



# **Women Students in Maryland Higher Education: Enrollment, Completion and Employment Trends**

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**MARYLAND HIGHER EDUCATION COMMISSION**  
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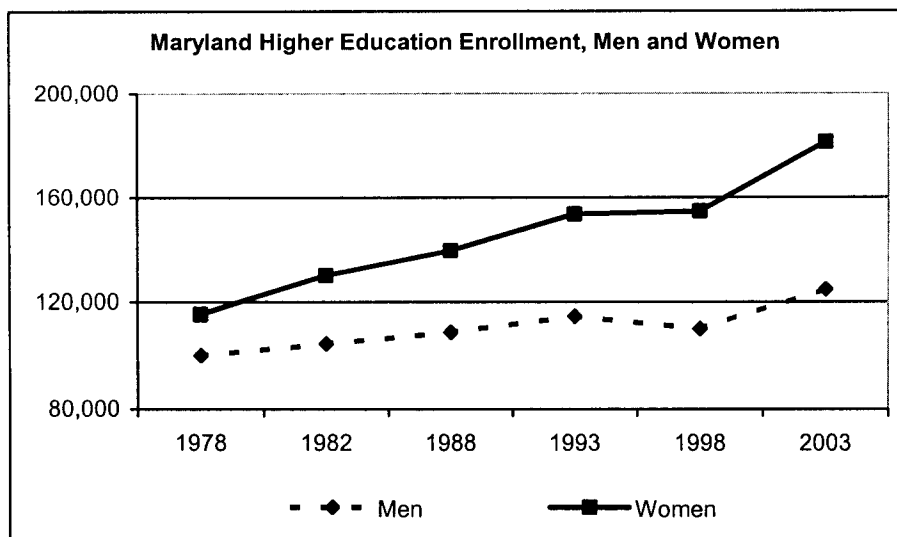
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## Introduction

Like other states, Maryland has been committed to ensuring the equitable participation of women in higher education. This report compares trends in the educational progress of women and men attending Maryland institutions. Data related to enrollment, retention, graduation, degrees and employment outcomes are discussed.

## Enrollment

Over the past 25 years, total headcount enrollment at Maryland higher education institutions increased 42.1 percent. Since 1978, the number of women enrolling increased at more than double the rate of men: 57.2 percent vs. 24.7 percent. Over this time period, women went from being 53.6 percent of the State's student population to 59.2 percent. In 1978, 115,327 women were enrolled in Maryland colleges and universities. By 2003, the number of women increased to 181,309.



The same trend has continued over the past decade. Total headcount enrollment at Maryland higher education institutions increased 14.2 percent between 1993 and 2003. Women are responsible for almost three-fourths (73.2 percent) of this growth. Over the 10-year period, the number of men rose by 8.9 percent while the number of women rose by 18.1 percent. As a result, the proportion of women relative to men participating in Maryland higher education increased from 57.3 percent in 1993 to 59.2 percent in 2003. This is slightly higher than national statistics where women make up 56.7 percent of all higher education students.

As the following table shows, this trend is true for every segment of Maryland higher education.

Principal author: Laura Filipp

<b>Table 1. Enrollment of Women By Segment in Maryland</b>			
	<b>1993</b>	<b>2003</b>	<b>Percent Change</b>
<b>COMMUNITY COLLEGES</b>			
Women	69,956	74,080	5.9%
Men	44,411	43,451	- 2.2%
% Women	61.2%	63.1%	
<b>FOUR YEAR PUBLICS</b>			
Women	60,068	75,706	26.0%
Men	52,230	58,747	12.5%
% Women	53.5%	56.3%	
<b>INDEPENDENTS</b>			
Women	23,500	31,523	34.1%
Men	17,958	22,559	25.6%
% Women	56.7%	58.3%	
<b>ALL CAMPUSES</b>			
Women	153,524	181,309	18.1%
Men	114,599	124,757	8.9%
% Women	57.3%	59.2%	
<b>UNITED STATES</b>			
% Women	55.5%	56.7%	

**The increase in women participating in Maryland higher education is linked to a dramatic increase in the number of minority women.** Over 24,000 more minority women were enrolled in 2003 compared to 1993, a 55.5 percent increase. Minority women are responsible for almost two-thirds of the *total* enrollment growth in the State.

As the following table shows, Hispanic women had the fastest growth rate, almost doubling their enrollment in the past decade (from 2,994 to 5,894). Over the same time period, the number of Asian women grew by 39.2 percent, to 9,465. But the biggest impact in numeric terms on statewide enrollment has been a 55.3 percent increase in African American women.

	<b>1993</b>	<b>2003</b>	<b>Percent Increase</b>
African American Women	33,564	52,132	55.3%
Asian Women	6,822	9,495	39.2%
Hispanic Women	2,994	5,894	96.9%
White Women	103,630	98,421	-5.0%
Minority Women	43,913	68,278	55.5%
All Women	153,524	181,309	18.1%

Almost 19,000 more African American women were enrolled in 2003 than in 1993. African American women are responsible for almost half of the *total* enrollment growth in Maryland.

	<b>1993</b>	<b>2003</b>	<b>Percent Change</b>
<b>COMMUNITY COLLEGES</b>			
African American Women	15,825	22,935	44.9%
All Women	69,956	74,080	5.9%
<b>FOUR YEAR PUBLICS</b>			
African American Women	15,343	23,605	53.8%
All Women	60,068	75,706	26.0%
<b>INDEPENDENTS</b>			
African American Women	2,396	5,592	133.4%
All Women	23,500	31,523	34.1%
<b>ALL CAMPUSES</b>			
African American Women	33,564	52,132	55.3%
All Women	153,524	181,309	18.1%

Among Asian and Hispanic students in Maryland, the growth rates of men have been somewhat lower than their female counterparts. This has resulted in a ratio of women to men just slightly higher than 1:1 among Asian and Hispanic students. In contrast, the gender gap among African American students has been much more pronounced; in 2003, there were twice as many African American women enrolled as African American men.

The same decade that saw statewide enrollment gains among minority men and women saw declines among white men and women. From 1993 to 2003, the enrollment of white men decreased by 8.6 percent and that of white women decreased by 5.0 percent.

**Enrollment trends differ at the undergraduate and graduate levels.** The growth in undergraduate women is among full-time students only. Since 1993, the number of full-time undergraduate women grew by 34.9 percent; part-time undergraduate women decreased by 2.6 percent. Overall, the proportion of all undergraduates who are women rose from 58.0 percent in 1993 to 59.7 percent in 2003.

The increase in graduate and first professional women is among both full- and part-time students. Between 1993 and 2003, the proportion of all graduate and first professional students who are women rose from 53.4 percent to 57.3 percent. The change over the decade is particularly notable at the full-time first-professional level, where, for the first time, a majority are women.

**The enrollment of women in the science and technology disciplines, where they have been historically underrepresented, has continued to increase in the past decade.** A total of 16.5 percent more women enrolled in these fields in 2003, compared to 1993. The number of women in science and technology programs increased over the decade at every level except the associate's, where it declined by 27.5 percent.

	1993			2003		
	Men	Women	% Women	Men	Women	% Women
Certificate, Associate	12,483	6,808	35.3%	14,464	5,215	26.5%
Bachelors	11,566	7,147	38.2%	15,771	9,850	38.4%
Masters	2,915	1,062	26.7%	4,198	2,117	33.5%
Doctorate	2,377	996	29.5%	2,868	1,475	34.0%

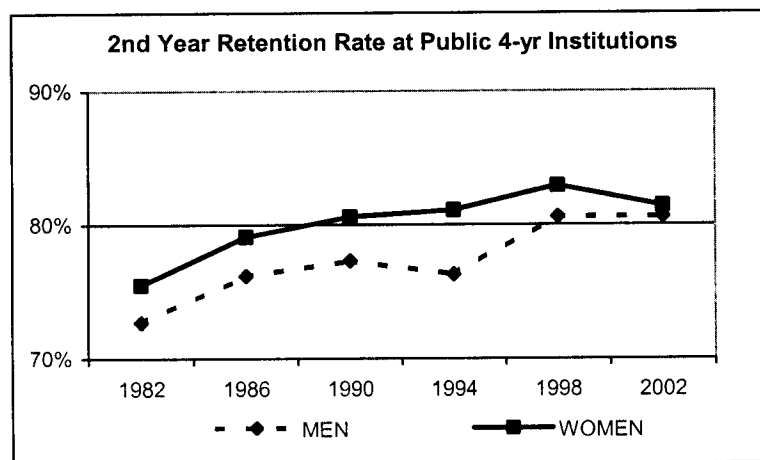
The fastest growth of women was at the graduate level, where the number of women science and technology graduate students increased by 74.5 percent (over twice the rate for men). The

proportion of women graduate students in these areas increased from 28.0 percent to 33.7 percent.

In numeric terms, the most substantial ten-year gains for women in the science and technology were in biology and computer science at both the bachelor's and master's levels. At the doctoral level, substantial numeric gains were in biology and engineering.

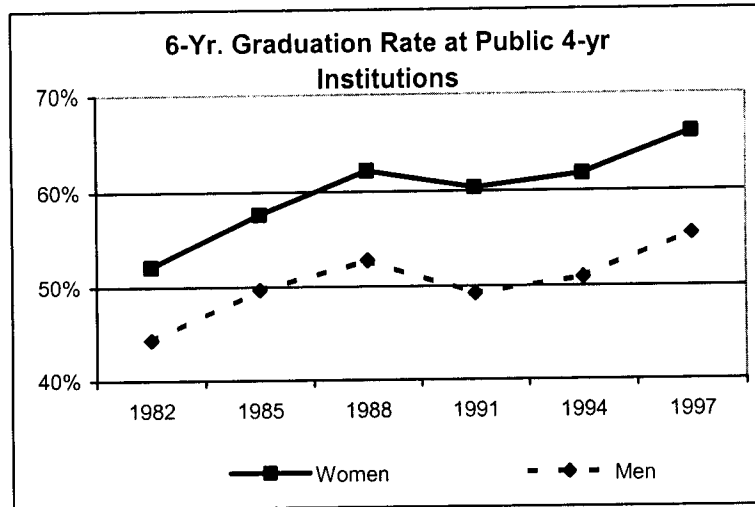
### **Retention at Four-Year Public Institutions**

Women have consistently led men in second year retention rates at public four-year public college and universities during the past ten years. However, the gap narrowed in the most recent cohort: women (81.4 percent) and men (80.6 percent).



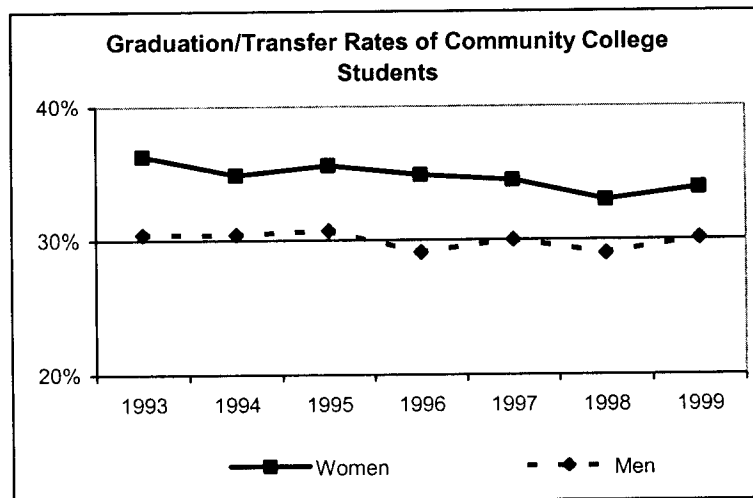
### **Graduation at Four-Year Public Institutions**

Women have consistently led men by 8 to 10 percentage points in six-year graduation rates at Maryland's public four-year campuses. In the most recent cohort (students entering in 1997), 66.1 percent of women graduated within six years of matriculating, compared to 55.4 percent of men. National statistics also show that women are more likely than men to complete a bachelor's degree.



### Graduation and Transfer Rates of Community College Students

A similar pattern is observed of women attending Maryland's community colleges, although the gender gap is not as wide. In the most recent cohort (1999), 33.8 percent of women earned an associate degree or certificate and/or transferred to a public four-year institution within four years, versus 30.1 percent of men. The difference was wider in the 1993 cohort, in which 36.2 percent of women graduated or transferred, compared to 30.4 percent of men.



### Degrees

The growth in the number of women enrolled in Maryland colleges and universities has led to an increase in the number of women earning degrees. Between 1994 and 2004, the number of degrees awarded to women increased by 30.9 percent to a total of 30,372 degrees. In contrast, the number of degrees earned by men rose 18.1 percent to 20,710. In 2004, the proportion of all degrees that were awarded to women was 59.5 percent, up from 56.9 percent in 1994.



The number of degrees awarded to women increased at all levels of study. The fastest rate of increase has been at the community college level, where the number received by women almost doubled. At the bachelor's level, the rate of increase for women was twice the rate of men. In 2004, women made up 58.4 percent of bachelor's degrees awarded in Maryland, a figure slightly higher than the national proportion (57 percent). Women now make up a majority of students awarded degrees at every level except the doctorate.

<b>Table 5. Degrees Awarded to Men and Women in Maryland</b>				
		<b>1994</b>	<b>2004</b>	<b>Percent Change</b>
Certificate	# Men	792	1,209	52.7%
	# Women	952	1,818	91.0%
	% Women	54.6%	60.1%	
Associate	# Men	3,063	3,144	2.6%
	# Women	5,229	6,005	14.8%
	% Women	63.1%	65.6%	
Bachelor's	# Men	9,051	9,924	9.6%
	# Women	11,669	13,955	19.6%
	% Women	56.3%	58.4%	
Masters	# Men	3,622	5,339	47.4%
	# Women	4,560	7,485	64.1%
	% Women	55.7%	58.4%	
Doctorate	# Men	539	571	5.9%
	# Women	395	492	24.6%
	% Women	42.3%	46.3%	
First Professional	# Men	475	523	10.1%
	# Women	391	617	57.8%
	% Women	45.2%	54.1%	
All Levels	# Men	17,542	20,710	18.1%
	# Women	23,196	30,372	30.9%
	% Women	56.9%	59.5%	

**Over the past decade, the number of degrees and certificates earned by minority women nearly doubled, while that of white women increased by less than 10 percent.** Minority women are responsible for 47.0 percent of the *total* growth in degrees and certificates in Maryland over this time period. The number of degrees received by minority women increased at every level; the biggest growth was a 64.3 percent increase in bachelor's degrees (representing an additional 1,830

degrees). In sharp contrast, the number of bachelor's degrees earned by white women declined by 1.8 percent over the same period.

Hispanic women have had the fastest growth rate, more than doubling their degree production (from 407 to 904). Over the same time period, the number of Asian women earning degrees grew by 89.5 percent. In terms of numbers, the biggest impact on statewide figures has been a 94.5 percent increase in the number of African American women earning degrees. African American women are responsible for 33.2 percent of the rise in all degrees and certificates since 1994.

	<b>1994</b>	<b>2004</b>	<b>Percent Increase</b>
African American Women	3,636	7,071	94.5%
Asian Women	996	1,887	89.5%
Hispanic Women	407	904	122.1%
White Women	17,312	18,968	9.6%
Minority Women	5,115	9,981	95.1%
All Women	23,196	30,372	30.9%

**Women have made progress in earning degrees in science and technology over the past decade.** Degrees in these fields awarded to women increased by 85.5 percent. Women now make up 37.0 percent of all science and technology degrees awarded in Maryland.

	1994			2004		
	Men	Women	% Women	Men	Women	% Women
Certificate, Associate	869	432	33.2%	1,406	826	37.0%
Bachelors	2,000	1,143	36.4%	3,052	1,985	39.4%
Masters	1,026	324	24.0%	1,617	795	33.0%
Doctorate	302	116	27.8%	328	131	28.5%

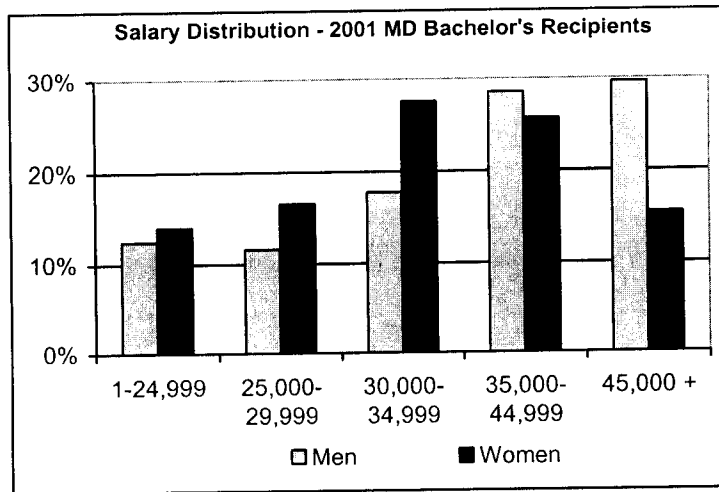
### **Employment Outcomes Among Degree Recipients**

While the vast majority of bachelor's degree recipients from Maryland public and independent campuses were employed one year after graduation, a slightly higher percentage of men were working full-time while a slightly higher percentage of women were working part-time (trends seen nationally). The unemployment rate (those not employed but seeking work) was higher among men than women in the survey of 2001 graduates; there was little or no variation between the genders in surveys of 1993 and 1999 graduates.

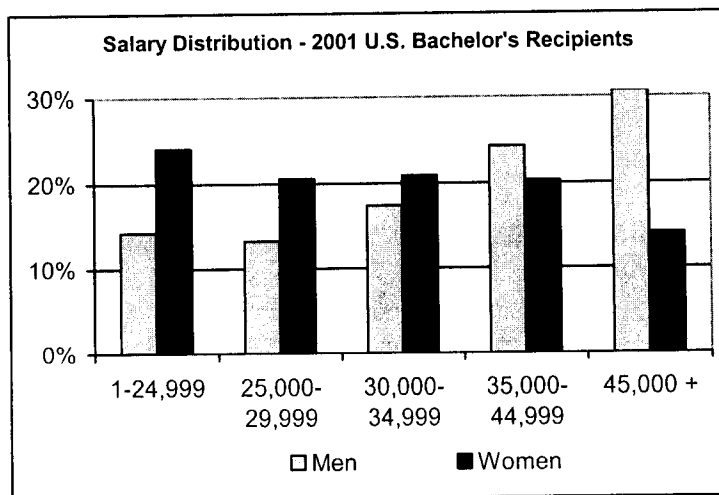
		1993	1999	2001
<b>Employed Full-Time</b>	Men	78.3%	82.1%	79.0%
	Women	76.5%	79.2%	78.6%
<b>Employed Part-Time</b>	Men	10.0%	7.2%	7.0%
	Women	12.8%	10.1%	9.4%
<b>Unemployment Rate</b>	Men	4.8%	4.1%	5.8%
	Women	4.6%	4.1%	4.7%

Gender differences are apparent in salary as well, as the following graph illustrates. Among Maryland bachelor's degree recipients who were employed full-time one year after graduation, women earned less than men. In 2001, a higher percentage of women than men

earned less than \$35,000, while a higher percentage of men than women earned more than that.



The distribution of annual salary earned by the nation's 2001 bachelor's recipients was similar to that of Maryland graduates, particularly for men. Maryland women bachelor's recipients fared better than their national counterparts, however: only 14 percent of Maryland women bachelor's recipients made less than \$24,999, compared to 24 percent nationally.



**The experience of Maryland community college graduates in the workforce one year after graduation has been similar.** In the follow-up surveys of 1998, 1999 and 2002 community college graduates, a higher percentage of men were working full-time in two of the three cohorts. A higher percentage of women were working part-time in all three cohorts. The unemployment rate

was slightly higher among men than women in all three cohorts, although the biggest difference was among the 2002 graduates (6.9 percent for men versus 5.0 percent for women).

<b>Table 9. Employment Outcomes of Maryland Community College Graduates One Year After Graduation</b>				
		<b>1998</b>	<b>1999</b>	<b>2002</b>
<b>Employed Full-Time</b>	Men	60.1%	61.5%	53.7%
	Women	55.9%	60.5%	55.8%
<b>Employed Part-Time</b>	Men	18.4%	14.1%	18.5%
	Women	23.4%	22.0%	23.3%
<b>Unemployment Rate</b>	Men	4.2%	3.3%	6.9%
	Women	3.8%	3.1%	5.0%

Income of community college graduates one year after graduation shows gender differences as well. In the graduate follow-up surveys of 1998, 1999 and 2002, women employed full-time reported earning less than men.

<b>Table 10. Median Income of Maryland Community College Graduates Employed Full-time One Year After Graduation</b>			
	<b>1998</b>	<b>1999</b>	<b>2002</b>
Men	\$33,000	\$39,000	\$37,777
Women	\$28,500	\$32,086	\$34,000