

Maryland Higher Education Commission

2004 State Plan for Higher Education and Key Policy Issues

Commission to Develop the Maryland Model for Funding Higher Education

June 18, 2007

Maryland Higher Education Commission

Kevin M. O’Keefe, Chairman

Donald J. Slowinski, Sr., Vice Chairman

Victor E. Bernson, Jr.

Joann A. Boughman

Anne Osborn Emery

James G. Morgan

Kurt A. Musser

Emmett Paige, Jr.

Sherman L. Ragland, II

Paul L. Saval

Mario F. VillaSanta

James E. Lyons, Sr.

Secretary of Higher Education

Martin O’Malley
Governor

Anthony G. Brown
Lt. Governor



2004 State Plan for Higher Education Development and Implementation

- Development of the State Plan was a collaborative effort with representatives from postsecondary education, legislators, cabinet officers, business community, community leaders, and others.
- Plan embodies Commission's vision for postsecondary education to be achieved through an overarching goal and five more specific goals.
- Overarching goal – Development of a comprehensive model to guide policy decisions relating to postsecondary education.
- Five goals focus on the following areas:
 - Quality and Effectiveness
 - Access and Affordability
 - Diversity
 - Student-centered Learning System
 - Economic Growth and Vitality



2004 State Plan Development and Implementation--Continued

- To achieve goals, 46 action recommendations were developed.
- MHEC, appropriate State agencies, and higher education segments were designated as lead agencies for implementation and for the preparation and submission of progress reports.
- Evaluation of progress for the first two years of the plan was recently completed.
- It is recognized that on-going commitment to the Plan is needed to ensure that Maryland has a high quality postsecondary education system that is accessible and affordable for students and meets the State's economic needs.



Goals of the State Plan

Overarching Goal: Development of a comprehensive model to guide policy decisions relating to postsecondary education

Goal 1: Maintain and strengthen a preeminent statewide array of postsecondary education institutions recognized nationally for academic excellence and effectiveness in fulfilling the educational needs of students, the State and nation

Goal 2: Achieve a system of postsecondary education that promotes a accessibility and affordability for all Marylanders

Goal 3: Ensure equal educational opportunity for Maryland's diverse citizenry

Goal 4: Strengthen and expand teacher preparation programs and support student-centered, preK-16 education to promote student success at all levels

Goal 5: Promote economic growth and vitality through the advancement of research and the development of a highly qualified workforce.



Overarching Goal: Development of a comprehensive model to guide policy decisions relating to postsecondary education

- Overarching goal led to the establishment of the Commission to Develop the Maryland Model for Funding Higher Education.
- State Plan is based on the vision that “All Maryland residents who can benefit from postsecondary education and desire to attend a college, university, or private career school should have a place in postsecondary education and it should be affordable.”
- To achieve this vision the State must initiate a comprehensive process to develop a postsecondary education model that will address the linkage of tuition policy, State support to institutions, and institutional and State financial aid.
- To perform a study and make recommendations on a funding model, Van de Water Consulting was retained.
- MHEC looks forward to working with the Commission to achieve the overarching goal of the 2004 State Plan.

Goal 1: Maintain and strengthen a preeminent statewide array of postsecondary education institutions recognized nationally for academic excellence and effectiveness in fulfilling the educational needs of students, the State and nation



- Maryland has a strong and diverse education system.
- Strong research and educational capabilities of our institutions contribute to the economic health of the State.
- Maryland ranks 6th in terms of its overall performance as a higher education system relative to funding per FTE.
- Maryland is ranked 4th in terms of per capita personal income. However, it is ranked 39th in general fund appropriations for Higher Education per \$1,000 of personal income.
- Maryland is a leader in the nation in the number of adults with bachelor's degrees or higher.
- Maryland ranks first among the states in the percentage of professional and technical workers in the workforce.
- Maryland ranks first for PhD's in biological and agricultural sciences, and first in health sciences.
- As noted in *Measuring Up 2006*, Maryland performs well compared to other states in student preparation, participation of students of all ages, benefits of postsecondary education, and degree completion.



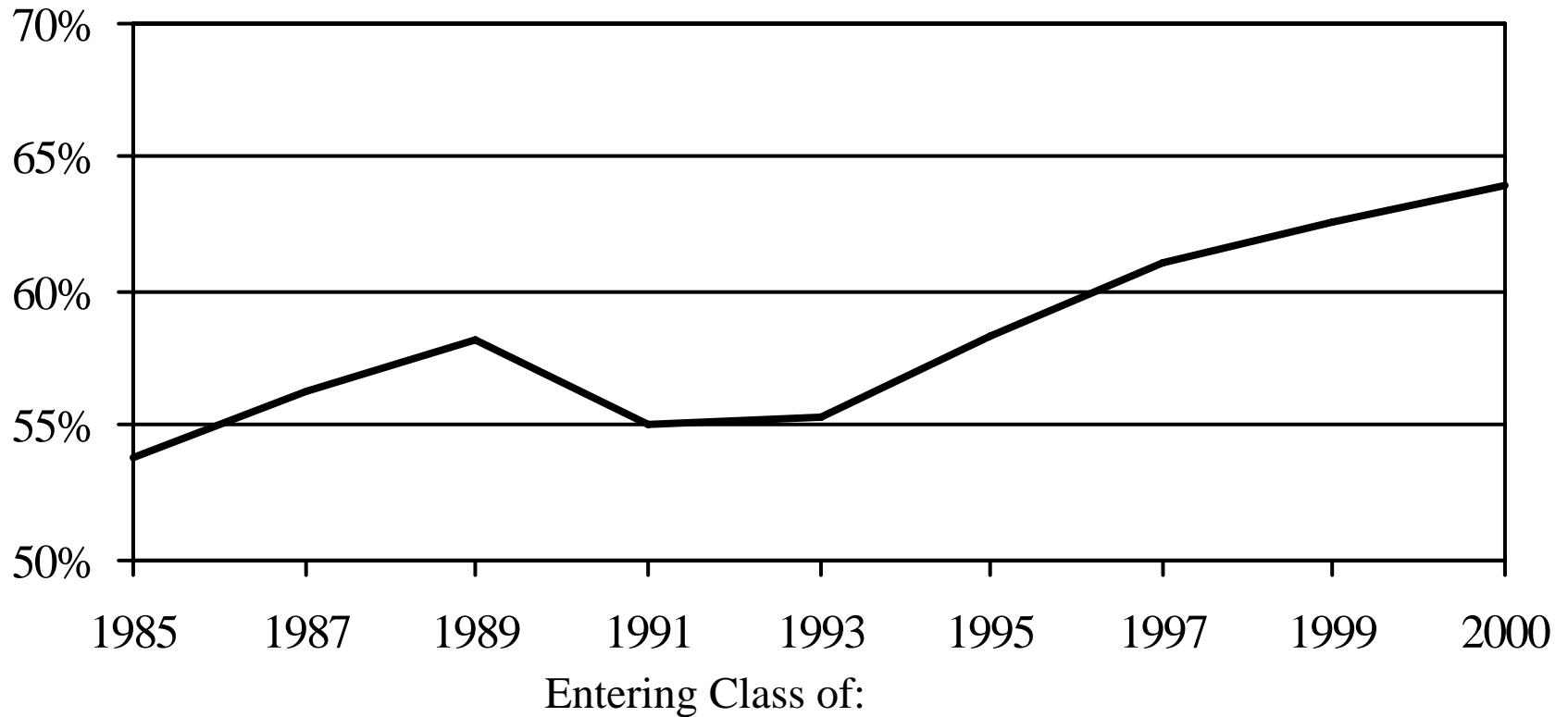
Achieving Quality & Effectiveness

- Funding for higher education has increased by 34% between FY 2005 and 2008 and overall funding guideline attainment is 82% in FY 2008.
- Community colleges have implemented initiatives to improve efficiencies and cut costs while maintaining quality, saving \$17.2 million and \$9.6 million in FY 2004 and FY 2005, respectively.
- The University System of Maryland's Efficiency & Effectiveness (E&E) Initiative has achieved cost savings of \$17.8 million in fiscal 2005 and anticipated additional savings of \$17 to \$19 million per year between FY 2006 and 2008.
- The independent colleges and universities have prepared an E&E document examining faculty workload and payroll, time to degree performance, use of on-line and out-of-classroom learning, and efficient procurement practices.
- Morgan State University has implemented new software to improve effectiveness and administrative processes.
- St. Mary's College of Maryland has included in its strategic plan the examination of business practices and procurements.



6 Year graduation rate at 4-Year Public Institutions is at an all time high

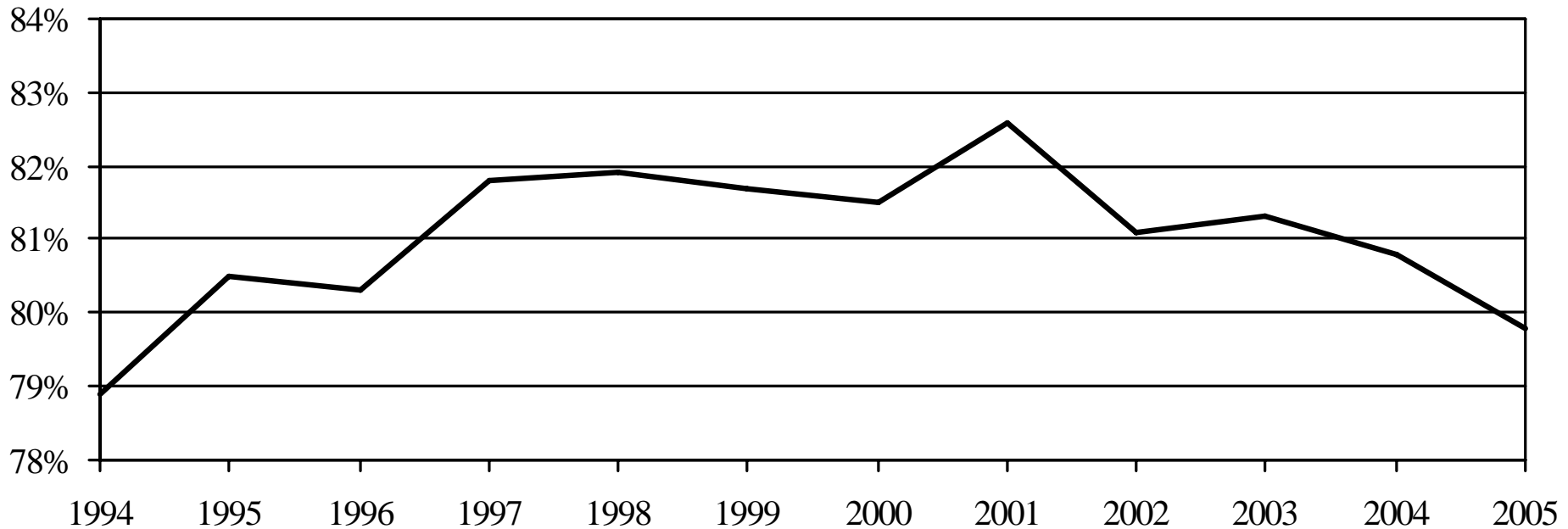
Trends in 6-year Graduation Rate at MD Public 4-year Institutions





2nd Year retention rate at 4-Year Public Institutions is declining

2nd Yr Retention at MD Public 4-year Institutions: 2005 Cohort



Goal 2: Achieve a system of postsecondary education that promotes accessibility and affordability for all Marylanders



- Access can be examined by 1) the capacity of colleges and universities to admit students; and 2) the ability of students to access desired academic programs.
- Affordability should be examined in terms of whether individuals who wish to pursue a higher education, especially low and moderate-income students, have the financial means to do so.
- To achieve access and affordability
 - Capacity must be expanded
 - Alternative delivery approaches must be enhanced
 - Technology must be better coordinated to play a larger role in program delivery
 - State and institutions of higher education must work together to ensure that financial aid effectively reaches the student, addresses student financial need, especially among low and moderate-income students and minimizes loan debt



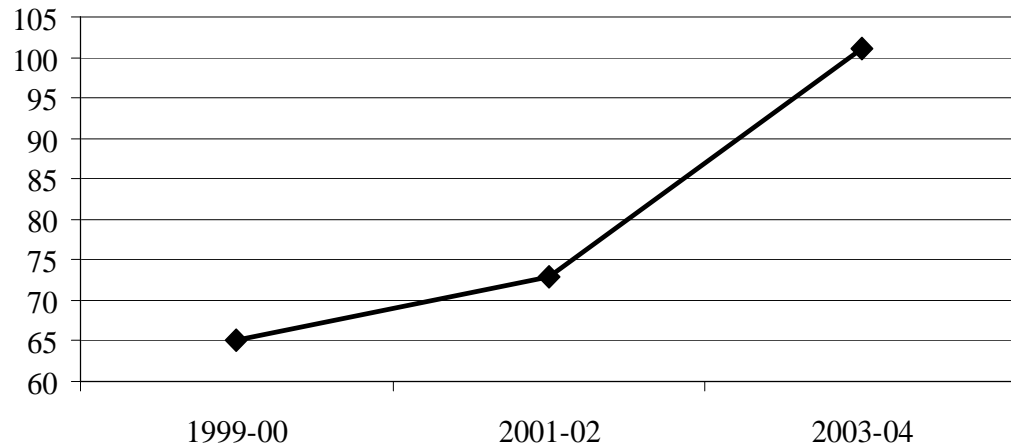
Achieving Access

- Completed assessment of space guidelines to be used to evaluate capital needs for higher education.
- This assessment, along with discussions and recommended model from the *Commission to Develop the Maryland Model for Funding Higher Education*, will be the foundation for the development of a 10-year growth plan for higher education in Maryland.
- Postsecondary education must continue to enhance alternative instructional delivery methods that provide flexible, targeted, and cost effective options to accommodate enrollment growth and increase participation in higher education.
 - Distance Education
 - Regional Higher Education Centers
 - 2 + 2 Transfer Programs

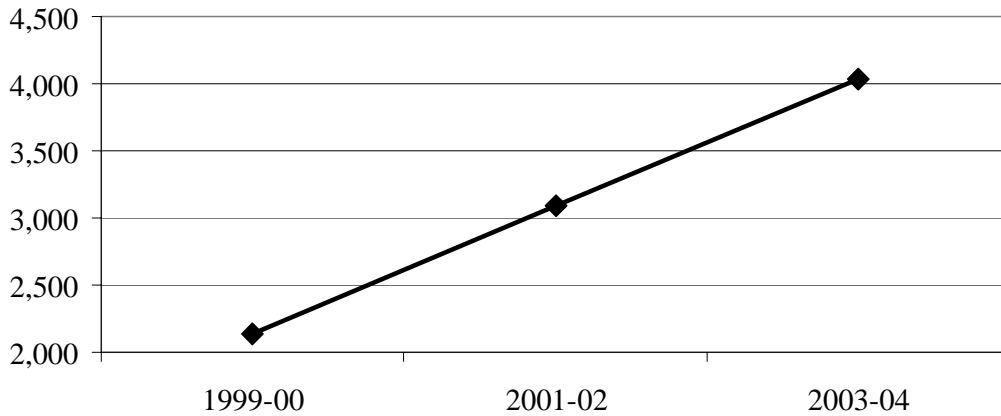


Distance education serves as a supplement to traditional instructional delivery

Growth in Degree Programs



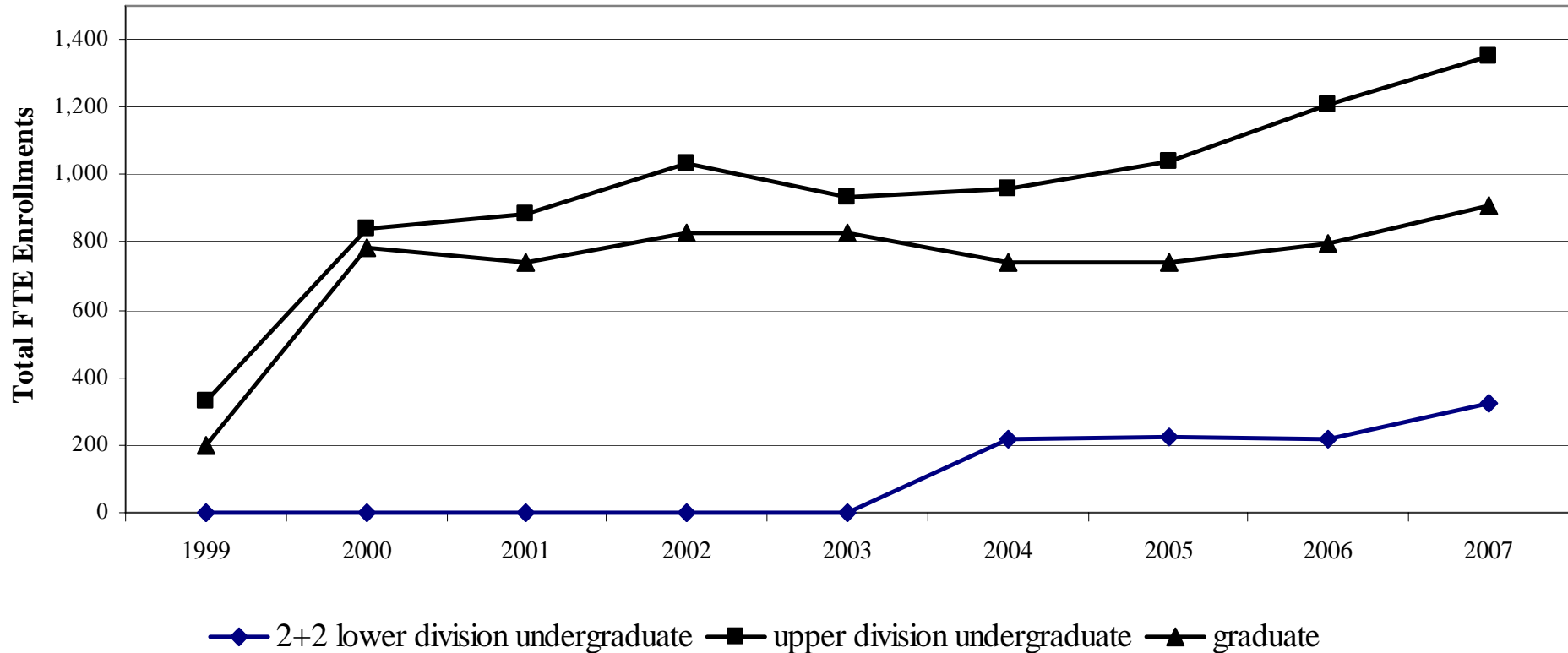
Growth in Credit Courses



Increasing capacity and institutional participation in Regional Higher Education Centers provides targeted supplemental instructional capacity



Regional Higher Education Center FTES by Degree Level 1999-2007





Using Financial Aid to Improve Affordability

- State and institutional funding of need-based aid has increased and tuition was frozen in FY 2007 and FY 2008 at USM institutions and Morgan State University.
 - All segments have indicated increases in institutional need-based aid funding and have indicated a commitment to continue increasing funds
- Funding for State need-based aid nearly doubled from FY 2004 to FY 2008, from \$42.4 million to \$85.4 million.
- Approximately 12,000 additional students have been reached.
- Awarding formulas have been revised for State's largest need-based aid program to cover greater percentages of need for students attending two-year and four-year institutions and the maximum award has been increased to \$3,000.
- Funding has also increased for part-time and graduate students.

Goal 3: Ensure equal educational opportunity for Maryland's diverse citizenry



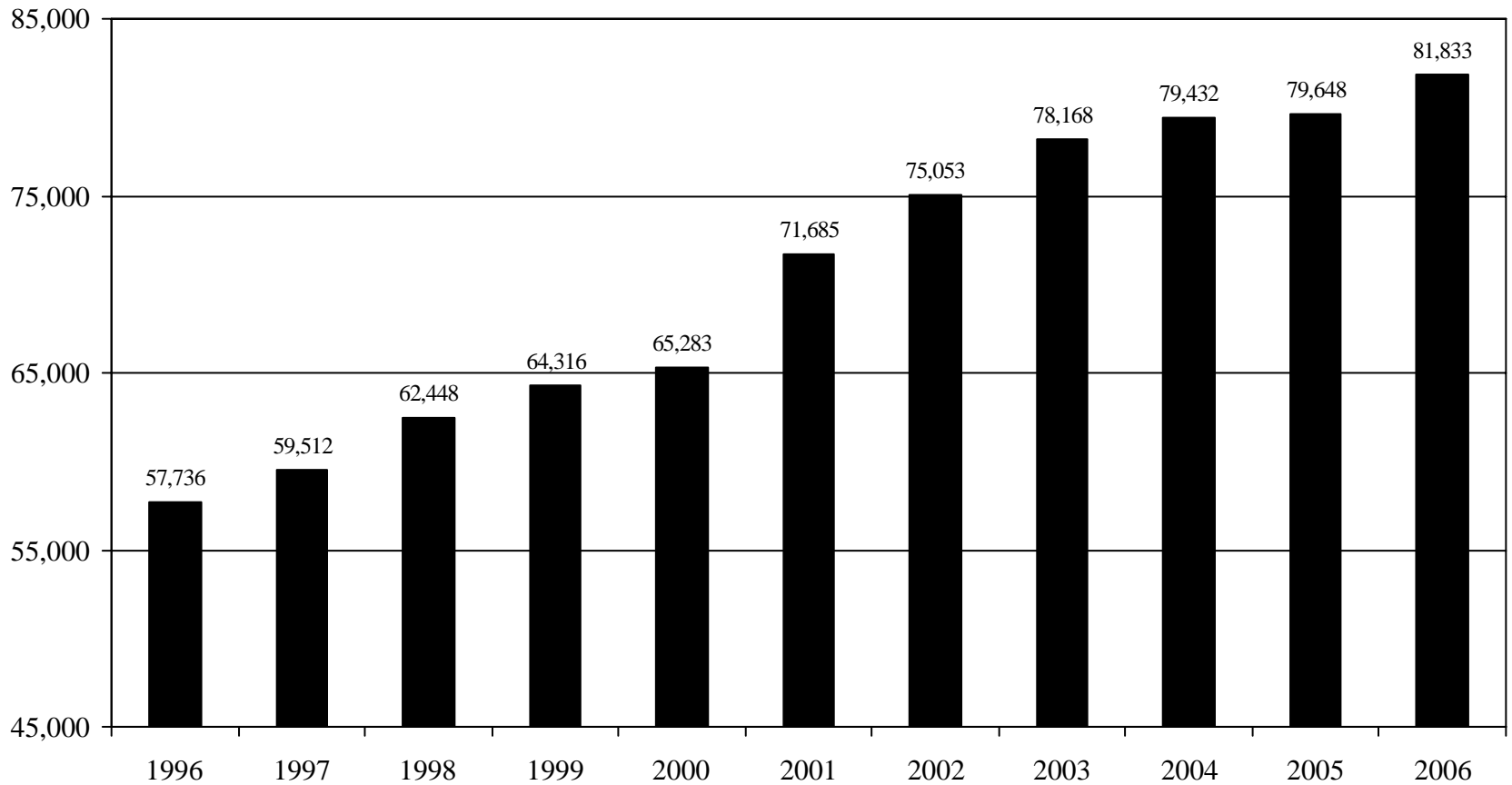
- Colleges and universities must foster a friendly, supportive, and attractive environment for students from different races and cultures, one that promotes high expectations for the success of all students.
- African Americans, Asian Americans, Hispanics, and Native Americans represent 36% of all students and 38% of undergraduates at Maryland's colleges and universities.
- To ensure a high-quality postsecondary education for all citizens, Maryland must continue to work to uphold the commitments of the OCR Agreement and promote minority achievement.

Supporting Diverse Student Population

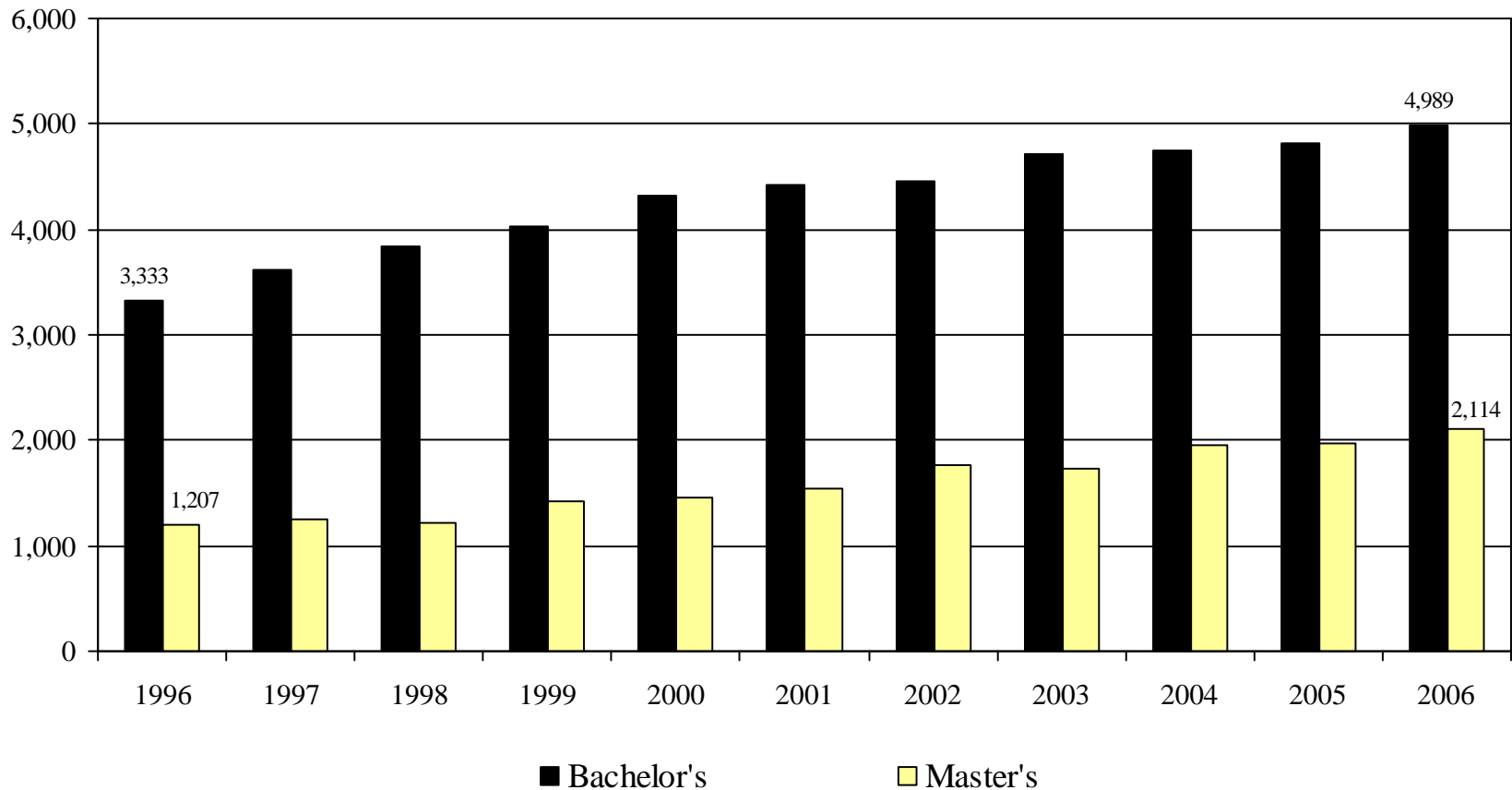


- Operating fund enhancements to the HBIs totals \$66.7 million from FY 2002 to FY 2008.
- Funds have been used to improve operations in student support services, implement PeopleSoft management systems, improve information technology, enhance library operations, develop and improve institutional advancement and alumni relations, as well as create programs to help students stay in school and graduate, such as Summer Bridge programs, Center for Excellence in Teaching and Learning, Pre-College Summer Program, Cohort Attack Program, First Year Experience/Transition class, and the Freshmen Laptop Initiative.
- Capital funding for the HBIs has totaled \$460 million for over thirty projects between FY 2002 to FY 2008.
- Colleges and universities have developed programs to increase cultural awareness and diversity in publications.
- Many institutions have implemented recruitment programs to attract African American and other ethnically under-represented students to advanced degree programs.

Enrollment of African Americans at Maryland campuses has increased by 42 percent in the past eleven years



The number of degrees awarded to African Americans has steadily increased over the past eleven years.



Goal 4: Strengthen and expand teacher preparation programs and support student-centered, preK-16 education to promote student success at all levels.



- To produce a sufficient number of qualified teachers, efforts must be undertaken to improve delivery methods and increase capacity.
- To ensure student success, requirements for high school graduation and first-year college courses must be fully aligned.
- Opportunities must be available for high school seniors to improve preparation and lessen time to degree through early college access programs.
- To ensure success once in college, higher education institutions should adopt student-centered policies to facilitate retention and timely graduation.
- In addition, current and potential barriers to transfer from a community college to a 4-year institution should be eliminated.

Maryland is not producing or attracting enough teachers to fulfill the staffing requirements especially in high need certification fields

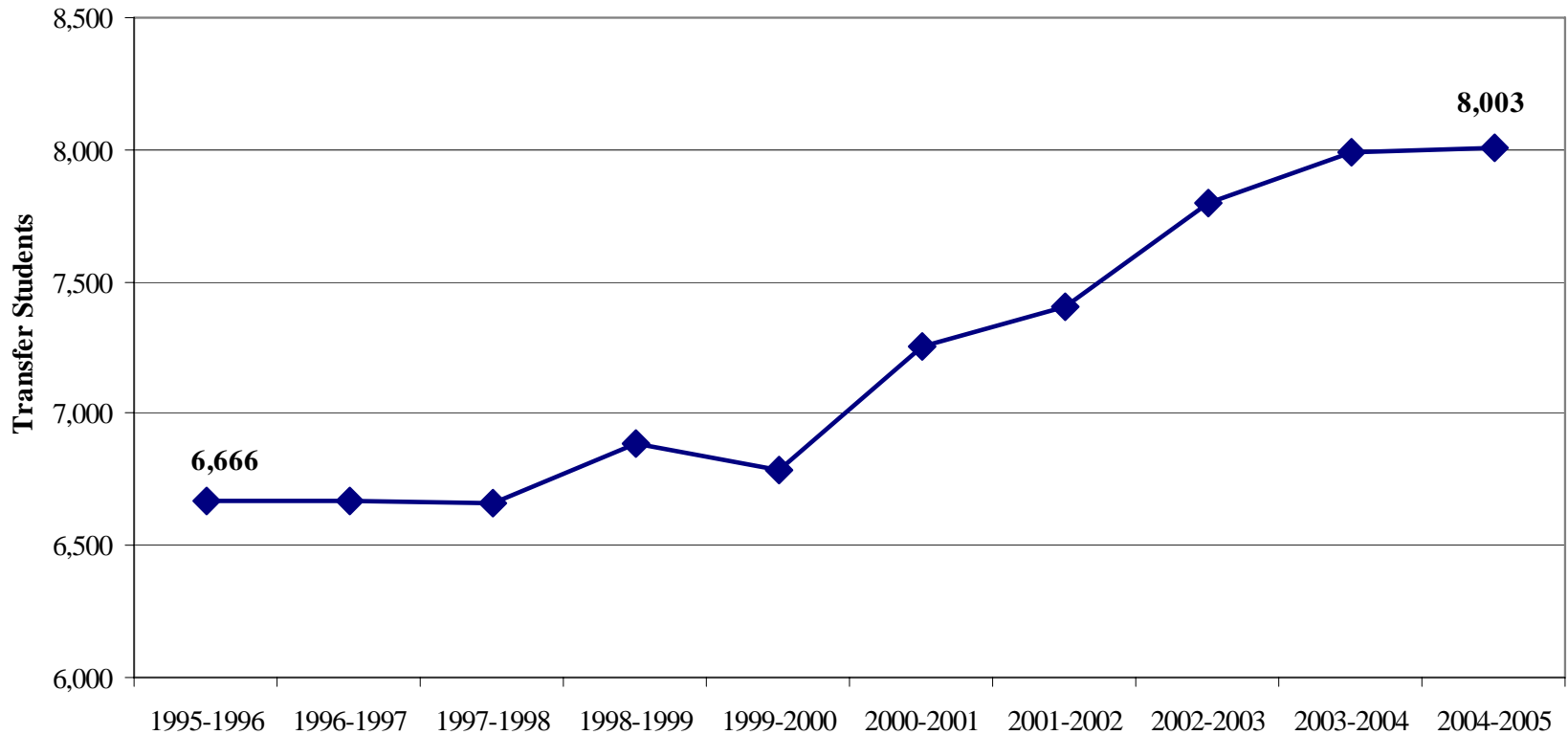


- The creation of 59 new Associate of Arts in Teaching (AAT) programs and sustained funding of professional development schools has improved program capacity and assisted with the retention of beginning teachers.
- Critical teacher shortages are reported in the following areas:
 - (1) Special Education; (2) Mathematics; (3) Chemistry, Earth/Space Science, Physical Science, & Physics; (4) English for Speakers of Other Languages (ESOL); (5) Latin & Spanish; (6) Computer Science; (7) Dance; and, (8) Career & Technology Areas.
- Of the 4,350 beginning teachers hired by Maryland public schools in 2005-2006, only 33% (1,439) were prepared at Maryland institutions.
- 2,576 teacher education candidates were produced by Maryland institutions in 2004-2005
- 40% of these graduates were in elementary education, which is not a shortage area.



An increasing number of students will attain a bachelor's degree through community college transfer programs

Number of Transfer Students from Community Colleges to Four-year Public Institutions: 1996-2005





Efforts to improve the transfer process for students enrolled in 2+2 programs are underway

- Statewide Articulation Agreements:
 - Associate of Arts in Teaching degree (AAT)
 - Nursing Articulation
- Common General Education requirements, policies, and definitions.
- 2+2+2 partnerships from high school to community college to 4-year institutions.
- Articulation Tools, Policies and Practices:
 - Principles of Student Transfer in Maryland
 - ARTSYS – USM’s online articulation and transfer system
 - USM – MACC Collaboration and Planning
- Development is underway for an Associate of Science in Engineering program that will articulate with baccalaureate engineering programs in the State.

Goal 5: Promote economic growth and vitality through the advancement of research and the development of a highly qualified workforce



- Research and technology transfer are vital to the growth of a global economy that is increasingly knowledge-based.
- Effective and coordinated strategies must be implemented to meet these changing workforce needs.
- The 2004 Report of the Commission on Development of Advanced Technology Business reports that over 50,000 jobs are supported by research and development funding attracted by Maryland faculty.
- Maryland is ranked 1st in federally funded research and development; however, it is ranked 45th in privately funded research and development at universities.



Achieving Economic Growth and Vitality

- The Maryland Technology and Development Corporation (TEDCO) works with the USM's Work Group on Technology Transfer to enhance the transfer of technology.
- Many institutions are developing research parks to support technology transfer and to support information technology and life science companies.
- MHEC is working with DLLR and GWIB to provide occupational supply and demand data to meet occupational demand in areas such as nursing and science, technology, engineering, and math (STEM) fields.
- Working in collaboration, MHEC, DLLR, and GWIB and other appropriate entities are developing a model to identify critical workforce occupations to receive scholarship assistance.

Nursing graduates have increased and programs are at capacity.



- Registered Nurse (RN) is the top demand occupation in Maryland as measured by each of three categories: projected 2014 employment, employment growth, or total annual openings.
- Maryland's higher education institutions have responded to the demand for nurses by significantly increasing the supply of nursing graduates.
 - A record of 2,717 total nursing graduates were produced in FY 2006.
- However, there was a reported decrease in graduates from master's level nursing programs that may impact the supply of eligible nurse faculty and limit the ability of nursing programs to expand enrollment.
- Maryland RN programs are admitting and enrolling less than half of the qualified applicants seeking admission.
 - In Fall 2005, 2,357 qualified applicants were not admitted to RN programs due to lack of capacity.
- Maryland's institutions reported that they could expand their nursing programs and enroll an additional 1,245-1,299 nursing students, if necessary resources were available.



Actions to increase the supply of Nurses

- The Nurse Support Program II (NSP II) is a significant new funding mechanism to increase the supply of qualified bedside nurses in Maryland hospitals and nurse faculty to train these nurses.
 - Under NSP II, an estimated \$8.8 million will be available annually for 10 years to fund (1) Competitive Institutional Grants, and (2) Statewide Initiatives that will provide nursing scholarships and new nurse faculty fellowships.
 - Funding for NSP II is obtained through a 0.1% increase in hospital patient rates.
- Maryland has many funding initiatives to increase the supply of nurses including
 - (1) State Nursing Scholarships, (2) Workforce Shortage Student Assistance Grant Program, (3) Janet L. Hoffman Loan Assistance Repayment Program, (4) Teach for the Health of It, (5) Sallie Mae's Care for Maryland Program, (6) Health Personnel Shortage Incentive Grant Program, and (7) Nurse Support Program I and II.
- Nonetheless, the crisis in nursing remains in Maryland.



Efforts are underway to address STEM occupations.

- *Rising Above the Gathering Storm* documents the urgent need to invest in science, technology, engineering, and math (STEM) education in order for America to remain competitive in a global, knowledge-based economy.
- MHEC is spearheading an initiative to increase the supply of engineers by establishing a new engineering transfer degree. The new Associate of Science in Engineering (ASE) Degree will be:
 - Fully articulated with baccalaureate degree programs in Maryland, and
 - Modeled after the successful Associate of Arts in Teaching (AAT) Degree.
- The State has provided the University System of Maryland with \$2 million to implement an initiative to increase the supply of STEM teachers and STEM graduates. Other higher education institutions have indicated their willingness to support and participate in such a STEM initiative.



Challenges to Achieving Maryland's 2004 State Plan for Higher Education

- Accommodating Enrollment Growth
- Affordability
- Student Success and Persistence



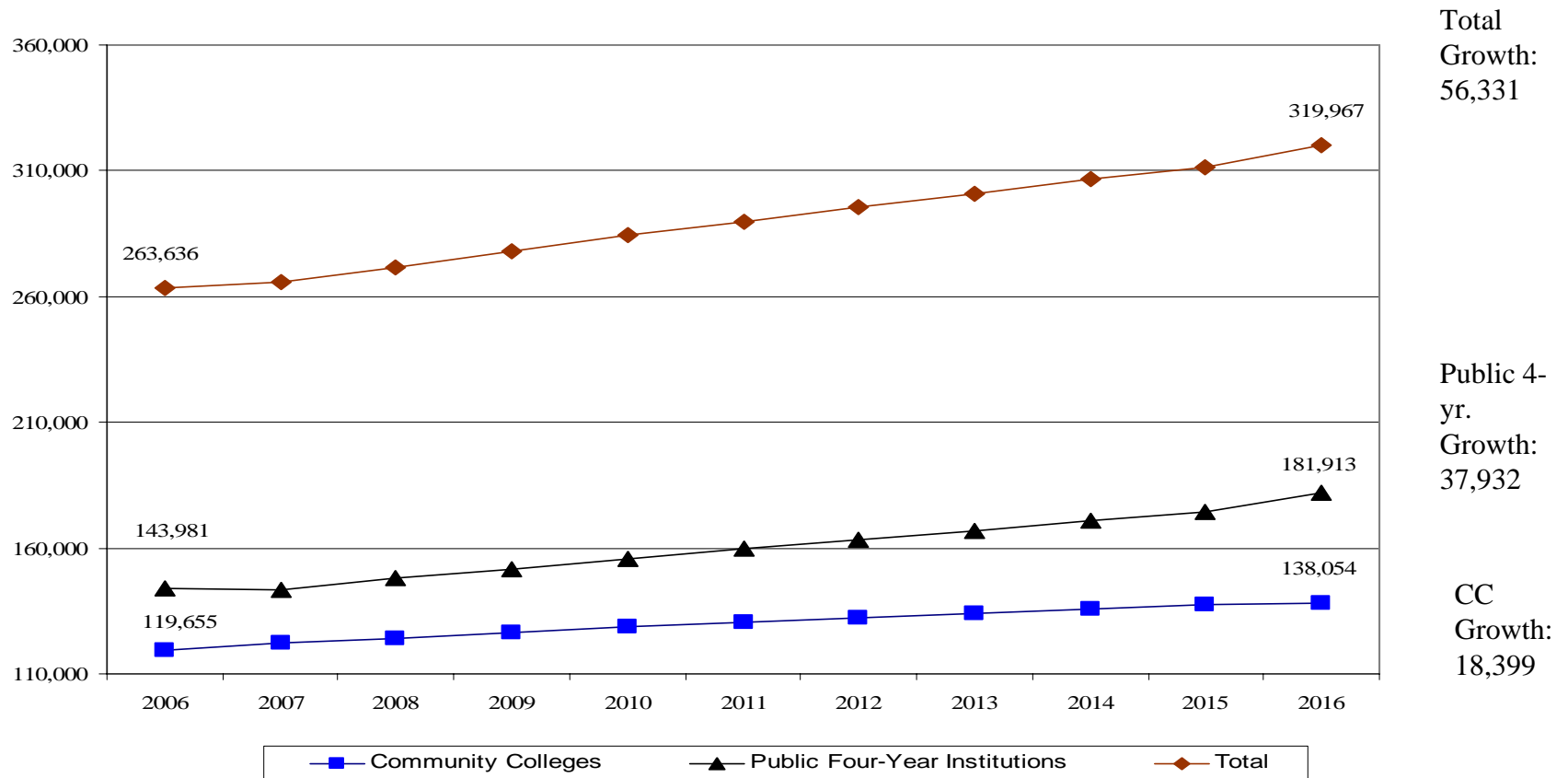
Accommodating Enrollment Growth

- The “baby boom echo” generation is enrolling in college now. Maryland’s higher education enrollments are expected to grow by more than 56,000 students by 2016.
- Rising enrollment in higher education will stretch capacity at all institutions.
- Between 1996 and 2005, minority enrollments increased by 31,467 students, growing from 31% to 36% of total enrollments.

Growth during the next decade presents challenges for instructional and facilities capacity



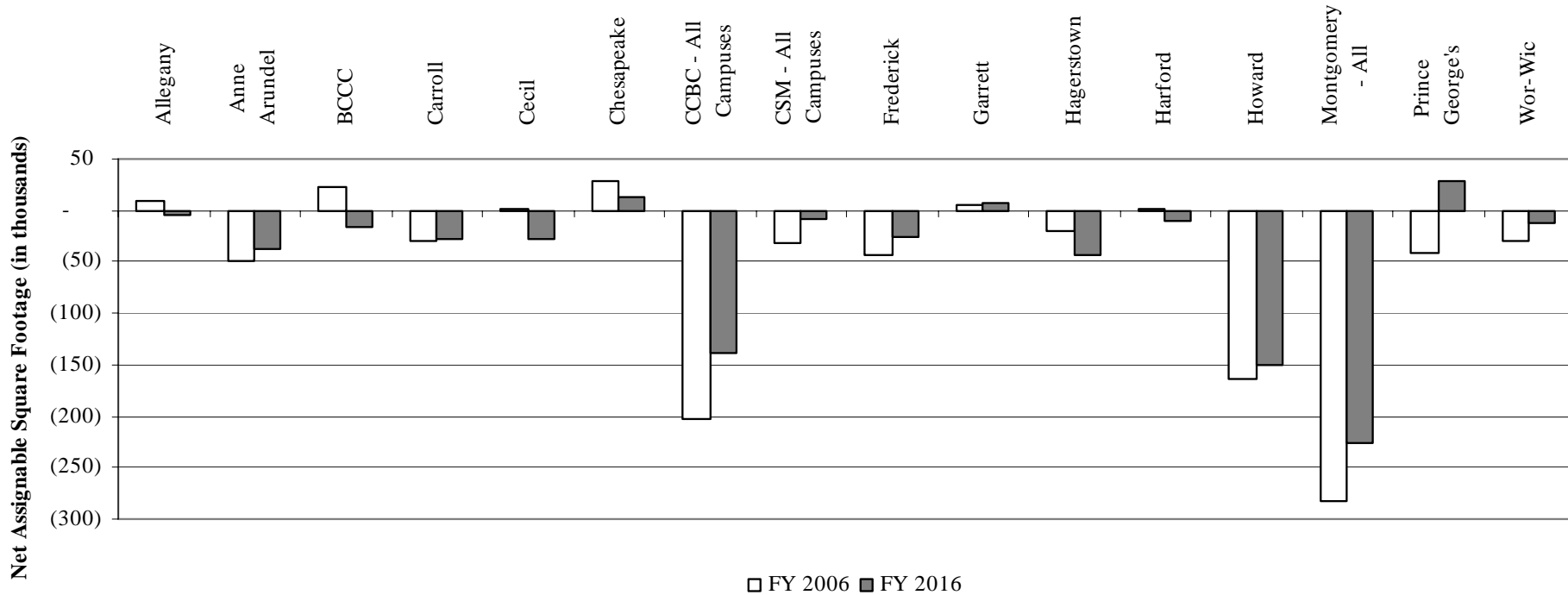
Projected Headcount Enrollments at Public Two-and Four-Year Institutions through 2016 Given Present Trends



Projected deficiencies in instructional space in community colleges given present trends



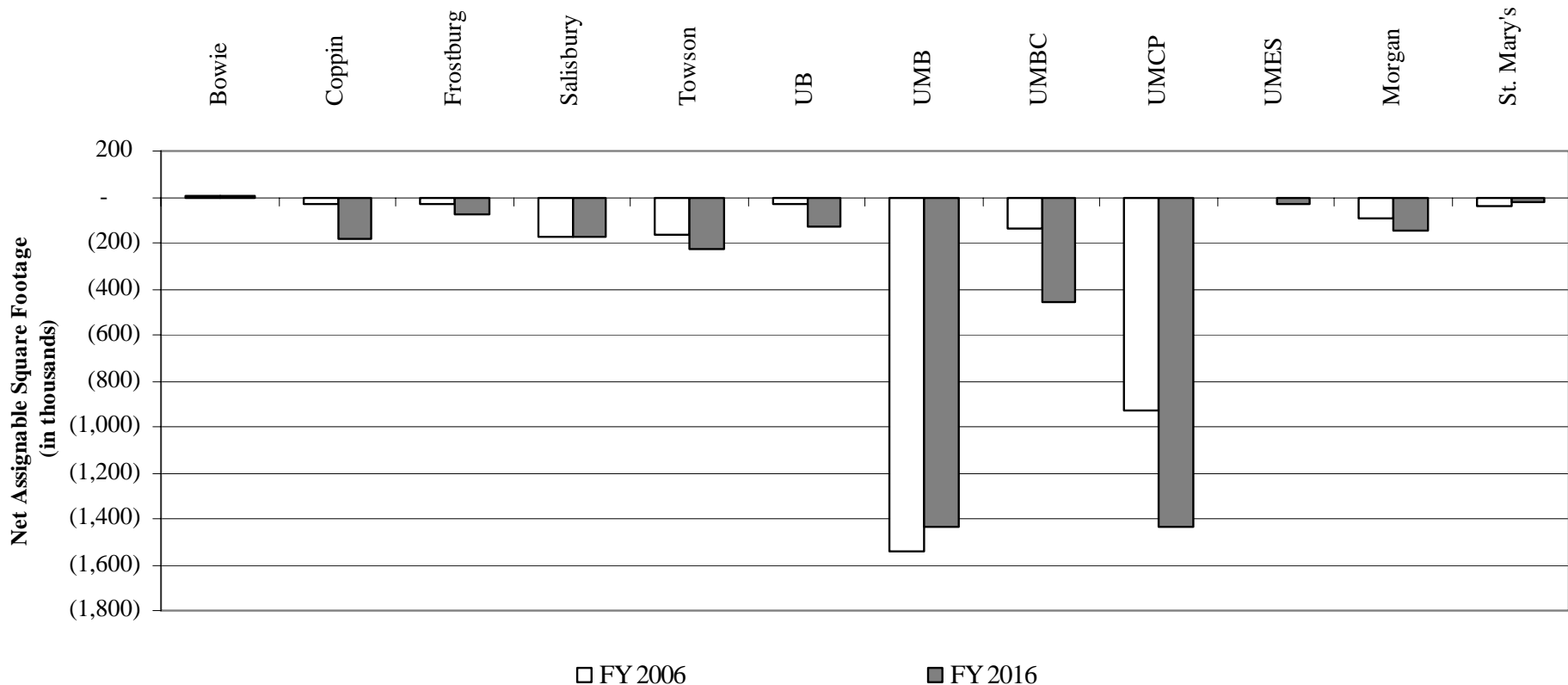
Total Academic Space: Surplus/Deficiency FY 2006 and Projected 2016



Projected deficiencies in instructional space in public four-year institutions given present trends



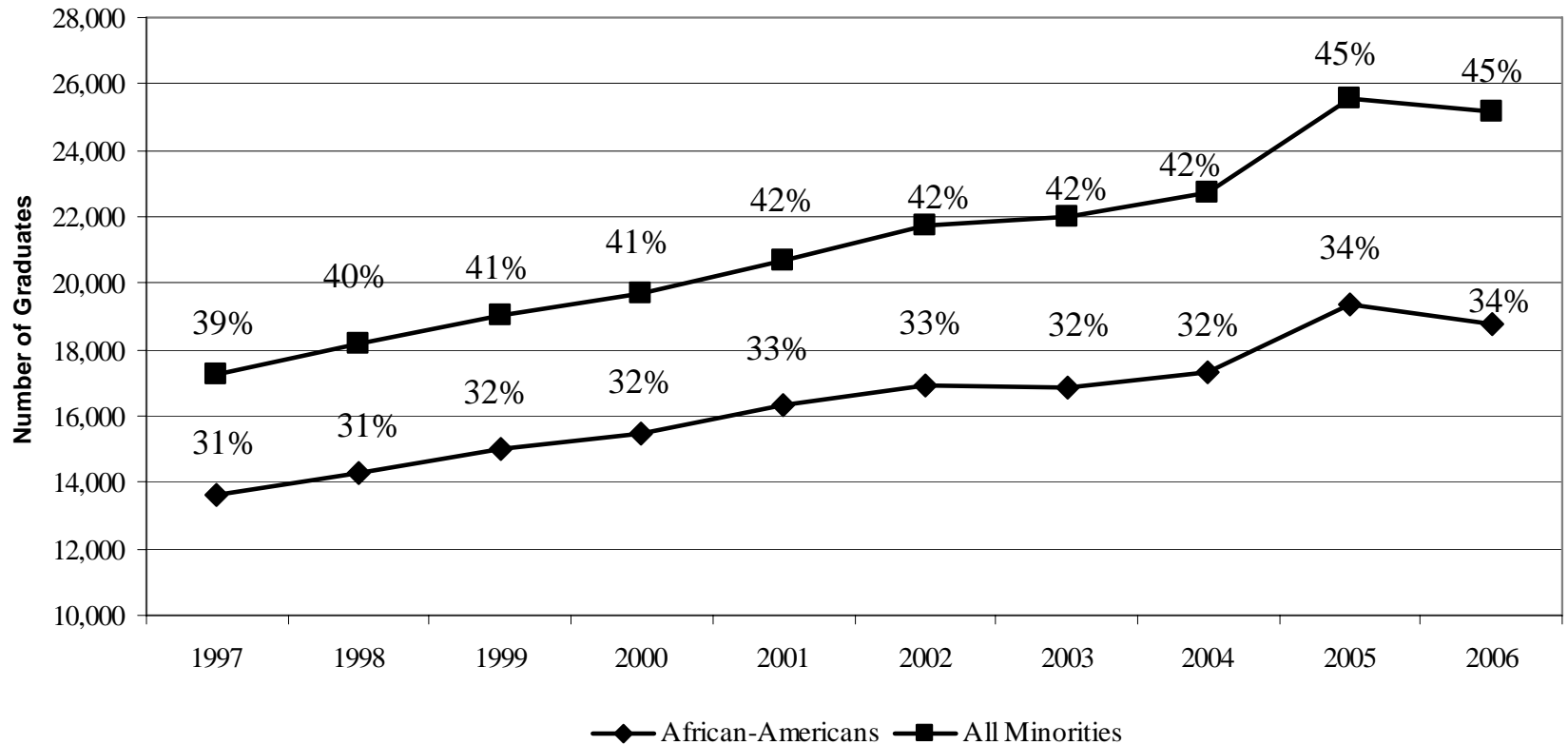
Total Academic Space: Surplus/Deficiency FY 2006 and Projected FY 2016



The traditional college age population is becoming increasingly diverse



Percent of Minority and African-American High School Graduates





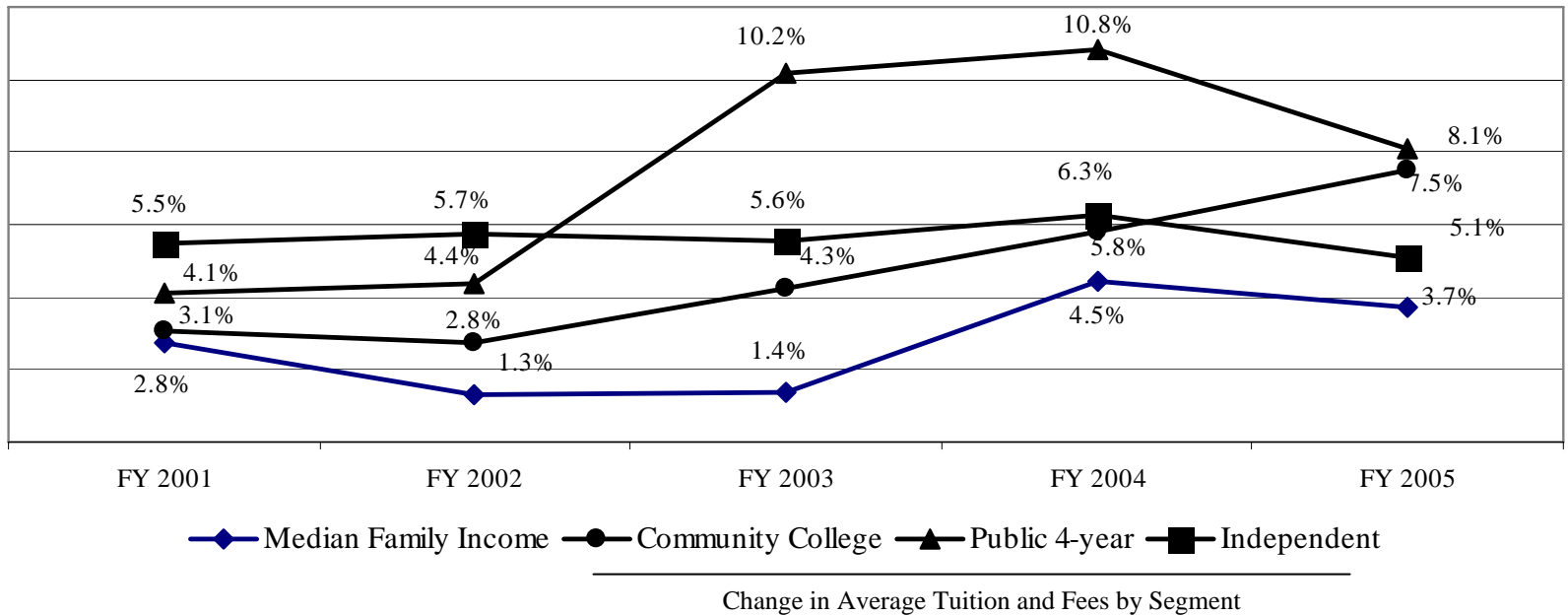
Affordability

- Tuition and fee increases have outpaced annual family median income growth.
- Maryland's college costs comprise a significant percentage of annual family income for lower income families.
- MHEC studies conducted using the new unit record Financial Aid Information System (FAIS) data show
 - Larger than expected unmet financial need – even among aid recipients with loans.
 - A high level of student loan debt particularly for low-income students.
 - State and institutional financial aid programs cover a lower percentage of need for lower income students than higher income students.

The percentage change in Maryland median family income has not kept pace with percentage increases in tuition and fees



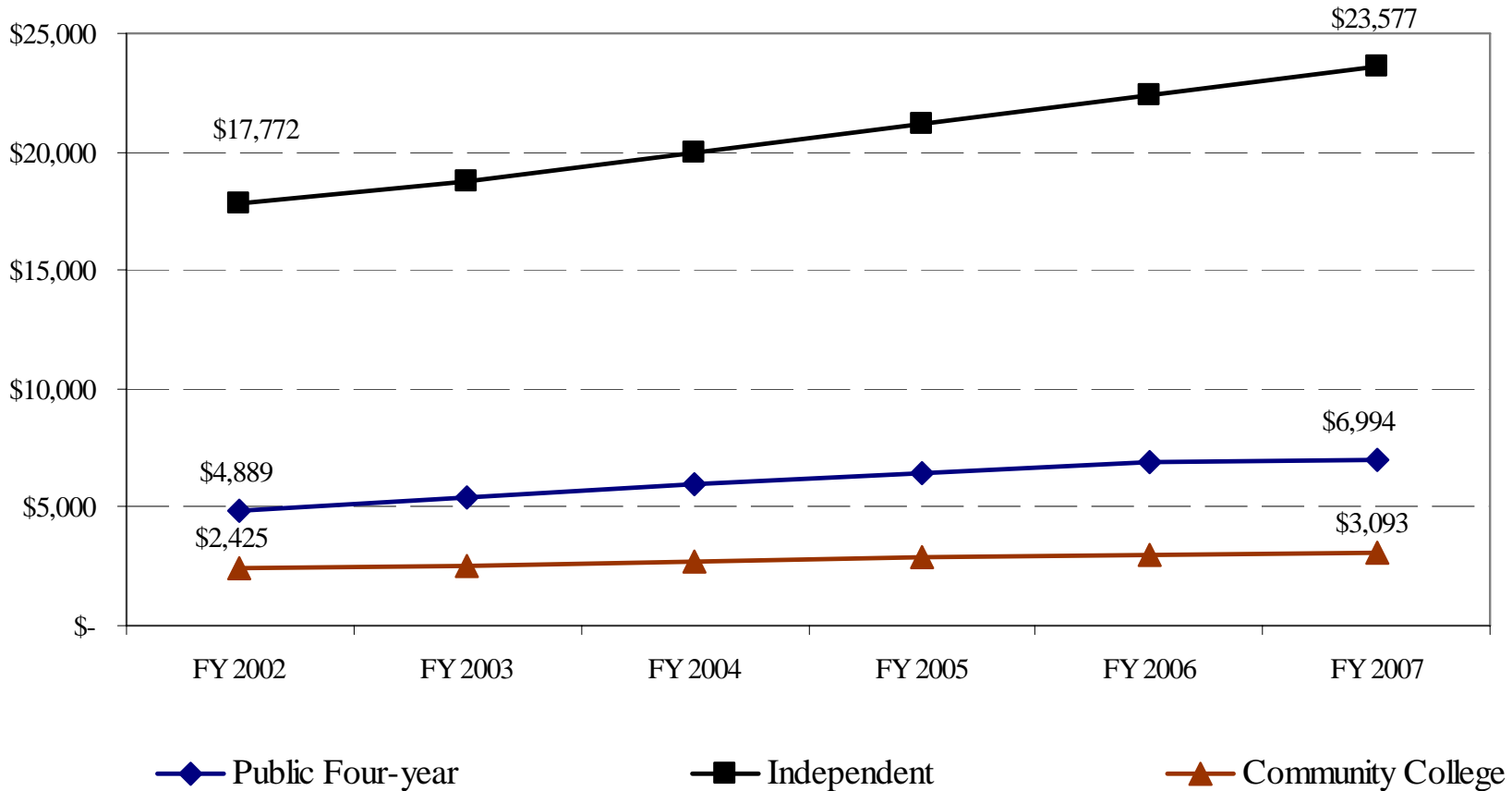
Percentage Increase in Median Family Income Compared to the Percentage Increase in College and University Tuition and Mandatory Fees in Maryland 2001-2005



Tuition and fees have steadily increased at all Maryland institutions over the past five years.



Trends in Tuition and Fees for Maryland Higher Educational Institutions FY 2002-2007



Maryland: Net College Costs as a Percent of Family Income - *Measuring Up 2006*

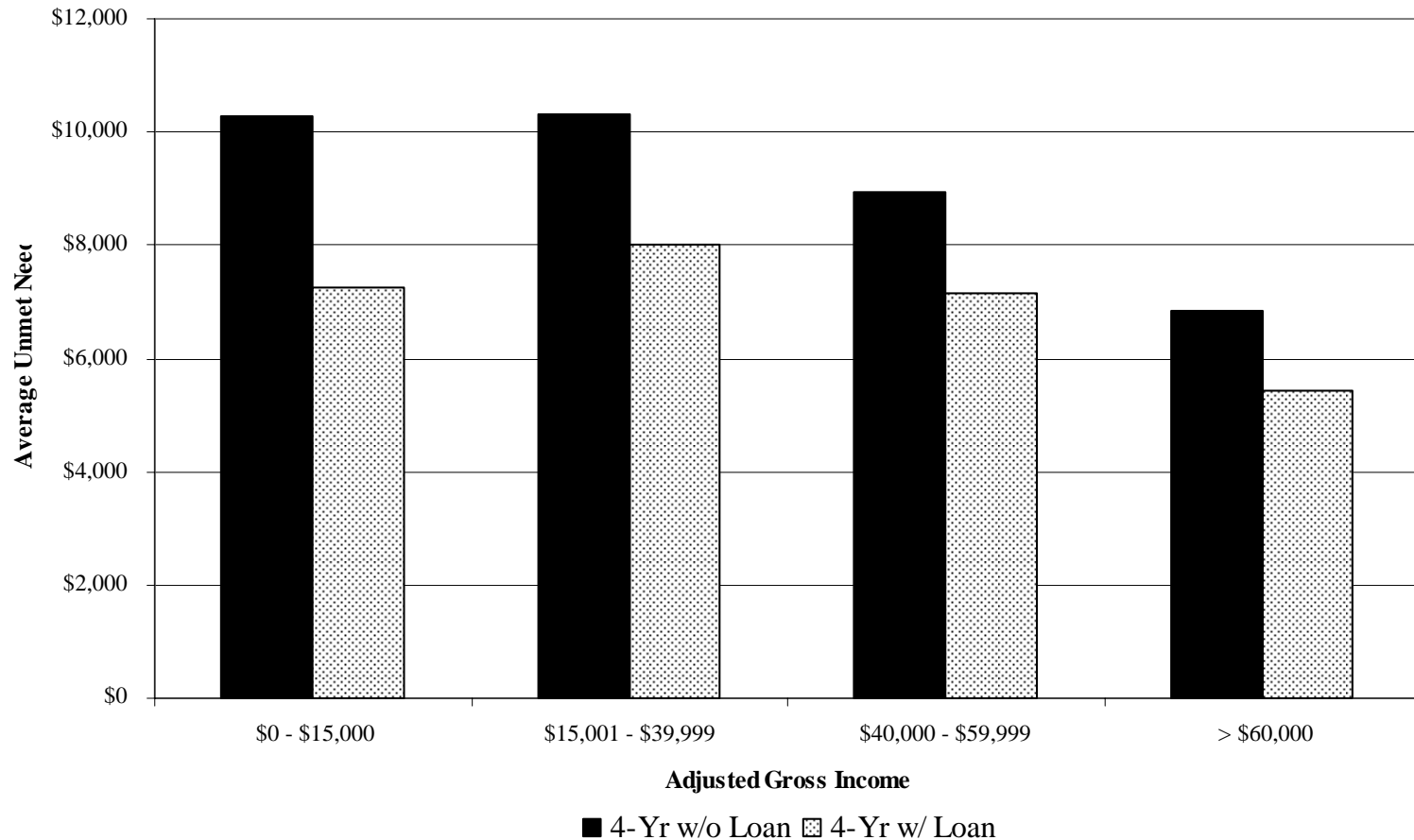


Income Quintile	Median Income Each Quintile	CC	Four-year
Lowest Income	\$15,000	62%	79%
Low Income	\$37,256	26%	34%
Middle Income	\$60,862	17%	22%
Upper Middle Income	\$94,000	11%	15%
Upper Income	\$161,046	6%	9%

Financial aid recipients with federally defined financial need had considerable unmet need even if they took out loans – Public Four-Year Students



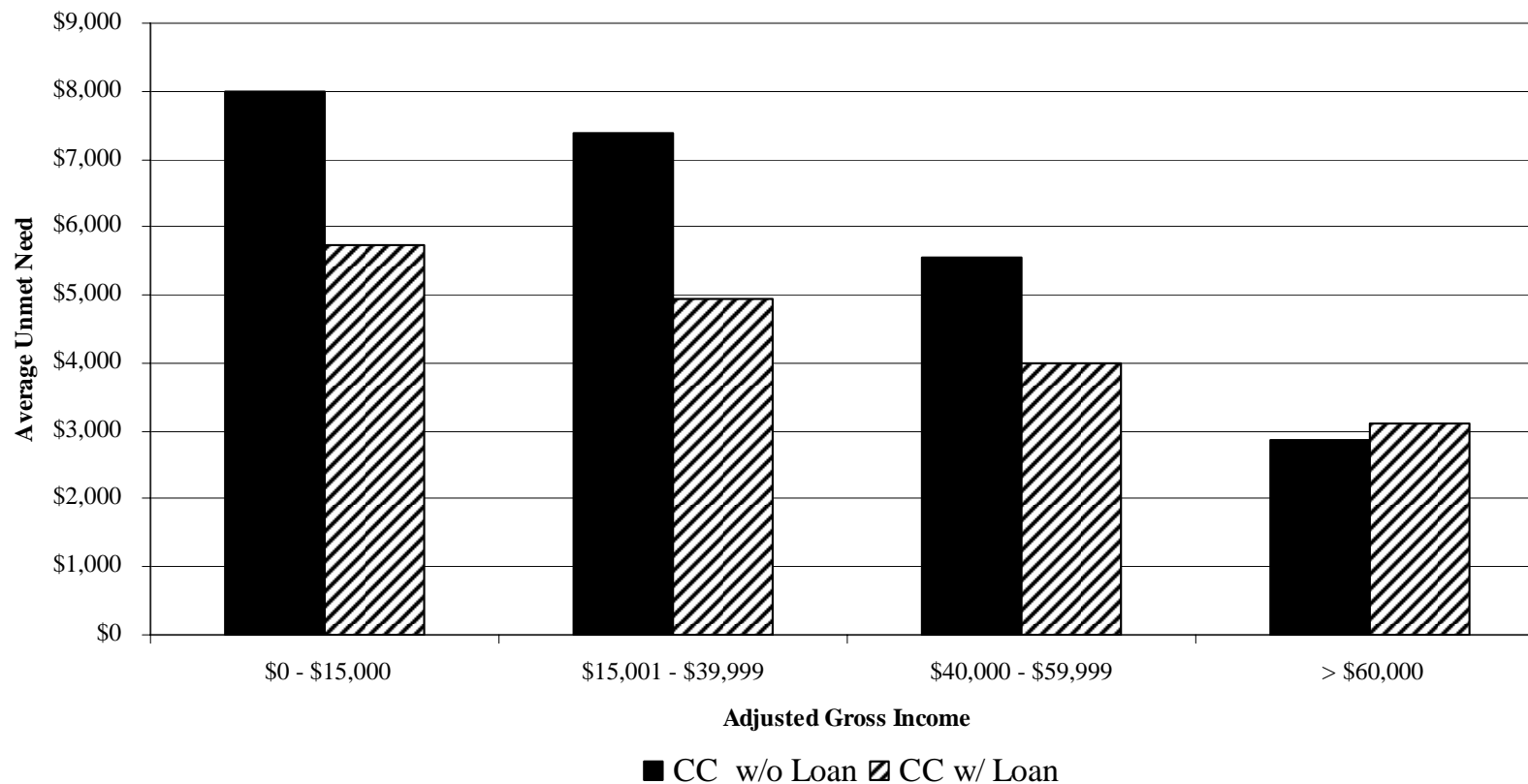
Average Unmet Need for Public Four-Year Aid Recipients Across Income Ranges 2004-2005



Financial aid recipients with federally defined financial need had considerable unmet need even if they took out loans – Community College Students.



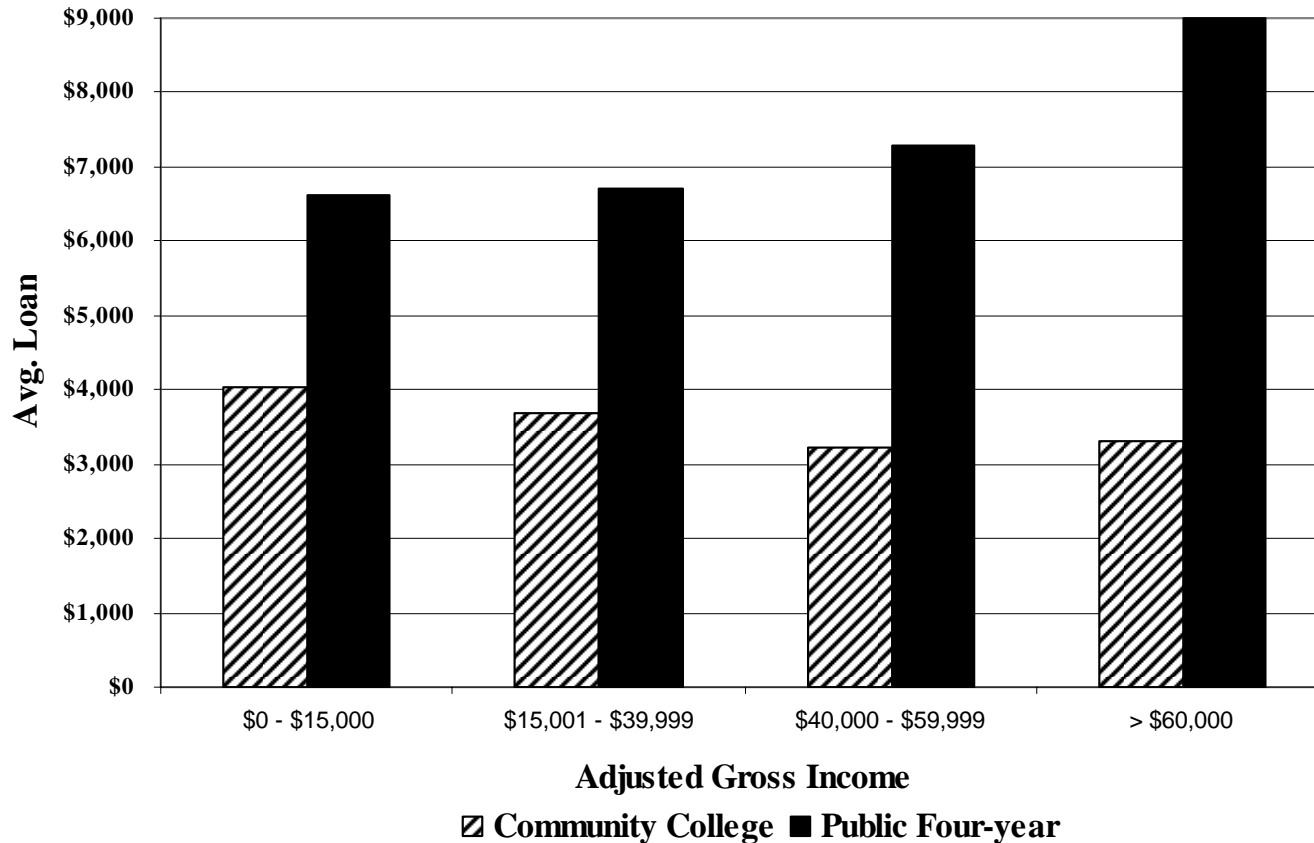
Average Unmet Need for Community College Aid Recipients Across Income Ranges 2004 2005





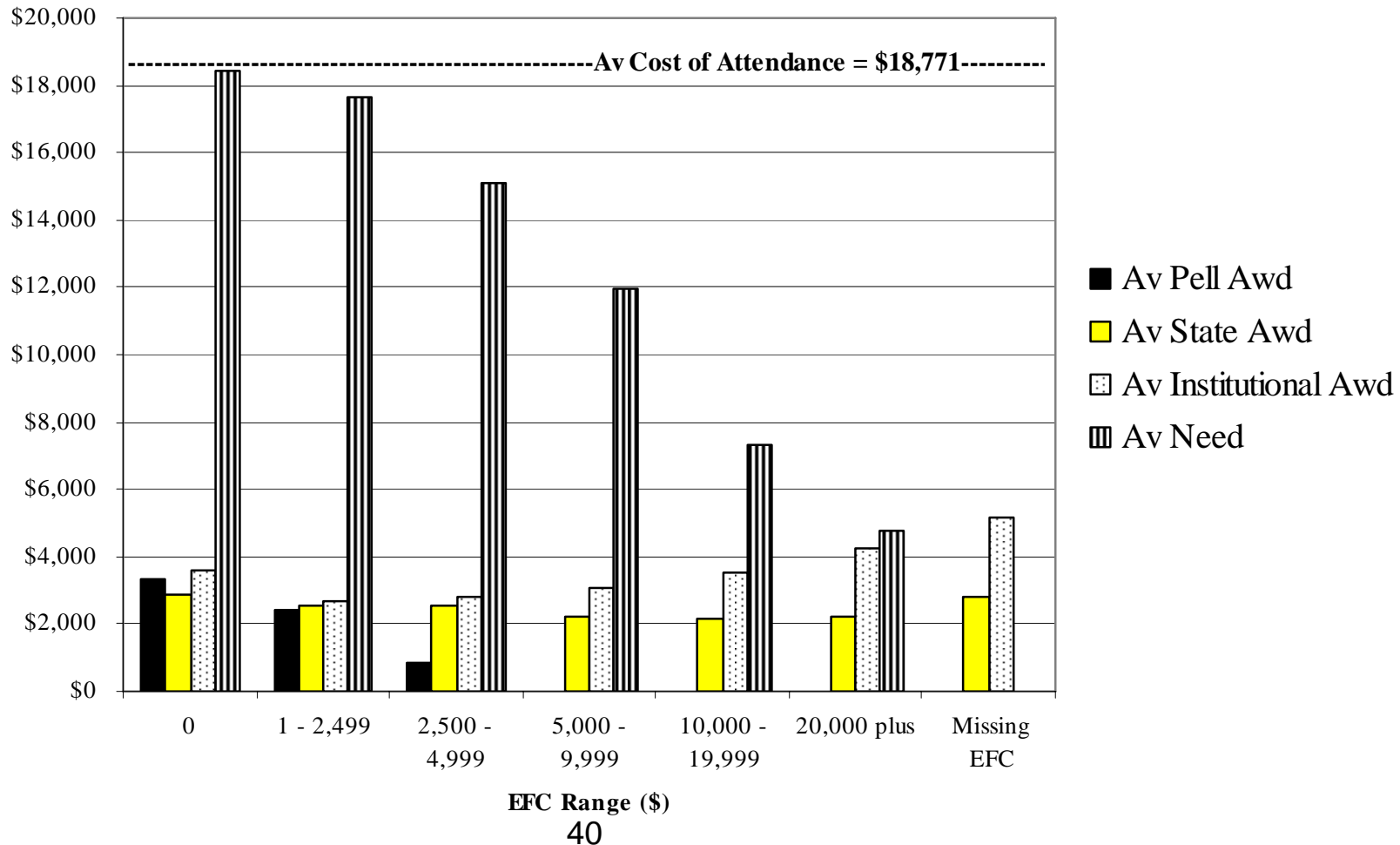
Students with federally defined financial need who fall in the lowest income ranges incur high debt amounts

Average Single Year Loan Amount for Students with Federally Defined Financial Need Enrolled in Maryland Public Institutions 2004-2005

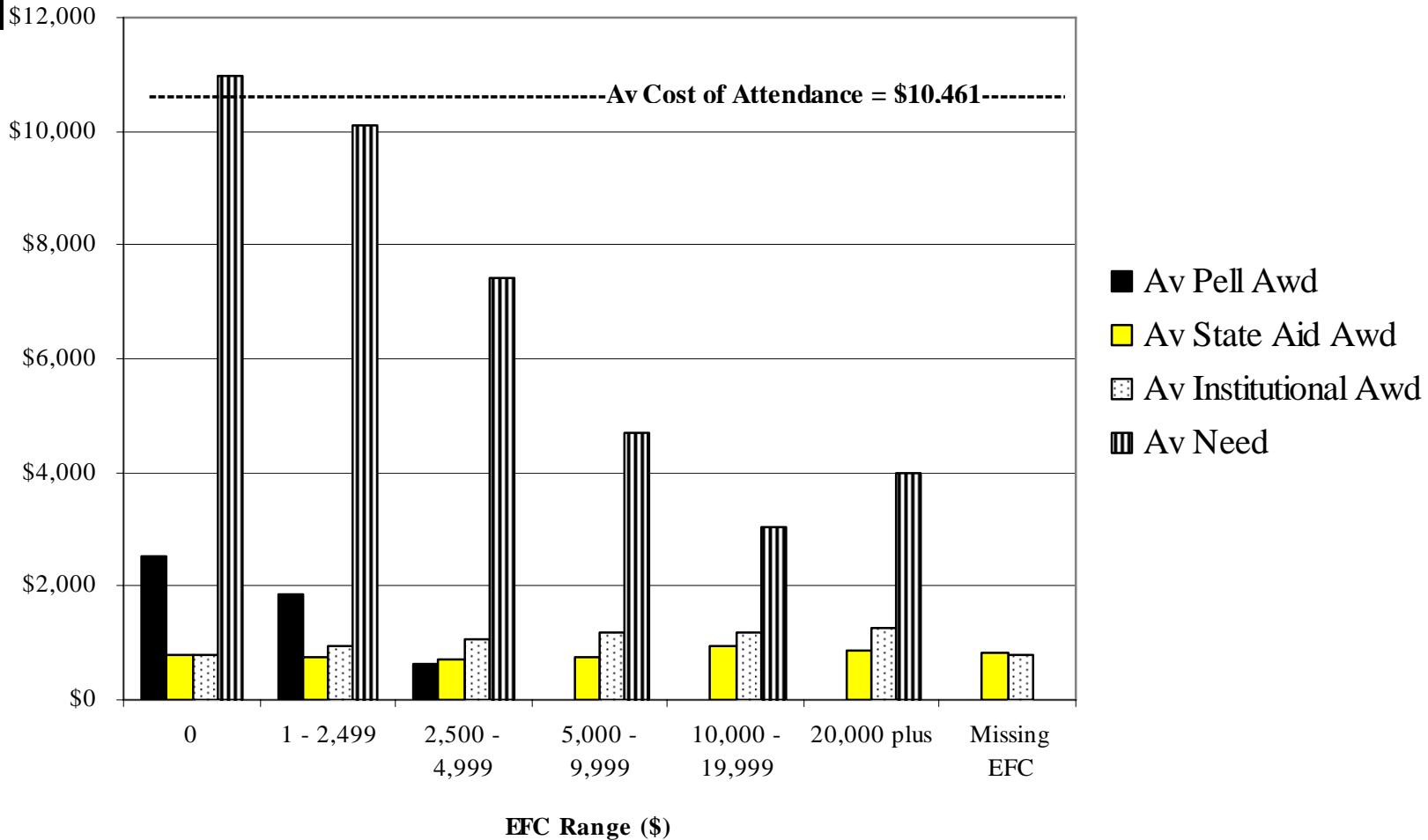




Average Aid Awards and Need for Public Four-year Aid Recipients by Expected Family Contribution, 2004-05



Average Aid Awards and Need for Community College Aid Recipients by Expected Family Contribution, 2004-05





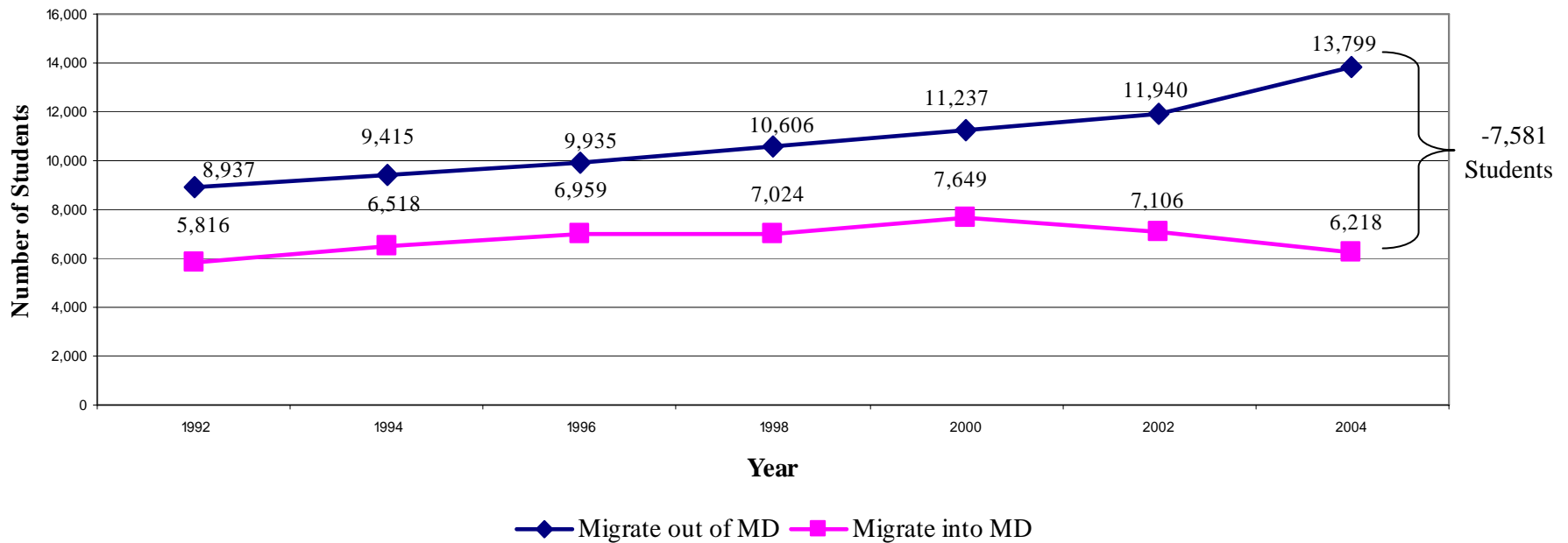
Student Success and Persistence

- Maryland employs a highly educated workforce, ranking 5th in number of adults with a bachelor's degree or higher, but a significant portion of that workforce comes from other states.
- More college-bound native students go out-of-state for higher education than out-of-state natives enter the system.
- Maryland's high school graduates have about average participation in higher education compared to those in other states.
- Academic preparedness in high school is essential for college success.
- African American Students continue to lag behind other students in
 - Persistence
 - Six-Year Graduation Rates
 - Transfer Student Graduation Rates
 - Remediation

More college-bound undergraduates enroll in out-of-state schools than out-of-state students enroll in Maryland schools



Migration of New College-Bound Undergraduates: FY 1992-2004



Maryland high school graduation rates and enrollment in higher education rank about average nationally.

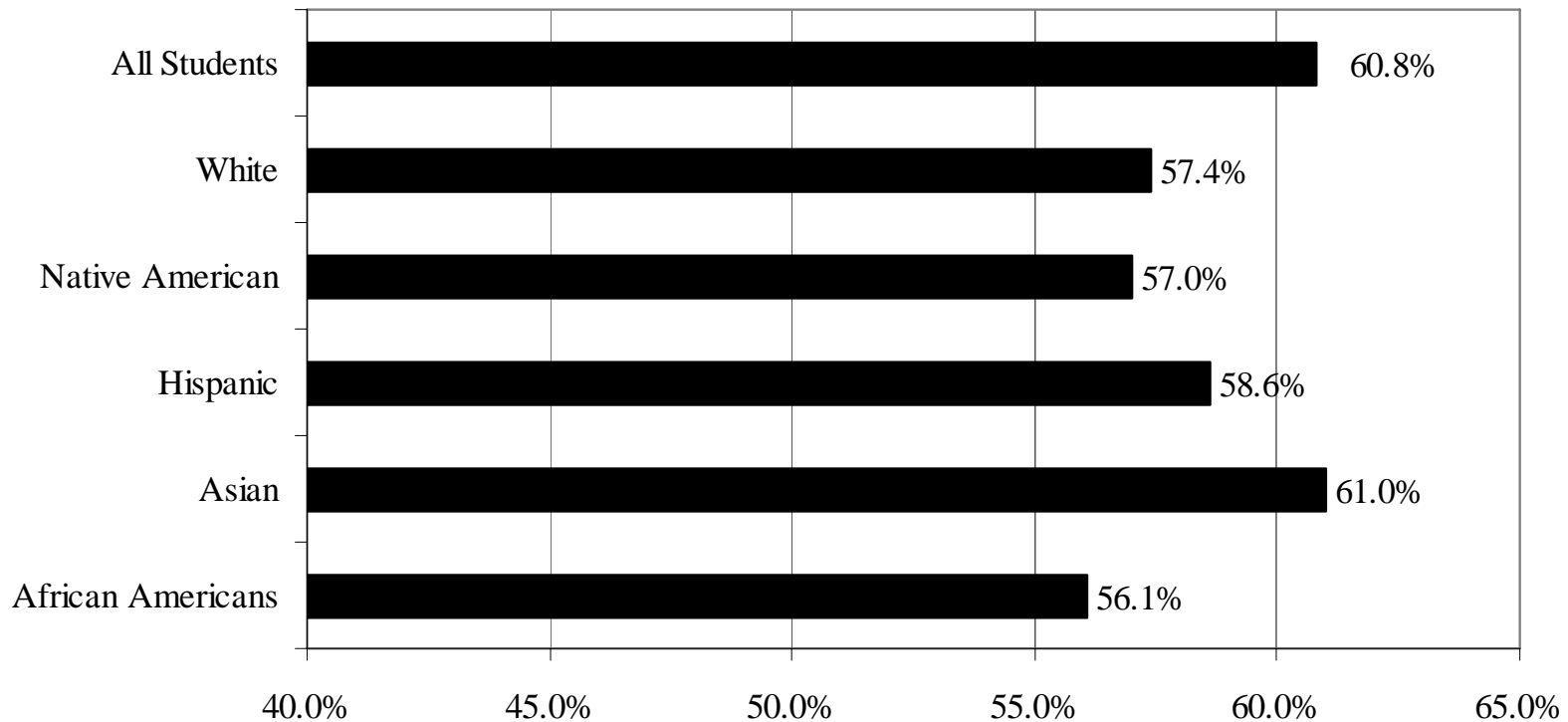


- 22nd – public high school graduation rate
- 25th – college continuation rate for high school graduates
- 17th – chance a 19-year old will enroll in college somewhere
- 18th – chance a low-income student will reach college

Fewer African Americans took a college preparatory curriculum in high school than students of other ethnicities



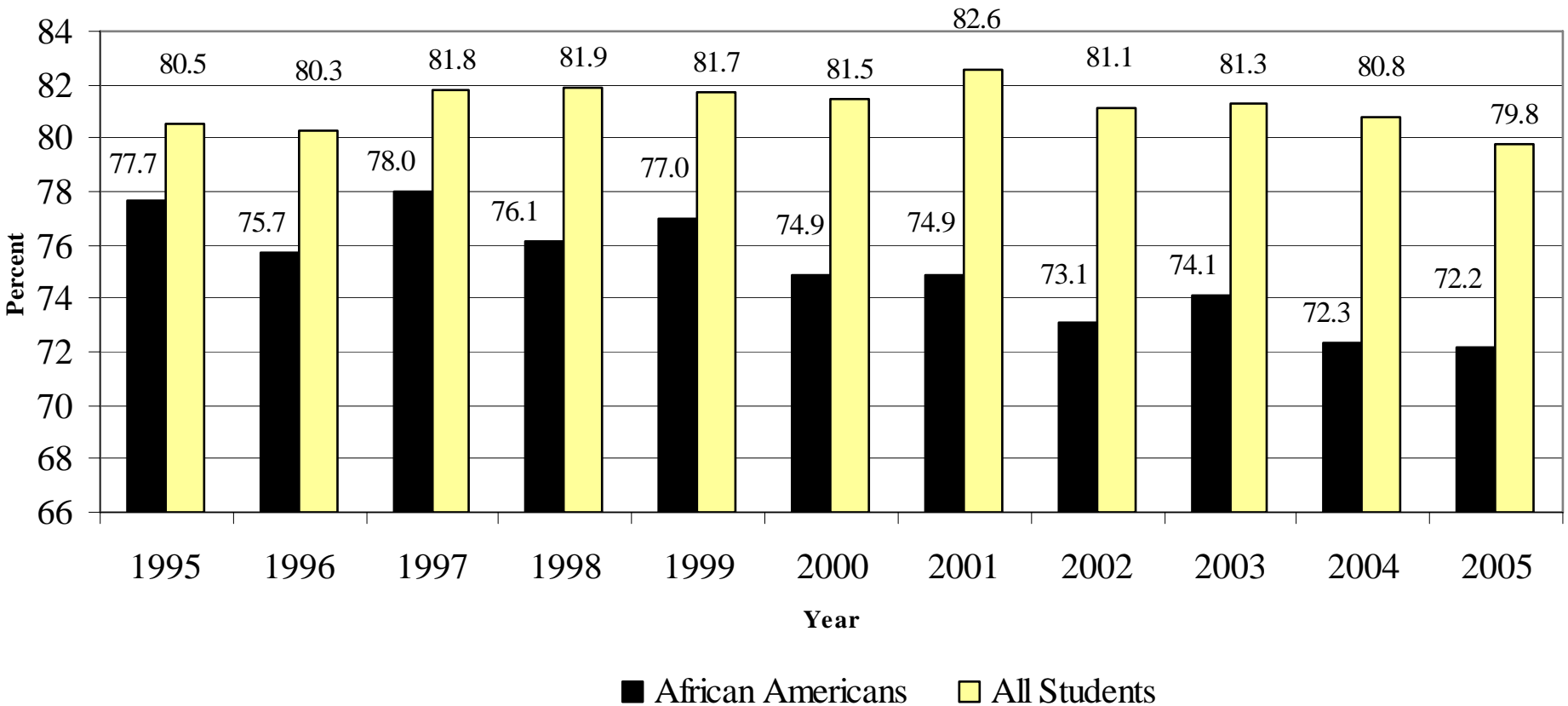
Percentage of Maryland College-Bound High School Graduates Who Completed a College Preparatory Program Curriculum



Second year retention rates of African American students have fallen to the lowest levels in 11 years.



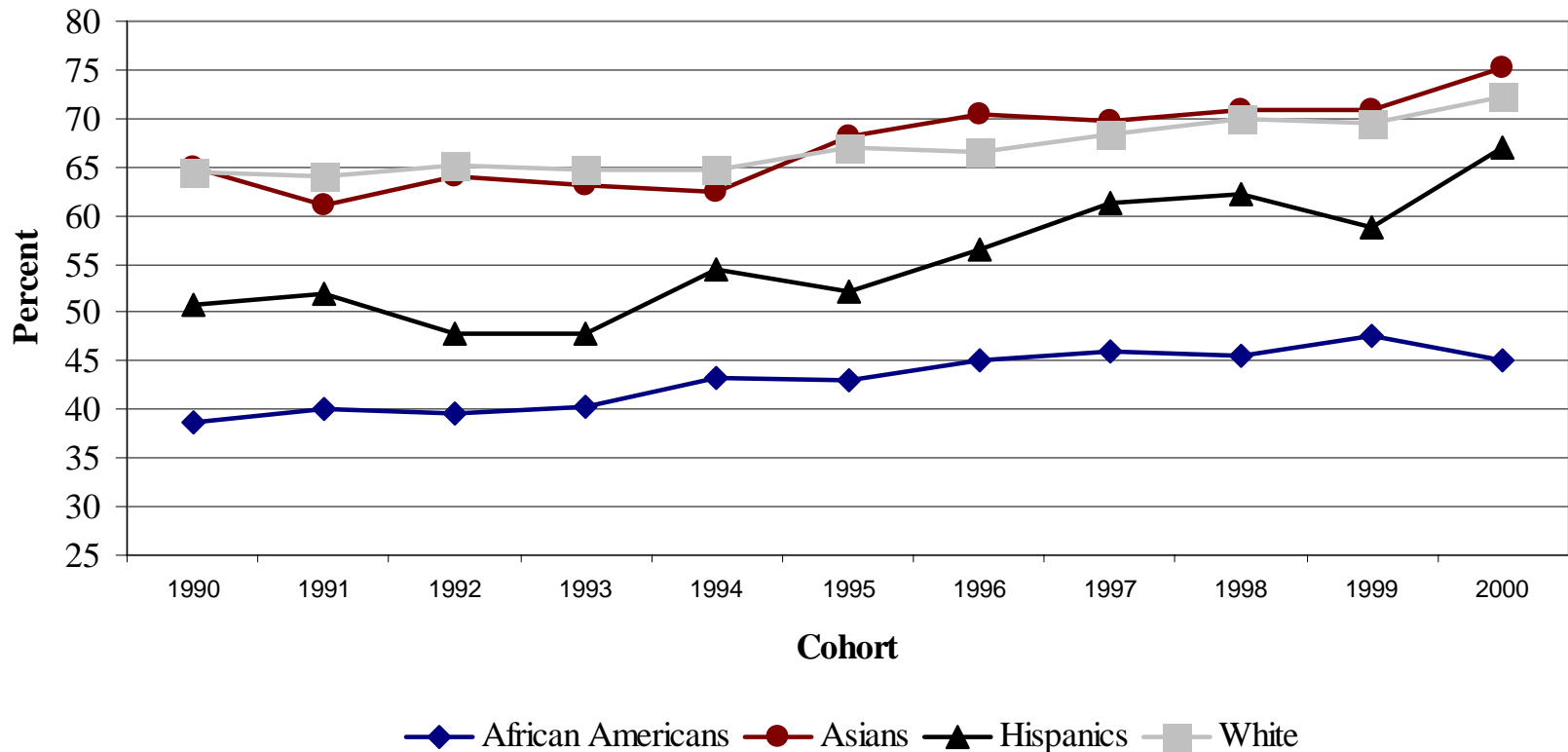
Second Year Retention Rates at Public Four-year Colleges and Universities 1995-2004



Six-Year graduation rates of African American and Hispanic students have continuously trailed those of Whites and Asians.



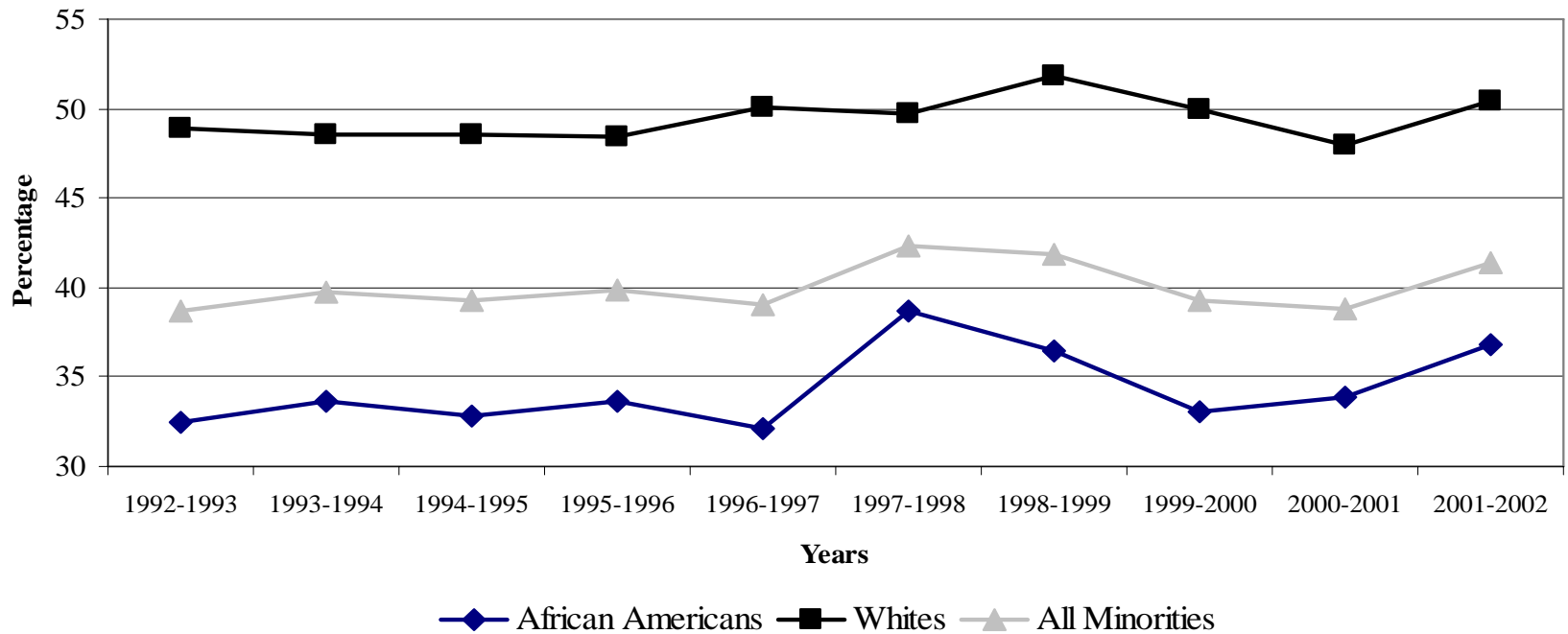
Six-Year Graduation Rates at Public Four-year Colleges and Universities 1990-2000





Minority student transfer rates lag behind majority student transfer rates.

Four-Year Graduation Rates of Community College Transfer Students at Public Four-year Institutions 1992-2002





Future Policy Actions that...

- Continue the efficiency efforts at all Maryland institutions.
- Promote and support use of RHECs and distance education as alternative delivery methods to meet the demand for higher education.
- Continue emphasis on need-based aid at both State and institutional levels.
- Support efforts to moderate the cost of higher education.
- Continue efforts to enhance academic preparation of all high school students.
- Ensure opportunity for Maryland's diverse citizenry
- Provide additional academic assistance to enhance underprepared students' academic success and persistence.
- Continue to improve the quality and effectiveness of the transfer process from two-year to four-year institutions.
- Continue efforts to study workforce shortages and work collaboratively with business and industry to address needs, such as the NSP II program.

...will accommodate growing enrollments, enhance academic success, improve affordability, and meet workforce needs to ensure Maryland the benefits of sustained economic growth stemming from an educated citizenry.