

**THE MASSACHUSETTS STUDENT**  
**FINANCIAL AID STUDY**

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This study provides a comprehensive review of the Massachusetts state financial aid system. The analysis provides a description of the aid programs, information on financial aid receipt and unmet student need, and detail on the overlap between programs. Additionally, we discuss how the Massachusetts aid system compares to other states. Based on this research, we identify opportunities to improve state-funded financial aid programs, including suggestions to consolidate and simplify the system to the benefit of students and families. Such reforms could help address key educational priorities of the Commonwealth, which include decreasing students' time to earning a postsecondary degree, closing achievement gaps, and improving college affordability.

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# THE MASSACHUSETTS STUDENT FINANCIAL AID STUDY

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## EXECUTIVE SUMMARY

For most adults, getting a postsecondary education is essential to their well-being in today's economy. College graduates enjoy numerous benefits, and most of the recent job growth has focused on jobs requiring postsecondary training. Yet, across the country, increases in tuition costs have outpaced the available student financial aid. At the federal level, the growth in tuition prices at Massachusetts' community colleges and four-year institutions have far outpaced increases in the Pell Grant, the primary federal need-based financial aid program. Within the Commonwealth, the primary need-based grant program, the MASSGrant, has fallen in purchasing power from 88 percent in 1988 to only 8 percent of average tuition and mandatory fees in 2013. Looking ahead, the Commonwealth will need to contend with the changing face of our high school graduates. Population projections suggest that low- and moderate-income students will make up a growing share of college students in the future, and Massachusetts should expect growing financial need among future college students.

Recognizing these trends, the Massachusetts Department of Higher Education has explicitly pursued three goals: (1) decrease students' time to earning a postsecondary degree; (2) close achievement gaps between groups of students; and (3) improve college affordability. Financial aid is an important lever in accomplishing these objectives. Previous research has demonstrated that college affordability can significantly impact students' educational pathways by supporting postsecondary enrollment, persistence, and degree completion. However, the design of financial aid policy matters. Simple and clear financial aid programs have the strongest impact on student outcomes. In addition, increasing transparency around financial aid can positively impact classroom motivation and the likelihood students take the steps necessary to prepare for college academically. In light of this growing body of research, one strategy implemented by state policymakers across the country has been to simplify and redesign state financial aid programs. To help support these statewide efforts, Lumina Foundation and the New England Board of Higher Education (NEBHE) partnered to implement the Redesigning Student Aid in New England Project. Through a competitive review process, Massachusetts was selected as one of three states to receive financial and technical support to conduct a holistic review of current program offerings.

### ***Study Goals***

This report summarizes findings from our review of the Massachusetts financial aid portfolio, which focused on two key questions:

- *How well does the current financial aid portfolio serve Massachusetts students and families?*
- *What opportunities are there for improving the financial aid system to better address the needs of Massachusetts' families?*

The analysis provides a description of the aid programs, information on financial aid receipt and unmet student need, and detail on the overlap between programs. Additionally, we discuss how the Massachusetts aid system compares to other states. Based on this research, we identify

opportunities to improve state-funded financial aid programs, including suggestions to consolidate and simplify the system to the benefit of students and families.

### ***An Overview of the State Financial Aid Portfolio***

A review of state-based financial aid reveals that there are a wide range of programs.

- The Commonwealth offers 31 different state financial aid programs that vary in size, average award amounts, and focus. State aid programs also vary by level of state oversight.
- Many Massachusetts financial aid programs are small in terms of the number of recipients. The largest Program, the MASSGrant, serves 49,540 students, but at least 5 programs serve fewer than 100 students, and 13 programs serve fewer than 1,000 students.
- In addition to grants, the state also offers a large number of tuition waivers, which are given by institutions and vary by institutional sector. These waivers add another layer of complexity to the financial aid system that families must navigate, and the prevalence of them is unique only to Massachusetts.

### ***Financial Aid Receipt and Unmet Need***

Among the 101,786 full-time, full-year students who applied for aid in FY2014, 44.6 percent received need-based grant aid.

- There is variation in award amount, but many programs give the median student \$1,000 or less. The largest program (MASSGrant) gives as maximum award of \$1,600, but the median student only receives \$600. Similarly, the 2<sup>nd</sup> largest program (Cash Grant) gave a median award of \$550.
- Many families, especially those with lower household incomes, still face substantial costs even after accounting for these resources. The portion of educational costs these low-income students were responsible for were 44 percent at community colleges, 47 percent at the state universities, and 55 percent at UMass campuses. In FY2014, this meant finding anywhere from \$8,225 to \$11,676 for one year of full-time college attendance.
- Lower-income students have lower persistence and degree completion rates compared to their higher-income peers (Appendix D). The financial burden created by unmet need is one contributing factor to this gap in college success and degree attainment.

### ***Duplication within the Portfolio***

Among the various state financial aid programs, there is a great deal of duplication. Multiple programs often serve the same students.

- Across two- and four-year public institutions, 68 percent of full-time, full-year students who received a Cash Grant also received a MASS Grant.
- Similarly, 44 percent of full-time, full-year recipients of the Cash Grant also received a MASS Grant and a Need-Based Tuition Waiver.

- Across private institutions, 73 percent of full-time, full-year students who received a Gilbert Grant also received a MASS Grant

### ***Comparisons with Other States***

When comparing the amount of financial aid Massachusetts gives per full-time equivalent (FTE) student to other states, the Commonwealth ranks 25.

- The state ranked number 1 (Washington) spends nearly five times as much aid per student as Massachusetts.
- A much smaller amount of financial aid is dispersed through our primary need-based aid program in comparison to other states. This suggests that the state's aid portfolio is much more diffuse than other places. The mean award from the primary aid program is also much smaller than for other states ranked higher.

### ***Questions for Consideration***

Based on these findings and additional details provided in this report, we recommend the Department of Higher Education consider the following questions:

- ***What is a reasonable amount of unmet need for Massachusetts residents?***

Students currently have a substantial amount of unmet financial need after accounting for federal, state, and institutional aid. Is there a benchmark that should be used to set a goal for the Commonwealth?

- ***What is the right balance between centralization and decentralization to improve accessibility for families and target unmet need levels in the aggregate?***

Considerations include balancing between: (i) highly-visible and predictable programs applicable for many students, such as centralized aid programs distributed by the state using clear award criteria, and (ii) targeted, smaller programs, which would allow individual institutions to distribute state funds but would not be as transparent and constant across the Commonwealth.

- ***How should the state balance the competing options of giving smaller awards to many more students versus giving large awards to fewer students?***

This question focuses on the relatively small amount each student receives from most Massachusetts financial aid programs, especially in comparison to the way other states allocate their financial aid. When considering this question, the Commonwealth should take into account anticipated changes to future program budgets and projected changes in the financial needs of future college-bound students.

- ***What proportion of state aid dollars should private institutions receive?***

How should the Commonwealth prioritize funding for residents who attend public versus private institutions? Given differences in resources and oversight by institutional sector, how should the limited financial aid resources be divided?

### ***Study Recommendations and Next Steps***

After all sources of financial aid, unmet financial need is substantial in the Commonwealth, particularly for low-income students. However, beyond increasing the financial aid budget, there are other ways to reform the system to be more impactful. As described below, the Commonwealth has multiple opportunities to improve the effectiveness and efficiency of the current financial aid portfolio.

- ***To improve the aid system, more support is needed to address the substantial unmet financial need facing many families.***

Across the Commonwealth, median unmet need for full-time, full-year students was \$11,163 in FY2014. This is a significant deterrent to college enrollment, persistence, and degree completion. Given changing demographics in the college-age population, the needs of students are predicted to grow, and the problem of unmet financial need will become worse unless action is taken now.

- ***Consolidating programs with similar goals into a simpler, more streamlined system would benefit multiple stakeholders.***

Massachusetts has a large number of programs—many that are small in terms of the number of recipients and size of the average aid award. There is also significant overlap between the major programs in terms of beneficiaries. Consolidation would ease administrative oversight, reduce uncertainty and the application burden for the many students eligible to receive small amounts of aid from multiple programs, and increase transparency, thereby making it easier to communicate with prospective students.

Programs to consider for consolidation include:

- Need-based aid programs that serve the same students (i.e. the MASS Grant, Cash Grant, Gilbert Grant, and Need-Based Tuition Waivers)
- Specialized programs within the broader categories, such as combining all the workforce development grants into one program (or all of the teacher development grants into one program);

Moreover, programs that have not been used in recent years should be removed from the DHE's communication materials to families.

- ***The Massachusetts system of tuition waivers could be much more effective repackaged in a simplified, well-publicized grant program.***

Massachusetts is the *only* state to focus so much of its state financial aid resources in the form of tuition waivers. Tuition waivers are hard to understand and communicate to families later in the enrollment process than other aid, and so they do not have the same positive, large effects on college enrollment and persistence as grants and scholarships. For this reason, other states have instead focused their resources on centralized, grant programs that are easy to publicize, understand, and award. In Massachusetts, with 41 different tuition waivers, it is impossible for families to understand what aid they could

receive, and converting and consolidating these funds into grants would be much more effective in supporting postsecondary education and efficient in terms of administration.

- ***Apply the lessons and innovations from pilot programs to existing aid policies***

While Massachusetts should embrace innovation, doing so by creating yet another program would only add to the complexity and informational burden on students and the schools and organizations that try to support them. As such, when considering the possibility of creating additional pilot programs, the DHE should consider how the innovations and lessons learned from such pilots might be folded into existing financial aid programs.

- ***The portfolio of Massachusetts financial aid programs could be communicated to families in clearer, more transparent ways to increase awareness.***

With so many varied programs, many of which that have similar goals but different application processes and award procedures, it's worth asking: *How difficult is it for a family to navigate our system?* Improved communications, including emphasizing larger programs and streamlining websites and print materials of out-of-date and tiny programs would help families to better focus on the supports most likely to help them. Adding simplified guidance on important tasks, checklists, and timelines for families to utilize would also be helpful. There are many examples from other states and organizations about how to better communicate financial aid information to students and their families that could be useful to the Commonwealth.

To capitalize on the suggestions described in this report, the Department of Higher Education could take the following multi-step approach:

- Share these findings with stakeholders at Massachusetts colleges and universities and the senior staff of the DHE.
- Collect feedback from institutional financial aid officers, the Office of Student Financial Assistance's advisory committee, students and parents who navigate and use state financial aid, and other stakeholders on the questions and tradeoffs highlighted by the report.
- Conduct additional analyses to better understand the effectiveness of our current grant aid programs on a range of student outcomes and the detrimental effects of unmet need on college access and success.
- Develop and share recommendations and suggested modifications to aid programs with the Massachusetts Board of Higher Education.

# THE MASSACHUSETTS STUDENT FINANCIAL AID STUDY

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## FULL REPORT

### Introduction

For most adults, getting a postsecondary education is essential to their well-being in today's economy. Those with a college degree or credential make substantially more than those with only a high school degree, and college graduates enjoy additional benefits, such as better health and retirement benefits and lower levels of government dependency and unemployment.<sup>1</sup> Since the most recent recession, over 99 percent of job growth has gone to workers with some postsecondary education.<sup>2</sup> Yet, across the country, increases in tuition costs have outpaced the available student financial aid.<sup>3</sup> According to the New England Board of Higher Education, the growth in tuition prices at Massachusetts' community colleges and four-year institutions have far outpaced increases in the federal Pell Grant, the primary need-based financial aid program. This has left a "widening gap" for low- and moderate-income students to fill, perhaps with state or institutional financial aid.<sup>4</sup> Unfortunately, the Commonwealth's primary need-based grant program, the MASSGrant, has fallen in purchasing power from 88 percent in 1988 to only 8 percent of average tuition and mandatory fees in 2013 forcing families to rely even more on their own strapped resources.<sup>5</sup>

This is a particularly critical time for Massachusetts. Looking ahead, the Commonwealth will need to contend with the changing face of our high school graduates. Population projections suggest that low- and moderate-income students will make up a growing share of college students in the future. While the number of high school graduates in Massachusetts is projected to decline overall from 75,330 in 2009-10 to 67,005 in 2031-32, much of this decline will be concentrated among White public high school graduates (from 48,386 in 2011-12 to 33,807 in 2031-32). Meanwhile, the number of Latino public high school graduates is expected to almost double (from 7,421 to 13,453), and the number of Black and Asian/Pacific Islander public high school graduates are also projected to increase.<sup>6</sup> Based on data of Massachusetts residents who applied for student financial aid in FY2014, students of color often have significantly fewer family resources to pay for college. Assuming these trends and patterns continue, Massachusetts should expect growing financial need among future college students—even if the number of college enrollments stays flat.

Recognizing these trends, the Massachusetts Department of Higher Education has explicitly pursued three goals: (1) decrease students' time to earning a postsecondary degree; (2)

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<sup>1</sup> Ma, J., Pender, M., & Welch, M. (2016). *Education Pays*. Washington, DC: The College Board.

<sup>2</sup> Georgetown Center on Education and the Workforce. (2016). *America's Divided Recovery: College Haves and Have-Nots*.

<sup>3</sup> College Board. (2016). *Trends in College Pricing*. Washington, DC: The College Board.

<sup>4</sup> New England Board of Higher Education. (2016). New England Fast Facts: The Price of Public Colleges in New England."

<sup>5</sup> Massachusetts Department of Higher Education analysis.

<sup>6</sup> Bransberger, P., & Michelau, D. K. (2016). *Knocking at the college door: Projections of high school graduates* (9th ed.). Boulder, Colo.: Western Interstate Commission for Higher Education.

close achievement gaps between groups of students; and (3) improve college affordability. Financial aid is an important lever in accomplishing these objectives. Previous research has demonstrated that college affordability can significantly impact students' educational pathways by supporting postsecondary enrollment, persistence, and degree completion.<sup>7</sup> However, the design of financial aid policy matters. Simple and clear financial aid programs have the strongest impact on student outcomes, while the evidence is less compelling for more complex financial aid programs that require an extensive application process or are less visible to students and families.<sup>8</sup> In addition, increasing transparency around financial aid can positively impact classroom motivation and the likelihood students take the steps necessary to prepare for college academically.<sup>9</sup> In light of this growing body of research, one strategy implemented by state policymakers across the country has been to simplify and redesign state financial aid programs.

To help support these statewide efforts, Lumina Foundation and the New England Board of Higher Education (NEBHE) partnered to implement the Redesigning Student Aid in New England Project. This project provided financial support to New England states committed to evaluating and improving their state financial aid portfolios. Through a competitive review process, Massachusetts was selected as one state to receive financial and technical support to conduct a holistic review of current program offerings. Given current and projected trends in affordability and demographic change, it is imperative for the Commonwealth to thoughtfully review and take steps to improve the state's financial aid portfolio with the goal of better addressing the needs of current and future Massachusetts college students. The findings reported in this study are meant to help with that process.

### **Study Goals and Data Sources**

This report summarizes findings from our review of the Massachusetts financial aid portfolio, which focused on two key questions:

- *How well does the current financial aid portfolio serve Massachusetts students and families?*
- *What opportunities are there for improving the financial aid system to better address the needs of Massachusetts' families?*

The analysis provides a description of the aid programs, information on financial aid receipt and unmet student need, and detail on the overlap between programs. Additionally, we discuss how the Massachusetts aid system compares to other states. Based on this research, we identify opportunities to improve state-funded financial aid programs, including suggestions to consolidate and simplify the system to the benefit of students and families.

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<sup>7</sup> Deming, D., & Dynarski, S. (2010). College Aid. In *Targeting Investments in Children: Fighting Poverty When Resources are Limited*, Levine and Zimmerman, ed. Chicago: University of Chicago Press and the National Bureau of Economic Research.

<sup>8</sup> Dynarski, S. M., & Scott - Clayton, J. E. (2006). The cost of complexity in federal student aid lessons from optimal tax theory and behavioral economics. *National Tax Journal*, 59(2), 319–356.

<sup>9</sup> Bettinger, E., Long, B., Oreopoulos, P., & Sanbonmatsu, L. (2012). The role of application assistance and information in college decisions: results from the H&R Block FAFSA experiment. *The Quarterly Journal of Economics*, 127(3), 1205–1242.; Destin, M. (2017). An Open Path to the Future: Perceived Financial Resources and School Motivation. *The Journal of Early Adolescence*, 37(7), 1004–1031.

Our analysis focuses on the most recent data available at the beginning of the study: the cohort that began their undergraduate education in FY2014 (i.e., the 2013-14 school year). These data enable us to give insight into how student aid in Massachusetts is disbursed across institution type and family income level and the remaining unmet need experienced by students across the Commonwealth. Additionally, we use data on the outcomes of the cohort that began in FY2009 to present patterns of student persistence and completion, including six-year graduation rates. In all our analyses, we focus on students who applied for federal and state financial aid.

Two data sources were used. The first is from the Massachusetts Department of Higher Education's Office of Student Financial Assistance (OSFA), which focuses on aid awards and family financial need. The second is from the Department's HEIRS II database, which contains data on student demographics and enrollment and degree completion information. (See Appendix G and H for more information about the data sources and definitions of terms used in this report.)

### **The Distribution of State Financial Aid**

- ***Massachusetts has a large number of separate aid programs, and they vary considerably in funding, level of state oversight, and focus.***

In FY2014, the Commonwealth awarded over \$108 million in need- and non-need-based grant aid. This was offered through 31 different state financial aid programs that vary in size, average award amounts, and focus (see Appendix A). Most are funded from the General Fund or Tuition Revenue, but some also receive private matches. Many of these aid programs are not need-based and instead focus on a particular group or purpose. For example, some of these programs are awarded to students in specific fields of study, like teaching. Others support specific activities, such as an internship, or have merit-based criteria such as a minimum GPA or test score. Still other programs are entitlements. Aid programs also vary in whether they are available to Massachusetts residents who attend private colleges.

Another important distinction between types of aid policies is the by level of state oversight. Some are *centralized* programs, meaning that student eligibility and selection are determined by the state via the Massachusetts Office of Student Financial Assistance. In contrast, *decentralized* programs allow institutions to decide which students should receive the state money. This allows schools to tailor the aid to local needs, but decentralization introduces complexity and reduces predictability for families, who must petition each institution to find out about their aid since the aid award rules are less transparent. What is the right balance between centralization and decentralization to improve accessibility for families and target unmet need levels in the aggregate? When considering this question, one must determine the right balance between centralized programs, which tend to be more visible and predictable and are applicable to many students, and decentralized programs, which tend to be targeted, smaller programs that require additional information and serve only a subset of students.

- ***Many of the Massachusetts aid programs are quite small both in terms of the number of students served and the average amount given.***

Many Massachusetts financial aid programs are small in terms of the number of recipients. The largest program, the MASSGrant, serves 49,540 students, but at least 5 programs serve fewer than 100 students, and 13 programs serve fewer than 1,000 students. Altogether, of

the 23 state financial aid programs with program-specific data available, over half granted awards to less than 1,000 students.

Our analysis of aid receipt uses the most recent data available at the beginning of the study: the cohort that began their undergraduate education in FY2014 (the 2013-14 school year). Among the 101,786 full-time, full-year students who applied for aid in FY2014, 44.6 percent received need-based grant aid (Appendix B). There is variation in award amount, but many programs give the median student \$1,000 or less. The largest program (MASSGrant) gives as maximum award of \$1,600, but the median student only receives \$600. Similarly, the 2<sup>nd</sup> largest program (Cash Grant) gave a median award of \$550.

- ***The Commonwealth also offers a large number of tuition waivers, which are uncommon in other states and different in important ways from grants.***

For FY 2014, \$41 million was awarded in the form of waivers through 41 state tuition programs.<sup>10</sup> These waivers add another layer to the financial aid system that families must navigate, and the prevalence of them is unique to Massachusetts. Tuition waivers are largely decided by institutions and vary by institutional sector, and given the decentralization of this aid, they are not well-publicized or predictable for families, thereby making them less effective in encouraging postsecondary enrollment.

### **Student Unmet Financial Need**

Each of the Massachusetts financial aid programs provide important resources to students who otherwise may be unable to finance their education. Educational costs, however, continue to rise, and as a result, unmet need remains high across public and private institutions, even after accounting for a family's ability to pay. A student's ability to pay is determined through a federal application process for financial aid, which takes into account family income, family size, and other assets to determine the amount a family is responsible for paying. This amount, known as a student's Expected Family Contribution (EFC), is subtracted from the estimated educational costs of an institution to determine a student's level of financial need. Financial need figures are used to determine the amount of need-based financial aid a student receives for that academic year. Frequently, the amount of need-based financial aid available is not enough to cover the remaining cost of attending college; this figure is known as unmet need:

$$\text{Unmet Need} = \text{Educational Costs} - \text{EFC} - \text{Grant Aid}$$

It represents additional dollars a student must pay on top of their expected family contribution.

- ***Many families, especially those with lower household incomes, face substantial costs even after accounting for federal, state, and institutional financial aid.***

Across all students who applied for financial aid in the Commonwealth, median unmet need for full-time, full-year students was \$11,163 in FY2014. In other words, 50% of students who had received some grant or waiver (81% of all students enrolled at a public college or

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<sup>10</sup> In total, nearly \$72 million was awarded for all tuition waivers, as shown in Appendix A2. This total includes employee benefit waivers and other waivers awarded to non-Massachusetts residents, such as athletes and members of the National Guard stationed in Massachusetts.

university) had unmet need greater than \$11,163 for AY2013-14. (See Appendix C.)

Figure 1 summarizes the median unmet need among students who entered full-time and stayed enrolled the full-year. The unmet need amounts are broken down by institutional sector. While students across the income distribution have a large amount of unmet financial need, students from the lowest-income families often had at least \$1,000 more in unmet need than their more financially advantaged peers. For example, the median unmet need after federal, state, institutional and outside grant aid for full-time, full-year community college students was \$7,244. For the subset of these students from the lowest-income families (i.e., students with a \$0 EFC, which suggests they are too poor to be unable to financially contribute to their college costs according to the federal needs-analysis methodology), the median unmet need was \$8,225 (Figure 1). Across the system, the portion of educational costs these low-income students were responsible for were 44 percent at community colleges, 47 percent at the state universities, and 55 percent at UMass campuses. In FY2014, this meant finding anywhere from \$8,225 to \$11,676 for one year of full-time college attendance.

**Figure 1: Median Unmet Need Among Full-Time/Full-Year Undergraduates who Received Any Grant of Waiver, FY2014**

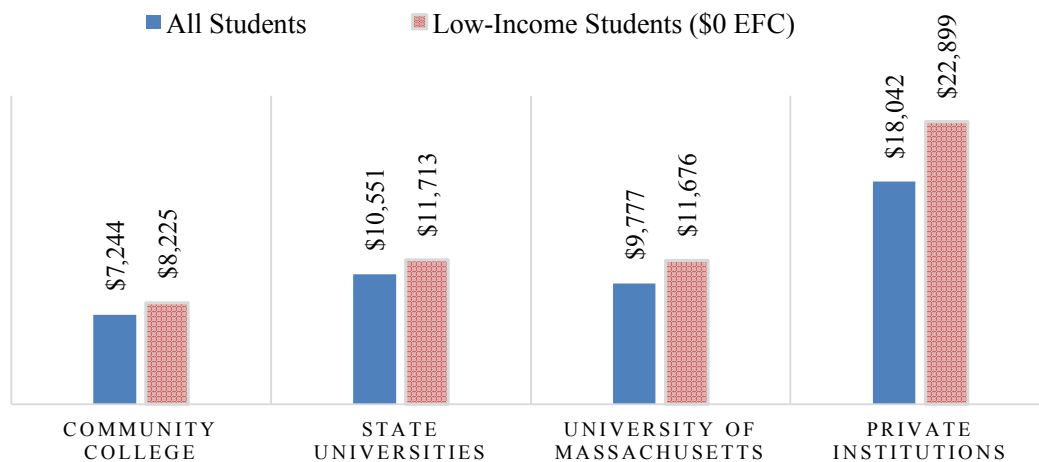
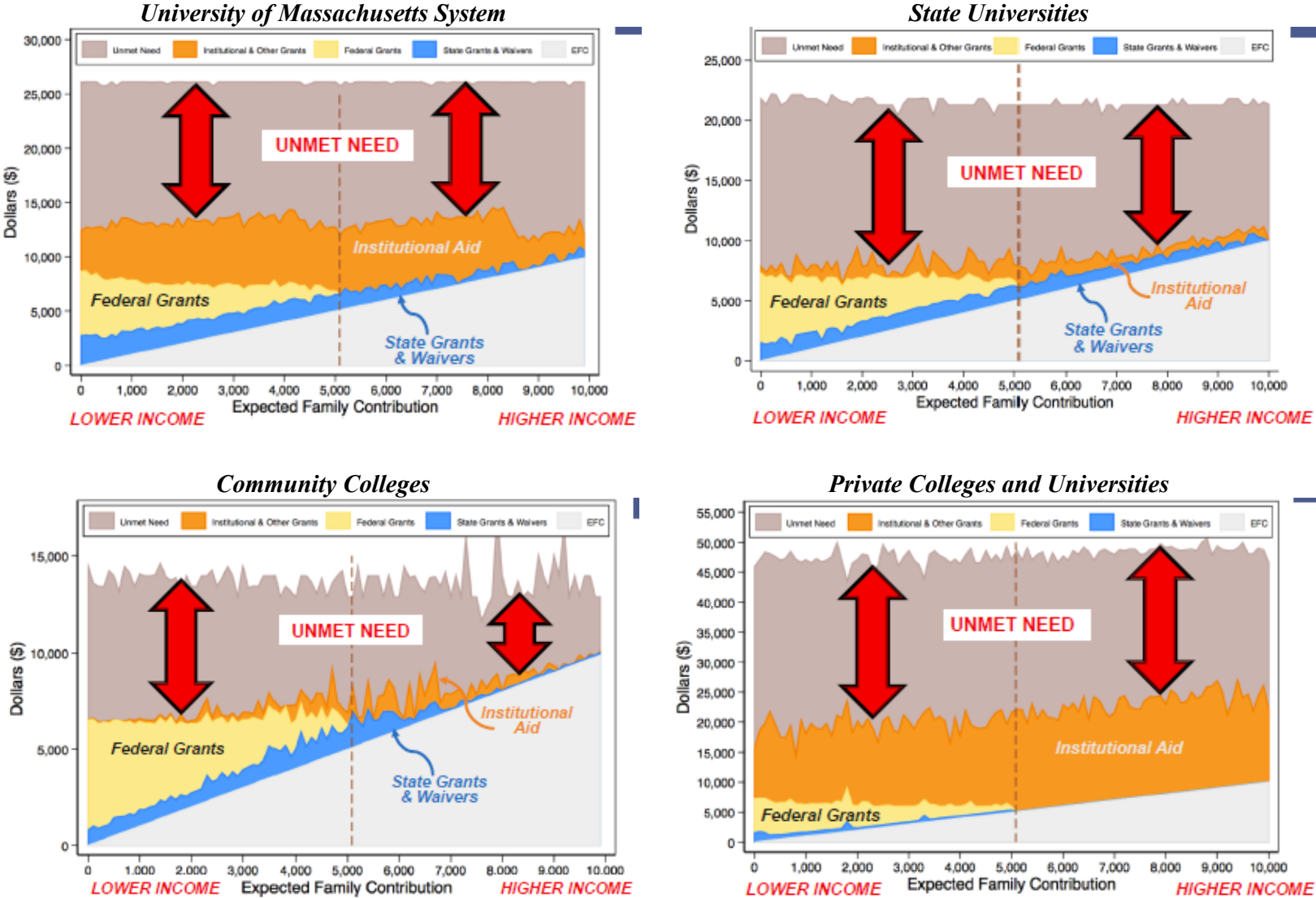


Figure 2 gives more detail on how much unmet financial need students have in comparison to the amount they are expected to contribute to college expenses (i.e., the EFC or Expected Family Contribution). Students with higher EFCs have higher incomes. To give a sense of perspective, families with an EFC of \$0 had a median adjusted gross income of \$12,684 in 2012, while families with an EFC of \$10,000 or above had a median adjusted gross income of \$95,249.<sup>11</sup> Students eligible for a federal Pell Grant, a proxy for being from a low-income family, are designated in the graphs as being to the left of the dashed line. The gray triangle at the bottom of each graph shows the amount the family is assumed to pay out of their own resources—it increases in height as the EFC increases along the bottom axis. Federal grants are in yellow, and are mostly Pell Grants, which are targeted towards low-income students. State grants and waivers are in light blue, and institution aid from the colleges and universities is in orange. The remaining amount, highlighted by the red arrows, is the unmet financial need, which we calculated using financial aid data from FY2014.

<sup>11</sup> Source: National Center for Education Statistics, National Postsecondary Student Aid Study (NPSAS:12).

Figure 2: Median College Costs, Aid Awards, and Unmet Need, FY2014 – Full-time, Full-Year Students



As shown in Figure 2, the role of state financial aid is relatively minor in comparison to federal aid and the family contribution. Even with 31 programs Within the UMass System and Private Institutions, institutional aid also plays an important role in helping to cover costs, but that aid appears to be awarded with little regard to ability-to-pay as families with higher incomes often receive as much or more than lower-income families. However, even with financial aid from these multiple sources, taken altogether, unmet need is large for families across the income distribution. For those eligible for a Pell Grant, the median unmet need is over \$10,000 at four-year institutions, and many students in the middle class face similar levels of unmet need (See Appendix C). This has important implications for the role of student loans—while taking out some loans to support postsecondary study is a reasonable expectation, there are many concerns that the amount of debt students and their families are being forced to take is very problematic, especially if loan amounts continue their upward trajectory.. Such high levels of debt can have detrimental effects on academic progress, labor market decisions, and other important economic activities, such as buying a home. There is substantial need for the state to do more to address these concerns.

- ***Lower-income students have lower persistence and degree completion rates compared to their higher-income peers. The financial burden created by unmet need is one contributing factor to this gap in college success.***

Thus, while there is a robust student financial aid portfolio in Massachusetts, the most financially needy students often bear a larger financial burden to finance their education than more advantaged students. Multiple studies have shown that an additional \$1,000 in student financial aid can increase persistence and degree completion rates.<sup>12</sup> The differential levels of unmet need among students thus may be one explanatory factor behind the lower graduation rates observed among lower-income Massachusetts residents who first enrolled in Fall 2008 (See Appendix D). Still, it is clear that many students, including those in the middle class, also face substantial costs that are not being met by federal, state, or institutional financial aid.

In light of these findings, we recommend that the department set benchmarks or goals for state aid programs by considering the following: what is a reasonable amount of unmet need? Is there a benchmark we should use across institutions or sectors? How should the benchmark vary across student EFC, if at all? Also, given current reforms, how will changes in tuition and fee setting change the ability of state financial aid programs to minimize unmet need for students?

### **Massachusetts Compared to Other States**

- ***The state ranked number 1 (Washington) spends nearly five times as much on aid per student as Massachusetts.***

Compared to other states, Massachusetts was among the top ten states in the number of awards per FTE in FY2013-14.<sup>13</sup> This reflects the large number of aid programs and commitment by the

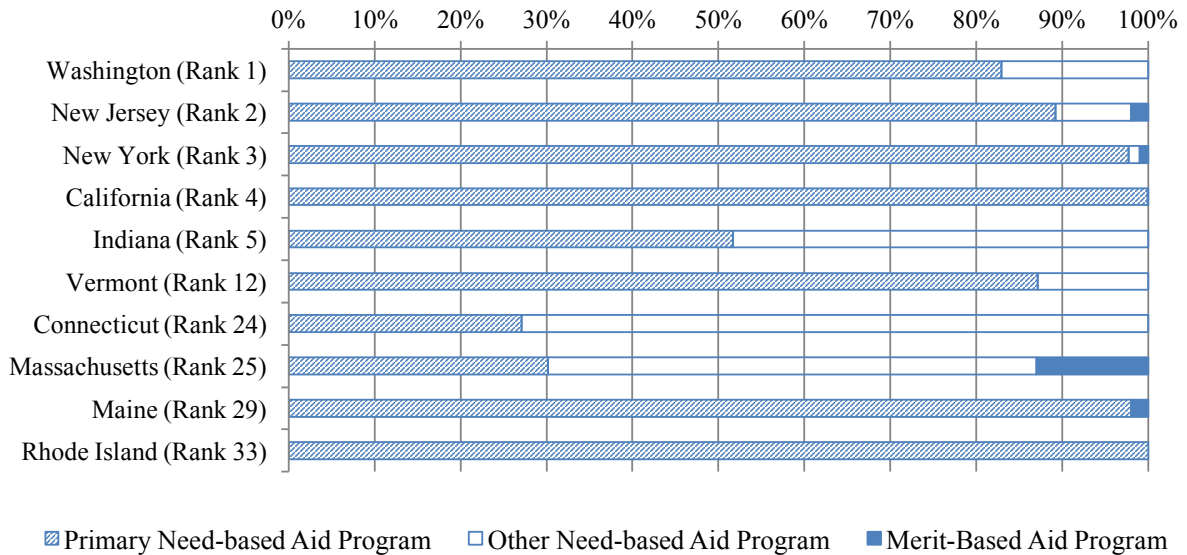
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<sup>12</sup> For a summary of recent research, see Dynarski, S. & Scott-Clayton, J. (2013). Financial aid policy: Lessons from research. In L. Barrow, T. Brock, & C. E. Rouse (Eds.), *Postsecondary education in the United States* (pp. 67-91). Princeton, NJ: The Future of Children, 23(1).

<sup>13</sup> National Association of State Student Grant and Aid Programs (NASSGAP). *45<sup>th</sup> Annual Survey Report on State-Sponsored Student Financial Aid: 2013-14*.

state to award aid to many students. However, as shown in Figure 3 when comparing states on need-based grant dollars available per undergraduate full-time equivalent (FTE, i.e., a way to standardize comparisons by the number of “equivalent” students), the Commonwealth falls to a rank of 25. (See Appendix F.) Massachusetts in-state tuition and fees at both public two- and four-year institutions are also higher than many other states that ranked higher in aid support, suggesting that Massachusetts, with a smaller amount of aid being given and higher tuition prices, is much more expensive than other states even after accounting for financial aid.<sup>14</sup>

**Figure 3: Distribution of Undergraduate State-Aid Dollars, FY2014**



States ranked higher than Massachusetts on financial aid expenditures per FTE undergraduate demonstrate different philosophies for allocating undergraduate student financial aid. For example, states such as Kentucky and West Virginia award similar amounts on both need- and merit-based aid programs. Others, such as New York and North Carolina, spend negligible amounts on merit-based aid compared to need-based aid. According to NASSGAP, 13 percent of Massachusetts’ undergraduate aid dollars were spent on solely merit-aid programs that did not consider student financial need.

➤ ***A much smaller amount of financial aid is dispersed through our primary need-based aid program in comparison to other states. This suggests that our aid portfolio is much more diffuse than other places. The mean award from the primary aid program is also much smaller than for other states ranked higher.***

Many states also spend a larger share of need-based aid dollars on a single, or primary, need-based aid program. In FY2014, Massachusetts spent 35 percent of its need-based aid budget on the MASS Grant program, the largest need-based aid program in the Commonwealth. Of the 24 states ranked above Massachusetts on the amount of need-based aid awarded to undergraduates, only three states spent a smaller share of their undergraduate need-based aid dollars on their primary need-based aid program. This suggests that the Commonwealth spreads

<sup>14</sup> College Board. (2016). *Trends in College Pricing*. Washington, DC: The College Board.

its resources widely over many more programs than is typical in most other states. In Massachusetts, aid awards across all programs varied from a low of \$250 to a high of \$18,500 (see Appendix A).

### **Overlap between Aid Programs**

Given this diffuse structure of the Massachusetts aid portfolio, we examined possible opportunities to simplify and consolidate programs. This analysis started by looking at two areas of overlap: (1) overlap in programmatic mission or purpose and (2) overlap in students served. We found that some financial programs do indeed share similar missions; some financial aid programs also award the same students.

➤ ***Among the state financial aid portfolio, there is some overlap in terms of programmatic mission or purpose.***

One example of financial aid programs that share similar missions are the Commonwealth's five teaching-related financial aid programs. Each of these programs is specific to a certain type of educator (i.e. early childhood educators; current teachers in the field; etc). While useful for incentivizing and supporting the growth of certain types of educators, it is unclear from the FY14 data whether these programs are utilized and publicized at equal rates. More data on educator shortages and the effect these programs have on addressing those shortages should be investigated, as having them as separate programs carries with it a heavier communications burden in order to be impactful.

Other financial aid programs award the same students. The Cash Grant program, Need-Based Tuition Waiver and MASS Grant are three distinct need-based financial aid programs. They are also among the state's largest need-based aid programs, in terms of number of student recipients. The Cash Grant program was created as a "mechanism for public institutions to support needy students" in conjunction with the Need-Based Waiver program.<sup>15</sup> Public institutions are annually allocated Cash Grant funds to disperse to students. Awards are determined by the institution, based on guidance provided by the Office of Student Financial Assistance.

➤ ***There is substantial overlap in the beneficiaries of the Cash Grant and MASS Grant. Students who receive need-based tuition waivers also often receive both the Cash Grant and MASS Grant.***

As shown in Figure 4, in FY2014, over 68 percent of full-time, full-year Cash Grant recipients attending a public institution also received a MASS Grant. (See Appendix Table E.) The overlap with the federal Pell Grant is even higher, suggesting that institutions are using their discretion through the Cash Grant to supplement the primary federal and state need-based aid programs available to students.

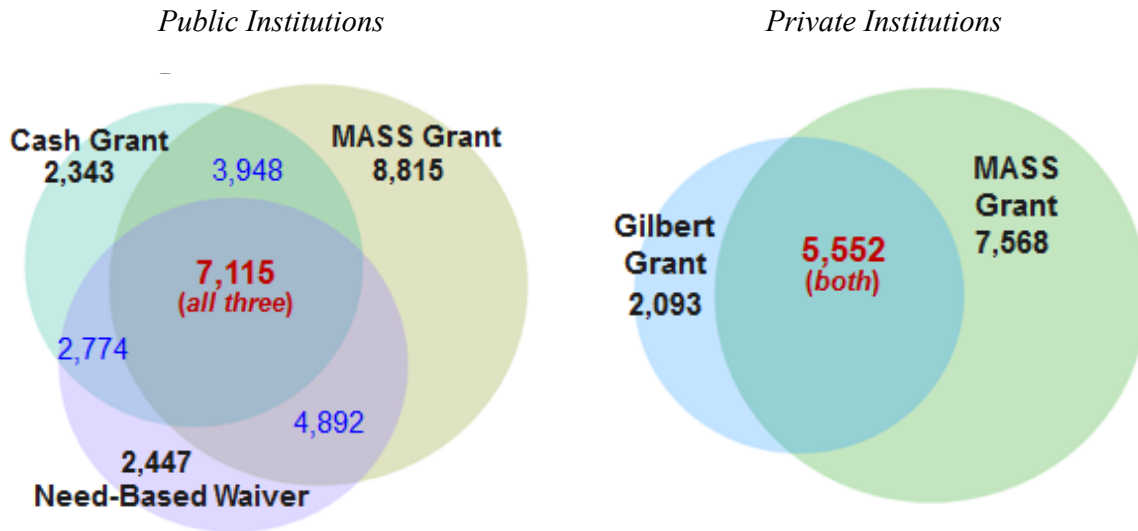
It was unclear from the data whether campuses receive different allocations of Cash Grant dollars and, if so, whether that variation leads to campus-based discrepancies in the total need-based state aid dollars available to students. Understanding the variation in Cash Grant

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<sup>15</sup> Commonwealth of Massachusetts. "Student Financial Aid Programs: Guidelines and Procedures 2014-2015."

allocations and award procedures could help determine how the state and institutions might further collaborate in allocating student aid dollars.

**Figure 4: Overlap of State Need-Based Aid Programs for Full-time/Full-year Students, FY2014**



- *At private institutions, there is substantial overlap in the beneficiaries of the MASS Grant and Gilbert Grant.*

At Massachusetts private institutions, the MASS Grant and Gilbert Grant—another need-based financial aid program—are also often awarded to the same students. Similar to the Cash Grant, the Gilbert Grant is administered by institutions and funded annually by the state. As shown on the right side of Figure 4, 73 percent of Gilbert Grant recipients also received a MASS Grant in FY14. As with the Cash Grant program, however, the variation of Gilbert Grant dollars available to students across institutions was unavailable in the dataset.

From this analysis, it is clear that institutions are leveraging these state-allocated financial aid dollars for financially needy students, *i.e.* those eligible for the MASS and Pell grants. The level of institutional discretion on state financial aid dollars, however, makes it difficult for the average Massachusetts student to understand how state financial aid may reduce their tuition bill. By tying state financial dollars to specific institutions, prospective college students may struggle to accurately predict the cost of attending college because these state aid programs are embedded within attending a certain college. Collapsing decentralized programs such as the Cash Grant and Gilbert Grant with the MASS Grant would lead to larger average block grants that could follow students to an institution of their choice. This would increase transparency around the true educational costs of attending a higher education institution in the Commonwealth. **Research suggests that students with less clarity—or erroneously high estimates—of college costs are less inclined to take college preparatory courses in middle and high school and less likely to**

enroll and complete college.<sup>16</sup>

### **Conclusions and Opportunities for Improvement**

Massachusetts ranks 25 in terms of the amount of state financial aid given to students, and the current set of programs leaves the most financially-needy students with substantial financial burdens and large amounts of unmet need. Moreover, with a large number aid programs rather than a single, clear program as found in many other states, there is a great deal of complexity within the system, making it difficult for families to understand the supports available to them. With an increasing share of college-age students projected to come from historically underrepresented and less affluent populations, it is imperative for the Commonwealth to consider reforms that might help the aid portfolio better address the needs of residents. Supporting these students with transparent and sufficient aid programs is crucial to increasing college enrollment and completion, major goals for the Massachusetts Department of Higher Education.

### ***Questions for Consideration***

Based on these findings and additional details provided in this report, we recommend the Department of Higher Education consider the following questions:

- ***What is a reasonable amount of unmet need for Massachusetts residents?***

Students currently have a substantial amount of unmet financial need after accounting for federal, state, and institutional aid. Is there a benchmark that should be used to set a goal for the Commonwealth?

- ***What is the right balance between centralization and decentralization to improve accessibility for families and target unmet need levels in the aggregate?***

Considerations include balancing between: (i) highly-visible and predictable programs applicable for many students, such as centralized aid programs distributed by the state using clear award criteria, and (ii) targeted, smaller programs, which would allow individual institutions to distribute state funds but would not be as transparent and constant across the Commonwealth.

- ***How should the state balance the competing options of giving smaller awards to many more students versus giving large awards to fewer students?***

This question focuses on the relatively small amount each student receives from most Massachusetts financial aid programs, especially in comparison to the way other states allocate their financial aid. When considering this question, the Commonwealth should take into account

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<sup>16</sup> For a discussion of the psychological toll complex financial aid systems may have on current and potential college students, see Goldrick-Rab, S., & Kolbe, T. (2016). A Matter of Trust: Applying Insights from Social Psychology to Make College Affordable. *Policy Insights from the Behavioral and Brain Sciences*, 3(2), 237–244.

anticipated changes to future program budgets and projected changes in the financial needs of future college-bound students.

- ***What proportion of state aid dollars should private institutions receive?***

How should the Commonwealth prioritize funding for residents who attend public versus private institutions? Given differences in resources and oversight by institutional sector, how should the limited financial aid resources be divided?

### ***Study Recommendations***

- ***To improve the aid system, more support is needed to address the substantial unmet financial need facing many families.***

After all sources of financial aid, unmet need is substantial in the Commonwealth, particularly for low-income students. At current funding levels, many Massachusetts families struggle with college costs or forego attendance altogether. Given changing demographics in the college-age population, the needs of students are predicted to grow, and the problem of unmet financial need will become worse unless action is taken now.

However, there are other ways to reform the system to be more impactful beyond increasing the financial aid budget. As described below, the Commonwealth has multiple opportunities to improve the effectiveness and efficiency of the current financial aid portfolio.

- ***Consolidating programs with similar goals into a simpler, more streamlined system would benefit multiple stakeholders.***

Massachusetts has a large number of programs—many that are small in terms of the number of recipients and size of the average aid award. There is also significant overlap between the major programs in terms of beneficiaries. These patterns beg the question: *Could the goals of Commonwealth be reached using a much simpler approach?*

Consolidating programs could have wide-ranging benefits. First, doing so would make administrative oversight easier and clearer. If the same goals of supporting college enrollment and persistence to a credential of value can be accomplished with less overhead, then the state will be better off. Additionally, research suggests that a simpler system would not only yield administrative benefits, but also could have a large positive effect on families. The awareness of financial aid is low among families, and this is made significantly harder by having a large number of separate programs with varying eligibility requirements. Moving to a system with one main need-based aid program, as is the custom in many other states, increases transparency for students and families and makes it easier for schools and other organizations to communicate and match families with the supports that might help them. Consolidating programs would also have the benefit of reducing the application burden and uncertainty for families on the receiving end of multiple aid programs.

Programs to consider for consolidation include:

- Need-based aid programs that serve the same students (i.e. the MASS Grant, Cash Grant, Gilbert Grant, and Need-Based Tuition Waivers)

- Specialized programs within the broader categories, such as combining all the workforce development grants into one program (or all of the teacher development grants into one program);
- One-off programs—could they be folded into larger programs with the same goals?

Moreover, programs that have not been used in recent years should be removed from communication materials to families. For example, the Commonwealth continues to advertise tuition waivers that have not been used in recent years. Removing them from the program list is a simple step towards helping families focus on the aid programs most likely to help them.

- ***The Massachusetts system of tuition waivers could be much more effective repackaged in a simplified, well-publicized grant program.***

Massachusetts is the *only* state to focus so much of its state financial aid resources in the form of tuition waivers. Tuition waivers are hard to understand and communicate to families later in the enrollment process than other aid, and so they do not have the same positive, large effects on college enrollment and persistence as grants and scholarships. For this reason, other states have instead focused their resources on centralized, grant programs that are easy to publicize, understand, and award. In Massachusetts, with 41 different tuition waivers, it is impossible for families to understand what aid they could receive, and converting and consolidating these funds into grants would be much more effective in supporting postsecondary education and efficient in terms of administration.

- ***Apply the lessons and innovations from pilot programs to existing aid policies***

We recognize that Massachusetts has already made efforts to improve student financial aid. The Completion Incentive Grant Fund (CIGF) pilot was among the first state-based performance-based scholarships in the country. Results from the pilot are forthcoming. Understanding how CIGF and other pilot programs might overlap with the current aid portfolio or possible consolidation process is crucial context for interpreting the results of these attempts to improve the Commonwealth's student aid programs. While Massachusetts should embrace innovation, doing so by creating yet another program would only add to the complexity and informational burden on students and the schools and organizations that try to support them.

As such, when considering the possibility of creating additional pilot programs, the DHE might consider innovations that might target the unmet financial need students currently face. Experiments with different formats and incentive schemes, as documented by other states, might also provide information about policy designs that support better student outcomes. However, as more is learned about how to help Massachusetts residents, the DHE should consider how the innovations and lessons learned from pilots might be folded into existing financial aid programs. Also, any new program should make progress towards reducing the substantial unmet need that has been identified in our analysis.

- ***The portfolio of Massachusetts financial aid programs could be communicated to families in clearer, more transparent ways to increase awareness.***

Along with considering how to simplify the aid portfolio with consolidation, it is also worthwhile for the Commonwealth to consider better ways to communicate the aid available to

students so that potential supports are easier to understand. Currently, with so many varied programs, many of which that have similar goals but different applications and award procedures, it's worth asking: *What does the Massachusetts aid system look like to families? How difficult is it for a family to navigate our system?* While the Commonwealth wants to encourage individuals to increase their educational attainment, doing so with so many programs means that families have the burden of navigating through a long list of programs.

Figure 5: Web Pages for Massachusetts Financial Aid

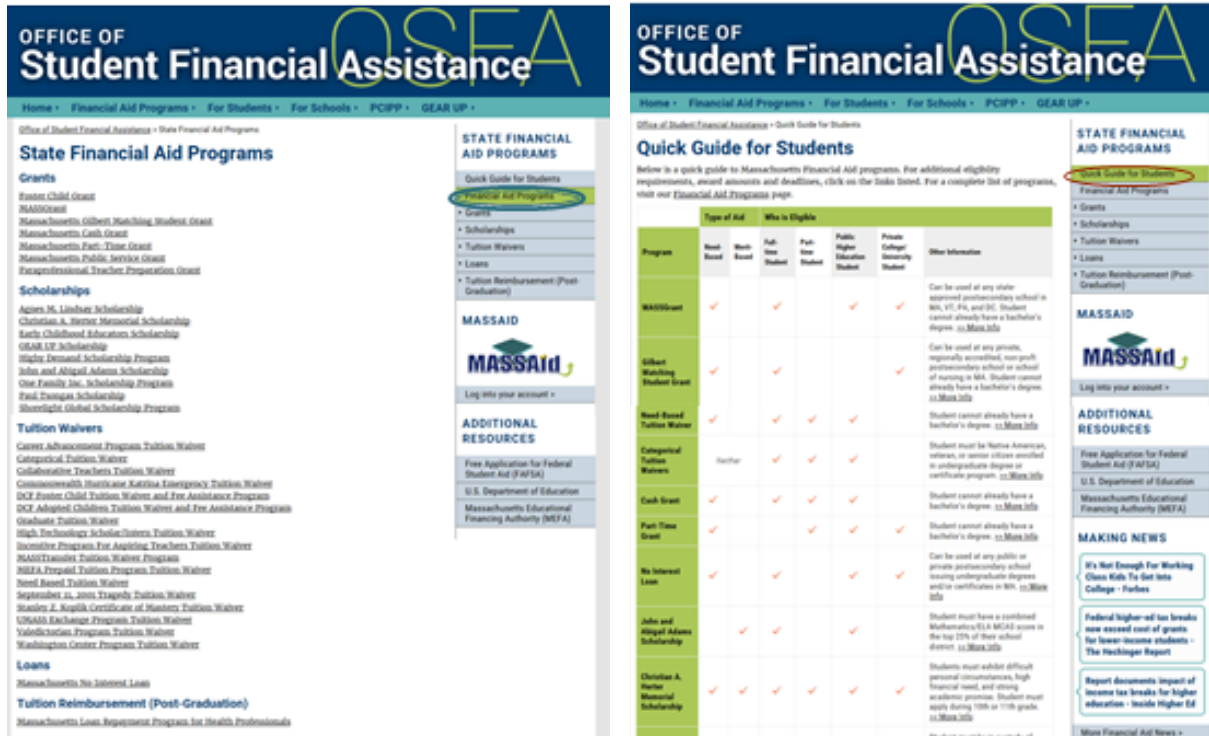


Figure 5 is a set of snapshots from the Office of Student Financial Assistance website. Students and their families can go here to learn more about the state financial aid programs. As shown, there is a long list of programs, broken down by type of aid. Notably, grants, scholarships, and tuition waivers all have the same effect on the cost faced by a student, but they differ in how the aid is obtained and from whom. This underscores the fact that similar programs require families to jump through cumbersome processes even though they have the same goals—in essence, families are being forced to jump through multiple hoops even though they are aligned in purpose and eligibility. Moreover, with all the many programs in the state, even the “Quick Guide for Students” (shown on the right) is a very long list of programs, many of which are similar in terms of the type of aid being advertised and who is eligible to receive it.

Imagine a first-generation or low-income student, who has limited counseling support from his/her high school trying to navigate this system. The burden on the student and their family could be greatly reduced using the same amount of dollars by consolidating programs. This is the reason why other states have made the choice to focus their funding and communication efforts on a single, primary need-based program with the hope of making that

program well-known and accessible to families. So as the Commonwealth considers what to improve financial aid in Massachusetts, it should consider: *What the tradeoffs from having so many targeted programs?* More importantly, *could the same goals be accomplished with a simpler approach?* Consolidating programs and simplifying state financial aid would make it easier to communicate with students and families.

Even without changes to our current suite of programs, there are ways to improve how financial aid information is disseminated to students. Improved communications, including emphasizing larger programs and streamlining websites and print materials of out-of-date and tiny programs would help families to better focus on the supports most likely to help them. Adding simplified guidance on important tasks, checklists, and timelines for families to utilize would also be helpful. There are many examples from other states and organizations about how to better communicate financial aid information to students and their families that could be useful to the Commonwealth.

### **Proposed Next Steps**

As a result of our analysis, we have identified several opportunities for the Commonwealth to improve the state financial aid system, and thereby increase college access and success among residents of the Massachusetts. Throughout this report, we have also used our analysis to generate questions that might guide future discussions between various stakeholders in Massachusetts.

To capitalize on the suggestions described in this report, the Department of Higher Education could take the following multi-step approach:

- Share these findings with stakeholders at Massachusetts colleges and universities and the senior staff of the DHE.
- Collect feedback from institutional financial aid officers, the Office of Student Financial Assistance's advisory committee, students and parents who navigate and use state financial aid, and other stakeholders on the questions and tradeoffs highlighted by the report.
- Conduct additional analyses to better understand the effectiveness of our current grant aid programs on a range of student outcomes and the detrimental effects of unmet need on college access and success.
- Develop and share recommendations and suggested modifications to aid programs with the Massachusetts Board of Higher Education.

## **About the Authors**

**Dr. Bridget Terry Long** is the Saris Professor of Education and Economics and former Academic Dean of the Harvard Graduate School of Education. Her research examines factors that influence college access, choice, and degree completion, as well as other measures of postsecondary success. Several current studies examine the roles of information and assistance in promoting college savings behavior, the completion of financial aid forms, and the likelihood of enrolling in college full-time. Other projects examine the effects of financial aid; the impact of postsecondary remediation; and the role of instructor quality, class size, and support programs on student outcomes. Long is a Research Associate of the National Bureau of Economic Research (NBER) and served as Chair of the National Board for Education Sciences (NBES), the advisory panel of the Institute of Education Sciences (IES) at the U.S. Department of Education. She has also been a Visiting Fellow at the Federal Reserve Bank of Boston and recipient of the National Academy of Education/Spencer Postdoctoral Fellowship. Long has testified multiple times before Congressional Committees on education issues and was awarded the Robert P. Huff Golden Quill Award from the National Association of Student Financial Aid Administrators (NASFAA). She has also won numerous research grants, including major awards from the Bill & Melinda Gates Foundation, the U.S. Department of Education, and the National Science Foundation (NSF). Long has served as an advisor to many organizations, including the College Board, Bill & Melinda Gates Foundation, American Council on Education, Ohio Board of Regents, and the I Have a Dream Foundation. Long received her Ph.D. and M.A. from the Harvard University Department of Economics and her A.B. from Princeton University.

**Monnica Chan** is a third-year student in the Ph.D. in Education program at Harvard University with a focus on Education Policy and Program Evaluation. Prior to her studies, Monnica was the Director of Policy and Research at the New England Board of Higher Education. In addition to the Redesigning Student Aid in New England Project, Monnica also worked with Massachusetts institutions on NEBHE's Developmental Math Demonstration Project as well as the Commonwealth's Joint Committee on Higher Education through NEBHE's Legislative Advisory Committee. She has a Master's degree from the Harvard Graduate School of Education.

**APPENDIX A: THE PORTFOLIO OF AID PROGRAMS**

**Table A.1: Massachusetts State Financial Aid Program Overview, FY2014**

| Program Name   | Centralization | Need Based? | Private Inst. | Funding Source          | FY2014<br>(Fall & Spring terms only) |            |              |
|--|----------------|-------------|---------------|-------------------------|--------------------------------------|------------|--------------|
|  |                |             |               |                         | # of Awards                          | Award Max. | Award Median |
| <b>MISC. GRANT PROGRAMS</b>                                  |                |             |               |                         |                                      |            |              |
| MASSGrant  | Centralized    | Y           | Y             | General Fund            | 49,540                               | \$1,600    | \$600        |
| Cash (ACCESS) Grant  | Decentralized  | Y           | N             | General Fund            | 28,016                               | \$9,281    | \$550        |
| John & Abigail Adams Scholarship*                            | Decentralized  | N           | N             | Tuition Revenue         | 13,093                               | \$1,714    | \$1,418      |
| Gilbert Grant  | Decentralized  | Y           | Y             | General Fund            | 8,315                                | \$4,000    | \$2,000      |
| Part Time Grant  | Decentralized  | Y           | Y             | General Fund            | 3,701                                | \$1,000    | \$200        |
| GEAR UP  | Centralized    | Y           | Y             | GEARUP Scholarship fund | 1,550                                | \$1,000    | \$1,000      |
| Completion Incentive Grant Fund                              | Centralized    | Y           | N             | General Fund            | 920                                  | \$2,000    | \$1,500      |
| Christian Herter Scholarship                                 | Centralized    | Y           | Y             | General Fund            | 63                                   | \$18,500   | \$10,400     |
| Agnes M. Lindsay Scholarship                                 | Centralized    | Y           | Y             | Trust                   | 40                                   | \$250      | \$250        |
| Public Service Grant   | Centralized    | N           | N             | General Fund            | 7                                    | \$1,714    | \$970        |
| Paul Tsongas Scholarship                                     | Decentralized  | N           | N             | Tuition Revenue         |                                      |            |              |
| <b>MISC. TUITION WAIVERS</b>                                 |                |             |               |                         |                                      |            |              |
| Need Based Tuition Waiver                                    | Decentralized  | Y           | N             | Tuition Revenue         | 31,161                               | \$1,714    | \$425        |
| Categorical Tuition Waiver                                   | Centralized    | N           | N             | Tuition Revenue         | 2,996                                | \$13,258   | \$456        |
| National Guard Tuition Waiver & Fee Assistance Program*      | Centralized    | N           | N             | Tuition Revenue         |                                      |            |              |
| Graduate Student Tuition Waiver                              | Decentralized  | N           | N             | Tuition Revenue         |                                      |            |              |
| Stanley Koplik Certificate of Mastery Tuition Waiver Program | Decentralized  | N           | N             | Tuition Revenue         |                                      |            |              |
| <b>TEACHING RELATED</b>                                      |                |             |               |                         |                                      |            |              |
| Early Childhood Educators Scholarship                        | Centralized    | N           | N             | General Fund            | 976                                  | \$4,500    | \$3,600      |
| Paraprofessional Teacher Preparation Grant                   | Centralized    | N           | N             | General Fund            | 111                                  | \$7,500    | \$3,750      |
| Career Advancement Program                                   | Decentralized  | N           | N             | Tuition Revenue         |                                      |            |              |
| Collaborative Teachers                                       | Decentralized  | N           | N             | Tuition Revenue         |                                      |            |              |
| Incentive Program for Aspiring Teachers                      | Decentralized  | N           | N             | Tuition Revenue         |                                      |            |              |
| <b>DCF OR OTHER PARTNERSHIPS</b>                             |                |             |               |                         |                                      |            |              |
| Foster Child Grant   | Centralized    | Y           | Y             | General Fund            | 224                                  | \$6,000    | \$4,450      |
| DCF Adopted Children Fee Tuition Waiver & Fee Assistance*    | Centralized    | N           | N             | General Fund            | 281                                  | \$12,084   | \$5,772      |
| DCF Foster Children Fee Tuition Waiver & Fee Assistance      | Centralized    | N           | N             | General Fund            | 432                                  | \$12,144   | \$3,663      |
| One Family, Inc. Scholarships                                | Centralized    | Y           | N             | General Fund            | 4                                    | \$5,810    | \$1,199      |

Continued on the next page.

**Table A.1: Massachusetts State Financial Aid Program Overview, FY2014 – Continued**

| Program Name   | Centralization | Need Based? | Private Inst. | Funding Source              | FY2014<br>(Fall & Spring terms only) |            |              |
|--|----------------|-------------|---------------|-----------------------------|--------------------------------------|------------|--------------|
|  |                |             |               |                             | # of Awards                          | Award Max. | Award Median |
| <b>WORKFORCE RELATED</b>                               |                |             |               |                             |                                      |            |              |
| High Demand Scholarship                                | Centralized    | N           | N             | General Fund                | 536                                  | \$1,181    | \$1,181      |
| Massachusetts Scholar-Internship Match Fund            | Decentralized  | N           | N             | General Fund, private match | 1                                    | \$273      | \$273        |
| State University Internship Incentive Program          | Decentralized  | N           | N             | General Fund, private match | 678                                  | \$5,000    | \$2,000      |
| High Technology Scholar/ Intern Tuition Waiver Program | Decentralized  | N           | N             | Tuition Revenue             |                                      |            |              |
| <b>OTHER PROGRAMS</b>                                  |                |             |               |                             |                                      |            |              |
| MSCBA Housing Grant                                    | Decentralized  | N           | N             | Res. Hall Rent Revenue      | 1,120                                | \$4,000    | \$1,000      |
| Massachusetts No Interest Loan                         | Centralized    | N           | Y             | Trust                       | 2,445                                | \$4,000    | \$2,000      |

\* indicates that the program requires students to self-disclose their eligibility to the institution in order to receive the award  
Source: Massachusetts Office of Student Financial Assistance.

Notes: The table summarizes aid awards for 184,200 student-records, or 95.60% of the student-records obtained from the Office of Student Financial Assistance. Because some students enrolled at more than one institution, there are 177,052 unique students in the data. For *Centralized Programs*, student eligibility and selection are determined by OSFA; programs are funded by an allocation from the state. For *Decentralized Campus-based Programs*, student recipients are selected by the institutions; programs are funded by an allocation from the state to public and/or private institutions. Certain rows do not report award amounts because some programs are only reported in the aggregate to OSFA. This table does not display three programs awarded by the UMass President’s Office (UMass Academic and Artistic Talent Program; UMass Athletic Program; and UMass Exchange Program), which are all funded with tuition revenue.

**Table A.2: Tuition Waiver Programs by Public Institutional Sector, FY2014**

| Program   | TOTAL DOLLARS |                    |                    | TOTAL HEADCOUNT |                    |                    |
|---|---------------|--------------------|--------------------|-----------------|--------------------|--------------------|
|   | UMass         | State Universities | Community Colleges | UMass           | State Universities | Community Colleges |
| <i>Departmental Programs</i>  |               |                    |                    |                 |                    |                    |
| Academic & artistic talent  | \$889,498     | \$0                | \$0                | 652             | 0                  | 0                  |
| Aspiring Teachers   | \$0           | \$13,416           | \$0                | 0               | 63                 | 0                  |
| Career Adv. program   | \$0           | \$0                | \$0                | 0               | 0                  | 0                  |
| Co-op Association for Scholarship   | \$0           | \$0                | \$0                | 0               | 0                  | 0                  |
| Collaborative teachers  | \$42,387      | \$42,120           | \$0                | 64              | 18                 | 0                  |
| Cooperative Association of States for Scholarships (CASS)                   | \$0           | \$0                | \$0                | 0               | 0                  | 0                  |
| Courtesy  | \$0           | \$0                | \$0                | 0               | 0                  | 0                  |
| DCE waiver  | \$39,398      | \$0                | \$0                | 75              | 0                  | 0                  |
| DSS adopted children  | \$90,934      | \$88,478           | \$81,179           | 63              | 103                | 244                |
| DSS foster care child   | \$130,631     | \$88,948           | \$88,292           | 97              | 115                | 315                |
| Dual enrollment   | \$7,616       | \$108,234          | \$110,987          | 30              | 215                | 616                |
| Foreign exchange  | \$819,170     | \$568,295          | \$0                | 145             | 81                 | 0                  |
| Graduate student  | \$6,339,890   | \$263,042          | \$0                | 1564            | 187                | 0                  |
| High Tech. Scholar/Intern   | \$2,181       | \$0                | \$0                | 2               | 0                  | 0                  |
| Human Service providers   | \$9,619       | \$7,205            | \$8,766            | 11              | 17                 | 39                 |
| Joint Admissions/Tuition Adv. Pgm.  | \$580,019     | \$106,184          | \$0                | 1252            | 569                | 0                  |
| MA Higher Education employee  | \$1,066,041   | \$880,229          | \$315,981          | 840             | 981                | 781                |
| McNair  | \$10,501      | \$0                | \$0                | 7               | 0                  | 0                  |
| Northeast Consortium of Colleges and Universities in Massachusetts (NECCUM) | \$25,039      | \$0                | \$18,871           | 46              | 0                  | 40                 |
| Other DHE   | \$8,720,299   | \$28,512           | \$78               | 2216            | 108                | 1                  |
| Other State employees   | \$262,518     | \$390,082          | \$103,420          | 230             | 527                | 474                |
| Research assistants   | \$4,672,550   | \$199,144          | \$0                | 1071            | 69                 | 0                  |
| S.Z. Koplik Cert. of Mastery  | \$907,951     | \$125,619          | \$3,065            | 568             | 132                | 6                  |
| SC Scholarship Prog./Tsongas  | \$0           | \$112,251          | \$0                | 0               | 109                | 0                  |
| UMass athletic  | \$1,494,164   | \$0                | \$0                | 317             | 0                  | 0                  |
| UMass exchange program  | \$551,626     | \$0                | \$0                | 179             | 0                  | 0                  |
| UMass talent  | \$0           | \$0                | \$0                | 0               | 0                  | 0                  |
| University waiver   | \$17,867      | \$0                | \$377,769          | 16              | 0                  | 0                  |
| Valedictorian   | \$20,945      | \$2,000            | \$0                | 13              | 2                  | 0                  |
| Washington Center   | \$8,757       | \$34,346           | \$0                | 13              | 64                 | 0                  |

*Continued on the next page.*

**Table A.2: Tuition Waiver Programs by Public Institutional Sector, FY2014 – Continued**

| Program                       | TOTAL DOLLARS       |                     |                    | TOTAL HEADCOUNT |                    |                    |
|-------------------------------|---------------------|---------------------|--------------------|-----------------|--------------------|--------------------|
|                               | UMass               | State Universities  | Community Colleges | UMass           | State Universities | Community Colleges |
| <b>Statutory Programs</b>     |                     |                     |                    |                 |                    |                    |
| Active Duty Armed Forces      | \$0                 | \$3,950             | \$5,166            | 0               | 5                  | 14                 |
| Adams Scholarship             | \$13,041,026        | \$3,081,280         | \$402,885          | 8405            | 3341               | 925                |
| Commission for the Blind      | \$11,858            | \$48,709            | \$5,885            | 10              | 13                 | 20                 |
| MA Rehabilitation Commission  | \$348,268           | \$369,955           | \$684,123          | 310             | 482                | 2273               |
| National Guard                | \$441,236           | \$290,530           | \$102,835          | 320             | 292                | 350                |
| Native American               | \$66,556            | \$28,048            | \$28,129           | 44              | 31                 | 79                 |
| Need-based                    | \$10,949,706        | \$3,451,374         | \$3,967,070        | 9035            | 4533               | 16777              |
| Police/Firefighters           | \$0                 | \$1,013             | \$1,725            | 0               | 4                  | 5                  |
| Senior citizens               | \$89,659            | \$324,508           | \$151,855          | 101             | 586                | 509                |
| Veterans/Vietnam veterans     | \$856,293           | \$756,693           | \$636,890          | 719             | 610                | 2114               |
| Other Statutory               | \$0                 | \$0                 | \$8,558            | 0               | 0                  | 42                 |
| <b>Local - Other Programs</b> | \$233,090           | \$137,236           | \$361,493          | 259             | 293                | 1151               |
| <b>Total</b>                  | <b>\$52,747,293</b> | <b>\$11,551,401</b> | <b>\$7,465,022</b> | <b>28,674</b>   | <b>13,550</b>      | <b>26,775</b>      |

Source: Massachusetts Department of Higher Education Annual Fiscal Collection Data

Note: Totals dollars awarded includes tuition waived for non-state supported coursework (i.e. courses taught by an adjunct). Tuition waivers awarded to students attending the University of Massachusetts Medical School are excluded.

**APPENDIX B: FINANCIAL AID RECEIPT**

**Table B.1: Massachusetts Need-Based Aid Programs Awards, FY2014: Full-Time, Full-Year Students by Institutional Sector**

|  | All State<br>Need-based Grants |         |        | Select State Need-Based Grants |        |            |        |               |       | Need-based<br>Tuition Waiver |        |
|--|--------------------------------|---------|--------|--------------------------------|--------|------------|--------|---------------|-------|------------------------------|--------|
|  | Median                         | Mean    | #      | MASS Grant                     |        | Cash Grant |        | Gilbert Grant |       | Median                       | #      |
|  |                                |         |        | Median                         | #      | Median     | #      | Median        | #     |                              |        |
| <b>Private Institutions (n=39,314)</b> | \$1,600                        | \$1,899 | 15,271 | \$800                          | 13,120 |            | 0      | \$2,400       | 7,645 |                              | 0      |
| EFC = 0 (n=8,021)                      | \$1,600                        | \$2,363 | 6,152  | \$1,600                        | 5,864  |            | 0      | \$2,000       | 2,758 |                              | 0      |
| EFC = \$1 - \$2,540 (n=5,318)          | \$1,600                        | \$1,711 | 4,615  | \$700                          | 4,480  |            | 0      | \$2,500       | 2,062 |                              | 0      |
| EFC = \$2,541 - \$5,081 (n=3,284)      | \$300                          | \$1,154 | 2,853  | \$300                          | 2,776  |            | 0      | \$2,500       | 1,212 |                              | 0      |
| EFC = \$5,082 - \$10,000 (n=4,662)     | \$2,395                        | \$2,002 | 987    |                                | 0      |            | 0      | \$2,400       | 966   |                              | 0      |
| EFC = Over \$10,000 (n=18,029)         | \$2,400                        | \$1,956 | 664    |                                | 0      |            | 0      | \$2,400       | 647   |                              | 0      |
| <b>UMass Campuses (n=27,432)</b>       | \$1,200                        | \$1,309 | 11,769 | \$1,200                        | 10,068 | \$500      | 7,917  |               | 0     | \$1,143                      | 6,986  |
| EFC = 0 (n=5,570)                      | \$1,700                        | \$1,807 | 4,916  | \$1,200                        | 4,721  | \$500      | 3,174  |               | 0     | \$1,144                      | 3,108  |
| EFC = \$1 - \$2,540 (n=3,752)          | \$900                          | \$1,079 | 3,370  | \$500                          | 3,266  | \$500      | 2,055  |               | 0     | \$1,400                      | 1,901  |
| EFC = \$2,541 - \$5,081 (n=2,412)      | \$800                          | \$820   | 2,141  | \$300                          | 2,081  | \$500      | 1,390  |               | 0     | \$1,270                      | 963    |
| EFC = \$5,082 - \$10,000 (n=3,862)     | \$500                          | \$842   | 1,306  |                                | 0      | \$500      | 1,276  |               | 0     | \$1,000                      | 909    |
| EFC = Over \$10,000 (n=11,836)         | \$1,000                        | \$1,012 | 36     |                                | 0      | \$875      | 22     |               | 0     | \$1,000                      | 105    |
| <b>State Universities (n=22,402)</b>   | \$900                          | \$1,282 | 10,568 | \$900                          | 8,259  | \$1,500    | 5,078  |               | 0     | \$910                        | 4,810  |
| EFC = 0 (n=4,495)                      | \$900                          | \$1,523 | 3,840  | \$900                          | 3,777  | \$1,800    | 1,209  |               | 0     | \$910                        | 1,428  |
| EFC = \$1 - \$2,540 (n=3,022)          | \$900                          | \$1,124 | 2,596  | \$400                          | 2,564  | \$1,735    | 894    |               | 0     | \$910                        | 1,058  |
| EFC = \$2,541 - \$5,081 (n=2,206)      | \$300                          | \$971   | 1,940  | \$300                          | 1,918  | \$1,335    | 810    |               | 0     | \$910                        | 806    |
| EFC = \$5,082 - \$10,000 (n=3,507)     | \$1,500                        | \$1,396 | 1,364  |                                | 0      | \$1,500    | 1,344  |               | 0     | \$910                        | 1,147  |
| EFC = Over \$10,000 (n=9,172)          | \$1,000                        | \$1,208 | 828    |                                | 0      | \$1,000    | 821    |               | 0     | \$910                        | 371    |
| <b>Community Colleges (n=12,638)</b>   | \$800                          | \$1,038 | 7,740  | \$800                          | 6,443  | \$740      | 3,185  |               | 0     | \$288                        | 5,432  |
| EFC = 0 (n=6,154)                      | \$800                          | \$902   | 4,562  | \$800                          | 4,132  | \$400      | 1,277  |               | 0     | \$250                        | 2,901  |
| EFC = \$1 - \$2,540 (n=2,129)          | \$728                          | \$859   | 1,640  | \$400                          | 1,461  | \$739      | 742    |               | 0     | \$300                        | 1,090  |
| EFC = \$2,541 - \$5,081 (n=1,300)      | \$1,300                        | \$1,422 | 1,016  | \$300                          | 850    | \$1,525    | 659    |               | 0     | \$325                        | 762    |
| EFC = \$5,082 - \$10,000 (n=1,389)     | \$2,035                        | \$2,070 | 492    |                                | 0      | \$2,048    | 482    |               | 0     | \$300                        | 581    |
| EFC = Over \$10,000 (n=1,666)          | \$963                          | \$1,509 | 30     |                                | 0      | \$850      | 25     |               | 0     | \$216                        | 98     |
| <b>Total (n=101,786)</b>               | \$1,200                        | \$1,455 | 45,348 | \$800                          | 37,890 | \$900      | 16,180 | \$2,400       | 7,645 | \$900                        | 17,228 |

Source: Massachusetts Office of Student Financial Assistance (OSFA) Database.

Notes: Data is for MA residents at MA institutions. Data from fall and spring semesters only. Only students who applied for aid and enrolled full-time for both fall and spring semesters in FY2014 are included. Full-time students with EFCs below \$5,082 are eligible for the Pell Grant, so the first three EFC bands are for Pell-eligible students. Quinsigamond Community College and Roxbury Community College are excluded from the analysis because data for these institutions were not available. Some state need-based aid programs do not have an EFC cut-off (ex. Herter Scholarship, Lindsay, DCF, etc.); students are eligible for these programs if they demonstrate positive financial need, which is defined as total cost of attendance minus EFC.

**Table B.2: Massachusetts Need-Based Aid Programs, FY2014: Students Enrolled Part-Time in Fall 2013**

|                                       | All State<br>Need-based Grants |         |        | Select State Need-Based Grants |       |            |       |               |    | Need-based<br>Tuition Waiver |       |
|---------------------------------------|--------------------------------|---------|--------|--------------------------------|-------|------------|-------|---------------|----|------------------------------|-------|
|                                       | Median                         | Mean    | #      | MASS Grant                     |       | Cash Grant |       | Gilbert Grant |    | Median                       | #     |
|                                       |                                |         |        | Median                         | #     | Median     | #     | Median        | #  |                              |       |
| <b>Private Institutions (n=7,109)</b> | \$350                          | \$461   | 600    | \$300                          | 244   | 0          |       | \$1,113       | 21 | 0                            |       |
| EFC = 0 (n=3,006)                     | \$400                          | \$493   | 378    | \$800                          | 136   | 0          |       | \$1,113       | 9  | 0                            |       |
| EFC = \$1 - \$2,250 (n=938)           | \$300                          | \$411   | 113    | \$250                          | 54    | 0          |       | \$1,225       | 4  | 0                            |       |
| EFC = \$2,251 - \$4,500 (n=710)       | \$300                          | \$370   | 92     | \$150                          | 49    | 0          |       | \$1,000       | 4  | 0                            |       |
| EFC = \$4,501 - \$10,000 (n=1,163)    | \$275                          | \$463   | 12     | \$150                          | 5     | 0          |       | \$2,500       | 1  | 0                            |       |
| EFC = Over \$10,000 (n=1,292)         | \$500                          | \$826   | 5      |                                | 0     | 0          |       | \$600         | 3  | 0                            |       |
| <b>UMass Campuses (n=3,430)</b>       | \$600                          | \$621   | 661    | \$600                          | 210   | \$650      | 297   | 0             |    | \$500                        | 541   |
| EFC = 0 (n=1,138)                     | \$600                          | \$654   | 465    | \$600                          | 124   | \$600      | 206   | 0             |    | \$430                        | 303   |
| EFC = \$1 - \$2,250 (n=545)           | \$350                          | \$494   | 92     | \$250                          | 56    | \$750      | 23    | 0             |    | \$501                        | 108   |
| EFC = \$2,251 - \$4,500 (n=380)       | \$450                          | \$478   | 53     | \$150                          | 24    | \$625      | 25    | 0             |    | \$601                        | 56    |
| EFC = \$4,501 - \$10,000 (n=630)      | \$750                          | \$687   | 47     | \$150                          | 6     | \$750      | 40    | 0             |    | \$672                        | 66    |
| EFC = Over \$10,000 (n=737)           | \$875                          | \$813   | 4      |                                | 0     | \$800      | 3     | 0             |    | \$700                        | 8     |
| <b>State Universities (n=2,702)</b>   | \$450                          | \$617   | 413    | \$450                          | 171   | \$1,078    | 116   | 0             |    | \$489                        | 186   |
| EFC = 0 (n=879)                       | \$450                          | \$599   | 203    | \$450                          | 90    | \$1,500    | 33    | 0             |    | \$455                        | 72    |
| EFC = \$1 - \$2,250 (n=405)           | \$409                          | \$589   | 92     | \$200                          | 44    | \$1,500    | 20    | 0             |    | \$530                        | 33    |
| EFC = \$2,251 - \$4,500 (n=296)       | \$225                          | \$499   | 65     | \$150                          | 31    | \$777      | 19    | 0             |    | \$590                        | 33    |
| EFC = \$4,501 - \$10,000 (n=496)      | \$750                          | \$882   | 44     | \$150                          | 6     | \$1,030    | 35    | 0             |    | \$542                        | 40    |
| EFC = Over \$10,000 (n=626)           | \$950                          | \$878   | 9      |                                | 0     | \$950      | 9     | 0             |    | \$362                        | 8     |
| <b>Community Colleges (n=22,333)</b>  | \$400                          | \$595   | 8,327  | \$400                          | 1,371 | \$324      | 6,271 | 0             |    | \$168                        | 6,313 |
| EFC = 0 (n=12,521)                    | \$275                          | \$334   | 4,675  | \$400                          | 954   | \$196      | 3,075 | 0             |    | \$150                        | 3,659 |
| EFC = \$1 - \$2,250 (n=3,295)         | \$400                          | \$534   | 1,450  | \$250                          | 260   | \$325      | 1,128 | 0             |    | \$175                        | 1,087 |
| EFC = \$2,251 - \$4,500 (n=2,116)     | \$877                          | \$1,025 | 1,149  | \$150                          | 132   | \$850      | 1,044 | 0             |    | \$175                        | 700   |
| EFC = \$4,501 - \$10,000 (n=2,608)    | \$1,200                        | \$1,359 | 997    | \$150                          | 25    | \$1,200    | 971   | 0             |    | \$216                        | 816   |
| EFC = Over \$10,000 (n=1,793)         | \$1,642                        | \$1,499 | 56     |                                | 0     | \$1,672    | 53    | 0             |    | \$200                        | 51    |
| <b>Total (n=35,574)</b>               | \$400                          | \$589   | 10,001 | \$400                          | 1,996 | \$350      | 6,684 | \$1,113       | 21 | \$192                        | 7,040 |

Source: Massachusetts Office of Student Financial Assistance (OSFA) Database.

Notes: Data is for MA residents at MA institutions from fall and spring semesters only. Only students who applied for aid and enrolled part-time in the fall semester FY14 are included, but the aid amounts reflect the total received 2013-14 regardless of enrollment intensity in the spring or if the student stopped out. Part-time students with EFCs below \$4,501 are eligible for the Pell Grant, so the first three EFC bands are for Pell-eligible students. (For Full-time students, the EFC cutoff for Pell eligibility is higher.) Quinsigamond Community College and Roxbury Community College are excluded from the analysis because data for these institutions were not available.

**Table B.3: Receipt of Major Need-Based Aid Programs by Full-Time, Full-Year Students, FY2014**  
**First-time Students**

|                                  | All State Need-based Grants |                |              | Selected State Need-Based Grants |              |                            |              | Need-based Tuition Waiver |              |
|----------------------------------|-----------------------------|----------------|--------------|----------------------------------|--------------|----------------------------|--------------|---------------------------|--------------|
|                                  | Median Award                | Average        | #            | MASS Grant<br>Median Award       | #            | Cash Grant<br>Median Award | #            | Median Award              | #            |
| UMass Campuses (n=6,294)         | \$1,300                     | \$1,540        | 2,618        | \$1,200                          | 2,154        | \$1,000                    | 2,179        | \$1,400                   | 1253         |
| EFC = 0 (n=1,063)                | \$1,700                     | \$2,058        | 1,007        | \$1,200                          | 995          | \$1,000                    | 800          | \$1,400                   | 547          |
| EFC = \$1 - \$2,540 (n=725)      | \$1,200                     | \$1,349        | 700          | \$400                            | 693          | \$500                      | 552          | \$1,400                   | 322          |
| EFC = \$2,541 - \$5,081 (n=496)  | \$800                       | \$1,175        | 468          | \$300                            | 466          | \$500                      | 390          | \$1,000                   | 163          |
| EFC = \$5,082 - \$10,000 (n=853) | \$1,000                     | \$1,054        | 427          |                                  | 0            | \$1,000                    | 425          | \$1,000                   | 199          |
| EFC = Over \$10,000 (n=3,157)    | \$1,000                     | \$915          | 16           |                                  | 0            | \$505                      | 12           | \$1,000                   | 22           |
| State Universities (n=4,778)     | \$1,000                     | \$1,382        | 2,406        | \$675                            | 1,763        | \$1,500                    | 1,520        | \$910                     | 1205         |
| EFC = 0 (n=862)                  | \$1,500                     | \$1,690        | 808          | \$900                            | 802          | \$1,500                    | 403          | \$910                     | 351          |
| EFC = \$1 - \$2,540 (n=570)      | \$950                       | \$1,251        | 539          | \$400                            | 534          | \$1,500                    | 271          | \$910                     | 272          |
| EFC = \$2,541 - \$5,081 (n=457)  | \$970                       | \$1,058        | 433          | \$300                            | 427          | \$1,182                    | 224          | \$970                     | 200          |
| EFC = \$5,082 - \$10,000 (n=726) | \$1,080                     | \$1,354        | 376          |                                  | 0            | \$1,080                    | 373          | \$910                     | 278          |
| EFC = Over \$10,000 (n=2,163)    | \$1,000                     | \$1,279        | 250          |                                  | 0            | \$1,000                    | 249          | \$970                     | 104          |
| Community Colleges (n=3,794)     | \$800                       | \$996          | 2,206        | \$800                            | 1,840        | \$755                      | 871          | \$288                     | 1551         |
| EFC = 0 (n=1,755)                | \$800                       | \$895          | 1,251        | \$800                            | 1,130        | \$375                      | 340          | \$240                     | 753          |
| EFC = \$1 - \$2,540 (n=647)      | \$610                       | \$790          | 487          | \$500                            | 450          | \$750                      | 199          | \$300                     | 348          |
| EFC = \$2,541 - \$5,081 (n=403)  | \$1,200                     | \$1,277        | 317          | \$300                            | 260          | \$1,500                    | 187          | \$360                     | 244          |
| EFC = \$5,082 - \$10,000 (n=409) | \$1,500                     | \$1,971        | 137          |                                  | 0            | \$1,550                    | 134          | \$288                     | 174          |
| EFC = Over \$10,000 (n=580)      | \$800                       | \$1,295        | 14           |                                  | 0            | \$800                      | 11           | \$196                     | 32           |
| <b>Total (n=14,866)</b>          | <b>\$1,000</b>              | <b>\$1,321</b> | <b>7,230</b> | <b>\$800</b>                     | <b>5,757</b> | <b>\$1,000</b>             | <b>4,570</b> | <b>\$848</b>              | <b>4,009</b> |

Source: Massachusetts Office of Student Financial Assistance Database & HEIRS II Enrollment Datafile

Notes: Data is for MA residents at MA institutions. Data from fall and spring semesters only. The table summarizes Massachusetts' largest state need-based aid programs for 14,866 student-records, or 93.02% of the relevant student-records obtained from the Office of Student Financial Assistance and the Department of Higher Education HEIRS II Database. Only students who applied for aid and enrolled full-time for both fall and spring semesters in FY14 and who enrolled as a first-time degree-seeking undergraduate in Fall 2013 are included. Full-time students with EFCs below \$5,082 are eligible for the Pell Grant, so the first three EFC bands are for Pell-eligible students. Quinsigamond Community College and Roxbury Community College are excluded from the analysis because data for these institutions were not available. State need-based grants include all need-based grants programs offered by the Commonwealth of Massachusetts.

**Table B.4: Receipt of Major Need-Based Aid Programs by Full-Time, Full-Year Students, FY2014**  
***Continuing Students***

|                                    | All State<br>Need-based Grants |         |        | Selected State Need-Based Grants |        |                 |       | Need-based<br>Tuition Waiver |        |
|------------------------------------|--------------------------------|---------|--------|----------------------------------|--------|-----------------|-------|------------------------------|--------|
|                                    | Median<br>Award                | Average | #      | Median<br>Award                  | #      | Median<br>Award | #     | Median<br>Award              | #      |
| UMass Campuses (n=18,534)          | \$1,200                        | \$1,232 | 7,949  | \$1,200                          | 6,841  | \$500           | 5,084 | \$1,144                      | 5,114  |
| EFC = 0 (n=3,792)                  | \$1,700                        | \$1,744 | 3,330  | \$1,200                          | 3,161  | \$500           | 2,083 | \$1,144                      | 2,278  |
| EFC = \$1 - \$2,540 (n=2,641)      | \$900                          | \$1,003 | 2,354  | \$500                            | 2,260  | \$500           | 1,354 | \$1,360                      | 1,431  |
| EFC = \$2,541 - \$5,081 (n=1,664)  | \$800                          | \$713   | 1,476  | \$300                            | 1,420  | \$500           | 892   | \$1,358                      | 717    |
| EFC = \$5,082 - \$10,000 (n=2,620) | \$500                          | \$718   | 771    |                                  | 0      | \$500           | 747   | \$1,000                      | 616    |
| EFC = Over \$10,000 (n=7,817)      | \$1,000                        | \$1,089 | 18     |                                  | 0      | \$1,050         | 8     | \$1,000                      | 72     |
| State Universities (n=13,412)      | \$900                          | \$1,269 | 6,102  | \$900                            | 4,846  | \$1,500         | 2,732 | \$910                        | 2,775  |
| EFC = 0 (n=2,627)                  | \$900                          | \$1,478 | 2,225  | \$900                            | 2,186  | \$1,800         | 597   | \$910                        | 802    |
| EFC = \$1 - \$2,540 (n=1,857)      | \$665                          | \$1,116 | 1,559  | \$400                            | 1,535  | \$1,800         | 509   | \$910                        | 641    |
| EFC = \$2,541 - \$5,081 (n=1,310)  | \$300                          | \$990   | 1,136  | \$300                            | 1,125  | \$1,500         | 463   | \$970                        | 476    |
| EFC = \$5,082 - \$10,000 (n=2,133) | \$1,500                        | \$1,434 | 765    |                                  | 0      | \$1,500         | 751   | \$910                        | 668    |
| EFC = Over \$10,000 (n=5,485)      | \$1,000                        | \$1,181 | 417    |                                  | 0      | \$1,000         | 412   | \$910                        | 188    |
| Community Colleges (n=5,924)       | \$800                          | \$1,071 | 3,910  | \$800                            | 3,273  | \$775           | 1,603 | \$288                        | 2,685  |
| EFC = 0 (n=2,919)                  | \$800                          | \$907   | 2,313  | \$800                            | 2,119  | \$400           | 608   | \$264                        | 1,436  |
| EFC = \$1 - \$2,540 (n=1,003)      | \$800                          | \$919   | 815    | \$400                            | 728    | \$775           | 389   | \$300                        | 519    |
| EFC = \$2,541 - \$5,081 (n=618)    | \$1,402                        | \$1,489 | 499    | \$300                            | 426    | \$1,642         | 331   | \$312                        | 379    |
| EFC = \$5,082 - \$10,000 (n=664)   | \$2,214                        | \$2,127 | 272    |                                  | 0      | \$2,228         | 265   | \$300                        | 301    |
| EFC = Over \$10,000 (n=720)        | \$1,000                        | \$1,490 | 11     |                                  | 0      | \$963           | 10    | \$216                        | 50     |
| Total (n=37,870)                   | \$900                          | \$1,209 | 17,961 | \$800                            | 14,960 | \$775           | 9,419 | \$910                        | 10,574 |

Source: Massachusetts Office of Student Financial Assistance Database & HEIRS II Enrollment Datafile

Notes: Data is for MA residents at MA institutions. Data from fall and spring semesters only. The table summarizes Massachusetts' largest state need-based aid programs for 37,870 student-records, or 93.57% of the relevant student-records obtained from the Office of Student Financial Assistance and the Department of Higher Education HEIRS II Database. Only students who applied for aid and enrolled full-time for both fall and spring semesters in FY14 and who enrolled as a continuing degree-seeking undergraduate in Fall 2013 are included. Full-time students with EFCs below \$5,082 are eligible for the Pell Grant, so the first three EFC bands are for Pell-eligible students. Quinsigamond Community College and Roxbury Community College are excluded from the analysis because data for these institutions were not available. State need-based grants include all need-based grants programs offered by the Commonwealth of Massachusetts.

**APPENDIX C: UNMET FINANCIAL NEED**

**Table C.1: Educational Costs, Need- and Merit-Based Aid Awards, and Unmet Need, FY2014**  
**Full-time, Full-Year Students**

|                                      | MEDIAN EDUC. COSTS | MEDIAN NEED | GOVERNMENT AID AWARDS |         |                                |         |                                  |         | MEDIAN UNMET NEED |                      |  |  |
|--------------------------------------|--------------------|-------------|-----------------------|---------|--------------------------------|---------|----------------------------------|---------|-------------------|----------------------|--|--|
|                                      |                    |             | Federal Grants        |         | State Grants & Tuition Waivers |         | Institutional and Outside Grants |         | % Rcvd            | After Federal Grants | After Federal and State Grants/Waivers | After All Grants/Waivers (incl. Instit. & Outside) |
|                                      |                    |             | %                     | Median  | %                              | Median  | %                                | Median  |                   |                      |  |  |
| <b>UMass Campuses (n=27,432)</b>     | \$26,098           | \$16,441    | 41.7%                 | \$5,645 | 68.3%                          | \$1,714 | 65.0%                            | \$4,933 | 81.5%             | \$16,498             | \$14,949                               | \$9,777  |
| EFC = 0 (n=5,570)                    | \$26,084           | \$26,084    | 97.5%                 | \$6,045 | 93.1%                          | \$2,901 | 84.4%                            | \$4,782 | 99.2%             | \$20,053             | \$16,953                               | \$11,676   |
| EFC = \$1-\$2,540 (n=3,752)          | \$26,098           | \$24,623    | 98.4%                 | \$4,895 | 93.7%                          | \$2,200 | 85.2%                            | \$5,895 | 99.4%             | \$20,043             | \$17,521                               | \$11,189   |
| EFC = \$2,541-\$5,081 (n=2,412)      | \$26,098           | \$22,041    | 96.6%                 | \$2,095 | 93.2%                          | \$1,754 | 86.2%                            | \$6,100 | 98.9%             | \$20,075             | \$17,895                               | \$11,107   |
| EFC = \$5,082-\$10,000 (n=3,862)     | \$26,098           | \$18,043    | 0.0%                  | \$3,964 | 64.4%                          | \$1,714 | 85.9%                            | \$5,423 | 91.3%             | \$18,172             | \$17,095                               | \$11,196   |
| EFC = Over \$10,000 (n=11,836)       | \$26,098           | \$346       | 0.0%                  |         | 44.8%                          | \$1,714 | 38.4%                            | \$2,018 | 60.7%             | \$2,237              | \$805                                  | (\$1,166)  |
| <b>State Universities (n=22,402)</b> | \$21,804           | \$12,944    | 42.7%                 | \$5,595 | 62.7%                          | \$1,270 | 41.3%                            | \$1,500 | 72.2%             | \$13,752             | \$11,470                               | \$10,551   |
| EFC = 0 (n=4,495)                    | \$21,804           | \$21,804    | 97.9%                 | \$5,645 | 88.4%                          | \$1,810 | 49.1%                            | \$1,800 | 98.7%             | \$16,159             | \$13,277                               | \$11,713   |
| EFC = \$1-\$2,540 (n=3,022)          | \$21,804           | \$20,538    | 98.5%                 | \$4,695 | 88.7%                          | \$1,385 | 49.5%                            | \$1,900 | 98.8%             | \$15,707             | \$13,619                               | \$11,999   |
| EFC = \$2,541-\$5,081 (n=2,206)      | \$21,296           | \$17,703    | 98.0%                 | \$2,095 | 90.1%                          | \$1,270 | 57.5%                            | \$1,900 | 98.5%             | \$15,629             | \$13,626                               | \$11,789   |
| EFC = \$5,082-\$10,000 (n=3,507)     | \$21,296           | \$13,426    | 0.1%                  | \$3,964 | 63.4%                          | \$1,500 | 56.1%                            | \$1,068 | 74.9%             | \$13,773             | \$12,017                               | \$10,779   |
| EFC = Over \$10,000 (n=9,172)        | \$21,353           | \$20        | 0.2%                  | \$3,964 | 34.6%                          | \$970   | 25.3%                            | \$1,000 | 43.1%             | \$2,850              | \$1,765                                | \$806  |
| <b>Community Colleges (n=12,638)</b> | \$13,956           | \$12,848    | 73.8%                 | \$5,645 | 75.6%                          | \$872   | 20.3%                            | \$775   | 87.3%             | \$8,111              | \$7,347                                | \$7,224  |
| EFC = 0 (n=6,154)                    | \$14,656           | \$14,254    | 97.4%                 | \$5,645 | 85.5%                          | \$872   | 15.8%                            | \$400   | 99.2%             | \$9,368              | \$8,311                                | \$8,225  |
| EFC = \$1-\$2,540 (n=2,129)          | \$13,606           | \$12,796    | 98.0%                 | \$4,694 | 86.9%                          | \$885   | 16.0%                            | \$745   | 98.6%             | \$7,998              | \$7,301                                | \$7,193  |
| EFC = \$2,541-\$5,081 (n=1,300)      | \$13,768           | \$9,985     | 96.2%                 | \$1,995 | 88.4%                          | \$1,256 | 39.6%                            | \$1,000 | 97.8%             | \$7,964              | \$6,819                                | \$6,676  |
| EFC = \$5,082-\$10,000 (n=1,389)     | \$13,390           | \$6,633     | 0.3%                  | \$450   | 63.4%                          | \$971   | 41.4%                            | \$1,000 | 76.1%             | \$6,793              | \$5,524                                | \$4,868  |
| EFC = Over \$10,000 (n=1,666)        | \$12,856           | \$0         | 0.0%                  |         | 24.5%                          | \$600   | 9.5%                             | \$1,000 | 30.0%             | (\$1,339)            | (\$1,970)                              | (\$2,457)  |

Continued on the next page.

**Table C.1: Educational Costs, Need- and Merit-Based Aid Awards, and Unmet Need, FY2014 – Continued**  
**Full-time, Full-Year Students**

|                                  | MEDIAN EDUC. COSTS | MEDIAN NEED | GOVERNMENT AID AWARDS |              |                                |              |                                  |              | MEDIAN UNMET NEED<br><i>Sample: Received any Grant or Waiver</i> |                      |  |  |
|----------------------------------|--------------------|-------------|-----------------------|--------------|--------------------------------|--------------|----------------------------------|--------------|--|----------------------|--|--|
|                                  |                    |             | Federal Grants        |              | State Grants & Tuition Waivers |              | Institutional and Outside Grants |              | % Rcvd   | After Federal Grants | After Federal and State Grants/Waivers | After All Grants/Waivers<br><i>(incl. Instit. &amp; Outside)</i> |
|                                  |                    |             | %                     | Median Award | %                              | Median Award | %                                | Median Award |  |                      |  |  |
| Private Institutions (n=39,314)  | \$48,770           | \$36,305    | 39.6%                 | \$5,595      | 38.9%                          | \$1,600      | 72.3%                            | \$15,250     | 85.6%  | \$35,744             | \$34,977                               | \$18,042   |
| EFC = 0 (n=8,021)                | \$45,476           | \$44,440    | 90.4%                 | \$5,645      | 76.7%                          | \$1,600      | 66.3%                            | \$14,261     | 98.9%  | \$39,992             | \$37,423                               | \$22,899   |
| EFC = \$1-\$2,540 (n=5,318)      | \$46,810           | \$45,706    | 95.8%                 | \$5,095      | 86.8%                          | \$1,600      | 73.5%                            | \$16,000     | 99.6%  | \$41,031             | \$39,865                               | \$23,247   |
| EFC = \$2,541-\$5,081 (n=3,284)  | \$47,160           | \$43,511    | 94.8%                 | \$2,195      | 87.0%                          | \$300        | 74.1%                            | \$16,700     | 99.0%  | \$41,412             | \$40,746                               | \$23,707   |
| EFC = \$5,082-\$10,000 (n=4,662) | \$48,588           | \$41,072    | 0.7%                  | \$1,350      | 21.3%                          | \$2,400      | 76.8%                            | \$18,000     | 81.0%  | \$41,047             | \$40,622                               | \$21,077   |
| EFC = Over \$10,000 (n=18,029)   | \$50,916           | \$24,927    | 0.3%                  | \$3,760      | 3.7%                           | \$2,400      | 73.2%                            | \$14,680     | 74.2%  | \$26,262             | \$26,207                               | \$9,506  |
| Total (n=101,786)                | \$26,098           | \$18,480    | 45,898                | \$5,645      | 56.6%                          | \$1,600      | 57.1%                            | \$6,900      | 81.7%  | \$17,512             | \$16,116                               | \$11,163   |

Source: Massachusetts Office of Student Financial Assistance (OSFA) Database.

Notes: Notes: Data is for MA residents at MA institutions. Data from fall and spring semesters only. Only students who applied for aid and enrolled full-time for both fall and spring semesters in FY14 are included. Median educational costs and median financial need are calculated across all students in the dataset, regardless of aid receipt. Median government aid awards and unmet financial need are calculated for students who received a grant and/or tuition waiver. Full-time students with EFCs below \$5,082 are eligible for the Pell Grant, so the first three EFC bands are for Pell-eligible students. Quinsigamond Community College and Roxbury Community College are excluded from the analysis because data for these institutions were not available.

**Table C.2: Educational Costs, Financial Need and Unmet Need for Full-Time, Full-Year Students Attending a MA Public Institution in FY2014: First-Time Students**

|                                     | MEDIAN EDUC. COSTS | MEDIAN NEED | GOVERNMENT AID AWARDS |              |                                |              |                                |              | MEDIAN UNMET NEED |                      |  |  |
|-------------------------------------|--------------------|-------------|-----------------------|--------------|--------------------------------|--------------|--------------------------------|--------------|-------------------|----------------------|--|--|
|                                     |                    |             | Federal Grants        |              | State Grants & Tuition Waivers |              | Institutional & Outside Grants |              | #                 | After Federal Grants | After Federal and State Grants/Waivers | After All Grants/Waivers (incl. Instit. & Outside) |
|                                     |                    |             | #                     | Median Award | #                              | Median Award | #                              | Median Award |                   |                      |  |  |
| <b>UMass Campuses (n=6,294)</b>     | \$26,098           | \$13,955    | 2,266                 | \$5,645      | 4,749                          | \$1,714      | 4,401                          | \$5,000      | 5,425             | \$14,084             | \$12,523                               | \$7,169  |
| EFC = 0 (n=1,063)                   | \$25,720           | \$25,720    | 1,055                 | \$6,045      | 1,034                          | \$3,100      | 976                            | \$5,000      | 1,063             | \$19,439             | \$15,829                               | \$9,763  |
| EFC = \$1 - \$2,540 (n=725)         | \$25,754           | \$24,515    | 721                   | \$4,895      | 712                            | \$2,514      | 681                            | \$6,000      | 725               | \$20,026             | \$17,002                               | \$10,156   |
| EFC = \$2,541 - \$5,081 (n=496)     | \$26,091           | \$22,012    | 490                   | \$2,145      | 482                            | \$2,514      | 469                            | \$6,895      | 495               | \$20,060             | \$17,539                               | \$10,066   |
| EFC = \$5,082 - \$10,000 (n=853)    | \$26,084           | \$17,979    | 0                     |              | 709                            | \$1,714      | 780                            | \$5,784      | 820               | \$18,055             | \$16,199                               | \$9,947  |
| EFC = Over \$10,000 (n=3,157)       | \$26,098           | \$0         | 0                     |              | 1,812                          | \$1,714      | 1,495                          | \$2,500      | 2,322             | \$1,174              | \$(128)                                | \$(1,990)  |
| <b>State Universities (n=4,778)</b> | \$22,804           | \$12,492    | 1,883                 | \$5,595      | 3,260                          | \$1,563      | 2,424                          | \$1,700      | 3,661             | \$13,901             | \$11,286                               | \$10,099   |
| EFC = 0 (n=862)                     | \$22,804           | \$22,804    | 858                   | \$5,745      | 826                            | \$2,470      | 512                            | \$1,900      | 861               | \$16,687             | \$13,177                               | \$11,713   |
| EFC = \$1 - \$2,540 (n=570)         | \$22,804           | \$21,207    | 568                   | \$4,695      | 551                            | \$1,970      | 381                            | \$1,900      | 569               | \$16,675             | \$14,049                               | \$12,450   |
| EFC = \$2,541 - \$5,081 (n=457)     | \$21,296           | \$18,073    | 454                   | \$2,095      | 442                            | \$1,598      | 350                            | \$2,106      | 455               | \$15,612             | \$13,885                               | \$11,688   |
| EFC = \$5,082 - \$10,000 (n=726)    | \$21,296           | \$14,152    | 1                     | \$1,982      | 560                            | \$1,615      | 478                            | \$1,500      | 633               | \$14,231             | \$12,187                               | \$10,874   |
| EFC = Over \$10,000 (n=2,163)       | \$22,804           | \$334       | 2                     | \$3,964      | 881                            | \$970        | 703                            | \$1,000      | 1,143             | \$2,596              | \$1,719                                | \$833  |
| <b>Community Colleges (n=3,794)</b> | \$12,858           | \$11,624    | 2,773                 | \$5,645      | 2,795                          | \$800        | 716                            | \$900        | 3,332             | \$7,243              | \$6,723                                | \$6,582  |
| EFC = 0 (n=1,755)                   | \$13,390           | \$13,390    | 1,735                 | \$5,645      | 1,432                          | \$855        | 214                            | \$500        | 1,750             | \$7,745              | \$7,211                                | \$7,147  |
| EFC = \$1 - \$2,540 (n=647)         | \$12,858           | \$12,160    | 646                   | \$4,664      | 562                            | \$843        | 98                             | \$591        | 646               | \$7,253              | \$6,894                                | \$6,856  |
| EFC = \$2,541 - \$5,081 (n=403)     | \$12,856           | \$9,375     | 391                   | \$1,995      | 363                            | \$1,125      | 168                            | \$1,010      | 399               | \$7,221              | \$6,375                                | \$6,293  |
| EFC = \$5,082 - \$10,000 (n=409)    | \$12,858           | \$6,147     | 1                     | \$104        | 264                            | \$850        | 176                            | \$1,000      | 328               | \$6,360              | \$5,117                                | \$4,558  |
| EFC = Over \$10,000 (n=580)         | \$12,856           | \$0         | 0                     |              | 174                            | \$600        | 60                             | \$1,000      | 209               | \$(3,041)            | \$(3,299)                              | \$(3,903)  |
| <b>Total (n=14,866)</b>             | \$22,804           | \$12,480    | 6,922                 | \$5,645      | 10,804                         | \$1,700      | 7,541                          | \$3,000      | 12,418            | \$11,167             | \$9,749                                | \$7,444  |

Source: Massachusetts Office of Student Financial Assistance Database & HEIRS II Enrollment Datafile

Notes: Data is for MA residents at MA institutions. Data from fall and spring semesters only. The table summarizes Massachusetts' largest state need-based aid programs for 14,866 student-records, or 93.02% of the relevant student-records obtained from the Office of Student Financial Assistance and the Department of Higher Education HEIRS II Database. Only students who applied for aid and enrolled full-time for both fall and spring semesters in FY14 and who enrolled as a first-time degree-seeking undergraduate in Fall 2013 are included. Full-time students with EFCs below \$5,082 are eligible for the Pell Grant, so the first three EFC bands are for Pell-eligible students. Quinsigamond Community College and Roxbury Community College are excluded from the analysis because data for these institutions were not available.

**Table C.3: Educational Costs, Financial Need and Unmet Need for Full-Time, Full-Year Students Attending a MA Public Institution in FY2014: Continuing Students**

|                                      | MEDIAN EDUC. COSTS | MEDIAN NEED | GOVERNMENT AID AWARDS |              |                                |              |                                |              | MEDIAN UNMET NEED<br><i>Sample: Received any Grant or Waiver</i> |                      |  |  |
|--------------------------------------|--------------------|-------------|-----------------------|--------------|--------------------------------|--------------|--------------------------------|--------------|--|----------------------|--|--|
|                                      |                    |             | Federal Grants        |              | State Grants & Tuition Waivers |              | Institutional & Outside Grants |              | #  | After Federal Grants | After Federal and State Grants/Waivers | After All Grants/Waivers<br><i>(incl. Instit. &amp; Outside)</i> |
|                                      |                    |             | #                     | Median Award | #                              | Median Award | #                              | Median Award |  |                      |  |  |
| <b>UMass Campuses (n=18,534)</b>     | \$26,098           | \$16,666    | 7,906                 | \$5,645      | 12,427                         | \$1,714      | 11,988                         | \$4,873      | 14,888   | \$17,124             | \$15,711                               | \$10,269   |
| EFC = 0 (n=3,792)                    | \$26,098           | \$26,098    | 3,692                 | \$5,645      | 3,538                          | \$2,830      | 3,241                          | \$4,439      | 3,765  | \$20,053             | \$16,953                               | \$12,355   |
| EFC = \$1 - \$2,540 (n=2,641)        | \$26,098           | \$24,683    | 2,605                 | \$4,895      | 2,472                          | \$2,200      | 2,270                          | \$5,867      | 2,628  | \$20,054             | \$17,615                               | \$11,686   |
| EFC = \$2,541 - \$5,081 (n=1,664)    | \$26,098           | \$22,017    | 1,608                 | \$2,095      | 1,552                          | \$1,710      | 1,428                          | \$6,000      | 1,647  | \$20,083             | \$17,951                               | \$11,486   |
| EFC = \$5,082 - \$10,000 (n=2,620)   | \$26,098           | \$18,053    | 1                     | \$3,964      | 1,588                          | \$1,676      | 2,255                          | \$5,310      | 2,391  | \$18,208             | \$17,282                               | \$11,684   |
| EFC = Over \$10,000 (n=7,817)        | \$26,098           | \$494       | 0                     |              | 3,277                          | \$1,714      | 2,794                          | \$2,000      | 4,457  | \$2,407              | \$832                                  | \$(-1,126)   |
| <b>State Universities (n=13,412)</b> | \$21,296           | \$12,595    | 5,710                 | \$5,595      | 8,212                          | \$1,210      | 5,505                          | \$1,500      | 9,594  | \$13,515             | \$11,403                               | \$10,296   |
| EFC = 0 (n=2,627)                    | \$21,804           | \$21,804    | 2,578                 | \$5,645      | 2,308                          | \$1,692      | 1,337                          | \$1,800      | 2,604  | \$15,987             | \$13,340                               | \$11,600   |
| EFC = \$1 - \$2,540 (n=1,857)        | \$21,296           | \$20,251    | 1,833                 | \$4,695      | 1,619                          | \$1,370      | 884                            | \$1,900      | 1,840  | \$15,648             | \$13,322                               | \$11,844   |
| EFC = \$2,541 - \$5,081 (n=1,310)    | \$21,296           | \$17,506    | 1,283                 | \$2,095      | 1,164                          | \$1,270      | 726                            | \$1,900      | 1,289  | \$15,605             | \$13,330                               | \$11,601   |
| EFC = \$5,082 - \$10,000 (n=2,133)   | \$21,296           | \$13,145    | 3                     | \$3,964      | 1,316                          | \$1,325      | 1,251                          | \$1,000      | 1,606  | \$13,476             | \$11,895                               | \$10,481   |
| EFC = Over \$10,000 (n=5,485)        | \$21,296           | \$0         | 13                    | \$3,964      | 1,805                          | \$970        | 1,307                          | \$1,000      | 2,255  | \$2,624              | \$1,526                                | \$561  |
| <b>Community Colleges (n=5,924)</b>  | \$13,956           | \$12,856    | 4,405                 | \$5,645      | 4,678                          | \$900        | 1,229                          | \$800        | 5,212  | \$8,311              | \$7,540                                | \$7,449  |
| EFC = 0 (n=2,919)                    | \$16,190           | \$15,410    | 2,822                 | \$5,645      | 2,621                          | \$872        | 489                            | \$475        | 2,899  | \$10,345             | \$9,331                                | \$9,108  |
| EFC = \$1 - \$2,540 (n=1,003)        | \$13,856           | \$12,949    | 986                   | \$4,695      | 898                            | \$950        | 153                            | \$750        | 994  | \$8,212              | \$7,424                                | \$7,281  |
| EFC = \$2,541 - \$5,081 (n=618)      | \$13,856           | \$10,143    | 595                   | \$1,995      | 553                            | \$1,500      | 245                            | \$1,000      | 603  | \$8,149              | \$6,936                                | \$6,843  |
| EFC = \$5,082 - \$10,000 (n=664)     | \$13,856           | \$6,796     | 2                     | \$450        | 442                            | \$1,225      | 276                            | \$1,000      | 516  | \$6,902              | \$5,657                                | \$4,932  |
| EFC = Over \$10,000 (n=720)          | \$12,858           | \$0         | 0                     |              | 164                            | \$600        | 66                             | \$1,000      | 200  | \$(-790)             | \$(-1,342)                             | \$(-1,897)   |
| <b>Total (n=37,870)</b>              | \$22,132           | \$13,895    | 18,021                | \$5,645      | 25,317                         | \$1,600      | 18,722                         | \$3,000      | 29,694   | \$13,435             | \$11,725                               | \$9,811  |

Source: Massachusetts Office of Student Financial Assistance Database & HEIRS II Enrollment Datafile

Notes: Data is for MA residents at MA institutions. Data from fall and spring semesters only. The table summarizes Massachusetts' largest state need-based aid programs for 37,870 student-records, or 93.57% of the relevant student-records obtained from the Office of Student Financial Assistance and the Department of Higher Education HEIRS II Database. Only students who applied for aid and enrolled full-time for both fall and spring semesters in FY14 and who enrolled as a continuing degree-seeking undergraduate in Fall 2013 are included. Full-time students with EFCs below \$5,082 are eligible for the Pell Grant, so the first three EFC bands are for Pell-eligible students. Quinsigamond Community College and Roxbury Community College are excluded from the analysis because data for these institutions were not available.

## APPENDIX D: FINANCIAL AID AND OUTCOMES

**Table D.1: First-Year Persistence and Degree Completion Rates for First-Time, Degree-seeking Undergraduates  
Sample: Aid Applicants Enrolled Full-Time in a Public Institution in Fall 2008**

| <i>Initial Institution</i>                 | UMASS CAMPUSES  |   |                            | STATE UNIVERSITIES |   |                            | COMMUNITY COLLEGES |   |                             |                            |
|--|-----------------|---|----------------------------|--------------------|---|----------------------------|--------------------|---|-----------------------------|----------------------------|
|  | Entering Cohort | One-year Persistence<br>( <i>same inst.</i> ) | 6-Year Bach. Deg. Completn | Entering Cohort    | One-year Persistence<br>( <i>same inst.</i> ) | 6-Year Bach. Deg. Completn | Entering Cohort    | One-year Persistence<br>( <i>same inst.</i> ) | 3-Year Assoc. Deg. Completn | 6-Year Bach. Deg. Completn |
| <b><i>Expected Family Contribution</i></b> |                 |   |                            |                    |   |                            |                    |   |                             |                            |
| EFC = 0                                    | 718             | 85.0%   | 59.1%                      | 537                | 77.5%   | 54.9%                      | 2,432              | 60.3%   | 17.1%                       | 6.7%                       |
| EFC = \$1 - \$2,020                        | 546             | 77.7%   | 61.9%                      | 417                | 77.2%   | 59.5%                      | 996                | 57.93%  | 15.4%                       | 8.0%                       |
| EFC = \$2,021 - \$4,041                    | 422             | 77.7%   | 62.1%                      | 388                | 80.9%   | 61.6%                      | 728                | 58.38%  | 18.8%                       | 10.2%                      |
| EFC = \$4,042 - \$10,000                   | 1,116           | 82.8%   | 65.5%                      | 985                | 79.6%   | 65.0%                      | 1,191              | 64.57%  | 23.2%                       | 12.3%                      |
| EFC = Over \$10,000                        | 3,317           | 87.3%   | 75.6%                      | 2,307              | 84.3%   | 71.0%                      | 1,257              | 68.2%   | 27.2%                       | 16.2%                      |
| <b><i>Race and Ethnicity</i></b>           |                 |   |                            |                    |   |                            |                    |   |                             |                            |
| White                                      | 4,540           | 84.1%   | 71.2%                      | 3,847              | 81.8%   | 67.8%                      | 3,959              | 63.2%   | 23.2%                       | 11.6%                      |
| Female                                     | 2,167           | 85.0%   | 74.9%                      | 2,237              | 82.7%   | 70.0%                      | 2,130              | 64.4%   | 24.5%                       | 11.4%                      |
| Male                                       | 2,373           | 83.2%   | 67.8%                      | 1,610              | 80.6%   | 64.7%                      | 1,827              | 61.9%   | 21.7%                       | 11.9%                      |
| Hispanic/Latino                            | 399             | 84.2%   | 58.4%                      | 252                | 78.6%   | 57.9%                      | 1,185              | 56.7%   | 14.3%                       | 6.6%                       |
| Female                                     | 220             | 86.4%   | 64.1%                      | 154                | 79.2%   | 59.7%                      | 724                | 58.7%   | 14.0%                       | 6.2%                       |
| Male                                       | 179             | 81.6%   | 51.4%                      | 98                 | 77.6%   | 55.1%                      | 461                | 53.6%   | 14.8%                       | 7.2%                       |
| Black/African American                     | 381             | 84.8%   | 59.3%                      | 285                | 84.2%   | 53.7%                      | 894                | 59.3%   | 13.8%                       | 7.4%                       |
| Female                                     | 231             | 83.6%   | 62.8%                      | 178                | 85.4%   | 59.0%                      | 492                | 60.6%   | 14.8%                       | 7.3%                       |
| Male                                       | 150             | 86.7%   | 54.0%                      | 107                | 82.2%   | 44.9%                      | 402                | 57.7%   | 12.4%                       | 7.5%                       |
| Asian/Native Haw./Pac. Isl.                | 564             | 89.7%   | 73.4%                      | 105                | 81.0%   | 65.7%                      | 308                | 73.7%   | 20.1%                       | 13.3%                      |
| Female                                     | 264             | 90.5%   | 79.6%                      | 61                 | 80.3%   | 70.5%                      | 167                | 76.1%   | 20.4%                       | 12.0%                      |
| Male                                       | 300             | 89.0%   | 68.0%                      | 44                 | 81.8%   | 59.1%                      | 141                | 70.9%   | 19.9%                       | 14.9%                      |
| Unknown                                    | 86              | 76.7%   | 54.7%                      | 76                 | 72.4%   | 52.6%                      | 133                | 55.6%   | 14.3%                       | 1.5%                       |
| Two or more races                          | 135             | 91.9%   | 79.3%                      | 61                 | 80.3%   | 67.2%                      | 96                 | 72.9%   | 31.3%                       | 17.7%                      |
| American Indian/<br>Alaska Native          | 15              | 80.0%   | 26.7%                      |                    |   | 42.9%                      | 24                 | 66.7%   | 12.5%                       | 12.5%                      |

*Continued on the next page.*

**Table D: First-Year Persistence and Degree Completion Rates for First-Time, Degree-seeking Undergraduates – Continued**

| <i>Initial Institution</i> | UMASS CAMPUSES  |   |                            | STATE UNIVERSITIES |   |                            | COMMUNITY COLLEGES |   |                             |                            |
|----------------------------|-----------------|---|----------------------------|--------------------|---|----------------------------|--------------------|---|-----------------------------|----------------------------|
|                            | Entering Cohort | One-year Persistence<br>( <i>same inst.</i> ) | 6-Year Bach. Deg. Completn | Entering Cohort    | One-year Persistence<br>( <i>same inst.</i> ) | 6-Year Bach. Deg. Completn | Entering Cohort    | One-year Persistence<br>( <i>same inst.</i> ) | 3-Year Assoc. Deg. Completn | 6-Year Bach. Deg. Completn |
| <b><i>Gender</i></b>       |                 |   |                            |                    |   |                            |                    |   |                             |                            |
| Female                     | 3,005           | 85.5%   | 73.2%                      | 2,708              | 82.5%   | 68.5%                      | 3,640              | 63.2%   | 20.8%                       | 9.9%                       |
| Male                       | 3,115           | 83.9%   | 66.2%                      | 1,926              | 80.2%   | 62.6%                      | 2,962              | 60.5%   | 19.1%                       | 10.4%                      |
| <b><i>Age</i></b>          |                 |   |                            |                    |   |                            |                    |   |                             |                            |
| Less than 18               | 1,429           | 84.5%   | 69.7%                      | 1,063              | 81.6%   | 67.0%                      | 1,179              | 67.1%   | 22.9%                       | 11.4%                      |
| 18-24 year olds            | 4,677           | 84.8%   | 69.7%                      | 3,553              | 81.5%   | 65.9%                      | 4,925              | 61.2%   | 19.3%                       | 10.3%                      |
| 25-34 year olds            | 13              | 76.9%   | 46.2%                      | 13                 | 100.0%  | 53.9%                      | 305                | 57.7%   | 19.3%                       | 6.9%                       |
| 35 and older               |                 |   | 100.0%                     |                    |   | 20.0%                      | 174                | 60.9%   | 23.6%                       | 2.9%                       |
| <b><i>Overall</i></b>      | 6,120           | 84.7%   | 69.6%                      | 4,634              | 81.6%   | 66.0%                      | 6,604              | 62.0%   | 20.1%                       | 10.1%                      |

Source: Massachusetts Office of Student Financial Assistance (OSFA) Database and Massachusetts Department of Education HEIRS II Database.

Note: The table summarizes student outcomes for 17,358 students or 90.48% of first-time undergraduates enrolled full-time in Fall 2008 who also applied for financial aid. Full-time students with EFCs below \$4,618 were eligible for the Pell Grant in FY2008-09, so the first three EFC bands are for Pell-eligible students. Data is for MA residents at MA institutions. Persistence is defined as continued enrollment in Fall 2009 at the same institution. Bachelor's degree completion rates are calculated as the percentage of these students who earned a bachelor's degree within six years, by the institution sector where they initially enrolled. Associate degree completion rates are calculated as the percentage of these students who earned an associate's degree within three years, for students who initially enrolled at a community college.

Quinsigamond Community College and Roxbury Community College are excluded from the analysis because data for these institutions were not available. Totals are inconsistent across characteristics because of missing information. Cells with fewer than 10 observations are not displayed. There are not enough Non-resident Alien students to report and maintain privacy.

**APPENDIX E: OVERLAP BETWEEN AID PROGRAMS**

**Table E.1: Overlap of State Need-based Grant Awards, FY2014**  
***Full-Time, Full-Year Students***

|  | NUMBER RECEIVED |            |                   |               | OVERLAP BETWEEN AID PROGRAMS:          |                                    |                                    |   |   |
|--|-----------------|------------|-------------------|---------------|--|------------------------------------|------------------------------------|---|---|
|  | MASS Grant      | Cash Grant | Need-Based Waiver | Gilbert Grant | % CASH GRANT also Receiving MASS GRANT | % WAIVER also Receiving MASS GRANT | % CASH GRANT also Receiving WAIVER | % CASH GRANT also Receiving MASS GRANT and WAIVER | % GILBERT GRANT also Receiving MASS GRANT |
| <b>UMass Campuses (n=27,432)</b>       | 10,068          | 7,917      | 6,986             | 0             | 79.4%                                  | 78.1%                              | 56.6%                              | 47.3%   |   |
| EFC = 0 (n=5,570)                      | 4,721           | 3,174      | 3,108             | 0             | 94.5%                                  | 90.6%                              | 68.2%                              | 63.9%   |   |
| EFC = \$1-\$2,540 (n=3,752)            | 3,266           | 2,055      | 1,901             | 0             | 95.2%                                  | 92.1%                              | 57.5%                              | 54.4%   |   |
| EFC = \$2,541-\$5,081 (n=2,412)        | 2,081           | 1,390      | 963               | 0             | 95.9%                                  | 92.5%                              | 45.3%                              | 43.2%   |   |
| EFC = \$5,082-\$10,000 (n=3,862)       | 0               | 1,276      | 909               | 0             | 0.0%                                   | 0.0%                               | 38.9%                              | 0.0%  |   |
| EFC = Over \$10,000 (n=11,836)         | 0               | 22         | 105               | 0             | 0.0%                                   | 0.0%                               | 18.2%                              | 0.0%  |   |
| <b>State Universities (n=22,402)</b>   | 8,259           | 5,078      | 4,810             | 0             | 55.6%                                  | 64.9%                              | 62.7%                              | 40.0%   |   |
| EFC = 0 (n=4,495)                      | 3,777           | 1,209      | 1,428             | 0             | 96.2%                                  | 93.4%                              | 72.0%                              | 69.2%   |   |
| EFC = \$1-\$2,540 (n=3,022)            | 2,564           | 894        | 1,058             | 0             | 97.0%                                  | 95.0%                              | 72.7%                              | 70.4%   |   |
| EFC = \$2,541-\$5,081 (n=2,206)        | 1,918           | 810        | 806               | 0             | 98.0%                                  | 96.9%                              | 71.1%                              | 70.0%   |   |
| EFC = \$5,082-\$10,000 (n=3,507)       | 0               | 1,344      | 1,147             | 0             | 0.0%                                   | 0.0%                               | 58.7%                              | 0.0%  |   |
| EFC = Over \$10,000 (n=9,172)          | 0               | 821        | 371               | 0             | 0.0%                                   | 0.0%                               | 36.2%                              | 0.0%  |   |
| <b>Community Colleges (n=12,638)</b>   | 6,443           | 3,185      | 5,432             | 0             | 61.2%                                  | 63.1%                              | 70.0%                              | 42.0%   |   |
| EFC = 0 (n=6,154)                      | 4,132           | 1,277      | 2,901             | 0             | 68.8%                                  | 71.8%                              | 72.4%                              | 47.6%   |   |
| EFC = \$1-\$2,540 (n=2,129)            | 1,461           | 742        | 1,090             | 0             | 77.2%                                  | 73.0%                              | 68.1%                              | 51.3%   |   |
| EFC = \$2,541-\$5,081 (n=1,300)        | 850             | 659        | 762               | 0             | 75.6%                                  | 72.4%                              | 70.1%                              | 52.8%   |   |
| EFC = \$5,082-\$10,000 (n=1,389)       | 0               | 482        | 581               | 0             | 0.0%                                   | 0.0%                               | 66.2%                              | 0.0%  |   |
| EFC = Over \$10,000 (n=1,666)          | 0               | 25         | 98                | 0             |  |                                    | 80.0%                              |   |   |
| <b>Private Institutions (n=39,314)</b> | 13,120          | 0          | 0                 | 7,645         |  |                                    |                                    |   | 72.6%                                     |
| EFC = 0 (n=8,021)                      | 5,864           | 0          | 0                 | 2,758         |  |                                    |                                    |   | 90.2%                                     |
| EFC = \$1-\$2,540 (n=5,318)            | 4,480           | 0          | 0                 | 2,062         |  |                                    |                                    |   | 93.5%                                     |
| EFC = \$2,541-\$5,081 (n=3,284)        | 2,776           | 0          | 0                 | 1,212         |  |                                    |                                    |   | 93.6%                                     |
| EFC = \$5,082-\$10,000 (n=4,662)       | 0               | 0          | 0                 | 966           |  |                                    |                                    |   | 0.0%                                      |
| EFC = Over \$10,000 (n=18,029)         | 0               | 0          | 0                 | 647           |  |                                    |                                    |   | 0.0%                                      |
| <b>Total (n=101,786)</b>               | 37,890          | 16,180     | 17,228            | 7,645         | 68.4%                                  | 69.7%                              | 61.1%                              | 44.0%   | 72.6%                                     |

Source: Massachusetts Office of Student Financial Assistance (OSFA) Database.

Note: Data is for MA residents at MA institutions. Data from fall and spring semesters only. Only students who applied for aid and enrolled full-time for both fall and spring semesters in FY14 are included. Full-time students with EFCs below \$5,082 are eligible for the Pell Grant, so the first three EFC bands are for Pell-eligible students. Quinsigamond Community College and Roxbury Community College are excluded from the analysis because data for these institutions were not available.

**Table E.2: Overlap of Federal and State Need-based Grant Awards, FY2014**  
**Full-Time, Full-Year Students enrolled at a Public Institution**

|                                      | NUMBER OF STUDENTS RECEIVED |            |            |                   | OVERLAP BETWEEN AID PROGRAMS:          |  |                                    |   |
|--------------------------------------|-----------------------------|------------|------------|-------------------|--|--|------------------------------------|---|
|                                      | Federal Pell Grant          | MASS Grant | Cash Grant | Need-Based Waiver | % MASS GRANT also receiving PELL GRANT | % CASH GRANT also receiving PELL GRANT | % WAIVER also receiving PELL GRANT | % PELL GRANT also receiving MASS GRANT, CASH GRANT and WAIVER |
| <b>UMass Campuses (n=27,432)</b>     | 11,451                      | 10,068     | 7,917      | 6,986             | 99.6%                                  | 83.2%                                  | 85.0%                              | 32.6%   |
| EFC = 0 (n=5,570)                    | 5,429                       | 4,721      | 3,174      | 3,108             | 99.4%                                  | 99.5%                                  | 99.1%                              | 37.2%   |
| EFC = \$1-\$2,540 (n=3,752)          | 3,691                       | 3,266      | 2,055      | 1,901             | 99.9%                                  | 99.8%                                  | 99.7%                              | 30.3%   |
| EFC = \$2,541-\$5,081 (n=2,412)      | 2,331                       | 2,081      | 1,390      | 963               | 99.9%                                  | 99.1%                                  | 99.7%                              | 25.7%   |
| EFC = \$5,082-\$10,000 (n=3,862)     | 0                           | 0          | 1,276      | 909               | 0.0%                                   | 0.0%                                   | 0.0%                               | 0.0%  |
| EFC = Over \$10,000 (n=11,836)       | 0                           | 0          | 22         | 105               | 0.0%                                   | 0.0%                                   | 0.0%                               | 0.0%  |
| <b>State Universities (n=22,402)</b> | 9,537                       | 8,259      | 5,078      | 4,810             | 99.8%                                  | 57.2%                                  | 68.2%                              | 21.3%   |
| EFC = 0 (n=4,495)                    | 4,400                       | 3,777      | 1,209      | 1,428             | 99.6%                                  | 99.6%                                  | 99.5%                              | 19.0%   |
| EFC = \$1-\$2,540 (n=3,022)          | 2,976                       | 2,564      | 894        | 1,058             | 99.9%                                  | 99.8%                                  | 99.8%                              | 21.1%   |
| EFC = \$2,541-\$5,081 (n=2,206)      | 2,161                       | 1,918      | 810        | 806               | 99.8%                                  | 99.8%                                  | 99.9%                              | 26.2%   |
| EFC = \$5,082-\$10,000 (n=3,507)     | 0                           | 0          | 1,344      | 1,147             | 0.0%                                   | 0.0%                                   | 0.0%                               | 0.0%  |
| EFC = Over \$10,000 (n=9,172)        | 0                           | 0          | 821        | 371               | 0.0%                                   | 0.0%                                   | 0.0%                               | 0.0%  |
| <b>Community Colleges (n=12,638)</b> | 9,328                       | 6,443      | 3,185      | 5,432             | 99.9%                                  | 83.7%                                  | 87.3%                              | 14.3%   |
| EFC = 0 (n=6,154)                    | 5,991                       | 4,132      | 1,277      | 2,901             | 99.9%                                  | 99.5%                                  | 99.7%                              | 10.1%   |
| EFC = \$1-\$2,540 (n=2,129)          | 2,087                       | 1,461      | 742        | 1,090             | 99.9%                                  | 100.0%                                 | 100.0%                             | 18.3%   |
| EFC = \$2,541-\$5,081 (n=1,300)      | 1,250                       | 850        | 659        | 762               | 99.8%                                  | 99.4%                                  | 99.7%                              | 27.8%   |
| EFC = \$5,082-\$10,000 (n=1,389)     | 0                           | 0          | 482        | 581               | 0.0%                                   | 0.0%                                   | 0.0%                               | 0.0%  |
| EFC = Over \$10,000 (n=1,666)        | 0                           | 0          | 25         | 98                | 0.0%                                   | 0.0%                                   | 0.0%                               | 0.0%  |
| <b>Total (n=62,472)</b>              | 30,316                      | 24,770     | 16,180     | 17,228            | 99.8%                                  | 75.1%                                  | 81.0%                              | 23.4%   |

Source: Massachusetts Office of Student Financial Assistance (OSFA) Database.

Note: Data is for MA residents at MA institutions. Data from fall and spring semesters only. Only students who applied for aid and enrolled full-time for both fall and spring semesters in FY14 are included. Full-time students with EFCs below \$5,082 are eligible for the Pell Grant, so the first three EFC bands are for Pell-eligible students. Quinsigamond Community College and Roxbury Community College are excluded from the analysis because data for these institutions were not available.

**Table E.3: Overlap of Need-based Grant Awards for Full-Time, Full-Year Students Attending a MA Public Institution, FY2014: First-Time Students**

|                                     | NUMBER RECEIVED |            |                   | OVERLAP BETWEEN AID PROGRAMS           |                                    |                                    |   |
|-------------------------------------|-----------------|------------|-------------------|--|------------------------------------|------------------------------------|---|
|                                     | MASS Grant      | Cash Grant | Need-Based Waiver | % CASH GRANT also Receiving MASS GRANT | % WAIVER also Receiving MASS GRANT | % CASH GRANT also Receiving WAIVER | % CASH GRANT also Receiving MASS GRANT and WAIVER |
| <b>UMass Campuses (n=6,294)</b>     | 2,154           | 2,179      | 1,253             | 79.0%                                  | 80.6%                              | 48.8%                              | 41.2%   |
| EFC = 0 (n=1,063)                   | 995             | 800        | 547               | 98.6%                                  | 98.0%                              | 60.5%                              | 59.8%   |
| EFC = \$1 - \$2,540 (n=725)         | 693             | 552        | 322               | 98.7%                                  | 97.5%                              | 50.5%                              | 49.6%   |
| EFC = \$2,541 - \$5,081 (n=496)     | 466             | 390        | 163               | 99.5%                                  | 98.2%                              | 38.0%                              | 37.4%   |
| EFC = \$5,082 - \$10,000 (n=853)    | 0               | 425        | 199               | 0.0%                                   | 0.0%                               | 35.3%                              | 0.0%  |
| EFC = Over \$10,000 (n=3,157)       | 0               | 12         | 22                | 0.0%                                   | 0.0%                               | 16.7%                              | 0.0%  |
| <b>State Universities (n=4,778)</b> | 1,763           | 1,520      | 1,205             | 58.0%                                  | 66.6%                              | 58.1%                              | 37.2%   |
| EFC = 0 (n=862)                     | 802             | 403        | 351               | 98.5%                                  | 98.0%                              | 61.5%                              | 61.0%   |
| EFC = \$1 - \$2,540 (n=570)         | 534             | 271        | 272               | 98.2%                                  | 97.1%                              | 68.3%                              | 66.8%   |
| EFC = \$2,541 - \$5,081 (n=457)     | 427             | 224        | 200               | 97.8%                                  | 97.0%                              | 63.4%                              | 61.6%   |
| EFC = \$5,082 - \$10,000 (n=726)    | 0               | 373        | 278               | 0.0%                                   | 0.0%                               | 57.1%                              | 0.0%  |
| EFC = Over \$10,000 (n=2,163)       | 0               | 249        | 104               | 0.0%                                   | 0.0%                               | 38.2%                              | 0.0%  |
| <b>Community Colleges (n=3,794)</b> | 1,840           | 871        | 1,551             | 59.5%                                  | 61.0%                              | 70.2%                              | 40.1%   |
| EFC = 0 (n=1,755)                   | 1,130           | 340        | 753               | 65.9%                                  | 69.5%                              | 70.9%                              | 42.7%   |
| EFC = \$1 - \$2,540 (n=647)         | 450             | 199        | 348               | 81.9%                                  | 73.0%                              | 67.3%                              | 54.8%   |
| EFC = \$2,541 - \$5,081 (n=403)     | 260             | 187        | 244               | 70.1%                                  | 69.3%                              | 73.3%                              | 50.8%   |
| EFC = \$5,082 - \$10,000 (n=409)    | 0               | 134        | 174               | 0.0%                                   | 0.0%                               | 67.2%                              | 0.0%  |
| EFC = Over \$10,000 (n=580)         | 0               | 11         | 32                | 0.0%                                   | 0.0%                               | 81.8%                              | 0.0%  |
| <b>Total (n=14,866)</b>             | 5,757           | 4,570      | 4,009             | 68.3%                                  | 68.8%                              | 56.0%                              | 39.7%   |

Source: Massachusetts Office of Student Financial Assistance Database & HEIRS II Enrollment Datafile.

Note: Data is for MA residents at MA institutions. Data from fall and spring semesters only. The table summarizes Massachusetts' largest state need-based aid programs for 14,866 student-records, or 93.02% of the relevant student-records obtained from the Office of Student Financial Assistance and the Department of Higher Education HEIRS II Database. Only students who applied for aid and enrolled full-time for both fall and spring semesters in FY14 and who enrolled as a first-time degree-seeking undergraduate in Fall 2013 are included. Full-time students with EFCs below \$5,082 are eligible for the Pell Grant, so the first three EFC bands are for Pell-eligible students. Quinsigamond Community College and Roxbury Community College are excluded from the analysis because data for these institutions were not available.

**Table E.4: Overlap of Need-based Grant Awards, FY2014 for Full-Time, Full-Year Students Attending a MA Public Institution, FY2014: Continuing Students**

|                                      | NUMBER RECEIVED |            |                   | OVERLAP BETWEEN AID PROGRAMS           |                                    |                                    |   |
|--------------------------------------|-----------------|------------|-------------------|--|------------------------------------|------------------------------------|---|
|                                      | MASS Grant      | Cash Grant | Need-based Waiver | % CASH GRANT also Receiving MASS GRANT | % WAIVER also Receiving MASS GRANT | % CASH GRANT also Receiving WAIVER | % CASH GRANT also Receiving MASS GRANT and WAIVER |
| <b>UMass Campuses (n=18,534)</b>     | 6,841           | 5,084      | 5,114             | 79.4%                                  | 77.8%                              | 60.3%                              | 50.3%   |
| EFC = 0 (n=3,792)                    | 3,161           | 2,083      | 2,278             | 92.7%                                  | 88.9%                              | 72.8%                              | 66.9%   |
| EFC = \$1 - \$2,540 (n=2,641)        | 2,260           | 1,354      | 1,431             | 93.4%                                  | 90.6%                              | 60.4%                              | 56.2%   |
| EFC = \$2,541 - \$5,081 (n=1,664)    | 1,420           | 892        | 717               | 94.1%                                  | 91.5%                              | 48.3%                              | 45.4%   |
| EFC = \$5,082 - \$10,000 (n=2,620)   | 0               | 747        | 616               | 0.0%                                   | 0.0%                               | 39.8%                              | 0.0%  |
| Over \$10,000 (n=7,817)              | 0               | 8          | 72                | 0.0%                                   | 0.0%                               | 25.0%                              | 0.0%  |
| <b>State Universities (n=13,412)</b> | 4,846           | 2,732      | 2,775             | 55.3%                                  | 65.1%                              | 64.4%                              | 41.8%   |
| EFC = 0 (n=2,627)                    | 2,186           | 597        | 802               | 95.1%                                  | 92.4%                              | 78.1%                              | 74.5%   |
| EFC = \$1 - \$2,540 (n=1,857)        | 1,535           | 509        | 641               | 95.7%                                  | 93.8%                              | 74.9%                              | 71.5%   |
| EFC = \$2,541 - \$5,081 (n=1,310)    | 1,125           | 463        | 476               | 98.5%                                  | 97.3%                              | 72.6%                              | 71.9%   |
| EFC = \$5,082 - \$10,000 (n=2,133)   | 0               | 751        | 668               | 0.0%                                   | 0.0%                               | 57.9%                              | 0.0%  |
| Over \$10,000 (n=5,485)              | 0               | 412        | 188               | 0.0%                                   | 0.0%                               | 34.2%                              | 0.0%  |
| <b>Community Colleges (n=5,924)</b>  | 3,273           | 1,603      | 2,685             | 62.3%                                  | 65.9%                              | 71.3%                              | 43.7%   |
| EFC = 0 (n=2,919)                    | 2,119           | 608        | 1,436             | 70.7%                                  | 75.5%                              | 74.5%                              | 50.7%   |
| EFC = \$1 - \$2,540 (n=1,003)        | 728             | 389        | 519               | 78.9%                                  | 76.5%                              | 69.2%                              | 53.5%   |
| EFC = \$2,541 - \$5,081 (n=618)      | 426             | 331        | 379               | 78.9%                                  | 75.7%                              | 71.3%                              | 55.6%   |
| EFC = \$5,082 - \$10,000 (n=664)     | 0               | 265        | 301               | 0.0%                                   | 0.0%                               | 67.2%                              | 0.0%  |
| Over \$10,000 (n=720)                | 0               | 10         | 50                | 0.0%                                   | 0.0%                               | 70.0%                              | 0.0%  |
| <b>Total (n=37,870)</b>              | 14,960          | 9,419      | 10,574            | 69.5%                                  | 71.4%                              | 63.3%                              | 46.7%   |

Source: Massachusetts Office of Student Financial Assistance Database & HEIRS II Enrollment Datafile.

Notes: Data is for MA residents at MA institutions. Data from fall and spring semesters only. The table summarizes Massachusetts' largest state need-based aid programs for 37,870 student-records, or 93.57% of the relevant student-records obtained from the Office of Student Financial Assistance and the Department of Higher Education HEIRS II Database. Only students who applied for aid and enrolled full-time for both fall and spring semesters in FY14 and who enrolled as a continuing degree-seeking undergraduate in Fall 2013 are included. Full-time students with EFCs below \$5,082 are eligible for the Pell Grant, so the first three EFC bands are for Pell-eligible students. Quinsigamond Community College and Roxbury Community College are excluded from the analysis because data for these institutions were not available.

**APPENDIX F: STATE COMPARISONS**

**Table F.1: Comparison of State Aid Portfolios, FY2014**  
***Ranked by Need-based Grant Dollars per FTE Undergraduate Student***

|                | UNDERGRADUATE NEED-BASED AID          |               |                                       |  |                 |                       | UNDERGRADUATE MERIT-BASED AID                     |                               |                    |
|----------------|---------------------------------------|---------------|---------------------------------------|--|-----------------|-----------------------|---|-------------------------------|--------------------|
|                | <i>Total Need-based Grant Dollars</i> |               | <i>Primary Need-based Aid Program</i> |  |                 |                       | % of Need- and Merit-Based Aid to Merit-Based Aid | Total Merit-Based Aid Awarded | Mean per Recipient |
|                | Amount/<br>FTE<br>Student             | State<br>Rank | Total<br>Need-Based<br>Aid Awarded    | % of Need-<br>based Aid to<br>Primary<br>Program | Aid<br>Awarded  | Mean per<br>Recipient |   |                               |                    |
| Washington     | \$1,316                               | 1             | \$365,387,044                         | 83%  | \$303,040,576   | \$4,322               | 0%  | \$529,437                     | \$7,253            |
| New Jersey     | \$1,228                               | 2             | \$384,578,432                         | 91%  | \$350,129,504   | \$4,810               | 2%  | \$7,149,304                   | \$2,411            |
| New York       | \$1,045                               | 3             | \$947,606,424                         | 99%  | \$935,569,024   | \$3,093               | 1%  | \$11,270,000                  | \$730              |
| California     | \$987                                 | 4             | \$1,671,941,616                       | 100%   | \$1,671,755,008 | \$5,671               | 0%  | \$2,379,545                   | \$7,167            |
| Indiana        | \$870                                 | 5             | \$270,443,768                         | 52%  | \$139,775,376   | \$2,667               |   |                               |                    |
| Pennsylvania   | \$840                                 | 6             | \$459,557,802                         | 98%  | \$450,474,464   | \$2,482               | 0%  | \$1,591,000                   | \$9,527            |
| North Carolina | \$825                                 | 7             | \$326,148,984                         | 69%  | \$225,816,736   | \$2,099               | 2%  | \$5,528,795                   | \$6,205            |
| Minnesota      | \$736                                 | 8             | \$194,100,330                         | 89%  | \$172,513,984   | \$1,734               |   |                               |                    |
| Texas          | \$725                                 | 9             | \$720,541,216                         | 48%  | \$345,426,720   | \$3,955               | 6%  | \$48,549,108                  | \$6,380            |
| Illinois       | \$710                                 | 10            | \$373,567,095                         | 100%   | \$372,188,704   | \$2,725               |   |                               |                    |
| Wyoming        | \$623                                 | 11            | \$15,149,557                          |  |                 |                       |   |                               |                    |
| Vermont        | \$548                                 | 12            | \$17,313,654                          | 87%  | \$15,082,633    | \$1,692               | 0%  | \$73,267                      | \$964              |
| Oklahoma       | \$512                                 | 13            | \$84,704,296                          | 24%  | \$19,935,640    | \$844                 | 11%   | \$10,689,975                  | \$4,182            |
| Kentucky       | \$497                                 | 14            | \$93,368,460                          | 67%  | \$62,343,528    | \$1,568               | 53%   | \$105,401,936                 | \$1,520            |
| Wisconsin      | \$495                                 | 15            | \$126,037,792                         | 63%  | \$78,934,080    | \$1,380               | 2%  | \$2,984,774                   | \$1,018            |
| Maryland       | \$491                                 | 16            | \$107,273,464                         | 67%  | \$72,146,352    | \$2,130               | 1%  | \$1,470,000                   | \$2,946            |
| West Virginia  | \$463                                 | 17            | \$45,416,519                          | 90%  | \$40,779,992    | \$2,141               | 51%   | \$46,862,836                  | \$4,545            |
| Virginia       | \$427                                 | 18            | \$194,766,032                         | 43%  | \$83,154,224    | \$1,547               | 3%  | \$6,366,575                   | \$2,470            |
| Tennessee      | \$349                                 | 19            | \$87,561,408                          | 57%  | \$50,272,824    | \$1,542               | 75%   | \$266,159,488                 | \$2,681            |
| Delaware       | \$348                                 | 20            | \$13,821,951                          | 7%   | \$1,011,364     | \$1,422               | 34%   | \$6,980,053                   | \$1,612            |
| Oregon         | \$327                                 | 21            | \$55,373,937                          | 99%  | \$54,932,808    | \$1,599               |   |                               |                    |
| South Carolina | \$321                                 | 22            | \$60,641,048                          | 100%   | \$60,641,048    | \$1,401               | 80%   | \$244,388,640                 | \$5,268            |
| Colorado       | \$320                                 | 23            | \$90,809,236                          | 81%  | \$73,612,648    | \$1,271               | 0%  | \$420,000                     |                    |

|               |       |    |               |      |               |         |      |               |         |
|---------------|-------|----|---------------|------|---------------|---------|------|---------------|---------|
| Connecticut   | \$288 | 24 | \$146,708,144 | 27%  | \$39,804,820  | \$1,948 |      |               |         |
| Massachusetts | \$267 | 25 | \$111,633,436 | 35%  | \$38,599,660  | \$652   | 13%  | \$16,879,532  | \$1,207 |
| Iowa          | \$256 | 26 | \$59,568,111  | 83%  | \$49,591,512  | \$2,964 |      |               |         |
| New Mexico    | \$253 | 27 | \$31,196,577  | 36%  | \$11,084,243  | \$697   | 69%  | \$68,145,456  | \$2,758 |
| North Dakota  | \$248 | 28 | \$9,941,009   | 97%  | \$9,630,809   | \$1,286 | 40%  | \$6,522,120   | \$1,612 |
| Maine         | \$242 | 29 | \$12,064,759  | 100% | \$12,064,759  | \$771   | 2%   | \$235,500     | \$2,907 |
| Michigan      | \$223 | 30 | \$95,248,280  | 24%  | \$22,916,224  | \$735   | 0%   | \$8,063       | \$1,613 |
| Missouri      | \$212 | 31 | \$60,548,864  | 99%  | \$59,878,156  | \$1,133 | 44%  | \$46,688,304  | \$2,463 |
| Nebraska      | \$191 | 32 | \$17,340,789  | 95%  | \$16,419,718  | \$1,030 | 2%   | \$423,968     | \$3,962 |
| Rhode Island  | \$189 | 33 | \$11,921,059  | 100% | \$11,921,059  | \$649   |      |               |         |
| Florida       | \$184 | 34 | \$146,678,880 | 91%  | \$134,187,304 | \$1,118 | 67%  | \$304,549,376 | \$1,973 |
| Alaska        | \$177 | 35 | \$3,890,170   | 100% | \$3,890,170   | \$1,370 | 67%  | \$7,824,057   | \$3,332 |
| Ohio          | \$165 | 36 | \$81,333,512  | 99%  | \$80,855,552  | \$935   | 0%   | \$5,744       | \$1,149 |
| Louisiana     | \$143 | 37 | \$26,101,384  | 100% | \$26,101,384  | \$1,012 | 90%  | \$222,576,208 | \$4,194 |
| Kansas        | \$125 | 38 | \$18,526,836  | 87%  | \$16,185,423  | \$1,648 |      |               |         |
| Nevada        | \$125 | 39 | \$20,886,503  | 47%  | \$9,764,056   | \$1,853 | 53%  | \$23,866,376  | \$1,284 |
| Montana       | \$90  | 40 | \$4,568,028   | 44%  | \$2,018,775   | \$800   | 23%  | \$1,339,000   | \$1,975 |
| Hawaii        | \$75  | 41 | \$4,364,663   | 7%   | \$284,889     | \$1,499 |      |               |         |
| Arkansas      | \$66  | 42 | \$8,283,226   | 64%  | \$5,284,376   | \$741   | 94%  | \$125,217,512 | \$3,724 |
| Mississippi   | \$62  | 43 | \$8,324,690   | 89%  | \$7,443,326   | \$5,390 | 75%  | \$24,360,328  | \$908   |
| Arizona       | \$46  | 44 | \$21,511,576  | 11%  | \$2,319,500   | \$749   |      |               |         |
| Alabama       | \$31  | 45 | \$6,546,420   | 40%  | \$2,611,069   | \$664   | 26%  | \$2,244,862   | \$383   |
| Wash, DC      | \$27  | 46 | \$1,196,981   | 100% | \$1,196,981   | \$2,714 |      |               |         |
| Idaho         | \$19  | 47 | \$1,420,028   | 87%  | \$1,235,989   | \$2,741 | 71%  | \$3,514,705   | \$536   |
| Utah          | \$14  | 48 | \$2,770,892   | 100% | \$2,770,892   | \$858   | 69%  | \$6,087,100   |         |
| South Dakota  | \$5   | 49 | \$200,000     | 100% | \$200,000     | \$926   | 96%  | \$4,508,197   | \$1,193 |
| Georgia       |       | 50 | \$0           |      |               |         | 100% | \$527,980,480 | \$2,764 |
| New Hampshire |       | 51 | \$0           |      |               |         |      |               |         |

Source: National Association of State Student Grant and Aid Programs (NASSGAP) 45th Annual Survey Data. Note: Estimated Need-based Undergraduate Grant Dollars per Undergraduate is calculated by NASSGAP using survey data and FTE data from IPEDS. Additional calculations done by authors. Undergraduate merit-based aid excludes merit-based aid with a need component; then programs are included under need-based aid totals.

## **APPENDIX G: DISCUSSION OF DATA SOURCES**

This report focuses on two student cohorts: students who applied for federal and state financial aid for FY2009 and FY2014. Two data sources were used: data from the Massachusetts Department of Higher Education's Office of Student Financial Assistance (OSFA) and data from the Department's HEIRS II database.

### ***Office of Student Financial Aid Database***

The data from OSFA includes information at the student- and institution- level variables such as:

- Institutional characteristics, such as annual estimated educational costs. Institution type and control (i.e. public, 2-year college) was determined using IPEDS;
- Student characteristics, such as expected family contribution, FAFSA application status, Title IV eligibility, and enrollment intensity; and
- Dispersed amount of financial aid dollars, by financial aid program. OSFA categorizes financial aid programs by source: the federal government, state government, institutions and outside agencies/organizations. OSFA further categorizes programs as grants, loans, or other/unspecified awards.

Information from Quinsigamond Community College and Roxbury Community College were unavailable for this analysis.

The OSFA data was compiled by student, institution and fiscal year for FY2009 and FY2014. Students included in the analysis were assumed to have submitted a FAFSA and to be Massachusetts residents. In consultation with OSFA, the following conditions were used to exclude a record from analysis:

- Cap of \$100,000 on estimated educational costs (deemed too high);
- Unreasonably high or missing values for other cost-related variables. These variables are tuition, books and insurance costs;
- Missing information for whether a student met eligibility requirements (i.e. on-time FAFSA filing and Title IV eligibility);
- Incongruous expected family contribution, financial need values, and receipt of need-based aid;
- Financial aid disbursement amounts that exceed program maximums;
- Possible out-of-state residence, as indicated by non-Massachusetts state financial aid receipt;
- Enrollment in a single term exceeded 28 credits;
- Inconsistent values across records for the same student enrolled in the same institution and term for variables that should be constant, such as registered credits, educational costs, expected financial contribution, estimated financial need and Department of Higher Education ID.

The resulting sample counts are as follows:

**Table G.1: Number OSFA Records Used in Analysis, at the Student- and Institution-Level**

| Fiscal Year Cohort | Total   | Excluded | Retained |
|--------------------|---------|----------|----------|
| 2014               | 192,676 | 8,476    | 95.60%   |
| 2009               | 167,664 | 12,636   | 92.46%   |

### ***HEIRS II Database***

Student demographic, enrollment and degree completion information originated from the Department of Higher Education's HEIRS II Annual Enrollment and Student Information files. Information is only available for students enrolled in Massachusetts public institutions. The variables used in the analysis include:

- Gender (male, female or unknown);
- Race and ethnicity categories. These were consolidated to align with federally reported race and ethnicity categories. Specifically, students who identified as Cape Verdean were counted as Black or African American. Students who identified as Asian or Pacific Islander, Asian or Native Hawaiian or Other Pacific Islander were also grouped collectively into Asian, Native Hawaiian or Pacific Islander;
- Birthdate. Students' birthdates were used to calculate their age at the start of the fiscal year (i.e. July 1, 2013 for the FY2014 cohort and July 1, 2008 for the FY2009 cohort);
- Type of student (i.e. degree-seeking first-time freshman, degree-seeking first-time transfer student, graduate student, etc);
- Educational level of program enrolled (i.e. certificate, associate, bachelor's, etc)
- Degree types, including certificates, associate, bachelor's, master's and other graduate degrees;
- Date of degree receipt, up to June 1, 2015.

The HEIRS II data was used to identify first-time undergraduate freshman in the fall semester of FY2009 and these students' persistence and six-year degree completion rates. It was also used to identify first-time and continuing undergraduate students in the fall semester of FY2014.

For the FY2009 cohort, the following conditions were used to exclude a record from the analysis:

- Not a first-time undergraduate first-year student at any institution in the fall 2008 semester;
- Enrollment in any advanced degree program (post-baccalaureate programs or higher)
- Enrollment in a non-degree program
- Degree receipt before FY2009.

For the FY2014 cohort, the following conditions were used to exclude a record from the analysis:

- Not a first-time undergraduate first-year student at any institution in the fall 2013 semester;
- Enrollment in any advanced degree program (post-baccalaureate programs or higher)
- Enrollment in a non-degree program

### ***Combining Financial Aid and Student Enrollment Data***

Using the unique student identifiers in the HEIRS II database, we combined the student financial aid, enrollment, demographic and, for FY2009, degree attainment information for first-time freshmen enrolled at a public two- or four-year institution. In addition to restricting student records per the exclusions listed previously for each dataset, we also strove to eliminate inconsistent HEIRS II and OSFA unique student identifier pairs. As a result of our data cleaning, we removed HEIRS student IDs that were duplicated at multiple institutions, thus potentially

eliminating some transfer students. However, as shown in the table below, we retained 88 and 90 percent of the matched records.

**Table G.2: OSFA & HEIRS II Records Used in Analysis, at the Student- and Institution-Level**

| Fiscal Year Cohort | Number of OSFA Records | Matched Records, Undergraduates at Public Institutions | Excluded | % of Matched Records Retained | % of Original OSFA Records |
|--------------------|------------------------|--|----------|-------------------------------|----------------------------|
| 2014               | 192,676                | 115,384  | 13,752   | 88.08%                        | 52.75%                     |
| 2009               | 167,664                | 19,184   | 1,826    | 90.48%                        | 9.41%                      |

Notes: This table summarizes the subset of data used in each analysis. The FY2014 cohort focused on first-time and continuing undergraduate students enrolled at a state public institution in the fall 2013 semester. The FY2009 cohort focused only on first-time undergraduate students enrolled full-time at a state public institution in the fall 2008 semester.

Table G.3 gives a sense of the total population of Massachusetts residents at a public institution within the Commonwealth and the percentage who apply for financial aid.

**Table G.3: Characteristics of MA Residents Attending a MA Public Institution in Fall 2013**

|  | UMass Campuses   |               | State Universities |               | Community Colleges |               | Total Enrollment |               |
|--|------------------|---------------|--------------------|---------------|--------------------|---------------|------------------|---------------|
|  | Total Enrollment | Apply for Aid | Total Enrollment   | Apply for Aid | Total Enrollment   | Apply for Aid | Total Enrollment | Apply for Aid |
| <b>Race or Ethnicity</b>                   |                  |               |                    |               |                    |               |                  |               |
| White                                      | 25,263           | 88.48%        | 23,308             | 85.18%        | 31,390             | 69.66%        | 79,961           | 80.13%        |
| Hispanic or Latino                         | 3,417            | 92.63%        | 2,465              | 90.63%        | 11,376             | 81.36%        | 17,258           | 84.91%        |
| Black or African American                  | 3,801            | 93.87%        | 2,147              | 91.62%        | 8,235              | 66.53%        | 14,183           | 77.66%        |
| Asian, Native Hawaiian or Pacific Islander | 3,735            | 91.99%        | 744                | 87.63%        | 2,881              | 79.24%        | 7,360            | 86.56%        |
| Two or more races                          | 1,067            | 92.13%        | 860                | 89.42%        | 1,576              | 74.05%        | 3,503            | 83.33%        |
| Unknown                                    | 1,447            | 90.05%        | 325                | 83.69%        | 907                | 68.69%        | 2,679            | 82.05%        |
| American Indian or Alaska Native           | 66               | 92.42%        | 75                 | 81.33%        | 236                | 74.58%        | 377              | 79.05%        |
| Non-resident Alien                         | 27               | 81.48%        | 32                 | 75.00%        | 68                 | 88.24%        | 127              | 83.46%        |
| <b>Total</b>                               | <b>38,823</b>    | <b>89.87%</b> | <b>29,956</b>      | <b>86.23%</b> | <b>56,669</b>      | <b>72.19%</b> | <b>125,448</b>   | <b>81.02%</b> |
| <b>Gender</b>                              |                  |               |                    |               |                    |               |                  |               |
| Female                                     | 18,900           | 91.28%        | 17,618             | 87.02%        | 35,152             | 73.33%        | 71,670           | 81.43%        |
| Male                                       | 19,922           | 88.54%        | 12,326             | 85.09%        | 21,448             | 70.24%        | 53,696           | 80.44%        |
| <b>Total</b>                               | <b>38,822</b>    | <b>89.87%</b> | <b>29,944</b>      | <b>86.23%</b> | <b>56,600</b>      | <b>72.16%</b> | <b>125,366</b>   | <b>81.01%</b> |
| <b>Age</b>                                 |                  |               |                    |               |                    |               |                  |               |
| Less than 18                               | 1,300            | 99.77%        | 1,034              | 99.61%        | 1,298              | 96.15%        | 3,632            | 98.43%        |
| 18-24 year olds                            | 31,363           | 90.45%        | 24,766             | 86.94%        | 32,797             | 71.42%        | 88,926           | 82.46%        |
| 25-34 year olds                            | 4,212            | 84.88%        | 2,711              | 78.09%        | 12,935             | 70.88%        | 19,858           | 74.83%        |
| 35 and older                               | 1,739            | 85.34%        | 1,323              | 79.44%        | 8,806              | 73.34%        | 11,868           | 75.78%        |
| <b>Total</b>                               | <b>38,614</b>    | <b>89.93%</b> | <b>29,834</b>      | <b>86.24%</b> | <b>55,836</b>      | <b>72.17%</b> | <b>124,284</b>   | <b>81.07%</b> |
| <b>Overall</b>                             | <b>38,823</b>    | <b>89.87%</b> | <b>29,956</b>      | <b>86.23%</b> | <b>56,669</b>      | <b>72.19%</b> | <b>125,448</b>   | <b>81.02%</b> |

Source: Massachusetts Office of Student Financial Assistance Database & HEIRS II Student Datafile

Note: Data represents undergraduate, degree-seeking students who enrolled at a MA public institution in Fall 2013. The table summarizes demographic characteristics for 125,448 student-records, or 90.11% of the undergraduate student-records obtained from the Office of Student Financial Assistance and the Department of Higher Education HEIRS II Database for FY14. Because some students enrolled at more than one institution, there are 125,062 unique students in the data. Students enrolled at either Quinsigamond Community College or Roxbury Community College are excluded from the aid application rate because financial aid data for these institutions were not available. Totals are inconsistent across demographic characteristics because not all demographic information is known for every student.

For the analysis, we often show how aid and unmet need vary by family income level. Aid is awarded according to the family's Expected Family Contribution (EFC), which relates to family income as shown in Table G.4.

**Table G.4: Crosswalk between Expected Family Contribution (EFC) and Family Income, FY2014**

| Adjusted Gross<br>Income (AGI) | Number of Dependent Children |          |          |
|--------------------------------|------------------------------|----------|----------|
|                                | One                          | Two      | Three    |
| \$30,000                       | \$560                        | \$0      | \$0      |
| \$40,000                       | \$2,361                      | \$1,572  | \$832    |
| \$50,000                       | \$3,806                      | \$3,304  | \$2,603  |
| \$60,000                       | \$5,984                      | \$4,944  | \$4,021  |
| \$70,000                       | \$8,947                      | \$7,513  | \$6,241  |
| \$80,000                       | \$12,583                     | \$10,960 | \$9,464  |
| \$90,000                       | \$16,218                     | \$14,595 | \$13,100 |
| \$100,000                      | \$19,394                     | \$17,943 | \$16,619 |
| \$110,000                      | \$22,559                     | \$21,109 | \$19,784 |
| \$120,000                      | \$25,263                     | \$23,577 | \$22,253 |

Source: Onink, Troy. (2013) "2013 Guide To FAFSA, CSS Profile, Expected Family Contribution (EFC) And College Aid." *Forbes*. Available at: <https://blogs-images.forbes.com/troyonink/files/2014/07/2013-efc-table12181.png>.

Notes: Full-time students with EFCs below \$5,082 are eligible for the Pell Grant. The AGI cutoffs for Pell Grant eligibility are approximately \$56,000 for families with one dependent child, \$61,000 for families with two dependent children, and \$65,000 for families with three dependent children. For part-time students, the Pell Grant eligibility cutoff is an EFC of \$4,501.

## **APPENDIX H: DEFINITION OF TERMS**

*Centralized Financial Aid Programs:* Programs that are completely administered by the Office of Student Financial Assistance (OSFA). In other words, OSFA determines student eligibility and award sizes.

*Decentralized Financial Aid Programs:* State financial aid programs that are administered by institutions and/or campuses. With these programs, institutions and/or specific campuses select student awardees and may also have discretion over the award amount.

*Degree-Seeking Undergraduate Student:* Students who were enrolled in an undergraduate degree program. This includes certificate programs.

*Educational Costs:* The annual education cost reported used by the institution to calculate a student's financial aid need. This figure is reported by the institution to OSFA. It includes direct and indirect costs.

*Expected Family Contribution (EFC):* The expected family contribution that an institution used to calculate financial aid need, as reported to OSFA.

*Financial Need:* The student's demonstrated financial need that the institution used to award financial aid, as reported by the institution to OSFA.

*First-Time Student:* The student was enrolled as a first-time degree seeking undergraduate. This does not include other first-time student types, such as first-time transfer students or readmitted/reactivated students. It also includes neither non-degree seeking new undergraduate students nor degree seeking undergraduates who may be seeking another degree at the same institution.

*Fiscal Year (FY):* Defined by DHE as running from July 1 to June 30 of the indicated year. FY2014 thus runs from July 1, 2013 to June 30, 2014. Students enrolled in the fall term of FY2014 are enrolled in the Fall 2013 semester.

*Full-Time Enrollment:* 12 or more credits in a given semester. Enrollment intensity was determined by the number of registered credits reported to OSFA.

*Graduation:* A student "graduated" if their unique student identifier was associated with degree receipt. Bachelor's degrees earned by FY2015 were counted in the six-year graduation rate; Associate degrees earned by FY2012 were counted in the three-year graduation rate.

*Part-Time Enrollment:* 6-11 credits in a given semester. Enrollment intensity was determined by the number of registered credits reported to OSFA.

*Persistence:* A student "persisted" if they re-enrolled as a continuing undergraduate at the same institution in the fall semester of FY2010 after enrolling as an undergraduate, first-time freshman in FY2009.