



Follow-Up Survey of 2014 Maryland Community College Graduates

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Maryland Higher Education Commission

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EXECUTIVE SUMMARY

Every three years, the Maryland Higher Education Commission (MHEC) conducts a follow-up survey of community college certificate and associate degree graduates a year after they have completed their program. The report generated from this survey provides information on completers' perceptions of the quality of their institutional experience, post-graduation educational and employment status, and other related outcomes.

Of the 15,946 surveys delivered to the community college graduates of 2014, 16.4% completed the survey. The response rates among the community colleges ranged from 3.6% at Montgomery College to 33.3% at Wor-Wic Community College. Findings should be interpreted with caution given the low response rates.

Most survey respondents rated the quality of their community colleges, their overall community college experience, and the quality of their classroom instruction very highly (89.8%, 88.2%, and 87.4%, respectively, rated these aspects as "very good" or "good"). Graduates were less positive, however, about the job placement and referral services on their campuses, with just 53.7% rating these services as "good" or "very good."

Nearly three-quarters (73.2%) of the survey respondents indicated that their primary motivation for enrolling in community college was to earn a degree or prepare to transfer to a four-year institution, and a majority of the students with these goals felt that they had completely achieved these objectives (93.1% and 83.1%, respectively). However, only 21.4% of survey respondents indicated that their objective in attending community college was specifically related to the workforce (i.e., preparing for a first career, or a different career, or updating job skills). Smaller proportions of respondents (ranging from 54.9% to 68.9%) with workforce-related objectives indicated they had completely achieved their objectives by attending community college.

When asked about their post-graduation educational and career activities, just over half of respondents (51.8%) continued to take courses at a four-year or two-year institution after completing their program at a community college. Most graduates (74.0%) who transferred to a four-year institution enrolled in a Maryland public college or university, and 79.4% of all those who transferred to a four-year institution reported high levels of satisfaction with the academic preparation they received at the community college.

An important factor for students transferring to four-year institutions is whether or not they receive credits for their courses. Since the survey of 2000 graduates, the percentage of students reporting any lost credits at transfer declined substantially (from 83.6% for 2000 graduates to 54.5% for 2014 graduates) which suggests the success of various policy initiatives of the State, colleges and universities, and related organizations.

In terms of their employment status following graduation from community college, 60.0% of respondents were employed full-time, 29.0% were employed part-time and 11.0% were unemployed and actively seeking employment one year after graduation. Overall, 70.4% of graduates employed full-time reported they had been very well or well prepared for employment, and a majority of these graduates (84.3%) were employed in Maryland.

FOLLOW-UP SURVEY OF 2014 MARYLAND COMMUNITY COLLEGE GRADUATES

Every three years, the Maryland Higher Education Commission (MHEC) conducts a follow-up survey of community college certificate and associate degree graduates a year after they have completed their program. The report generated from this survey provides information on completers' perceptions of the quality of their institutional experience, post-graduation educational and employment status, and other related outcomes. This edition of the report presents results for survey completers who received their degrees and certificates during the 2013-2014 academic year. Some of the survey results for each community college can be found in their institution's Performance Accountability Report (PAR).

SURVEY PROCEDURE

In 2015, each community college in Maryland administered a survey of its 2014 graduates using questions approved by MHEC and the Maryland Association of Community Colleges. There were 18 standardized multiple-choice questions included in the survey, designed to produce aggregate statewide data. These standard questions are largely unchanged from questions that have been asked over many years, in order to provide a basis for long-term comparisons. Colleges were encouraged to conduct their surveys online and to mail a standard, paper-based survey to all graduates without valid email addresses. Colleges distributed the surveys between June and August 2015. At the end of the survey period, each of Maryland's 16 community colleges submitted data files containing students' survey responses to MHEC.¹

SURVEY RESPONSES

There were 17,323 graduates in academic year 2014,² with 15,946 surveys delivered via email or mail and 1,377 surveys reported as undeliverable. A total of 2,619 surveys were completed, resulting in a statewide response rate of 16.4%. As indicated in Table 1, institutional response rates varied widely, from 3.6 % at Montgomery College to 33.3% at Wor-Wic Community College. The overall response rate for the survey of 2014 graduates is comparable to the previous administration of the survey (16.4% of 2014 graduates compared to 16.8% of 2011 graduates).

¹ In the past, community colleges submitted addresses and demographic information to MHEC. MHEC prepared the survey questionnaires and then returned them to each institution for them to mail the surveys to their graduates. Respondents returned completed surveys to the colleges, which then sent the surveys to MHEC for scanning, process and analysis. MHEC then returned the original surveys and data files to each campus.

² Data for all 2014 graduates are from MHEC's 2014 Degree Information System.

**Table 1: Community College Graduate Follow-Up Survey
Response Rates by Institution**

Institution	Adjusted Sample Size	Responses	Response Rate
Allegany College of Maryland	651	124	19.0%
Anne Arundel Community College	1,969	262	13.3%
Baltimore City Community College	581	36	6.2%
Carroll Community College	657	171	26.0%
Cecil Community College	299	15	5.0%
Chesapeake College	318	98	30.8%
College of Southern Maryland	1,174	286	24.4%
Community College of Baltimore County	2,978	346	11.6%
Frederick Community College	969	86	8.9%
Garrett College	79	12	15.2%
Hagerstown Community College	811	241	29.7%
Harford Community College	915	203	22.2%
Howard Community College	1,085	283	26.1%
Montgomery College	1,918	69	3.6%
Prince George's Community College	1,052	224	21.3%
Wor-Wic Community College	490	163	33.3%
Statewide Total	15,946	2,619	16.4%
Note: Adjusted sample size is calculated by excluding students with undeliverable surveys from the total graduate population.			

Graduate and Survey Respondent Demographic and Academic Characteristics

Despite the challenges associated with low response rates, as Table 2 shows, the respondent profile is demographically similar to the overall community college graduate population. Women are slightly overrepresented among the survey respondents versus the general graduate population (68.1% and 60.2%, respectively) and men are slightly underrepresented (31.9% and 39.9%, respectively). Whites and African Americans constitute the largest percentage of graduates while all other racial groups constitute a fairly small percentage of graduates in both the overall and the respondent populations. However, African Americans are underrepresented in the survey (20.9% of respondent population versus 23.5% of all graduates), along with Hispanic (3.5% versus 5.9%) and foreign students (2.2% versus 4.1%). White students are the most substantially overrepresented racial group in the survey, constituting 63.7% of respondents and 57.2% of all graduates. Graduates of unknown race are also slightly overrepresented, with 3.9% of survey respondents identified as unknown compared to 2.0% of the total graduate population.

Table 2: Graduate and Survey Respondent Demographic Characteristics

	Survey Respondents		All 2014 Community College Graduates	
	#	%	#	%
Gender				
Male	836	31.9%	6,895	39.9%
Female	1,783	68.1%	10,428	60.2%
Race				
African American	548	20.9%	4,064	23.5%
American Indian or Alaska Native	10	0.4%	124	0.7%
Native Hawaiian or Pacific Islander	9	0.3%	46	0.3%
Asian	118	4.5%	1,002	5.8%
Hispanic	91	3.5%	1,020	5.9%
White	1,667	63.7%	9,905	57.2%
Two or More races	15	0.6%	97	0.6%
Foreign/Non-Resident Alien	58	2.2%	718	4.1%
Unknown	103	3.9%	347	2.0%
Total	2,619		17,323	
Note: Information on all 2014 community college graduates is based on MHEC's 2014 Degree Information System.				

More substantial, albeit still quite small, differences between the respondents and all 2014 graduates can be seen in the academic characteristics of the two populations. As Table 3 shows, while 14.4% of survey respondents earned a certificate and 85.6% an associate degree, 19.5% of all graduates received certificates and 80.5% an associate degree, making certificate earners underrepresented among survey respondents while associate earners are overrepresented.

The percentage of survey respondents enrolled in transfer programs (majors designed for students intending to transfer to a four-year institution) versus non-transfer programs (majors designed to prepare students to enter the workforce directly after graduation) was very similar to the overall graduate population. Additionally, the distribution of academic program enrollment among respondents was very similar to the overall graduate population for most programs. However, graduates of programs in the health services and paramedical studies and graduates in the arts and sciences were overrepresented, while graduates of programs in public service technology and general studies were underrepresented.

Table 3: Graduate and Survey Respondent Academic Characteristics

	Survey Respondents		All 2014 Community College Graduates	
	#	%	#	%
Highest Degree Earned				
Certificate	374	14.4%	3,377	19.5%
Associate	2,217	85.6%	13,946	80.5%
Academic Program				
<i>Non-Transfer Majors</i>	1,230	47.5%	8,290	47.9%
Business and Commerce	267	10.3%	1,626	9.4%
Data Processing	123	4.7%	850	4.9%
Health Services and Paramedical Studies	595	23.0%	3,540	20.4%
Mechanical Technologies and Engineering	56	2.2%	456	2.6%
Natural Science	19	0.7%	119	0.7%
Public Service Technology	170	6.6%	1,699	9.8%
<i>Transfer Majors</i>	1,361	52.5%	9,033	52.1%
Arts and Sciences	336	13.0%	1,905	11.0%
Humanities and Social Sciences	26	1.0%	114	0.7%
Engineering	42	1.6%	242	1.4%
General Studies	658	25.4%	5,004	28.9%
Teacher Education	88	3.4%	469	2.7%
Business Administration	184	7.1%	1,131	6.5%
Computer Science	25	1.0%	152	0.9%
Interdisciplinary	2	0.1%	16	0.1%
Total	2,591		17,323	
Note: Information on all degree recipients is based on MHEC's 2014 Degree Information System. Degree and program information are missing for 28 survey respondents; they are excluded from this analysis.				

Precautions have been taken to protect the privacy of individuals, as well as the validity of the reported data. Program data is only presented for academic programs with more than 50 students responding statewide. Natural Science, Humanities and Social Sciences, Engineering, Computer Science, and Interdisciplinary majors have all been excluded from subsequent programmatic breakouts. Responses by race are only included for racial groups with more than 50 respondents, thus, data will not be broken out by race for survey respondents identifying as American Indian or Alaska Native, Native Hawaiian or Pacific Islander, and Two or More Races. For both race and academic program, however, categories not presented in the tables are included in the totals. Additionally, findings should be interpreted with caution given the low response rates.

SURVEY FINDINGS

The Community College Experience

Survey respondents in the 2014 graduating class were asked to rate their community college experiences on a continuum from “very good” to “very poor.” An additional option was provided for students who felt that they had no basis to judge the institution on a given characteristic. Students responded very favorably on most aspects of the college experience, including the overall college experience, the overall quality of the college, and the quality of instruction. As Table 4 shows, 87.4% of respondents indicated that the quality of their overall college experience was either “good” or “very good.” An even larger proportion of students responded similarly regarding the quality of the college itself (89.8%) and the quality of classroom instruction (88.2%). When asked to rate other aspects of their community college experience, however, respondents’ opinions varied more considerably. Respondents were most negative regarding job placement, with 46.3% responding that job placement and referral services on their campus were “fair,” “poor,” or “very poor.” This was 6.5 percentage points lower than the ratings of the survey respondents in the 2011 graduating class, where 52.8% of those graduates rated job placement as “fair,” “poor,” or “very poor.”

Table 4: Respondent Rating of the Overall Community College Experience

	Very Good	Good	Fair	Poor	Very Poor
Overall college experience	53.0%	34.4%	10.6%	1.3%	0.7%
Overall quality of college	53.4%	36.4%	8.2%	1.5%	0.5%
Quality of classroom instruction	48.3%	39.9%	9.9%	1.2%	0.6%
Faculty availability/helpfulness	52.3%	34.0%	10.4%	1.9%	1.4%
Access to information technology	44.7%	38.6%	14.2%	1.8%	0.6%
Class scheduling	46.6%	37.5%	12.7%	2.2%	1.0%
Library	46.0%	38.7%	13.6%	1.2%	0.5%
Quality of laboratory equipment	42.9%	40.7%	13.8%	1.7%	0.8%
Tutorial services	45.3%	31.8%	17.8%	3.3%	1.7%
Quality of online instruction	37.5%	37.5%	18.2%	5.0%	1.7%
Student activities	36.9%	35.8%	20.9%	4.6%	1.7%
Academic advising	39.3%	29.4%	19.1%	6.9%	5.3%
Job placement/referral services	27.2%	26.5%	24.2%	11.6%	10.5%
Note: Students answering "no basis to judge" were excluded from the analysis.					

Across all institutions, Maryland’s community college graduates reported having had positive experiences at their colleges. As Table 5 shows, five colleges had combined “very good” and “good” satisfaction ratings of over 90%. These institutions were Wor-Wic Community College (92.3%), Anne Arundel Community College (90.8%), Hagerstown Community College (90.3%), Howard Community College (90.2%), and Carroll Community College (90.1%). In comparison,

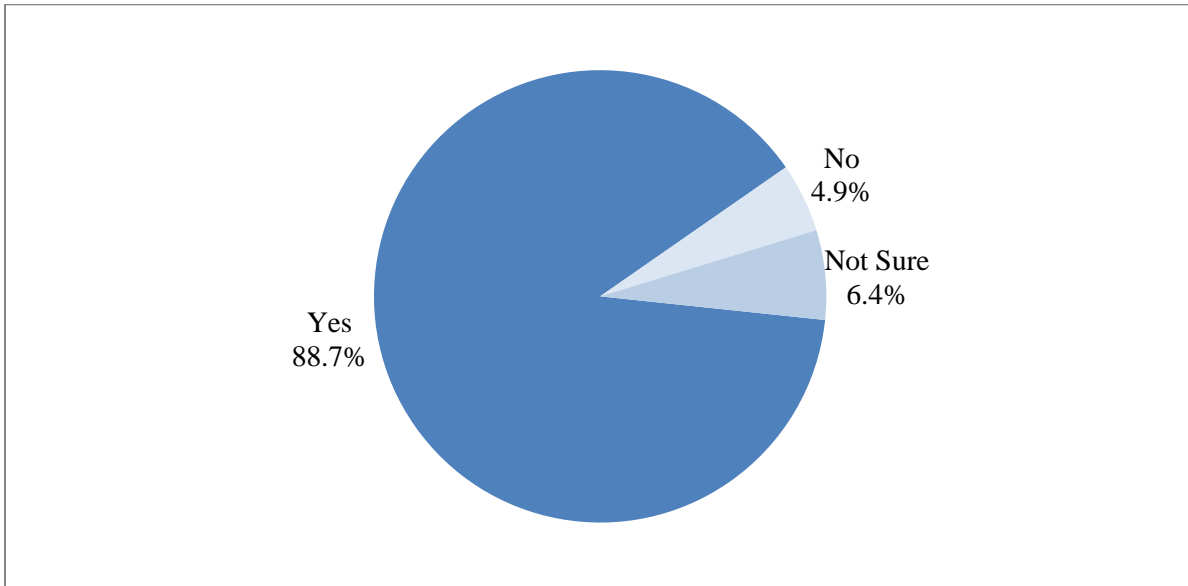
in the survey of 2008 graduates, all but three colleges had ratings of over 90%, and just three institutions had ratings over of 90% in the survey of 2011 graduates.

Table 5: Respondents' Satisfaction with Overall Community College Experience by College

	Very Good	Good	Fair	Poor	Very Poor
Allegany College of Maryland	42.6%	35.2%	16.4%	2.5%	3.3%
Anne Arundel Community College	56.8%	34.0%	8.1%	0.8%	0.4%
Baltimore City Community College	30.6%	44.4%	16.7%	2.8%	5.6%
Carroll Community College	49.7%	40.4%	8.2%	1.8%	0.0%
Cecil Community College	26.7%	53.3%	13.3%	0.0%	6.7%
Chesapeake College	52.1%	34.4%	12.5%	1.0%	0.0%
College of Southern Maryland	42.8%	43.9%	12.6%	0.4%	0.4%
Community College of Baltimore County	51.9%	34.6%	12.5%	0.6%	0.3%
Frederick Community College	53.6%	35.7%	5.4%	3.6%	1.8%
Garrett College	25.0%	41.7%	25.0%	8.3%	0.0%
Hagerstown Community College	53.6%	36.7%	8.0%	0.8%	0.8%
Harford Community College	56.2%	31.8%	8.0%	3.5%	0.5%
Howard Community College	58.1%	32.1%	8.3%	1.1%	0.4%
Montgomery College	58.8%	26.5%	14.7%	0.0%	0.0%
Prince George's Community College	52.3%	30.4%	15.0%	1.4%	0.9%
Wor-Wic Community College	71.3%	21.0%	7.0%	0.6%	0.0%
Statewide	53.0%	34.4%	10.6%	1.3%	0.7%
Note: Students answering "no basis to judge" were excluded from the analysis.					

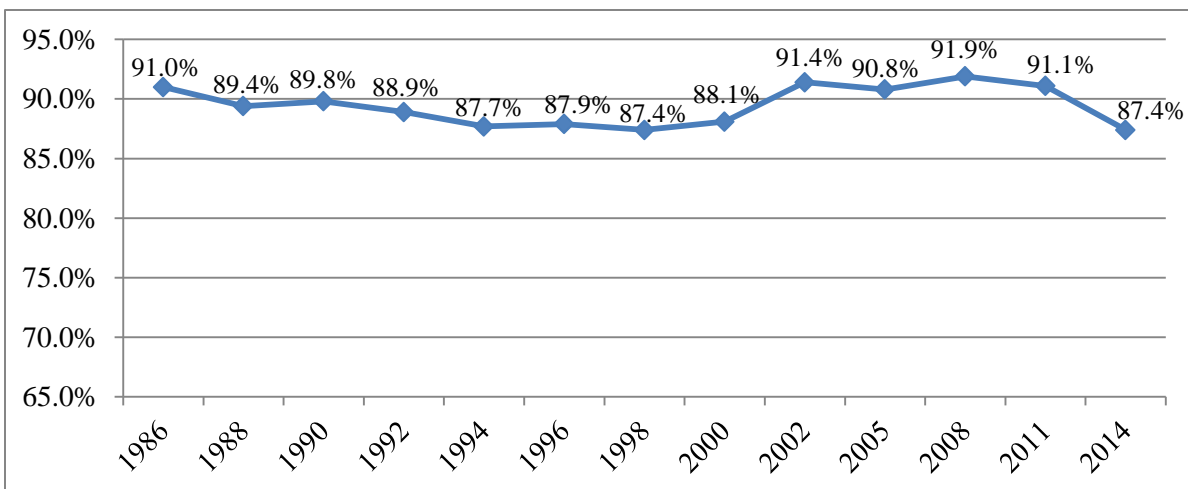
The high rate of satisfaction that graduates had with their institutions was also evident when they were asked whether they would attend the same community college if given the opportunity. As Figure 1 shows, graduates across all institutions overwhelmingly stated that they would attend the same community college, with 88.7% of graduates responding “Yes.” The remaining respondents indicated either that they were uncertain (6.4%) or would not attend the same institution (4.9%). The percentage of respondents who indicated they would repeat their community college experience was slightly higher in the survey of 2008 and 2011 graduates (92.0% and 92.5%, respectively).

Figure 1: Percentage of Respondents Who Would Attend the Same Community College



Maryland community college graduates have consistently rated their experiences highly. As Figure 2 shows, in every administration of the Community College Graduate Follow-Up Survey since 1986, a majority of respondents have rated their overall experience at the institution highly.³ Among survey respondents in the class of 2014, satisfaction with the overall community college experience was 87.4%, lower than respondents' satisfaction on the previous five surveys but similar to the results of respondents from the class of 1998.

Figure 2: Percentage of Respondents Rating the Overall Community College Experience Highly



³ The wording of this question and response choices provided have changed over time. Surveys of graduates from the classes of 1986 to 2005, and 2011 to 2014 provided "very good" and "good" as answer choices. The survey of 2008 graduates prompted respondents to choose from "very well" or "well" as answer choices.

When asked if they would enroll in the same academic program, the majority of students (70.0%) responded affirmatively, similar to the respondents in the class of 2008 and 2011 (68.8% and 71.3% respectively). However, as Table 6 indicates, those percentages varied by academic program. For example, 80.0% of respondents graduating from health services and paramedical studies programs and 80.4% graduating from public service technology programs indicated that they would enroll in the same academic program if given the chance. On the other end of the spectrum, just over half of respondents (55.5%) reported that they would re-enroll in a course of general studies. In addition, non-transfer program graduates were substantially more likely than transfer program graduates to respond that they would enroll in the same academic program. While 76.5% of all non-transfer program majors responded that they would enroll in the same course of study, only 62.8% of transfer program majors would.

Table 6: Percentage of Respondents Who Would Enroll in the Same Academic Program by Program

	Percentage of Respondents
Academic Program	
<i>Non-Transfer Majors</i>	76.5%
Business and Commerce	72.2%
Data Processing	66.7%
Health Services and Paramedical Studies	80.0%
Mechanical Technologies and Engineering	69.6%
Public Service Technology	80.4%
<i>Transfer Majors</i>	62.8%
Arts and Sciences	68.1%
General Studies	55.5%
Teacher Education	73.9%
Business Administration	73.8%
All Programs	70.0%

Educational Objectives

Graduates were asked to respond to several questions regarding their motivations and objectives for enrolling in a community college and their success in achieving those objectives during their time in the program. Graduates were asked to rate the importance of the identified objectives on a scale including “very important,” “somewhat important,” and “not important” and to select their most important objective. As indicated in Table 7, most respondents found all of the identified objectives to be important motivators driving them to enroll. Students were most likely to consider obtaining an associate degree or certificate to be very important (88.5%). Fewer than two percent of respondents indicated that obtaining a credential was not an important factor behind their enrollment. Nearly two-thirds of the respondents found self-enrichment (92.1%) and

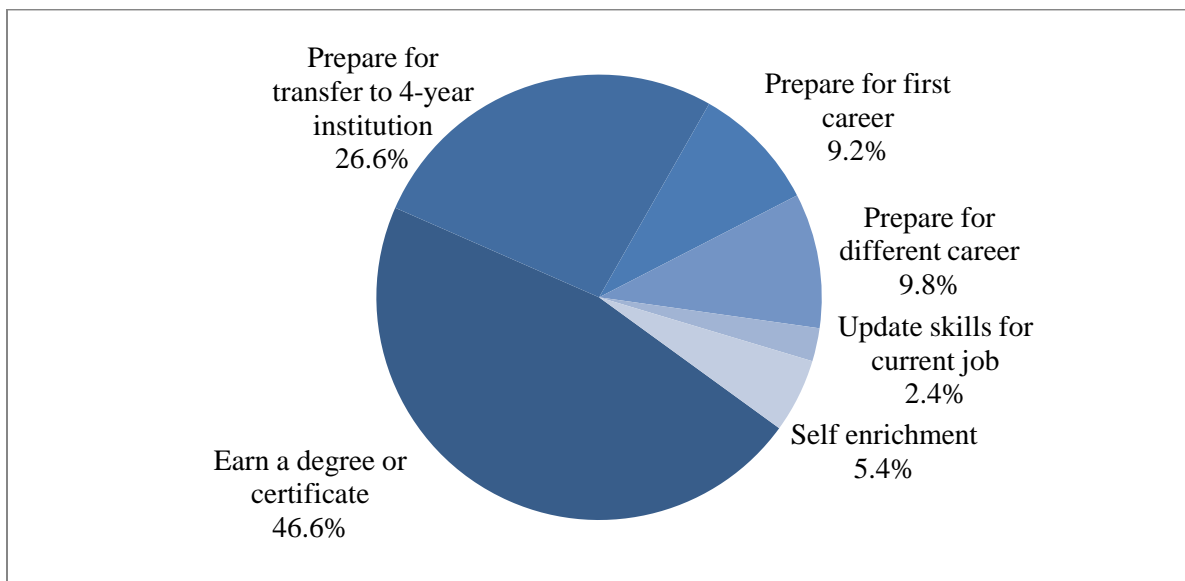
preparing to transfer to a four-year institution (84.3%) to be very important or somewhat important.

Table 7: Respondents’ Rating of the Importance of Schooling Objectives

Objective	Very Important	Somewhat Important	Not Important
Earn an associate degree or certificate	88.5%	9.7%	1.7%
Prepare for transfer into a four-year institution	63.5%	20.8%	15.7%
Prepare for entry into first career	50.1%	23.9%	26.0%
Prepare for entry into different career	42.0%	26.0%	32.0%
Update skills for current job	40.5%	25.8%	33.7%
Self-enrichment	64.2%	27.9%	7.9%

As Figure 3 shows, the primary motivator for most respondents’ initial enrollment was the desire to attain an associate degree or certificate. Nearly one-half of students (46.6%) identified obtaining a credential as their primary goal when enrolling in the community college. Over one-quarter of students (26.6%) intended to prepare for transfer to a four-year college or university. Taken together, this means that nearly three-quarters of students enrolling in community colleges are doing so for reasons directly tied to the state’s goal of 55% of Marylanders holding a credential by 2025. A smaller percentage of survey respondents (19.0%) indicated that their primary goal was to prepare for career entry into a different or first career, while the remaining students (7.8%) had the primary goal of updating skills for their current job or for self-enrichment. It is interesting to note that workforce-related objectives were the least important to students among these options, given that a significant number of policy actors place a high degree of emphasis on workforce goals for this population.

Figure 3: Primary Motivation for Enrolling in Community College



Most respondents (96.9%) indicated that their primary objective had been achieved completely or partly by the time they graduated. Table 8 indicates the percentages of students ranking each objective most important who found those specific objectives to have been achieved completely, partly, or not at all. Those students entering with the goal of earning an associate degree or certificate were most likely to have found their objective completely achieved (93.0%). Students entering with the primary objective of preparing for entry into their first career were least likely to have found their goal completely achieved (54.9%), and 12.4% of those graduates responded that it had not been achieved at all.

Table 8: Respondents’ Achievement of the Most Important Objective for Attending Community College

Objective	Completely	Partly	Not at all
Earn an associate degree or certificate	93.1%	6.0%	0.8%
Prepare for transfer into a four-year institution	83.1%	15.5%	1.5%
Prepare for entry into first career	54.9%	32.6%	12.4%
Prepare for entry into different career	63.3%	27.4%	9.3%
Update skills for current job	68.9%	27.9%	3.3%
Self-enrichment	64.7%	32.4%	2.9%
All Objectives Combined	81.8%	15.1%	3.1%

Academic Skills and Developmental Change

Recognizing that there are a number of potential benefits associated with educational attainment beyond earning a degree, the survey also asks graduates about improvement of both their academic skills and personal characteristics. As Table 9 illustrates, most indicated that they had improved a great deal or a fair amount on all of the characteristics included in the survey. Between 79.0% and 88.0% of respondents indicated they had improved a great deal on these characteristics.

Table 9: Respondents' Improvement of Academic Skills and Personal Change

Academic Skills	Improved a Great Deal	Improved a Fair Amount	No Improvement at All
Writing Skills	42.3%	43.8%	13.9%
Mathematics Skills	34.3%	44.7%	21.0%
Understanding of Science and Technology	47.9%	40.1%	12.0%
Reading Comprehension	34.9%	44.3%	20.8%
Computer skills	36.3%	44.8%	18.9%
Personal Change	Increased a Great Deal	Increased Somewhat	Remained the Same
Appreciation of Art, Music, and Literature	25.1%	31.8%	43.1%
Clarity of Educational and Career Goals	56.0 %	31.5%	12.5%
Self-Confidence	54.4%	31.9%	13.7%
Appreciation of Cultural Diversity	37.7%	33.9%	28.4%
Enjoyment of Learning	51.2%	31.4%	17.5%

In addition, survey respondents indicated the greatest increase in clarity of educational and career goals (87.5 %), self-confidence (86.3%), and enjoyment of learning (82.6%) as a result of their community college experience. Respondents indicated the lowest level of increase in appreciation of art, music, and literature (57.0%).

Post-Graduation Activity

As indicated in the sections above, many students sought a certificate or associate degree in order to prepare for transfer to a four-year institution or increase their preparation for employment. To assess the degree to which graduates achieved those objectives, the survey asked students several questions regarding their post-graduation educational and career activities.

Transfer to Four-Year Institutions

More than half (51.8%) of respondents continued to take courses at a four-year or two-year institution following program completion. This is slightly lower than the percentage of 2011 graduates who transferred (52.2%) but nearly five percentage points higher than the class of 2008 (46.9%). Of those students who successfully transferred to a four-year institution, the majority enrolled as full-time students, with 76.4% enrolling full-time and 23.6% enrolling part-time. As Table 10 shows, there were significant differences in transfer rates by institution. Montgomery College had the highest rate of transfer (79.7%) to a four-year institution. While Allegany College had the lowest rate of transfer among Maryland's community colleges, the 28.5% of 2014 graduates who transferred represent an increase over the 25.3% of 2008 graduates who reported transferring to a four-year institution.

Table 10: Percentage of Respondents Transferring to a Four-Year College or University

	Full-Time		Part-Time		Total	
	#	%	#	%	#	%
Allegany College of Maryland	20	16.3%	15	12.2%	35	28.5%
Anne Arundel Community College	97	37.3%	30	11.5%	127	48.8%
Baltimore City Community College	11	31.4%	10	28.6%	21	60.0%
Carroll Community College	71	42.3%	25	14.9%	96	57.1%
Cecil Community College	8	53.3%	1	6.7%	9	60.0%
Chesapeake College	35	36.5%	10	10.4%	45	46.9%
College of Southern Maryland	148	51.9%	41	14.4%	189	66.3%
Community College of Baltimore	143	41.3%	43	12.4%	186	53.8%
Frederick Community College	16	28.1%	6	10.5%	22	38.6%
Garrett College	6	50.0%	1	8.3%	7	58.3%
Hagerstown Community College	61	25.4%	22	9.2%	83	34.6%
Harford Community College	74	37.4%	27	13.6%	101	51.0%
Howard Community College	135	48.6%	29	10.4%	164	59.0%
Montgomery College	49	71.0%	6	8.7%	55	79.7%
Prince George's Community College	85	39.5%	30	14.0%	115	53.5%
Wor-Wic Community College	57	35.0%	14	8.6%	71	43.6%
All Campuses	1,027	39.7%	317	12.2%	1,344	51.8%

Table 11 displays the percentage of students transferring to a four-year institution by race and gender. More men than women transferred, with 58.3% of men transferring and 49.0% of women. Hispanic students were most likely (67.0%) to enroll in a four-year institution. White students, however, constituted the largest number of transfer students, but had the smallest proportion of students transferring, when compared to students of other races.

Table 11: Percentage of Respondents Transferring to a Four-Year Institution by Race and Gender

	Percentage of Respondents
Gender	
Male	58.3%
Female	49.0%
Race	
African American	55.7%
Asian	59.5%
Hispanic	67.0%
White	48.4%
Foreign/Non-Resident Alien	54.4%
Unknown	58.3%
Statewide Total	51.9%

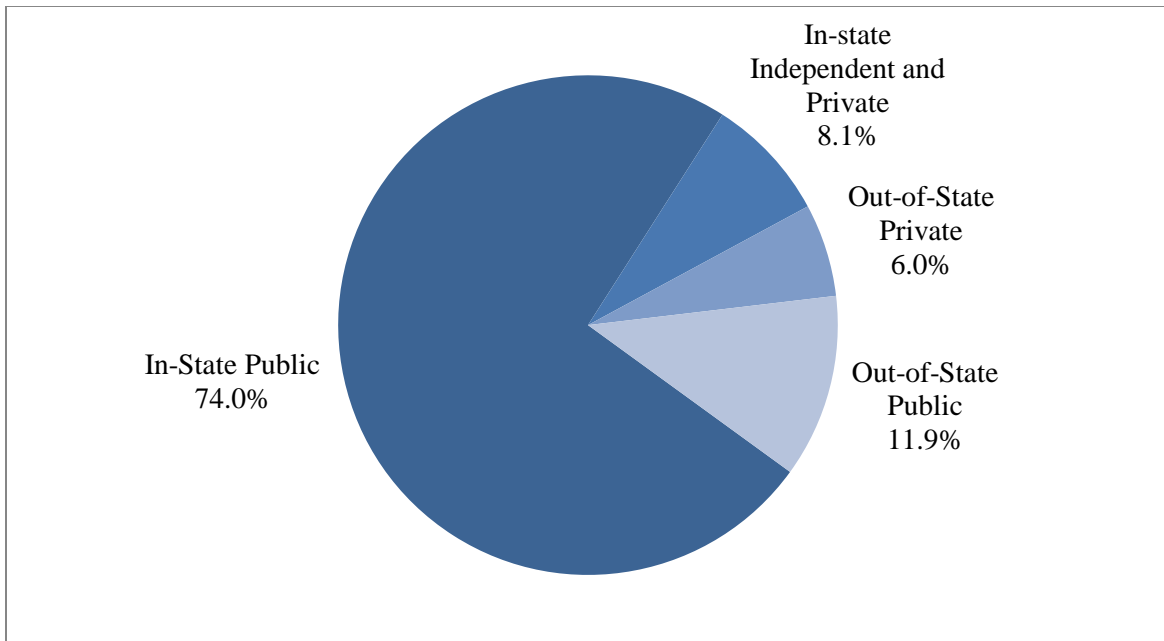
There were also differences in transfer activity between transfer and non-transfer program students. As shown in Table 12, more than two-thirds of transfer major students (68.8%) re-enrolled in four-year institutions within a year of graduation from the community college. While non-transfer program graduates were far less likely to re-enroll than transfer program students, nearly one-third of non-transfer program students (31.5%) transferred to a four-year institution.

Table 12: Percentage of Respondents Transferring to a Four-Year Institution by Academic Program

	Percentage of Respondents
Academic Program	
<i>Non-Transfer Majors</i>	31.5%
Business and Commerce	29.5%
Data Processing	51.2%
Health Services and Paramedical Studies	29.0%
Mechanical Technologies and Engineering	23.2%
Public Service Technology	32.0%
<i>Transfer Majors</i>	68.8%
Arts and Sciences	70.0%
General Studies	64.7%
Teacher Education	80.7%
Business Administration	75.1%
All Programs	51.8%

As Figure 4 shows, nearly three-quarters of graduates (74.0%) that transferred to four-year institutions chose to enroll at a Maryland public college or university. A small portion of graduates (8.1%) transferred to a Maryland independent or private institution. Additionally, 17.9% of students transferred to a public or private out-of-state institution.

Figure 4: Four-Year Institution Transfer Choices of Respondents



As Figure 5 shows, the survey respondents who transferred to a four-year Maryland public institution after graduation chose a wide array of colleges and universities. Among community college graduates, the top two transfer institutions were University of Maryland University College (25.0%) and Towson University (20.2%), who along with University of Maryland, College Park (14.5%) and University of Maryland, Baltimore County (10.8%) received nearly three-quarters of community college transfer students.

Figure 5: Transfer Choices of Respondents Transferring to Maryland Public Institutions

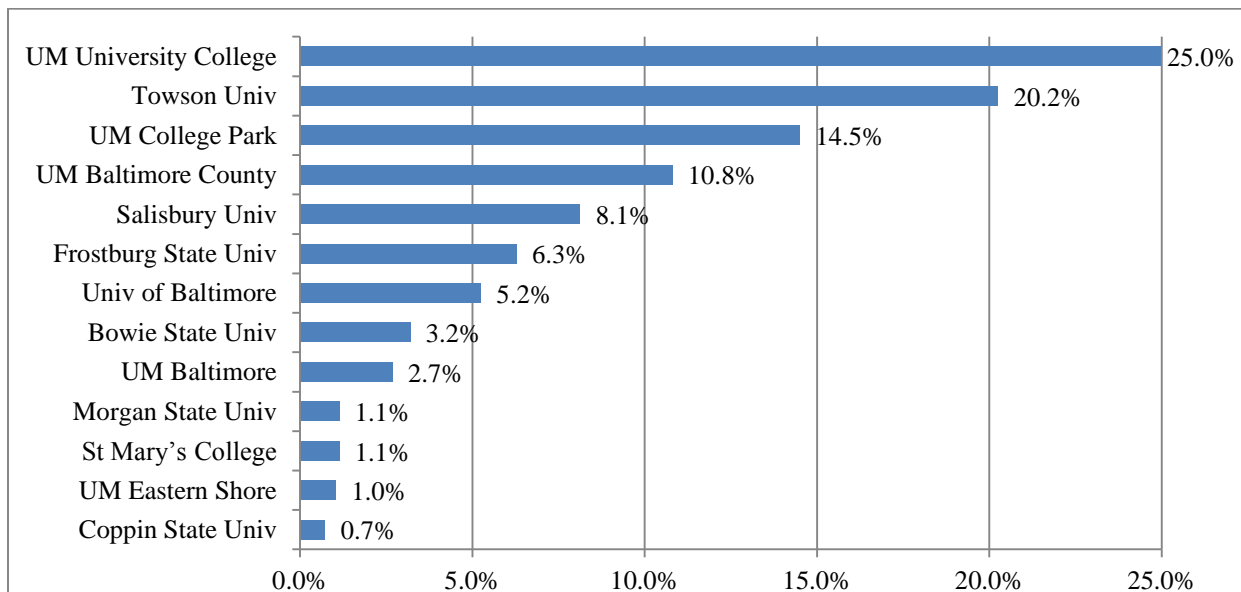
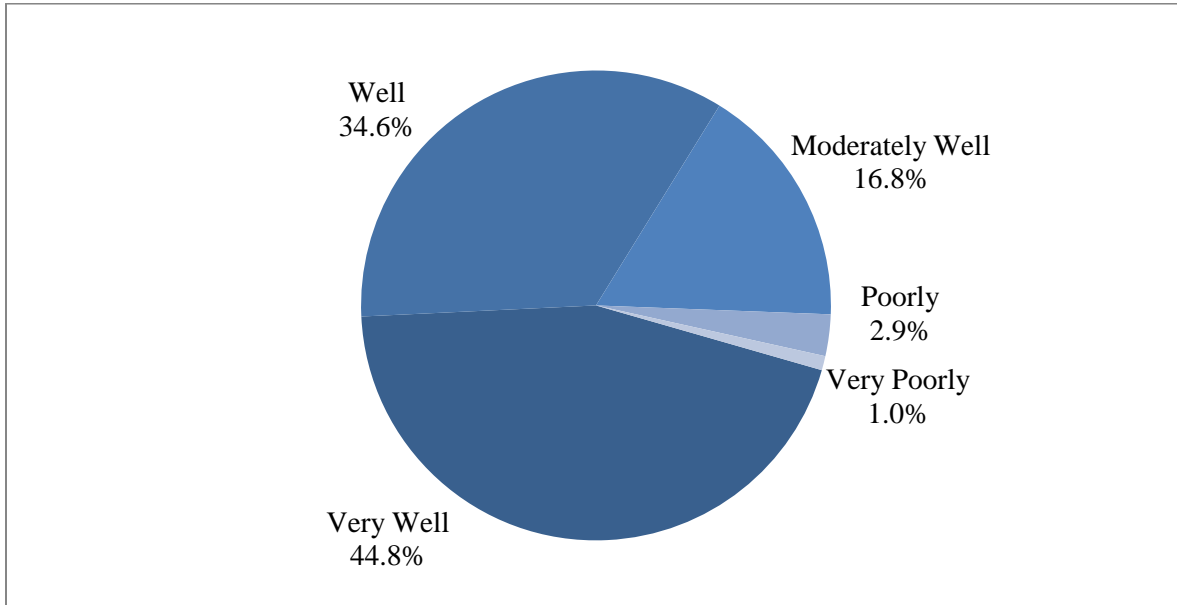


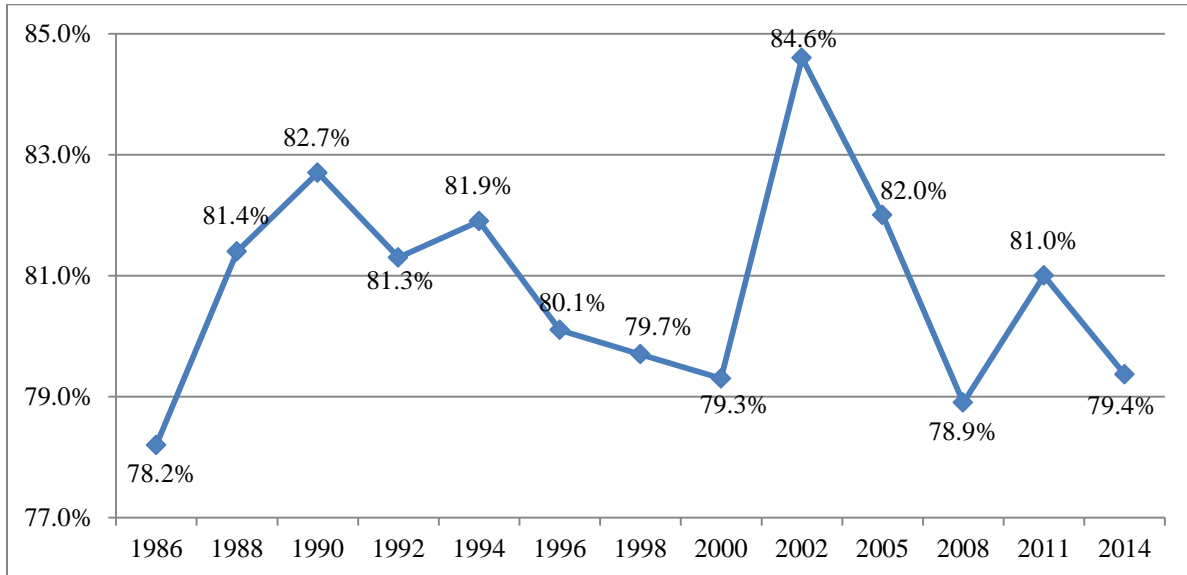
Figure 6 shows that the vast majority of survey respondents transferring to a four-year institution reported high levels of satisfaction with the academic preparation received at the community college. Most (79.4%) of the respondents indicated that the community college had prepared them "very well" or "well" for transfer to a four-year college or university.

Figure 6: Percentage of Respondents Rating Transfer Preparation Highly, 2014 Graduates



As Figure 7 illustrates, the results of the current survey are consistent with decades of high ratings ("very well" or "well") regarding transfer preparation. Since the survey of 1986 graduates, over three-quarters of transfer students responding to the survey rated their preparation very highly. The satisfaction level for 2014 graduates was 79.4%, a slight decrease from the ratings of 2011 graduates (81.0%) and a decrease from the highest rating on the survey of 2002 graduates (84.6%).

Figure 7: Percentage of Respondents Rating Transfer Preparation Highly, 1986-2014 Graduates



Significant policy attention has focused on whether students who transfer to a four-year institution having received a grade of at least a "C" or better received credit for their courses when transferring to a four-year college or university. As is shown in Table 13, half of respondents (45.5%) transferring to four-year institutions reported that they received credit for all courses successfully completed at the community college. Another high percentage of students (29.6%) indicated that the four-year institution did not award credit for between one and six credits that had been completed with a grade of "C" or better. However, nearly a quarter of students (24.9 %) reported that they were unable to transfer six or more of the credits earned at the sending community college.

While the proportion of students reporting that credits had been lost upon transfer remains high, survey respondents reporting the successful transfer of all credits has increased dramatically since the survey of 2002 graduates. As is presented in Table 13, nearly half of all survey respondents transferring to a four-year institution lost no credits when they transferred, whereas nearly two decades ago, just over ten percent (12.8%) indicated the same. In addition, since the survey of 2000 graduates, the percentage of students reporting any lost credits at transfer declined substantially (from 83.6% for 2000 graduates to 54.5% for 2014 graduates).

**Table 13: Percentage of Respondents Reporting Credit Loss,
1996-2014 Graduates**

Graduation Year	Number of Credits Lost Upon Transfer		
	None	1-6 Credits	Over 6 Credits
1996	12.8%	47.3%	39.9%
1998	13.9%	49.7%	36.4%
2000	16.4%	46.8%	36.8%
2002	45.2%	31.9%	22.9%
2005	45.2%	30.0%	25.8%
2008	40.2%	32.4%	27.5%
2011	43.9%	30.3%	25.8%
2014	45.5%	29.6%	24.9%

The results presented in Table 13 are indicative of a number of initiatives undertaken by the State, the University System of Maryland (USM), other public universities, and the Maryland Independent Colleges and Universities Association (MICUA) campuses pertaining to transfer credit articulation.

Employment Following Graduation

Several additional survey questions focused on employment status following graduation from the community college, including employment status, location, job preparation, and relationship to academic program. Participants were given several options to choose from when reporting employment: employed full-time, employed part-time, serving active military duty, full-time homemaker, unemployed and seeking a job, unemployed and not seeking a job, and retired. The majority of all survey respondents reported that they were employed either part-time (25.9%) or full-time (54.2%), and 9.0% reported being unemployed and actively seeking employment at the time of the survey.

In accordance with Bureau of Labor Statistics methodology for calculating unemployment rates, those who reported their status as full-time homemaker, unemployed and not seeking a job, active-duty military, or retired were excluded from calculations of employment rates. Following graduation from a community college, the vast majority (80.1%) of respondents reported employment in some capacity, whether full-time or part-time. Nearly 11% of respondents were excluded from the workforce in accordance with BLS methodology. Table 14 displays the percentage of students from each demographic and academic major category in the workforce reporting that they were employed full-time, employed part-time, or unemployed and actively seeking a job.

Table 14: Employment Status by Demographic and Academic Category

	Employed Full-Time	Employed Part-Time	Unemployed
Gender			
Male	61.1%	25.6%	13.3%
Female	59.6%	30.6%	9.9%
Race			
African American	61.2%	24.4%	14.3%
Asian	44.1%	37.3%	18.6%
Hispanic	56.8%	27.2%	16.0%
White	61.6%	30.0%	8.3%
Foreign/Non-Resident Alien	36.7%	32.7%	30.6%
Unknown	61.8%	28.1%	10.1%
Highest Degree Earned			
Certificate	67.9%	20.5%	11.6%
Associate	58.7%	30.4%	11.0%
Academic Program			
<i>Non-Transfer Majors</i>	<i>73.7%</i>	<i>18.1%</i>	<i>8.2%</i>
Business and Commerce	71.1%	16.3%	12.6%
Data Processing	60.4%	23.6%	16.0%
Health Services and Paramedical Studies	76.4%	18.8%	4.8%
Mechanical Technologies and Engineering	72.5%	13.7%	13.7%
Public Service Technology	77.2%	16.0%	6.8%
<i>Transfer Majors</i>	<i>47.4%</i>	<i>39.8%</i>	<i>12.8%</i>
Arts and Sciences	37.2%	48.3%	14.5%
General Studies	50.3%	36.9%	12.8%
Teacher Education	44.9%	50.0%	5.1%
Business Administration	56.5%	30.4%	13.1%
All Students	60.0%	29.0%	11.0%
Note: In accordance with BLS methodology, active-duty military, full-time homemakers, and individuals who are unemployed and not seeking unemployment are excluded from calculations.			

At 11.0%, unemployment one year after graduation among the survey respondents in the class of 2014 was 2.3 percentage points lower than survey respondents in the class of 2011 (13.3%).⁴ The unemployment rate for survey respondents in the 2014 graduating class, however, was higher than both the national and state rates. Nationally the unemployment rate in 2014 was 4.5% for

⁴ The 2008 report did not exclude those not in the workforce.

those 25 or older with an associate degree.⁵ At the time of the survey distribution, Maryland had an overall unemployment rate of 5.2%.⁶ While official unemployment figures for recent graduates are hard to come by, a report by the Economic Policy Institute estimated that the unemployment rate for young college graduates not enrolled in college or a university (age 21 to 24) was 8.5% in 2014.⁷ The study also indicated that over the past four decades, on average, unemployment rates of workers under age 25 are about twice as high as the overall national unemployment rate, regardless of the strength or weakness of the economy. This phenomenon may be reflected among survey respondents in the 2014 graduating class, whose unemployment rate is 5.8 percentage points higher than the national rates (4.5%), and 6.5 percentage points higher than the state rate of 5.2%.

The degree to which respondents' jobs were connected to their careers differed substantially by major, though a majority of students in most majors responded that their job was either in the same or a somewhat related field as their academic program of study. Table 15 displays the percentage of graduates employed full-time who indicated that their job was related to their major. Those students enrolled in transfer programs typically reported a weaker connection between their job and their major than students enrolled in non-transfer programs, as transfer programs are typically intended for preparation for transfer to a four-year university rather than direct employment in the chosen field. Graduates in services and paramedical studies (89.6%) and public service technology (64.8%) graduates were most likely to be employed in the same field as their academic studies. Graduates from arts and sciences (18.7%) and general studies (16.5%) programs were the least likely to report being employed in the same field in which they had studied.

⁵ Bureau of Labor Statistics. Labor Force Statistics from Current Population Survey. Household Data Annual Averages, *Employment Status Of The Civilian Noninstitutional Population 25 Years and Over by Educational Attainment, Sex, Race, and Hispanic or Latino Ethnicity*. <http://www.bls.gov/cps/cpsaat07.htm>

⁶ Maryland Department of Labor Licensing and Regulation. Office of Workforce Information and Performance. *Maryland Seasonally Adjusted Local Area Unemployment Data*. <http://www.dllr.state.md.us/lmi/laus/>

⁷ Shierholz, H., Davis, A., and Kimball, W. (2014). *The Class of 2014: The Weak Economy is Idling Too Many Young Graduates*. Economic Policy Institute, Briefing Paper No. 377. <http://www.epi.org/publication/class-of-2014/>

Table 15: Relationship of Respondents' Full-Time Jobs to Their Academic Field of Study

	Same Field	Somewhat Related Field	Different Field
Academic Program			
<i>Non-Transfer Majors</i>	<i>69.3%</i>	<i>14.2%</i>	<i>16.4%</i>
Business and Commerce	47.7%	31.4%	20.9%
Data Processing	50.8%	30.2%	19.0%
Health Services and Paramedical Studies	89.6%	5.2%	5.2%
Mechanical Technologies and Engineering	55.6%	22.2%	22.2%
Public Service Technology	64.8%	11.2%	24.0%
<i>Transfer Majors</i>	<i>23.1%</i>	<i>30.6%</i>	<i>46.3%</i>
Arts and Sciences	18.7%	28.0%	53.3%
General Studies	16.5%	38.6%	44.6%
Teacher Education	51.4%	22.9%	25.7%
Business Administration	47.4%	34.7%	17.9%
All Programs	54.1%	22.4%	23.5%

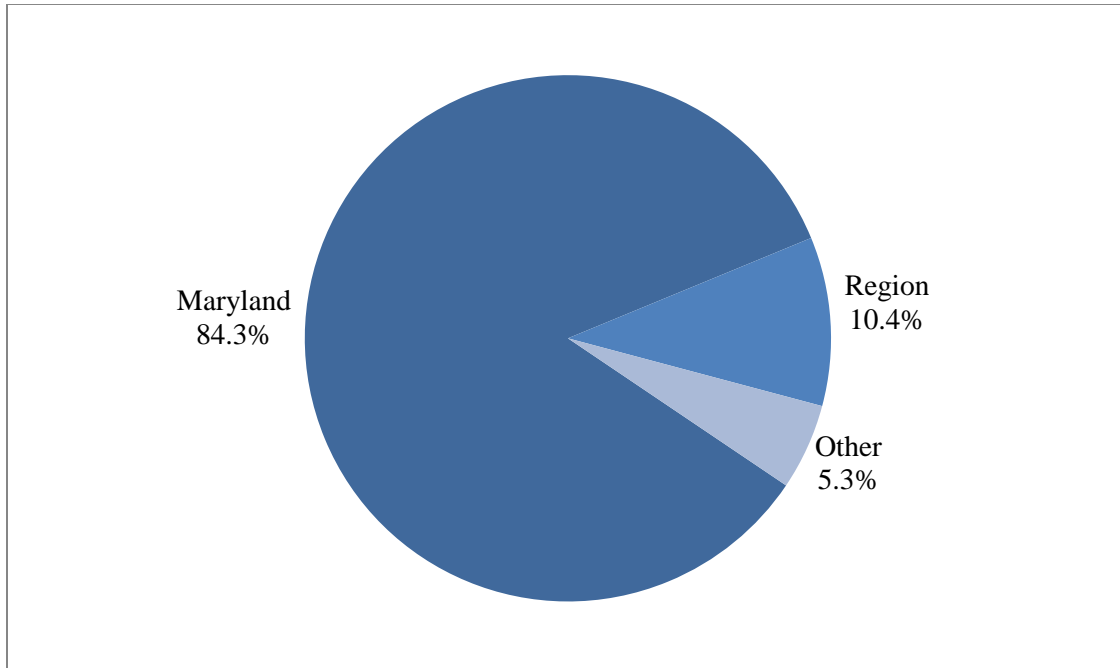
As previously noted, many graduates attended community colleges with the primary goal of increasing employment skills. Survey respondents reported that the community colleges are doing an excellent job of meeting that goal. When asked how well the community college had prepared them for employment, at all but two institutions, fewer than five percent of graduates employed full-time responded “poorly” or “very poorly.” More than two-thirds of graduates reported being prepared either “very well” (38.0%) or “well” (32.4%). Table 16 shows the percentage of respondents in each rating category by institution.

Table 16: Respondents' Rating of How Well Community Colleges Prepared Them for Employment by Community College

	Very Well	Well	Moderately Well	Poorly	Very Poorly
Allegany Community College	41.9%	32.4%	16.2%	4.1%	5.4%
Anne Arundel Community College	27.1%	36.4%	31.0%	4.7%	0.8%
Baltimore City Community College	27.3%	36.4%	31.8%	4.5%	0.0%
Carroll Community College	29.9%	38.1%	27.8%	2.1%	2.1%
Cecil Community College	0.0%	40.0%	20.0%	0.0%	40.0%
Chesapeake College	34.5%	31.0%	24.1%	6.9%	3.4%
College of Southern Maryland	28.2 %	37.4%	27.0%	4.3%	3.1%
Community College of Baltimore County	37.4%	32.7%	26.3%	2.9%	0.6%
Frederick Community College	45.7%	28.3%	21.7%	0.0%	4.3%
Garrett College	0.0%	33.3%	66.7%	0.0%	0.0%
Hagerstown Community College	50.7%	28.2%	16.2%	3.5%	1.4%
Harford Community College	32.7%	32.7%	26.0%	4.8%	3.8%
Howard Community College	38.6%	28.7%	23.8%	5.0%	4.0%
Montgomery College	42.9%	38.1%	14.3%	0.0%	4.8%
Prince George's Community College	42.4%	27.2%	19.2%	7.2%	4.0%
Wor-Wic Community College	56.5%	29.6%	10.2%	1.9%	1.9%
All Campuses	38.0%	32.4%	22.9%	3.9%	2.7%
Note: Cecil Community College and Garrett College had fewer than 15 respondents.					

An important function of community colleges is to create a more educated workforce for the state. Keeping college graduates in the state is a primary contributor to making progress toward achieving the 2025 goal of 55% of Marylanders possessing a college degree. Maryland community colleges have been successful in producing graduates who have contributed to Maryland's economy by working in-state after graduation. As Figure 8 illustrates, the majority (84.3%) of the survey respondents who are working full-time after graduation remain in the state. An additional 10.4% of graduates with full-time employment reported working within the region (District of Columbia, Virginia, Delaware, or Pennsylvania). Relatively few (5.3%) respondents reported that their job was located elsewhere.

Figure 8: Location of Employment for Respondents Working Full-Time



CONCLUSION

The Community College Graduate Follow-Up Survey has been administered since the class of 1980 to capture information on graduates' educational experiences and outcomes. However, response rates for both this and the Bachelor's Follow-Up Survey have declined over time. As previously noted, findings should be interpreted with caution given the possibility of respondent bias. Nevertheless, graduate feedback is a valuable component of the State's efforts to assess how well institutions are serving their graduates and contributing to the State's educational goals, and the Commission is working with community colleges and other institutions to explore other methods to gather information relating to the goals of this report. For example, data from the Maryland Longitudinal Data System Center (MLDSC) may provide additional reliable information on questions related to some of the longer term outcomes of these graduates such as unemployment rates and earnings.

Despite the dangers of a low response rate, the Graduate Follow-Up Survey of 2014 community college graduates appears to indicate that Maryland institutions are continuing to perform well. As in prior years, graduates remain satisfied with their overall community college experience, their level of preparation for transfer to a four-year college or university, and their levels of preparation for employment.

However, a significant concern remains. While the number of graduates experiencing credit loss upon transfer has declined significantly in recent years, about one in four students (25.9%) report

losing six or more credits when transferring to a four-year institution. Credit loss can contribute to higher costs and time required to complete a degree program. A number of policies have been enacted by community colleges and four-year colleges and universities in an attempt to remedy this problem. Additionally, in the 2013 legislative session, the Maryland legislature passed the College Readiness and Completion Act of 2013. While credit loss is not the sole focus of the legislation, the Act contained a number of specific steps to be undertaken by MHEC and the campuses to increase the transferability of credits between community colleges and four-year institutions. In particular, the legislation requires community college students to file degree plans within a short period after enrollment at a public four-year institution to ensure that they are on the path to completion. Many institutions did not have this formal advising structure in place under the previous system. In addition, this legislation authorized MHEC to establish a statewide transfer program where at least 60 credits earned at a community college, towards an associate of arts degree or associate of science degree, are transferable to any public four-year higher education institution in the state for a bachelor's degree by 2016. These policy changes occurred too late to assist 2014 graduates, but they may be reflected in the results of the next edition of this survey, which will be offered to graduates in 2017.

The results of this year's administration of the survey provide MHEC, policymakers, and institutions with valuable information on the state of our community colleges. This year's survey results show that community college graduates are largely satisfied with most aspects of their experience, but each community college has ways in which it can continue to improve. Examining existing policies and careful consideration of graduate feedback may help institutions and the State continue to provide a high-quality experience.