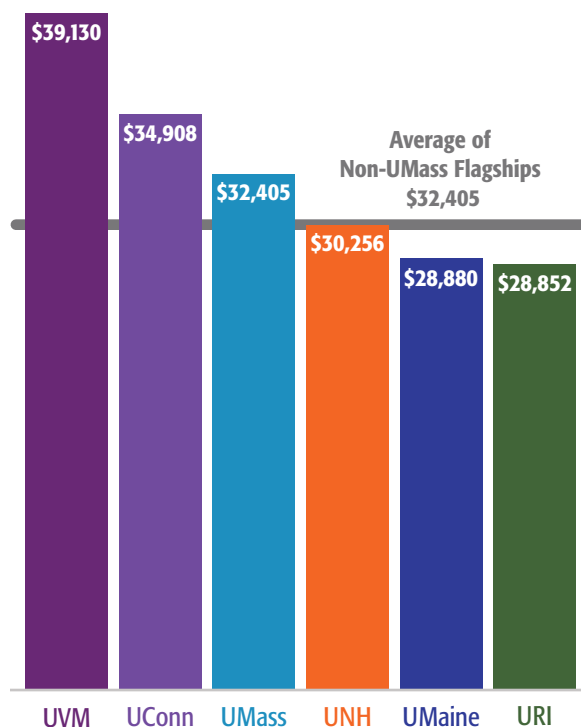


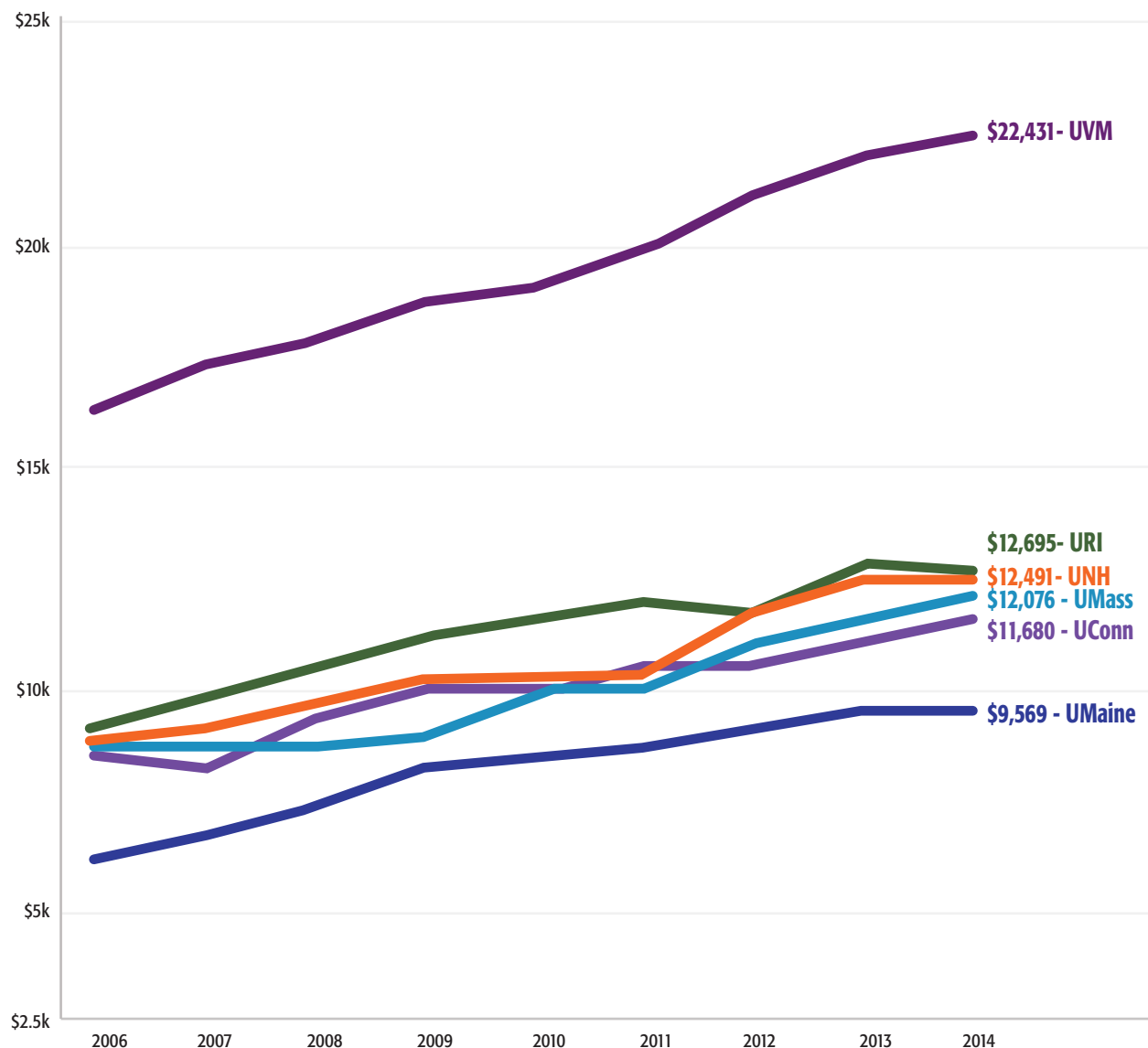
Figure 3<sup>4</sup> compares out-of-state tuition and fees at the six New England flagship campuses.

## REVENUES FROM TUITION AND FEES PER FULL-TIME EQUIVALENT STUDENT AT NEW ENGLAND FLAGSHIP CAMPUSES

The Integrated Postsecondary Education Data System (IPEDS) of the U.S. Department of Education reports revenues from tuition and fees per full-time equivalent (FTE) student, including undergraduate and graduate students.<sup>5</sup> The FTE student metric is used to provide standardized comparative assessments across different education contexts. Displaying revenues from tuition and fees per FTE, Figure 4<sup>6</sup> shows that Massachusetts falls in the middle of the pack among New England state universities by this criterion, with one notable exception. Revenues from tuition and fees per FTE at UVM have been substantially and consistently higher than those at UMass and

the other New England state flagship campuses. UVM's substantially higher revenues per FTE are largely attributable to two factors: 1) its tuition and fee charges are higher for both in-state and out-of-state students relative to other flagship campuses; and 2) its percentage of students paying out-of-state charges is higher than those of the other flagship campuses. It is worth noting that UMass ranks 4<sup>th</sup> out of 6 New England state universities in revenues per FTE. Despite its considerable enrollment growth in the last ten years, UMass is taking in less revenue from tuition and fees per student than other New England flagship campuses.

Figure 4. Revenues from tuition and fees per FTE at New England state flagship campuses



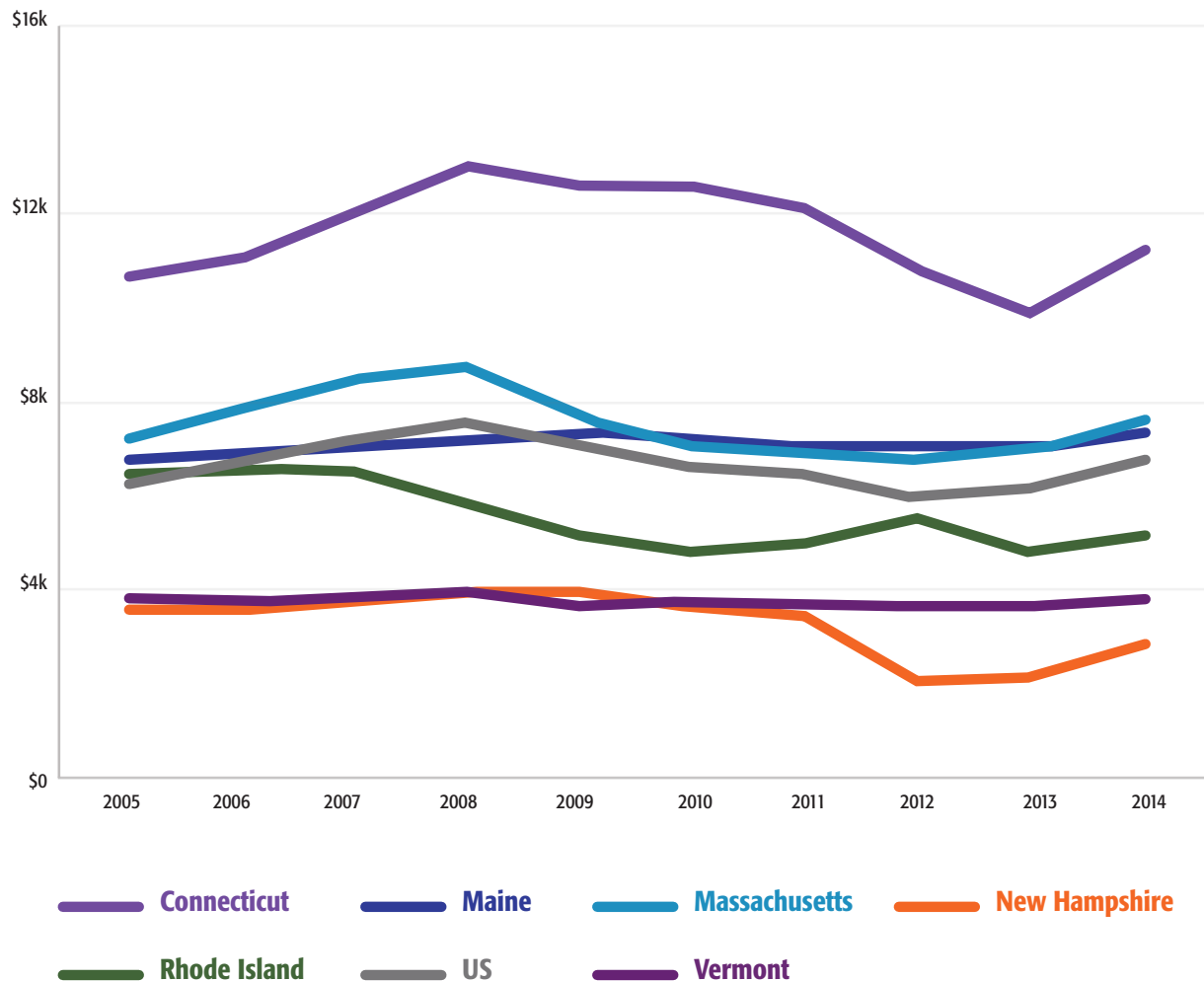
## HIGHER EDUCATION SUPPORT PER FTE STUDENT IN MASSACHUSETTS, NEW ENGLAND, AND THE U.S.

Growing financial strain at UMass has been accompanied by a push by university officials for increased state appropriations. As discussed in our second report, funding levels from the state have varied significantly over the years. The following tables and graphs present data from the State Higher Education Executive Officers Association (SHEEO)<sup>7</sup> comparing state support for public higher education in Massachusetts, New England states, and in the U.S. overall from 2005 to 2014.<sup>8</sup>

Figure 5<sup>9</sup> shows state support per FTE student enrollment at all public higher education institutions during this

period. In Massachusetts, these include the five campuses in the UMass system, nine state universities, and fifteen community colleges. State support includes state appropriations, state payment of fringe benefits, and all other state support excluding sums for capital outlays and debt service.<sup>10</sup> As figure 5 reveals, state support has been relatively flat for public institutions in all states over this period. Massachusetts' state support per FTE student at MA public colleges and universities is higher than most other New England states and the U.S. average, with the exception of Vermont.

Figure 5. State financial support per FTE student at higher education institutions, including state universities, state colleges, and community colleges





## NET TUITION REVENUE AND OUT-OF-STATE COSTS IN MASSACHUSETTS, NEW ENGLAND, AND THE U.S.

To what degree is revenue generated through student tuition and fees covering the total cost of educational programming at UMass? A helpful metric in making this assessment is net revenue from tuition, which measures how much of the cost of higher education is paid for by the student. It represents the sum of gross tuition and mandatory fee assessments minus state-funded student financial aid, institutional discounts and waivers, and medical school student tuition revenue per FTE.<sup>11</sup>

Compared with students at other public higher education institutions in New England, including state universities,

colleges, and community colleges, Massachusetts students contributed the least in net tuition per year on average throughout the 2005-2014 time period. In 2014, FTE students at all Massachusetts public higher education institutions paid \$5,920 on average, according to SHEEO data.<sup>12</sup> In Vermont, the average was \$14,540; in Rhode Island, \$12,043; in New Hampshire, \$10,995; in Connecticut, \$9,504; and in Maine, \$8,707. Massachusetts students paid slightly more than the national average in net tuition in 2014.

Figure 6. Net tuition per FTE student at higher education institutions, including state universities, state colleges, and community colleges in New England and the U.S.

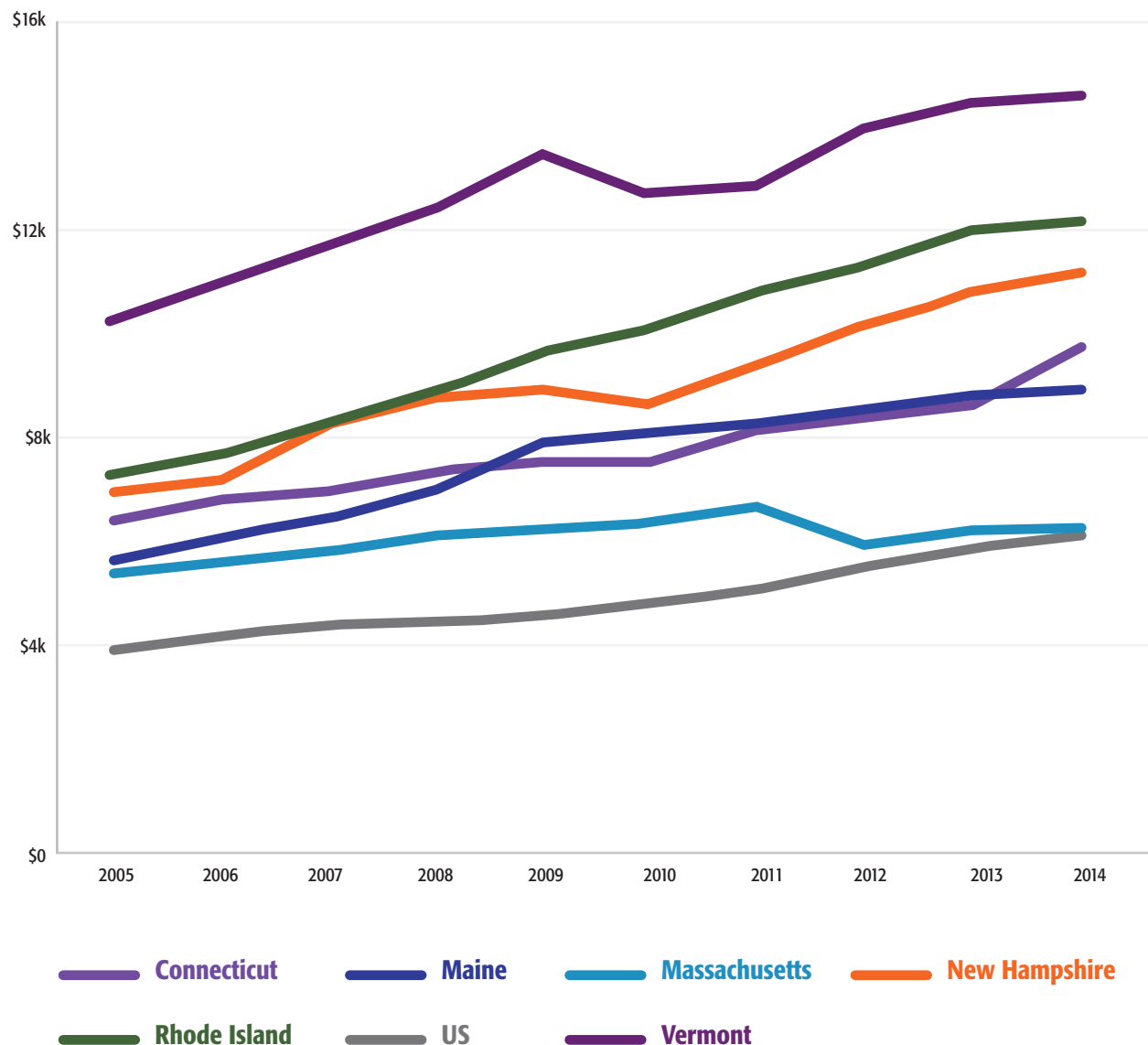


Figure 7 lists the top 20 most expensive institutions in the U.S. as well as the six New England state flagship universities, including UMass-Amherst. Among public four-year higher education institutions in the U.S., UMass-Amherst ranked 50<sup>th</sup> in tuition and fee charges for out-of-state students in the 2014-15 school year, while UVM ranked 4<sup>th</sup> and UConn 24<sup>th</sup>. Both UMaine (55<sup>th</sup>) and URI (60<sup>th</sup>) charge out-of-state students less than UMass.

## UMASS' RECENT STRATEGY OF INCREASING OUT-OF-STATE ENROLLMENT

The pursuit of out-of-state students as a means of generating additional revenue is a trend at public universities nationwide. The percentage of out-of-state students attending large public universities such as the University of California, University of Wisconsin-Madison, University of South Carolina, University of Alabama, and the University of Michigan has increased dramatically.<sup>13</sup> More than half of the student body at the University of Michigan, University of Iowa and University of Alabama is out-of-state<sup>14</sup>—UMass is increasingly moving towards this policy.

The University of California (UC) is a prominent and illustrative example. UC officials have expressed that, due to dwindling state funding, the university system cannot cover the cost of expanding enrollment for in-state students.<sup>15</sup> To augment revenue in the face of cuts to appropriations from the state, the UC system adopted a policy of increasing out-of-state enrollment. Two of the system's largest campuses, UCLA and UC-Berkeley, increased out-of-state enrollment in their respective 2014-2015 freshman classes to 28.1 percent<sup>16</sup> and 29.1 percent<sup>17</sup>—up from 6 percent and 10 percent, respectively in 2004.<sup>18</sup> These levels are almost the same as UMass-Amherst's 27.9 percent out-of-state freshman admission level in 2015-2016.

The increase in out-of-state enrollment has been met with strong backlash and accusations that the policy has had an adverse impact on in-state students seeking enrollment at schools within the UC system. California Governor Jerry Brown and members of the state legislature expressed concern that in-state applicants were being short changed. As a result, in March 2015 UC President Janet Napolitano agreed to cap out-of-state enrollment at UCLA and UC-Berkeley at 2014-2015 levels.<sup>19</sup> In January of 2016, the California state legislature proposed a cap of 15.5 percent on out-of-state enrollees at UC schools.<sup>20</sup> More recently, the California State Auditor released a report in March 2016 scrutinizing the shift in enrollment strategy that relaxed admissions standards for nonresidents, stating, "the university's decision to increase the enrollment

Figure 7. Rankings among U.S. public higher education institutions in 2014-2015 in tuition and fees for out-of-state students, with New England flagship campuses

Public Institution	State	Published out-of-state tuition and fees 2014-15	Rank
University of Virginia - Main Campus	VA	\$42,394	1
University of Michigan - Ann Arbor	MI	\$41,906	2
College of William and Mary	VA	\$39,916	3
University of Vermont	VT	\$37,874	4
Virginia Military Institute	VA	\$37,574	5
University of California - Davis	CA	\$36,774	6
University of California - Santa Barbara	CA	\$36,743	7
University of California - San Diego	CA	\$36,305	8
University of California - Riverside	CA	\$36,285	9
University of California - Santa Cruz	CA	\$36,275	10
University of California - Irvine	CA	\$36,057	11
University of California - Merced	CA	\$36,038	12
University of California - Berkeley	CA	\$35,850	13
University of California - Los Angeles	CA	\$35,583	14
Michigan State University	MI	\$34,965	15
The University of Texas at Austin	TX	\$34,836	16
Colorado School of Mines	CO	\$33,598	17
University of Washington - Seattle Campus	WA	\$33,513	18
University of North Carolina at Chapel Hill	NC	\$33,418	19
University of Washington - Tacoma Campus	WA	\$33,381	20
University of Connecticut	CT	\$32,880	24
University of New Hampshire - Main Campus	NH	\$29,532	43
University of Massachusetts - Amherst	MA	\$28,998	50
University of Maine	ME	\$28,486	55
University of Rhode Island	RI	\$28,072	60

of nonresidents has made it more difficult for California residents to gain admission to the university” and that the university “denied admission to an increasing proportion of qualified residents at the campus to which they applied—nearly 11,000 in academic year 2014–15 alone.”<sup>21</sup> The report, entitled *University of California: Its Admissions and Financial Decisions Have Disadvantaged California Resident Students*, calls for a “legislative intervention” to make the UC system more affordable and attainable to in-state residents.<sup>22</sup> The University soon released a report in response, criticizing the Auditor’s findings as inaccurate.<sup>23</sup>

The University of North Carolina at Chapel Hill (UNC) has in place similarly stringent restrictions on the volume of out-of-state applicants it accepts. The UNC Board of Governors strictly limits enrollment of out-of-state students in the first-year class at 18 percent.<sup>24(25)</sup> At its March 2016 meeting, the Board enforced a \$1,041,017 penalty against the university after its 2015–2016 out-of-state freshman enrollment exceeded the limit by 1.5 percent.<sup>26</sup>

Lack of adequate state funding is not the only factor pushing state schools to increase out-of-state enrollment. Many public universities recruit academically high-performing out-of-state students who pay higher tuitions to boost institutional profile as well as to generate more revenue. As an article published in *Inside Higher Ed* titled “Buying Outsiders” explains, “colleges are competing with one another, and often out-of-state students help boost test scores and overall revenue and thus increase a college’s ranking and stature.” A May 2015 report from *New America*, cited prominently in the article mentioned above, notes that public colleges and universities across the country have undergone a paradigm shift with respect to their enrollment practices largely in response to “state disinvestment and institutional status-seeking.”<sup>27</sup> A significant number of these schools are increasingly moving away from their core mission of offering low-cost education to in-state residents and towards tactics that mirror practices among private higher education institutions. The study explains:

For many of these schools, that has meant using their institutional aid dollars strategically in order to lure affluent out-of-state students to their campuses in order to climb up the rankings and increase their revenue. As a result, fewer institutional aid dollars are available to in-state students who come from less privileged backgrounds.<sup>28</sup>

A May 18, 2015 *Time* article entitled “Why an Out-of-Stater May Be Taking Your Kid’s Seat at State U.” also echoes this sentiment, describing the shifting character of public college and university recruitment. As the article mentions, many public higher education institutions are looking for wealthier nonresident students who can afford the higher price tag of an out-of-state college education. The author explains: “Driven by a desire for dollars and

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higher rankings, public colleges are increasingly using their financial awards to recruit affluent out-of-staters instead of helping needy state residents attend college.”<sup>29</sup>

In a January 2016 *Washington Post* article entitled “Nation’s prominent public universities are shifting to out-of-state students,” a Georgetown University research professor cites an adverse consequence of rising out-of-state enrollment at public universities:

People inside states believe that they have greater access to their state universities,” said Marguerite Roza, a Georgetown University research professor who studies education finance. Many are now asking, she said, “who does that public university belong to anymore? And what is it doing? Is it seeking ‘elite’ status? That’s great, but not if your own kids can’t go there.”<sup>30</sup>

**UMass-Amherst’s strategy regarding recruitment of out-of-state students**

UMass’ strategy of increasing out-of-state enrollment students as a means of building institutional status and generating additional revenues dates back to at least 2009. In October of that year, UMass-Amherst Chancellor Robert Holub announced the school would be seeking new avenues for financial support—attracting more out-of-state students, Holub remarked, would “not only increase [UMass’s] geographical, cultural, and ethnic diversity, but also provide a more secure funding base going forward.”<sup>31</sup> That same month, the *Boston Globe* reported that UMass was weighing the use of “financial incentives to entice out-of-state students”, and that the school had plans to double its out-of-state student population by 2020. As the *Globe* noted, the plan to bring in 300 additional nonresident students per year would generate an estimated \$4 million a year in added revenue. The *Globe* explains:

UMass-Amherst Chancellor Robert Holub is seeking new sources of income, amid dwindling state subsidies, to increase the size and prominence of the faculty, update deteriorating postwar buildings, and invest in scientific research. To help reach that goal, he envisions increasing undergraduate enrollment by 15 percent, to 22,500 students, over the next decade by exclusively courting out-of-state students.<sup>32</sup>

**UMass-Boston sets forth its out-of-state scholarship program as follows on its web site: “Out of state students can get a \$10,000 merit scholarship and an invitation to Honors College renewable for up to four years with a minimum (recalculated) high school GPA of 3.5 and at least 1200 on the math and critical reading portions of the SAT.”<sup>36</sup>**

The university has since adopted policy changes aimed at realizing this goal of boosting out-of-state enrollment. In 2011, UMass began a program to recruit of out-of-state students by offering tuition discounts. As an April 2014 report prepared by UMass consultant Huron Consulting Group discloses, UMass introduced the program to bring in a higher number of out-of-state students through a “two-pronged approach,” discounting tuition for nonresident students and revising how funds are allocated among colleges and schools within colleges, based upon the proportion of out-of-state versus in-state students at each unit. The report makes reference to admissions targets for nonresident students, which the report notes can serve as a strategy to meet enrollment and revenue goals, and points out that almost 43 percent of generated revenue comes from out-of-state tuition and fees, after scholarships and waivers have been accounted for.<sup>33</sup> As the report explains: “a focus on in and out of state tuition and fee generation aligns with the strategic incentives already established to grow out of state students and has led to enrollment growth.” According to Huron, \$9.3 million in tuition and fee discounts were awarded to out-of-state undergraduate students from a total of \$73.4 million allotted to undergraduate scholarships and waivers.<sup>34</sup>

A number of public documents from UMass make reference to the importance of out-of-state recruitment and acknowledge this student subgroup as a targeted population for strategic enrollment. In its 2013 self-assessment report, UMass-Lowell discusses the states in which it is currently engaging in recruitment of non-Massachusetts residents: “In order to increase our out-of-state student population, UMass Lowell recruits actively in California, Florida, New England, New Jersey, New York, North Carolina, and Pennsylvania. We also established an improved scholarship program.”<sup>35</sup> Over the last several

years, UMass-Lowell has awarded merit-based discounts to non-Massachusetts students as a way to attract more nonresident enrollees. UMass-Boston sets forth its out-of-state scholarship program as follows on its web site: “Out of state students can get a \$10,000 merit scholarship and an invitation to Honors College renewable for up to four years with a minimum (recalculated) high school GPA of 3.5 and at least 1200 on the math and critical reading portions of the SAT.”<sup>36</sup>

A planning document published by the UMass President’s Office in July of 2014<sup>37</sup> provides further indication that UMass is employing recruitment strategies that favor out-of-state applicants. The report, which was produced by the Office of Institutional Research—a subgroup under the oversight of the President’s Office—delineates admission targets for undergraduate and graduate students at the five UMass campuses from the fall of 2012 to the fall of 2017. As the document shows, UMass has set the following system-wide targets for its five campuses: a 7 percent increase in in-state undergraduates versus a 35 percent increase in out-of-state undergraduates and an 8 percent increase in in-state graduate students versus a 25 percent increase in out-of-state graduate students. These targets are listed in figure 8 below.

**Figure 8. UMass headcount enrollment targets, FY2014-2018**

Student Residency	FY2014	FY2018	Increase
In-State Undergraduate Students	44,911	47,966	7%
Out-of-State Undergraduate Students	8,990	12,146	35%
International Undergraduate Students as Percent of Out-of-State Undergraduates	20%	37%	17%
In-State Graduate Students	9,400	10,182	8%
Out-of-State Graduate Students	7,473	9,324	25%
International Graduate Students as Percent of Out-of-State Graduate Students	37%	46%	9%

UMass’ targeted increases for international student recruitment are an important component of its strategic plan. As figure 8 above shows, the university hopes to increase international students as a percentage of undergraduate out-of-state students from 20 to 37 percent by 2018. UMass aims to increase its number of out-of-state graduate students by 25 percent and to increase its number of international students as a percentage of graduate out-of-state students from 37 percent to 46 percent by 2018.

The UMass campuses have taken a number of steps to achieve these international recruitment targets.



UMass-Dartmouth, for instance, published an International Programs Strategic Plan 2011-2017 aimed at attracting more international students to the campus as full-time undergraduates and graduates. UMass-Medical has also made policy changes. The Medical School has publicly stated that the university has been actively recruiting non-U.S. residents and is increasingly relying on the sizable tuition revenues generated by this population. When UMass Medical School officials announced that it will begin accepting out-of-state students for the first time earlier this year, they shared that the school will benefit from significant additional revenue: “The Worcester medical school will benefit financially from the extra students, who will pay about \$55,000 per year compared to the approximately \$38,000 for residents. UMass Medical will continue to admit 125 in-state students each year but increase the size of the class by 25, reserving those spots for out-of-staters.”<sup>38</sup>

To assist with recruitment of this group, UMass has sought assistance from outside consultants to bolster targeted enrollment. Since 2010, hired consultants have helped recruit foreign students at UMass-Boston, UMass-Dartmouth, and UMass-Lowell for a commission of one-half of first year tuition and fees. According to a report in the *Boston Globe*, the three campuses hired Navitas, an educational consulting firm based in Australia whose services consist of university pathway programming including English language instruction and vocational training, to recruit students for their respective schools. The report notes that Navitas “takes a cut, receiving from the university half of the \$23,736 that out-of-state freshmen pay in tuition and fees.”<sup>39</sup> UMass-Boston, UMass-Dartmouth, and UMass-Lowell each renewed their contracts with Navitas for an additional ten-year term in February 2015.

Then-Chancellor of UMass-Lowell Marty Meehan, now President of UMass, conceded that this method of recruitment of internationals, like strategic enrollment of out-of-state students, is an effort to offset declines in funding due to cuts to state assistance. Meehan told the *Boston Globe*, “We’ve had our state appropriation cut by 26 percent in the last three years. We have to develop programs and recruiting in a way that provides the revenue that we need.”<sup>40</sup>

UMass-Boston has expressed similar sentiment regarding the importance of international recruitment as a source of revenue due to declining state subsidization and other concerning budget constraints. In its February 2016 Institutional Self-Study, the school cites three central issues that will require the university to make adjustments in

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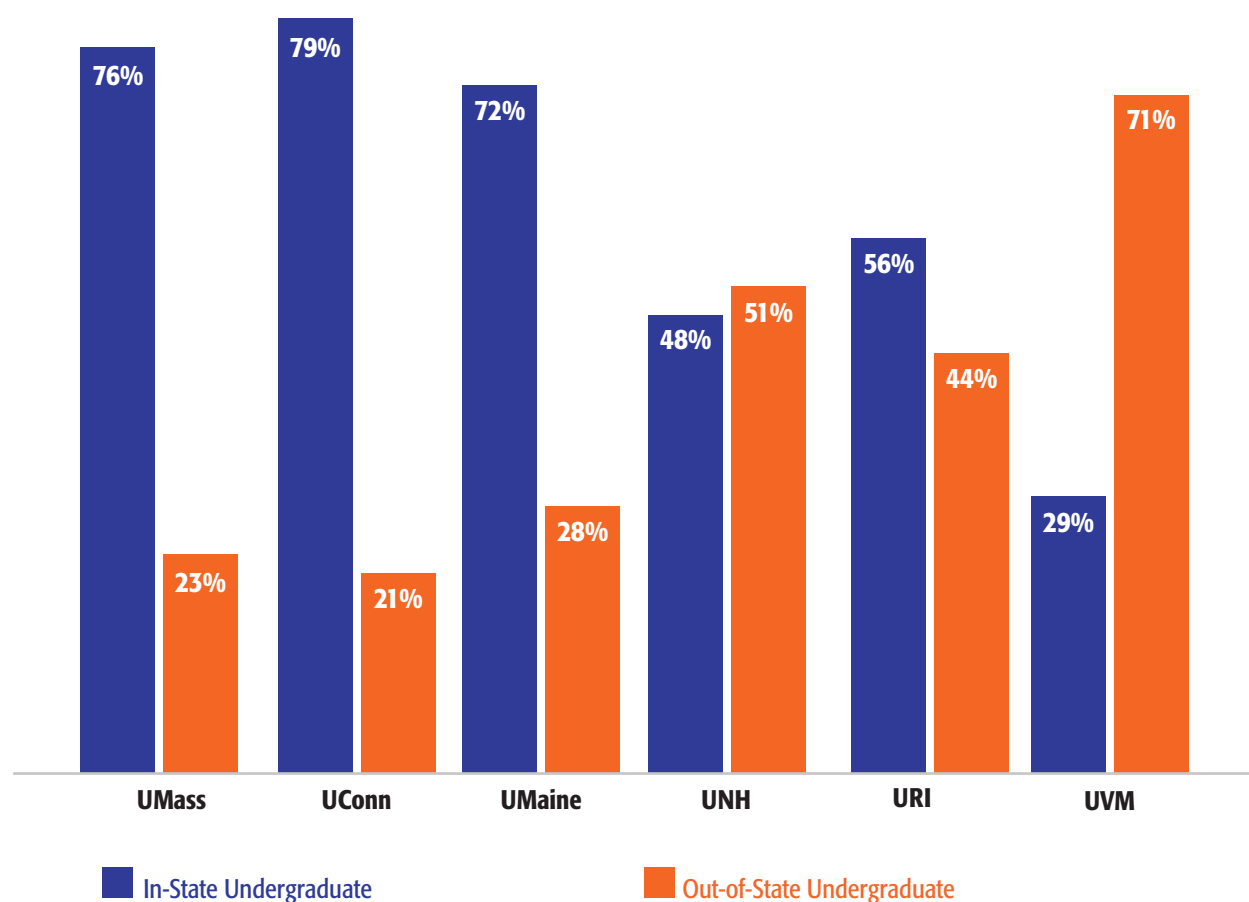
how it seeks revenue: uncertainty surrounding future increases in appropriations from the state, which the school expects to be “modest at best,” a projected decline in the number of high school graduates in the region through 2027-28, which the university notes will “challenge the university’s ability to reach the enrollment targets upon which much of the [school’s] financial model backing the [strategic] plan is based,” and that the school does not have complete control over setting tuition and mandatory fee rates.<sup>41</sup> The document further notes that any strategic plan that depends heavily on revenue via student fees “must plan for a growing number of international and out-of-state students.”<sup>42</sup>

It is important to note that UMass’ shift towards more significant out-of-state recruitment, including strategic enrollment of international students, is also reflective of efforts to make their schools more diverse and campus communities more welcoming to talent from abroad at a time when higher education is becoming increasingly internationalized. As other experts have expressed, however, there is still uncertainty regarding the extent to which pursuit of these goals will be balanced with consideration of the potential adverse outcomes strategic recruitment of out-of-state and international students might generate for in-state students.

## Enrollment trends at public universities across New England – how does UMass compare?

Figure 8<sup>43</sup> breaks down in-state and out-of-state undergraduate enrollment at New England state universities in 2015-16. As the chart shows, out-of-state students make up a large percentage of many of New England flagship campuses' student populations. The most extreme instance of this is UVM, where 71 percent of the undergraduate student body is comprised of out-of-state students. At UNH, out-of-state undergraduate enrollment totals 51 percent. URI also has a notably high percentage of out-of-state undergraduates—44 percent. UMaine, UConn, and UMass, have undergraduate out-of-state populations consisting of 28 percent, 21 percent, and 23 percent of their total student bodies, respectively.

Figure 8. Percentage of in-state/out-of-state undergraduate enrollment at New England flagship state campuses 2015-2016.



In Figure 9,<sup>44</sup> a comparison of in-state and out-of-state graduate enrollment at New England state universities in 2015-16 shows that 70 percent of UMass' graduate student body is comprised of out-of-state students—a significantly higher proportion than that of other state universities in the New England region. This is more than 20 percentage points higher than the school with the next highest percentage of out-of-state enrollees, UVM, where 49 percent of graduate students are not in-state residents. The schools with the next highest percentages for this metric, URI and UNH, have graduate populations made up of 48 percent and 45 percent out-of-state students, respectively. At UConn and UMaine, out-of-state graduate enrollment is considerably less—33 percent and 34 percent, respectively.

**...a comparison of in-state and out-of-state graduate enrollment at New England state universities in 2015-16 shows that 70 percent of UMass' graduate student body is comprised of out-of-state students—a significantly higher proportion than that of other state universities in the New England region.**

Figure 9. Percentage of in-state/out-of-state graduate enrollment at New England flagship state campuses 2015-2016.

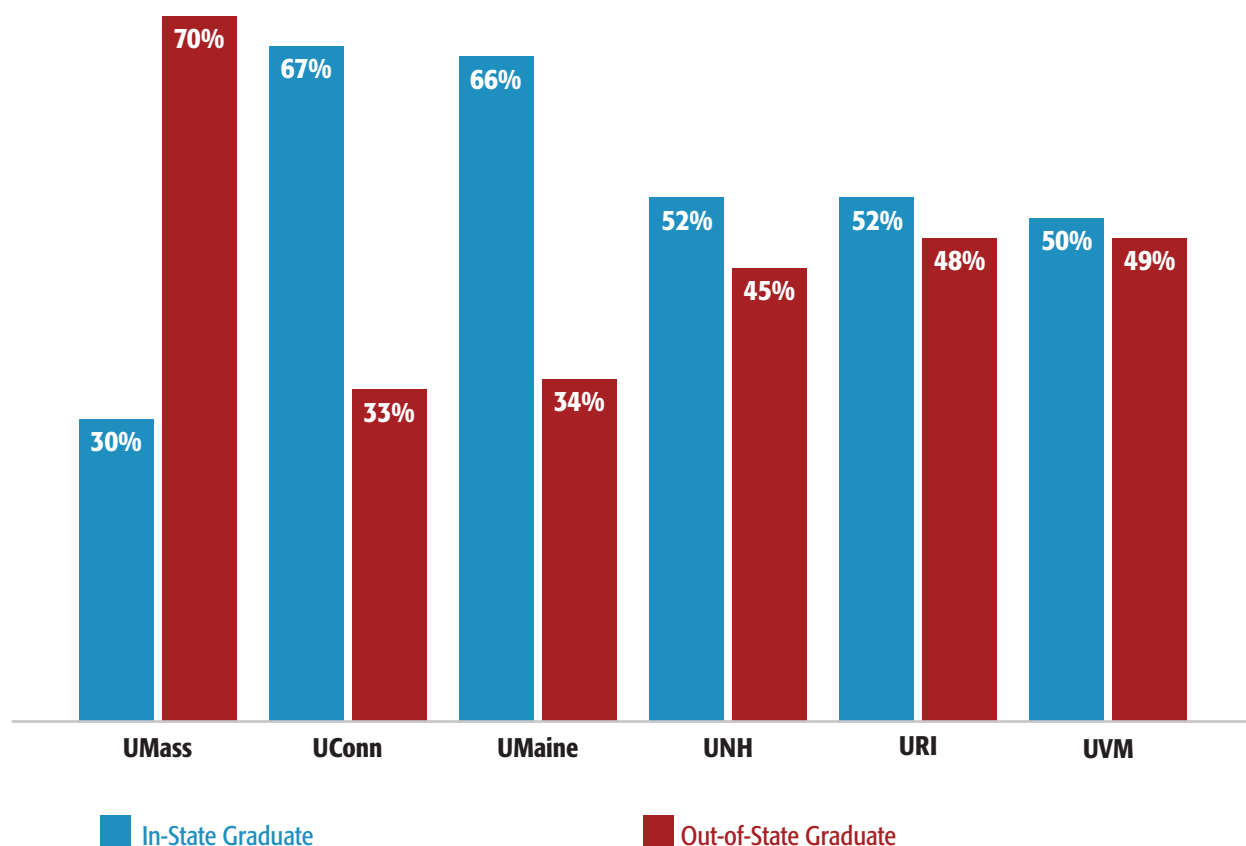
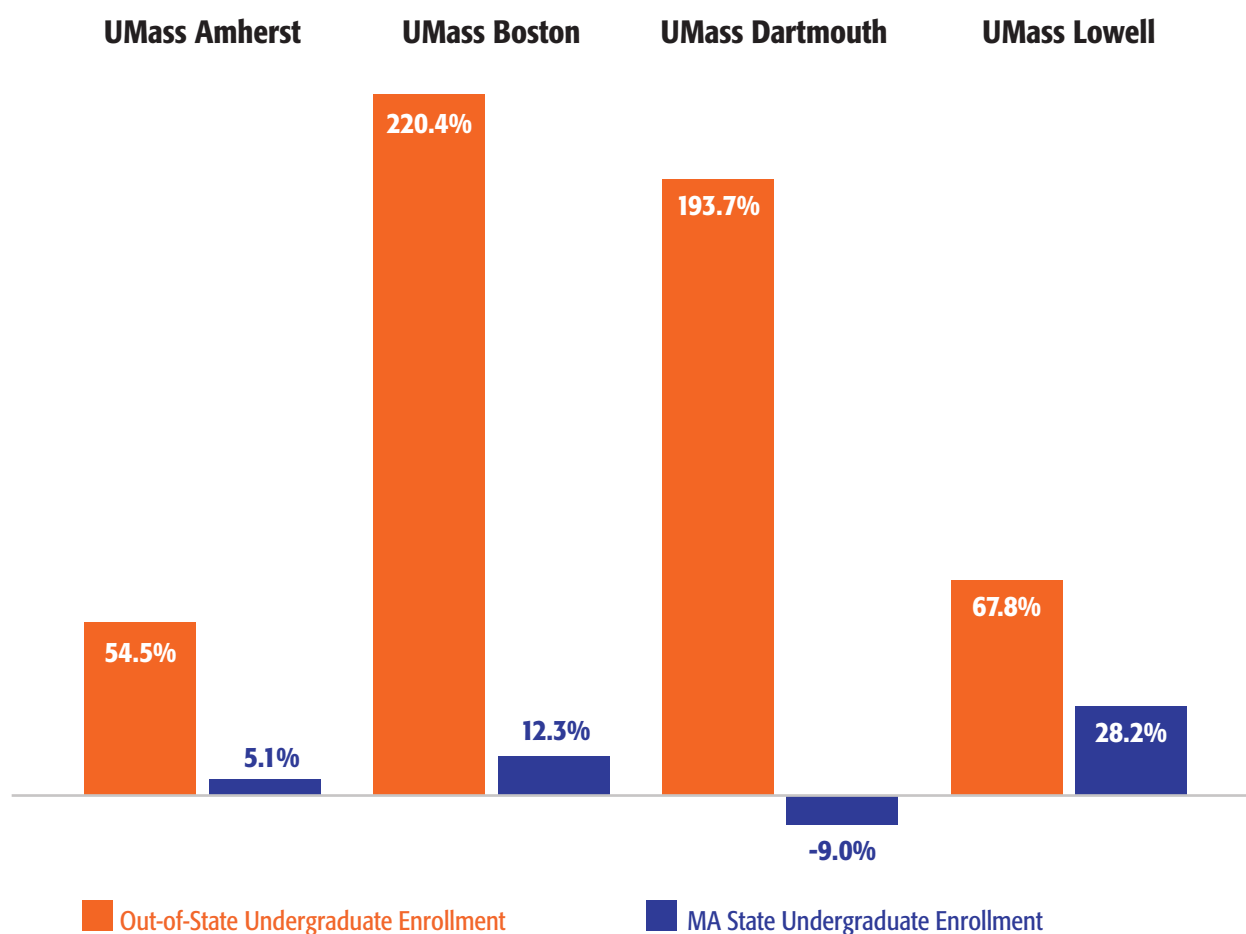


Figure 10. Percent growth in undergraduate in-state/out-of-state undergraduate enrollment, 2008-09 compared to 2014-15 at UMass campuses



### Comparing UMass out-of-state enrollment by campus

Figure 10<sup>45</sup> shows the percentage increase in in-state and out-of-state undergraduate enrollment at UMass' four undergraduate campuses, comparing 2008-09 with 2014-15. At all campuses, out-of-state enrollment growth far exceeded that of in-state enrollment over this period. These data demonstrates the impact of UMass' strategy of targeted recruitment of out-of-state students, discussed earlier in this report.

Between 2008 and 2014, out-of-state undergraduate enrollment at UMass grew from 6,218 to 11,473, an addition of 5,255 students, representing an 84.5 percent increase. Meanwhile, in-state undergraduate enrollment grew by 3,506 students, from 39,798 to 43,304—an 8.8 percent increase. The largest percentage increase in out-of-state enrollment occurred at UMass-Boston, which saw its nonresident population grow by 220.4 percent, from 747 to 2,395 students. Comparatively, in-state enrollment on

the Boston campus increased by just 12.3 percent, from 8,596 to 9,653 students. UMass-Dartmouth experienced similar levels of growth among its out-of-state student population—enrollment among students in this group increased by 193.7 percent while in-state enrollment actually declined by 9 percent. At UMass-Amherst, out-of-state enrollment rose by 54.5 percent while in-state enrollment increased by 5.1 percent. At UMass-Lowell, out-of-state enrollment increased by 67.8 percent while in-state enrollment grew by 28.2 percent.

As mentioned above, UMass' out-of-state undergraduate enrollment is less than other public universities in New England, some of which have out-of-state student populations that make up more than 50 percent of their total student bodies. The pace at which the percentage of out-of-state undergraduates at UMass' campuses has grown, however, suggests the school is catching up. UMass'



out-of-state undergraduate population grew significantly during the last six years, from 54 to 220 percent on the four undergraduate campuses. There is significant disparity between the undergraduate and graduate population within the UMass system. UMass' in-state students comprise 76 percent of the undergraduate population; in contrast, in-state students make up just 30 percent of all graduate students.

Figure 11<sup>46</sup> shows the percentage increase of in-state and out-of-state graduate enrollment at UMass' five campuses, comparing 2008-09 and 2014-15. System-wide, out-of-state graduate enrollment grew by more than twice as much as in-state enrollment—by 2,734 students, which is equal to a 50.2 percent increase. Comparatively, in-state enrollment increased by 1,665 students, or 22 percent.

At four of five UMass campuses, growth of out-of-state

graduate enrollment exceeded in-state growth. The largest numerical and percentage increase in out-of-state enrollment occurred at UMass-Lowell, which added 1,061 out-of-state students for a total increase of 154.7 percent, and 780 in-state students, which is equal to a 46.7 percent increase for this group. UMass-Boston increased out-of-state enrollment by 93.9 percent while its in-state student population grew by 22.5 percent. At UMass-Amherst, out-of-state graduate enrollment grew by 694 students, a 20.2 percent increase, while in-state enrollment decreased by 10 students, a 0.4 percent decline. At the Dartmouth campus, out-of-state enrollment grew by 82.8 percent while in-state enrollment grew by 48.4 percent. At UMass' Medical School in Worcester, which offers graduate programs in addition to its medical school, in-state enrollment grew by 10.9 percent while out-of-state grew by 5 percent.

Figure 11. Percent growth in graduate in-state/out-of-state enrollment 2008-2014 at UMass campuses

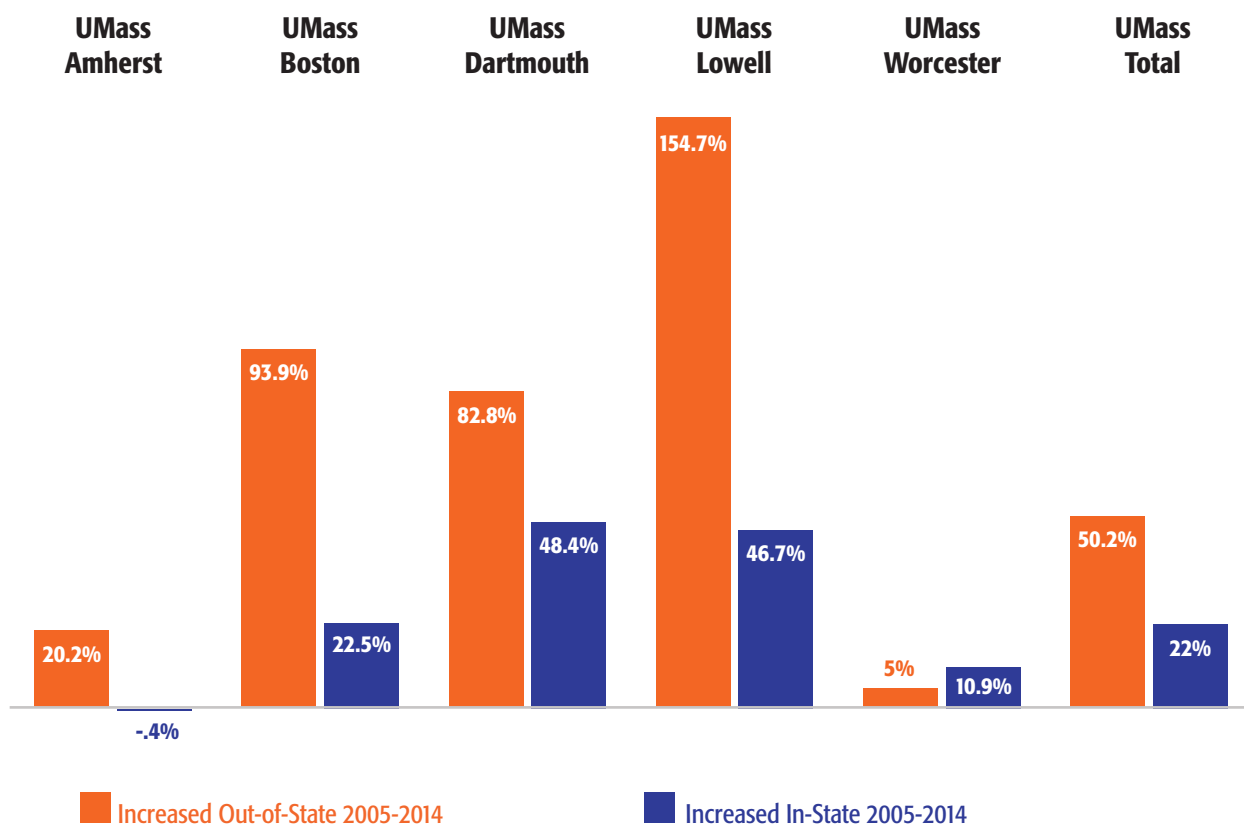
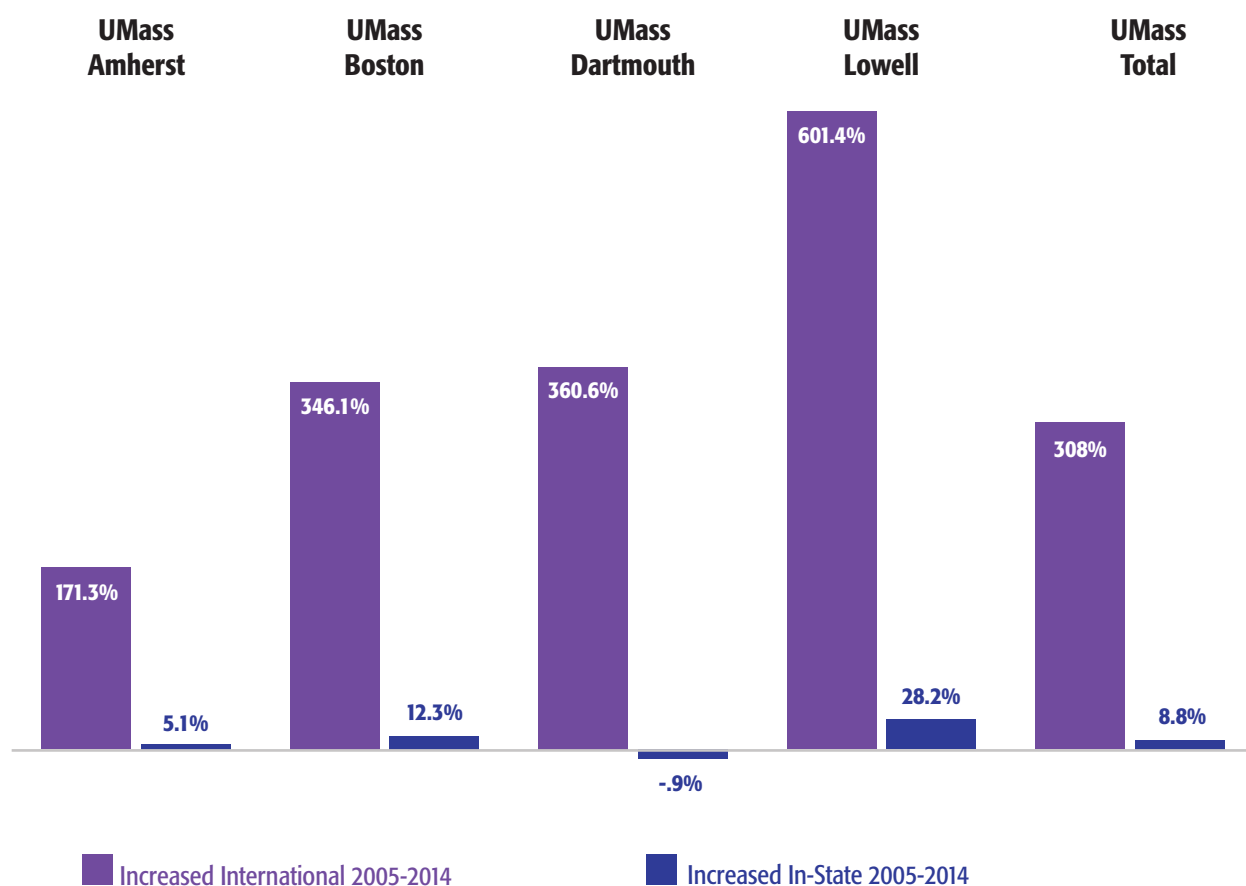


Figure 12. Percent growth in undergraduate in-state/international enrollment 2008-2014 at UMass campuses



As discussed earlier in this report, international undergraduate enrollment has also been on the rise at UMass—figure 12<sup>47</sup> below illustrates this trend, comparing international undergraduate enrollment growth at the four undergraduate campuses. Across these campuses, the number of international undergraduates increased from 676 in 2008 to 2,758 in 2014—this represents an increase of 2,082 students and a percentage increase of 308 percent. At the same time, overall undergraduate enrollment increased by 8.8 percent, from 39,798 to 43,304. The greatest percentage growth in international students occurred

at UMass-Lowell, which had 69 students in 2008 and jumped to 484 in 2014—a 601.4 percent increase. The greatest numerical increase in international students occurred at UMass-Boston, which grew from 323 to 1,441 international students for a total increase of 346.1 percent. UMass-Amherst and UMass-Dartmouth also saw expansion in international enrollment: their foreign student populations grew by 171.3 percent and 360.6 percent, respectively.

Figure 13. Percent growth in graduate in-state/international enrollment 2008-2014 at UMass campuses

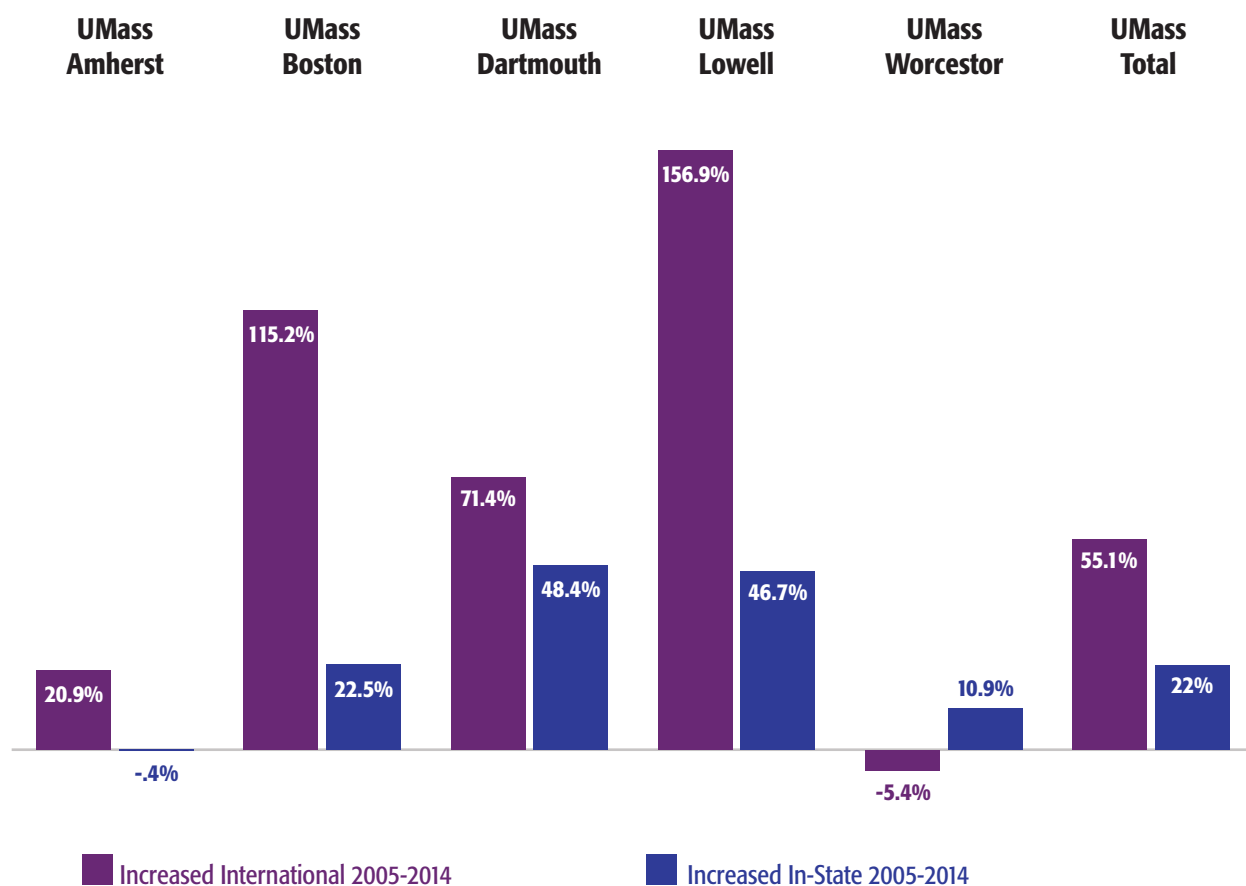


Figure 13<sup>48</sup> presents data comparing international undergraduate enrollment growth at the five graduate campuses. As the chart shows, international graduate student enrollment across the entire UMass system increased from 2,245 in 2008 to 3,481 in 2014, for an increase of 1,236 students and a percentage increase of 55.1 percent. In comparison, in-state graduate enrollment grew by 1,665 students, for a total increase of 22 percent. The most significant growth in international students in the UMass system occurred at UMass-Lowell, where the foreign student population grew by 557 students from 2008 to 2014, a 156.9 percent increase, while its in-state enrollment grew by 780 from 1,671 to 2,451, a 46.7 percent increase.

The next biggest numerical increase in international students occurred at the Amherst campus, which saw an

increase of 267 students, or 20.9 percent. Over the 2008-2014 period, UMass-Amherst's in-state graduate enrollment declined from 2,270 to 2,260—a reduction of 0.4 percent. UMass-Boston had the second greatest percentage increase in international enrollment, adding 235 students, a 115.2 percent increase, while its in-state graduate enrollment grew by 495 students, which is equal to a 22.5 percent increase. UMass-Dartmouth increased international enrollment by 71.4 percent from 255 to 444, while its in-state graduate enrollment increased by 318, a 48.4 percent increase. International graduate enrollment declined at UMass Medical School-Worcester by 8 students from 148 to 140 over this period—a 5.4 percent drop—while its in-state enrollment grew from 750 to 832—a 10.9 percent increase of 82 students.

Figure 14. Doctoral students UMass Amherst –  
in-state/out-of-state domestic/international 2015-2016

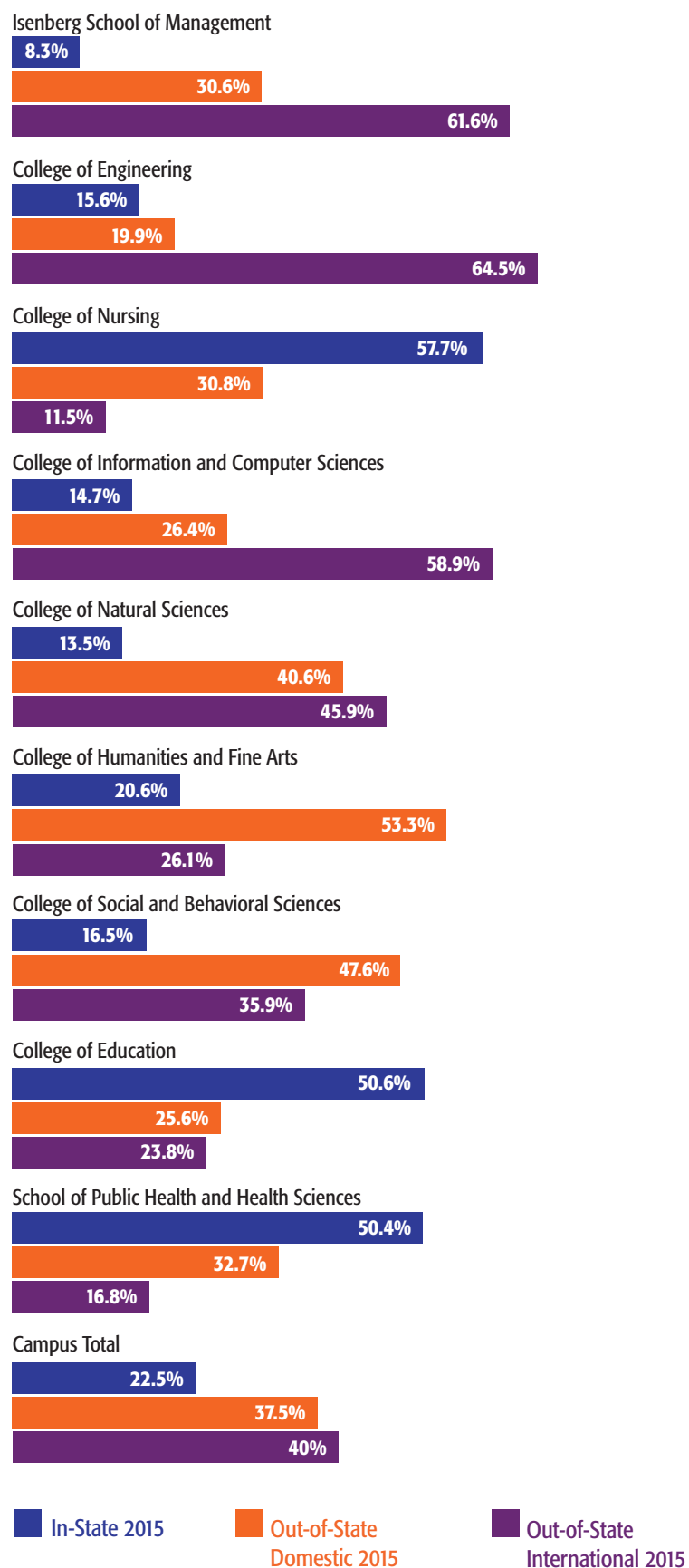
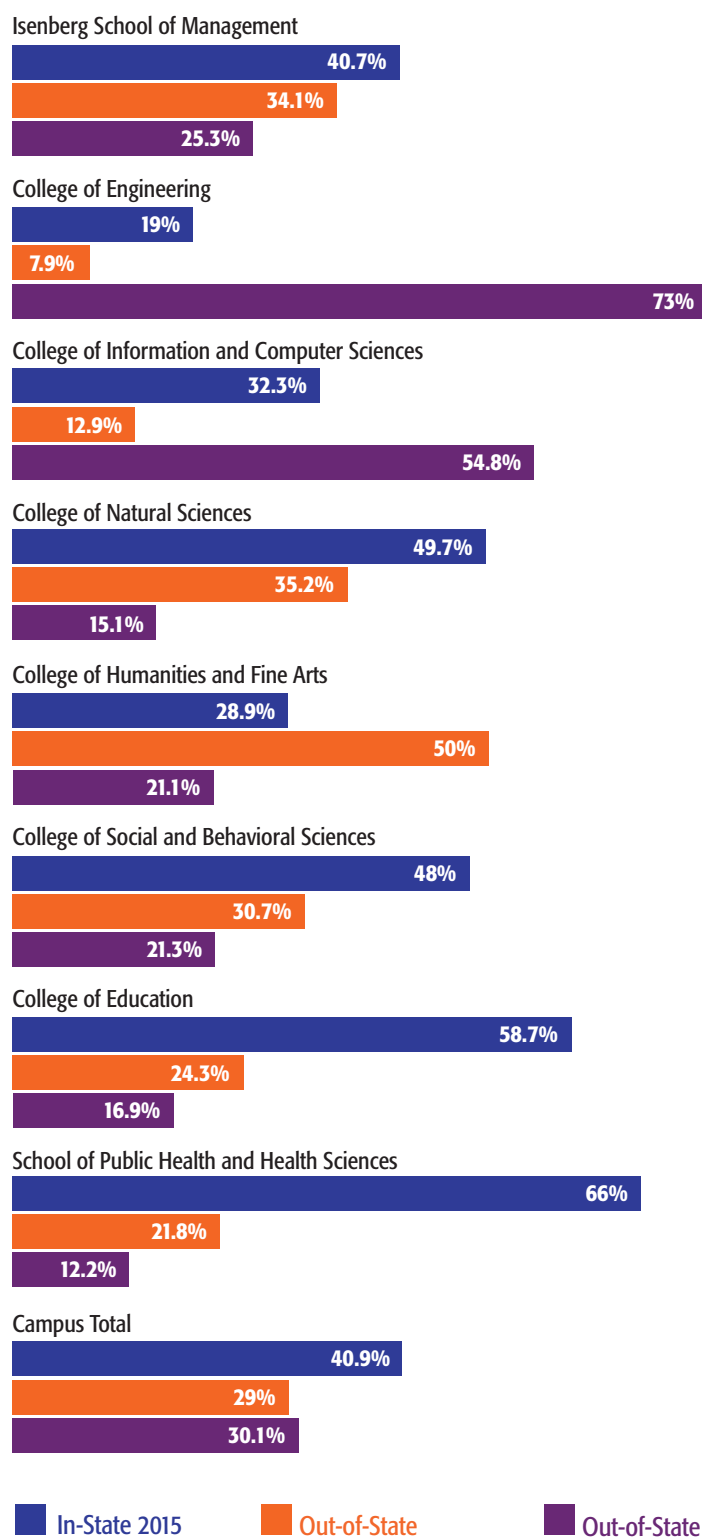


Figure 14<sup>49</sup> compares the percentage of in-state, out-of-state, and international students at the nine UMass-Amherst doctoral programs in 2015-16. The data shows that in all programs, only 22.5 percent of doctoral students are Massachusetts residents, while 40 percent are international students and 37.5 percent are out-of-state U.S. residents.

In the most selective programs, the percentage of in-state students is very low relative to the percentage of out-of-state and international students. In the Isenberg School of Management, for example, only 8.3 percent of doctoral students are Massachusetts residents while 61.1 percent are international students and 30.6 percent are out-of-state U.S. residents. In the College of Engineering, Massachusetts residents make up only 15.6 percent of doctoral students while 64.5 percent are international students and 19.9 percent are out-of-state U.S. residents. In the College of Information and Computer Science, 14.7 percent of doctoral students are Massachusetts residents—this figure is dwarfed by the number of international students, who make up 58.9 percent of the total of this group, and out-of-state U.S. residents, who make up 26.4 percent. In the College of Natural Sciences, only 13.5 percent of doctoral students are Massachusetts residents while 45.9 percent are international students and 45.9 percent are out-of-state U.S. residents.

Figure 15. Masters students UMass Amherst –  
in-state/out-of-state domestic/international 2015-2016



Available student data on UMass' master's degree programs show similar distributions. Figure 15<sup>50</sup> displays the percentage of in-state, out-of-state, and international students at the nine UMass-Amherst master's degree programs in 2015-16. The data show that in all programs, only 40.9 percent of master's degree students are Massachusetts residents, while 30.1 percent are international students and 29 percent are out-of-state U.S. residents. In the College of Engineering, only 19 percent of master's degree students are Massachusetts residents while 73 percent are international students and 7.9 percent are out-of-state U.S. residents. Approximately 32 percent of students pursuing a master's in the College of Information and Computer Science are residents of Massachusetts—54.8 percent are international students and 12.9 percent are out-of-state U.S. residents.

**Figure 16. Undergraduate students UMass Amherst by college—out-of-state  
Fall 2006 and 2015**

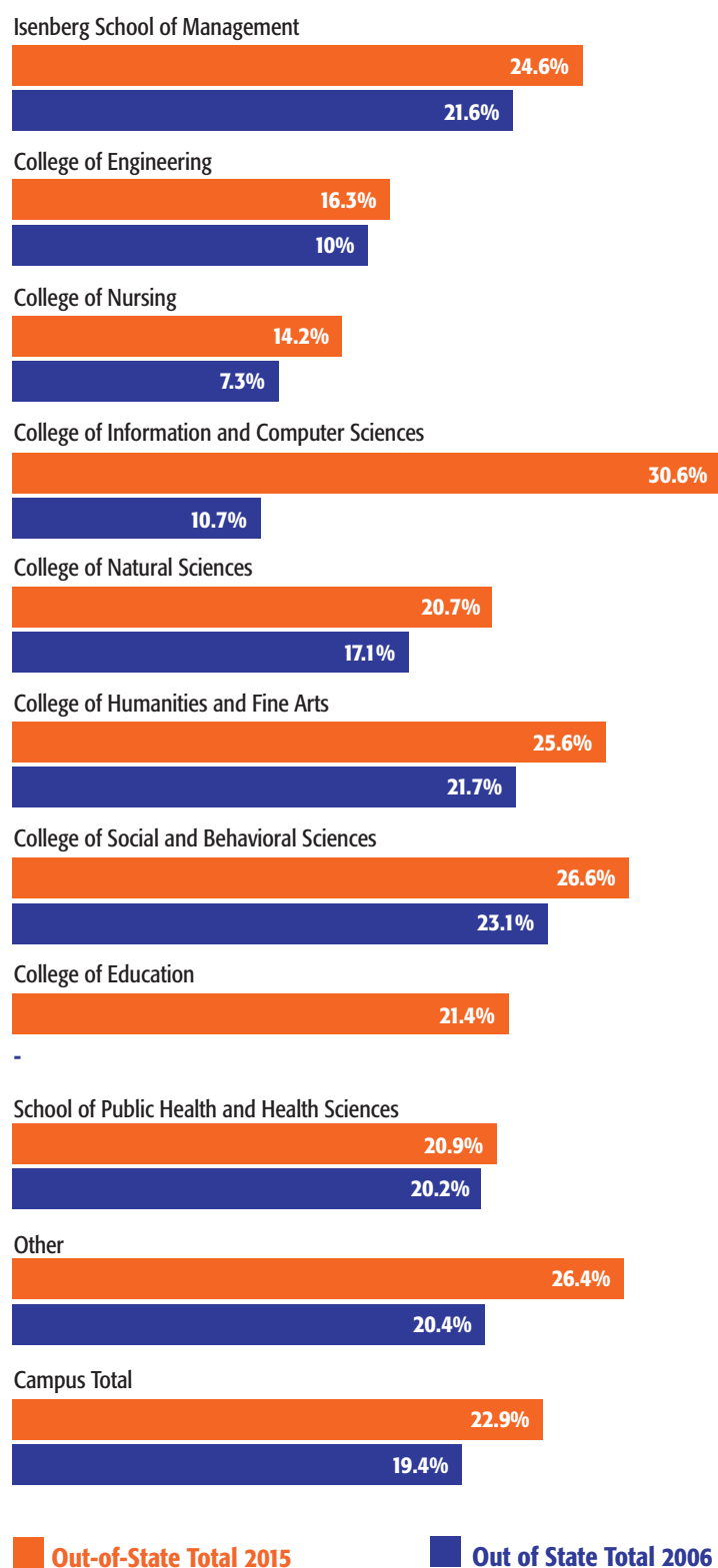


Figure 16<sup>51</sup> compares the percentage of in-state and out-of-state students attending each of the ten UMass-Amherst undergraduate programs in the fall of 2006 and the fall of 2015. The data show that in all programs, the percentage of out-of-state residents increased over this period—most notably in the College of Information and Computer Sciences, where out-of-state enrollment increased from 10.7 percent in 2006 to 30.6 percent in 2015. The College of Engineering also experienced notable increases in out-of-state enrollment—this group grew from 10 percent of the College's student population in 2006 to 16.3 percent in 2015. Similarly, out-of-state enrollment at the College of Nursing increased from 7.3 percent in 2006 to 14.2 percent in 2015.

## TRENDS IN ADMISSIONS FOR IN-STATE AND OUT-OF-STATE STUDENTS AT UMASS

Figure 17<sup>52</sup> shows that in 2005, 7,035 out-of-state students submitted applications for admission to UMass' freshman class; by 2015 that number had increased to 19,488, for a total increase of 177 percent. In 2005, out-of-state applicants received 5,613 offers of admission—over the next ten years, the number of applications from this group increased to 11,657, representing slightly more than half of all offers of admission made by the university in 2015.

The UMass-Amherst campus has become an increasingly popular higher education option for out-of-state applicants. The percentage of applications submitted by out-of-state students for first year admission to UMass-Amherst was 48.7 percent last year—a significant increase since

2005, when 34.8 percent of all applications to Amherst came from this group. During this ten-year period, the percentage of offers of admission made by UMass-Amherst to out-of-state students increased dramatically, from 34.6 percent in 2005 to slightly more than 50 percent in 2015. Over the same timeframe, the percentage of in-state applications decreased from 65.2 percent to 51.3 percent of total applications. Offers of admission for in-state students also fell, from 65.4 percent of applications to just under 50 percent. Over the last decade, while the number of offers of acceptance made to out-of-state students increased by 6,044, there were only an additional 1,023 offers made to in-state students, despite the additional 7,350 in-state applicants.

Figure 17. Number of in-state/out-of-state applicants for admission at UMass Amherst 2005-06 to 2015-16

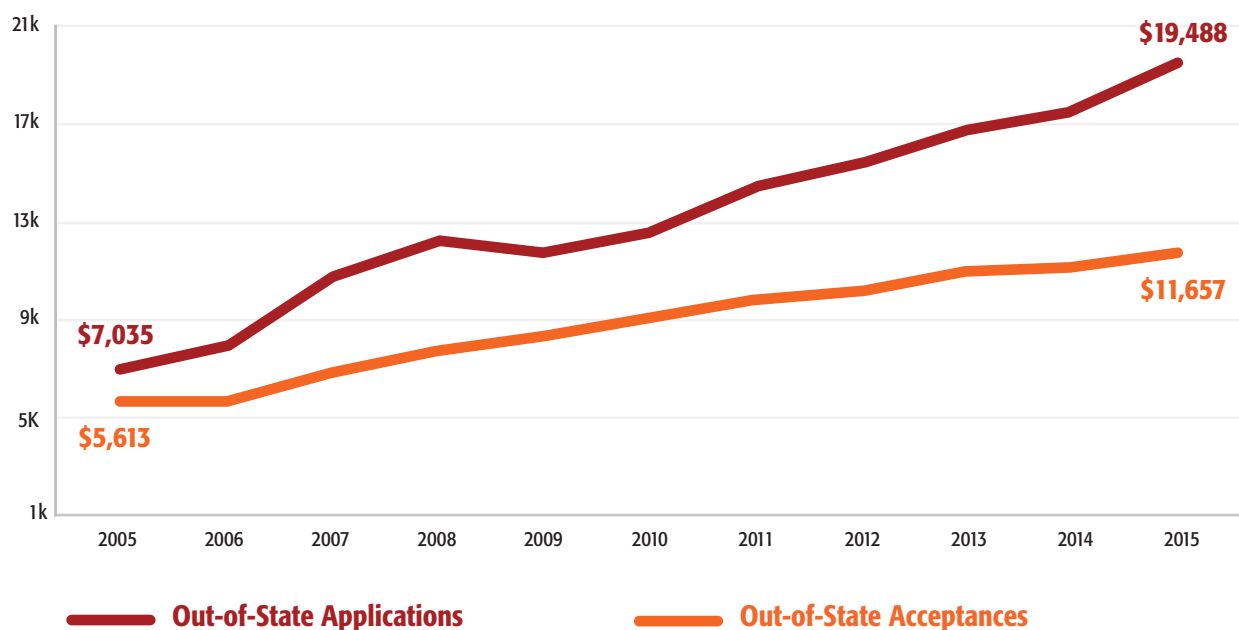
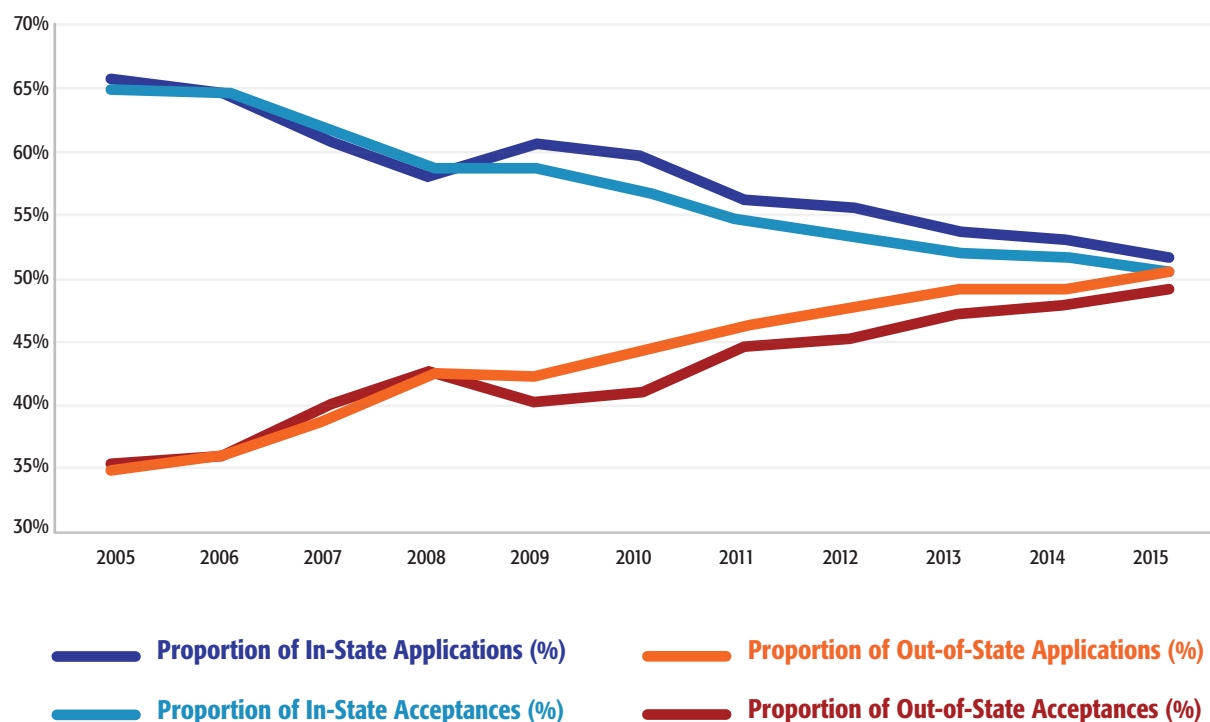


Figure 18. Proportion of in-state/out-of-state applications to UMass-Amherst and acceptance offers, 2005-06 to 2015-16



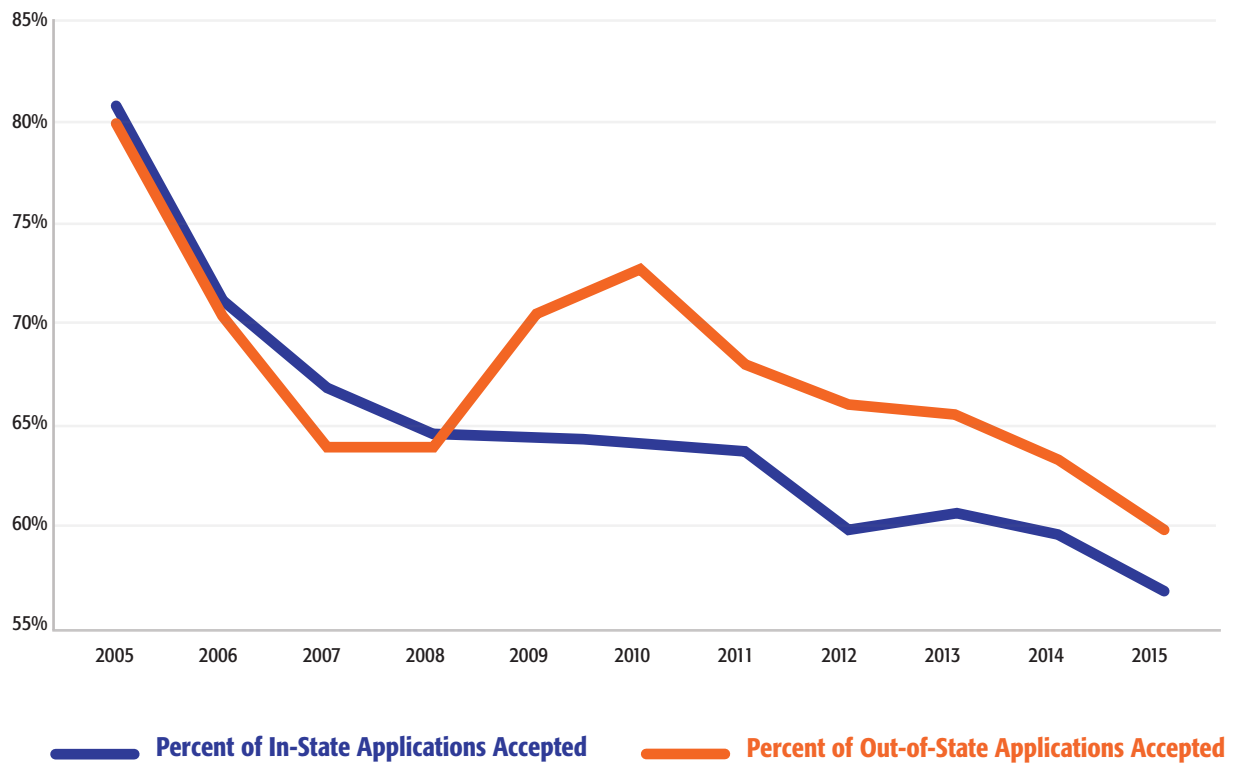
In the 2015 application cycle, for the first time in its history, UMass-Amherst offered admission to more out-of-state applicants than in-state applicants—11,657 versus 11,651. In 2005, 21 percent of the incoming freshmen class was from outside Massachusetts. By 2015, the out-of-state proportion of the freshmen class had grown to 27.9 percent. Figure 18<sup>53</sup> shows the growing proportion of applications UMass received from out-of-state students out of the total applicant pool, in addition to offers of admission made to non-Massachusetts applicants by UMass-Amherst. It also depicts a concomitant decline in the proportion of in-state applications and offers of admission made to in-state students.



Increasing selectivity in the admissions process at UMass-Amherst has made it far more difficult for Massachusetts students to gain admission. In 2005, 80.7 percent of in-state applicants received offers of admission; by 2015, only 56.8 percent of applicants did so. It is important to note there has also been significant decline among the number of accepted out-of-state applications. This trend among both groups of applicants is reflective of the overall increase in competition for admissions at the Amherst

campus. Figure 19<sup>54</sup> shows the decline in the acceptance rate of in-state applicants as well as of out-of-state applicants from 2005 to 2015. As the chart shows, the acceptance rate for in-state applicants dropped to a lower percentage than the out-of-state acceptance rate last year. In other words, last year UMass-Amherst accepted more out-of-state than in-state applicants as a proportion of the overall applicant pool.

Figure 19. Percent of in-state/out-of-state applicants offered admission at UMass Amherst 2005-06 to 2015-16



## CONCLUSION

UMass's considerable enrollment growth, capital expansion, and consequential increase in operating expenses and debt have made the university reliant on increasing revenue from tuition, fees, and state funding. To address this financial need, the university has adopted a policy of increasing enrollment of out-of-state and international students.

### **UMass leaders and Massachusetts lawmakers must give careful consideration to the following main takeaways from this report:**

- 1** The UMass system has undertaken a recruitment strategy predicated on increasing out-of-state enrollment as a means of increasing revenue and financing continued expansion of the university system. A number of states, including North Carolina and California, have capped out-of-state enrollment in order to focus on the priority of providing post-secondary education to in-state residents. Massachusetts should do the same. The Governor, state education leaders, and the state legislature should consider whether UMass' current strategy of expanding the university's facilities and enrollment capacity in order to serve a growing percentage of out-of-state students serves the financial and educational interest of Massachusetts residents.
- 2** UMass is charging out-of-state students less in tuition and fee charges than the average of other New England state universities. The University of Vermont is currently charging 28.3 percent more for out-of-state undergraduate tuition and fees than is UMass (\$39,130 for UVM compared to \$30,504 for UMass). UMass should consider increasing out-of-state tuition and fees to offset growing operating expenses.
- 3** UMass graduate and doctoral programs are primarily serving out-of-state students. The university and legislature should assess whether policies should be implemented to increase opportunities for Massachusetts residents seeking in-state, lower-cost public graduate school options at UMass.

UMass continues to grow to historic levels in both enrollment and influence—over the last ten years especially, this growth has been accompanied by a significant rise in the number of out-of-state and international students as a percentage of the overall student population. University leaders need to reconsider UMass' current strategy—with focus on the university's 2015-2019 Capital Plan—and work with legislators to create a financially sustainable future for the state's premier public university system that does not compromise the institution's valuable mission of serving in-state residents who seek a quality and affordable post-secondary education.

UVM is currently charging  
**28.3 % more**  
 for out-of-state undergraduate  
 tuition and fees than is UMass

## APPENDIX A

Table - Figure 1. UMass tuition, fees, room & board increases from academic years 2005-2006 to 2015-2016

Year	In-state tuition	In-state fees	In-state tuition & fees	Out-of-state tuition	Out-of-State fees	Out-of-state tuition & fees	Room	Board	Room & board	In-state tuition room & board	Out of state tuition room & board
2005-06	1,714	7,564	9,278	9,937	8,460	18,397	3,605	2,912	6,517	15,795	24,914
2006-07	1,714	7,881	9,595	9,937	9,380	19,317	3,905	3,084	6,989	16,584	26,306
2007-08	1,714	8,207	9,921	9,937	10,562	20,499	4,151	3,327	7,478	17,399	27,977
2008-09	1,714	8,518	10,232	9,937	11,792	21,729	4,524	3,590	8,114	18,346	29,843
2009-10	1,714	10,018	11,732	9,937	13,292	23,229	4,816	3,664	8,480	20,212	31,709
2010-11	1,714	10,018	11,732	9,937	13,691	23,628	4,876	3,938	8,814	20,546	32,442
2011-12	1,714	10,898	12,612	9,937	15,463	25,400	5,306	4,206	9,512	22,124	34,912
2012-13	1,714	11,516	13,230	9,937	16,708	26,645	5,563	4,374	9,937	23,167	36,582
2013-14	1,714	11,544	13,258	9,937	18,037	27,974	5,846	4,593	10,439	23,697	38,413
2014-15	1,714	11,544	13,258	9,937	18,876	28,813	6,137	4,820	10,957	24,215	39,770
2015-16	1,714	12,457	14,171	9,937	20,567	30,504	6,442	5,061	11,503	25,674	42,007

Table - Figures 2 and 3. Tuition, room & board at New England flagship state universities: 2015-2016 academic year

2015 - 2016 Year	UMass	UConn	UMaine	URI	UVM	Average of non-UMass flagships	UMass +/- average of non-UMass flagships
In-state tuition & fees	\$14,171	\$13,366	\$10,610	\$12,862	\$16,738	\$13,394	5.8%
Out-of-state tuition & fees	\$30,504	\$34,908	\$28,880	\$28,852	\$39,130	\$32,943	-7.4%
Room & board	\$11,503	\$12,436	\$9,576	\$11,956	\$11,180	\$11,287	1.9%
In-state tuition rm & bd	\$25,674	\$25,802	\$20,186	\$24,818	\$27,918	\$24,681	4.0%
Out-of-state tuition rm & bd	\$42,007	\$47,344	\$38,456	\$40,808	\$50,310	\$44,230	-5.0%

Table - Figure 4. Revenues from tuition and fees per FTE at New England state flagship campuses

IPEDS Unit ID Institution Name	129020 U Conn	161253 U Maine	166629 U Mass Amherst	183044 UNH Main Campus	217484 URI	231174 UVM
2006	\$8,572	\$6,223	\$8,680	\$8,830	\$9,165	\$16,336
2007	\$8,283	\$6,754	\$8,731	\$9,206	\$9,900	\$17,308
2008	\$9,366	\$7,376	\$8,780	\$9,787	\$10,532	\$17,894
2009	\$10,026	\$8,298	\$8,945	\$10,286	\$11,154	\$18,692
2010	\$10,015	\$8,501	\$9,921	\$10,138	\$11,653	\$19,023
2011	\$10,511	\$8,751	\$10,146	\$10,393	\$12,027	\$19,867
2012	\$10,521	\$9,219	\$11,041	\$11,772	\$11,803	\$21,099
2013	\$11,188	\$9,599	\$11,566	\$12,480	\$12,828	\$21,995
2014	\$11,680	\$9,569	\$12,076	\$12,491	\$12,695	\$22,431

Table - Figure 5. State financial support per FTE student at higher education institutions, including state universities, state colleges, and community colleges

State Support for Public Higher Education including ARRA/FTE	CT	ME	MA	NH	RI	VT	US
2005	10,663	6,741	7,240	3,705	6,417	3,772	6,326
2006	11,057	6,803	7,895	3,658	6,602	3,794	6,817
2007	12,074	7,102	8,436	3,816	6,547	3,901	7,250
2008	13,063	7,511	8,764	3,997	6,089	3,977	7,566
2009	12,664	7,396	7,683	3,999	5,181	3,686	7,121
2010	12,598	7,096	7,040	3,657	4,774	3,759	6,637
2011	12,161	7,136	6,935	3,497	4,994	3,688	6,492
2012	10,858	7,054	6,845	2,115	5,537	3,611	5,994
2013	9,909	7,029	7,051	2,183	4,894	3,682	6,176
2014	11,310	7,339	7,552	2,947	5,149	3,905	6,659

**Table - Figure 6. Net tuition per FTE student at higher education institutions, including state universities, state colleges, and community colleges in New England and the U.S.**

Net Tuition/FTE	CT	ME	MA	NH	RI	VT	US
2005	\$6,058	\$5,250	\$5,042	\$6,573	\$6,895	\$10,082	\$3,425
2006	\$6,474	\$5,657	\$5,241	\$6,883	\$7,342	\$10,818	\$3,773
2007	\$6,647	\$6,078	\$5,479	\$8,013	\$7,966	\$11,631	\$3,970
2008	\$6,993	\$6,654	\$5,757	\$8,492	\$8,654	\$12,334	\$4,028
2009	\$7,239	\$7,604	\$5,878	\$8,634	\$9,425	\$13,362	\$4,164
2010	\$7,280	\$7,806	\$5,984	\$8,393	\$9,899	\$12,606	\$4,419
2011	\$7,883	\$7,986	\$6,322	\$9,145	\$10,649	\$12,731	\$4,696
2012	\$8,168	\$8,266	\$5,567	\$9,972	\$11,142	\$13,899	\$5,153
2013	\$8,335	\$8,528	\$5,842	\$10,611	\$11,865	\$14,405	\$5,515
2014	\$9,504	\$8,707	\$5,920	\$10,995	\$12,043	\$14,540	\$5,777

**Table – Figure 8 and 9. Percentage of In-state/out-of-state undergraduate and graduate enrollment at New England flagship state campuses 2015-2016**

Undergraduate Enrollment	UMass	UConn	UMaine	UNH	URI	UVM
In-state	16,266	18,149	6,705	6,080	7,581	2,917
Out-of-state	4,936	4,824	2,592	6,525	6,060	7,164
Total undergraduate	21,308	22,973	9,297	12,775	13,641	10,081
Graduate Enrollment	UMass	UConn	UMaine	UNH	URI	UVM
In-state	1,247	5,458	1,074	1,094	1,545	698
Out-of-state	2,846	2,688	551	945	1,427	687
Total graduate	4,093	8,146	1,625	2,103	2,972	1,405
Graduate Enrollment	UMass	UConn	UMaine	UNH	URI	UVM
In-state undergraduate	76%	79%	72%	48%	56%	29%
Out-of-state undergraduate	23%	21%	28%	51%	44%	71%
In-state graduate	30%	67%	66%	52%	52%	50%
Out-of-state graduate	70%	33%	34%	45%	48%	49%

Table - Figure 10. Percent growth in undergraduate out-of-state enrollment 2008-2014 at UMass campuses

Undergraduate out-of-state enrollment	2008	2009	2010	2011	2012	2013	2014	Increase 2008-2014	Percent increase 2008-2014
UMass Amherst	3,784	3,630	4,745	5,054	5,358	5,673	5,848	2,064	54.5%
UMass Boston	747	793	1,246	1,474	1,889	2,163	2,395	1,648	220.4%
UMass Dartmouth	318	318	334	354	412	427	934	616	193.7%
UMass Lowell	1,369	1,482	1,567	1,790	2,058	2,178	2,296	927	67.8%
<b>UMass TOTAL</b>	<b>6,218</b>	<b>6,224</b>	<b>7,892</b>	<b>8,672</b>	<b>9,717</b>	<b>10,441</b>	<b>11,473</b>	<b>5,255</b>	<b>84.5%</b>
Undergraduate in-state enrollment	2008	2009	2010	2011	2012	2013	2014	Increase 2008-2014	Percent increase 2008-2014
UMass Amherst	19,016	19,311	20,791	21,265	21,448	21,672	21,864	2,848	15.0%
UMass Boston	9,343	9,916	10,626	10,941	11,386	11,721	12,048	2,705	28.9%
UMass Dartmouth	7,951	7,954	7,734	7,567	7,532	7,402	7,879	-72	-0.9%
UMass Lowell	9,706	10,584	11,260	11,729	12,287	12,734	12,986	3,280	33.8%
<b>UMass TOTAL</b>	<b>46,017</b>	<b>47,765</b>	<b>50,411</b>	<b>51,502</b>	<b>52,653</b>	<b>53,529</b>	<b>54,777</b>	<b>8,760</b>	<b>19.0%</b>
Undergraduate in-state enrollment	2008	2009	2010	2011	2012	2013	2014	Increase 2008-2014	Percent increase 2008-2014
UMass Amherst	15,232	15,681	16,046	16,211	16,090	15,999	16,016	784	5.1%
UMass Boston	8,596	9,123	9,380	9,467	9,497	9,558	9,653	1,057	12.3%
UMass Dartmouth	7,633	7,636	7,400	7,213	7,120	6,975	6,945	-688	-9.0%
UMass Lowell	8,337	9,102	9,693	9,939	10,229	10,556	10,690	2,353	28.2%
<b>UMass TOTAL</b>	<b>39,798</b>	<b>41,542</b>	<b>42,519</b>	<b>42,830</b>	<b>42,936</b>	<b>43,088</b>	<b>43,304</b>	<b>3,506</b>	<b>8.8%</b>

Table - Figure 11. Percent growth in graduate in-state/out-of-state enrollment 2008-2014 at UMass campuses

Graduate school	UMass Amherst	UMass Boston	UMass Dartmouth	UMass Lowell	UMass Worcester	UMass Total
Fall 2005 in-state	2,270	2,204	657	1,671	750	7,552
Fall 2014 in-state	2,260	2,699	975	2,451	832	9,217
<b>Increase/decrease in-state 2008-2014</b>	<b>-10</b>	<b>495</b>	<b>318</b>	<b>780</b>	<b>82</b>	<b>1,665</b>
Fall 2005 out-of-state	3,429	700	373	686	258	5,446
Fall 2014 out-of-state	4,123	1,357	682	1,747	271	8,180
<b>Increase/decrease out-of-state 2008-2014</b>	<b>694</b>	<b>657</b>	<b>309</b>	<b>1,061</b>	<b>13</b>	<b>2,734</b>
<b>Increase in-state 2005-2014</b>	<b>-0.4%</b>	<b>22.5%</b>	<b>48.4%</b>	<b>46.7%</b>	<b>10.9%</b>	<b>22.0%</b>
<b>Increase out-of-state 2005-2014</b>	<b>20.2%</b>	<b>93.9%</b>	<b>82.8%</b>	<b>154.7%</b>	<b>5.0%</b>	<b>50.2%</b>

Table - Figure 12. Percent growth in undergraduate in-state/international enrollment 2008-2014 at UMass campuses

Undergraduate out-of-state enrollment	2008	2009	2010	2011	2012	2013	2014	Increase 2008-2014	Percent increase 2008-2014
UMass Amherst	15,232	15,681	16,046	16,211	16,090	15,999	16,016	784	5.1%
UMass Boston	8,596	9,123	9,380	9,467	9,497	9,558	9,653	1,057	12.3%
UMass Dartmouth	7,633	7,636	7,400	7,213	7,120	6,975	6,945	-688	-9.0%
UMass Lowell	8,337	9,102	9,693	9,939	10,229	10,556	10,690	2,353	28.2%
<b>UMass TOTAL</b>	<b>39,798</b>	<b>41,542</b>	<b>42,519</b>	<b>42,830</b>	<b>42,936</b>	<b>43,088</b>	<b>43,304</b>	<b>3,506</b>	<b>8.8%</b>
International undergraduate enrollment	2008	2009	2010	2011	2012	2013	2014	Increase 2008-2014	Percent increase 2008-2014
UMass Amherst	251	262	304	378	421	537	681	430	171.3%
UMass Boston	323	360	466	678	950	1,180	1,441	1,118	346.1%
UMass Dartmouth	33	33	27	69	114	127	152	119	360.6%
UMass Lowell	69	57	64	129	259	399	484	415	601.4%
<b>UMass TOTAL</b>	<b>676</b>	<b>712</b>	<b>861</b>	<b>1,254</b>	<b>1,744</b>	<b>2,243</b>	<b>2,758</b>	<b>2,082</b>	<b>308.0%</b>

Table - Figure 13. Percent growth in graduate in-state/international enrollment 2008-2014 at UMass campuses

Graduate school	UMass Amherst	UMass Boston	UMass Dartmouth	UMass Lowell	UMass Worcester	UMass Total
Fall 2005 in-state	2,270	2,204	657	1,671	750	7,552
Fall 2014 in-state	2,260	2,699	975	2,451	832	9,217
<b>Increase/decrease In-State 2008-2014</b>	<b>-10</b>	<b>495</b>	<b>318</b>	<b>780</b>	<b>82</b>	<b>1,665</b>
Fall 2005 international	1,279	204	259	355	148	2,245
Fall 2014 international	1,546	439	444	912	140	3,481
<b>Increase/decrease international 2008-2014</b>	<b>267</b>	<b>235</b>	<b>185</b>	<b>557</b>	<b>-8</b>	<b>1,236</b>
<b>Increase in-state 2005-2014</b>	<b>-0.4%</b>	<b>22.5%</b>	<b>48.4%</b>	<b>46.7%</b>	<b>10.9%</b>	<b>22.0%</b>
<b>Increase international 2005-2014</b>	<b>20.9%</b>	<b>115.2%</b>	<b>71.4%</b>	<b>156.9%</b>	<b>-5.4%</b>	<b>55.1%</b>

Table - Figure 14. Doctoral students UMass Amherst – in-state/out-of-state domestic/international 2015-2016

Doctoral	Total	In-state	Out-of-state domestic	Out-of-state international	Out-of-state total
Isenberg School of Management	72	8.3%	30.6%	61.1%	91.7%
College of Engineering	282	15.6%	19.9%	64.5%	84.4%
College of Nursing	52	57.7%	30.8%	11.5%	42.3%
College of Information and Computer Sciences	163	14.7%	26.4%	58.9%	85.3%
College of Natural Sciences	776	13.5%	40.6%	45.9%	86.5%
College of Humanities and Fine Arts	364	20.6%	53.3%	26.1%	79.4%
College of Social and Behavioral Sciences	382	16.5%	47.6%	35.9%	83.5%
College of Education	324	50.6%	25.6%	23.8%	49.4%
School of Public Health and Health Sciences	113	50.4%	32.7%	16.8%	49.6%
<b>Campus Total</b>	<b>2,528</b>	<b>22.5%</b>	<b>37.5%</b>	<b>40.0%</b>	<b>77.5%</b>

Table - Figure 15. Masters students UMass Amherst – in-state/out-of-state domestic/international 2015-2016

Masters	Total	In-state	Out-of-state domestic	Out-of-state international	Out-of-state total
Isenberg School of Management	91	40.7%	34.1%	25.3%	59.3%
College of Engineering	252	19.0%	7.9%	73.0%	81.0%
College of Information and Computer Sciences	62	32.3%	12.9%	54.8%	67.7%
College of Natural Sciences	179	49.7%	35.2%	15.1%	50.3%
College of Humanities and Fine Arts	308	28.9%	50.0%	21.1%	71.1%
College of Social and Behavioral Sciences	150	48.0%	30.7%	21.3%	52.0%
College of Education	189	58.7%	24.3%	16.9%	41.3%
School of Public Health and Health Sciences	147	66.0%	21.8%	12.2%	34.0%
<b>Campus Total</b>	<b>1,380</b>	<b>40.9%</b>	<b>29.0%</b>	<b>30.1%</b>	<b>59.1%</b>



Table - Figure 16. Undergraduate students UMass Amherst by college-- in-state/out-of-state domestic/international Fall 2006 and 2015

Undergrad	Total Fall 2006	In-state 2006	Out-of-state total 2006	Total Fall 2015	In-state 2015	Out-of-state total 2015
Isenberg School of Management	2,954	78.4%	21.6%	3,418	75.4%	24.6%
College of Engineering	1,126	90.0%	10.0%	2,027	83.7%	16.3%
College of Nursing	508	92.7%	7.3%	345	85.8%	14.2%
College of Information and Computer Sciences	252	89.3%	10.7%	887	69.4%	30.6%
College of Natural Sciences	4,129	82.9%	17.1%	6,375	79.3%	20.7%
College of Humanities and Fine Arts	2,298	78.3%	21.7%	1,801	74.4%	25.6%
College of Social and Behavioral Sciences	3,487	76.9%	23.1%	3,544	73.4%	26.6%
College of Education	-	-	-	126	78.6%	21.4%
School of Public Health and Health Sciences	633	79.8%	20.2%	1,838	79.1%	20.9%
Other	3,362	79.6%	20.4%	825	73.6%	26.4%
Campus Summary	18,749	80.6%	19.4%	21,186	77.1%	22.9%

Table – Figures 17, 18 and 19. Applications, offers of admission, enrollments: in-state/out-of-state at UMass Amherst 2005-06 to 2015-16

UMass-Amherst first year admissions	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>Applications</b>	<b>20,207</b>	<b>22,451</b>	<b>27,138</b>	<b>28,931</b>	<b>29,452</b>	<b>30,853</b>	<b>32,564</b>	<b>34,326</b>	<b>35,868</b>	<b>37,183</b>	<b>40,010</b>
In-State	13,172	14,486	16,415	16,726	17,732	18,329	18,169	18,920	19,115	19,576	20,522
Out-of-State	7,035	7,965	10,723	12,205	11,720	12,524	14,395	15,406	16,753	17,607	19,488
In-State applications proportion	65.2%	64.5%	60.5%	57.8%	60.2%	59.4%	55.8%	55.1%	53.3%	52.6%	51.3%
Out-of-State applications proportion	34.8%	35.5%	39.5%	42.2%	39.8%	40.6%	44.2%	44.9%	46.7%	47.4%	48.7%
<b>Acceptances</b>	<b>16,241</b>	<b>15,941</b>	<b>17,815</b>	<b>18,601</b>	<b>19,703</b>	<b>20,858</b>	<b>21,373</b>	<b>21,470</b>	<b>22,556</b>	<b>22,804</b>	<b>23,308</b>
In-State	10,628	10,321	10,967	10,805	11,439	11,757	11,573	11,306	11,590	11,667	11,651
Out-of-State	5,613	5,620	6,848	7,796	8,264	9,101	9,800	10,164	10,966	11,137	11,657
In-State acceptances proportion	65.4%	64.7%	61.6%	58.1%	58.1%	56.4%	54.1%	52.7%	51.4%	51.2%	50.0%
Out-of-State acceptances proportion	34.6%	35.3%	38.4%	41.9%	41.9%	43.6%	45.9%	47.3%	48.6%	48.8%	50.0%
In-state acceptance rate	80.7%	71.2%	66.8%	64.6%	64.5%	64.1%	63.7%	59.8%	60.6%	59.6%	56.8%
Out-of-state acceptance rate	79.8%	70.6%	63.9%	63.9%	70.5%	72.7%	68.1%	66.0%	65.5%	63.3%	59.8%
<b>Enrollments</b>	<b>4,427</b>	<b>4,190</b>	<b>4,286</b>	<b>4,144</b>	<b>4,124</b>	<b>4,469</b>	<b>4,688</b>	<b>4,592</b>	<b>4,621</b>	<b>4,642</b>	<b>4,661</b>
In-State	3,496	3,218	3,263	3,189	3,233	3,249	3,378	3,333	3,353	3,338	3,360
Out-of-State	931	972	1,023	955	891	1,220	1,310	1,259	1,268	1,304	1,301
In-State Enrollment %	79.0%	76.8%	76.1%	77.0%	78.4%	72.7%	72.1%	72.6%	72.6%	71.9%	72.1%
Out-of-State Enrollment %	21.0%	23.2%	23.9%	23.0%	21.6%	27.3%	27.9%	27.4%	27.4%	28.1%	27.9%

## ENDNOTES

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2. Accompanied by Table – Figure 1 in Appendix A
3. Accompanied by Table - Figures 2 and 3 in Appendix A. Tuition and fees for each campus derived from respective campus websites.
4. Accompanied by Table - Figures 2 and 3 in Appendix A
5. IPEDS reports this data by institution using Governmental Accounting Standards Board (GASB) accounting methods. The calculation of these values takes the amounts reported by each institution for revenues and expenditures from the annual finance survey and divides those amounts by the 12 month FTE student enrollment from the 12 month enrollment survey.
6. Accompanied by Table – Figure 4 in Appendix A
7. SHEEO is the national association of the chief executives of statewide governing, policy, and coordinating boards of postsecondary education. For more info, see: <http://www.sheeo.org/about>.
8. The original table with this data is available at: <http://www.sheeo.org/sites/default/files/Table%205.jpg>.
9. Accompanied by Table- Figure 5 in Appendix A
10. For more information on definitions, see: [http://www.sheeo.org/sites/default/files/SHEEO002\\_2014AdtlDocs\\_Instructions\\_Rd1.pdf](http://www.sheeo.org/sites/default/files/SHEEO002_2014AdtlDocs_Instructions_Rd1.pdf)
11. This definition is what SHEEO provides in its Glossary of Terms, available at: [http://webcache.googleusercontent.com/search?q=cache:OairieWnSIAJ:www.sheeo.org/sites/default/files/Glossary%2520of%2520Terms\\_FINAL.pdf+&cd=1&hl=en&ct=clnk&gl=us](http://webcache.googleusercontent.com/search?q=cache:OairieWnSIAJ:www.sheeo.org/sites/default/files/Glossary%2520of%2520Terms_FINAL.pdf+&cd=1&hl=en&ct=clnk&gl=us)
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47. Accompanied by Table – Figure 12 in Appendix A
48. Accompanied by Table – Figure 13 in Appendix A
49. Accompanied by Table – Figure 14 in Appendix A
50. Accompanied by Table – Figure 15 in Appendix A
51. Accompanied by Table – Figure 16 in Appendix A
52. Accompanied by Table – Figures 17, 18, and 19 in Appendix A
53. Accompanied by Table – Figures 17, 18, and 19 in Appendix A
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## About Pioneer

Pioneer Institute is an independent, non-partisan, privately funded research organization that seeks to change the intellectual climate in the Commonwealth by supporting scholarship that challenges the "conventional wisdom" on Massachusetts public policy issues.

## Recent Publications

*UMass at a Crossroads Part 1: A State Higher Education System Serving Massachusetts, The Nation, and The World* White Paper, April 2016

*Massachusetts Charter Public Schools: Best Practices Using Data to Improve Student Achievement in Holyoke*, White Paper, March 2016

*Massachusetts Charter Public Schools: Best Practices Using Data to Improve Student Achievement in Springfield*, White Paper, March 2016

*The Reckless Cost of MBTA Financial Derivatives*, Policy Brief, February 2016

*Fordham Institute's Pretend Research*, Policy Brief, February 2016

*Data Reveals Out of Control Administrative Staffing Budget Increases at MBTA*, Policy Brief, February 2016

*Massachusetts Charter Public Schools: Best Practices in Curricular Innovation*, White Paper, January 2016

