Introduction

The 2012 Joint Chairmen's Report issued the following charge to the Maryland Higher Education Commission.

> 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 this charge in several ways. First, it provides data on progression and graduation. Second, it establishes a framework for reaching the 55% goal and provides a procedure for monitoring progress toward the goal. Third, it summarizes reports by 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 a preview of the inaugural Statewide College Completion Forum to be held in January 2013. 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 of first-time full-time students. The second-year retention rate has been fairly stable, averaging

around 82% for the last 13 cohorts. The six-year graduation rate has increased in recent years. The cohorts entering between 1985 and 1995 had an average graduation rate of 56%, while the cohorts entering since 1999 have had an average graduation rate of 64%. A statewide table of retention and graduation rates since 1990 appears in Table 1, on page 10. Institutional tables and other data and analysis can be found in the full regular 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*. Over the last nine years, the success rate has increased steadily, from 43.7% for the cohort entering in 1999 to 48.7% for the cohort entering in 2007 (12.9% remained enrolled, 9.2% graduated, and 26.6% transferred to a four-year institution). During this time persistence, graduation, and transfer have all increased moderately. A statewide table of persistence, transfer, and graduation rates appears in Table 2, on page 11.

Another important analytical tool for community colleges is the Degree Progress Analysis report. This tool was developed because 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 in 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 page 12. 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 (MAC). 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] These data will begin to be collected during the 2013-2014 academic year, and additional analysis will follow in subsequent years as data become available. Also, relevant research conducted by MHEC will be included or cited in subsequent editions of this report.

Among the additional data that will be collected is data on enrollment at 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 gives greater options to residents in those areas. Institutions offering courses at RHECs treat these courses as identical to courses on the main

[1] Maryland Higher Education Commission, "Retention and Graduation Rates at Maryland Four-Year Institutions," December 2012. Archived at http://www.mhec.state.md.us/publications/research/AnnualReports/2012RetGrad4yrs.pdf.

[2] Maryland Higher Education Commission, "Retention, Graduation, and Transfer Rates at Maryland Community Colleges," December 2012. Archived at http://www.mhec.state.md.us/publications/research/AnnualReports/2012RetGradTransRatCCs.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 .

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 main campus. Student enrollments have been reported to MHEC on the basis of the institution, not the location. The data to be collected beginning in 2013-2014 will provide additional information about the ways that course offerings at RHECs contribute to credit and degree completion at Maryland public institutions.

State and Institutional Goals and Targets

The broad goal of 55% of adults holding degrees by 2025 is well established, but the goal has not been translated into specific state or institutional targets for degree awards. This section of the report will attempt to establish some baselines and targets for realizing the completion goal. These targets depend upon some assumptions about uncertain factors, and the limitations of these targets will be discussed below.

In 2010, the US Census Bureau reported that there were 3,112,987 Marylanders between the ages of 25 and 64, of whom 1,413,296 held associate degrees or better. The attainment rate for that group was 45.4%. The Maryland Department of Planning projects that in 2025, there will be 3,308,156 Marylanders between the ages of 25 and 64. In order to reach the completion goal, 1,819,485 individuals (55% of 3,308,156) must hold at least an associate degree. In 2010 an estimated 878,154 persons aged 25 to 49 held associate degrees or better. In 2025, these individuals will have aged 15 years but will still be in the target group (ages 25 to 64). These individuals will need to be joined by an additional 941,331 degree holders between 2010 and 2025. Almost all degree holders will be supplied from three main sources: (1) migration of individuals from other states and nations who already hold degrees, (2) private institutions of higher education, and (3) public institutions of higher education.

A potential fourth source of degree holders is out-of-state institutions of higher education, which award a small but growing number of degrees to Marylanders. Although they will make some contribution to the completion goal, these institutions are not included in these projections. MHEC has no basis for projecting the number of degrees that they will award, because these institutions have not been required to submit data to MHEC on an annual basis. However, MHEC is about to begin collecting data on degree awards from out-of-state institutions, and these data will be added in future editions of this report.

In 2007, Maryland saw an estimated net migration of 15,700 persons aged 22 to 64 holding an associate's degree or better.[4] If this figure remains constant for the period 2010-2025, Maryland will have added another 251,200 degree holders by 2025.

Private institutions make an important contribution to the educational attainment of Marylanders. In 2009-2010, Maryland private nonprofit and for-profit institutions awarded 6,766 associate and baccalaureate degrees. This figure grew by 23% over the previous decade, up from 5,494 in 1999-2000. Although it is likely that private institutions will continue to grant additional undergraduate degrees through 2025, these targets take a more conservative approach and project

[4] NCHEMS (National Center for Higher Education Management Systems) Information Center, "Labor Demand: Net Migration by State, Age-Group, and Degree Level, 2007."

no growth for private institutions. If private institutions maintain their awards at 6,766 degrees annually, they will award a total of 108,256 degrees for the whole period.

Taken together, these contributions from migrants and private institutions provide 359,456 of the 941,331 degree holders needed. That leaves 581,875 additional degrees that must be awarded by public institutions. 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, which is 59,939 degrees short of the 55% degree attainment goal. In order to address this deficit, Maryland public institutions would have to increase the number of degree awards by 2% each year through 2025. That increase would result in the award of 43,904 degrees in the year 2024-2025, and a total of 608,032 degrees for the whole period. These additional degrees awarded by public institutions, combined with constant contributions from private institutions at the 2010 level and from migrants at the 2007 level, would provide Maryland with 967,488 additional degree holders, exceeding the 55% degree attainment goal by approximately 26,000 degrees.

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, certain indicators suggest that an annual average mortality rate of 0.2% is a reasonable estimate. That rate would remove 55,694 degree holders from the state total during the period, which would need to be replaced through additional degree awards. If Maryland public institutions were to increase their undergraduate degree awards by a slightly higher annual rate, 2.6%, these institutions would produce 47,941 degrees annually by 2025 and a total of 637,174 degrees for the period. This would be an increase of some 29,000 degrees, which, combined with the margin of 26,000 degrees, would be approximately equal to the 55,694 degree holders lost to mortality.

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 2% through 2021.[5] However, the US Department of Education projects a 1% annual average decline in high school graduates through 2019.[6] These mixed indicators suggest that the State cannot rely on enrollment growth alone to reach the goal, and institutions must improve the rate at which their enrolled students complete degrees.

Nevertheless, the assumptions in this projection model are conservative. The most conservative element is the assumption that private institutions will not award additional degrees. 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. Although it is difficult to determine what contributions will be provided from these sources, it is highly likely that these contributions will increase, particularly once MHEC begins collecting degree completion data from out-of-state institutions. Although this model will need to be reworked as additional information is available, this figures included in this report provide an extremely conservative

[5] Maryland Higher Education Commission, "Enrollment Projections, 2012-2021, Maryland Public Colleges and Universities," July 2012. Archived at http://www.mhec.state.md.us/publications/research/AnnualReports/2012-2021EnrollProjections.pdf.

[6] National Center for Education Statistics, "Projections of Education Statistics to 2020" (NCES 2011-026, September 2011), Table 14. http://nces.ed.gov/programs/projections/projections2020/index.asp.

blueprint that will enable Maryland to achieve the 55% degree attainment goal by primarily relying on the public institutions for gains in degree production. This model suggests that in 2025, Maryland public institutions will need to be awarding over 47,000, but it is possible that a degree output of over 44,000 would be adequate given likely contributions from other sources. This accounts for an increase in degree output of roughly 11,000 to 15,000 degrees by the year 2025 for public institutions.

Please note that this projection model is based on several assumptions that are subject to change. For instance, degree production by private institutions may not remain constant. Additionally, 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 projection 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 providing a standard against which to gauge progress rather than a precise forecast or even precise objectives for institutions or institutional sectors.

Table 4, on page 13, shows a matrix expressing the annual targets for each institution based on an annual 2% growth rate. This matrix will be used as the standard against which institutional output can be measured each year. Of course, some institutions may grow at a smaller rate, while others may grow at a larger rate. Nevertheless, this approach provides a simple way to identify whether the 55% degree attainment goal can be realized.

Table 5, below, provides a summary overview of actual and projected degree awards for each of the three institutional sectors for 2010-2011 and 2011-2012. This table indicates that, at least through 2011-2012, undergraduate degree awards are ahead of the target levels, and therefore the 55% degree attainment goal remains within reach. Degree awards declined slightly in 2011-2012 for private institutions, because one private institution closed and two others were reclassified as out-of-state-institutions because of ownership changes. This table will be updated annually in future editions of this report.

Table 5. Target and actual undergraduate degrees awarded, 2009-2010 through 2011-2012

Institutional Sector		**2009-2010 (baseline)**	**2010-2011**	**2011-2012**
Community Colleges	Target	11,163	11,453	11,757
	Actual		12,637	13,852
	+/-		**1,194**	**2,095**
Four-Year Institutions	Target	21,458	22,016	22,588
	Actual		22,735	24,331
	+/-		**719**	**1,743**
Private Institutions*	Target	6,766	6,766	6,766
	Actual		6,853	6,461
	+/-		**87**	**(305)**
Annual Total	*Target*	*39,387*	*40,235*	*41,111*
	Actual		*42,235*	*44,644*

	+/-		***2,000***	***3,533***
Cumulative Total	**Target**	**39,387**	**79,622**	**120,733**
	Actual		**81,612**	**126,256**
	+/-		**1,990**	**5,523**

*Includes both nonprofit and for-profit institutions.

Tables 6 and 7, on pages 14 and 15, provide similar detail for each public community college and four-year institution. These tables will also be updated annually in future editions of this report.

Best Practices

Institutions were asked to submit reports describing the data-validated best practices that they are currently using on their campuses to increase the number of degree holders. Institutions were not asked to provide detailed data in the brief reports they submitted to MHEC. Although some institutions provided this information, many did not. Moreover, because institutions designed their own validation procedures, the procedures cannot be collated together to show meaningful relationships across institutions. The reports contained hundreds of practices and programs, many of which were pursued at multiple campuses. These practices can be divided into two broad categories. The first category includes efforts to *increase the number of enrolling students*, while the second includes attempts to *improve the proportion of enrolled students who earn degrees*. Some common themes in each of these two 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 completed public high school in 2008-2009.[7] MHEC reported that 32,201 Maryland residents enrolled in public and private colleges and universities as new full-time students in Fall 2009.[8] Therefore, approximately 54.6% of high school graduates enrolled in colleges in Maryland. This figure is not a true continuation rate, as some students enrolling in college that semester may have

[7] 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.

[8] 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.

graduated from high school during 2007-2008 or earlier. But it is clear that a large proportion of 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 reaching out to adults in new ways. In the next year, MHEC will invite colleges to address approaches to increase enrollment among adults.

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

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. See the supplemental volume for 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
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 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

The Problem 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 don't always tell someone that they are leaving, and those who do speak to someone don't always say 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."[9] The exact scope of this problem is unknown, for reasons discussed below. Nevertheless, the persistence 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 a decline 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 has remained flat. On a per-student basis, however, state aid has 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 plans to conduct additional studies on financial aid and its impact on students and degrees during 2013. Some of these studies will be discussed in future editions of this report.

The Summit

MHEC will convene the inaugural Statewide College Completion Forum on January 8, 2013. The summit will gather educators and policymakers to exchange ideas about ways to improve degree completion at Maryland colleges and universities. The speakers scheduled to address the forum include Governor O'Malley and Lt. Governor Brown, as well as national experts from

[9] 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.

other states, representatives of the US Department of Education, advocacy groups and foundations, educators from Maryland public and private institutions, the Maryland State Department of Education, the University System of Maryland, and the Maryland Higher Education Commission. A summary of the proceedings of the Forum will be included in next year's report.

Conclusion

The institutional reports reflect a diverse array of efforts by colleges and universities to assist students in their effort 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 because of 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 cause even the best-supported students to drop out.

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 prove to have a more powerful effect.

MHEC will continue to conduct research on the factors affecting persistence and degree completion. The robust data sets that will be available beginning in 2013-2014 will significantly advance this research. Additional analyses will appear in future editions of this report.

In the meantime, this creates 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 improving student success, and to ensuring that Maryland has a well-educated citizenry.

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:

		One	Two	Three	Four Years		Five Years		Six Years	
Cohort	N	Year	Years	Years	Enrolled	Graduated	Enrolled	Graduated	Enrolled	Graduated
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		
2007	14,799	81.0	70.5	67.5	25.0	38.9				
2008	15,100	80.8	70.9	66.8						
2009	14,666	81.5	72.1							
2010	14,112	82.1								

Source: MHEC Enrollment and Degree Information Systems

Table 2. Trends in Retention, Graduation, and Transfer Rates for Maryland Community Colleges

All Students

Statewide Count

1999-2009

		Two Years			Three Years			Four Years		
Cohort	N	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
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%			
2009	18,071	38.5%	2.6%	12.7%						

Source: MHEC Enrollment and Degree Information Systems

Table 3. Degree Progress Four Years After Initial Enrollment
Maryland Community Colleges
Fall 2006 Entering Class

College	Entering Class	Analysis Cohort*	All Entering Students		College-Ready Students			Needed and Completed Developmental Coursework			Needed But Did Not Complete Developmental Coursework		
			Graduation / Transfer Rate	Successful or Still Enrolled**	Stu-dents	Graduation / Transfer Rate	Successful or Still Enrolled**	Stu-dents	Graduation/ Transfer Rate	Successful or Still Enrolled**	Stu-dents	Graduation/ Transfer Rate	Successful or Still Enrolled**
Allegany+	832	590	40.2%	53.4%	239	54.8%	67.8%	107	49.5%	68.2%	244	21.7%	32.8%
Anne Arundel	3,166	2,197	52.7%	69.0%	608	66.6%	78.8%	873	60.5%	82.2%	716	31.3%	44.6%
Baltimore City	1,204	673	31.6%	52.2%	93	31.2%	45.2%	162	37.7%	82.7%	418	29.4%	41.9%
Baltimore County	3,763	2,480	42.9%	65.7%	470	57.7%	74.9%	1,016	51.8%	84.4%	994	26.8%	42.4%
Carroll	795	587	57.9%	75.1%	93	81.7%	92.5%	359	64.9%	83.6%	135	23.0%	40.7%
Cecil	542	278	44.2%	63.7%	75	60.0%	82.7%	88	56.8%	80.7%	115	24.3%	38.3%
Chesapeake	653	386	41.2%	65.5%	76	64.5%	81.6%	204	44.6%	75.5%	107	17.8%	34.6%
College of S. MD	1,970	992	55.6%	76.6%	495	63.8%	82.2%	403	52.1%	76.2%	94	27.7%	48.9%
Frederick	1,456	787	62.4%	82.6%	239	75.7%	83.3%	460	60.4%	88.3%	88	36.4%	51.1%
Garrett	296	207	69.6%	79.7%	73	93.2%	97.3%	91	62.6%	80.2%	43	44.2%	48.8%
Hagerstown	788	522	64.2%	79.9%	158	85.4%	94.9%	236	69.1%	87.3%	128	28.9%	47.7%
Harford	1,410	933	59.7%	76.1%	294	74.5%	86.4%	412	64.1%	85.7%	227	32.6%	45.4%
Howard	1,559	1,126	57.1%	78.5%	335	71.0%	86.9%	425	66.4%	92.2%	366	33.6%	54.9%
Montgomery	5,674	4,040	52.9%	75.1%	1,801	62.1%	81.1%	740	51.1%	87.2%	1499	42.6%	62.0%
Prince George's	1,922	703	48.2%	77.4%	337	52.5%	83.4%	224	45.1%	79.9%	142	43.0%	59.2%
Wor-Wic	735	476	48.7%	67.2%	64	67.2%	85.9%	215	66.0%	89.8%	197	23.9%	36.5%
TOTAL++	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%

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

*** Successful or Still Enrolled is defined as students who complete at least 30 credit hours with a GPA of 2.00 or better, who have 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 (2.6% 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	587	602	618	634	650	667	685	702	721	739	759	778	799	819	841	11,173
Anne Arundel Community College	1,336	1,371	1,406	1,443	1,480	1,519	1,558	1,599	1,641	1,683	1,727	1,772	1,818	1,865	1,914	1,963	26,096
Baltimore City Community College	411	422	433	444	455	467	479	492	505	518	531	545	559	574	589	604	8,028
Carroll Community College	466	478	491	503	516	530	544	558	572	587	602	618	634	651	667	685	9,102
Cecil College	190	195	200	205	211	216	222	227	233	239	246	252	259	265	272	279	3,711
Chesapeake College	230	236	242	248	255	261	268	275	282	290	297	305	313	321	329	338	4,493
College of Southern Maryland	822	843	865	888	911	935	959	984	1,009	1,036	1,063	1,090	1,119	1,148	1,177	1,208	16,056
Community College of Baltimore County	1,703	1,747	1,793	1,839	1,887	1,936	1,987	2,038	2,091	2,146	2,201	2,259	2,317	2,378	2,439	2,503	33,264
Frederick Community College	682	700	718	737	756	775	796	816	837	859	882	904	928	952	977	1,002	13,321
Garrett College	96	98	101	104	106	109	112	115	118	121	124	127	131	134	138	141	1,875
Hagerstown Community College	442	453	465	477	490	503	516	529	543	557	571	586	601	617	633	650	8,633
Harford Community College	611	627	643	660	677	695	713	731	750	770	790	810	831	853	875	898	11,934
Howard Community College	675	693	711	729	748	767	787	808	829	850	873	895	918	942	967	992	13,185
Montgomery College	1,919	1,969	2,020	2,073	2,126	2,182	2,239	2,297	2,356	2,418	2,481	2,545	2,611	2,679	2,749	2,820	37,483
Prince George's Community College	690	708	726	745	765	784	805	826	847	869	892	915	939	963	988	1,014	13,478
Wor-Wic Community College	318	326	335	343	352	362	371	381	390	401	411	422	433	444	456	467	6,211
Sub-Total	11,163	11,453	11,751	12,057	12,370	12,692	13,022	13,360	13,708	14,064	14,430	14,805	15,190	15,585	15,990	16,406	218,043
FOUR-YEAR PUBLIC INSTITUTIONS																	
Bowie State University	606	622	638	655	672	689	707	725	744	763	783	804	825	846	868	891	11,837
Coppin State University	378	388	398	408	419	430	441	452	464	476	489	501	514	528	541	556	7,383
Frostburg State University	768	788	808	829	851	873	896	919	943	968	993	1,019	1,045	1,072	1,100	1,129	15,001
Salisbury University	1,661	1,704	1,748	1,794	1,841	1,888	1,938	1,988	2,040	2,093	2,147	2,203	2,260	2,319	2,379	2,441	32,444
Towson University	3,625	3,719	3,816	3,915	4,017	4,121	4,229	4,338	4,451	4,567	4,686	4,808	4,933	5,061	5,192	5,327	70,806
University of Baltimore	516	529	543	557	572	587	602	618	634	650	667	684	702	720	739	758	10,079
University of Maryland - Baltimore	379	389	399	409	420	431	442	454	465	477	490	503	516	529	543	557	7,403
University of Maryland - Baltimore County	1,915	1,965	2,016	2,068	2,122	2,177	2,234	2,292	2,352	2,413	2,475	2,540	2,606	2,674	2,743	2,814	37,405
University of Maryland - College Park	6,569	6,740	6,915	7,095	7,279	7,469	7,663	7,862	8,066	8,276	8,491	8,712	8,939	9,171	9,409	9,654	128,310
University of Maryland - Eastern Shore	463	475	487	500	513	526	540	554	569	583	598	614	630	646	663	680	9,044
University of Maryland - University College	3,365	3,452	3,542	3,634	3,729	3,826	3,925	4,027	4,132	4,239	4,350	4,463	4,579	4,698	4,820	4,945	65,727
Morgan State University	772	792	813	834	855	878	901	924	948	973	998	1,024	1,050	1,078	1,106	1,135	15,079
St. Mary's College of Maryland	441	452	464	476	489	501	514	528	542	556	570	585	600	616	632	648	8,614
Sub-Total	21,458	22,016	22,588	23,176	23,778	24,396	25,031	25,682	26,349	27,034	27,737	28,458	29,198	29,957	30,736	31,535	419,131
Annual Total	**32,621**	**33,469**	**34,339**	**35,232**	**36,148**	**37,088**	**38,052**	**39,042**	**40,057**	**41,098**	**42,167**	**43,263**	**44,388**	**45,542**	**46,726**	**47,941**	**637,174**

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	Cumulative Total
Allegany College of Maryland	Target	572	587	602	618	634	650	667	685	702	721	739	759	778	799	819	841	11,173
	Actual		603	562														
	+/-		**16**	(40)														
Anne Arundel Community College	Target	1,336	1,371	1,406	1,443	1,480	1,519	1,558	1,599	1,641	1,683	1,727	1,772	1,818	1,865	1,914	1,963	26,096
	Actual		1,505	1,567														
	+/-		**134**	**161**														
Baltimore City Community College	Target	411	422	433	444	455	467	479	492	505	518	531	545	559	574	589	604	8,028
	Actual		470	540														
	+/-		**48**	**107**														
Carroll Community College	Target	466	478	491	503	516	530	544	558	572	587	602	618	634	651	667	685	9,102
	Actual		534	557														
	+/-		**56**	**66**														
Cecil College	Target	190	195	200	205	211	216	222	227	233	239	246	252	259	265	272	279	3,711
	Actual		235	244														
	+/-		**40**	**44**														
Chesapeake College	Target	230	236	242	248	255	261	268	275	282	290	297	305	313	321	329	338	4,493
	Actual		251	272														
	+/-		**15**	**30**														
College of Southern Maryland	Target	822	843	865	888	911	935	959	984	1,009	1,036	1,063	1,090	1,119	1,148	1,177	1,208	16,056
	Actual		821	990														
	+/-		(22)	**125**														
Community College of Baltimore County	Target	1,703	1,747	1,793	1,839	1,887	1,936	1,987	2,038	2,091	2,146	2,201	2,259	2,317	2,378	2,439	2,503	33,264
	Actual		1,854	2,132														
	+/-		**107**	**339**														
Frederick Community College	Target	682	700	718	737	756	775	796	816	837	859	882	904	928	952	977	1,002	13,321
	Actual		778	846														
	+/-		**78**	**128**														
Garrett College	Target	96	98	101	104	106	109	112	115	118	121	124	127	131	134	138	141	1,875
	Actual		98	133														
	+/-		(0)	**32**														
Hagerstown Community College	Target	442	453	465	477	490	503	516	529	543	557	571	586	601	617	633	650	8,633
	Actual		490	551														
	+/-		**37**	**86**														
Harford Community College	Target	611	627	643	660	677	695	713	731	750	770	790	810	831	853	875	898	11,934
	Actual		772	834														
	+/-		**145**	**191**														
Howard Community College	Target	675	693	711	729	748	767	787	808	829	850	873	895	918	942	967	992	13,185
	Actual		882	955														
	+/-		**189**	**244**														
Montgomery College	Target	1,919	1,969	2,020	2,073	2,126	2,182	2,239	2,297	2,356	2,418	2,481	2,545	2,611	2,679	2,749	2,820	37,483
	Actual		2,183	2,383														
	+/-		**214**	**363**														
Prince George's Community College	Target	690	708	726	745	765	784	805	826	847	869	892	915	939	963	988	1,014	13,478
	Actual		800	904														
	+/-		**92**	**178**														
Wor-Wic Community College	Target	318	326	335	343	352	362	371	381	390	401	411	422	433	444	456	467	6,211
	Actual		371	382														
	+/-		**45**	**47**														
Sub-Total	**Target**	11,163	11,453	11,751	12,057	12,370	12,692	13,022	13,360	13,708	14,064	14,430	14,805	15,190	15,585	15,990	16,406	218,043
	Actual		12,647	13,852	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	+/-		**1,194**	**2,101**														

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	Cumulative Total
Bowie State University	Target	606	622	638	655	672	689	707	725	744	763	783	804	825	846	868	891	11,837
	Actual		683	688														
	+/-		**61**	**50**														
Coppin State University	Target	378	388	398	408	419	430	441	452	464	476	489	501	514	528	541	556	7,383
	Actual		379	460														
	+/-		(9)	**62**														
Frostburg State University	Target	768	788	808	829	851	873	896	919	943	968	993	1,019	1,045	1,072	1,100	1,129	15,001
	Actual		850	892														
	+/-		**62**	**84**														
Salisbury University	Target	1,661	1,704	1,748	1,794	1,841	1,888	1,938	1,988	2,040	2,093	2,147	2,203	2,260	2,319	2,379	2,441	32,444
	Actual		1,709	1,787														
	+/-		**5**	**39**														
Towson University	Target	3,625	3,719	3,816	3,915	4,017	4,121	4,229	4,338	4,451	4,567	4,686	4,808	4,933	5,061	5,192	5,327	70,806
	Actual		3,948	4,103														
	+/-		**229**	**287**														
University of Baltimore	Target	516	529	543	557	572	587	602	618	634	650	667	684	702	720	739	758	10,079
	Actual		631	625														
	+/-		**102**	**82**														
University of Maryland - Baltimore	Target	379	389	399	409	420	431	442	454	465	477	490	503	516	529	543	557	7,403
	Actual		359	340														
	+/-		(30)	(59)														
University of Maryland - Baltimore County	Target	1,915	1,965	2,016	2,068	2,122	2,177	2,234	2,292	2,352	2,413	2,475	2,540	2,606	2,674	2,743	2,814	37,405
	Actual		1,905	2,140														
	+/-		(60)	**124**														
University of Maryland - College Park	Target	6,569	6,740	6,915	7,095	7,279	7,469	7,663	7,862	8,066	8,276	8,491	8,712	8,939	9,171	9,409	9,654	128,310
	Actual		6,987	7,043														
	+/-		**247**	**128**														
University of Maryland - Eastern Shore	Target	463	475	487	500	513	526	540	554	569	583	598	614	630	646	663	680	9,044
	Actual		506	627														
	+/-		**31**	**140**														
University of Maryland - University College	Target	3,365	3,452	3,542	3,634	3,729	3,826	3,925	4,027	4,132	4,239	4,350	4,463	4,579	4,698	4,820	4,945	65,727
	Actual		3,555	4,280														
	+/-		**103**	**738**														
Morgan State University	Target	772	792	813	834	855	878	901	924	948	973	998	1,024	1,050	1,078	1,106	1,135	15,079
	Actual		813	902														
	+/-		**21**	**89**														
St. Mary's College of Maryland	Target	441	452	464	476	489	501	514	528	542	556	570	585	600	616	632	648	8,614
	Actual		410	444														
	+/-		(42)	(20)														
Sub-Total	**Target**	21,458	22,016	22,588	23,176	23,778	24,396	25,031	25,682	26,349	27,034	27,737	28,458	29,198	29,957	30,736	31,535	419,131
	Actual		22,735	24,331	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	+/-		**719**	**1,743**														

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