![MHEC - Maryland Higher Education Commission]

Report on Best Practices and Annual Progress Toward the 55% Completion Goal

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Introduction

The 2012 Joint Chairmen's Report issued the following charge to the Maryland Higher Education Commission (MHEC):

> The committees understand that in order to meet the State's goal to have at least 55% of Maryland's residents age 25-64 holding at least one degree credential by 2025, accurate and timely information on degree progression and best practices is needed to ensure that the State is on track to meet the goal. The committees request that the Maryland Higher Education Commission (MHEC) annually collect and analyze student- and transcript-level data on progression, graduation, and other relevant metrics from each public institution of higher education, including community colleges and regional higher education centers. MHEC should submit a report by December 15 each year that analyzes the data and shows each institution's progress toward the State and institutional goals in 2025. The report should also include a summary of best practices and findings on the effectiveness of institutions' programs, as well as any concerns regarding lack of progress or best practices that are not being implemented by institutions.

> In addition, the committees request that MHEC, on behalf of the Governor and General Assembly and in collaboration with the Governor's P-20 Council, convene an Annual Summit on Completion that provides a forum for representatives of all segments of education (including K-12), economic and workforce development, and other stakeholders to share best practices on college completion that are underway in Maryland and hear from experts on best practices in other states that may be replicated in Maryland. A summary of the summit should be included in the annual report on best practices and progress toward the 55% goal.

This report addresses the charge in several ways. First, it provides data on progression and graduation. Second, it provides an update to the original 2012 framework for reaching the 55% goal and provides information on current progress toward the goal. Third, it summarizes reports by the State's colleges and universities on the best practices they are pursuing to improve degree completion, with a particular discussion of the role of financial aid. Fourth, it provides an overview of the first two Statewide College Completion Forum events hosted by MHEC on January 8, 2013 and November 7, 2014. The report concludes with some reflections on factors contributing to degree completion and how they are connected to policy solutions.

Data on Progression and Graduation

Each year, MHEC publishes two reports discussing progression and graduation metrics at four-year colleges and universities and at community colleges. The principal metrics used for four-year institutions are the first-to-second-year retention rate and the six-year graduation rate for first-time full-time students. The second-year retention rate has been fairly stable, averaging around 81% for the last 10 cohorts. The six-year graduation rate has increased in recent years.

The cohorts entering between 1987 and 1994 had an average graduation rate of 56%, while the cohorts entering since 2000 have had an average graduation rate of 64%. A statewide table of retention and graduation rates since 1987 appears in Table 1, on page 15. Institutional tables and other data and analysis can be found in the full report.[1]

For community colleges, the principal metrics are the four-year rates of persistence, transfer to a four-year institution, and graduation for full-time students. These rates are aggregated into a *success rate*. The success rate increased from 43.7% for the cohort entering in 1999 to a peak of 46.5% for the cohort entering in 2008, although the rate declined to 45.3% for the cohort entering in 2009 (11.6% remained enrolled, 9.4% graduated, and 24.3% transferred to a four-year institution). A statewide table of persistence, transfer, and graduation rates appears in Table 2, on page 16.

Another important analytical tool for community colleges is the Degree Progress Analysis report. This tool was developed in response to the fact that community colleges enroll a large number of part-time students who are not captured in traditional metrics that focus on full-time students. The Degree Progress Analysis examines students who complete at least 18 credit hours within their first two years of enrollment, and identifies students as successful if they have graduated, transferred to a four-year institution, or are still enrolled with a cumulative grade point average of 2.0 or better. The most recent Degree Progress Analysis table appears in Table 3, on pages 17-18. Additional data and analyses, including institutional tables for all community colleges, can be found in the full regular report.[2]

MHEC is currently undertaking a substantial revision of its principal data collection, the Maryland Annual Collection. This revision, the most extensive in more than thirty years, will allow MHEC to examine additional information on the elements that contribute to degree progress and completion.[3] MHEC has begun collecting these data and will be able to provide additional analysis in the coming years as data become available. Any additional relevant research conducted by MHEC will be included or cited in subsequent editions of this report.

Among the additional data that will be collected are student enrollments at the State's regional higher education centers (RHECs). These centers have been established to provide additional educational options in parts of the state that have relatively few institutions of higher learning. Multiple institutions – including public and private institutions, some in-state and some out-of-state – offer courses at each RHEC, which provides greater options to residents in those areas. Institutions offering courses at RHECs treat these courses as identical to courses on the main campus for purposes of granting credit. That is, the transcript of a student who takes four courses at an RHEC is indistinguishable from that of a student who takes four courses on the

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[1] Maryland Higher Education Commission, November 2014. "Retention and Graduation Rates at Maryland Four-Year Institutions," Archived at
http://www.mhec.state.md.us/publications/research/AnnualReports/2014RetGrad4yrs.pdf.
[2] Maryland Higher Education Commission, November 2014. "Retention, Graduation, and Transfer Rates at Maryland Community Colleges," Archived at
http://www.mhec.state.md.us/publications/research/AnnualReports/2014RetGradTransRatsCCs.pdf.
[3] For more information on the revision, see Maryland Higher Education Commission, "Maryland Annual Collection Revision Report," November 2012. Archived at
http://www.mhec.state.md.us/publications/research/2012Studies/MACRevisionReport.pdf .

main campus. Student enrollments have been reported to MHEC on the basis of the institution, not the location. The course data to be collected beginning in 2014-2015 will provide additional information about the ways that course offerings at RHECs contribute to credit and degree completion at Maryland public institutions.

Maryland's 55% Degree Attainment Model

In response to the Joint Chairmen's charge, in 2012 MHEC developed a model that set state and institution degree targets to reach the goal of 55% of adults holding degrees by 2025. After these estimates were established, MHEC reached out to Maryland colleges and universities for their input on degree projections and model specifications. Segments and institutions suggested that the 2012 targets should be modified to account for certain changes in demographic and environmental factors (such as economic and employment changes), limited financial resources available to support expansion, and the difficult nature of forecasting degree attainment beyond a 10-year framework. As a result of this feedback, MHEC revisited the original degree projections to reflect these concerns and to incorporate newly acquired information on migration patterns within the State and increased degree output at independent colleges and universities in Maryland. This section includes a description of the original 2012 model with special attention to the updated components and their subsequent effects on both statewide and institution-specific targets.

At the time the original 2012 Best Practices report was prepared, the State's higher education attainment rate was 44.7%. Of 3,112,651 Marylanders between the ages of 25 and 64, 1,390,018 held associate degrees or higher.[4] Looking ahead, projections from the Maryland Department of Planning indicate that by 2025, there will be 3,324,400 Maryland residents between the ages of 25 and 64.[5] As a result of this anticipated expansion, 1,828,420 individuals (55% of 3,324,400) will need to hold at least an associate degree. MHEC estimates that in 2025, 903,511 persons aged 25-49 who held associate degrees in 2010 will have aged 15 years, but will still be in the target group (between ages 25 to 64).[6] Thus, Maryland will need to have 924,909 additional degree holders between 2010 and 2025 to meet the State's goal. Almost all Marylanders with degrees will come from one of the following three main sources: (1) migration of individuals from other states and nations who already hold college degrees, (2) private institutions of higher education, and (3) public institutions of higher education.

In the 2012 projection model, MHEC based estimates of migration patterns into Maryland using data available from 2007. However, as significant economic changes have occurred between those estimates and the first draft of this report, MHEC updated those calculations to reflect Maryland's current workforce patterns. Using U.S. Census data from 2012, it was determined

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[4] U.S. Census Bureau's American Community Survey: American Fact Finder. 2010. "B15001 : Sex by Age by Educational Attainment for the Population 18 Years and Over—Maryland." *2006– 2010 American Community Survey*. http://factfinder2.census.gov.

[5] Maryland State Government. Department of Planning. March 2012. 2013 Total Population Projections by Age, Sex and Race. http://planning.maryland.gov/msdc/S3_Projection.shtml.

[6] This number is an estimate based on the percentage of Marylanders ages 25-49 within the 25-64 age group (65%), and that percentage multiplied by the number of Marylanders ages 25-64 with a degree. This model assumes a flat rate of degree attainment across age brackets and recognizes that this number is only an estimate.

that Maryland has an estimated net migration gain of 18,968 persons aged 25 to 64 holding an associate degree or higher.[7] These migration estimates are above those in 2007, which calculated an annual net migration of 15,700 persons. If this new estimate remains constant, Maryland will have an addition through migration of 303,488 degree holders by 2025.

The State's independent and other private institutions also make an important contribution to the educational attainment of Marylanders. "Independent" institutions are privately controlled non-profit colleges or universities that enroll high school graduates, have a broadly public mission (as opposed to, for instance, sectarian institutions that educate only members of a particular faith), and award associate, baccalaureate or graduate degrees. "Other private" institutions include all other privately controlled institutions, primarily for-profit institutions and sectarian institutions. In 2009-2010, Maryland independent and other private institutions awarded 6,766 associate and baccalaureate degrees. This figure had grown by 23% over the previous decade, up from 5,494 in 1999-2000. In the 2012 degree attainment projections, MHEC took a conservative approach and did not forecast any growth in undergraduate degrees through 2025, estimating that graduates from independent institutions would account for a total of 91,470 degrees for the entire period, and graduates from other private institutions would earn a total of 10,020 degrees for the total period, for a combined total of 108,256.

However, independent institutions indicated a readiness to contribute to the State completion goal. They estimate that the number of undergraduate degrees they will award will increase to 7,365 by 2025. This estimate represents an increase of 21% above the 2010 actual total. But the 2025 total will include three fewer independent institutions than are included in the 2010 baseline, because of institutional closures. When these institutions are removed from the baseline, the total increase rises to 28%. Overall, independent institutions are expected to contribute 105,805 graduates to the State's degree completion total.

The number of other private institutions, like the number of independent institutions, has also declined slightly since the baseline year of 2009-2010, because institutions have closed, moved outside of Maryland, or been purchased by institutions or corporations whose headquarters based outside the state. These types of institutions are no longer required to report data to MHEC. Although a significant share of the graduates of these institutions are located in Maryland and remain within the state after graduation, they must necessarily be excluded from the model and from this monitoring report. The single institution with the highest number of graduates in the baseline year was ITT Technical Institute, which awarded 294, or 44%, of the 668 degrees awarded in this sector in 2010. ITT Technical Institute is one of the institutions that is now controlled by an out-of-state entity, and the removal of this institution will have significant effects on the number of degrees expected from this sector. For this reason MHEC has reduced the expected annual contribution of the other-private institutions by 50%, from 668 to 334, beginning in 2014-2015. This reduces the number of degrees expected from these institutions from 10,020 to 7,014. Nevertheless, despite the declining number of institutions, the total degree production from the independent and other private sectors for the whole period is expected to increase from 108,256 to 112,819.

[7] U.S. Census Bureau, 2012. 2010-2012 American Community Survey (ACS) Three Year Public Microdata Sample (PUMS).http://www.census.gov/acs/www/data_documentation/pums_data/

Taken together, these increased contributions from migration to Maryland and private institutions will now provide 416,307 of the 924,909 degree holders needed; previous calculations of these sectors only provided 359,456 of the total. This leaves 508,602 degrees that must be awarded by public colleges and universities. However, some additional degree awards will be needed to make up for some losses caused by mortality. Although precise mortality data are not available for degree holders in this age group, indicators from the Maryland Department of Health and Mental Hygiene suggest that an annual average mortality rate of 0.2% is a reasonable estimate.[8] That rate would remove 58,509 degree holders[9] from the state total during the period, leaving 567,111 degrees that must be awarded through the public sector to reach the current target.

In 2009-2010, Maryland public institutions awarded 32,621 associate and baccalaureate degrees. If this level were to remain constant through 2025, public institutions would award a total of 521,936 degrees, which is 45,175 short of the 55% degree attainment goal. In the 2012 projections, MHEC calculated that Maryland public institutions would have to increase the number of degrees awarded by 2.6% each year through 2025 to meet the target. However, with the increase in attainment from other sectors, MHEC has determined that public institutions will only need to increase their awards by 2.0% through 2025. This increase would result in 43,904 degrees awarded in the year 2024-2025, with a total of 608,032 degrees for the whole period. This target is slightly higher than the 567,111 degrees required to reach the goal, but this slightly higher goal accounts for unforeseen environmental factors which are difficult to predict and for extenuating circumstances. These additional degrees awarded by public institutions, combined with contributions from independent and other private institutions and from increased migration into the State, minus estimated mortality, would provide Maryland with 961,899 additional degree holders, exceeding the 55% degree attainment goal by more than 40,000 degrees.

Some of the growth in degree production from Maryland public institutions may result from increased enrollment. MHEC currently projects that public postsecondary enrollments will increase by an annual average of 1.6% through 2023.[10] However, the U.S. Department of Education projects an average annual increase of just 0.2% in public high school graduates in Maryland through 2023.[11] These indicators suggest that institutions may not be able to rely on enrollment growth alone to reach the goal, and institutions must improve the rate at which their enrolled students complete degrees.

A potential fourth source of degree holders is residents enrolled in out-of-state institutions operating in Maryland, which offer distance education programs to Maryland residents, or programs on the ground in the State. These institutions award a small but growing number of

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[8] Maryland Department of Health and Mental Hygiene, (2011) Maryland Vital Statistics Annual Report. http://dhmh.maryland.gov/vsa/Documents/11annual.pdf

[9] Number calculated by taking the average mortality rate of Maryland residents in 2012 between the ages of 25-64 (0.2%) and then multiplying this by the estimated total number of Maryland residents with degrees in this same age range in 2025 (1,828,420).

[10] Maryland Higher Education Commission, June 2014. "Enrollment Projections, 2014-2023, Maryland Public Colleges and Universities." Archived at http://www.mhec.state.md.us/publications/research/AnnualReports/2014-2023EnrollProjections.pdf.

[11] National Center for Education Statistics, "Projections of Education Statistics to 2022" (NCES 2014051, February 2014), Table 15. http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2014051.

degrees to Marylanders. Although they will make some contribution to the completion goal, these institutions are not included in these projections. MHEC currently has no basis for projecting the number of degrees that they will award, since these institutions have not submitted data to MHEC on an annual basis. However, MHEC is in the beginning stages of collecting data on degree awards from out-of-state institutions, and these data will be added in future editions of this report as they become available.

The figures included in this report provide a blueprint based on conservative estimates to enable the State to achieve the 55% degree attainment goal. These figures can also be used to gauge progress toward that goal. Table 4, on page 19, shows a matrix with annual targets for each institution based on an annual 2.0% growth rate. This matrix will continue to be used as the standard against which institutional output can be measured each year. The current targets suggest that in 2025, Maryland public institutions will need to award approximately 44,000 degrees annually.

In this updated Best Practices report, MHEC has tried to incorporate all institutional feedback that was received following the 2012 version. One additional concern institutions noted was that the changing demographic landscape within Maryland over the next 15 years would require more resources to be devoted toward degree attainment so that progress would not be hindered. Specific areas expected to change and that may challenge the expansion of degree production in Maryland include the projected decrease in high school graduation rates noted above, higher percentages of students from minority and low-income families in the State,[12] and already low minority student graduation rates. While the diversity of students enrolled at Maryland colleges and universities is expected to change in the coming years, one of the most immediate concerns is the large disparity in degree attainment between white and Asian students on the one hand and African American and Hispanic students on the other. The 2010-2012 American Community Survey shows that, among residents age 25 and over, only 32% of Maryland's African American population has an associate degree or higher, with Hispanic degree attainment at 24%, compared to 67% for Asian and 47% for white residents. These disparities within the current postsecondary populations are not unique to Maryland but are representative of national conditions. At the national level, 26% of African American residents and 19% of Hispanic residents had an associate degree or higher compared to 57% of Asian residents and 38% of white residents. [13] Because there are limited new financial resources available to promote increased degree attainment among students, states and institutions alike have worked to align their efforts with student needs by channeling more of their current resources toward degree attainment for these populations. MHEC encourages colleges and universities to turn to practices listed within this report as well as those used by other states and institutions to promote increased graduation and degree attainment among Maryland students.

[12] The Maryland State Department of Education (MSDE) reported that in 2012-2013, 43% of Maryland PreK-12 students qualified for Free and Reduced Meals (up from 31% 10 years prior). Additionally, both Hispanic and African American populations have experienced significant growth during the last decade in Maryland, with a 107% increase for Hispanics and a 15% increase for American Americans (U.S. Census Bureau, 2011).
[13] U.S. Census Bureau: American Fact Finder. 2012. Table B15002 (series): "Sex by Educational Attainment for the Population 25 Years and Over." *2010-2012 American Community Survey. U.S. Census Bureau. .* http://factfinder2.census.gov.

MHEC recognizes that the projections within this model are based on several environmental assumptions outside of education that are subject to change. For instance, the rate at which degree holders migrate to Maryland may be altered by other changes to Maryland's economy (e.g., a significant change in federal employment in the State). In some cases, the projections may be affected because data categories do not match precisely (e.g., age categories and degree attainment levels vary among different data sources). Therefore, these targets should be understood as a benchmark against which to gauge progress rather than a precise forecast or even precise objectives for institutions or institutional sectors.

The assumptions within this projection model are as conservative as is possible with the information available. Additionally, as noted earlier, out-of-state institutions are not currently included in the degree award totals, even though they do award degrees to Marylanders. Furthermore, the projections listed assume a linear growth in degree attainment across all institutions. MHEC does acknowledge, however, that some institutions may grow at different rates. Given the assumptions made in developing this model, it is possible that the projections may need to be reworked slightly as additional information is presented. Nevertheless, the expectation is that the projections in this report will be held constant in future years, in order to provide a consistent standard for evaluating year-to-year progress toward the 55% attainment goal.

State and Institutional Goals and Targets

Table 5, below, provides a summary overview of actual degree awards for each of the three institutional sectors for the academic years between 2010 and 2014. This table indicates that undergraduate degree awards are ahead of the target levels and have progressively increased over the last four years with an average growth rate of 4%, and therefore the 55% degree attainment goal remains within reach. Although degree awards have declined in the independent and other-private sectors, due to institutional closure and reclassification, overall totals remain well above target levels. At this time institutions are ahead of the current degree attainment target by nearly 14,000 degrees. This table will continue to be used to monitor progress toward the State's goal.

Table 5. Target and actual undergraduate degrees awarded, 2009-2010 through 2013-2014.

Institutional Sector		2009-2010 (baseline)	2010-2011	2011-2012	2012-2013	2013-2014
Community Colleges	Target		11,386	11,614	11,846	12,083
	Actual	11,163	12,647	13,852	14,269	14,451
	+/-		**1,261**	**2,238**	**2,423**	**2,368**
Four-Year Institutions	Target		21,887	22,325	22,771	23,227
	Actual	21,458	22,735	24,331	25,136	25,646
	+/-		**848**	**2,006**	**2,365**	**2,419**
Independent Institutions	Target		6,281	6,469	6,663	6,863
	Actual	6,098	6,174	6,303	6,442	6,145
	+/-		**(107)**	**(166)**	**(221)**	**(718)**
Other Private Institutions	Target		668	668	668	416
	Actual	668	679	325	200	416
	+/-		**11**	**(343)**	**(468)**	**0**
Annual Total	*Target*		*40,222*	*41,076*	*41,949*	*42,841*
	Actual	*39,387*	*42,235*	*44,811*	*46,047*	*46,748*
	+/-		*2,013*	*3,735*	*4,098*	*3,907*
Cumulative Total	**Target**		**79,549**	**120,685**	**162,634**	**205,475**
	Actual	**39,387**	**81,622**	**126,433**	**172,480**	**219,228**
	+/-		**2,013**	**5,748**	**9,846**	**13,753**

Tables 6 and 7, on pages 20 and 21, provide similar detail for each public community college and four-year institution, as well as targets for the entire period. Table 8, on page 22, shows targets for all sectors for the full period (including independent and other private institutions). These tables are updated annually and reflect the State's progression toward the 55% goal.

Best Practices

Institutions were asked to submit reports describing the data-validated best practices that they were using to help increase the number of degree completers. The reports contained hundreds of practices and programs, many of which were pursued at multiple campuses. Since institutions designed their own validation procedures, the procedures could not be collated together to show meaningful relationships across institutions. However, they could be divided into three broad categories. The first category includes efforts to *increase the number of enrolling students*, the second includes attempts to *improve the proportion of enrolled students who earn degrees*, and the third lists efforts *to reduce the achievement gap*. Some common themes in each of these categories are outlined below.

A supplemental volume containing all reports submitted by institutions will be posted on the MHEC website. The supplement will also include an index indicating specific institutional practices reflecting these common themes. This thematic index will allow institutions and other interested readers to discover which institutions are using practices effectively in each area.

Best Practices: Enrolling More Students

The first group of strategies is designed to increase the number of students enrolling in college. The Maryland State Department of Education reported that 59,002 students in Maryland graduated from a public high school in 2009-2010.[14] MHEC reported that 32,201 Maryland residents enrolled in public and private colleges and universities as new full-time students beginning in Fall 2009.[15] Using these figures as a proxy, approximately 55% of high school graduates immediately enrolled in colleges in Maryland. This figure is not a true continuation rate, however, as some students enrolling in college that semester may have graduated from high school during 2008-2009 or earlier, and others may have completed their studies at private high schools or in homeschools. Nevertheless, it is clear that a large proportion of Maryland students who graduate from high school do not enroll in college. In addition, adult students represent a promising option for enrollment growth. Colleges might consider expanding efforts to reaching out to adults in new ways, including targeted efforts for near completers, reverse transfers, and veterans.

Strategies to increase enrollment center on the following themes, which are discussed more thoroughly in the supplemental volume of this report.

1. *Provide information* to students, through high schools, middle schools, and other venues, about how to apply and pay for college.
2. *Enroll high school students* in dual enrollment programs, in which students enroll in college courses while still enrolled in high school, and accumulate credits on both levels.
3. *Make admissions easier* through offering programs such as on-the-spot admissions.
4. *Ease transitions for adult students* by providing information and support on returning to the classroom.

Best Practices: More Enrolled Students Finishing Degrees

The second group of strategies attempts to increase the proportion of enrolled students who go on to complete their degrees. Please see the supplemental volume for a more detailed discussion of institutional initiatives.

1. *Improve college readiness* by working with high schools and communities on developing more accurate expectations on how to prepare for college as well as how to learn while enrolled at college.

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[14] Maryland State Department of Education, Division of Accountability and Assessment, "Summary of Attendance, Maryland Public Schools, 2009-2010." Archived at http://www.marylandpublicschools.org/MSDE/divisions/planningresultstest/prim_pubs.htm.
[15] Maryland Higher Education Commission, "2010 Enrollment by Place of Residence (Fall 2009)," April 2010. Archived at http://www.mhec.state.md.us/publications/research/AnnualReports/2010EnrollbyResidFall2009.pdf.

2. *Improve the transition to college* through summer academies, first-year programs, living-learning communities, course packaging and laddering of sequences, and similar transitional events.
3. *Improve advising* to make it easier for students to prepare for the programs they want, to reduce opportunities for students to avoid advising, and to mediate problems (academic, social, financial) before they become insurmountable.
4. *Reduce the hurdle of remedial/developmental coursework* through course redesign, and adopt policies to encourage students to move rapidly from developmental coursework to credit-bearing coursework.
5. *Facilitate transfer* by aligning coursework with four-year curricula (community colleges) and by accepting more transfer students and granting credit for more courses and types of learning experiences (four-year institutions).
6. *Reduce course withdrawals and improve teaching* through course redesign and pedagogical change.
7. *Revise curricula and administrative procedures* to reduce academic and organizational obstacles to course completion and degree completion.
8. *Provide additional support* such as supplemental instruction programs, tutoring services, and other kinds of academic support.
9. *Enhance faculty response* through increased development on needs recognition and referral mechanisms.
10. *Support underserved populations* with dedicated programs for students without information about how to manage college.
11. *Increase degree awards* through reverse transfer, reaching out to near-completers, and other initiatives to facilitate program completion.

Best Practices: Reduce the Achievement Gap

A third group of strategies is targeted toward encouraging higher enrollment and graduation of minority students. As the current demographic landscape of students change throughout Maryland, these strategies are guiding the work of several colleges and universities as they respond to these new dynamics on their campuses. The supplemental volume has a more thorough examination of these programs.

1. *Targeted advising* and academic monitoring for underrepresented students.
2. *Annual monitoring of minority student progress* to ensure retention and graduation efforts are effective.
3. *Minority student mentors* that serve as an additional support and guidance for students new to the college environment.
4. *Financial literacy programs* in developmental and freshmen entry courses to inform those at economic risk of financial aid options.
5. *Faculty diversity training* programs aimed to work with faculty members on specific issues facing underrepresented college students.

The Challenge of Financial Aid

Several institutions are also attempting to use additional institutional financial aid to improve degree completion. Many institutions asserted in their reports that increased public financial aid would be the best way to improve student persistence and graduation. When students leave college, they do not always tell someone that they are leaving, and among those who do speak to someone, they often do not share why they are leaving. But by far, the most commonly given reason for drop out or stop out is "I can't afford to keep going."[16] The exact scope of this problem is unknown, for reasons discussed below. Nevertheless, the prevalence of this explanation suggests that there are indeed many students who lack the financial resources to enroll or to remain enrolled in college.

The recent recession contributed to declines in family income and also led more students to enroll in college. The combination of higher enrollment and greater financial need led to an explosive increase in demand for financial aid, and while federal and institutional aid have increased since 2006-2007, state aid in Maryland has remained flat. On a per-student basis, state aid has actually declined.

In 2007, MHEC conducted a study examining the effects of financial aid on student persistence for first-time full-time students. That study showed that students receiving large amounts of aid were more likely to persist to the second year, and this effect was especially pronounced for less affluent students. MHEC performed a second study on financial aid in 2013, which examined the impact of the Net Cost of Attendance (NCOA) on student persistence and bachelor's degree completion at public, four-year institutions (net cost of attendance is the student's cost of attendance minus all financial aid received). It was found that nearly half of all students receiving financial aid exhibit some form of unmet financial need, but it is a more significant issue for students from low-income backgrounds. Thus, low-income students pay more out of pocket than students from higher income families. Furthermore, NCOA showed a negative effect on both persistence and four-year degree completion for students in the two lowest income quintiles. As college costs rise, low-income students are faced with higher costs, which can have adverse effects on college retention and graduation. Such findings highlight the importance of targeted funding and resources toward students with the highest need.

Annual Summit on Completion

MHEC convened an inaugural Statewide College Completion Forum on January 8, 2013. The summit was held at Morgan State University and invited educators and policymakers from Maryland as well as national experts to exchange ideas about ways to improve degree completion at Maryland colleges and universities. Governor Martin O'Malley addressed the forum, and attendees also heard from partners from other states, representatives of the U.S. Department of Education, advocacy groups and foundations, educators from Maryland public

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[16] Financial concerns, sometimes expressed as a need to place work ahead of school, were most commonly cited by dropouts surveyed in Johnson et al., "With Their Whole Lives Ahead of Them" (Public Agenda, 2009), http://www.publicagenda.org/files/pdf/theirwholelivesaheadofthem.pdf. Research suggests that student persistence is strongly affected both by students' finances and their perceptions of their finances. A survey of research on financial impacts appears in St. John et al., "Economic Influences on Persistence Reconsidered," in Braxton, ed., *Reworking the Student Departure Puzzle* (Vanderbilt University Press, 2000), pp. 29-47.

and private institutions, and colleagues from the Maryland State Department of Education, Maryland Independent College and University Association, Maryland Association of Community Colleges, and the University System of Maryland. This meeting had several breakout sessions that provided opportunities for participants to discuss strategies to encourage higher degree completion for students such as K-12 reforms including PARCC and Common Core; transfer, reverse transfer, and degree completion initiatives; retention and developmental education programs; and high school success academies.

On November 7, 2014, MHEC and the University System of Maryland, working with higher education partners throughout the state, hosted a second statewide completion forum called Stride to 55. It was held at the College Park Marriott Hotel & Conference Center, adjacent to the campus of University of Maryland University College, with approximately 175 participants in attendance. The forum brought together education leaders and policymakers from across Maryland to share how degree completion efforts and policy changes are transforming student learning experiences. Like the first annual statewide completion forum held in January 2013, this event highlighted effective policies and practices, and identified ways to more efficiently transform the higher education landscape for current and future generations of students. Keynote discussions focused on how state, federal, and philanthropic organizations and stakeholders are working together to increase the number of postsecondary degrees earned and to enhance student outcomes. Speakers and panelists included Governor Martin O'Malley; Ted Mitchell, Under Secretary of Education, U.S. Department of Education; Jeff Selingo, author and journalist; Stan Jones, President, Complete College America; and Anne Keehn, Senior Fellow, Bill & Melinda Gates Foundation.

Additionally, attendees had opportunities to learn more about campus-based initiatives taking place in Maryland during morning and afternoon concurrent breakout sessions. These sessions were facilitated by faculty and administrators on Maryland college and university campuses, and addressed issues in areas including academic transformation/course redesign, workforce alignment, college affordability, common core/college readiness, and promising practices and programs that support student completion.

Conclusion

The institutional practices highlighted in this report reflect a diverse array of efforts by the State's colleges and universities to assist students in their efforts to complete their degrees. Educators across the state are working to identify problems and implement solutions to challenges that they experience on their own campuses. The breadth of these efforts reveals that degree completion is a complex problem without a single solution. If all students, for example, had the financial ability to complete their degrees, some would still fail to do so due to inadequate preparation. If all students were well prepared, some would fail to graduate because of inadequate support services. If all students had strong support services, some would fail to graduate because of financial reasons. In addition, some factors, such as disruptions to family life, can derail even the best-supported students from their degree attainment goals. Because of this complexity, it is difficult to identify the precise effects of any particular initiative. A program to improve remedial education can be shown to improve the ability of students to

complete remedial and even credit-bearing courses in those subjects, but this improvement may not lead to degree completion if other obstacles such as financial aid or support services have a more powerful effect.

MHEC will continue to conduct research on the factors affecting student persistence and degree completion. The robust data sets that will be available in future years through MHEC's new annual collection systems will significantly advance this research. Additional analyses will appear in future editions of this report. In the meantime, the relatively limited amount of data currently available create a challenge for policymakers who seek to direct policy solutions toward initiatives with clearly positive effects on degree completion. Until more detailed research on degree completion becomes available, the best policy approach may be to encourage efforts by institutions through competitions and other incentives and to encourage further research into problems of student persistence and departure. Institutions are already pursuing a wealth of programmatic initiatives, some of which are supported and coordinated by MHEC. These initiatives reflect the commitment of Maryland colleges and universities to improve student success, and to ensure that Maryland has a well-educated citizenry.

TABLES

Table 1.

Trends in Retention and Graduation Rates
MARYLAND PUBLIC COLLEGES AND UNIVERSITIES
All Students

Percent enrolled at original campus or graduated from **any** campus after:

Cohort	N	One Year	Two Years	Three Years	Four Years		Five Years		Six Years	
					Enrolled	Graduated	Enrolled	Graduated	Enrolled	Graduated
1987	10,563	77.7	65.7	60.8	33.2	23.4	10.0	48.2	4.0	56.3
1988	10,349	78.7	67.1	62.1	33.3	24.8	9.8	50.1	4.0	57.8
1989	9,313	80.5	68.7	63.4	34.5	24.5	9.8	50.4	4.5	58.2
1990	9,329	79.0	66.8	61.5	33.4	23.6	10.7	47.7	4.6	55.8
1991	9,272	77.8	66.2	61.3	32.6	24.3	9.7	47.7	3.7	55.1
1992	9,441	79.8	67.2	61.9	32.5	25.2	9.5	48.9	3.8	56.2
1993	9,797	78.6	66.3	61.2	31.8	25.2	9.2	48.4	3.7	55.4
1994	10,078	78.9	66.6	61.7	31.2	26.1	8.5	49.6	3.4	56.7
1995	10,717	80.5	68.1	63.6	29.6	29.9	8.8	51.6	3.7	58.4
1996	11,066	80.3	69.7	64.7	30.0	30.4	8.4	53.0	3.5	59.3
1997	11,612	81.8	70.7	66.4	29.3	33.0	8.2	54.8	3.3	61.1
1998	12,154	81.9	70.7	66.7	30.4	32.5	8.1	55.4	3.3	62.1
1999	12,037	81.7	71.8	67.8	29.1	34.2	7.9	56.4	3.1	62.6
2000	12,319	81.5	71.9	68.0	27.8	35.9	7.4	57.9	2.8	64.0
2001	13,454	82.6	72.0	68.2	25.7	37.9	6.3	58.5	2.6	64.2
2002	13,165	81.1	70.9	67.5	25.3	38.3	6.7	58.8	2.7	64.3
2003	13,250	81.3	71.3	67.9	25.0	39.0	6.6	59.2	2.9	64.7
2004	13,610	80.8	70.8	66.6	25.3	38.7	6.9	58.5	3.0	64.1
2005	13,788	79.8	69.4	66.1	22.8	40.2	6.8	58.2	3.2	63.3
2006	14,492	78.5	68.7	65.5	24.8	37.4	7.2	55.8	2.9	61.6
2007	14,799	81.0	70.5	67.5	25.0	38.9	6.9	58.3	2.9	63.8
2008	15,100	80.8	70.9	66.8	25.2	38.4	6.9	58.3		
2009	14,666	81.5	72.1	68.0	24.7	40.6				
2010	14,262	81.7	72.1	67.8						
2011	13,735	82.5	73.4							
2012	13,566	82.8								

* 2010 Cohort sizes have been updated to include UMUC in the total.

Source: MHEC Enrollment and Degree Information Systems

Table 2.

Trends in Retention, Graduation and Transfer Rates for Maryland Community Colleges
All Students
Statewide Count
1991 - 2011

Cohort	N	Two Years			Three Years			Four Years		
		Still Enrolled	Graduated/ Did Not Trans.	Transferred to 4 Year	Still Enrolled	Graduated/ Did Not Trans.	Transferred to 4 Year	Still Enrolled	Graduated/ Did Not Trans.	Transferred to 4 Year
1991	11,003	36.6%	3.1%	13.4%	18.4%	7.9%	21.5%	10.7%	9.9%	25.3%
1992	11,008	35.6%	2.7%	12.9%	17.7%	6.9%	20.8%	10.0%	9.1%	24.5%
1993	10,692	36.2%	2.2%	12.9%	18.0%	6.9%	20.7%	10.6%	9.3%	24.2%
1994	10,436	35.5%	2.1%	12.6%	17.4%	6.7%	20.2%	10.3%	8.6%	23.6%
1995	11,336	35.8%	2.3%	13.1%	18.1%	6.4%	21.0%	10.1%	8.7%	24.4%
1996	10,905	35.1%	2.7%	12.7%	17.6%	6.3%	20.4%	9.7%	8.2%	23.9%
1997	11,420	36.2%	2.8%	12.9%	18.1%	6.5%	20.1%	11.3%	8.5%	23.8%
1998	11,770	35.0%	2.1%	12.2%	19.1%	5.8%	19.4%	12.0%	8.2%	22.9%
1999	12,492	35.5%	2.3%	13.1%	18.9%	6.3%	20.2%	11.5%	8.6%	23.6%
2000	12,303	37.3%	2.0%	13.5%	19.3%	6.5%	21.0%	11.9%	8.6%	25.4%
2001	12,919	36.9%	2.2%	13.0%	19.2%	6.1%	21.9%	10.9%	8.5%	25.4%
2002	13,978	37.5%	2.3%	13.8%	19.8%	6.5%	21.2%	11.3%	8.9%	25.3%
2003	14,491	37.5%	2.3%	14.4%	19.5%	6.2%	22.3%	11.0%	8.7%	26.3%
2004	14,527	37.2%	2.6%	13.9%	19.5%	6.4%	21.7%	11.9%	9.2%	25.7%
2005	14,454	37.0%	2.5%	14.6%	20.1%	6.1%	22.3%	12.9%	8.9%	26.0%
2006	15,752	36.2%	2.2%	15.6%	20.7%	6.0%	23.0%	12.4%	8.4%	27.1%
2007	16,307	38.6%	2.3%	14.3%	21.8%	6.1%	22.3%	12.9%	9.2%	26.6%
2008	16,418	40.1%	2.3%	12.3%	22.1%	6.4%	19.9%	13.0%	9.4%	24.1%
2009	18,071	38.5%	2.6%	12.7%	20.6%	6.5%	20.3%	11.6%	9.4%	24.3%
2010	17,621	38.8%	2.5%	12.7%	20.7%	6.2%	20.9%			
2011	16,746	36.8%	2.5%	12.1%						

Source: MHEC Enrollment and Degree Information Systems

Table 3.

DEGREE PROGRESS FOUR YEARS AFTER INITIAL ENROLLMENT
MARYLAND COMMUNITY COLLEGES

College	Year of Fall Entering Class	Entering Class	Analysis Cohort*	ALL STUDENTS Graduation/ Transfer Rate	ALL STUDENTS Successful Persister**	COLLEGE READY Head Count	COLLEGE READY Graduation/ Transfer Rate	COLLEGE READY Successful Persister**	DEV. COMPLETERS Head Count	DEV. COMPLETERS Graduation/ Transfer Rate	DEV. COMPLETERS Successful Persister**	DEV. NON-COMPLETERS Head Count	DEV. NON-COMPLETERS Graduation/ Transfer Rate	DEV. NON-COMPLETERS Successful Persister**
Allegany+	2004	922	651	42.5%	68.4%	226	60.2%	81.4%	120	50.8%	80.0%	305	26.1%	54.1%
	2005	911	651	43.6%	60.7%	268	59.0%	75.7%	140	47.1%	70.7%	238	25.1%	41.2%
	2006	832	590	40.2%	53.4%	239	54.8%	67.8%	107	49.5%	68.2%	244	21.8%	32.8%
	2007	916	691	64.3%	76.0%	290	73.4%	84.1%	103	64.1%	82.5%	298	55.4%	65.8%
	2008	897	643	60.5%	74.5%	173	78.0%	86.1%	192	62.0%	84.4%	278	48.6%	60.4%
Anne Arundel	2004	3,131	2,173	49.8%	71.1%	486	63.2%	81.1%	971	63.5%	87.4%	716	22.1%	42.0%
	2005	3,150	2,197	51.0%	66.0%	610	66.2%	77.2%	860	56.7%	76.3%	727	31.5%	44.6%
	2006	3,166	2,197	52.7%	69.0%	608	66.6%	78.8%	873	60.5%	82.2%	716	31.4%	44.6%
	2007	3,323	2,337	53.5%	76.3%	564	70.6%	85.6%	1,005	62.7%	91.7%	768	28.9%	49.2%
	2008	3,192	2,330	50.6%	73.1%	562	67.4%	86.1%	959	58.8%	87.9%	1,768	45.2%	68.9%
Baltimore City	2004	1,308	710	27.3%	49.0%	53	54.7%	67.9%	198	42.9%	81.8%	459	17.4%	32.7%
	2005	1,371	749	27.0%	48.1%	67	56.7%	64.2%	183	31.7%	75.4%	499	21.3%	35.9%
	2006	1,204	673	31.6%	52.2%	93	31.2%	45.2%	162	37.7%	82.7%	418	29.3%	41.9%
	2007	1,176	735	37.6%	55.8%	39	61.5%	69.2%	197	48.7%	83.8%	499	31.3%	43.7%
	2008	1,213	714	37.7%	55.3%	26	50.0%	73.1%	188	43.1%	80.3%	500	35.0%	45.0%
Baltimore County	2004	4,492	2,968	45.3%	71.5%	951	55.1%	80.0%	1,214	49.5%	81.6%	803	27.3%	46.1%
	2005	3,937	2,530	45.5%	70.4%	669	56.7%	81.3%	1,164	49.8%	80.1%	697	27.6%	43.6%
	2006	3,763	2,480	42.9%	65.7%	470	57.7%	74.9%	1,016	51.8%	84.4%	994	26.8%	42.4%
	2007	4,164	2,802	42.1%	66.0%	477	53.0%	74.8%	1,144	53.3%	85.5%	1,181	26.8%	43.4%
	2008	3,982	2,779	41.6%	65.4%	415	54.5%	73.0%	1,226	50.9%	84.4%	1,138	26.9%	42.2%
Carroll	2004	754	521	55.9%	74.5%	82	81.7%	84.1%	311	64.3%	87.8%	128	19.0%	35.9%
	2005	710	478	58.6%	75.3%	78	82.1%	93.6%	280	66.4%	86.4%	120	25.1%	37.5%
	2006	795	587	57.9%	75.1%	93	81.7%	92.5%	359	64.9%	83.6%	135	22.9%	40.7%
	2007	873	626	58.8%	79.3%	104	72.1%	90.4%	390	68.7%	91.8%	162	26.4%	42.0%
	2008	818	627	56.5%	76.4%	85	72.9%	84.7%	388	67.3%	89.9%	151	20.5%	38.4%
Cecil	2004	194	150	46.0%	54.0%	24	58.3%	66.7%	88	48.9%	83.0%	38	31.5%	42.1%
	2005	551	218	41.3%	64.2%	40	52.5%	67.5%	69	55.1%	85.5%	109	28.5%	49.5%
	2006	542	278	44.2%	63.7%	75	60.0%	82.7%	88	56.8%	80.7%	115	24.3%	38.3%
	2007	620	357	48.5%	68.6%	117	67.5%	89.7%	107	57.9%	86.0%	133	24.2%	36.1%
	2008	704	418	43.5%	54.3%	130	68.5%	77.7%	133	42.9%	57.1%	155	23.2%	32.3%
Chesapeake	2004	591	352	44.3%	70.2%	66	71.2%	86.4%	157	52.2%	83.4%	129	20.9%	45.7%
	2005	593	342	43.0%	69.0%	69	66.7%	82.6%	179	43.6%	79.9%	94	24.5%	37.2%
	2006	653	386	41.2%	65.5%	76	64.5%	81.6%	204	44.6%	75.5%	107	17.8%	34.6%
	2007	640	417	44.8%	77.5%	75	64.0%	80.0%	229	51.5%	85.2%	113	18.5%	60.2%
	2008	646	420	49.8%	72.9%	118	66.9%	85.6%	182	52.7%	86.3%	120	28.3%	40.0%
College of S. MD	2004	1,799	655	65.2%	82.1%	416	71.9%	84.9%	228	53.5%	78.1%	11	54.3%	63.6%
	2005	1,835	921	54.3%	77.5%	495	61.4%	82.8%	405	46.2%	72.1%	21	43.2%	57.1%
	2006	1,970	992	55.6%	76.6%	495	63.8%	82.2%	403	52.1%	76.2%	94	27.4%	48.9%
	2007	2,106	1,041	51.5%	74.5%	589	59.1%	78.1%	356	44.9%	74.4%	96	29.3%	53.1%
	2008	2,322	1,202	51.8%	77.4%	774	56.2%	79.7%	334	49.1%	81.4%	94	25.5%	43.6%
Frederick	2004	1,324	684	62.3%	80.3%	226	79.2%	87.6%	391	57.3%	83.4%	67	34.5%	34.3%
	2005	1,520	819	64.1%	82.7%	273	78.4%	85.3%	417	61.6%	88.7%	129	41.9%	57.4%
	2006	1,456	787	62.4%	82.6%	239	75.7%	83.3%	460	60.4%	88.3%	88	36.7%	51.1%
	2007	1,697	1,023	65.4%	76.9%	297	82.5%	86.9%	621	63.8%	79.9%	105	26.5%	61.0%
	2008	1,790	1,036	73.9%	78.7%	334	78.1%	79.6%	609	74.4%	81.1%	93	55.9%	60.2%

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Table 3.

Institution	Year													
Garrett	2004	232	113	81.4%	91.2%	35	82.9%	94.3%	57	84.2%	91.2%	21	71.3%	85.7%
	2005	221	167	59.9%	73.1%	48	79.2%	95.8%	69	58.0%	73.9%	50	44.0%	50.0%
	2006	296	207	69.6%	79.7%	73	93.2%	97.3%	91	62.6%	80.2%	43	44.3%	48.8%
	2007	324	213	69.5%	78.9%	83	77.1%	89.2%	82	74.4%	85.4%	48	48.0%	50.0%
	2008	301	200	73.5%	86.5%	94	79.8%	95.7%	71	67.6%	83.1%	36	66.7%	66.7%
Hagerstown	2004	779	547	59.6%	76.6%	131	77.9%	84.7%	298	63.8%	87.2%	118	28.7%	40.7%
	2005	769	563	60.0%	76.7%	176	75.0%	88.6%	247	61.5%	83.8%	140	38.5%	49.3%
	2006	788	522	64.2%	79.9%	158	85.4%	94.9%	236	69.1%	87.3%	128	29.0%	47.7%
	2007	823	567	61.6%	80.8%	174	76.4%	92.0%	248	62.1%	87.1%	145	43.0%	56.6%
	2008	933	671	59.2%	75.9%	180	80.0%	90.6%	298	64.4%	87.6%	193	31.6%	44.0%
Harford	2004	1,532	1,056	54.7%	72.5%	259	68.0%	84.6%	537	62.9%	84.2%	260	24.5%	36.5%
	2005	1,383	921	57.1%	75.2%	336	74.1%	89.9%	380	61.8%	83.4%	205	20.5%	36.1%
	2006	1,410	933	59.7%	76.1%	294	74.5%	86.4%	412	64.1%	85.7%	227	32.5%	45.4%
	2007	1,564	1,054	55.4%	78.5%	336	73.5%	92.0%	493	57.6%	86.6%	225	23.6%	40.4%
	2008	1,590	1,114	54.9%	77.6%	337	73.0%	90.2%	515	58.6%	88.9%	262	24.4%	39.3%
Howard	2004	1,339	912	57.1%	76.4%	296	67.6%	84.5%	310	66.1%	91.3%	306	37.8%	53.6%
	2005	1,455	991	57.1%	75.2%	336	74.1%	89.9%	379	64.6%	90.0%	324	22.2%	49.1%
	2006	1,559	1,126	57.1%	78.5%	335	71.0%	86.9%	425	66.4%	92.2%	366	33.6%	54.9%
	2007	1,551	1,111	56.2%	76.1%	308	76.3%	86.7%	450	59.6%	88.2%	353	34.3%	51.6%
	2008	1,766	1,314	54.2%	73.4%	392	64.0%	80.4%	455	60.7%	82.9%	467	39.6%	58.2%
Montgomery	2004	4,366	3,022	54.3%	76.7%	1,797	61.7%	82.5%	778	52.2%	79.3%	447	28.2%	49.0%
	2005	4,013	2,645	48.8%	72.8%	1,191	54.6%	78.4%	750	56.9%	85.7%	704	30.4%	49.4%
	2006	5,674	4,040	52.9%	75.1%	1,801	62.1%	81.1%	740	51.1%	87.2%	1,499	42.7%	62.0%
	2007	4,281	3,059	54.3%	80.1%	1,150	69.7%	88.8%	1,324	52.9%	85.7%	585	27.2%	50.4%
	2008	3,889	2,722	51.3%	73.3%	562	70.1%	85.8%	1,240	60.8%	87.0%	920	27.1%	47.3%
Prince George's	2004	2,122	816	46.6%	81.1%	309	57.0%	85.1%	289	43.6%	87.2%	218	35.8%	67.4%
	2005	2,129	802	47.8%	78.9%	209	55.0%	85.2%	395	49.9%	85.1%	198	36.0%	60.1%
	2006	1,922	703	48.2%	77.4%	337	52.5%	83.4%	224	45.1%	79.9%	142	42.9%	59.2%
	2007	2,100	1,255	39.0%	64.5%	134	60.4%	75.4%	446	54.9%	89.9%	675	24.2%	45.5%
	2008	1,831	1,145	39.7%	62.8%	126	46.8%	67.5%	605	29.3%	45.8%	414	52.7%	86.2%
Wor-Wic	2004	751	399	43.1%	60.9%	56	75.0%	83.9%	164	58.5%	85.4%	179	19.0%	31.3%
	2005	769	441	53.1%	73.9%	52	75.0%	84.6%	202	64.4%	91.6%	187	34.8%	51.9%
	2006	735	476	48.7%	67.2%	64	67.2%	85.9%	215	66.0%	89.8%	197	23.8%	36.5%
	2007	776	483	42.7%	72.5%	64	64.1%	85.9%	215	51.6%	91.6%	204	26.6%	48.0%
	2008	860	569	44.8%	71.2%	77	75.3%	88.3%	261	54.8%	90.4%	231	23.4%	43.7%
TOTAL++	2004	25,636	15,729	50.7%	72.9%	5,413	63.5%	82.7%	6,111	56.4%	84.0%	4,205	25.9%	44.8%
	2005	25,317	15,415	50.1%	71.2%	4,869	62.8%	81.5%	6,104	55.0%	81.8%	4,442	29.4%	45.4%
	2006	26,765	16,977	51.4%	71.7%	5,450	64.3%	81.0%	6,015	56.8%	84.1%	5,513	32.7%	48.9%
	2007	26,964	17,801	51.5%	73.7%	4,801	68.4%	84.9%	7,410	57.1%	85.1%	5,590	29.6%	47.4%
	2008	26,734	17,904	50.8%	71.4%	4,385	66.3%	82.5%	7,656	56.3%	82.1%	5,861	32.1%	49.1%

* Analysis Cohort = students who attempt at least 18 hours within two years of matriculation

** Successful or Stll Enrolled is defined as students who completed at least 30 credit hours with a GPA of 2.00 or better, who have graduated and/or

transferred, or who are still enrolled at the institution.
+ Allegany data is obtained from sources not including the National Student Clearinghouse.

++ Totals reflect summation of cohort data as reported by the colleges, and derived percentages based solely on the reporting institutions. These

may provide an "indication" or estimate of the statewide community college success levels, but should not be relied upon as a completely accurate

measure at the statewide level.
Sources: Student Information System, National Student Clearinghouse Enrollment Search and Degree Verify, MHEC Transfer Student System, data

provided by individual institutions

Table 4. Degree targets for public institutions, by institution (2% annual growth)

Institution	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	Cumulative Total
COMMUNITY COLLEGES																	
Allegany College of Maryland	572	583	595	607	619	632	644	657	670	684	697	711	725	740	755	770	10,662
Anne Arundel Community College	1,336	1,363	1,390	1,418	1,446	1,475	1,505	1,535	1,565	1,597	1,629	1,661	1,694	1,728	1,763	1,798	24,902
Baltimore City Community College	411	419	428	436	445	454	463	472	482	491	501	511	521	532	542	553	7,661
Carroll Community College	466	475	485	495	504	515	525	535	546	557	568	579	591	603	615	627	8,686
Cecil College	190	194	198	202	206	210	214	218	223	227	232	236	241	246	251	256	3,541
Chesapeake College	230	235	239	244	249	254	259	264	269	275	280	286	292	298	303	310	4,287
College of Southern Maryland	822	838	855	872	890	908	926	944	963	982	1,002	1,022	1,042	1,063	1,085	1,106	15,321
Community College of Baltimore County	1,703	1,737	1,772	1,807	1,843	1,880	1,918	1,956	1,995	2,035	2,076	2,117	2,160	2,203	2,247	2,292	31,743
Frederick Community College	682	696	710	724	738	753	768	783	799	815	831	848	865	882	900	918	12,712
Garrett College	96	98	100	102	104	106	108	110	112	115	117	119	122	124	127	129	1,789
Hagerstown Community College	442	451	460	469	478	488	498	508	518	528	539	550	561	572	583	595	8,239
Harford Community College	611	623	636	648	661	675	688	702	716	730	745	760	775	790	806	822	11,389
Howard Community College	675	689	702	716	731	745	760	775	791	807	823	839	856	873	891	908	12,582
Montgomery College	1,919	1,957	1,997	2,036	2,077	2,119	2,161	2,204	2,248	2,293	2,339	2,386	2,434	2,482	2,532	2,583	35,769
Prince George's Community College	690	704	718	732	747	762	777	793	808	825	841	858	875	893	910	929	12,861
Wor-Wic Community College	318	324	331	337	344	351	358	365	373	380	388	395	403	411	420	428	5,927
Sub-Total	11,163	11,386	11,614	11,846	12,083	12,325	12,571	12,823	13,079	13,341	13,608	13,880	14,157	14,441	14,729	15,024	208,070
FOUR-YEAR PUBLIC INSTITUTIONS																	
Bowie State University	606	618	630	643	656	669	682	696	710	724	739	753	769	784	800	816	11,295
Coppin State University	378	386	393	401	409	417	426	434	443	452	461	470	479	489	499	509	7,046
Frostburg State University	768	783	799	815	831	848	865	882	900	918	936	955	974	993	1,013	1,034	14,315
Salisbury University	1,661	1,694	1,728	1,763	1,798	1,834	1,871	1,908	1,946	1,985	2,025	2,065	2,107	2,149	2,192	2,235	30,960
Towson University	3,625	3,698	3,771	3,847	3,924	4,002	4,082	4,164	4,247	4,332	4,419	4,507	4,597	4,689	4,783	4,879	67,567
University of Baltimore	516	526	537	548	559	570	581	593	605	617	629	642	654	668	681	694	9,618
University of Maryland - Baltimore	379	387	394	402	410	418	427	435	444	453	462	471	481	490	500	510	7,064
University of Maryland - Baltimore County	1,915	1,953	1,992	2,032	2,073	2,114	2,157	2,200	2,244	2,289	2,334	2,381	2,429	2,477	2,527	2,577	35,694
University of Maryland - College Park	6,569	6,700	6,834	6,971	7,110	7,253	7,398	7,546	7,697	7,851	8,008	8,168	8,331	8,498	8,668	8,841	122,441
University of Maryland - Eastern Shore	463	472	482	491	501	511	521	532	542	553	564	576	587	599	611	623	8,630
University of Maryland - University College	3,365	3,432	3,501	3,571	3,642	3,715	3,790	3,865	3,943	4,021	4,102	4,184	4,268	4,353	4,440	4,529	62,721
Morgan State University	772	787	803	819	836	852	869	887	905	923	941	960	979	999	1,019	1,039	14,390
St. Mary's College of Maryland	441	450	459	468	477	487	497	507	517	527	538	548	559	570	582	594	8,220
Sub-Total	21,458	21,887	22,325	22,771	23,227	23,691	24,165	24,648	25,141	25,644	26,157	26,680	27,214	27,758	28,313	28,880	399,962
Annual Total	**32,621**	**33,273**	**33,939**	**34,618**	**35,310**	**36,016**	**36,737**	**37,471**	**38,221**	**38,985**	**39,765**	**40,560**	**41,371**	**42,199**	**43,043**	**43,904**	**608,032**

Totals for University of Maryland - University College include both associate and baccalaureate degrees.

Table 6. Target and actual undergraduate degrees awarded, community colleges.

Institution		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	Total
Allegany College of Maryland	Target		583	595	607	619	632	644	657	670	684	697	711	725	740	755	770	10,662
	Actual	572	603	562	588	576												
	+/-		20	-33	-19	-43												
Anne Arundel Community College	Target		1,363	1,390	1,418	1,446	1,475	1,505	1,535	1,565	1,597	1,629	1,661	1,694	1,728	1,763	1,798	24,902
	Actual	1,336	1,505	1,567	1,581	1,800												
	+/-		142	177	163	354												
Baltimore City Community College	Target		419	428	436	445	454	463	472	482	491	501	511	521	532	542	553	7,661
	Actual	411	470	540	446	385												
	+/-		51	112	10	-60												
Carroll Community College	Target		475	485	495	504	515	525	535	546	557	568	579	591	603	615	627	8,686
	Actual	466	534	557	658	656												
	+/-		59	72	163	152												
Cecil College	Target		194	198	202	206	210	214	218	223	227	232	236	241	246	251	256	3,541
	Actual	190	235	244	219	290												
	+/-		41	46	17	84												
Chesapeake College	Target		235	239	244	249	254	259	264	269	275	280	286	292	298	303	310	4,287
	Actual	230	251	272	308	282												
	+/-		16	33	64	33												
College of Southern Maryland	Target		838	855	872	890	908	926	944	963	982	1,002	1,022	1,042	1,063	1,085	1,106	15,321
	Actual	822	821	990	1,082	1,215												
	+/-		-17	135	210	325												
Community College of Baltimore	Target		1,737	1,772	1,807	1,843	1,880	1,918	1,956	1,995	2,035	2,076	2,117	2,160	2,203	2,247	2,292	31,743
	Actual	1,703	1,854	2,132	2,086	2,020												
	+/-		117	360	279	177												
Frederick Community College	Target		696	710	724	738	753	768	783	799	815	831	848	865	882	900	918	12,712
	Actual	682	778	846	883	847												
	+/-		82	136	159	109												
Garrett College	Target		98	100	102	104	106	108	110	112	115	117	119	122	124	127	129	1,789
	Actual	96	98	133	105	108												
	+/-		0	33	3	4												
Hagerstown Community College	Target		451	460	469	478	488	498	508	518	528	539	550	561	572	583	595	8,239
	Actual	442	490	551	573	601												
	+/-		39	91	104	123												
Harford Community College	Target		623	636	648	661	675	688	702	716	730	745	760	775	790	806	822	11,389
	Actual	611	772	834	923	903												
	+/-		149	198	275	242												
Howard Community College	Target		689	702	716	731	745	760	775	791	807	823	839	856	873	891	908	12,582
	Actual	675	882	955	1,066	1,113												
	+/-		194	253	350	382												
Montgomery College	Target		1,957	1,997	2,036	2,077	2,119	2,161	2,204	2,248	2,293	2,339	2,386	2,434	2,482	2,532	2,583	35,769
	Actual	1,919	2,183	2,383	2,318	2,374												
	+/-		226	386	282	297												
Prince George's Community College	Target		704	718	732	747	762	777	793	808	825	841	858	875	893	910	929	12,861
	Actual	690	800	904	963	948												
	+/-		96	186	231	201												
Wor-Wic Community College	Target		324	331	337	344	351	358	365	373	380	388	395	403	411	420	428	5,927
	Actual	318	371	382	470	423												
	+/-		47	51	133	79												
Sub-Total	**Target**		11,386	11,614	11,846	12,083	12,325	12,571	12,823	13,079	13,341	13,608	13,880	14,157	14,441	14,729	15,024	208,070
	Actual	21,458	12,647	13,852	14,269	14,541												
	+/-		1,261	2,238	2,423	2,458												

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Table 7. Target and actual undergraduate degrees awarded, four-year colleges and universities.

Institution		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	Total
Bowie State University	Target		618	630	643	656	669	682	696	710	724	739	753	769	784	800	816	11,295
	Actual	606	683	688	739	741												
	+/-		**65**	**58**	**96**	**85**												
Coppin State University	Target		386	393	401	409	417	426	434	443	452	461	470	479	489	499	509	7,046
	Actual	378	379	460	409	478												
	+/-		-7	**67**	**8**	**69**												
Frostburg State University	Target		783	799	815	831	848	865	882	900	918	936	955	974	993	1,013	1,034	14,315
	Actual	768	850	892	969	1,012												
	+/-		**67**	**93**	**154**	**181**												
Salisbury University	Target		1,694	1,728	1,763	1,798	1,834	1,871	1,908	1,946	1,985	2,025	2,065	2,107	2,149	2,192	2,235	30,960
	Actual	1,661	1,709	1,787	1,872	1,899												
	+/-		**15**	**59**	**109**	**101**												
Towson University	Target		3,698	3,771	3,847	3,924	4,002	4,082	4,164	4,247	4,332	4,419	4,507	4,597	4,689	4,783	4,879	67,567
	Actual	3,625	3,948	4,103	4,147	4,291												
	+/-		**251**	**332**	**300**	**367**												
University of Baltimore	Target		526	537	548	559	570	581	593	605	617	629	642	654	668	681	694	9,618
	Actual	516	631	625	670	665												
	+/-		**105**	**88**	**122**	**106**												
University of Maryland - Baltimore	Target		387	394	402	410	418	427	435	444	453	462	471	481	490	500	510	7,064
	Actual	379	359	340	337	337												
	+/-		-28	-54	-65	-73												
University of Maryland - Baltimore County	Target		1,953	1,992	2,032	2,073	2,114	2,157	2,200	2,244	2,289	2,334	2,381	2,429	2,477	2,527	2,577	35,694
	Actual	1,915	1,905	2,140	2,230	2,250												
	+/-		-48	**148**	**198**	**177**												
University of Maryland - College Park	Target		6,700	6,834	6,971	7,110	7,253	7,398	7,546	7,697	7,851	8,008	8,168	8,331	8,498	8,668	8,841	122,441
	Actual	6,569	6,987	7,043	7,192	7,279												
	+/-		**287**	**209**	**221**	**169**												
University of Maryland - Eastern Shore	Target		472	482	491	501	511	521	532	542	553	564	576	587	599	611	623	8,630
	Actual	463	506	627	514	585												
	+/-		**34**	**145**	**23**	**84**												
University of Maryland - University College	Target		3,432	3,501	3,571	3,642	3,715	3,790	3,865	3,943	4,021	4,102	4,184	4,268	4,353	4,440	4,529	62,721
	Actual	3,365	3,555	4,280	4,631	4,755												
	+/-		**123**	**779**	**1,060**	**1,113**												
Morgan State University	Target		787	803	819	836	852	869	887	905	923	941	960	979	999	1,019	1,039	14,390
	Actual	772	813	902	976	922												
	+/-		**26**	**99**	**157**	**86**												
St. Mary's College of Maryland	Target		450	459	468	477	487	497	507	517	527	538	548	559	570	582	594	8,220
	Actual	441	410	444	450	432												
	+/-		-40	-15	-18	-45												
Sub-Total	**Target**		21,887	22,325	22,771	23,227	23,691	24,165	24,648	25,141	25,644	26,157	26,680	27,214	27,758	28,313	28,880	399,962
	Actual	21,458	22,735	24,331	25,136	25,646												
	+/-		**848**	**2,006**	**2,365**	**2,419**												

Totals for University of Maryland - University College include both associate and baccalaureate degrees.

Table 8. Cumulative targets and actual degree awards for all sectors.

Institutional Sector		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	Total
Community Colleges	Target		11,386	11,614	11,846	12,083	12,325	12,571	12,823	13,079	13,341	13,608	13,880	14,157	14,441	14,729	15,024	208,070
	Actual	11,163	12,647	13,852	14,269	14,541												
	+/-		**1,261**	**2,238**	**2,423**	**2,458**												
Four-Year Institutions	Target		21,887	22,325	22,771	23,227	23,691	24,165	24,648	25,141	25,644	26,157	26,680	27,214	27,758	28,313	28,880	399,962
	Actual	21,458	22,735	24,331	25,136	25,646												
	+/-		**848**	**2,006**	**2,365**	**2,419**												
Independent Institutions	Target		6,281	6,469	6,663	6,863	6,225	6,136	6,269	6,410	6,570	6,680	6,706	6,859	7,022	7,189	7,365	99,707
	Actual	6,098	6,174	6,303	6,442	6,145												
	+/-		**-107**	**-166**	**-221**	**-718**												
Other Private Institutions	Target		668	668	668	416	416	416	416	416	416	416	416	416	416	416	416	6,996
	Actual	668	679	325	200	416												
	+/-		**11**	**-343**	**-468**	**0**												
Annual Total	Target		40,222	41,076	41,949	42,589												
	Actual	39,387	42,235	44,811	46,047	46,748												
	+/-		**2,013**	**3,735**	**4,098**	**4,159**												
Cumulative Total	Target		79,609	120,685	162,634	205,223												**714,735**
	Actual	39,387	81,622	126,433	172,480	219,228												
	+/-		**2,013**	**5,748**	**9,846**	**14,005**												