



Follow-Up Survey of 2010 Bachelor's Degree Recipients at Maryland Four-Year Institutions

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MARYLAND HIGHER EDUCATION COMMISSION

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Introduction

Every three years, Maryland performs statewide surveys of graduates from Maryland four-year public institutions, independent institutions, and community colleges. These surveys are a valuable tool that helps the State and campuses better understand student outcomes.

The Maryland Higher Education Commission (MHEC) conducts this follow-up survey of bachelor's degree recipients a year after the students have graduated. This report presents results of the most current *Bachelor's Follow-Up Survey*, which includes graduates who earned their degrees from a public four-year campus in Maryland during fiscal year 2010. In addition, this report includes analysis of over 20 years of trend data. The report provides information regarding the degree recipients' post-graduation educational and employment statuses, perceptions about the quality of their experiences at their institutions, and other related outcomes. Results from the survey are included in each college's Performance Accountability Report (PAR) and in the Commission's Managing for Results (MFR) submission. The Bachelor's Follow-Up Survey provides MHEC with data that are currently not captured any other way. These include satisfaction with educational preparation and workforce placement information.

Methods

A common core of 17 questions developed and approved by MHEC, the University System of Maryland, Morgan State University, Saint Mary's College of Maryland, and Maryland Independent Colleges and Universities Association was created for the institutions. Each institution then developed and administered its own survey, with many institutions adding to the core questions specifically relevant to their student population. The follow-up surveys were distributed by the institutions between March and May of 2011 to every student who earned a bachelor's degree at a Maryland public four-year university or a participating independent four-year institution during Fiscal Year 2010 (July 1, 2009 to June 30, 2010). Institutions were able to choose between electronic or paper-based survey distributions. Several strategies were utilized to attempt to increase responses, including the offering of incentives for survey completion, notification being given to degree recipients prior to the mailing of the surveys, and multiple mailings. Following administration of the surveys, institutions compiled responses from the core questions to create a data file for MHEC's analysis.

Although there were 20,658 bachelor degree recipients in FY2010, incomplete and missing contact information resulted in a potential survey population of 18,151 (the adjusted sample size). From this population, completed surveys were returned by 3,911 graduates, resulting in a statewide response rate of 21.5%. The institutional response rates ranged from 10.5% at Salisbury University to 43.4% at the University of Baltimore. Table 1 displays response rates by institution.

Table 1: Survey Response Rate by Institution

Campus	Total Bachelor's Recipients	Adjusted Sample Size	Number of Responses	Response Rate
Bowie	606	580	143	24.7%
Coppin	377	355	74	20.8%
Frostburg	777	748	173	23.1%
Salisbury	1,616	1,616	170	10.5%
Towson	3,624	3,564	854	24.0%
UBalt	516	484	210	43.4%
UMB	379	371	83	22.4%
UMBC	1,843	1,816	384	21.1%
UMCP	6,176	5889	837	14.2%
UMES	463	418	90	21.5%
UMUC	3,070	2909	626	21.5%
Morgan	770	582	105	18.0%
St. Mary's	441	435	162	37.2%
Statewide	20,658	18,151	3,911	21.5%

Since some independents chose not to participate in this survey, this report will focus on outcomes for students attending public institutions. Independent institutions that participated were provided with the results of the data analyses from their completed surveys.

Precautions have been taken to protect the privacy of individuals. In particular, program data is only presented for academic programs with more than 50 students responding statewide, and responses by race are only included for racial groups with more than 50 respondents. Low response rates can raise concerns about biases of respondents and the sample's ability to be representative of the entire graduate population.

Survey Results

Respondent Profile

Table 2 displays the demographic profile for survey respondents and the entire fiscal 2010 graduating class. Males comprised 36.3% of the respondents and females 63.3%, as opposed to 41.7% and 58.3% of the respective baccalaureate populations. The survey population was similar to the baccalaureate population of African Americans and Hispanics. White graduates (63.9% of respondents; 58.7% of total population) were overrepresented, while graduates identifying as Other race (one percent of survey population; seven percent of total graduates) were underrepresented in the survey compared to their presence in the graduate population.

Table 2: Respondent Profile

	2011 Survey Respondents	2010 Bachelor's Degree Recipients
Gender		
Male	36.3%	41.7%
Female	63.3%	58.3%
Unknown/Missing	0.7%	0.0%
Race		
African American	23.3%	19.3%
Native American	0.3%	0.3%
Asian	6.8%	8.5%
Hispanic	3.4%	3.7%
White	63.9%	58.7%
Foreign	1.6%	2.2%
Other/Unknown	0.6%	7.4%

Financial Need

As Figure 1 shows, 70.2% of graduates received financial aid while working towards their degrees. As indicated in Table 3, 24.8% of those graduates who received financial aid reported that without assistance obtaining a degree would have required significant financial hardship for them and their families. More than half (55.8%) of graduates who had received aid stated that earning their degree would not have been foreseeable without financial assistance. These findings show that financial aid continues to play a pivotal role in ensuring students are able to complete their degrees.

Figure 1: Received Any Financial Aid

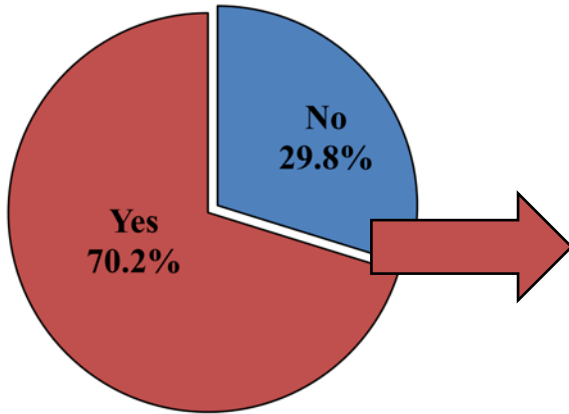


Table 3: Able to complete Degree without Financial Aid

	% of those who Received Financial Aid
Yes, without major hardship	19.6%
Yes, but with major hardship	24.6%
No	55.8%

African American, Hispanic, and Native American students relied more on financial aid in order to complete their degrees, as shown in Table 4. Nearly three quarters (73.8%) of African American graduates reported that they would not have been able to complete their degrees without financial aid. In addition, 82.9% of African American and 90.7% of Hispanic students reported that without financial assistance they would have either not have been able to continue pursuing their degrees or they would have incurred major financial hardship. While White and Asian students were more likely to respond that they may have been able to complete their degrees even without financial assistance, 77.5% of Asian students and 75.9% of Whites still reported that financial aid prevented considerable financial hardship and/or the end of their educational pursuits.

Table 4: Able to Complete Degree without Financial Aid

	Yes, without major hardship	Yes, but <u>with</u> major hardship	No	Would not have completed or would have incurred major hardship
African American	10.8%	15.4%	73.8%	89.2%
Native American	16.7%	16.7%	66.7%	83.4%
Asian	22.5%	28.4%	49.1%	77.5%
Hispanic	9.3%	25.8%	64.9%	90.7%
White	24.1%	28.3%	47.6%	75.9%

Post-Baccalaureate Education

As Table 5 illustrates, 40.2% of the survey respondents reported enrolling in school again after the receipt of their baccalaureate degrees. While six percent of respondents reported seeking another undergraduate-level award such as a certificate, associate degree, or additional bachelor's degree, 30.0% were pursuing advanced degrees. Of all 2010 graduates, 23.0% were seeking a master's degree, nearly six percent a doctorate, just over one percent a graduate-level certificate, and 0.4% a first-professional degree. An additional four percent reported enrolling in school again without seeking a degree or certificate. Whether those non-degree seeking students were enrolled in undergraduate or graduate level coursework is not clear from the available data.

Table 5: Enrollment in Higher Education Following Graduation

	% Enrolling After Graduation
Undergraduate-Level Award	6.1%
Master's Degree	23.0%
Doctorate	5.8%
Graduate-Level Certificate	1.1%
First Professional	0.4%
Non-Degree Seeking	3.9%
Total Re-Enrolled	40.2%

Table 6 displays survey respondents who enrolled in advanced degree programs within one year of earning their bachelor's degrees. The pursuit of advanced study by recent graduates varied widely by institution, ranging from 12.4% of St. Mary's graduates seeking advanced degrees to 48.3% of graduates pursuing such degrees at Bowie State University. Women continue to pursue advanced degrees at a higher rate than men. African Americans were most likely to pursue advanced studies, with 38.5% enrolling within one year after graduation. Asian respondents were the least likely to pursue advanced degrees.

Table 6: Respondents Seeking an Advanced Degree

	% Seeking Advanced Degree
Campus	
Bowie	48.3%
Coppin	32.4%
Frostburg	30.1%
Salisbury	28.2%
Towson	25.5%
UBalt	31.4%
UMB	14.5%
UMBC	34.9%
UMCP	34.2%
UMES	37.8%
UMUC	28.8%
Morgan	36.2%
St. Mary's	12.4%
Race	
African American	38.5%
Asian	25.2%
Hispanic	28.7%
White	27.9%
Foreign	27.1%
Gender	
Male	26.5%
Female	32.2%
All Students	30.1%

Some degree programs produced a larger percentage of students who pursued advanced degrees after graduating than others. As Table 7 shows, while Biological Sciences majors were most likely to pursue an additional degree of any level, they were third most likely to pursue advanced degrees. Public affairs and Psychology graduates were the most likely to pursue advanced degrees. Communications majors were both least likely to pursue any degree and least likely to pursue an advanced degree. Business and Computer Science were nearly tied for the second least likely majors to pursue an advanced degree.

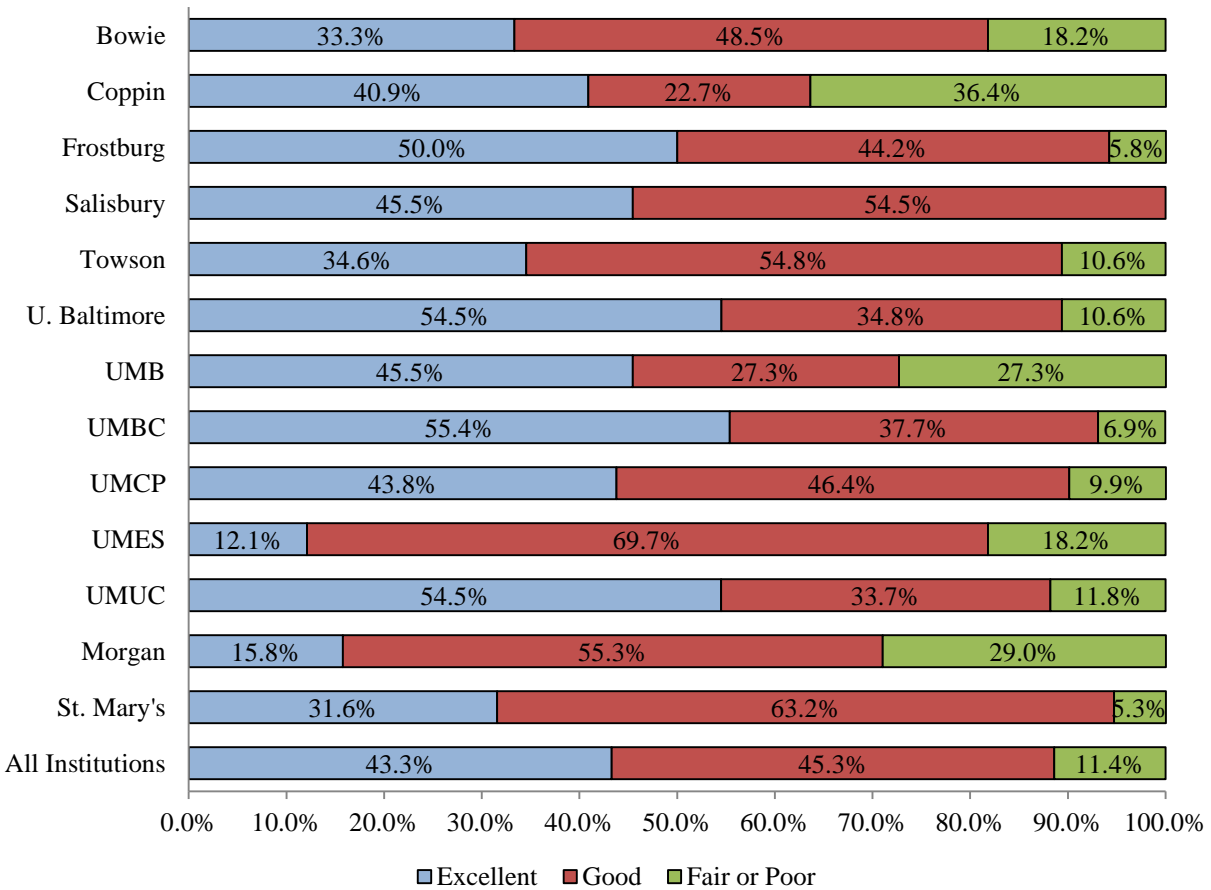
Table 7: Respondents Seeking Additional Education and Seeking an Advanced Degree

Degree Program	% Seeking Additional Education	% Seeking an Advanced Degree
Public Affairs	50.5%	46.4%
Psychology	53.6%	43.1%
Biological Science	57.2%	42.0%
Letters and Sciences	42.9%	35.7%
Engineering	41.5%	31.0%
Social Sciences	43.0%	31.1%
Interdisciplinary Studies	40.2%	30.3%
Education	35.4%	28.4%
Health	28.7%	24.7%
Business	34.1%	22.9%
Computer Science	34.0%	22.6%
Communications	26.1%	20.0%
Total (All Programs)	40.2%	30.1%

Note: Table represents degree programs with at least 50 respondents

Respondents who were pursuing advanced degrees were asked to rate the institutions from which they received their bachelor’s degrees on how well the institution prepared them for graduate and/or professional study. Figure 2 indicates that of those graduates seeking advanced education, 43.3% of the respondents rated the preparation they received for graduate/professional study as “Excellent”, while an additional 45.3% stated that their institution provided them with “Good” preparation. Overall, 88.6% of the respondents who pursued advanced degrees felt they had been well prepared by their undergraduate campuses.

Figure 2. Respondents' Rating of Preparation for Graduate/Professional Study by Institution



As Figure 3 shows, the majority of respondents pursuing advanced degrees sought them in fields that were either the same as or similar to their undergraduate major. Nearly one-fifth of the respondents reported pursuing a program of advanced study in a field different from their undergraduate coursework. Table 8 displays the number of respondents indicating that their graduate program involved the same or similar major as their program of study during their undergraduate career. Education and Engineering had the largest percentage of students pursuing the same or a similar major in graduate programs, with 92.5% and 92.3%, respectively, reporting that their graduates programs were related to their undergraduate field of study. Letters and Sciences had the smallest percentage of graduates pursuing the same or similar majors at the graduate level, with only 69.1% of graduates reporting that their advanced studies programs were related to their undergraduate studies.

Figure 3: Relationship of Graduate/Professional Major to Undergraduate

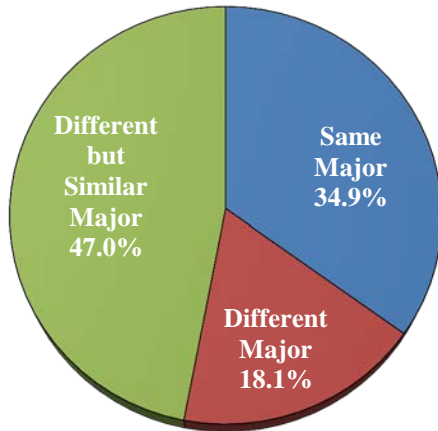


Table 8: Respondents Reporting Same or Similar Major as Undergraduate Degree

Degree Program	Responding Same or Similar Major
Education	92.5%
Engineering	92.3%
Health	90.2%
Computer Science	89.2%
Biological Science	87.7%
Business	82.9%
Psychology	83.5%
Social Sciences	77.2%
Letters and Sciences	69.1%
Total (All Programs)	81.9%

Note: Table displays degree programs with at least 50 respondents seeking a graduate degree

Post-Graduation Employment

Of those graduates in the labor market, 88.8% reported having either part-time or full-time employment. Just over one-tenth (10.5%) of degree recipients reported being unemployed and looking for work. The seven percent of graduates who reported being unemployed and not seeking work were excluded when calculating unemployment rates, in accordance with U.S. Bureau of Labor Statistics methodology.

As indicated in Table 9, respondents who graduated from the University of Maryland, Eastern Shore reported the lowest unemployment rate, followed closely by the University of Maryland, Baltimore and the University of Baltimore. The highest rates were found among graduates of Morgan State University and St. Mary’s College of Maryland, with 16.3% of respondents at both institutions unemployed. The unemployment rate was lowest for White and African American graduates, with both reporting approximately 10.0% unemployment. Asian and Hispanic graduates had the highest rates of unemployment. Men and Women reported unemployment at similar levels, at 10.8% and 10.2%, respectively.

These figures are high for Maryland, which at the time of survey distribution had an overall unemployment rate below 10.0%. However, they are not completely out of the norm given the impact the economic recession has had upon recent college graduates’ employment prospects. While official unemployment figures for recent graduates are hard to come by, a recent report by the Center on Education and the Workforce estimates the national unemployment rate for recent

college graduates is now nine percent, almost twice the unemployment rate for all those with college degrees.¹

Table 9: Unemployment Rate of Respondents

	Unemployed
Campus	
Morgan	16.3%
St. Mary's	16.3%
Salisbury	13.0%
Bowie	12.9%
Coppin	12.3%
UMBC	12.2%
UMCP	11.4%
UMUC	11.1%
Frostburg	10.2%
Towson	8.0%
UMB	7.4%
UBalt	5.6%
UMES	3.9%
Race	
Foreign	17.3%
Asian	16.4%
Hispanic	12.6%
African American	10.3%
White	9.5%
Gender	
Male	10.8%
Female	10.2%
All Students	10.5%

Note: Only includes graduates identified as in the workforce.

Table 10 indicates the degree to which the jobs of respondents' who were working full-time were related to their majors and whether a bachelor's degree was required to perform the duties of their current job. Overall, 75.8% of graduates reported working in fields related to their major. The degree programs with the highest percentages of graduates working in fields related to their undergraduate majors were Health, Engineering, Education, Computer Science, and Biological Science, with over 80% of graduates in each of those majors responding that their jobs were either directly or somewhat related to their major field of study.

Of graduates working full-time, 57.8% reported working in jobs that required a bachelor's degree. However, as also indicated in Table 10, this varied tremendously by degree program. Engineering had the highest percentage of graduates working in jobs that required a degree, with

¹ A. Carnevale, B. Cheah, & J. Strohl. (2012). *Hard Times: Not All College Degrees Are Created Equal*. Washington, DC: Georgetown University Center on Education and the Workforce. 3.

86.9% of graduates working in jobs requiring a degree. Education and Biology graduates also tended to be working in jobs that required a degree, with both fields having nearly three-quarters of their students working in jobs requiring bachelor’s degrees. Interdisciplinary Studies, Psychology, Public Affairs, and Health majors were the least likely to be working in jobs requiring a degree, even though many of these jobs were related to the curriculum those graduates had pursued during their bachelor’s degree program.

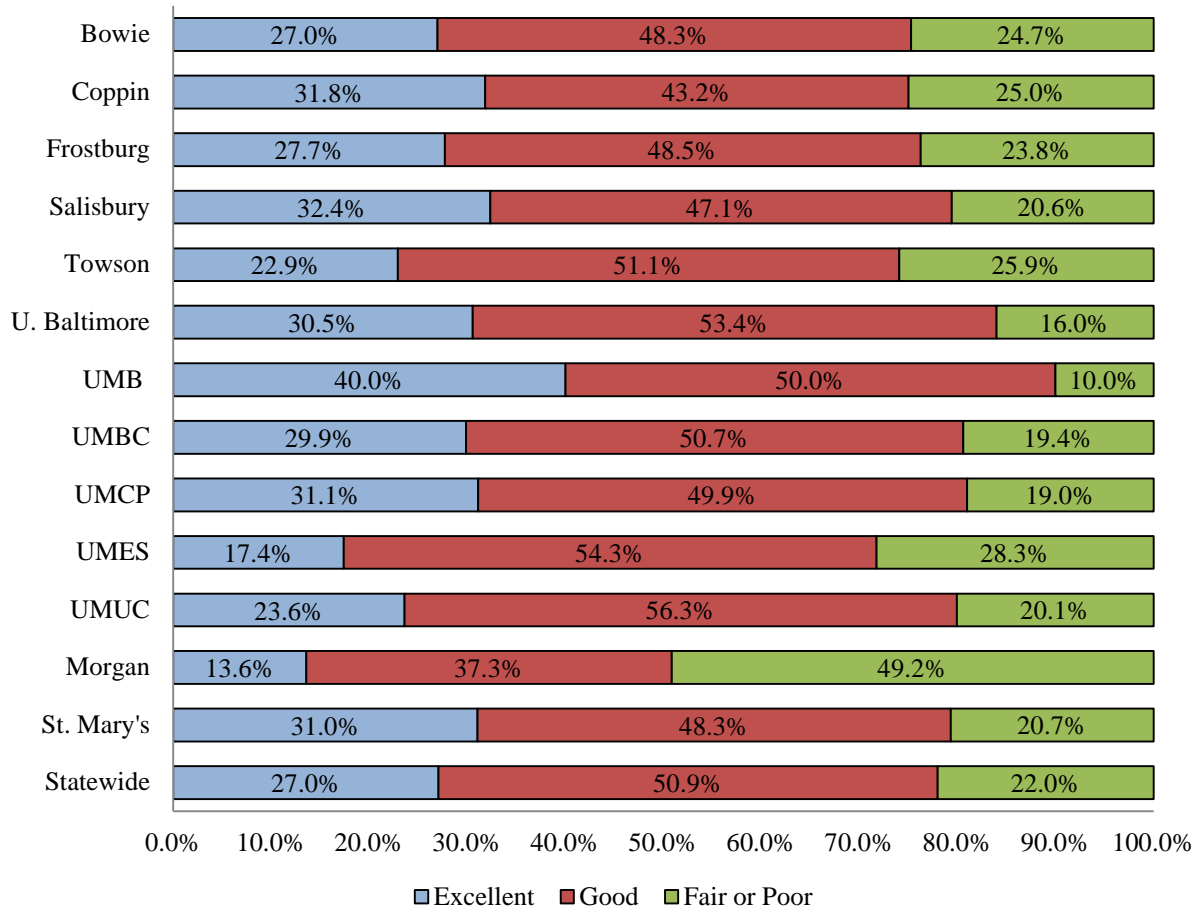
Table 10: Respondents Reporting Current Job Related to Undergraduate Degree and Percent of Current Jobs Requiring a Bachelor’s Degree

Degree Program	% Responding Directly/Somewhat Related	% Responding Current Job Requires Bachelor’s Degree
Health	93.7%	49.1%
Engineering	91.6%	86.9%
Education	86.5%	74.9%
Computer Science	85.1%	50.8%
Biological Science	82.7%	70.0%
Communications	79.4%	66.3%
Business	77.6%	54.1%
Public Affairs	76.9%	48.1%
Psychology	68.0%	46.6%
Interdisciplinary Studies	65.9%	45.7%
Letters and Sciences	64.0%	56.0%
Fine Arts	62.5%	51.8%
Social Sciences	54.5%	55.5%
Total (All Programs)	75.8%	57.8%

Note: Table displays programs with at least 50 respondents reported working full-time.

Figure 4 provides career preparation ratings by campus. The overall satisfaction rating by bachelor’s degree recipients, including those who indicated receiving “Excellent” or “Good” career preparation, was 77.9%. This rating of satisfaction with job preparation was considerably lower than the 88.6% satisfaction rating offered by respondents regarding preparation for post-baccalaureate study. While 43.3% of respondents rated their preparation for advanced study as “Excellent”, only 27.0% of respondents rated their career readiness as “Excellent”. However, there was considerable variation among institutions. Among graduates from the University of Maryland, Baltimore, 90.0% of respondents rated their job preparation as “Excellent” or “Good”, the highest among all of the 13 institutions. The lowest level of satisfaction with job preparation was reported by graduates of Morgan, where only 50.8% of graduates indicated that they had received either “Excellent” or “Good” preparation for their current job or career.

Figure 4: Respondents' Rating of Preparation for Current Job/Career by Institution



As Table 11 shows, graduates who majored in Computer Science and Engineering earned the highest median salaries among respondents who worked full-time. Graduates of Fine Arts programs had the lowest median income, earning less than \$25,000. Analysis of graduates from different racial/ethnic backgrounds showed that Asian graduates and graduates from other countries earned the highest median salaries. Hispanics and African Americans also exceeded the median salary of whites. The median salary for women was \$8,000 lower than that of men.

Table 11: Median Salary of Respondents

	Median Salary
Degree Program	
Computer Science	\$61,071
Engineering	\$56,458
Health	\$49,582
Business	\$44,601
Interdisciplinary Studies	\$36,999
Social Sciences	\$33,253
Communications	\$33,029
Education	\$31,250
Public Affairs	\$30,333
Letters and Sciences	\$28,958
Psychology	\$27,343
Biological Science	\$26,125
Fine Arts	\$24,604
Race	
African American	\$38,534
Native American	\$32,500
Asian	\$42,391
Hispanic	\$40,625
White	\$36,133
Foreign	\$41,818
Gender	
Male	\$42,706
Female	\$34,665

Note: Table represents degree programs with at least 50 respondents

Median salaries by program by gender are shown in Table 12. In most degree programs, males earned a higher median salary than women, most with large gaps between median earnings. However, in Education and Communications, women attained greater salaries than their male counterparts. For both males and females, Computer Science graduates earned the highest. For females, Psychology majors had the lowest salaries, while Communications majors earned the lowest for males.

Table 12: Median Salary of Respondents by Gender

Degree Program	Gender	
	Male	Female
Biological Sciences	--	\$24,463
Business	\$47,327	\$43,169
Communications	\$28,333	\$34,073
Computer Science	\$62,205	\$54,166
Education	\$31,071	\$31,346
Engineering	\$55,833	--
Health	--	\$49,687
Letters & Sciences	--	\$31,666
Psychology	--	\$26,634
Social Sciences	\$36,625	\$31,346

Table represents programs with at least 50 respondents in gender category

Transfer Status

Nearly half of all respondents began their academic pursuits at an institution other than the one from which they received their bachelor's degree. Over a quarter transferred from a Maryland community college, while six percent transferred from another Maryland four-year public institution. Thirteen percent of respondents transferred from a degree-granting institution outside of Maryland.

There are, however, substantial differences in transfer by institution, as shown in Table 13. The University of Maryland, Baltimore, does not offer any lower-division coursework, so all of its graduates are transfer-in. Among UMB graduates, 61.0% transferred in from community colleges and 39.0% transferred in from four-year institutions both in and out of state. The University of Baltimore first began offering admission to a small class of first-year students in Fall 2007, so only six percent of its 2010-11 respondents were not transfers at entry; 78.1% were transferring from Maryland community colleges.² This will likely change as students admitted to the school as freshmen continue to move through the pipeline. Thirty-four percent of UMUC 2010-11 respondents transferred from out-of-state institutions, a much higher out-of-state transfer-in figure than any other institution. In contrast, only 12.4% of students graduating from St. Mary's had first attended another institution. University of Maryland College Park and University of Maryland Eastern Shore graduates also reported relatively low rates of transfer, with over 70.0% of students indicating that they had not transferred from another institution.

² The Operating Budget Analysis for Fiscal Year 2012 noted that retention rates had been particularly low for the first cohort of entering students in 2007, which UB attributed to the availability of one-year scholarships to all entering students with the class beginning in 2007. They suggested that many students had likely entered with the intent to transfer. Future years may begin to see an increase in graduates responding that UB was the only institution they attended.

Table 13: Graduates Transferred in to Bachelor’s Degree-Granting Institution

Institution	“Transfer From” Institution Type				Total Transfers
	None	Community College	Maryland 4-Year	Out-of-State	
Bowie	53.5%	20.4%	10.6%	15.5%	46.5%
Coppin	43.2%	43.2%	12.2%	1.4%	56.8%
Frostburg	55.8%	33.7%	2.3%	8.1%	44.2%
Salisbury	63.9%	23.1%	1.8%	11.2%	36.1%
Towson	61.7%	24.0%	6.9%	7.4%	38.3%
U. Baltimore	5.7%	78.1%	6.7%	9.5%	94.3%
UMB	0.0%	61.0%	23.2%	15.9%	100.0%
UMBC	59.1%	28.1%	5.2%	7.6%	40.9%
UMCP	73.4%	14.8%	2.2%	9.6%	26.6%
UMES	71.1%	14.4%	4.4%	10.0%	28.9%
UMUC	21.8%	33.2%	10.8%	34.2%	78.2%
Morgan	59.0%	20.0%	5.0%	16.0%	41.0%
St. Mary’s	87.6%	6.8%	1.9%	3.7%	12.4%
Statewide	53.7%	27.2%	6.2%	13.0%	46.3%

Residency

Most Maryland residents continue living in the State following the completion of the bachelor’s degrees. Four-fifths of recent graduates were residents of Maryland when they first enrolled at their institutions, and Table 14 shows that 78.5% were residents a year following their graduation. Recent graduates were heavily concentrated in Baltimore County, Montgomery County, and Prince George’s County, which together accounted for 39.5% of all residencies.

Table 14: Current Residency of Recent Bachelor’s Degree Recipients

Place of Residence	%	Place of Residence	%
Allegany	0.6%	Howard	6.8%
Anne Arundel	7.2%	Kent	0.1%
Baltimore City	6.9%	Montgomery	14.3%
Baltimore County	14.2%	Prince George's	11.0%
Calvert	1.6%	Queen Anne's	0.5%
Caroline	0.2%	St. Mary's	1.5%
Carroll	1.8%	Somerset	0.3%
Cecil	0.7%	Talbot	0.3%
Charles	1.9%	Washington	0.8%
Dorchester	0.2%	Wicomico	0.6%
Frederick	2.9%	Worchester	0.5%
Garrett	0.2%	All Maryland	78.5%
Harford	3.6%	Out-of-State	21.5%

Employment Profile

Overall, most graduates of Maryland institutions tend to be working in Maryland following graduation. As shown in Table 15, two-thirds of 2010-11 graduates were working in Maryland one year following graduation. Maryland residents educated in Maryland are especially likely to remain and work in the State following graduation. Of respondents in the workforce, 75.0% of those with full-time employment were working in Maryland one year later. Of those respondents who were not residents of Maryland when they first enrolled at one of the State’s public institutions, 27.7% reported working in Maryland a year after graduation. Maryland graduates are also highly likely to find employment in neighboring states. Of total graduates, 86.2% were employed in Maryland, Washington DC, the Northern Virginia suburbs, or elsewhere in another neighboring state. Two-thirds of survey respondents reported that they worked in Maryland and 15.8% worked in Washington DC and the northern Virginia suburbs. Five percent worked in a border state such as Delaware, New Jersey, Pennsylvania, West Virginia, or elsewhere in Virginia. Only 13.8% reported that they worked outside of the Washington DC area and bordering states (in another state or country). However, among those graduates who were out-of-state at entry, 42.3% found employment outside of the region. The data do not allow us to determine what proportion returned to their region of origin following graduation or whether respondents sought employment in states or countries other than where they came from.

Table 15: Location of Employment for Graduates Employed Full-Time

	MD Residents at Entry	Out-of-State Residents at Entry	Total Respondents
Location of Employment			
Maryland	75.0%	27.7%	65.7%
DC	10.3%	6.2%	9.5%
Northern VA suburbs	5.4%	10.0%	6.3%
Neighboring State*	2.5%	13.8%	4.7%
Other State	5.8%	37.7%	12.1%
Other Country	1.0%	4.6%	1.7%

*Neighboring state includes DE, NJ,PA,WV, and elsewhere in VA

As Table 16 shows, Maryland bachelor’s degree recipients were employed in a wide variety of occupations a year after graduation. Of all respondents employed full-time, the Other Professional, Health Professional, Financial, and Teacher sectors accounted for the largest proportions of employment. However, this survey is conducted on graduates only a year after graduation. Fields such as Social Work and Legal Professional, which frequently require some level of advanced degree, may represent a smaller portion of employment at this point than they would once students have time to earn additional credentials.

Table 16: Category of Current Occupation

Category of Current Occupation	% of Employed
Other Professional	19.3%
Financial	11.4%
Information Systems	10.9%
Health Professional	10.1%
Teacher	9.6%
Non-Professional	9.0%
Sales or Marketing	8.1%
Manager, Executive, Proprietor	5.9%
Scientist	5.0%
Engineer or Architect	4.3%
Legal Professional	3.3%
Social Worker	3.0%

It is clear from Figures 5 and 6 that there are fairly substantial differences in sector of employment between full-time and part-time employees. The percentage of graduates who are teachers is almost twice as high for part-time rather than full-time employees; part-timers are also much more likely to be employed in Sales and Marketing than full-time employees. Full-time employees are more concentrated in the Financial and Information Systems sectors than graduates who are employed part-time.

Figure 5: Type of Occupation for Full-Time Employed

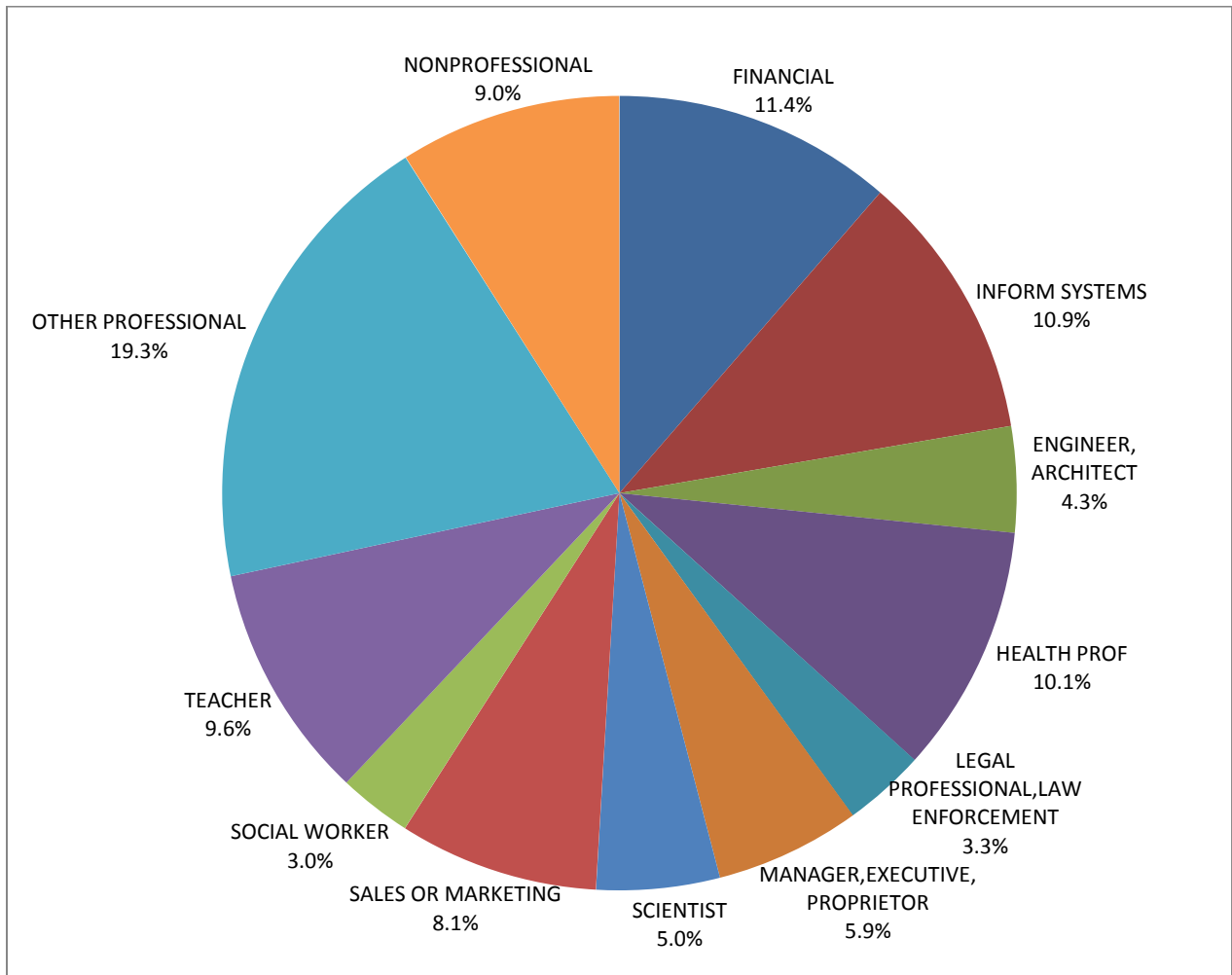
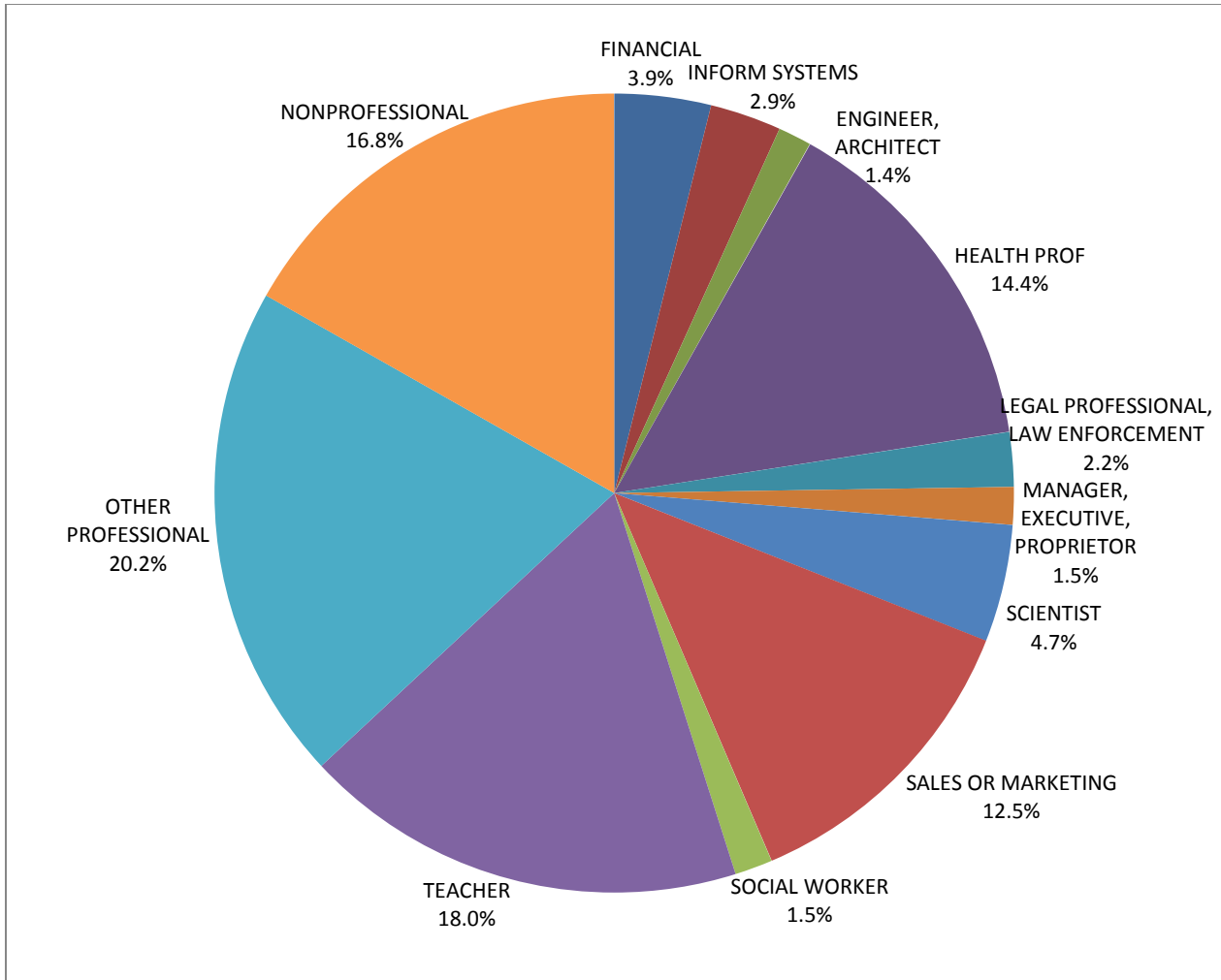


Figure 6: Type of Occupation for Part-Time Employed



Overall Satisfaction

Table 17 provides the graduates’ responses to the question of whether they would attend the same institution if they were given the option. The data indicate that recent graduates were largely satisfied with their degree-granting institution. Of all graduates statewide, 51.8% would definitely attend the same institution, and 31.1% probably would. Statewide, then, 82.9% of students reported overall satisfaction with their undergraduate experience. At all but 4 institutions, more than four-fifths of respondents would probably or definitely choose to attend the same institution. Fewer than 60.0% of graduates from University of Maryland, Eastern Shore and Morgan State University reported that they would attend their alma mater again.

Table 17: Respondents Who Would Definitely or Probably Choose to Attend the Same Institution

Campus	Definitely/Probably Would
UBalt	89.3%
St. Mary's	88.9%
UMUC	88.0%
UMCP	86.9%
Salisbury	85.1%
Frostburg	84.3%
UMB	84.1%
UMBC	82.3%
Towson	81.5%
Bowie	70.9%
Coppin	62.2%
UMES	58.6%
Morgan	55.6%
Statewide (All Campuses)	82.9%

Trend Profile

One of the most useful ways of looking at data is examining how trends may have emerged over time. This section presents trends that have emerged from the *Bachelor's Follow-Up Survey* in the past twenty-five years, from 1985-2010. The surveys were administered to bachelor's degree recipients graduating in 1985, 1991, 1996, 1999, 2004, 2007, and 2010, and data points are presented for each of these years.

Financial Aid

Provision of financial aid remains a crucial factor in ensuring continued accessibility to higher education for a large portion of the college-age population. Over the past three decades, college tuition and fees have grown exponentially. A 2011 report by the Education Trust³ found that today low-income families today must pay or borrow nearly three-quarters of their annual income to send just one child to a four-year college. While the burden is lower for middle- and upper-class students, they still must pay approximately 27% and 14% of annual income, respectively.

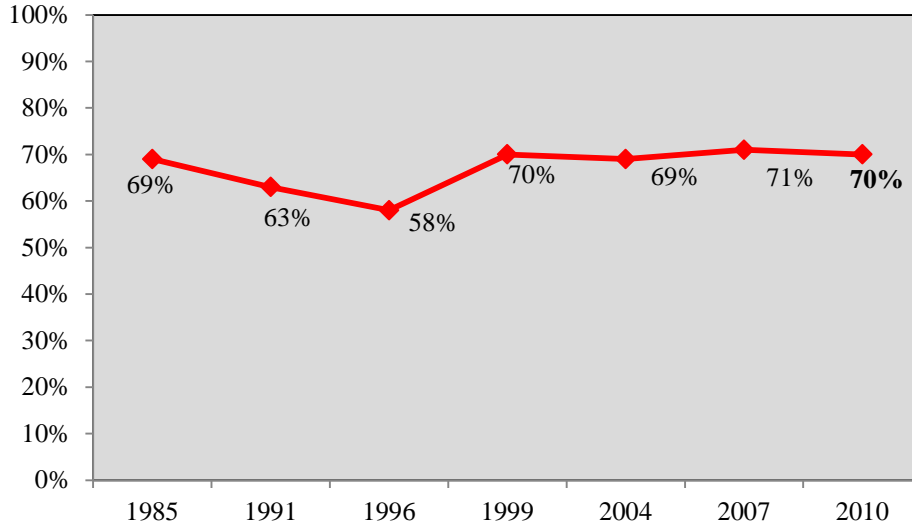
Rising costs have not always been met with greater availability of financial aid, even as the rise of college costs outpaced the growth in inflation during the last two and a half decades. During the period from FY1988-2010, for example, the cost of mandatory tuition and fees increased by nearly 300%, while the inflation rate during that time period was 92%.⁴ Figure 7 shows the

³ Lynch et al. (2011). *Priced out: How the wrong financial aid policies hurt low-income students*. Washington, DC: The Education Trust. 2.

⁴ Maryland Budget Books; Consumer Price Index Inflation Calculator.

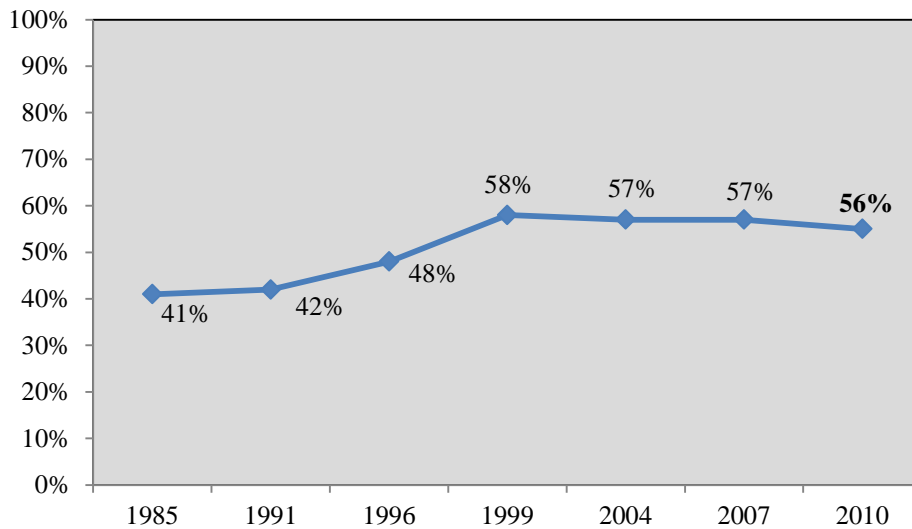
trend in the percentage of recent graduates who received financial aid during their college careers. From 1985 to 1996, there was a decrease in the percentage of respondents who reported receiving aid, but that proportion had risen greatly by 1999. It reached its highest point (71%) in 2007, but slightly declined to 70% in 2010.

Figure 7: Respondents Receiving Financial Aid: 1985-2010



As Figure 8 shows, the importance of financial aid to ensuring degree completion has grown tremendously over time, though it has changed little over the past decade. This figure shows the percentage of graduates who stated that they would not have completed their bachelor's degrees without financial support. The percentage of recent graduates who would not have been able to complete their degrees without financial aid gradually increased from 1985 to 1999, reaching a high of 58% following a sharp increase from 1996 to 1999. From 2004 to 2010, the rate remained fairly stable, indicating that financial aid remains a serious contributor to student success.

Figure 8: Respondents Not Able to Complete Their Degrees without Financial Aid Received: 1985-2010



Post-baccalaureate Education

Figure 9 displays the trend in the percentage of graduates who reported they had enrolled in an advanced study program after earning their baccalaureate degree. While there was a large increase in enrollment in advanced degree programs between the 1985 and 1996 surveys, enrollment in post-baccalaureate education has remained fairly steady over the last decade and a half.

Figure 9: Respondents Seeking Advanced Degrees: 1985-2010

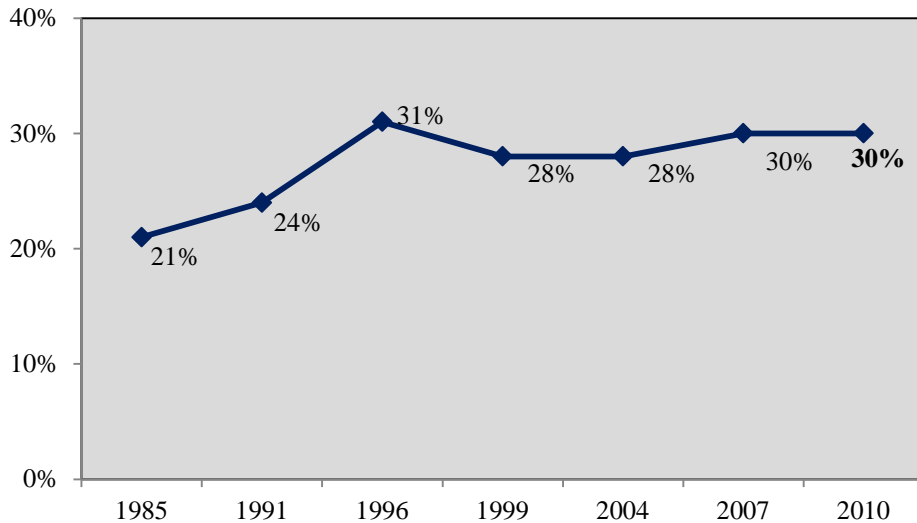
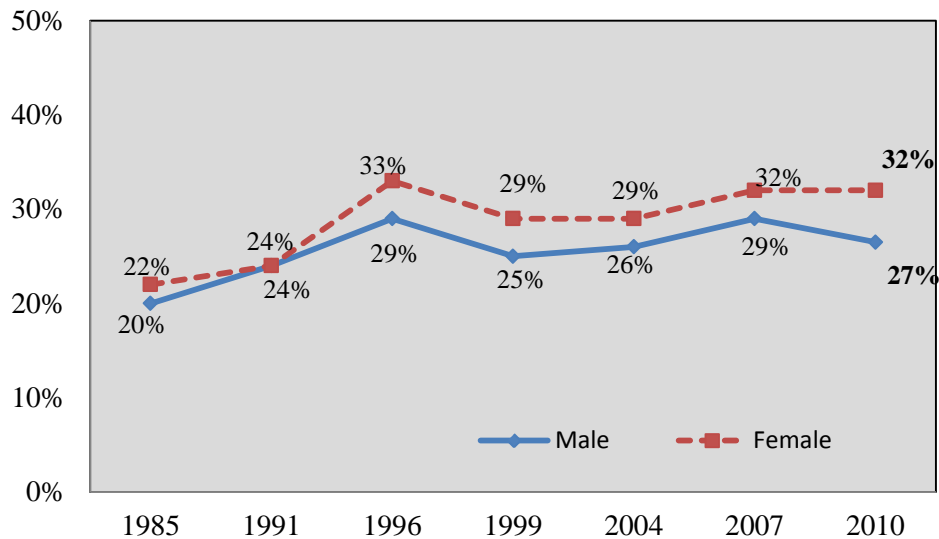


Figure 10 compares the percentage of men and women pursuing advanced degrees over time. From 1985 to 1991, women and men were seeking advanced degrees at similar rates. From 1991 onward, females began to outpace their male peers. In 2010, the percentage of women seeking an advanced degree remained steady at 32% while the percentage of men seeking advanced degrees declined slightly from 29% to 27%. While this study examines only the first year after graduation, these enrollment patterns are also reflected in degrees awarded. In the 2010-11 academic year, women accounted for 59% of all master’s and doctoral degrees awarded in Maryland.⁵ The male-female enrollment trend in Maryland is reflective of national trends as well. According to the National Center for Education Statistics 2010 report “The Condition of Education”, female graduate enrollment first outpaced male in 1988 and has continued to do so every year since. NCES’s future projections forecast that by 2021 females will comprise 61% of total post-baccalaureate enrollment throughout the nation’s colleges and universities.⁶

Figure 10: Respondents Seeking Advanced Degrees by Gender: 1985-2010



Throughout the years for which data is available, White and African American graduates have continued to pursue advanced degrees at higher rates. In this current survey, African Americans achieved their highest rate of pursuit of an advanced degree, nearly doubling the rate of attendance of the 1985 graduating cohort. From 1985 to 2010, the Asian and Hispanic rates of advanced degree pursuit have actually declined over time, though the rates have fluctuated. Table 18 and Figure 11 present the percentage of recent graduates who sought advanced degrees by race from 1985-2010.

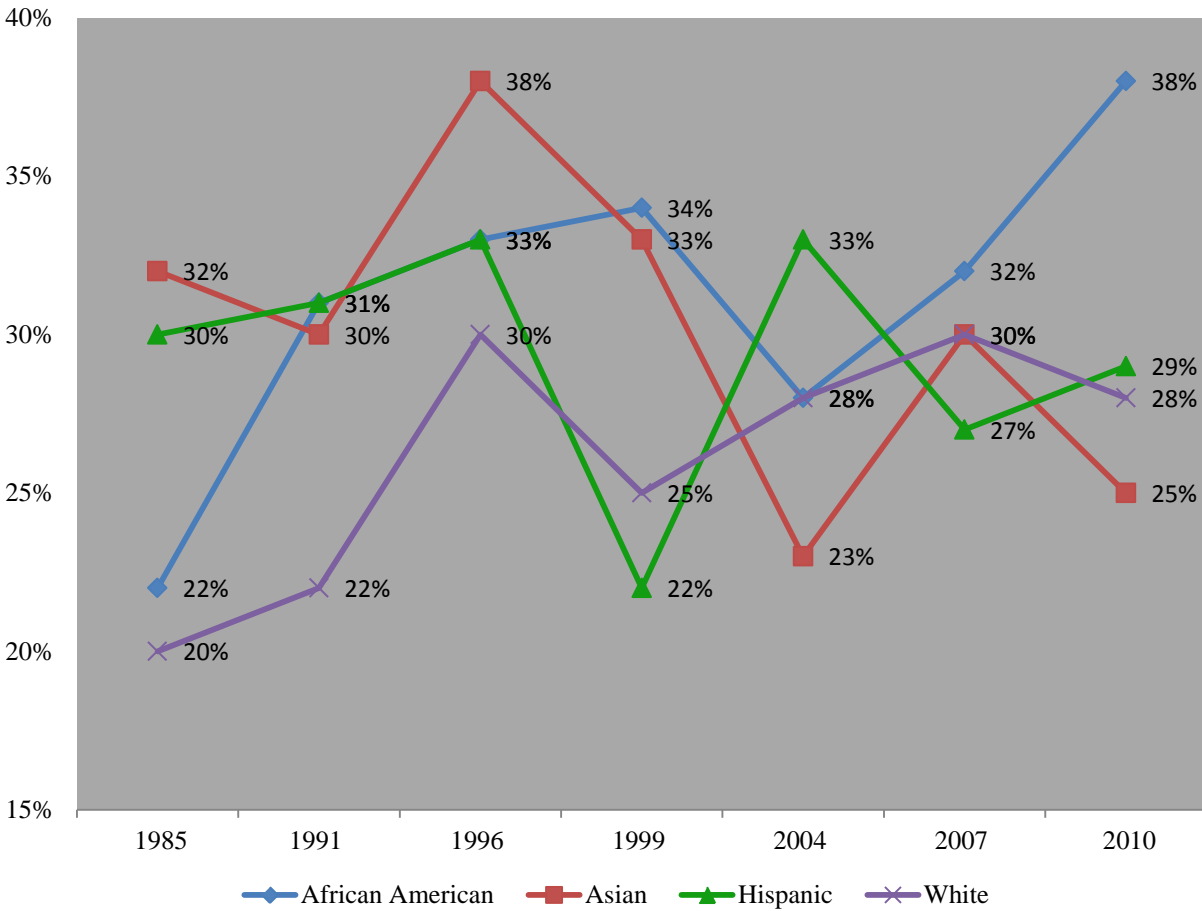
⁵ Maryland Higher Education Commission Degree Information System

⁶ Table A-10-1, Table A-11-1

Table 18: Respondents Seeking Advanced Degrees by Race: 1985-2010

Race	% Seeking an Advanced Degree						
	1985	1991	1996	1999	2004	2007	2010
African American	22%	31%	33%	34%	28%	32%	38%
Asian	32%	30%	38%	33%	23%	30%	25%
Hispanic	30%	31%	33%	22%	33%	27%	29%
White	20%	22%	30%	25%	28%	30%	28%

Figure 11: Respondents Seeking Advanced Degrees: 1985-2010



As illustrated in Table 19, recent graduates pursuing advanced degrees have continued to report that they felt well prepared for graduate-level studies, indicating that they felt that their bachelor’s degree program had provided them with either “Excellent” or “Good” preparation them for advanced study programs. 2010 graduates reported that almost nine out of ten students

were satisfied with their preparation. This is tied for the highest rate of satisfaction with preparation for graduate study since the survey began in 1985. Most institutions have similarly improved their institutional satisfaction rates, though Morgan and Bowie have experienced declines.

Table 19: Advanced Degree Seekers Who Felt Prepared for Graduate Study: 1985-2010

Campus	% Satisfied with Preparation for Graduate Study						
	1985	1991	1996	1999	2004	2007	2010
Bowie	89%	78%	76%	78%	96%	64%	81%
Coppin	68%	71%	82%	88%	*	77%	69%
Frostburg	77%	75%	76%	92%	92%	80%	94%
Salisbury	79%	80%	73%	90%	93%	89%	94%
Towson	69%	79%	71%	84%	88%	89%	88%
UBalt	64%	86%	93%	80%	94%	97%	89%
UMB	69%	72%	100%	77%	92%	92%	73%
UMBC	83%	81%	77%	90%	87%	82%	90%
UMCP	72%	69%	78%	80%	89%	86%	88%
UMES	63%	93%	60%	74%	76%	65%	82%
UMUC	83%	82%	80%	89%	90%	93%	88%
Morgan	89%	64%	70%	81%	81%	84%	71%
St. Mary's	85%	87%	94%	87%	100%	95%	95%
Statewide	75%	76%	77%	84%	89%	87%	89%

*Note: Coppin omitted as 0 students from Coppin reported attending graduate school in the follow-up survey of 2004 degree recipients.

Post-graduation Employment

Figure 12 presents the percentage of recent graduates who were employed full-time or unemployed since 1985. The data show that the rates have remained relatively stable over time, though the percent of graduates reporting working full-time reached its lowest levels since this survey has been administered with the 2010 graduating class. While the percentage of recent graduates who are unemployed has risen sharply and full-time employment has fallen, as previously discussed this is reflective of national trends for recent college graduates. In addition, there may be some difficulty in longitudinal analysis of unemployment figures since it is unclear whether the total workforce figures were calculated using appropriate BLS methodology.

Figure 12: Respondents Working Full-time and Unemployed: 1985-2010

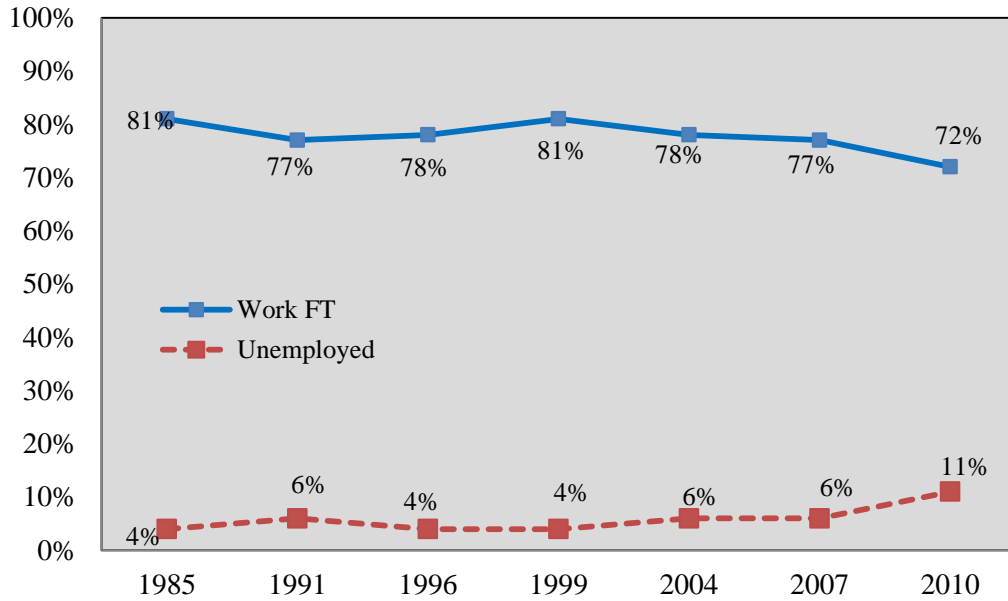
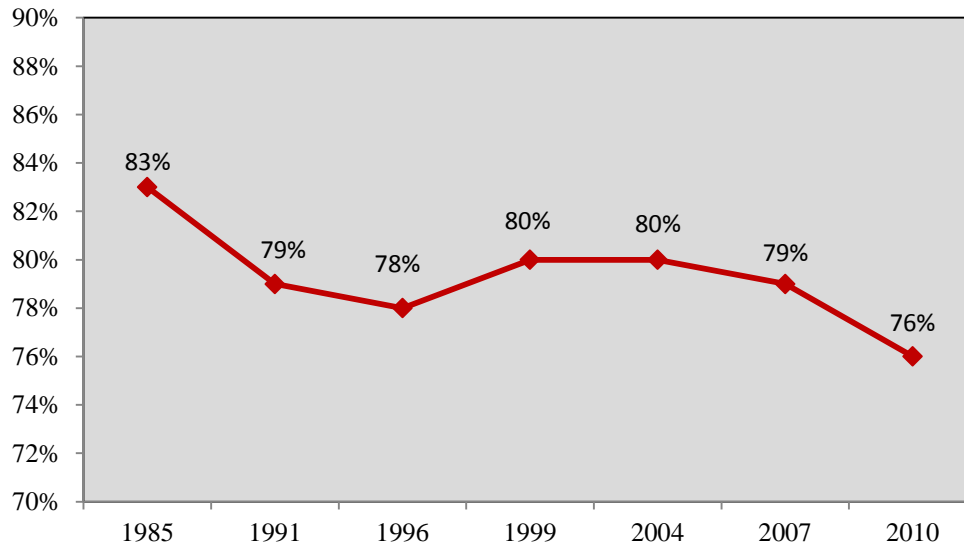


Figure 13 displays the percentage of recent graduates who worked in positions that were similar or directly related to their undergraduate major. From 1985 to 2010, the rate of graduates employed full-time in jobs related to their undergraduate major has fallen slightly. In 2010, approximately three-fourths of graduates rated their employment as directly or somewhat related to their program of study.

Figure 13: Respondents Working Full-time in a Job Related to their Undergraduate Major: 1985-2010



The overall median salary of graduates working full-time has doubled in the past 20 years, as shown in Figure 14. Men continue to earn a higher median salary than women. However, for the first time, the median salaries for both men and women showed considerable decline over the previous year's salaries. The median salaries in 2010 were similar to the 2004 salaries. The median salary for men declined from \$46,531 in 2007 to \$42,706 and the median salary for women decreased from \$40,146 in 2007 to \$34,665 in 2010.

Figure 14: Median Salary by Gender: 1985-2010

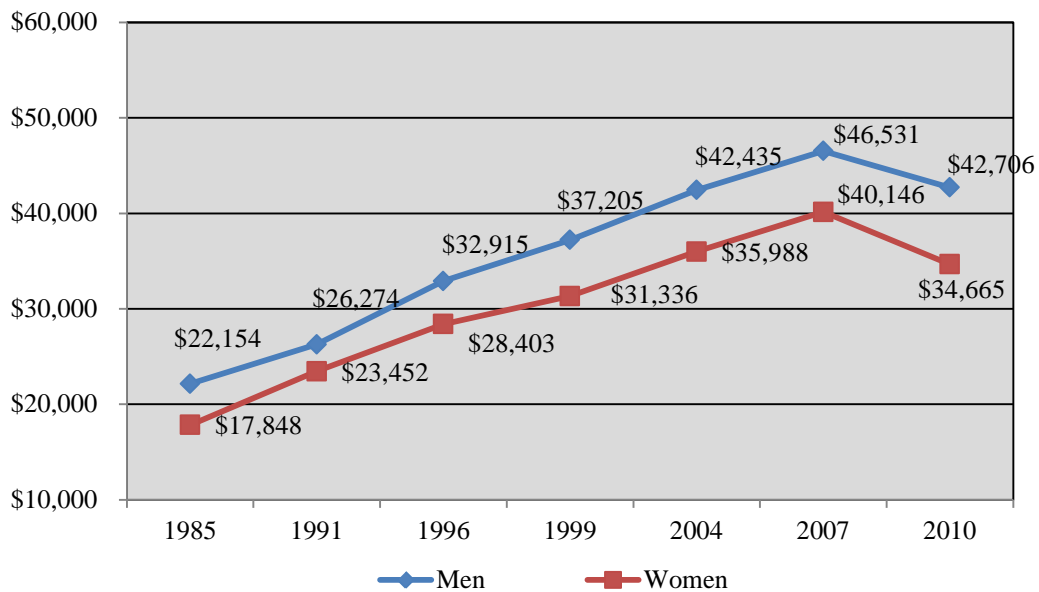
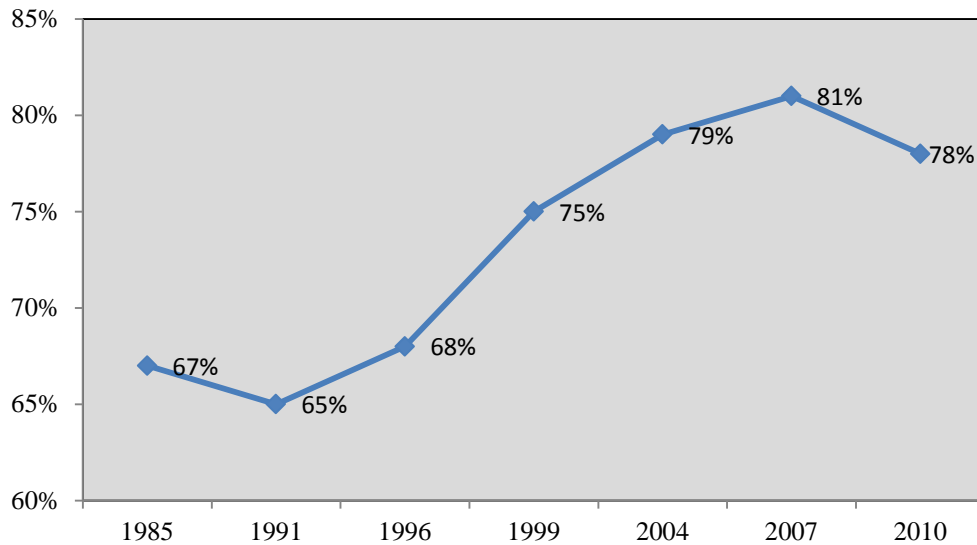


Figure 15 shows that recent graduates who worked full-time have remained largely satisfied with the preparation they received for their current job. This satisfaction level is based on those who rated their job preparation as “Excellent” or “Good”. The current data show a slight decline in overall satisfaction with job preparation since the 2007 survey respondents.

Figure 15: Respondents Working Full-time and Satisfied with their Job Preparation: 1985-2010



There remained a fairly wide range among institutions in the degree to which graduates were satisfied with the preparation they received for their career. As shown in Table 20, the majority of full-time workers continue to feel satisfied with the job preparation they receive from their degree-granting institution, with most campuses having over three-quarters of graduates rating their preparation as either “Excellent” or “Good”. In 2010, the ratings ranged from 51% for Morgan State University graduates to 90% for University of Maryland, Baltimore graduates. This range is almost 40 points, nearly double the previous highest range of 23 percentage points in 1996, and a considerable increase since 2007 (20 percentage points).

Table 20: Full-time Workers Who Felt Prepared for their Job: 1985-2010

Campus	% Satisfied with Job Preparation						
	1985	1991	1996	1999	2004	2007	2010
Bowie	88%	73%	72%	75%	80%	77%	75%
Coppin	79%	69%	75%	79%	81%	83%	75%
Frostburg	70%	64%	70%	77%	76%	80%	77%
Salisbury	73%	70%	76%	83%	85%	83%	79%
Towson	60%	65%	61%	76%	76%	82%	74%
UBalt	64%	72%	79%	71%	82%	86%	84%
UMB	76%	84%	71%	65%	88%	93%	90%
UMBC	68%	66%	65%	77%	67%	77%	81%
UMCP	63%	58%	68%	71%	82%	82%	81%
UMES	58%	76%	72%	63%	68%	76%	72%
UMUC	73%	73%	72%	78%	81%	81%	80%
Morgan	73%	69%	61%	76%	73%	73%	51%
St. Mary's	75%	75%	84%	85%	81%	78%	79%

Table 21 reveals that graduates were largely satisfied with their experiences at their baccalaureate degree-granting institutions. Similar to the 2007 graduates, the 2010 data showed that more than 70% of the graduates at 10 of the 13 institutions reported that they would attend their same campus again. Statewide, over four-fifths (83%) would again enroll at their alma mater if given the chance.

Table 21: Respondents Who Would Attend the Same Institution Again: 1985-2010

Campus	% Would Attend Same School Again						
	1985	1991	1996	1999	2004	2007	2010
Bowie	68%	77%	67%	77%	74%	64%	71%
Coppin	68%	69%	66%	84%	72%	74%	62%
Frostburg	69%	74%	81%	89%	78%	84%	84%
Salisbury	71%	74%	80%	89%	89%	89%	85%
Towson	65%	67%	67%	77%	77%	83%	81%
UBalt	81%	82%	89%	87%	83%	89%	89%
UMB	65%	79%	60%	79%	90%	97%	84%
UMBC	71%	71%	70%	78%	76%	79%	82%
UMCP	72%	66%	77%	85%	85%	84%	87%
UMES	62%	78%	71%	67%	67%	62%	59%
UMUC	92%	87%	90%	91%	89%	89%	88%
Morgan	63%	76%	73%	88%	71%	67%	56%
St. Mary's	76%	79%	89%	87%	85%	88%	89%

Graduate Retention

Graduates who were residents when they first enrolled at a Maryland four-year public campus have historically tended to remain in the State after completing their degrees. As is demonstrated in Figure 16, the last two and one-half decades have seen little change in this trend. Similarly, graduates who were not Maryland residents when they first enrolled have tended to not remain in the State. While this percentage has seen a slight decline since the first time this survey was administered, today more than one-quarter of students graduating from Maryland institutions who originally came from out of state remain to live in Maryland following graduation. Overall, the State continues to retain a high percentage of Marylanders after graduation and on into the workforce.

Figure 16: Respondents Currently Living in Maryland by Residence at Time of First Enrollment: 1985-2010

