
Student Demographic Projections, Public Policy Questions and the Impact on Higher Education

Knowing who is (and is not) knocking at the college door

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“These findings can be very helpful in helping shape public policy. Many folks may not like the implications of these findings, but they are the facts, and we ignore them at our peril.”

David Longenecker, Executive Director,
WICHE, *The Chronicle of Higher Education*
2/24/2006

IS this much ado about nothing or do we ignore at our peril? You decide

- Demographic changes are one piece of a complex puzzle
- Income and gender are two others that we will talk about that haven't received much attention or analysis

Things to think about today...

- What is the environment within which we operate?
- What is happening in our state and region?
- Where do our students come from (at our institutions)?
- Where do students from our state go?
- Where do non-residents come from to our schools?
- Will these changes impact career colleges, community colleges, state colleges, public flagships and different varieties of privates differently?

Things to think about today...

Context... What's happening to ALL of education?

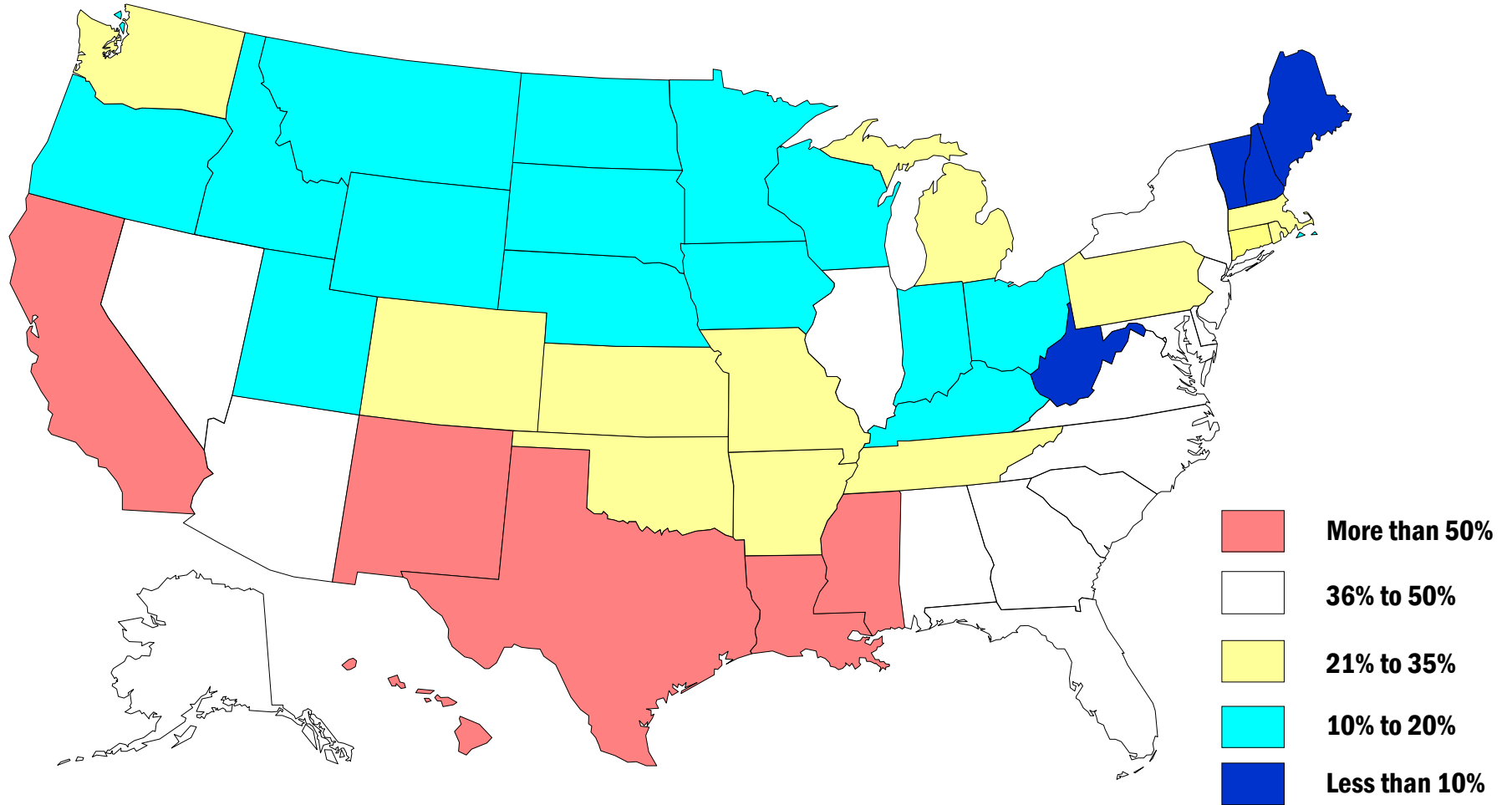
- NCLB (N\$LB) –
 - ❑ states under attack, threats to pull back federal funding
 - ❑ Pressure to allow students to transfer (what about those who can't – are they *left behind*)
 - ❑ Effects spilling over into higher education policy

The Effects of Accountability Movements and Efforts like NCLB

- Testing at the federal and collegiate level (CLA)?
- New definitions of “college material?”
- During the next two decades will access and the number of students going to college expand or will opportunities contract?

Minority School Enrollments

Source: U.S. Department of Education



Some sobering facts about schools

- Public secondary education is resegregating at accelerating rates, despite the growing minority student population across the country.
- **Nationwide**
 - 70% of Black students attend minority majority schools,
 - White students are the most segregated group, they typically attend schools where less than 20 percent of students are from other racial and ethnic groups.

Some sobering facts about schools

- **Minority schools are more highly correlated with high poverty schools;**
 - tend to have lower parental participation;
 - maintain fewer resources; and
 - have less experienced classroom teachers with higher turnover than white schools.

Source: André Bell, MRO, The College Board

Demographic changes

- First talked about in the late 70's -- higher education ignored
- Recently, College Board has been the leading voice in the discussion on the national level
 - <http://www.collegeboard.com/highered/de/index.html>
- Moody's recently published a paper

What will we look at?

- High School Graduation Projections through 2018
 - by race
 - by region
- College Going Rates by Race, Gender and SES
- Current Enrollment Patterns by State

What will we look at?

- Enrollment Patterns by Race and Gender
- Migration Data
- Public Policy Issues – recent research
- Your part -- What do we think this all means?

Policy Related Implications for Higher Education and State Policy Makers

- What can change these projections? Are there likely to be improvements or decreases in graduation rates by any groups?
- In the Northeast, maintaining market share will lead to declines in enrollment for individual institutions. Will enrollment shift sectors? How will legislatures respond to these shifts?

Policy Related Implications for Higher Education and State Policy Makers

- What are the implications for tax revenues and per capita income if the percent of college graduates decreases?
- Will new populations of students graduate in the same patterns as their predecessors? (Majors, time to degree, students and sports?)
- Do our faculty and staff reflect mirror the new demographics? How will that affect our ability to recruit and retain students?

Challenges of the Perfect Demographic Storm

- How can we reduce barriers to college access for low-income and minority students?
 - Improve K-12 preparation
 - Admission and financial aid policies and processes
 - Improve Retention
- If we succeed, how will we find adequate funding (Federal, State, Institutional) to support increasing financial need?

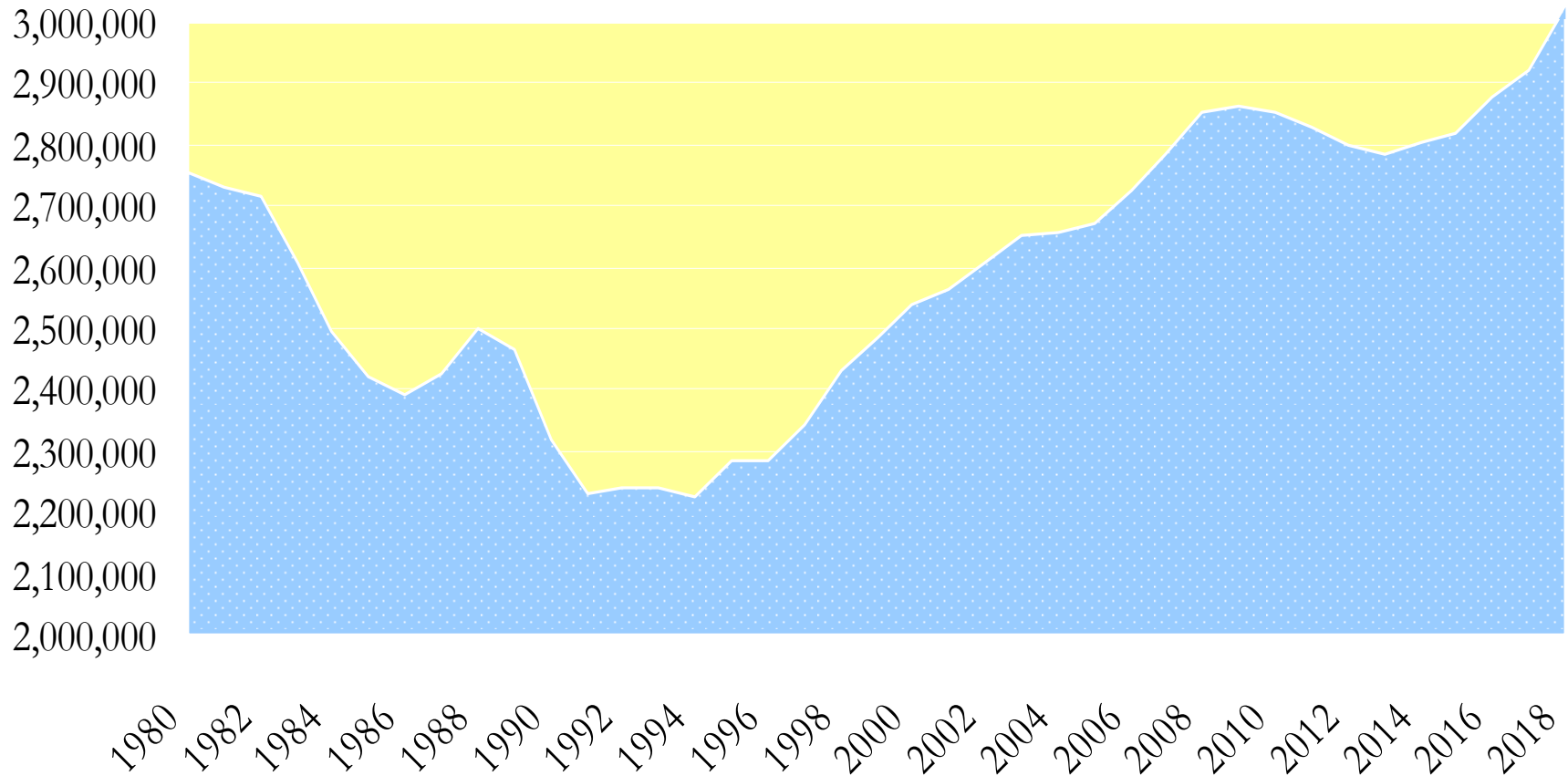
WICHE Projections

- Public and Non-public high school graduation data since 1960
- Actual from 87-88 through 01-02
- Projections from 01-02 to 2017-18
- Included details descriptions and formulas of the ‘aging’ process as well as detailed notes by state

WICHE Data

- Historical and projection tables for **public schools** with total births, public enrollments by grade, and high school graduates, including progression ratios;
- Historical and projection tables for **each racial/ethnic group** with births, public enrollments by grade, and high school graduates, including progression ratios;
- Historical and projection tables for **nonpublic schools** in each state with total births, nonpublic enrollments by grade, and high school graduates, including progression ratios;
- **Detailed notes** for each state explaining the sources of the historical data that underlie the projections and the methods used to generate the projections.
- Historical and projection tables for **income brackets** in each state with public enrollments by grade and high school graduates, including progression ratios.
- Projections extend to the year 2017-18. Birth data are from the National Center for Health Statistics' *Monthly Vital Statistics* reports providing final birth data for each year. Enrollment and graduate data are collected primarily from the state education agencies. When state data were incomplete, other sources were used and are detailed in the notes for each state.

Number of Public High School Graduates Peaks and Valleys ...

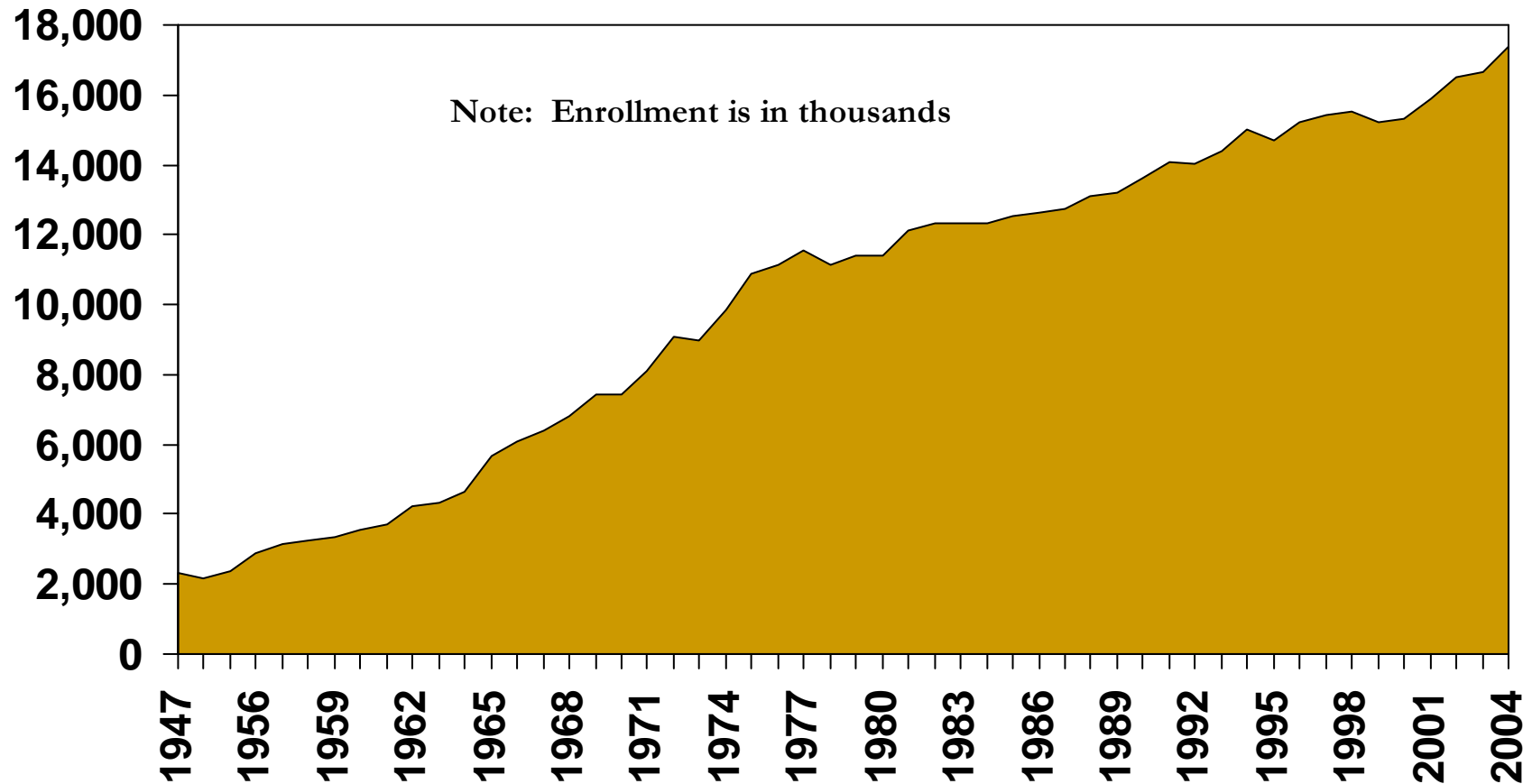


Source: WICHE/The College Board

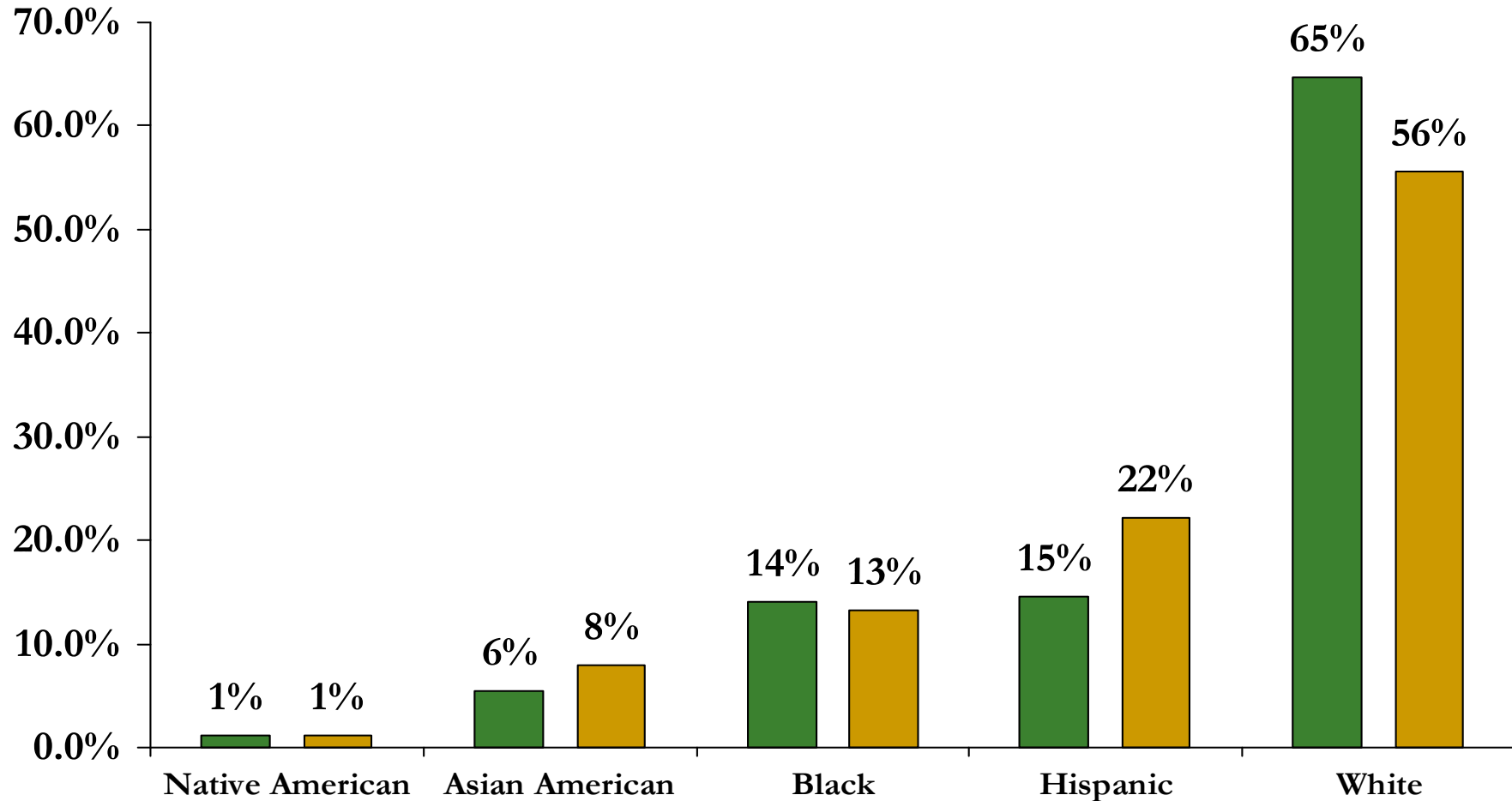
College 'bubble' is about to burst (Philadelphia Inquirer – 7/31/2006)

- *Administrators at local private institutions as diverse as Chestnut Hill College, Drexel University, St. Joseph's University, and two-year Harcum College in Bryn Mawr say they already are preparing for the coming shortage. In an effort to maintain the dramatic enrollment gains they've made, many are extending their recruiting efforts to faster-growing states, as well as adopting new academic programs to appeal to a wider pool of students.*

Enrollment at colleges and universities: 1947 to 2004 (Census Bureau)

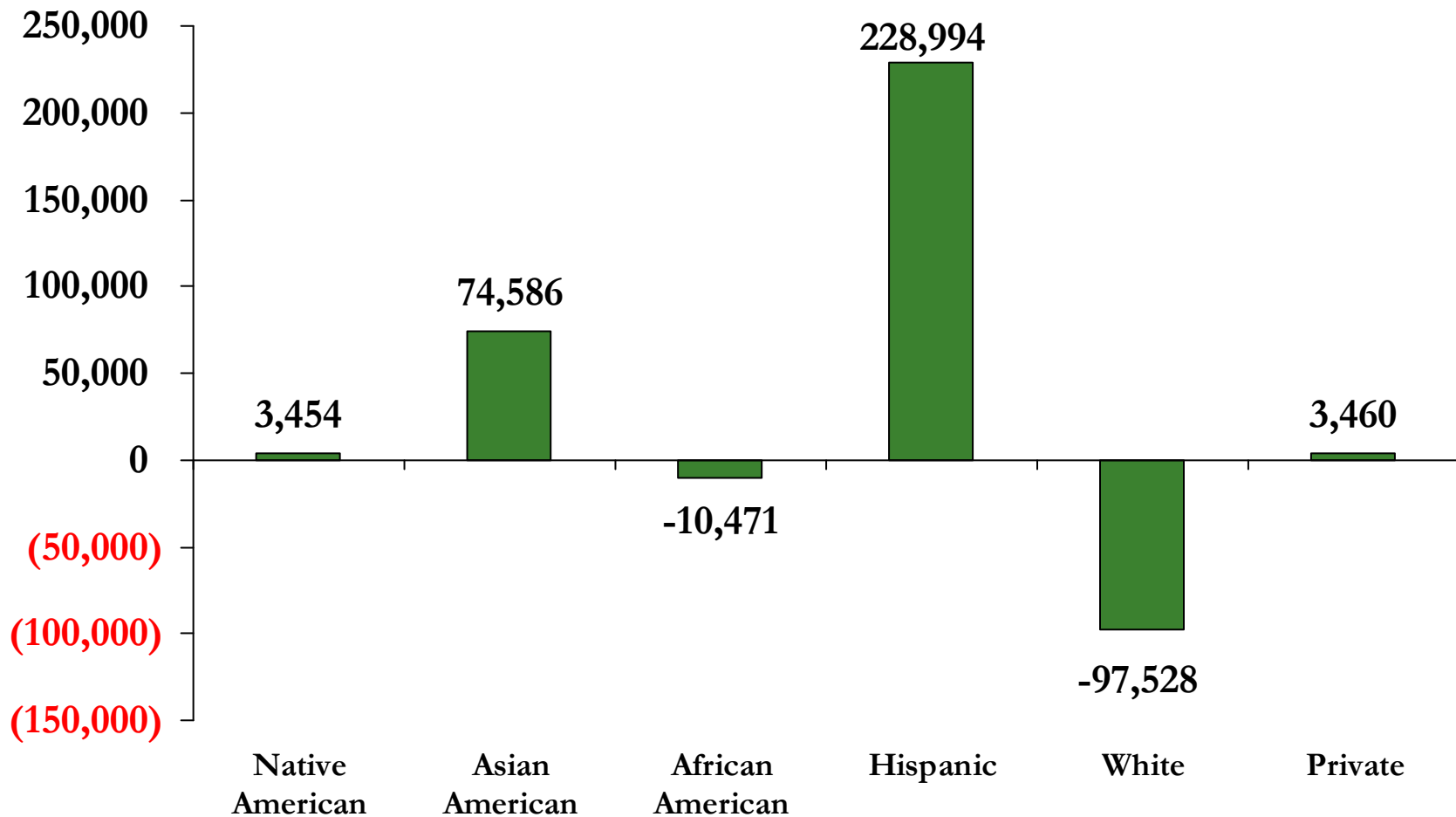


Projections of HS Graduates in the United States

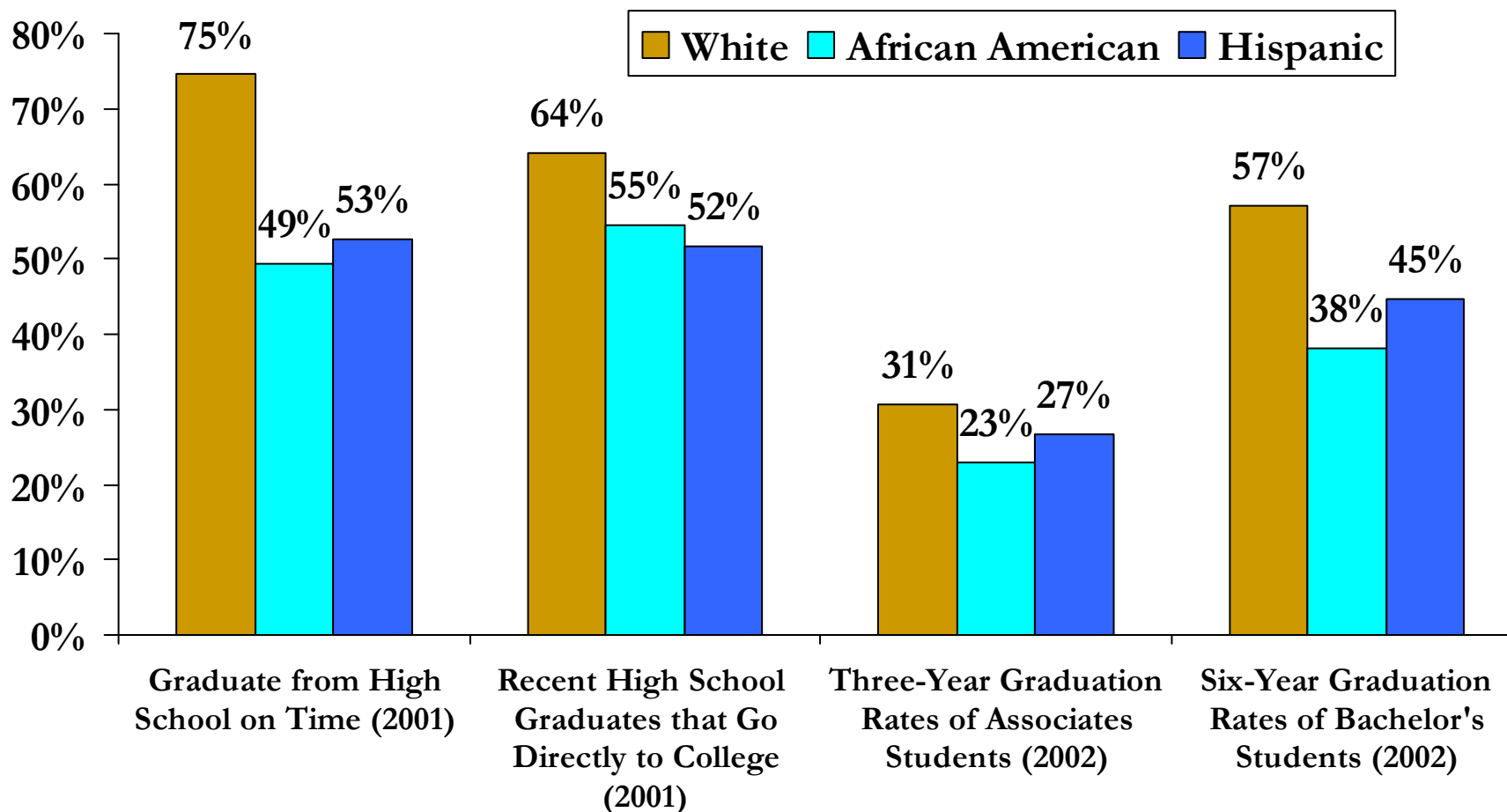


Projections of HS Graduates

United States: 2006-07 to 2017-18



Transition and Completion Measures from High School to College



Tomás Rivera Study

18-24 year old California Latinos

- 400 person sample
- 200 who had never attended college and 200 who had attended college
- Interviews were in English and/or Spanish
- Sample representative of Latinos in US except over 75% were HS graduates
- Median income was \$25,000 to \$35,000
- 83% US born
- 72% had at least one foreign born parent

Tomás Rivera Study

18-24 year old California Latinos

- 98% said it was important to have a college education
- **38% did not feel the benefits outweighed the costs**
- Not being able to work and incurring debt were opportunity costs associated with attending college

Tomás Rivera Study

18-24 year old California Latinos

- Over 50% erroneously thought you had to be a US citizen to apply for financial aid
- Few respondents could accurately estimate the cost of attending either UC or Cal State Univ – most overestimated the cost
- There is a lack for familiarity with Cal Grants and federal grants

Tomás Rivera Study

18-24 year old California Latinos

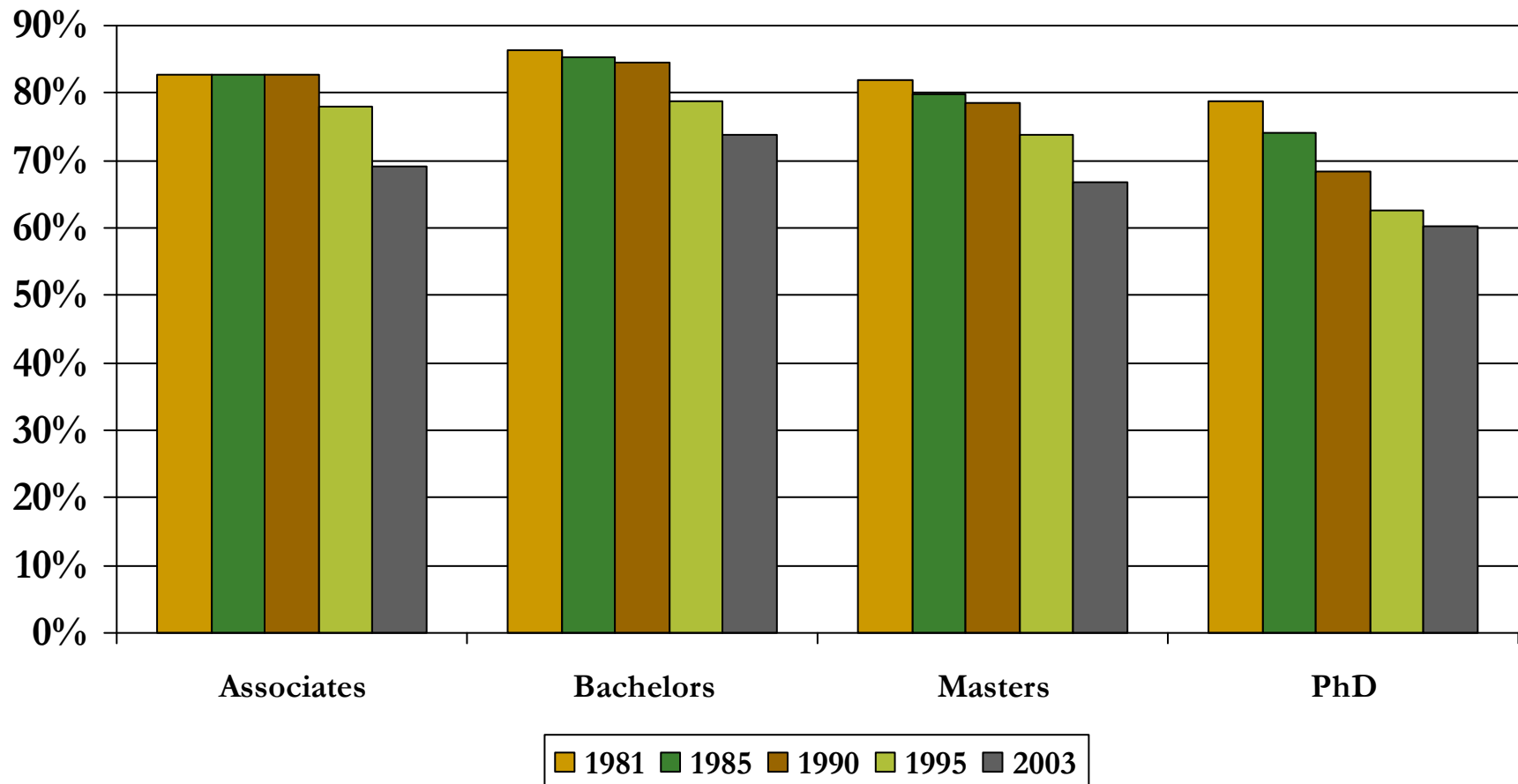
- Almost 25% thought loan availability was contingent on grades
- 30% would use a commercial bank as the source of their loan (Aspire)

“Perceptions of College Financial Aid Among California Latino Youth”

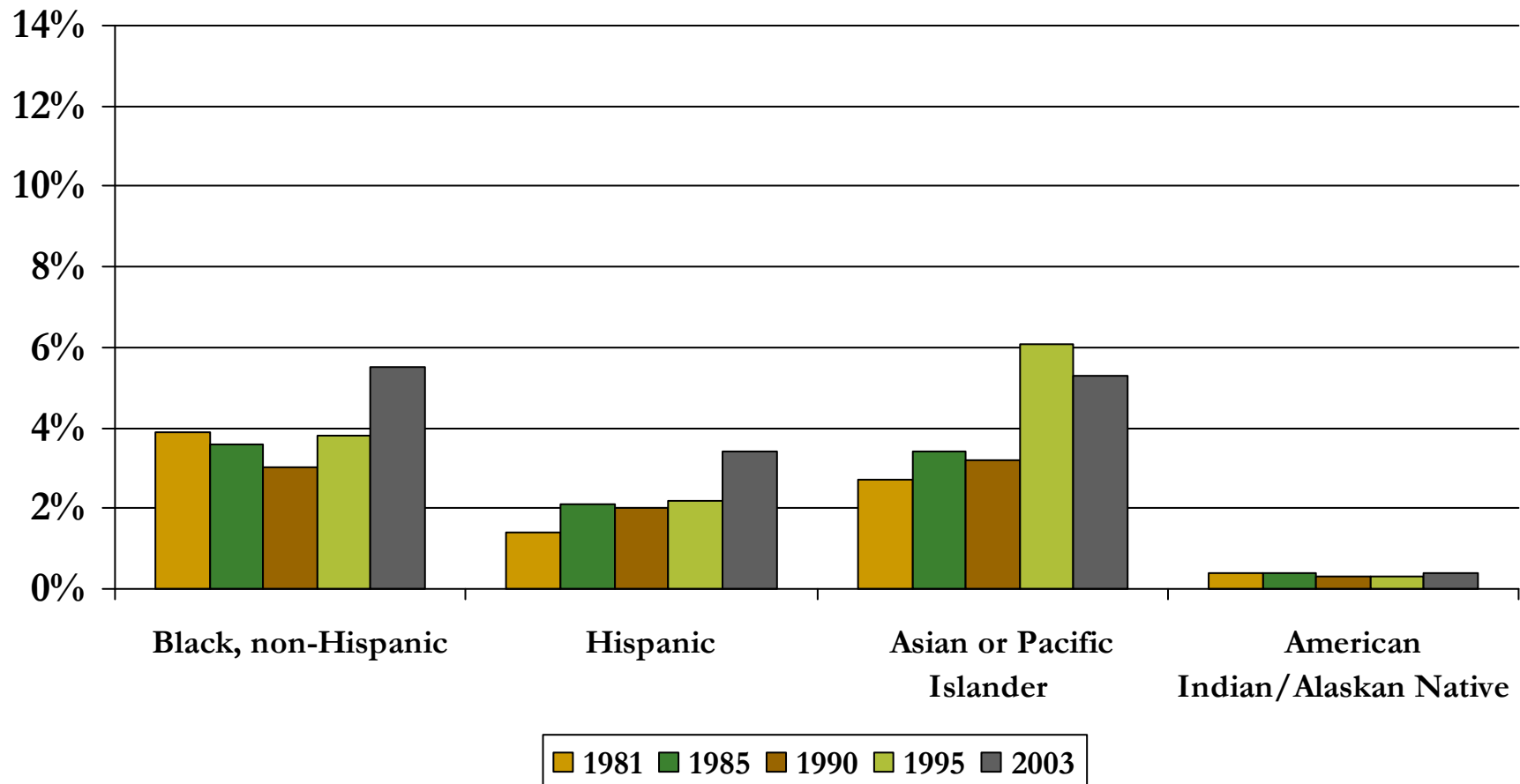
Implications

- Explaining the benefits of higher education will continue to be a challenge, especially when recruiting students with no family history
- Opportunity costs are an impediment to many families
- Cost perceptions will continue to hamper colleges ability to recruit
- Need to better explain financial aid eligibility

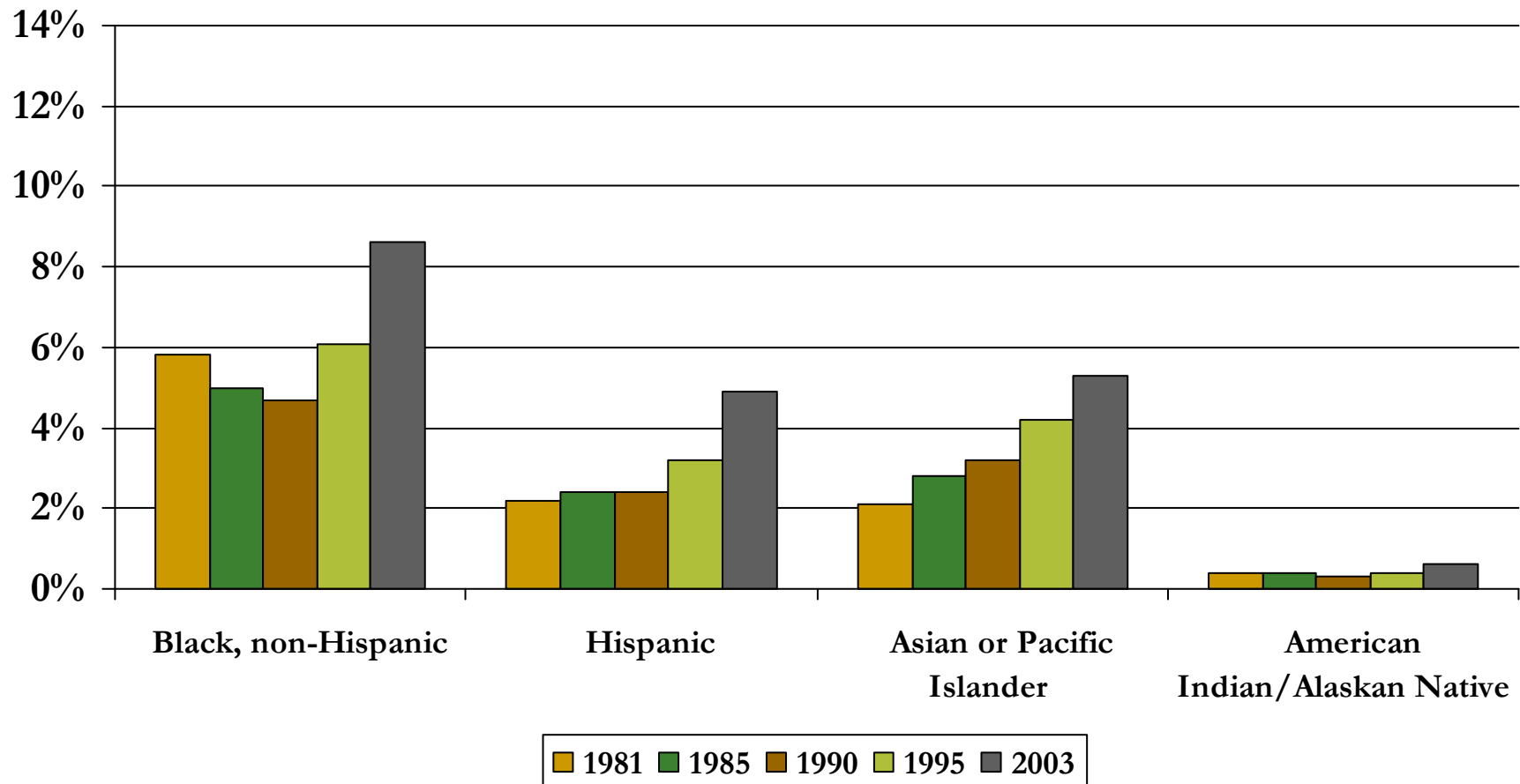
White, Non-Hispanic Degree Attainment



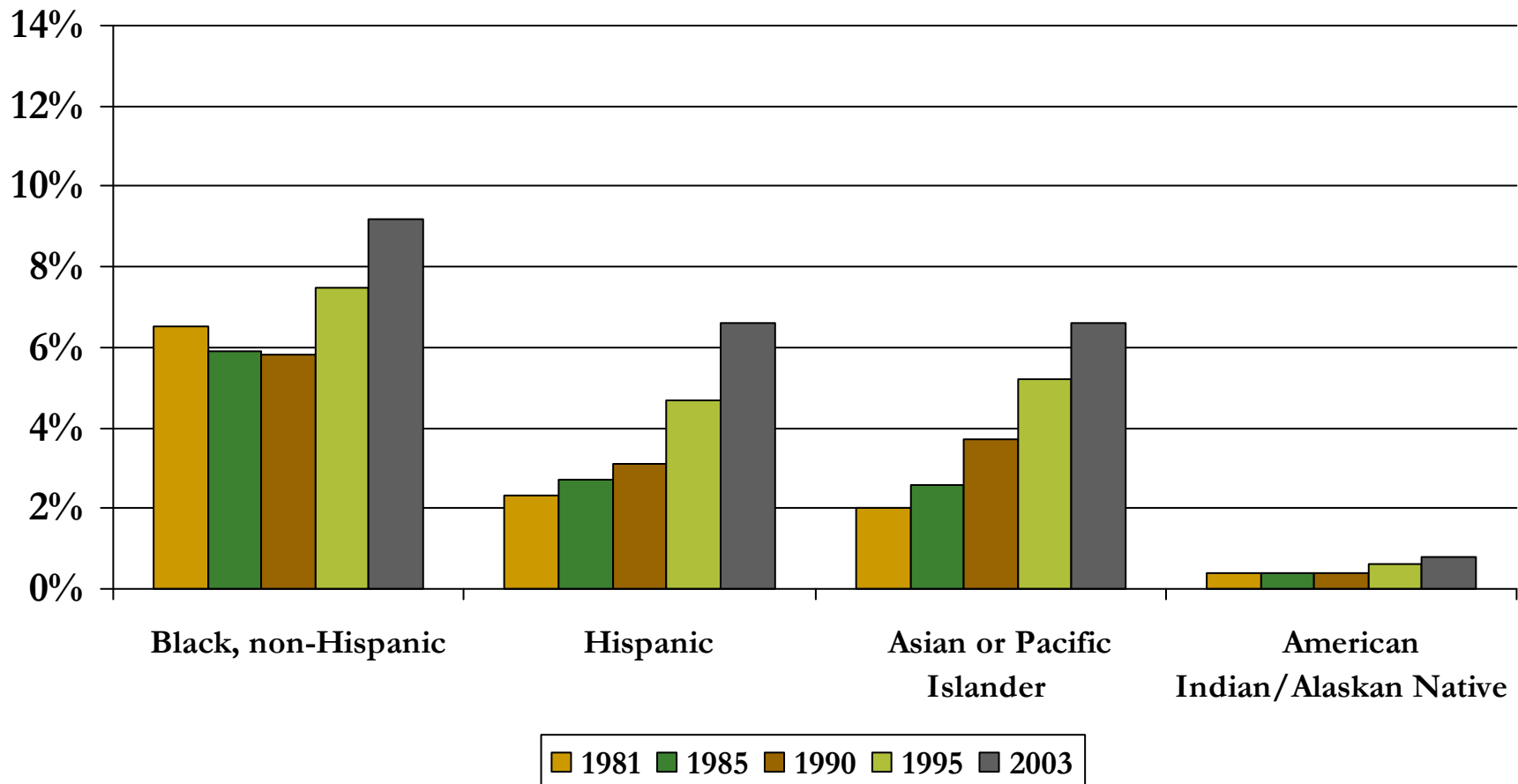
PhD's Awarded by Race



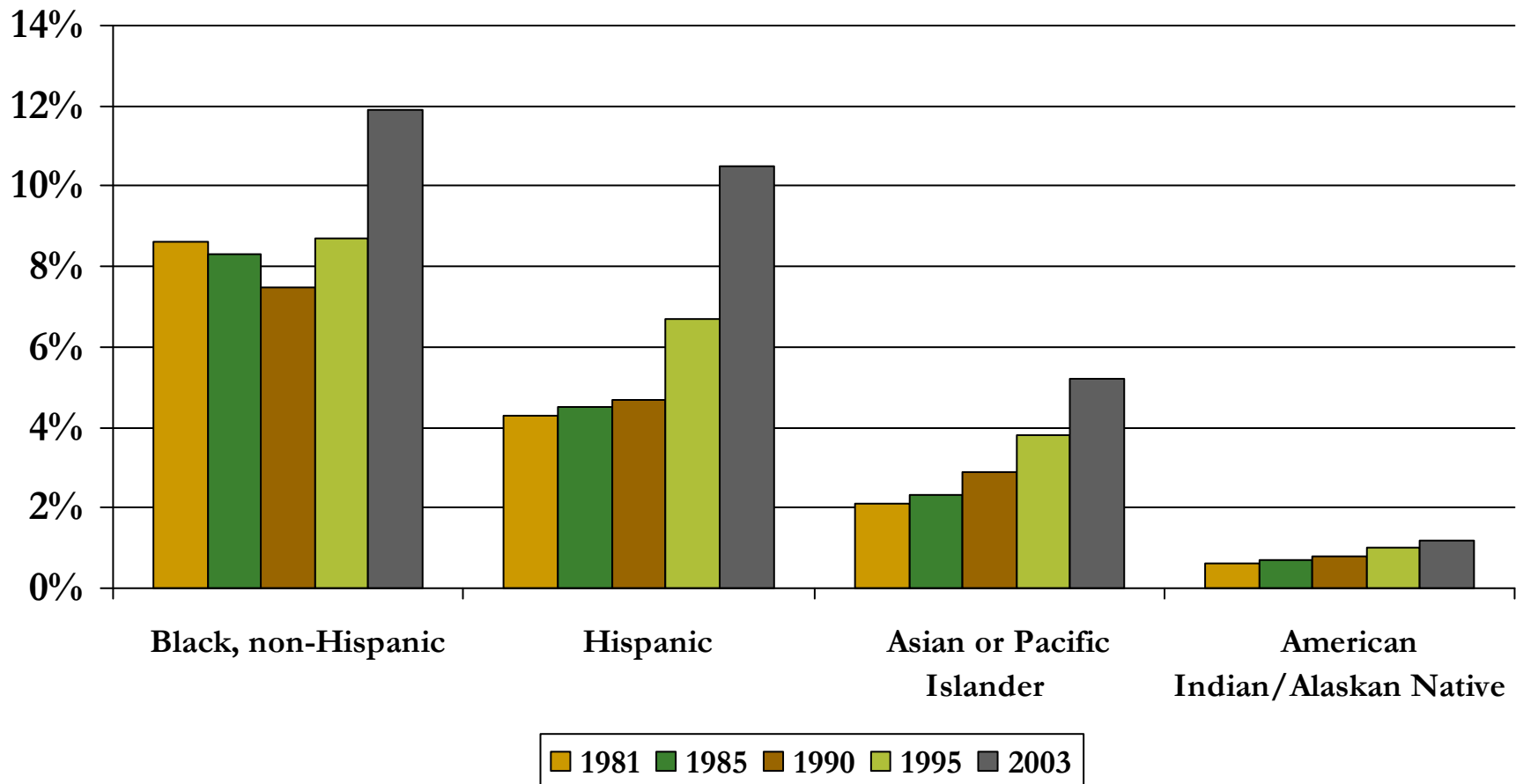
Master's Degrees Awarded by Race



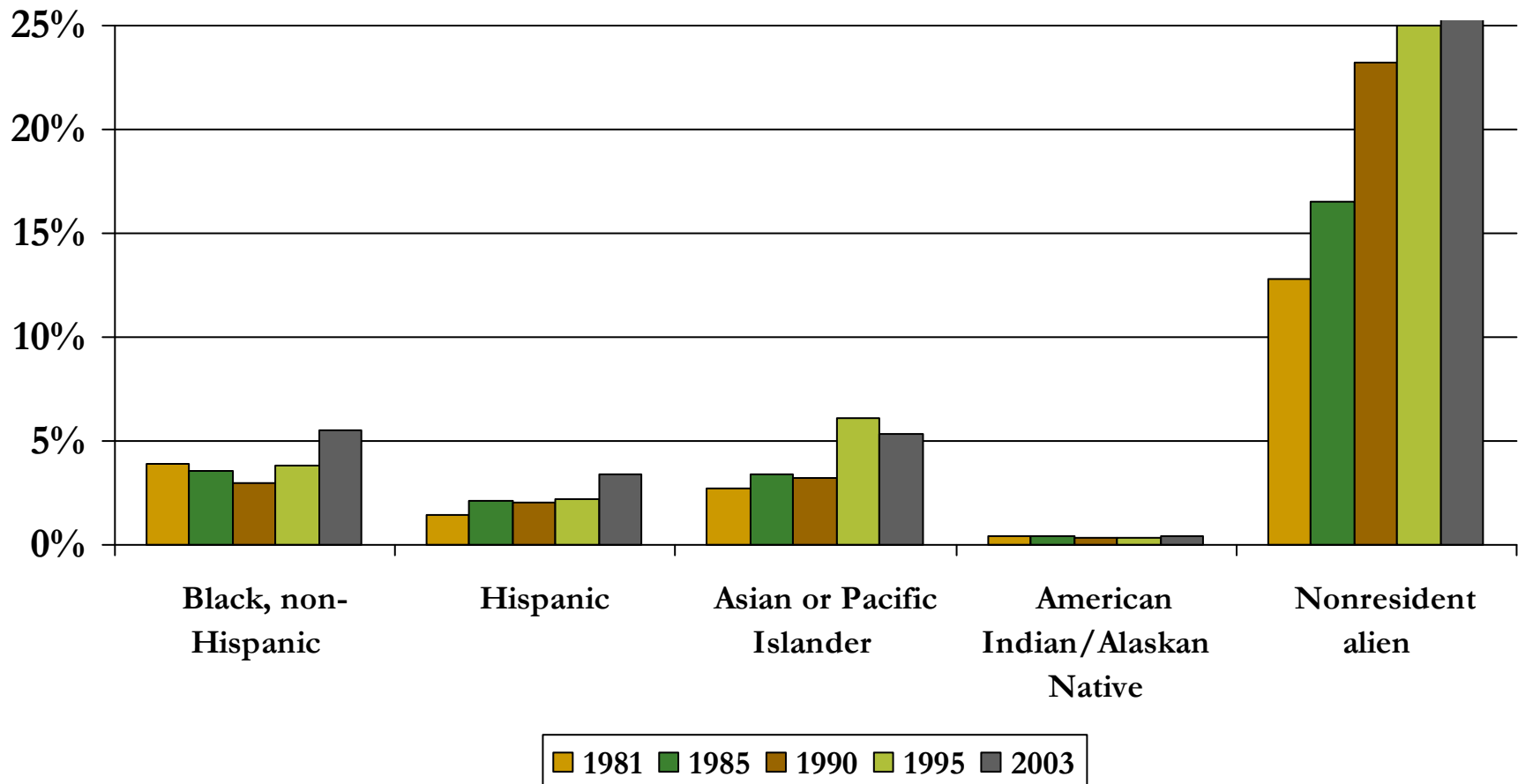
Bachelor's Degrees Awarded by Race



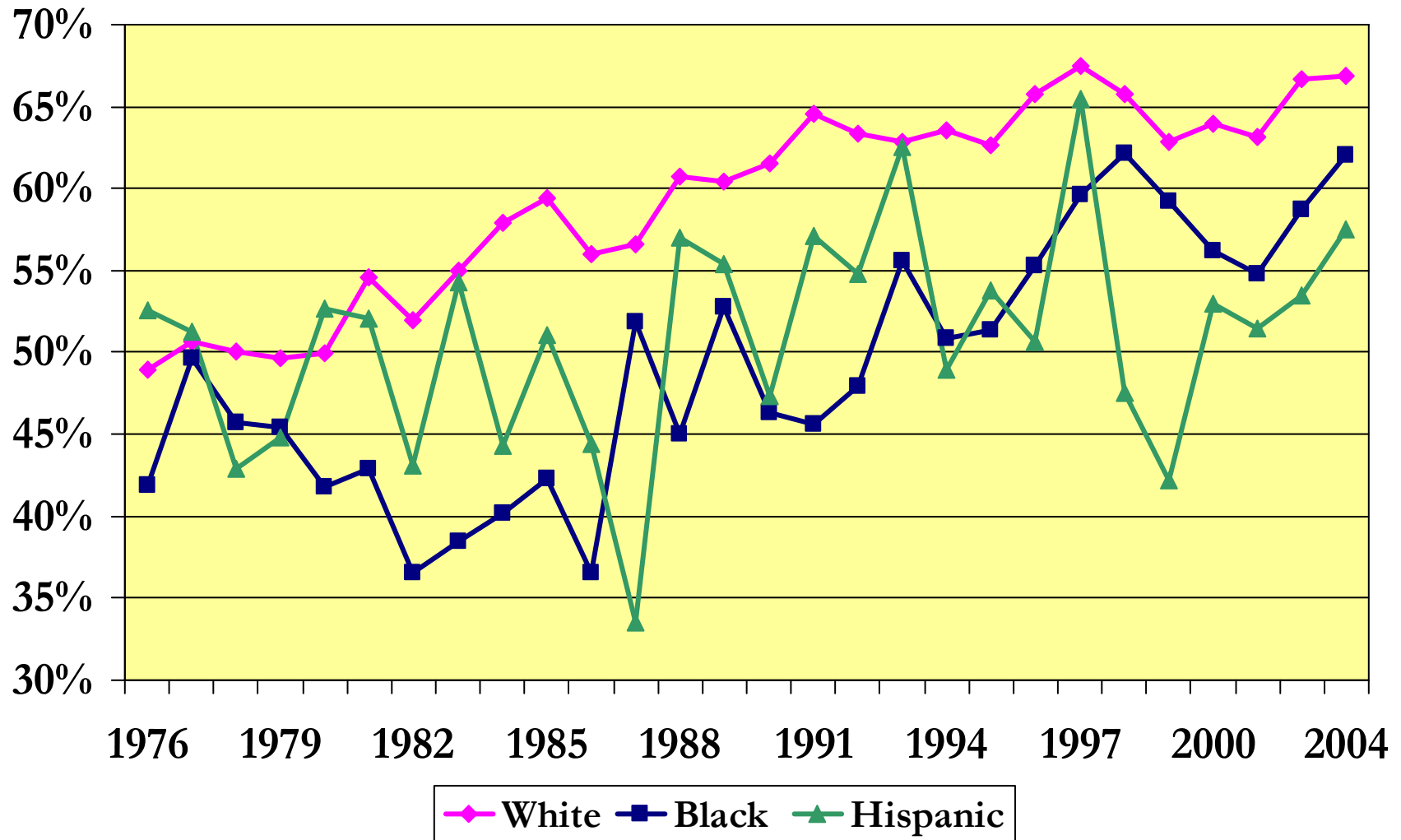
Associate's Degrees Awarded by Race



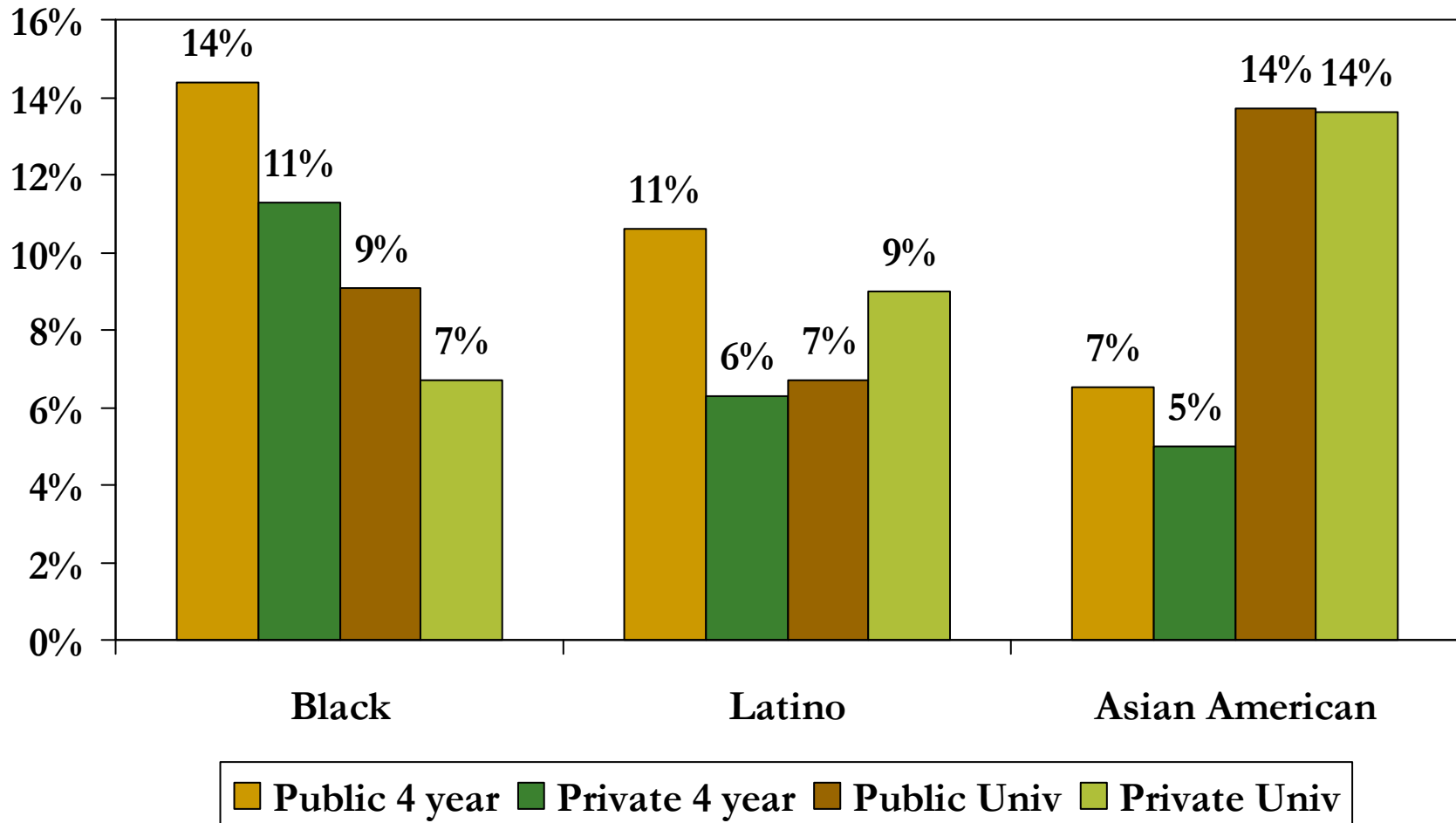
PhD's Awarded by Race



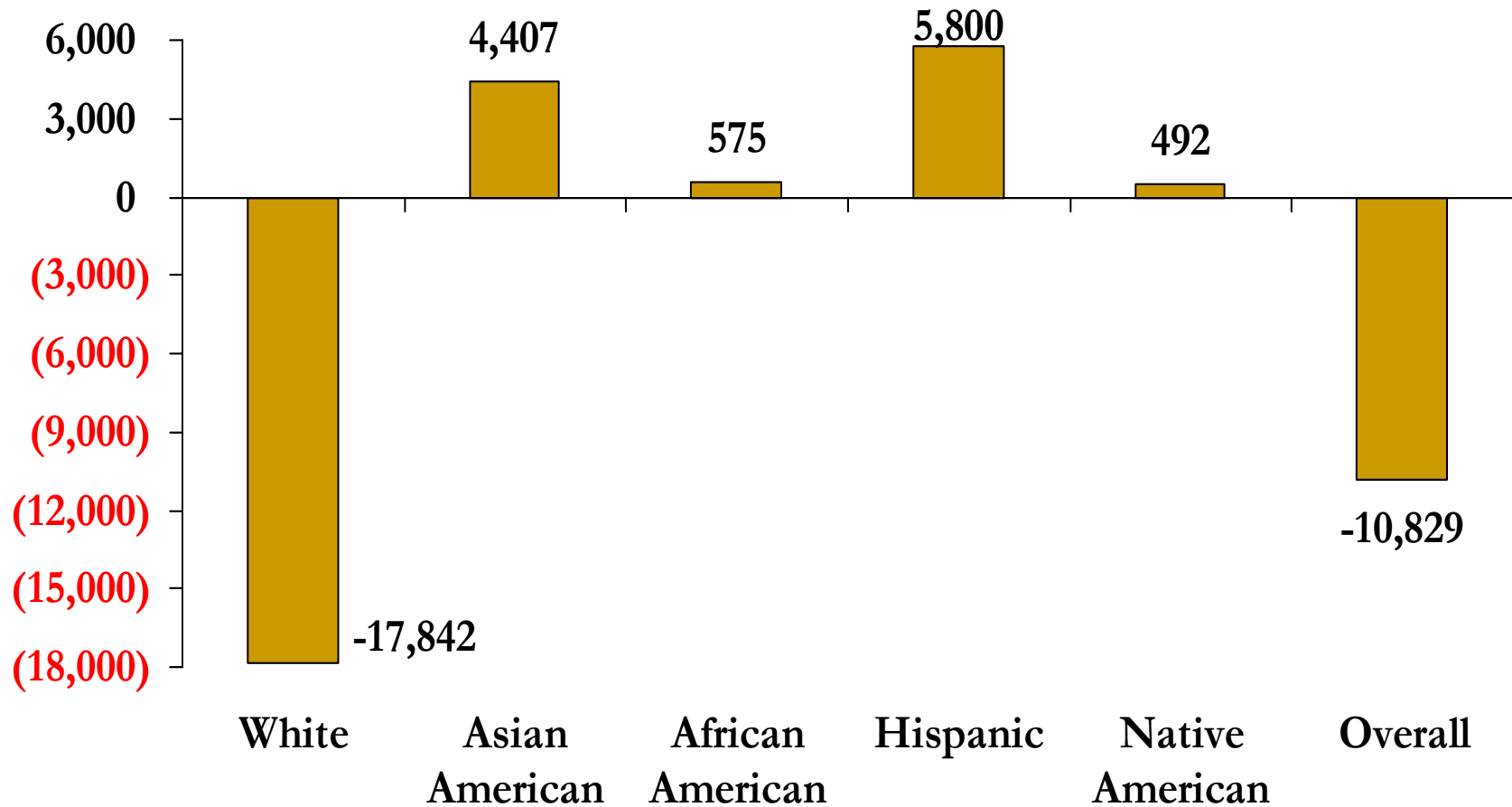
College Continuation Rates



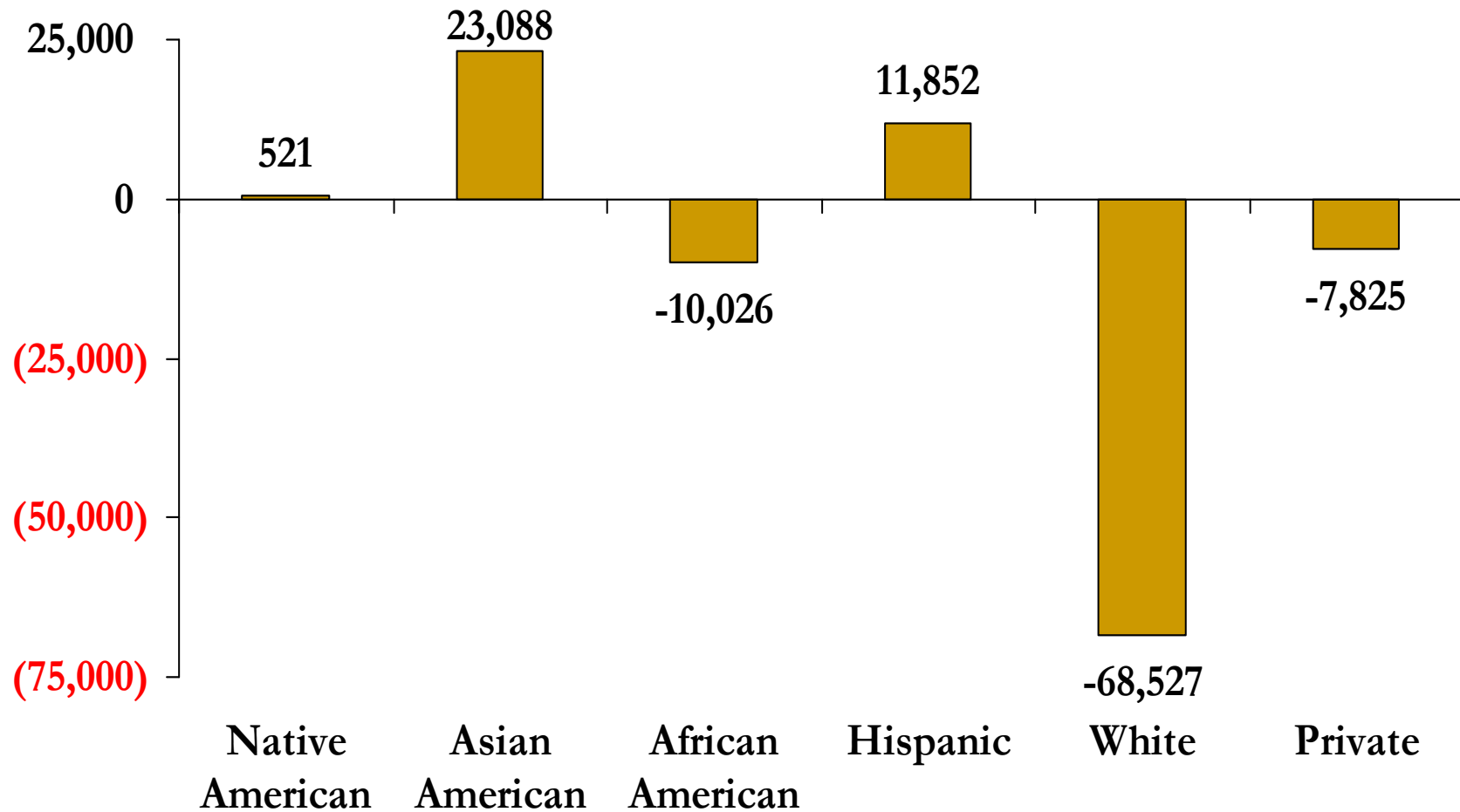
Fall 2005 Freshmen Enrollment by Race – Four-Year Colleges (CIRP)



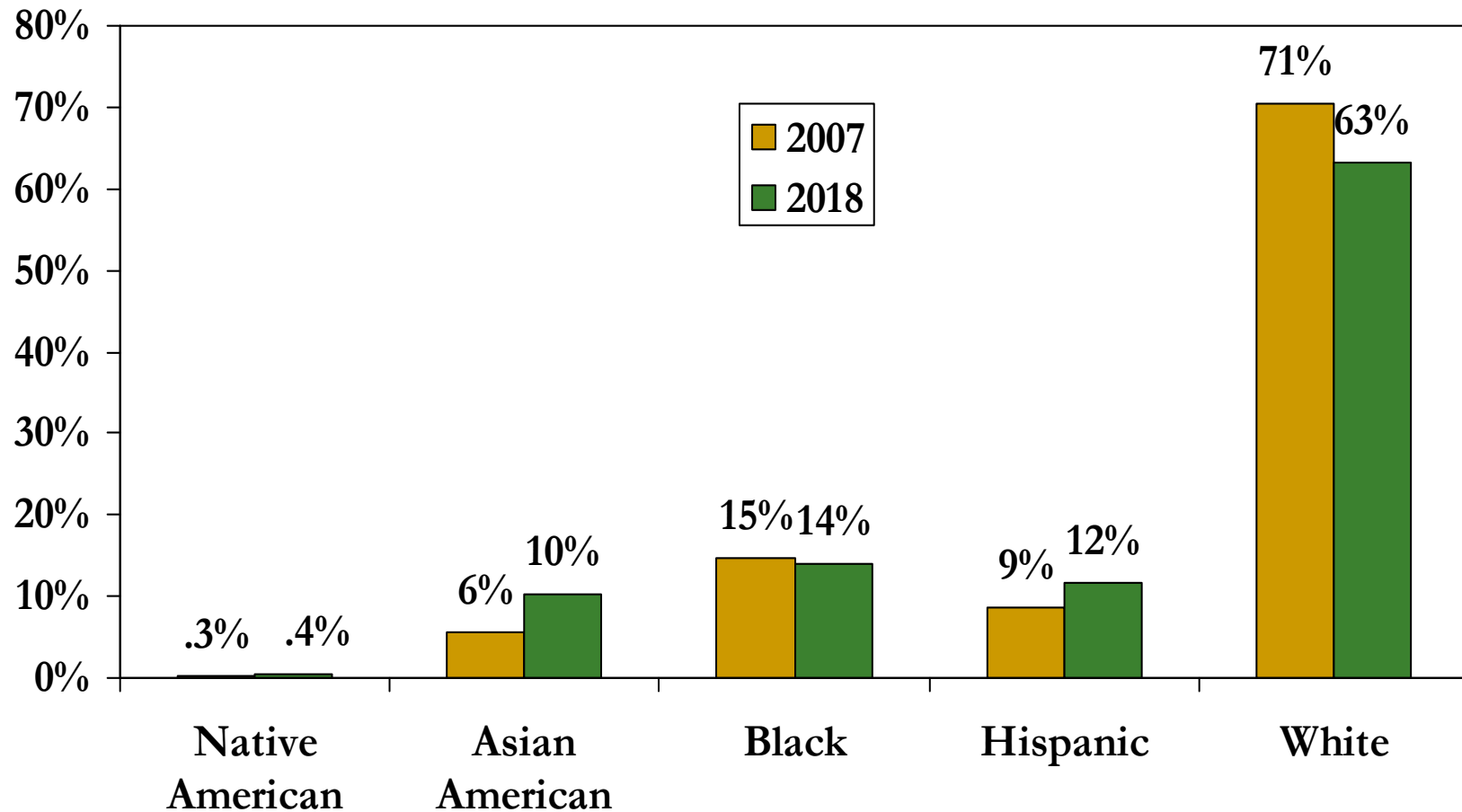
NE HS Graduates: Changes in actual numbers from 2006 to 2018



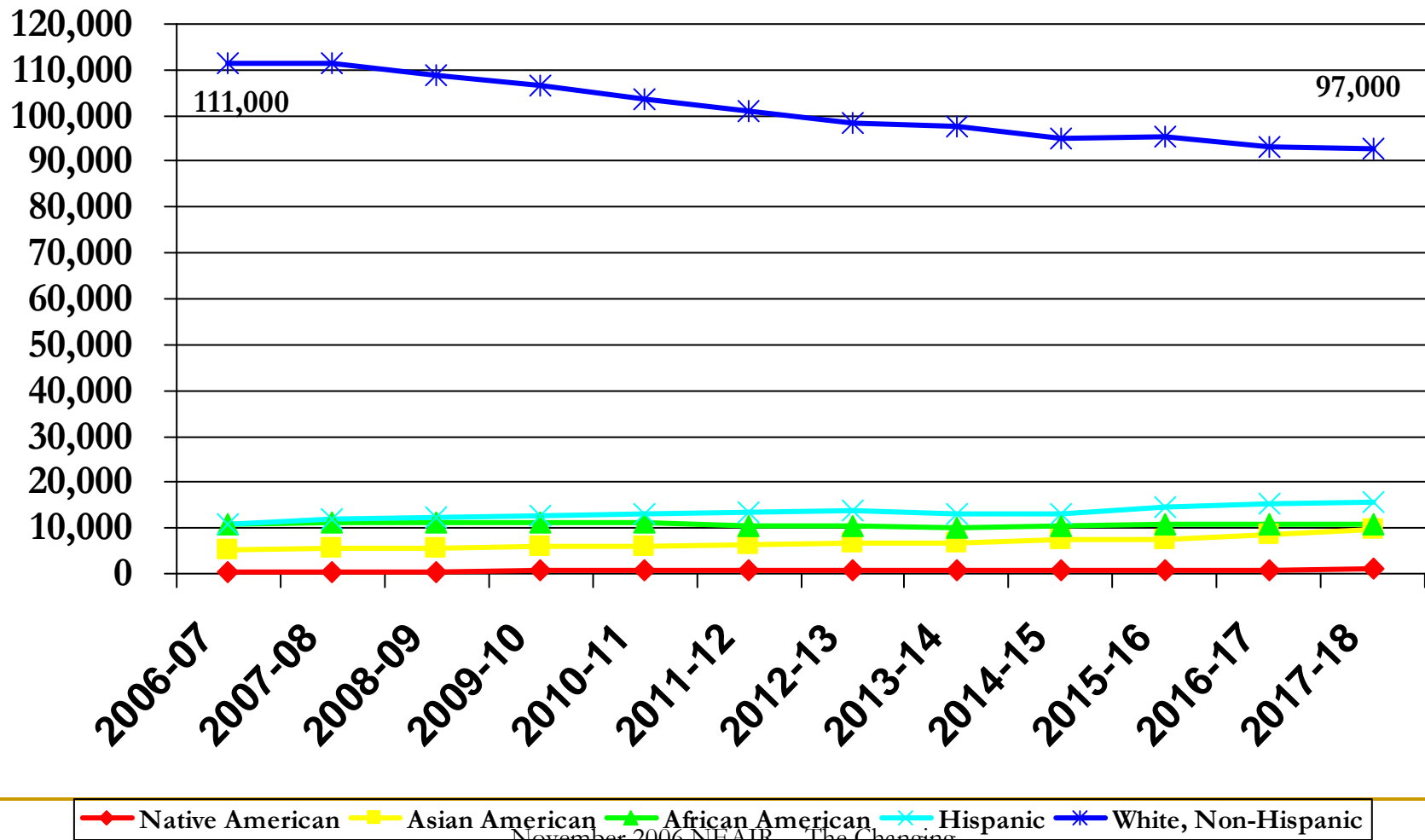
Northeast HS Graduates: Changes in actual numbers from 2006-07 to 2017-18



Changes in HS Graduates in the Northeast: 2006-07 to 2017-2018

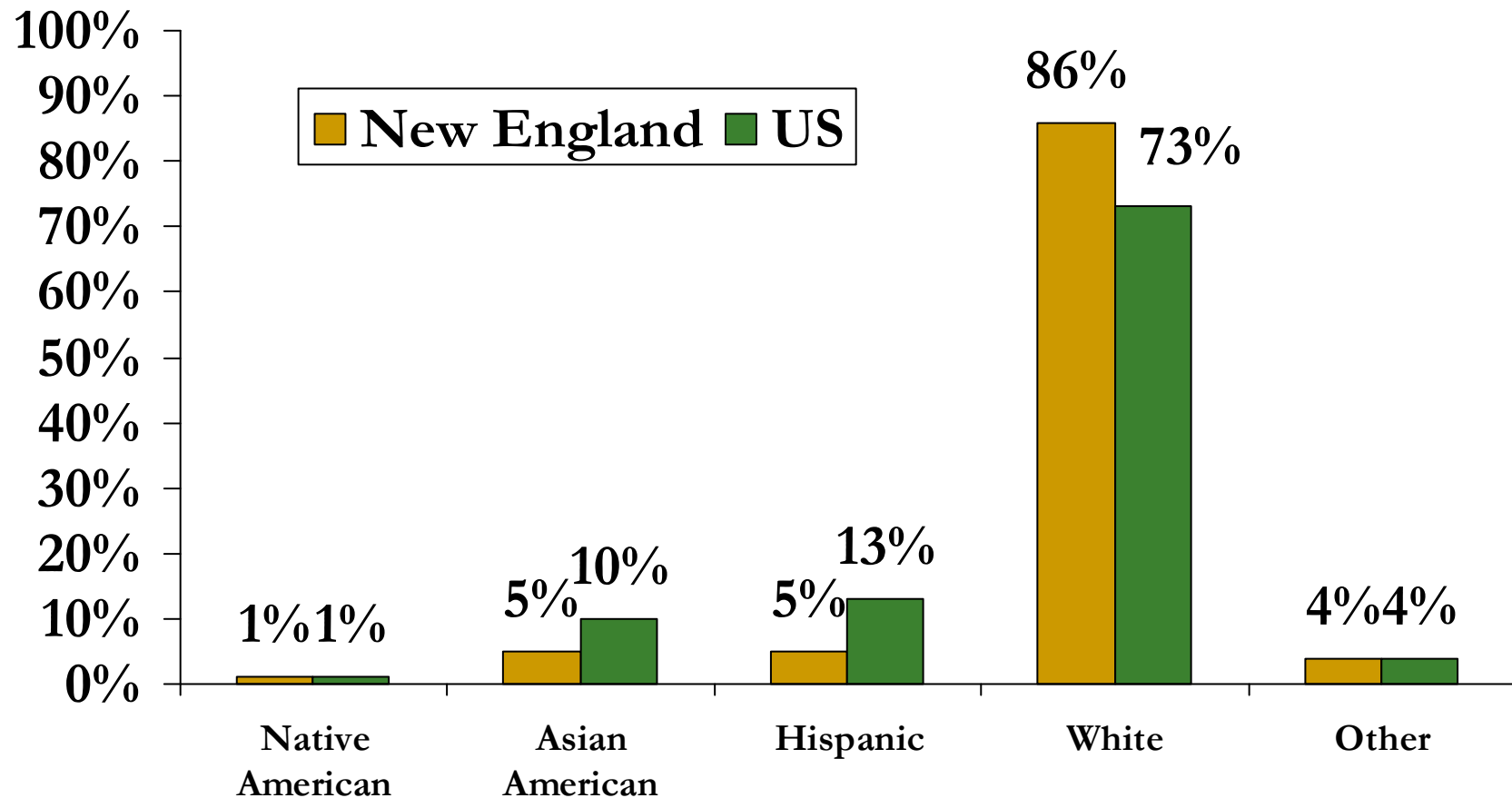


HS Graduates in New England



November 2006 NEAIR - The Changing Demographics of Higher Education

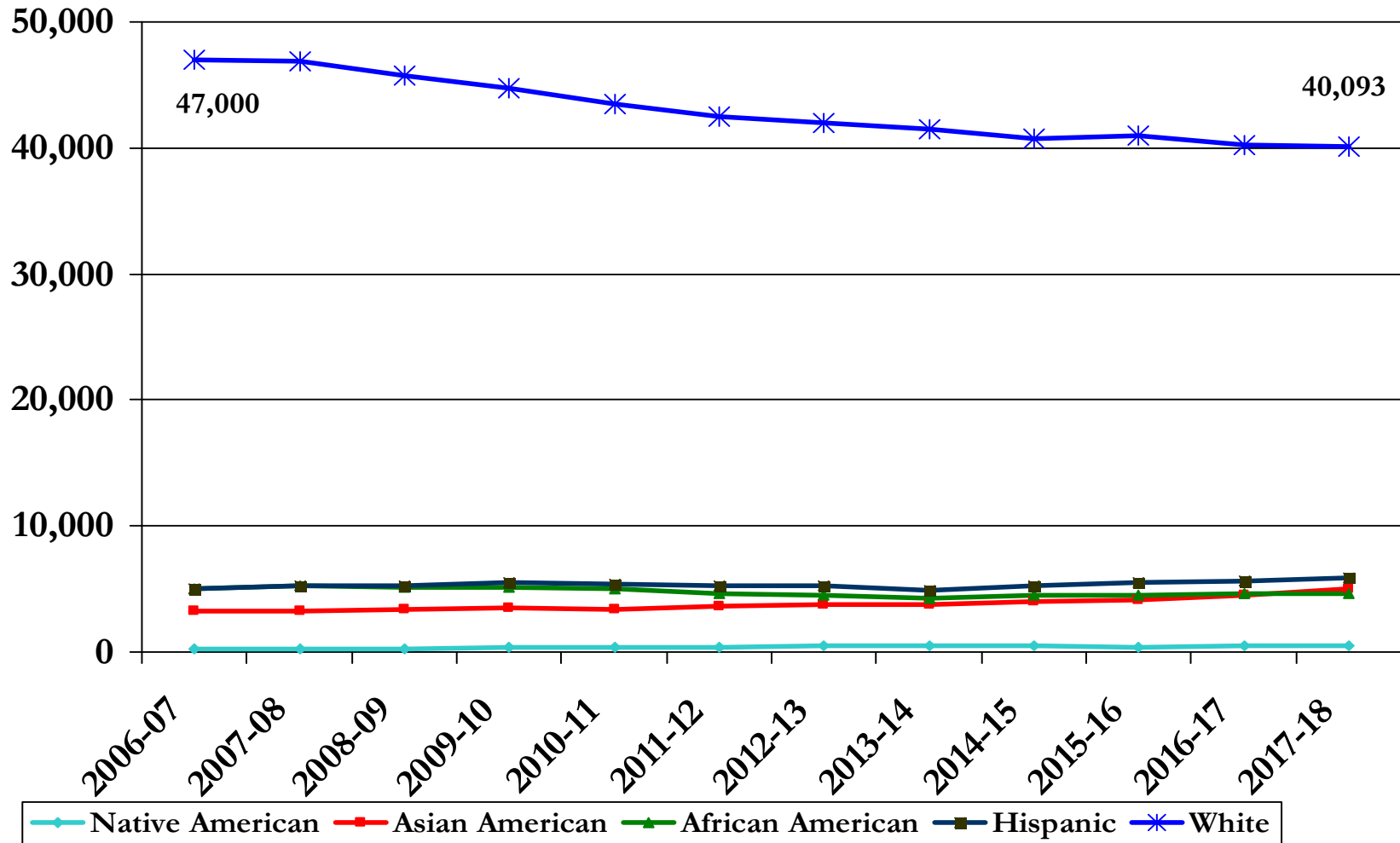
SAT Takers by Race/Ethnicity



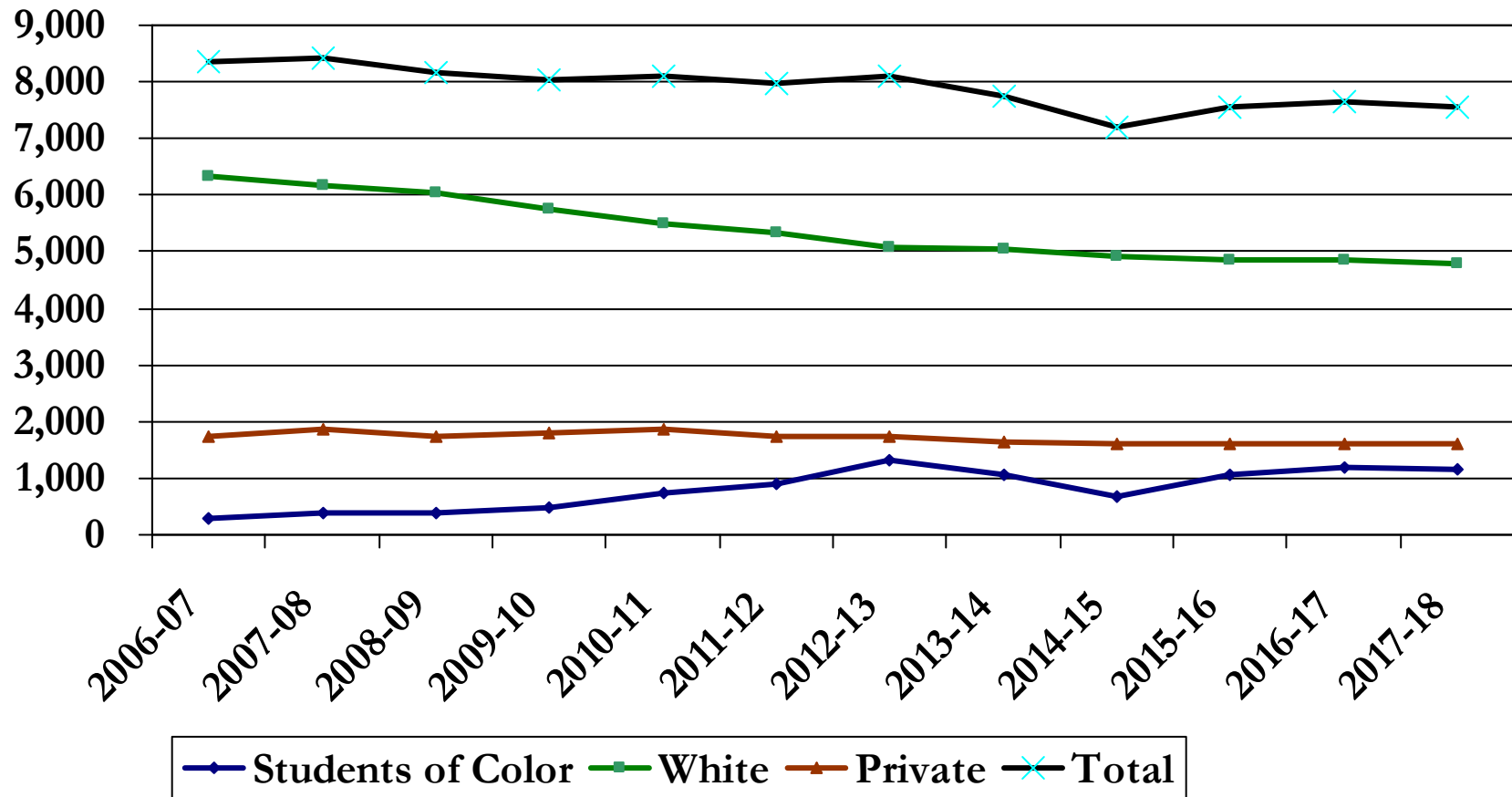
Participation by Low-income

- All New England states above the national average of 25%
- Lowest rates are in the south and west

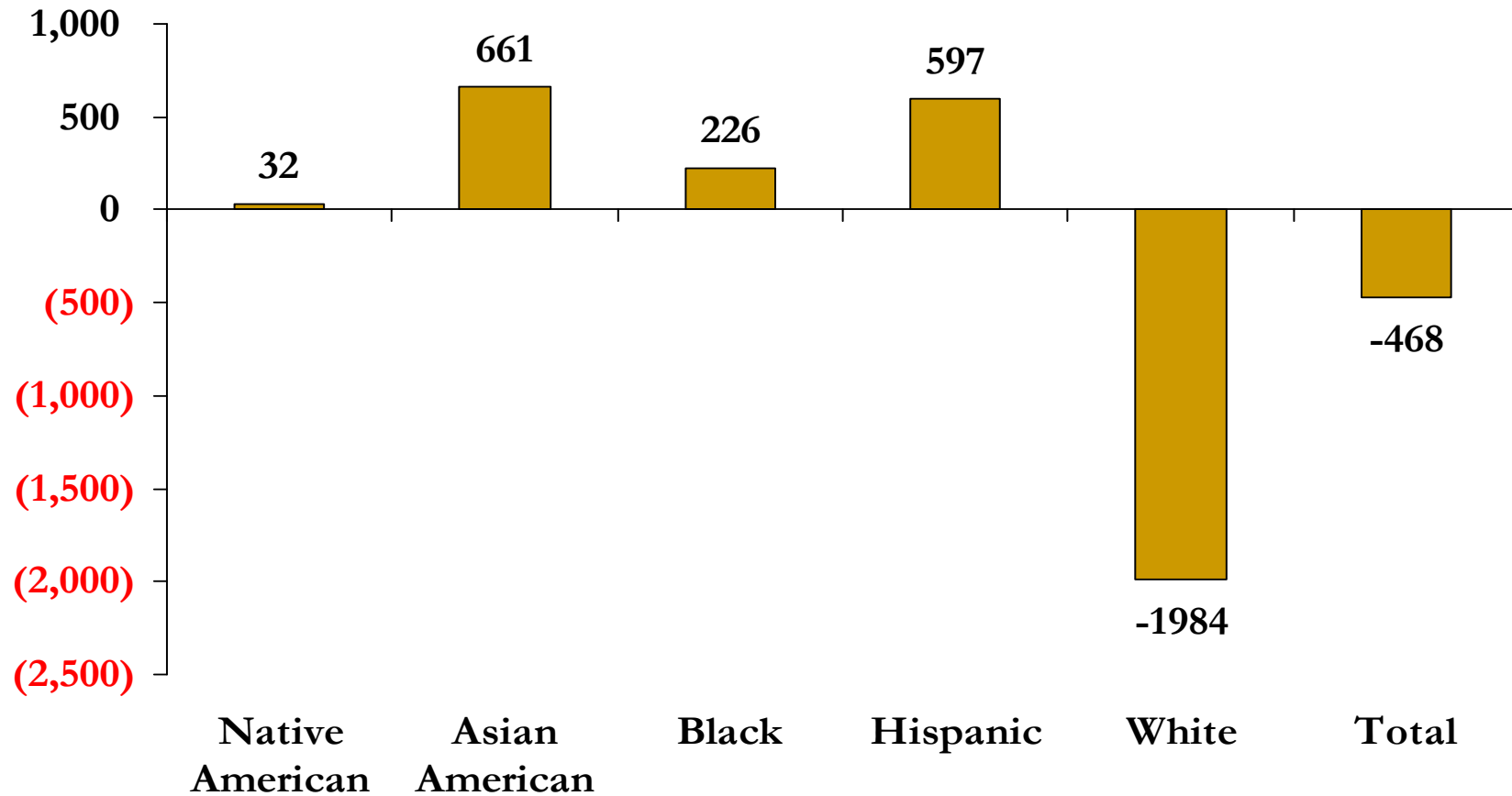
HS Graduates in Massachusetts



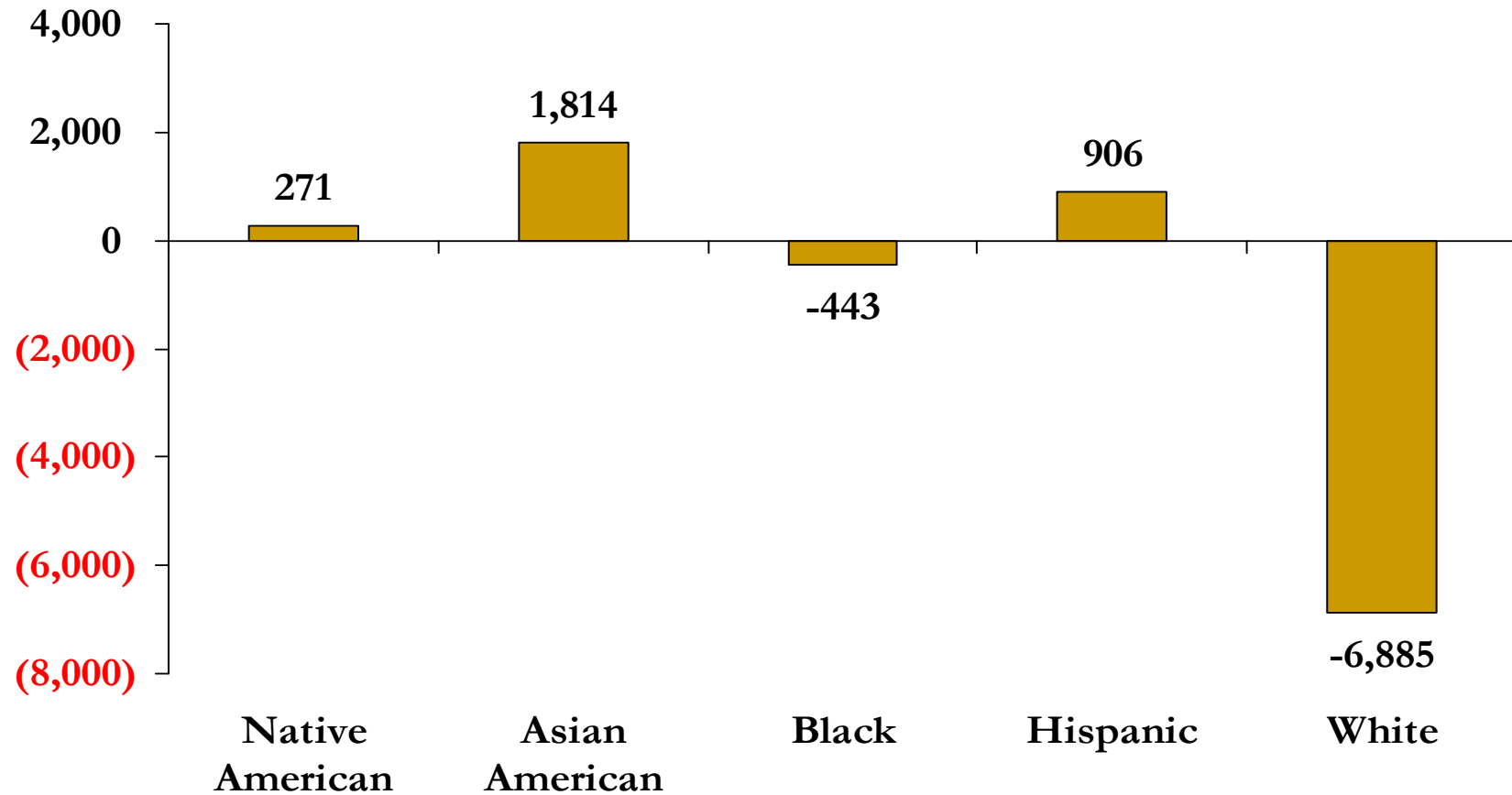
Projections of HS Graduates in Vermont: 2006-07 to 2017-18



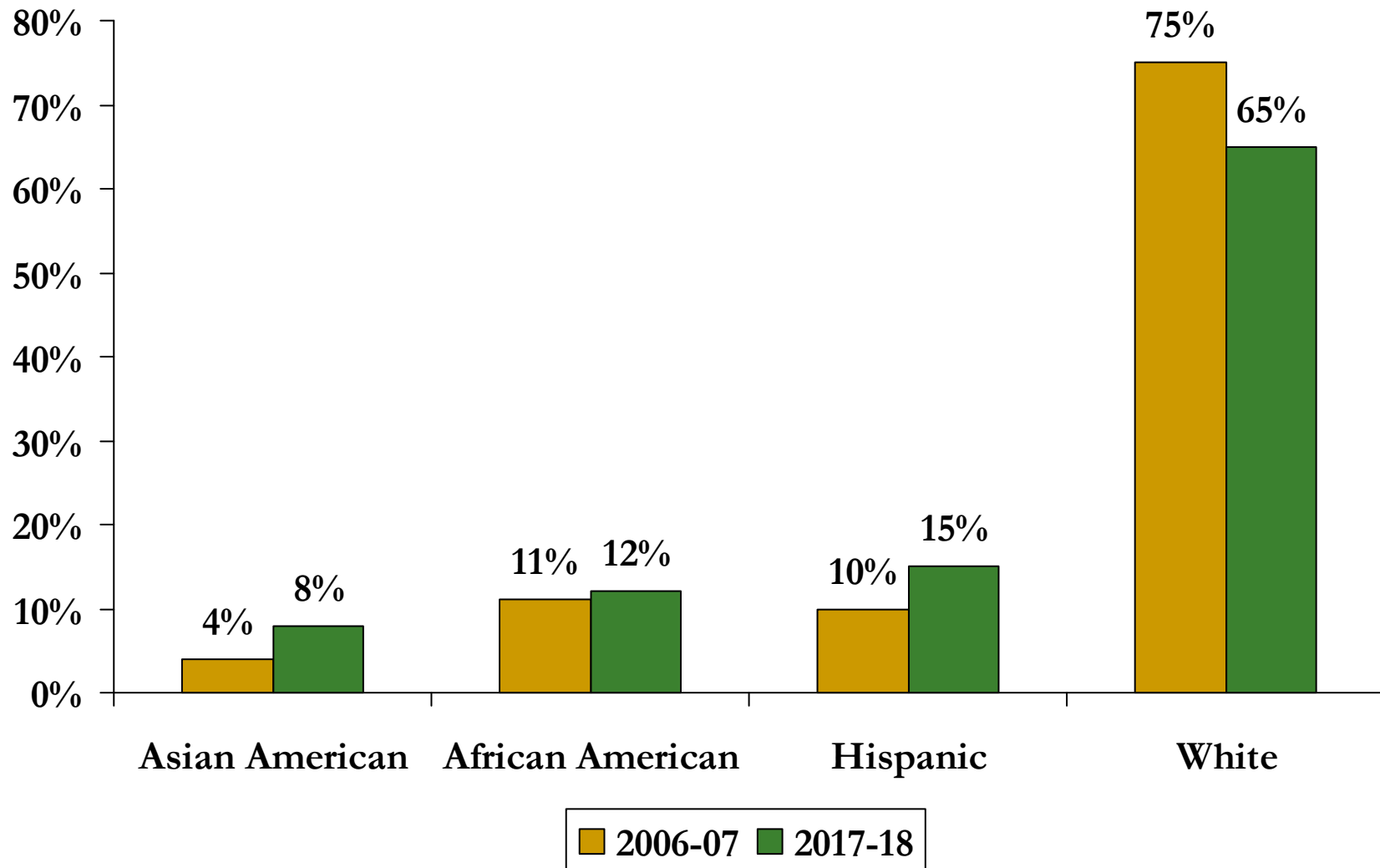
HS Graduates in NH: 2006-07 to 2017-18



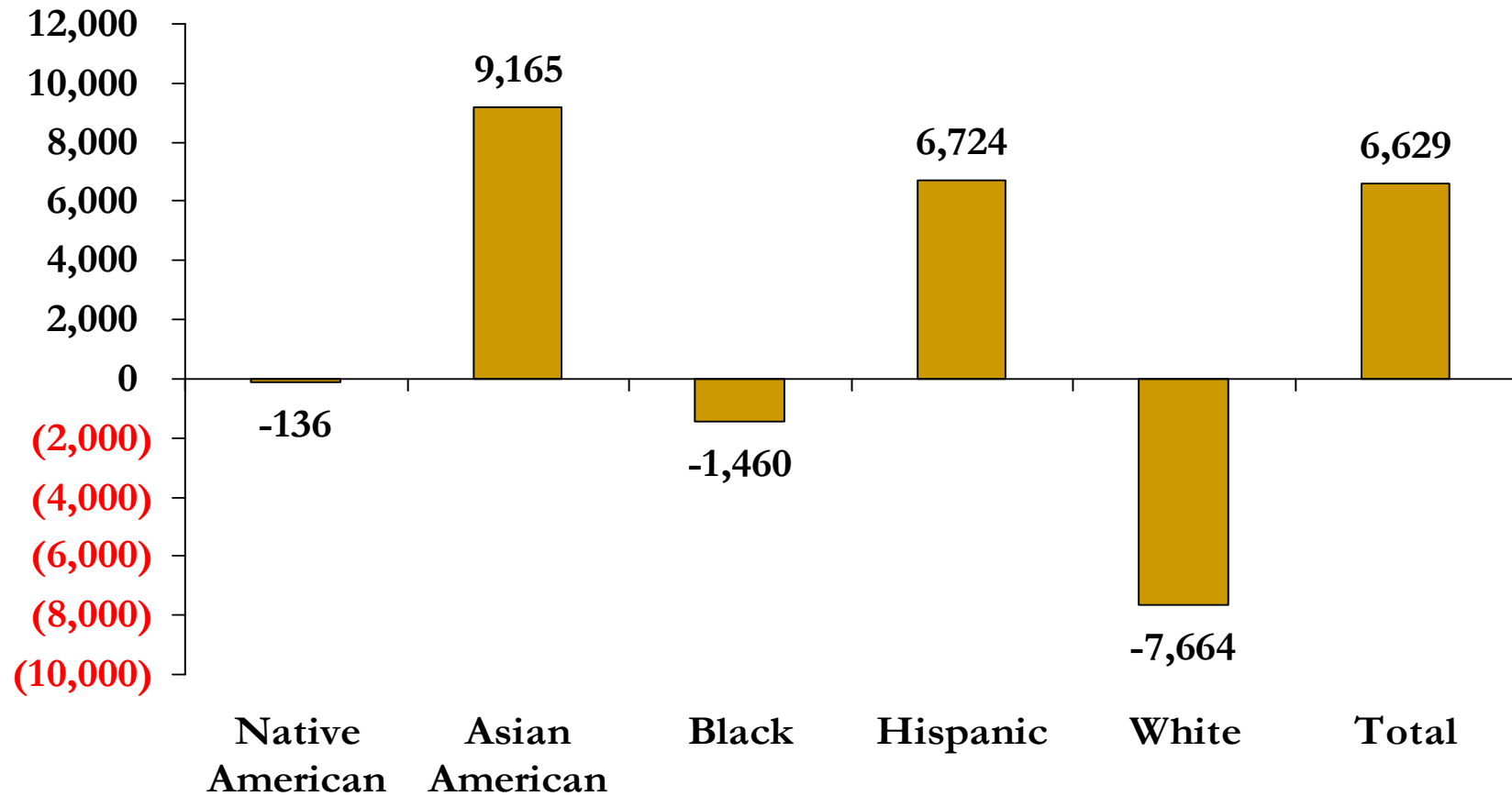
HS Graduates in Massachusetts: 2006-07 to 2017-18



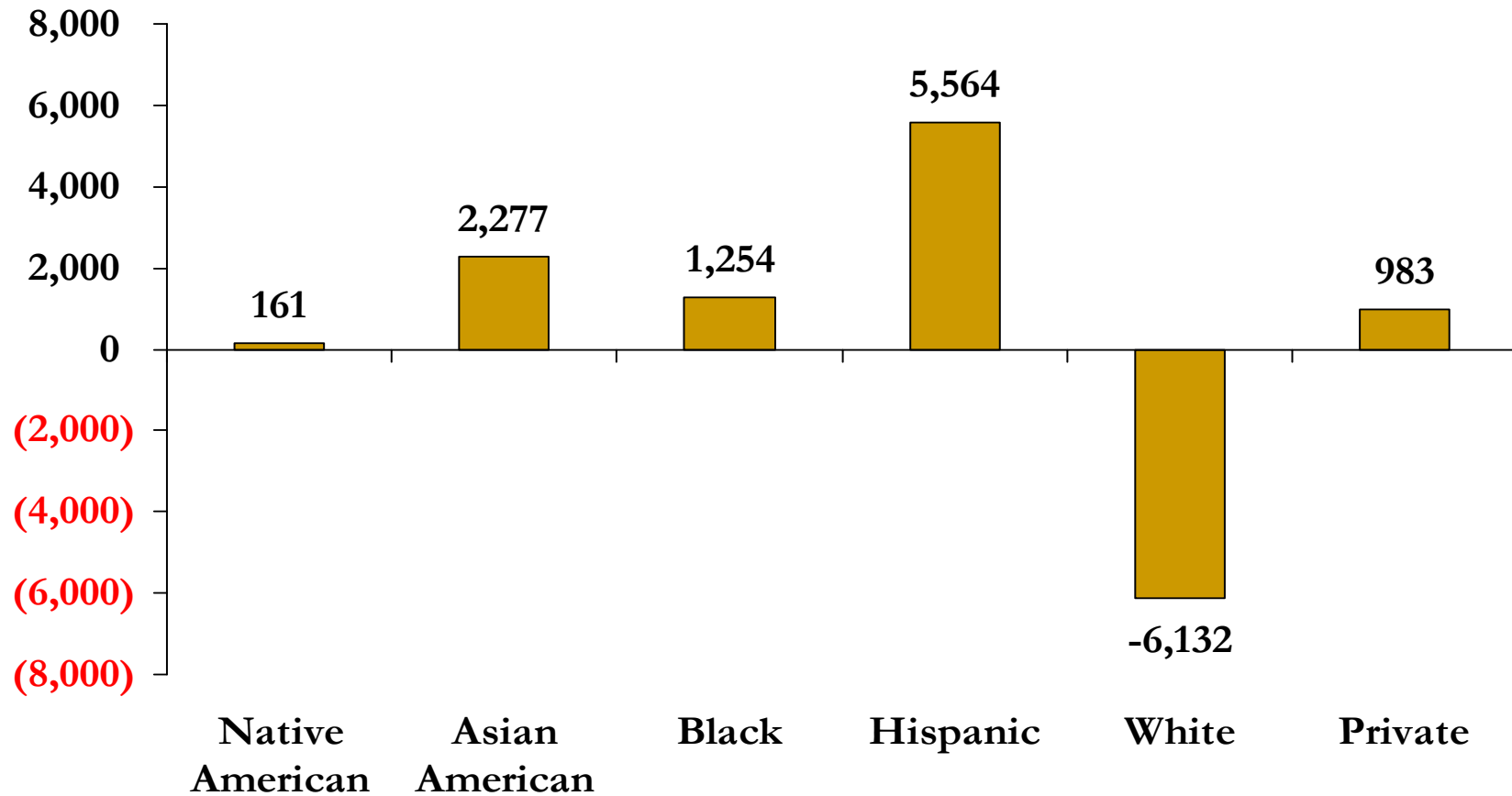
HS Graduates in Connecticut



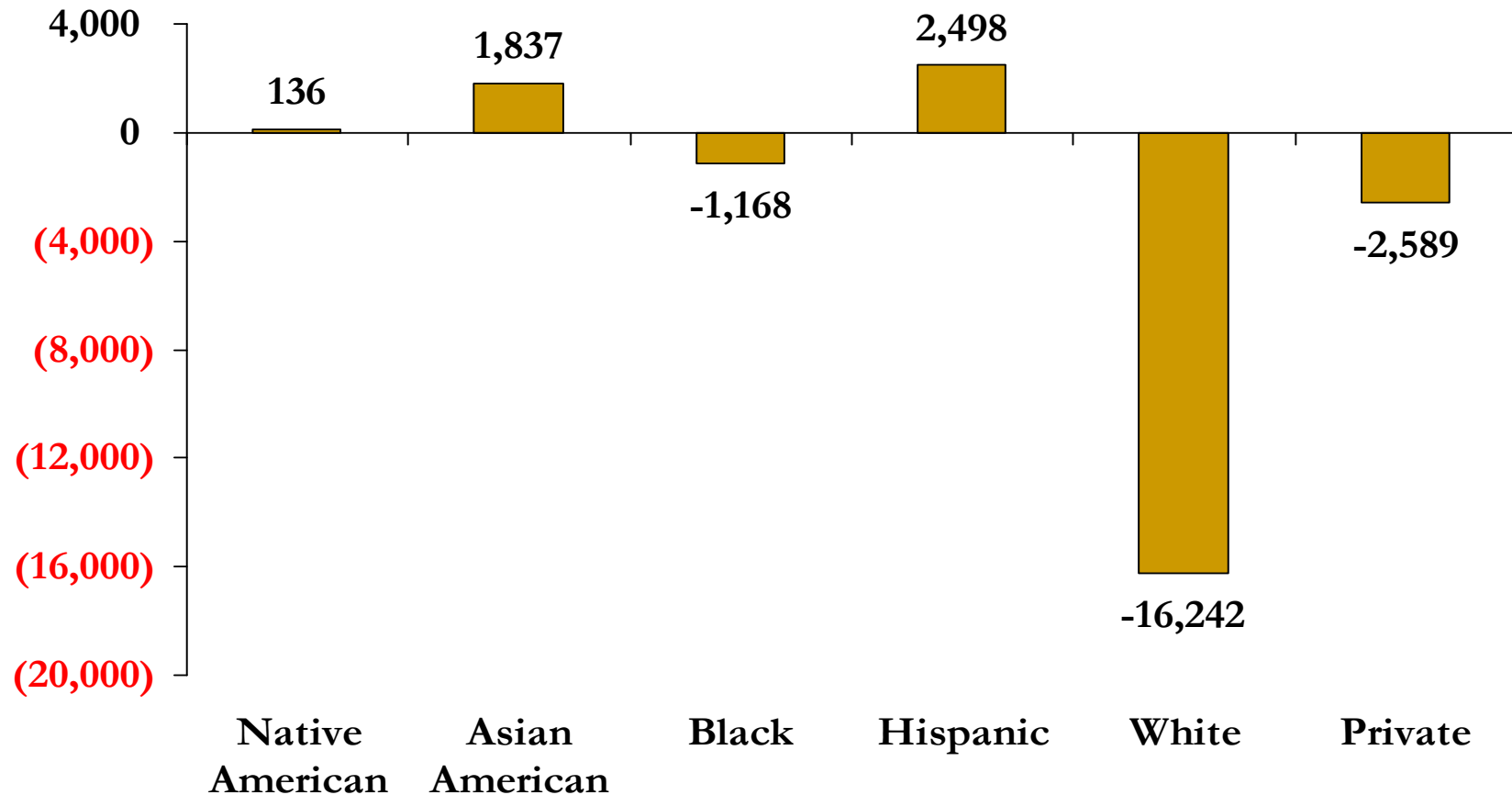
HS Graduates in NJ: 2006-07 to 2017-18



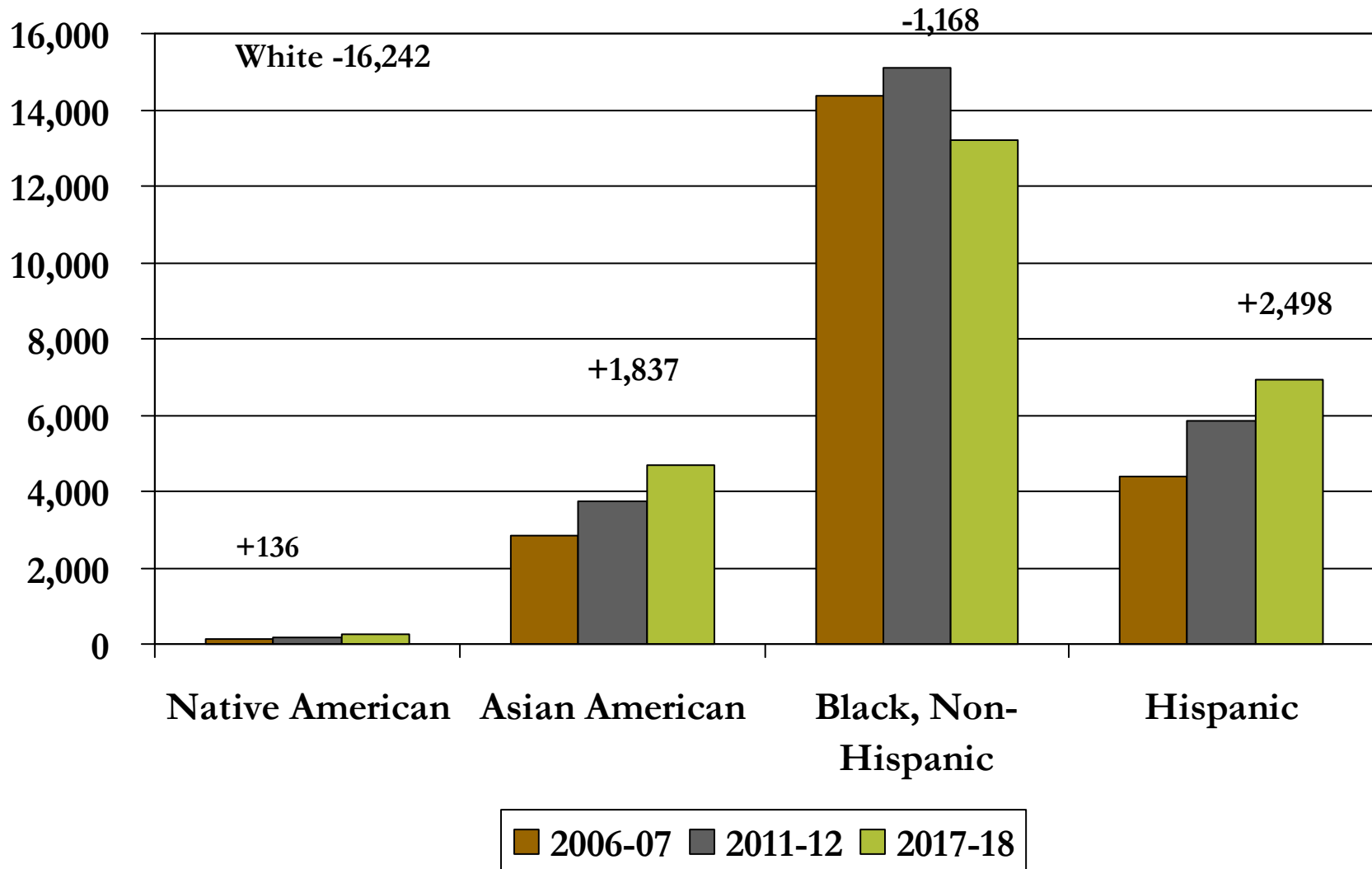
HS Graduates in Maryland: 2006-07 to 2017-18



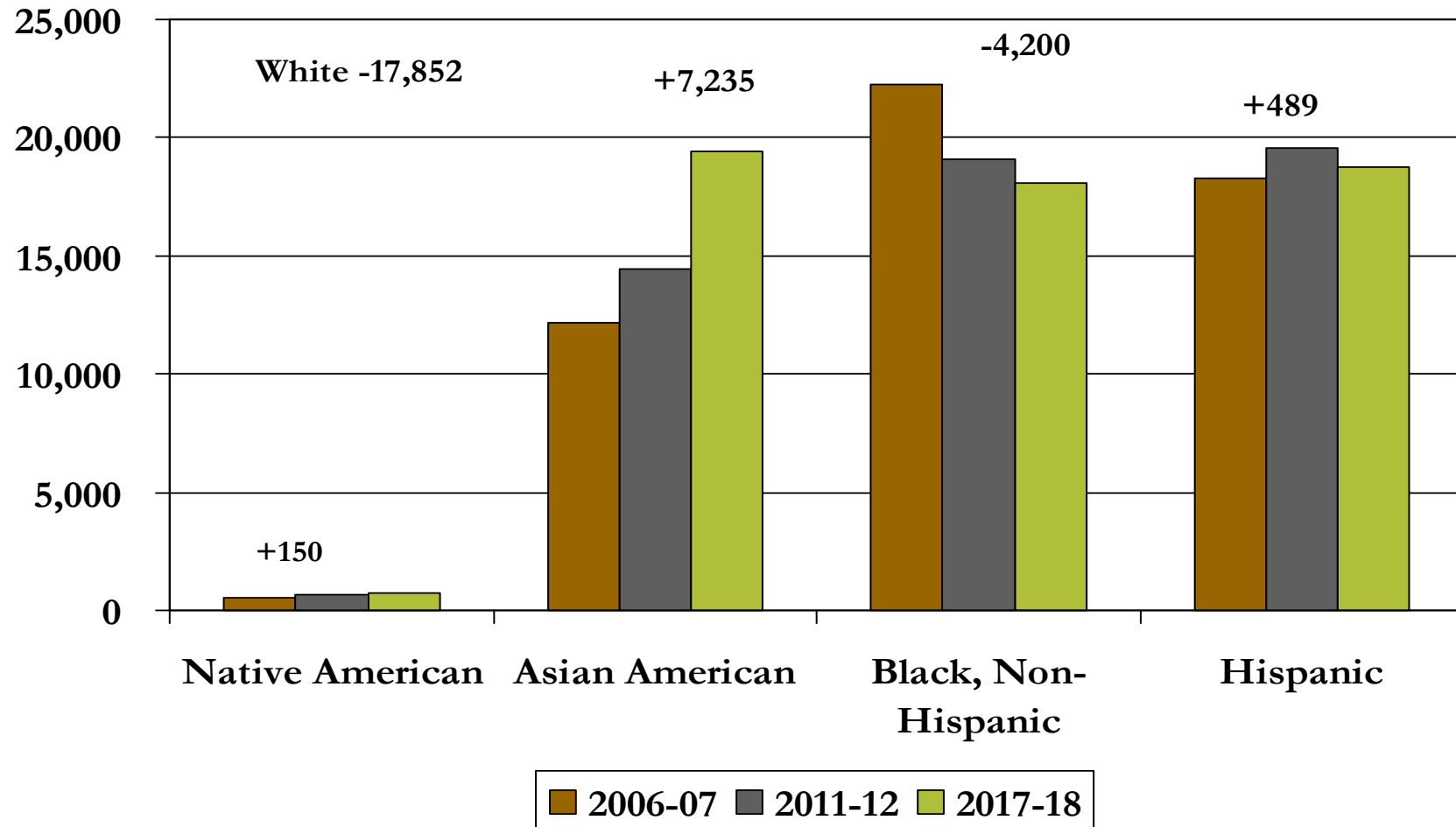
HS Graduates in Pennsylvania: 2006-07 to 2017-18



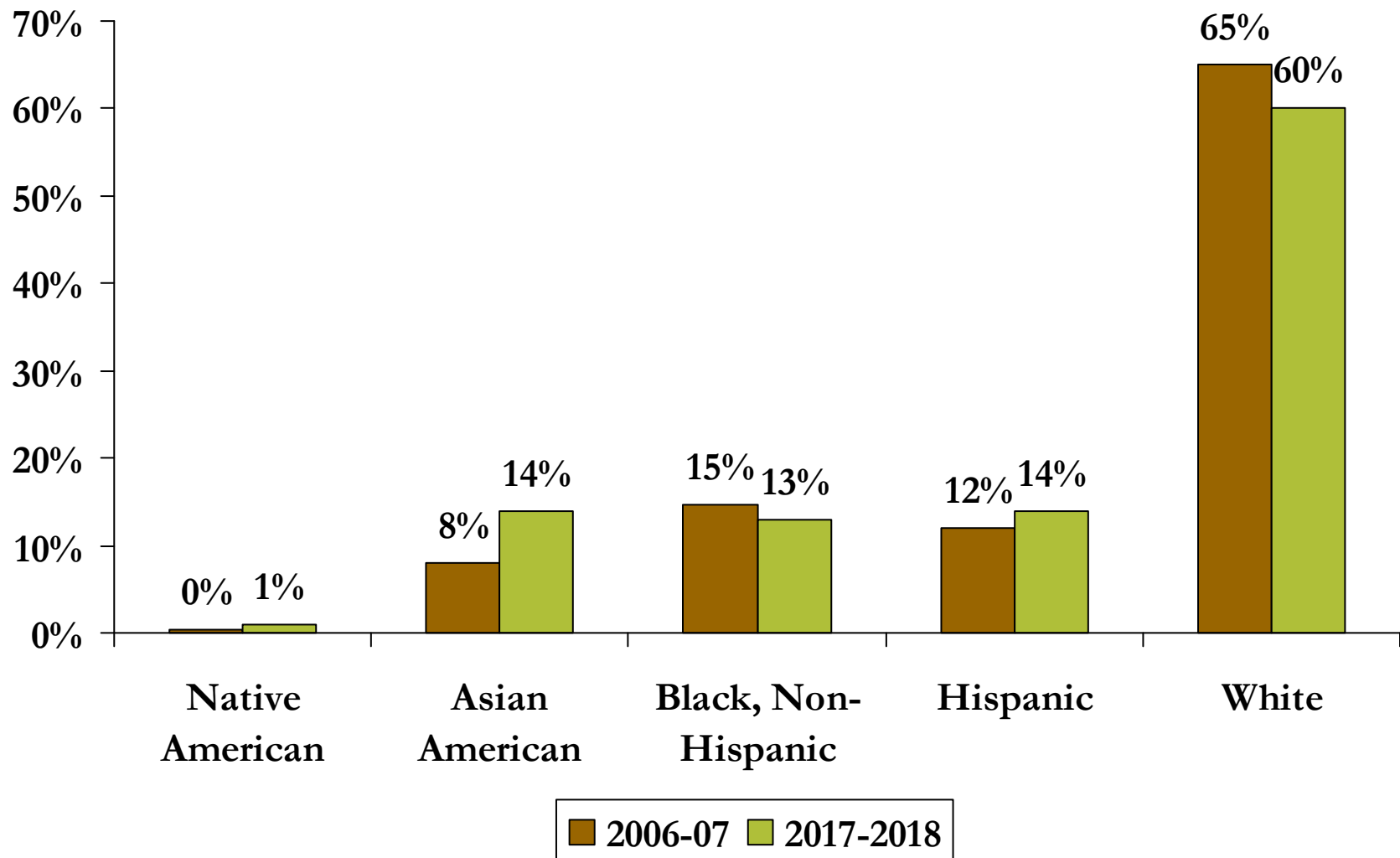
Pennsylvania High School Graduates



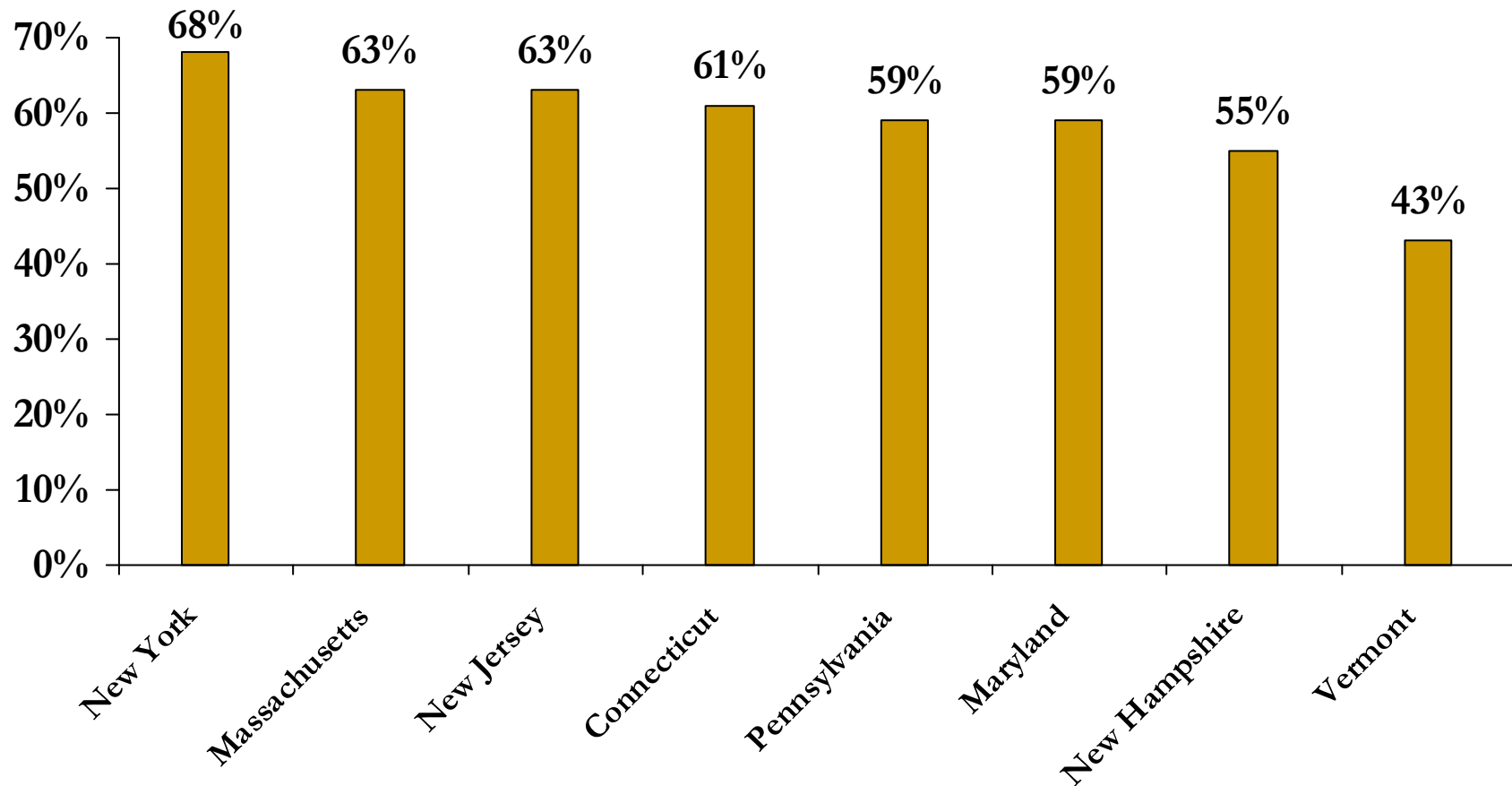
New York High School Graduates



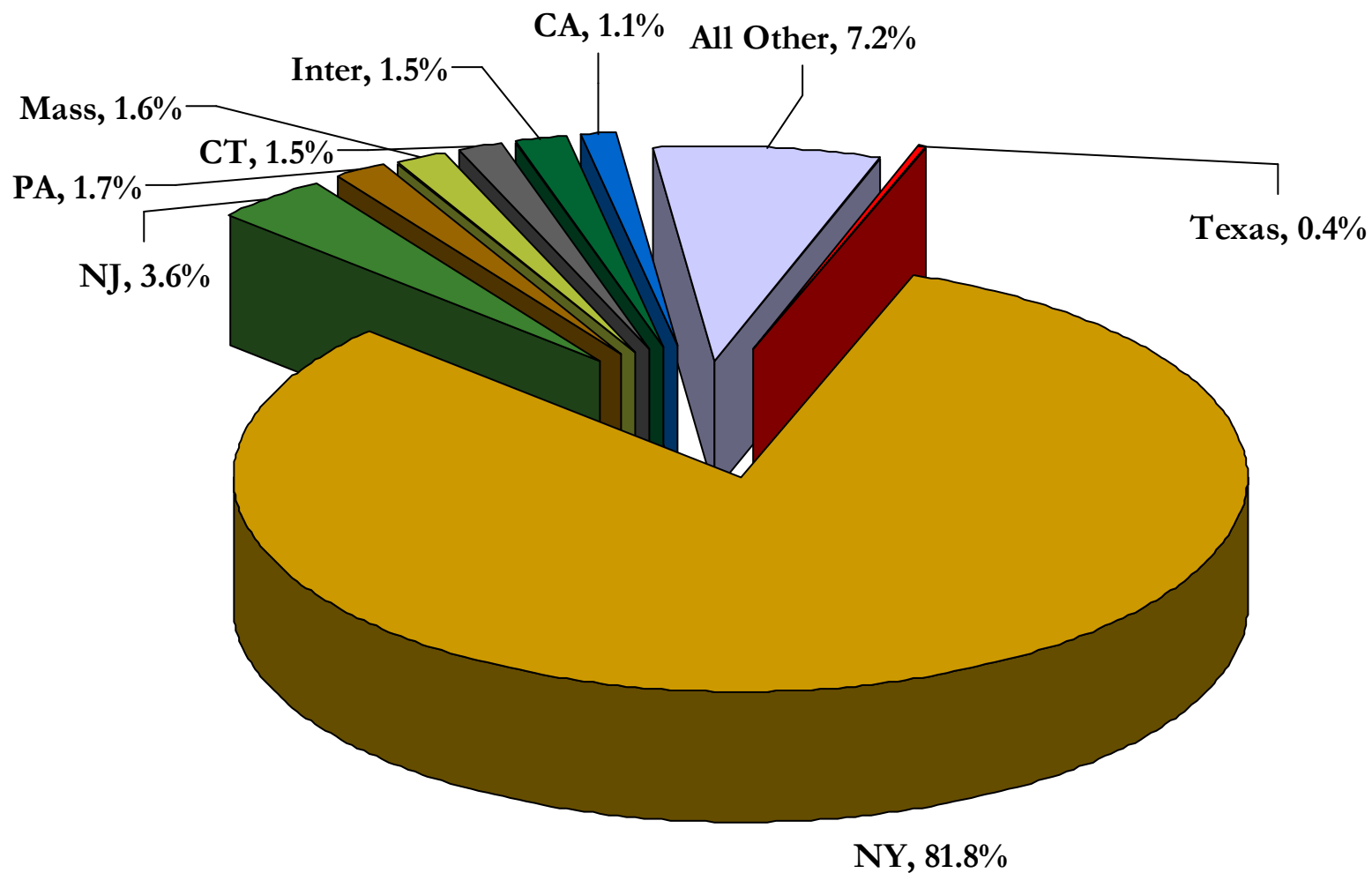
Changes in HS Graduates in New York



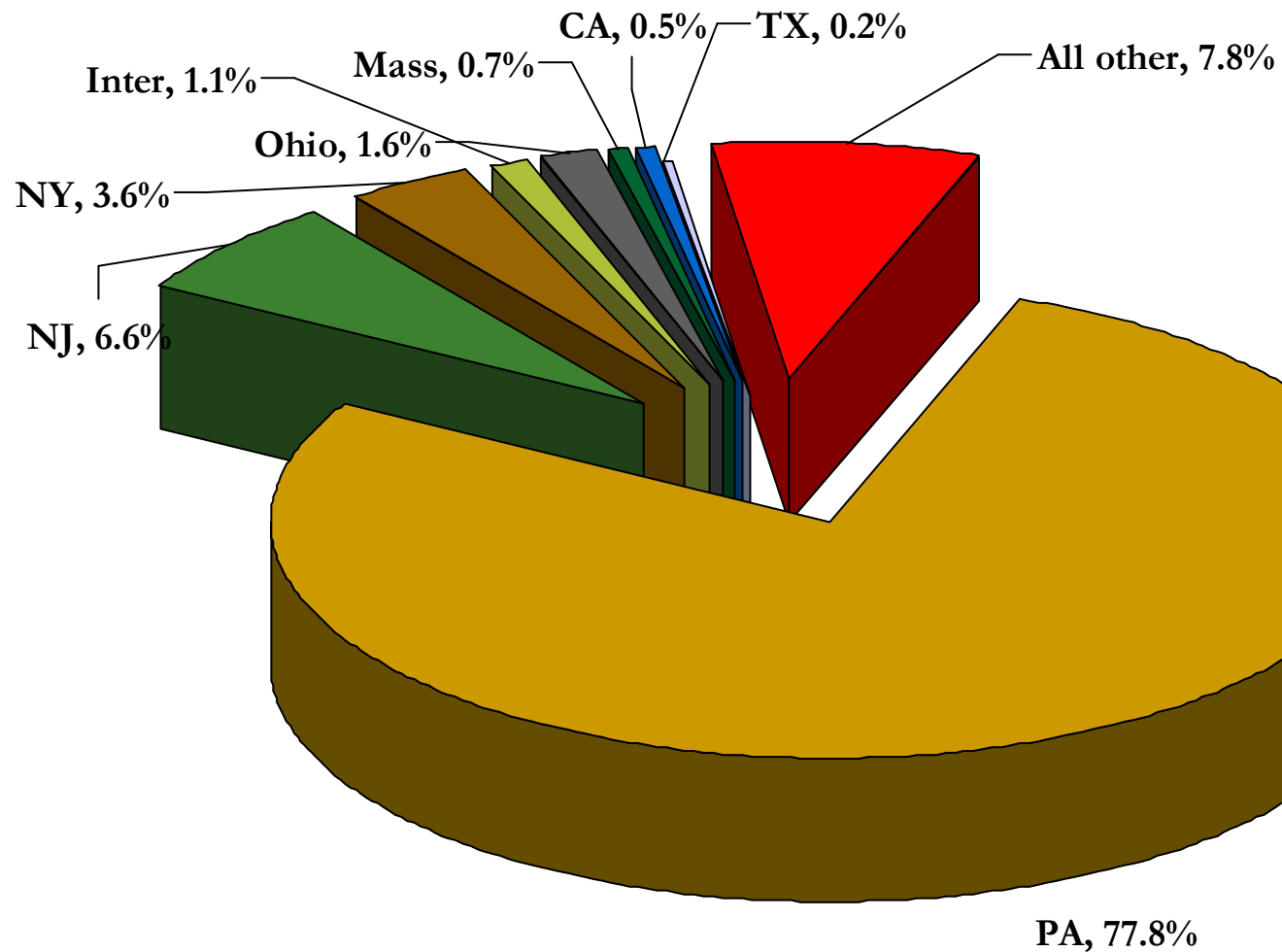
College Continuation Rates in the Northeast



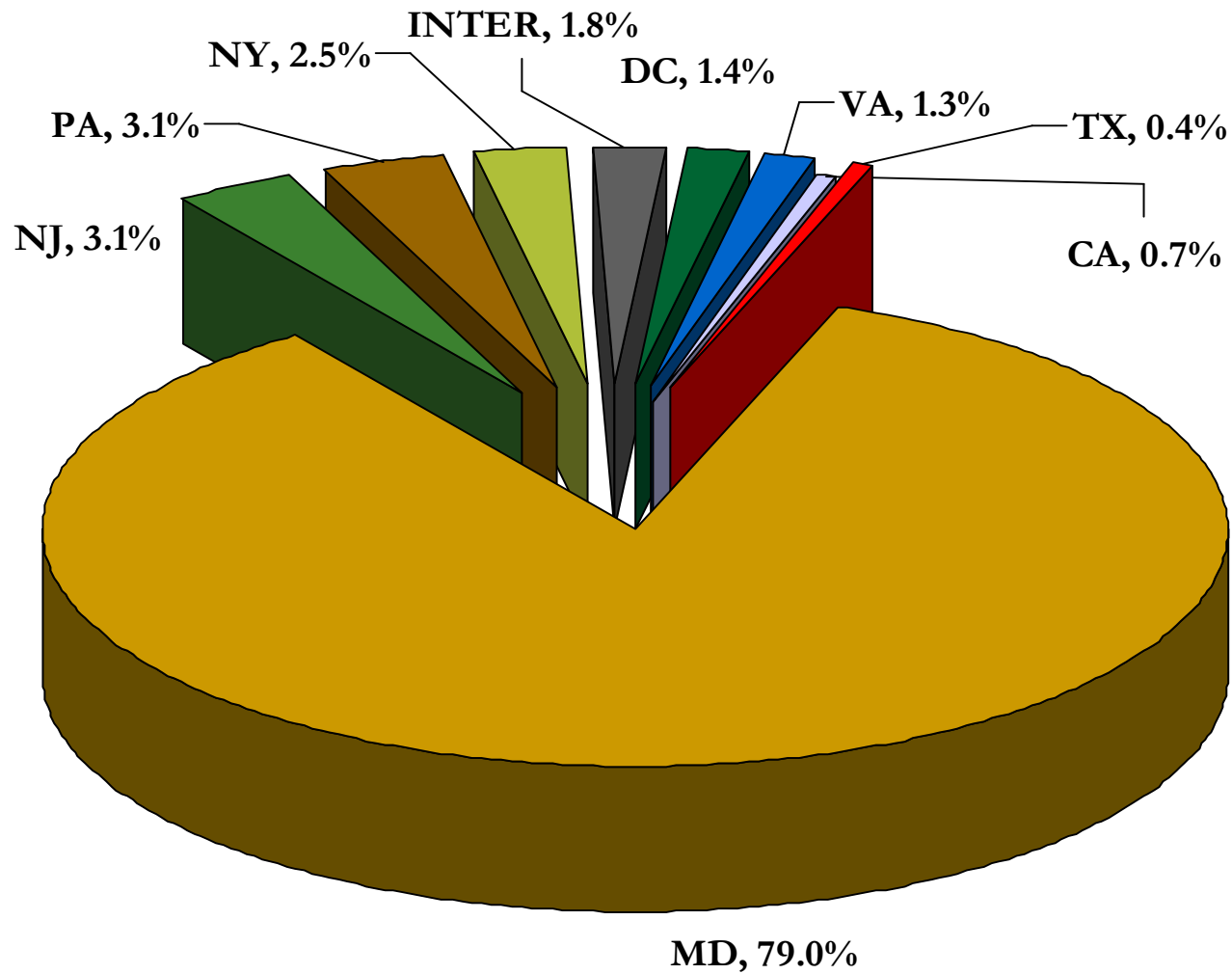
Enrollment at Colleges in NY



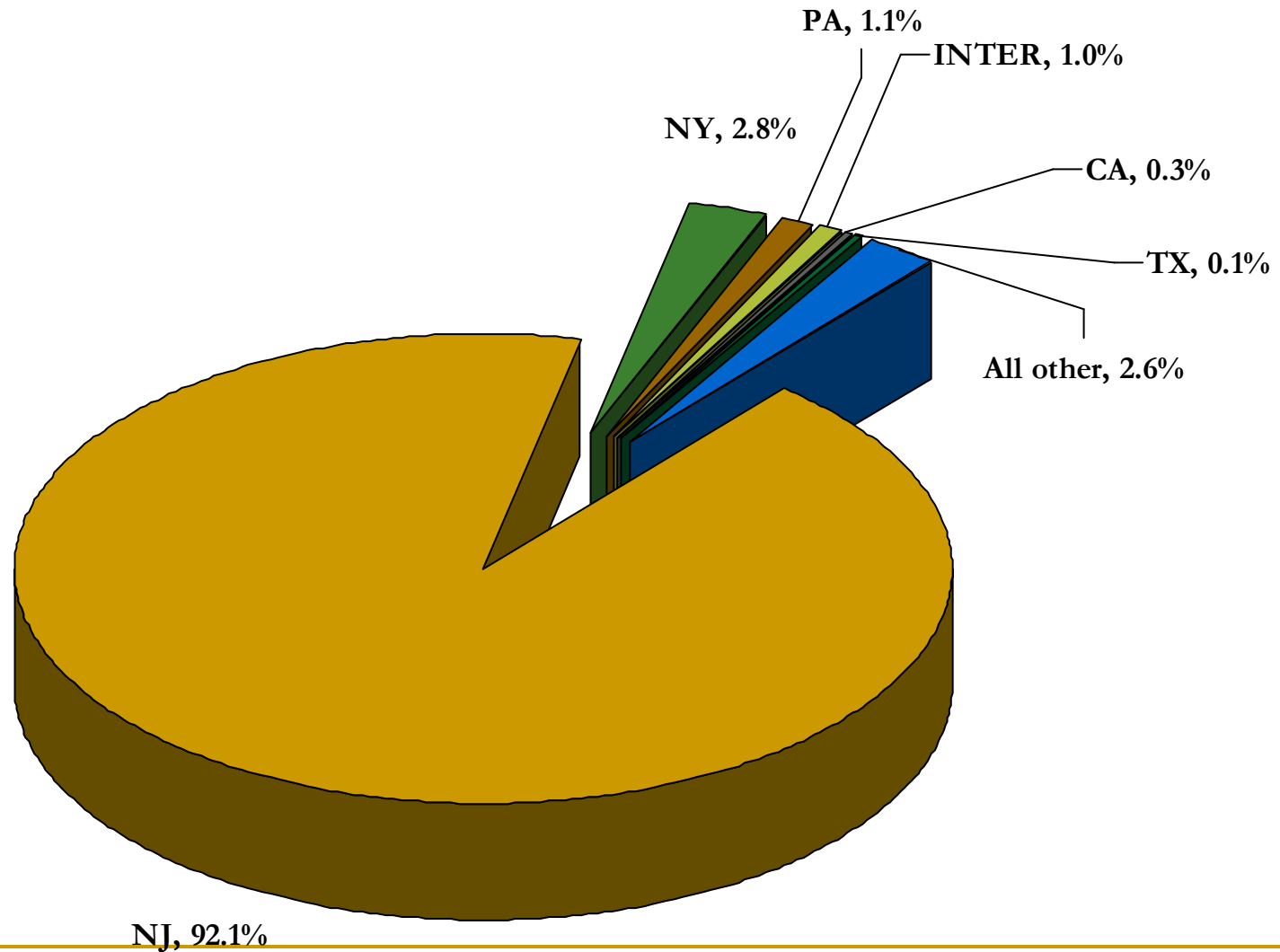
Enrollment at Colleges in Pennsylvania



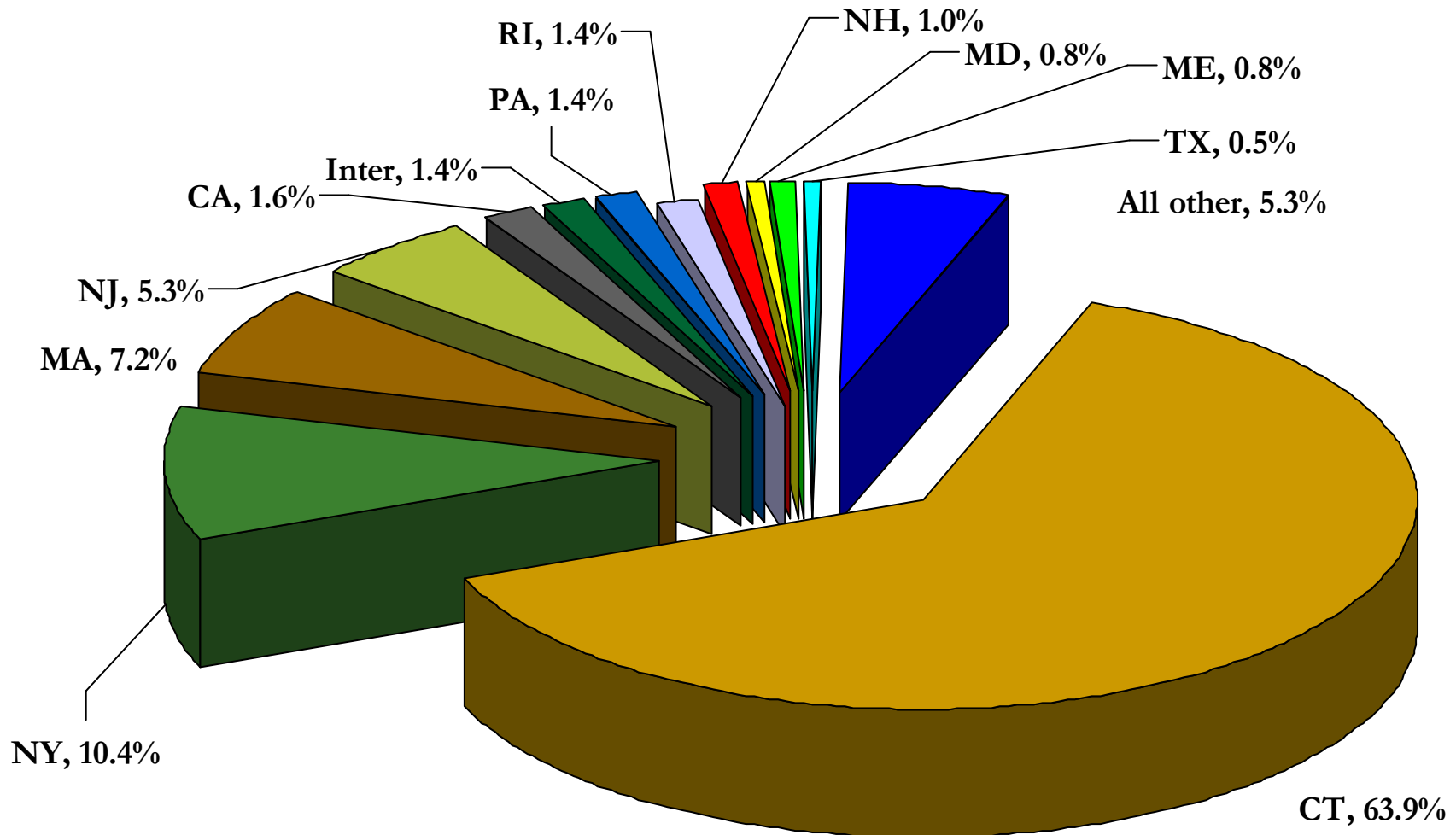
Enrollment at Colleges in Maryland



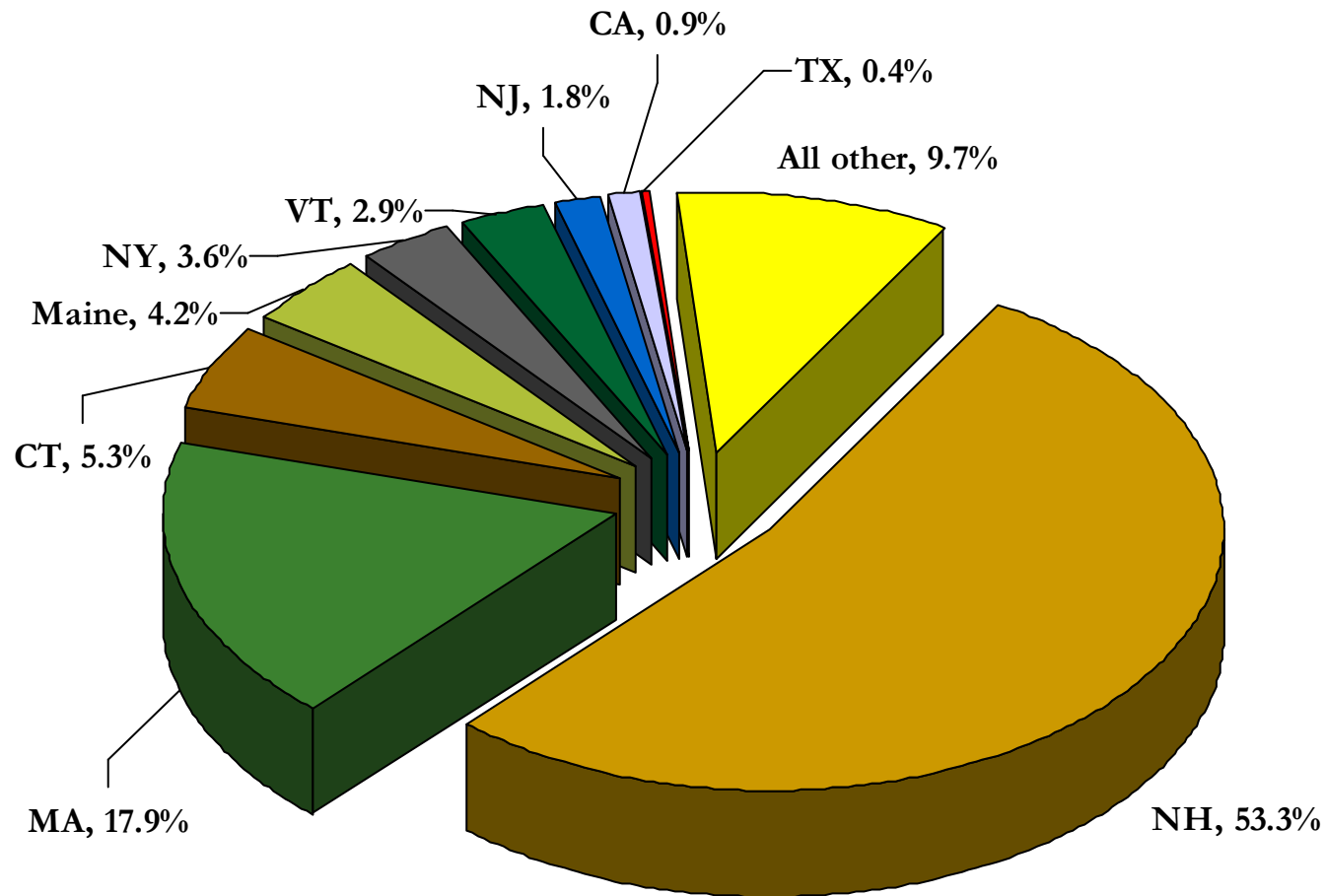
Enrollment at Colleges in New Jersey



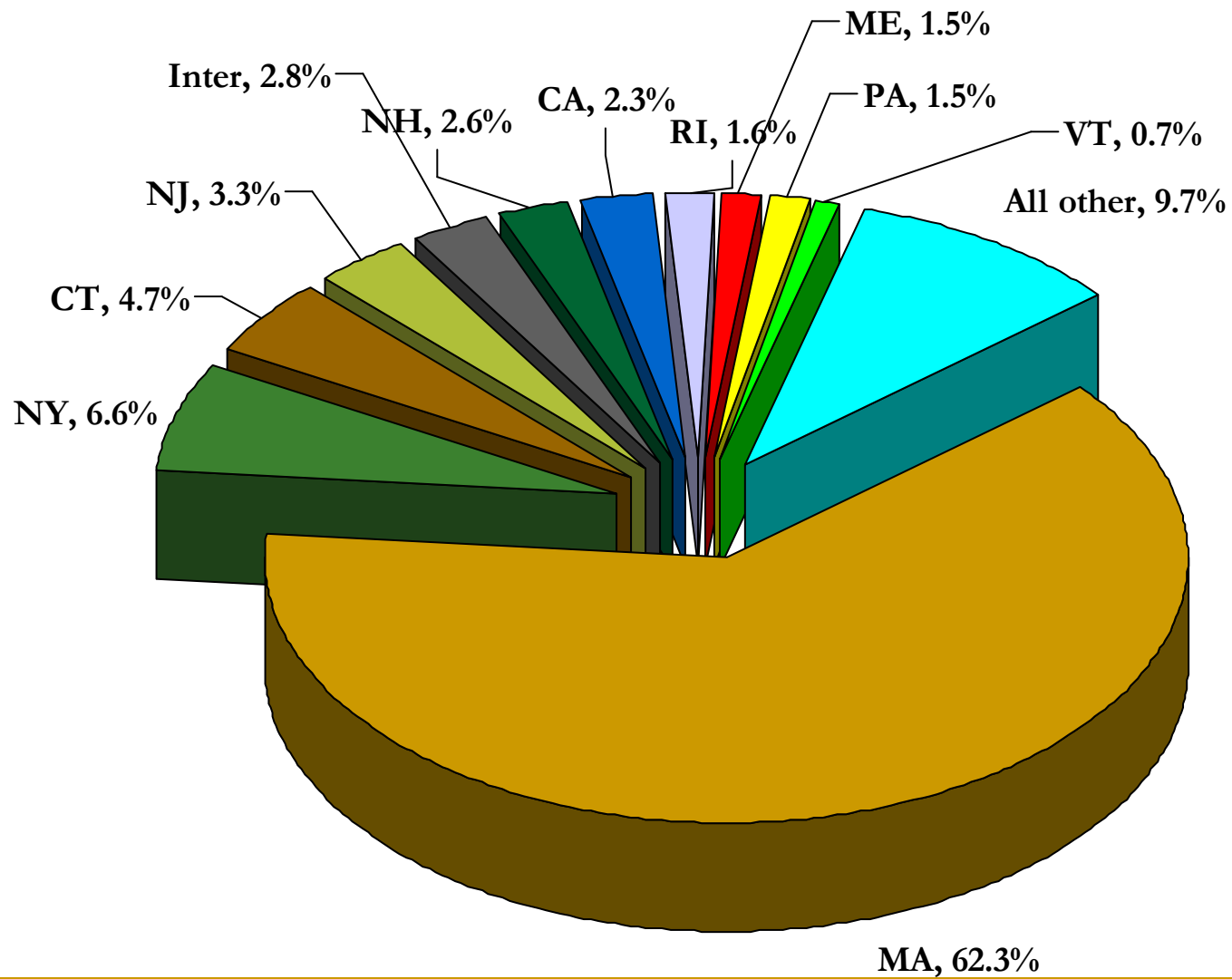
Enrollment at Colleges in Connecticut



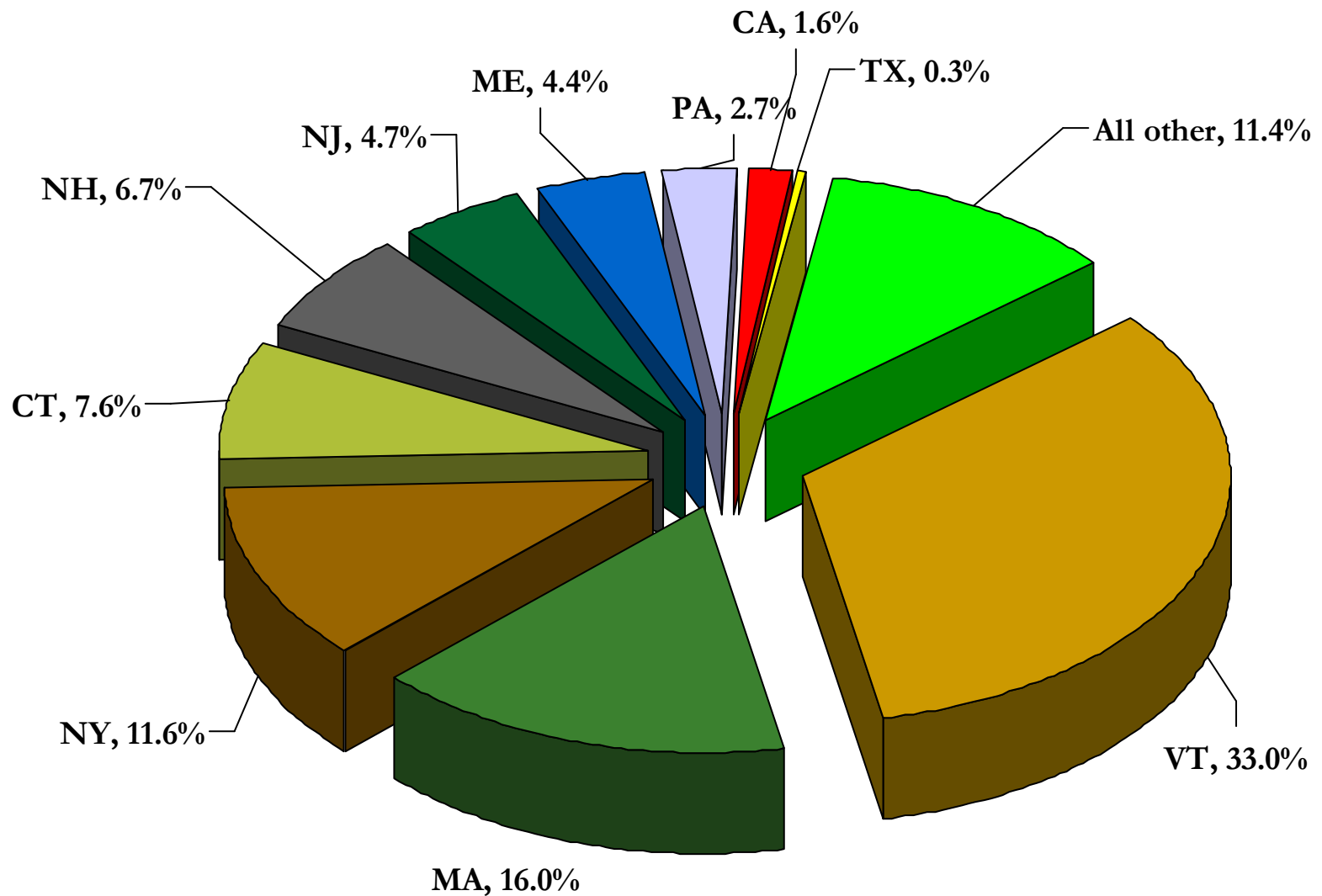
Enrollment at Colleges in New Hampshire



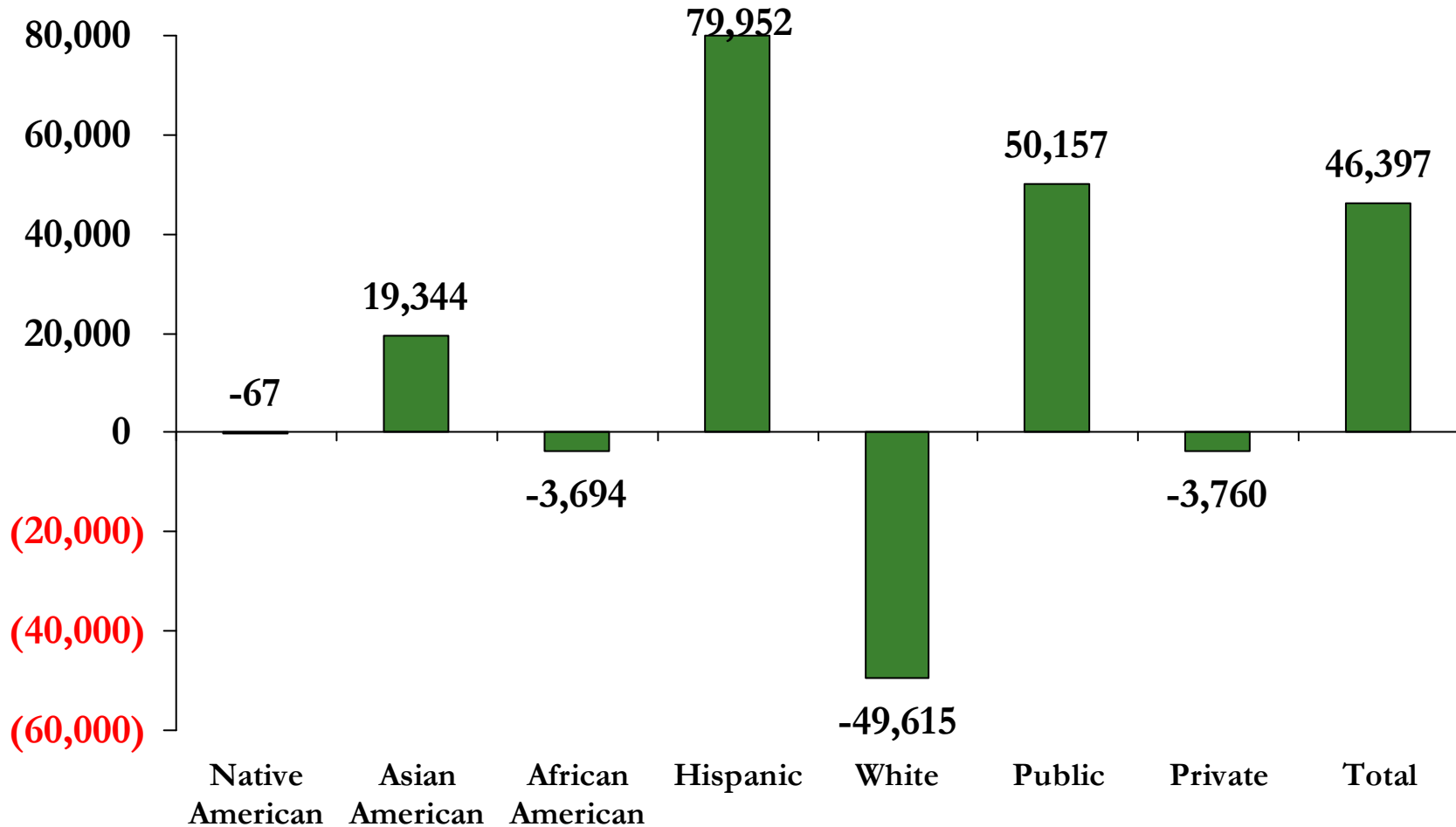
Enrollment at Colleges in Massachusetts



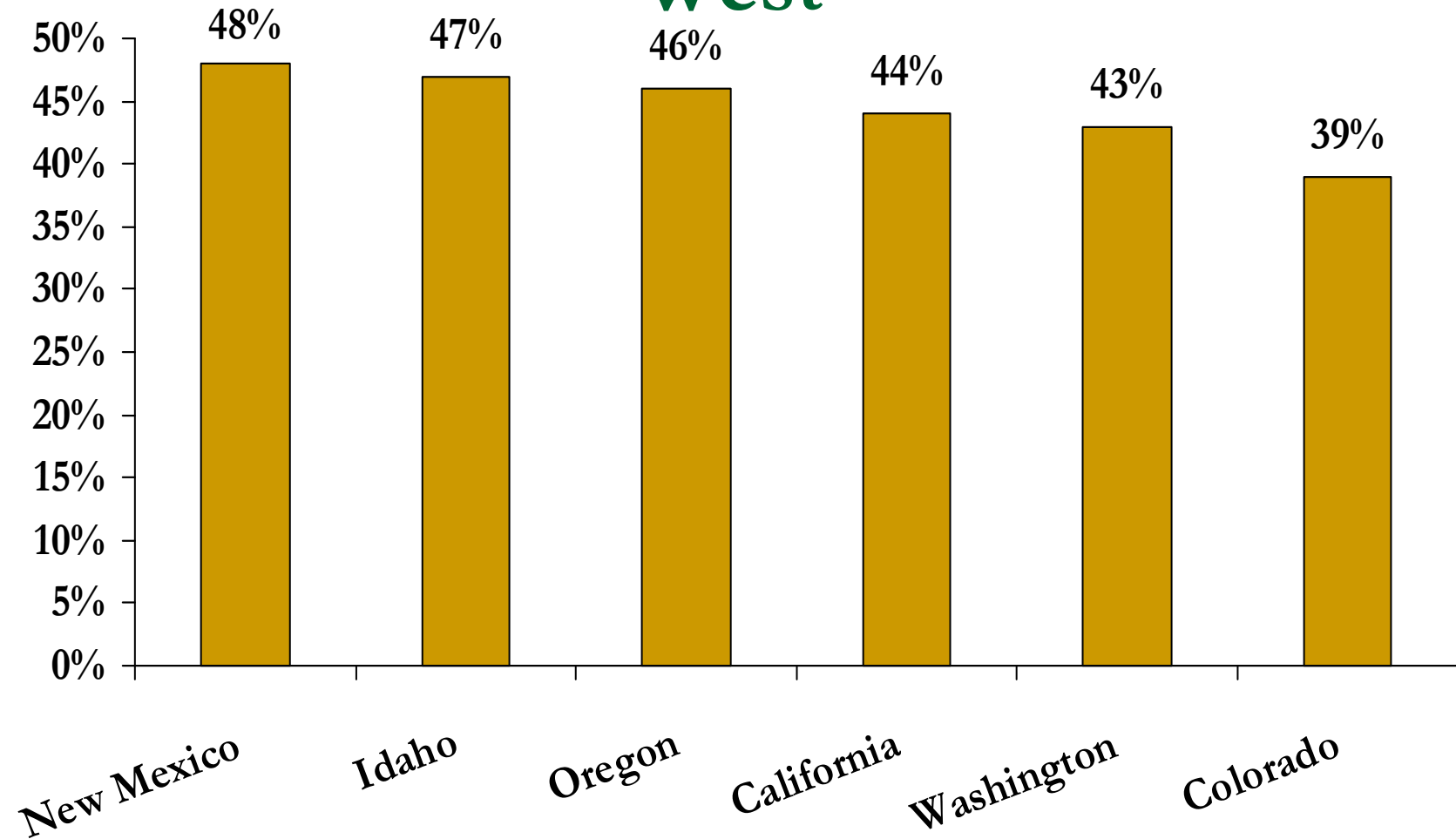
Enrollment at Colleges in Vermont



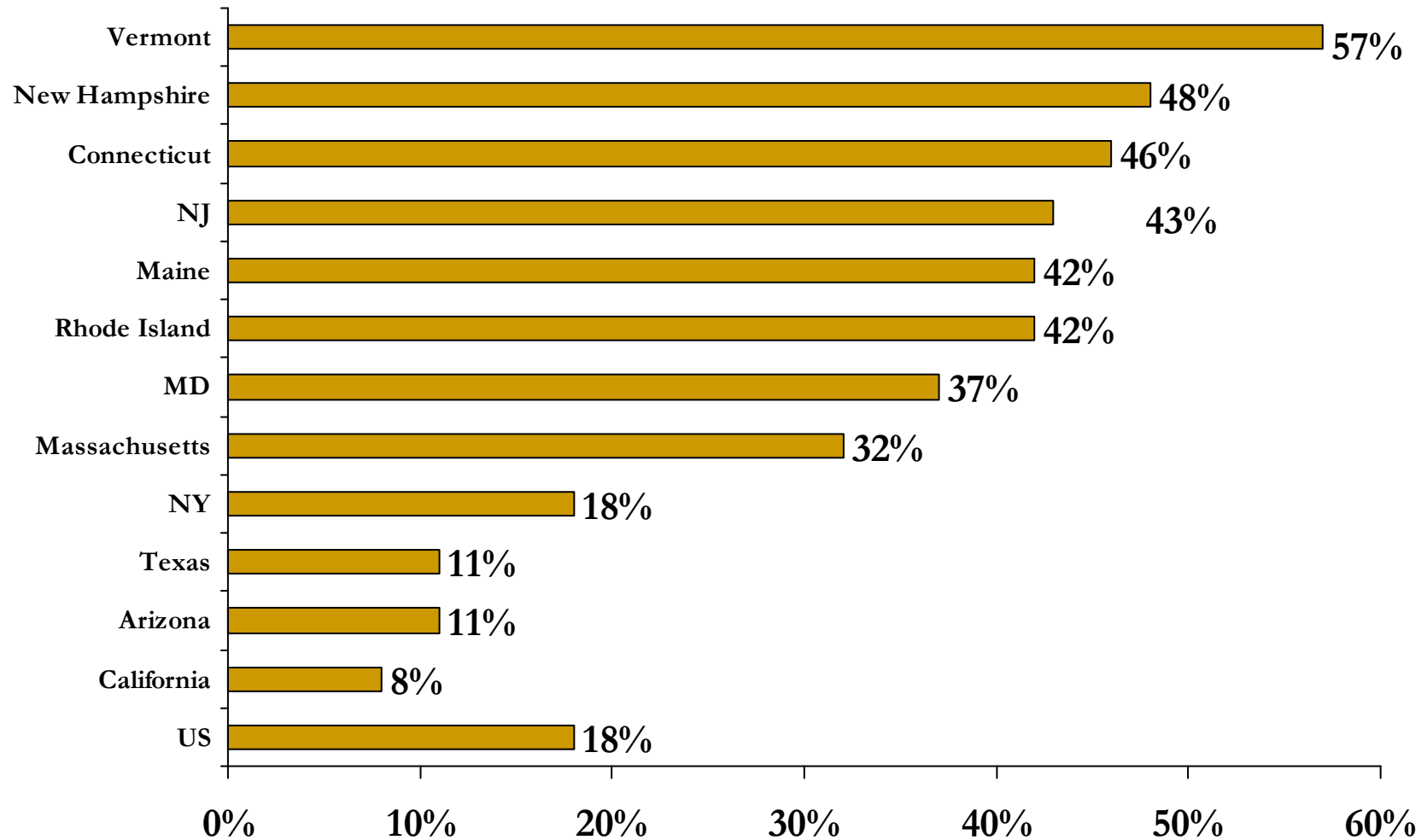
Projections of HS Graduates in the West



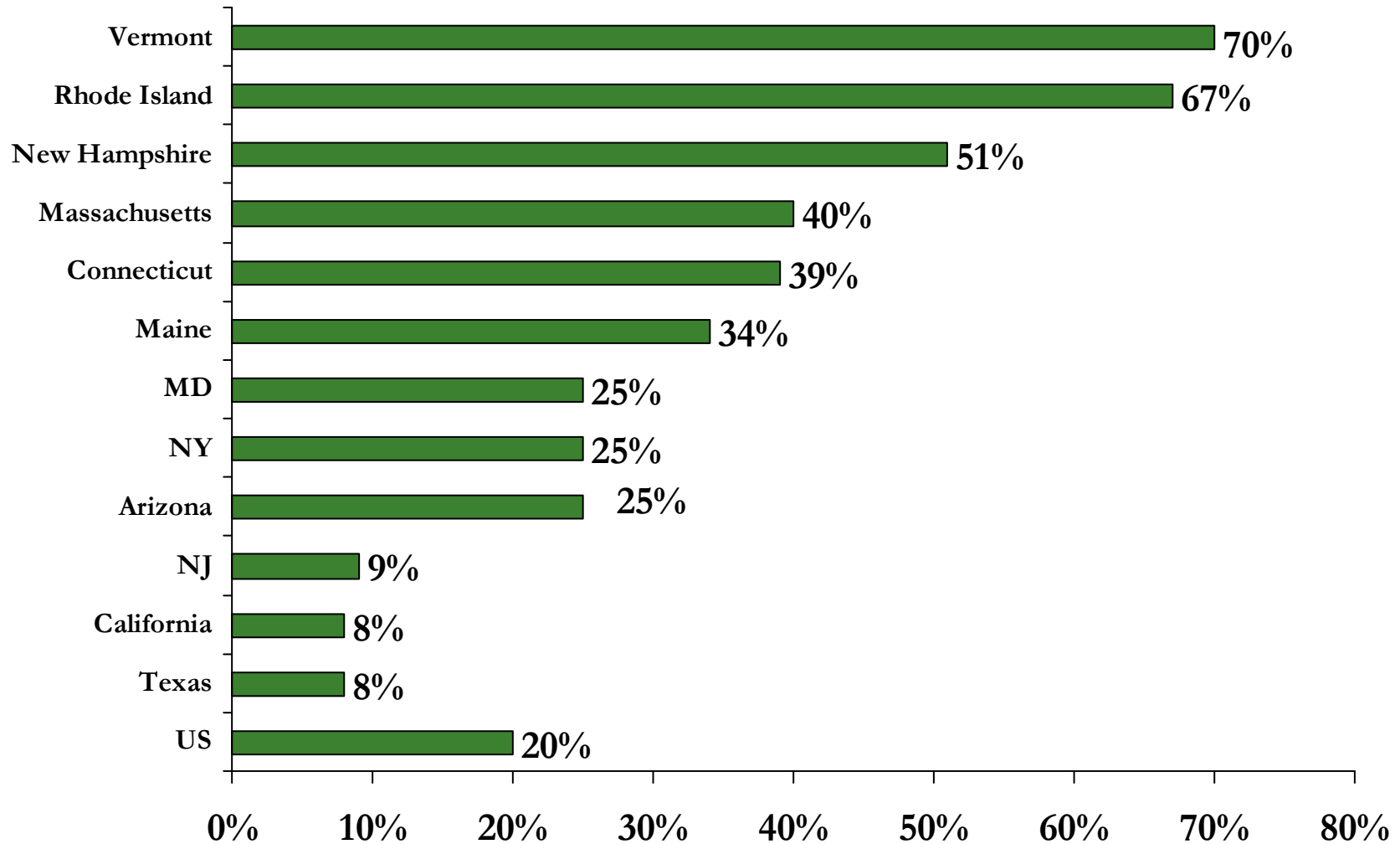
College Continuation Rates in the West



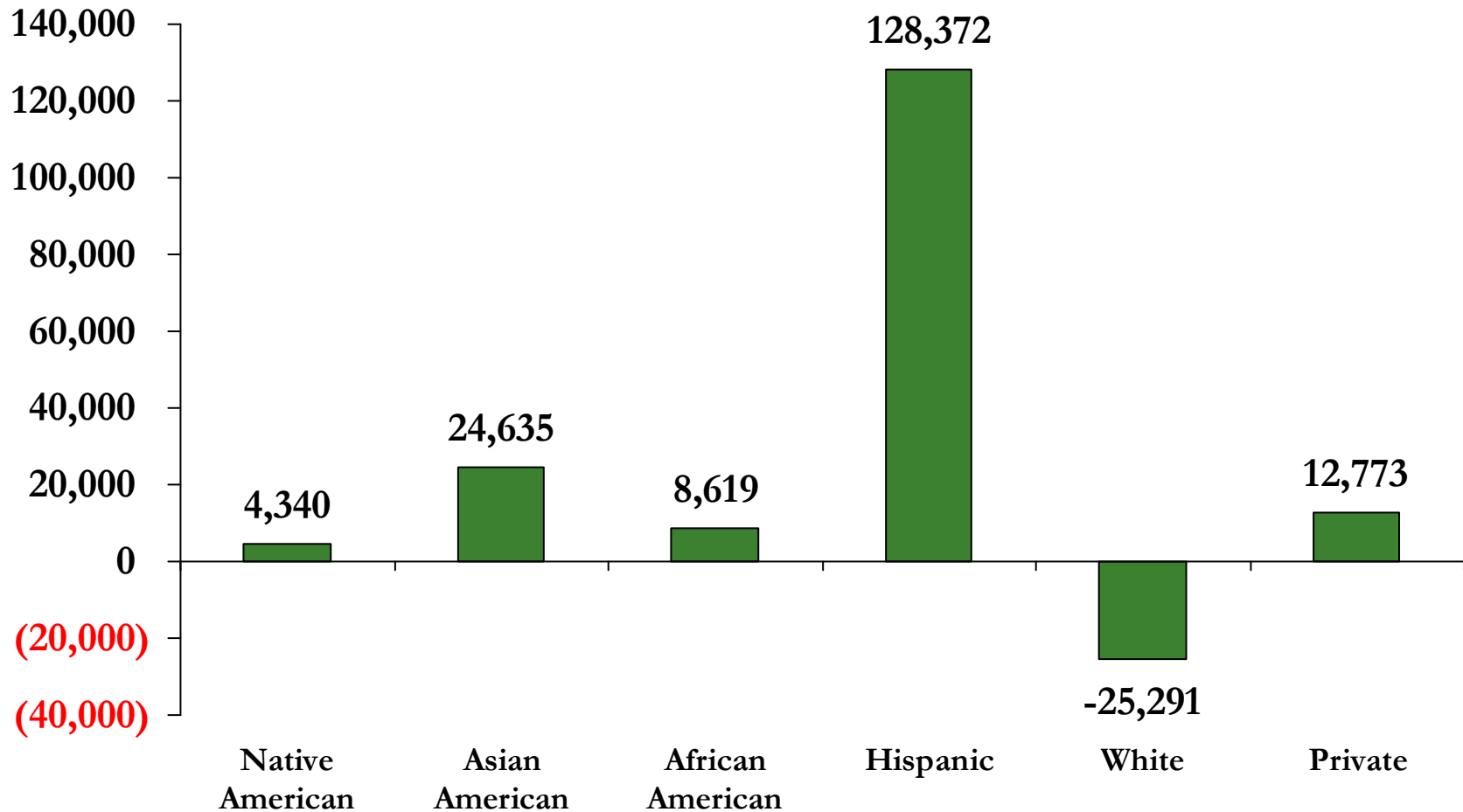
Emigration of College Students



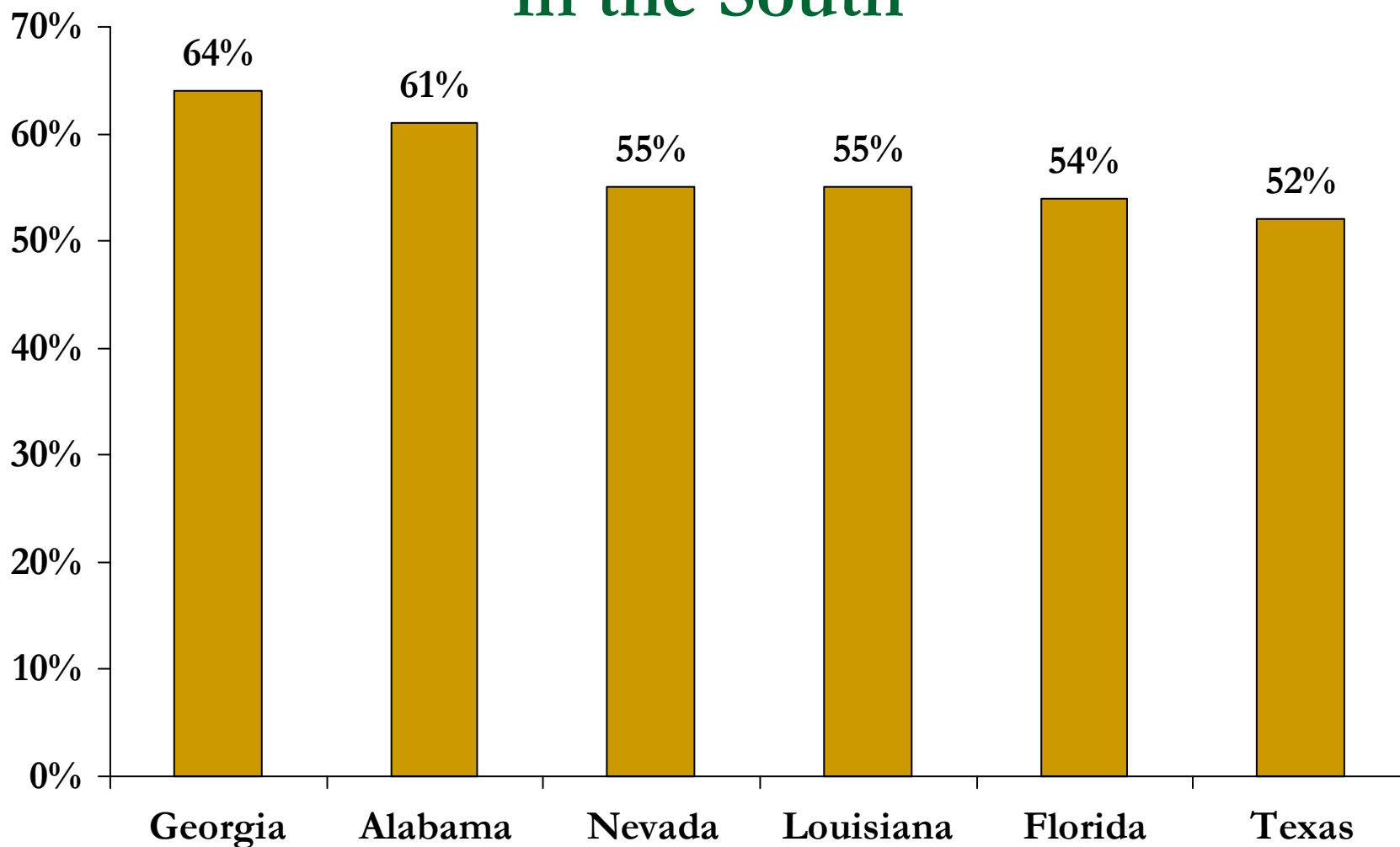
Percent of Freshmen from Out-of-State



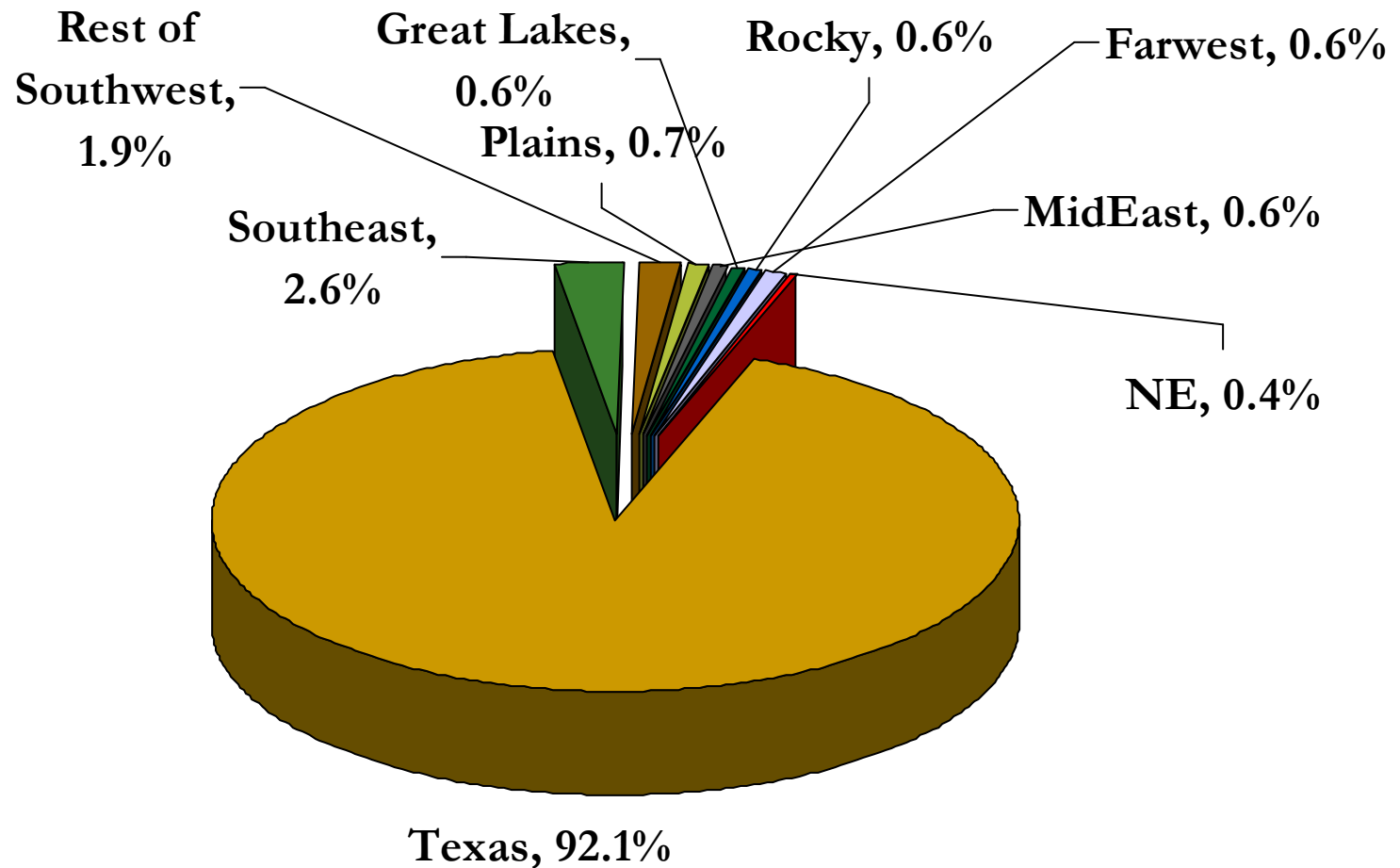
Projections of HS Graduates in the South



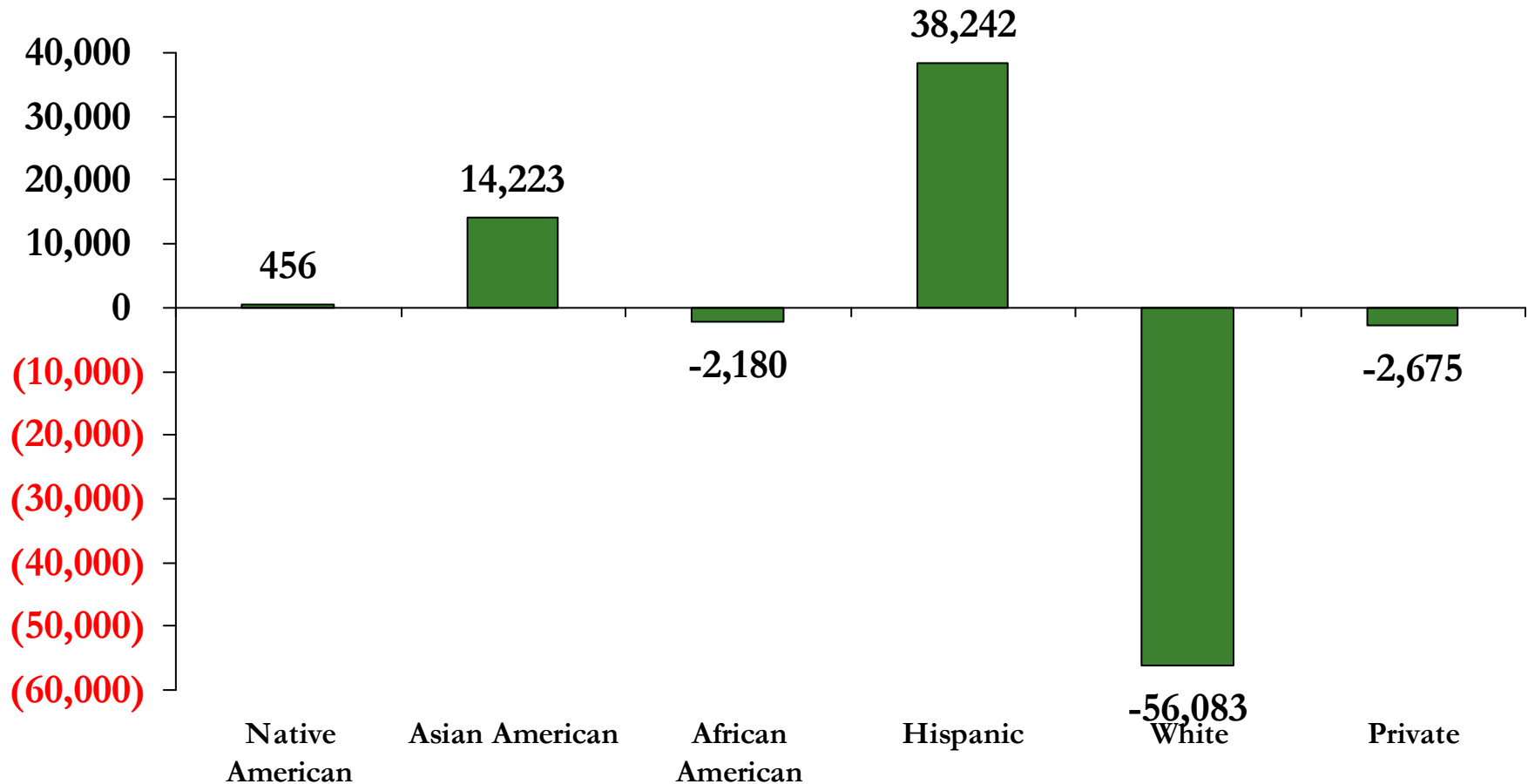
College Continuation Rates in the South



Don't mess with Texas! Where do their HS Graduates go to College?



Projections of HS Graduates in the Midwest: 2006-07 to 2017-2018

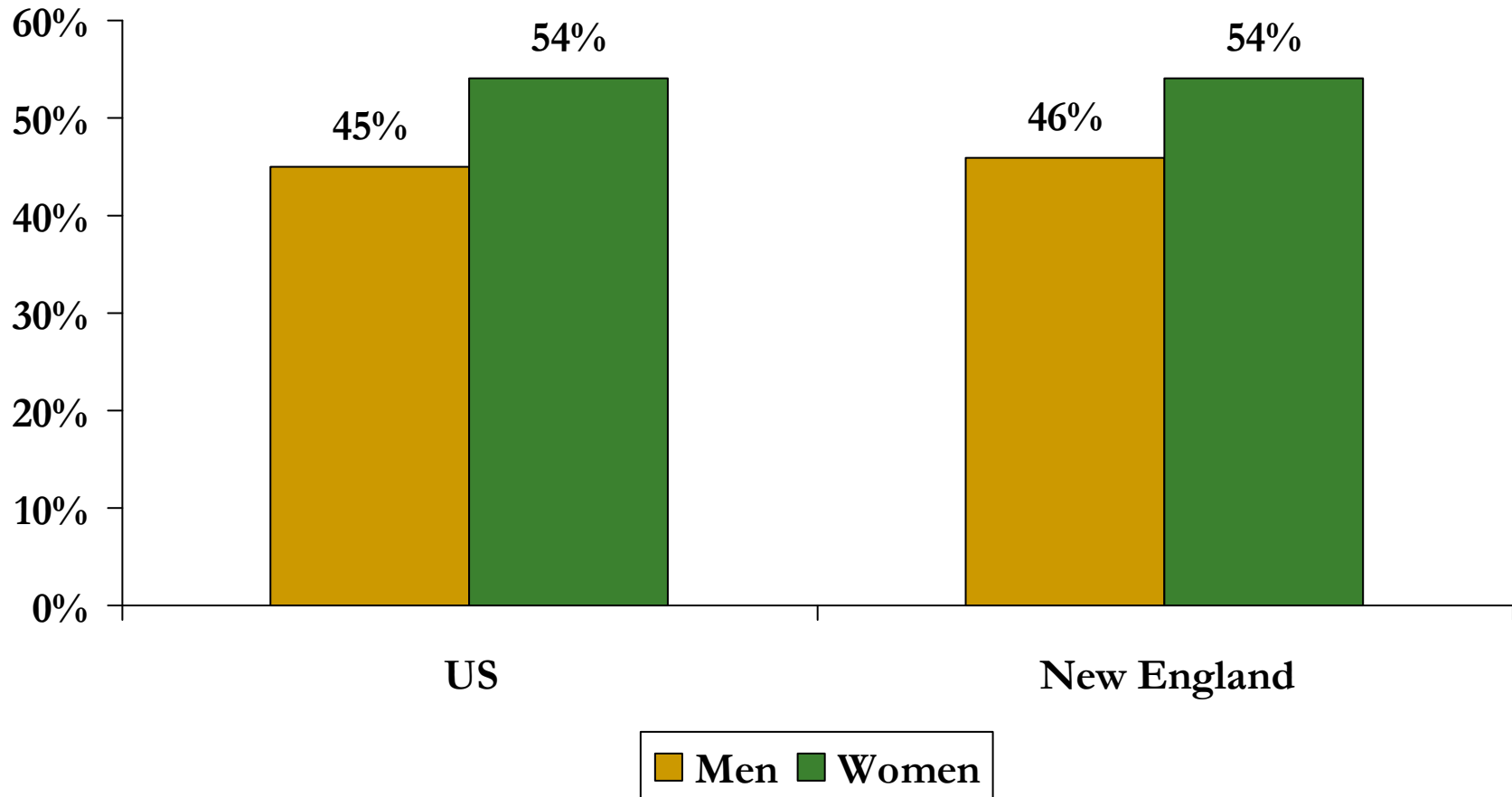


What about gender issues?

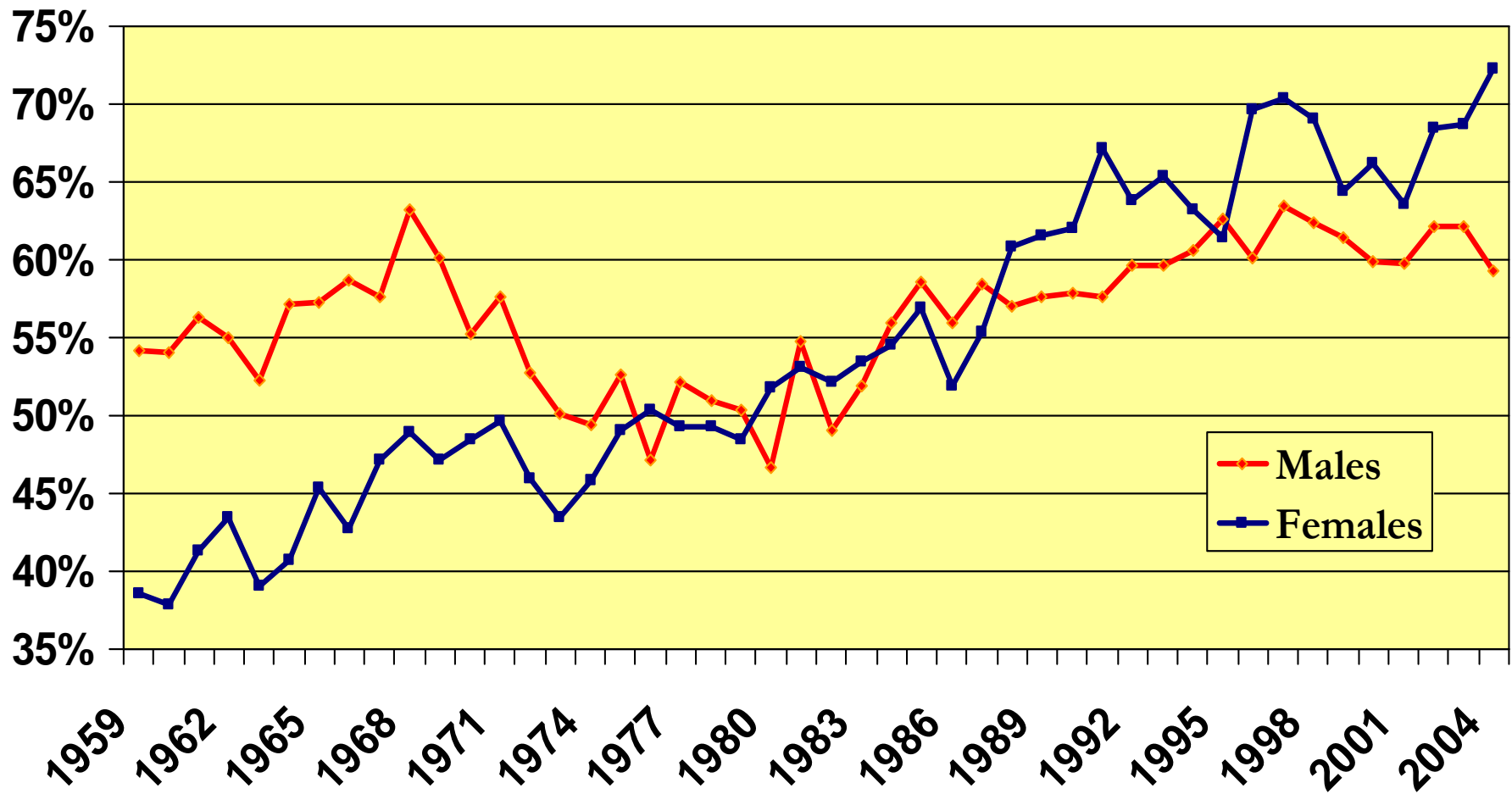
College going rates: Where are the boys?

- Males outnumber female through age 30
- Males account for less than 50% of high school graduates
- Males account for 47% of college freshmen
- Continuation rates vary by gender – men around 59% and women 72%

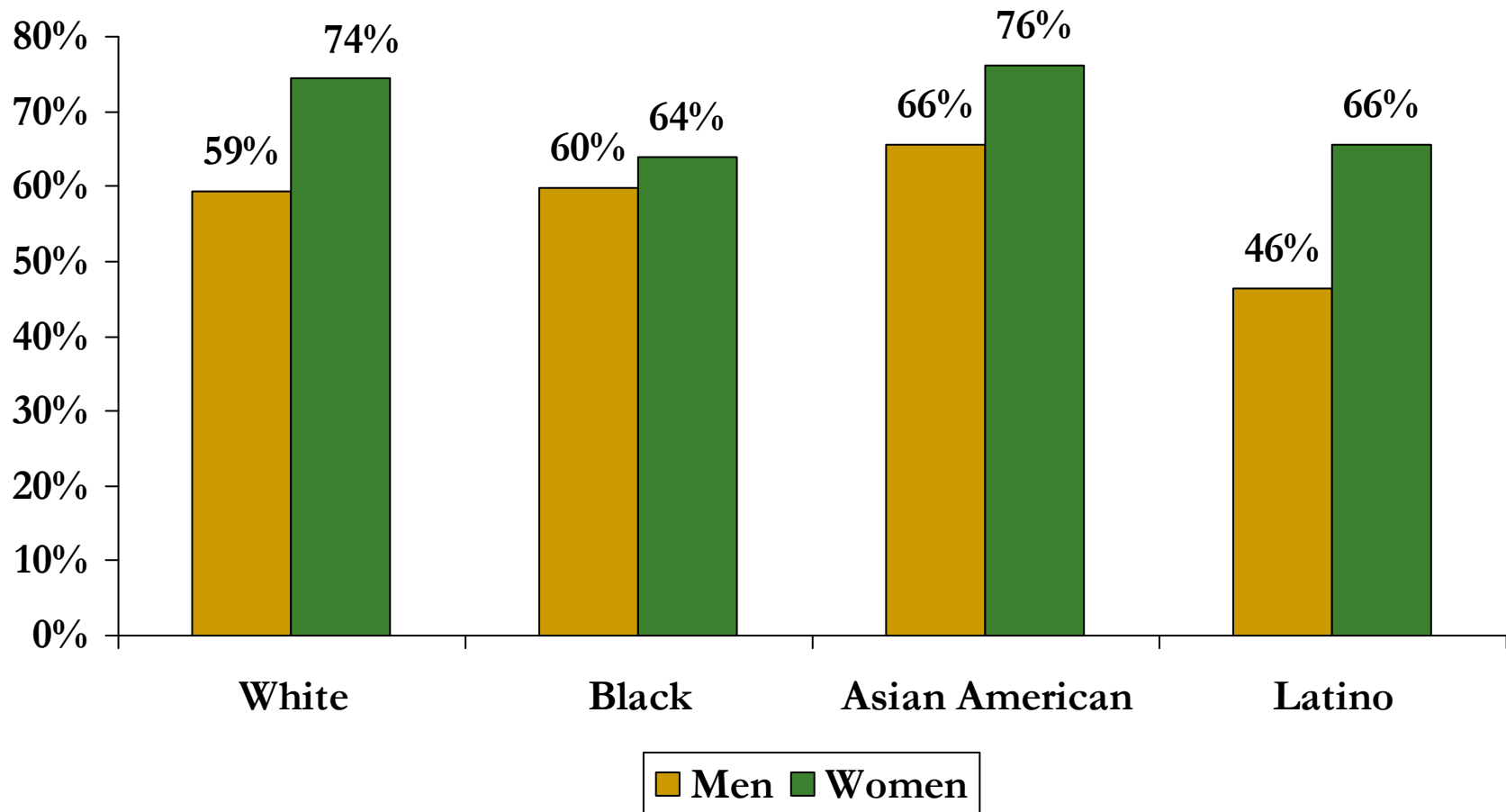
SAT Takers by Gender



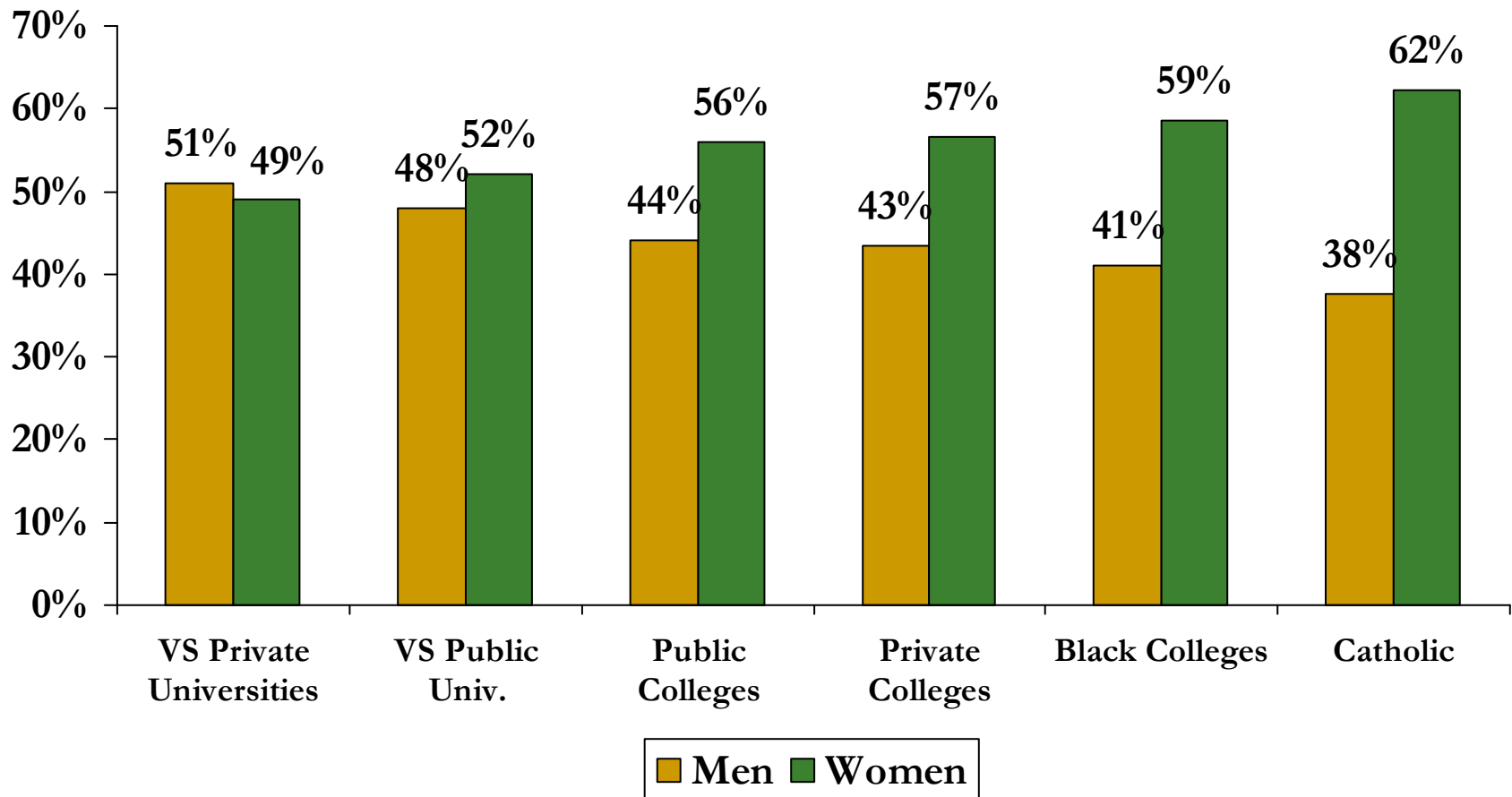
College continuation rates



College Continuation Rates by Gender and Race



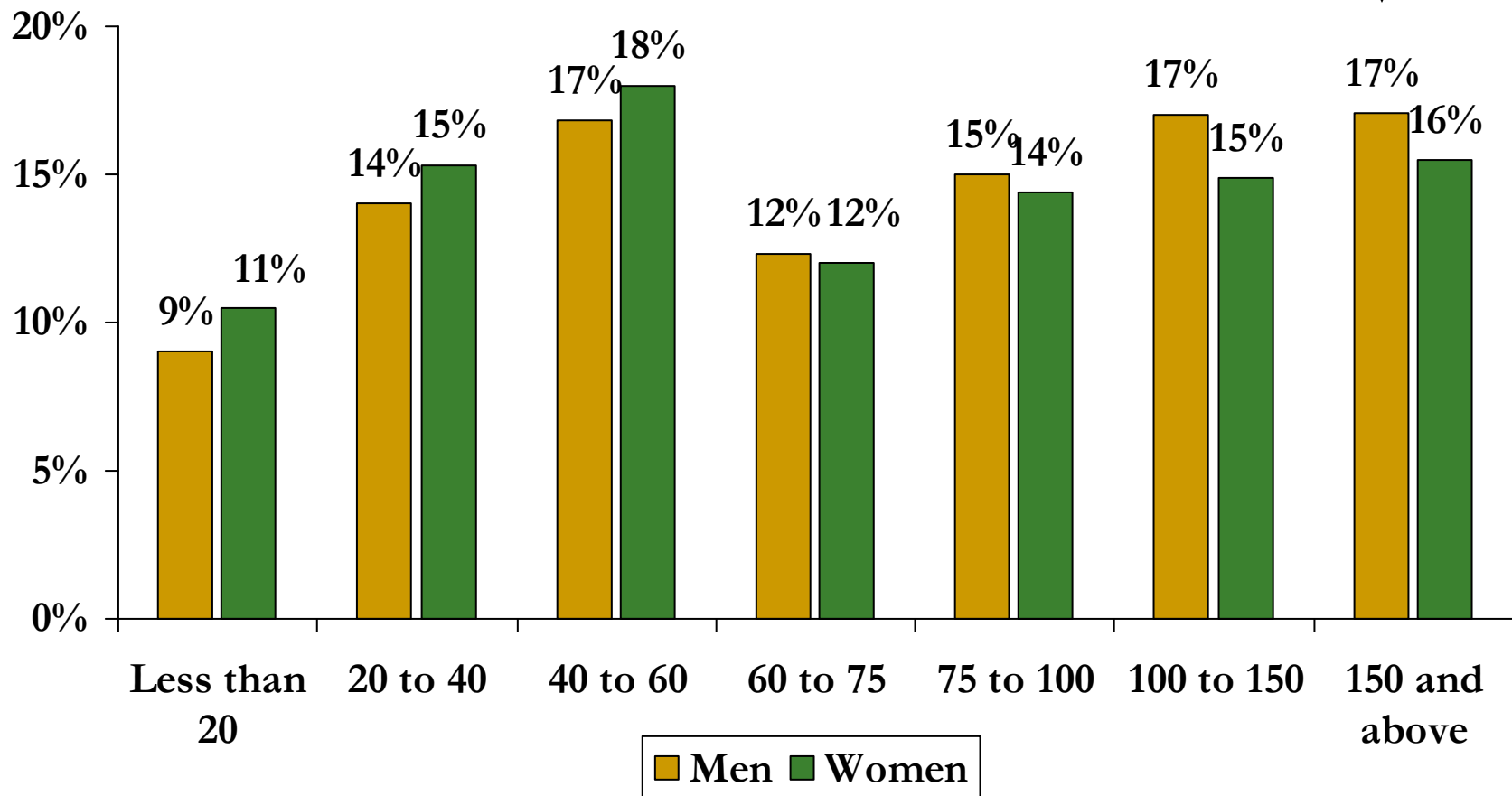
Fall 2005 Freshmen by Gender by Institution Type



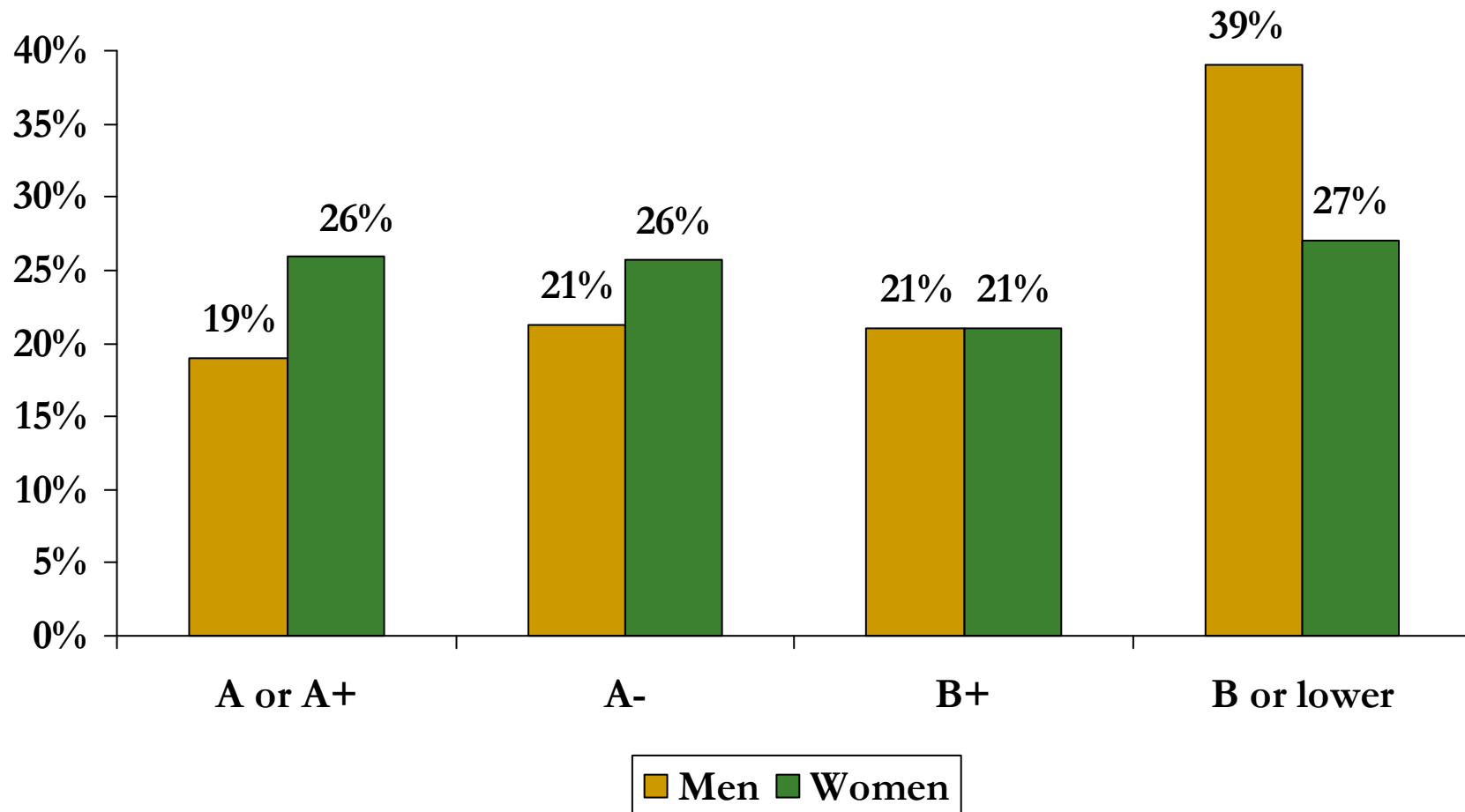
Fall 2005 Freshmen by Gender and Region



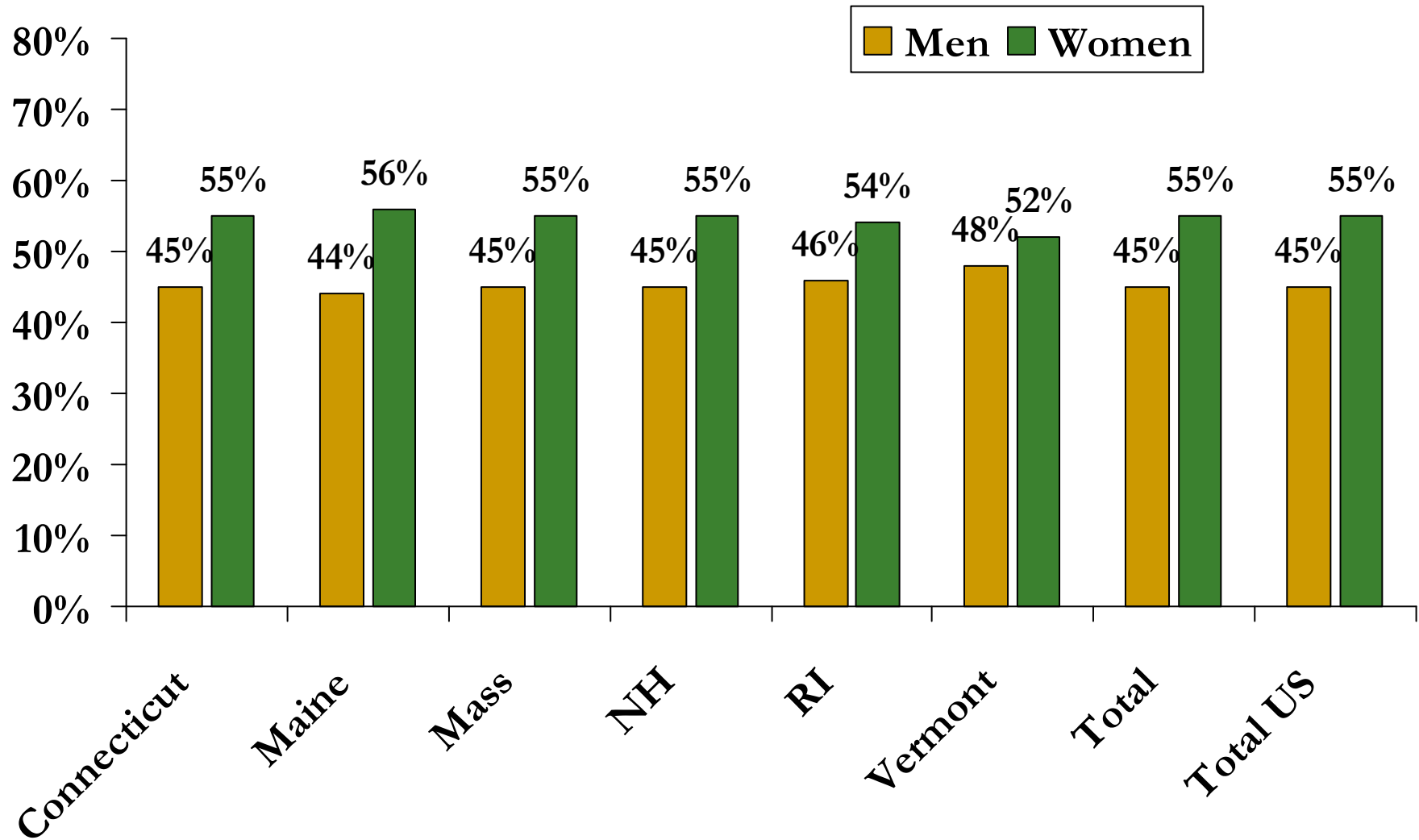
Fall 2005 Freshmen by Gender by Income



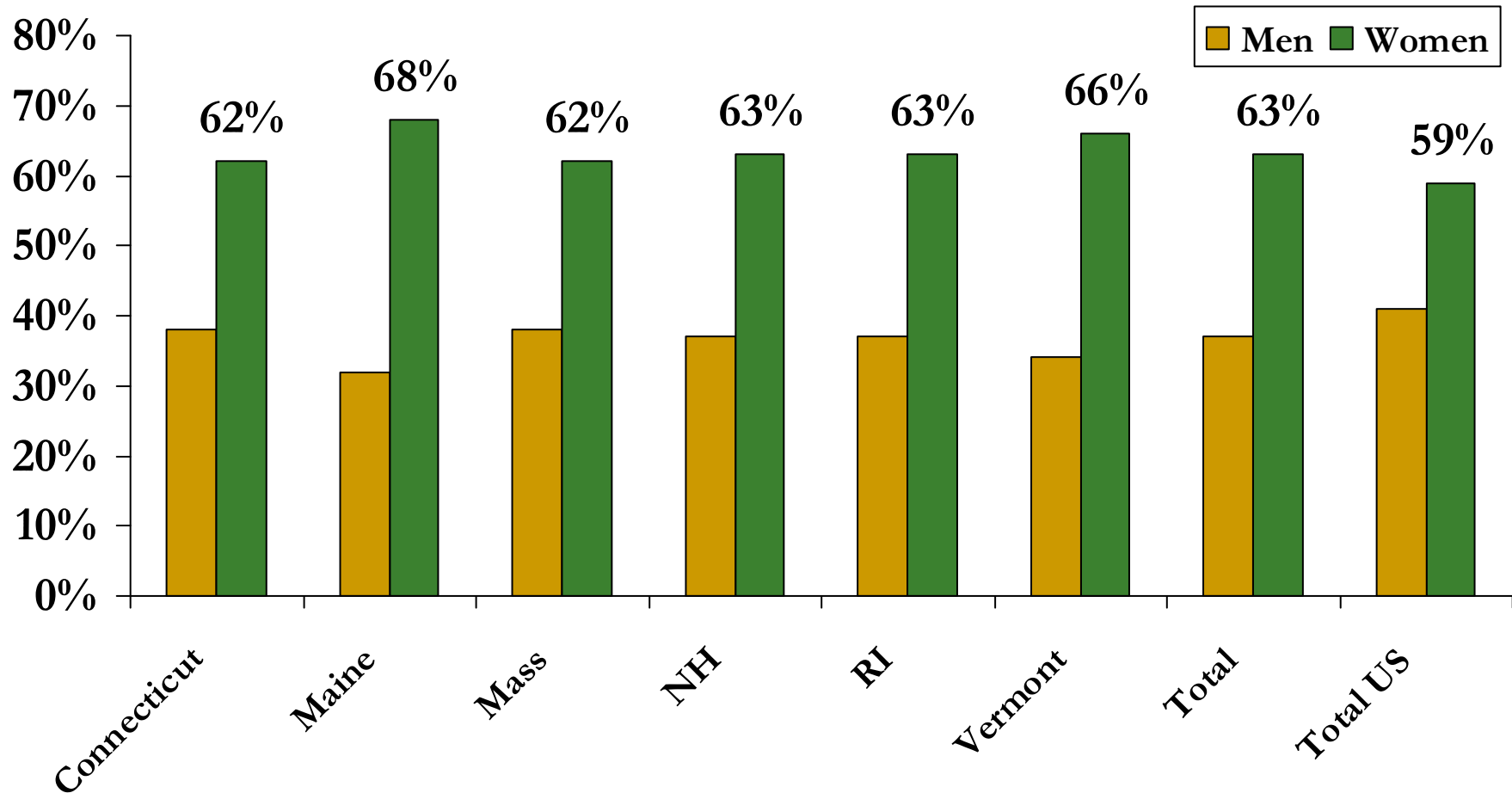
Fall 2005 Freshmen Average HS Grades by Gender



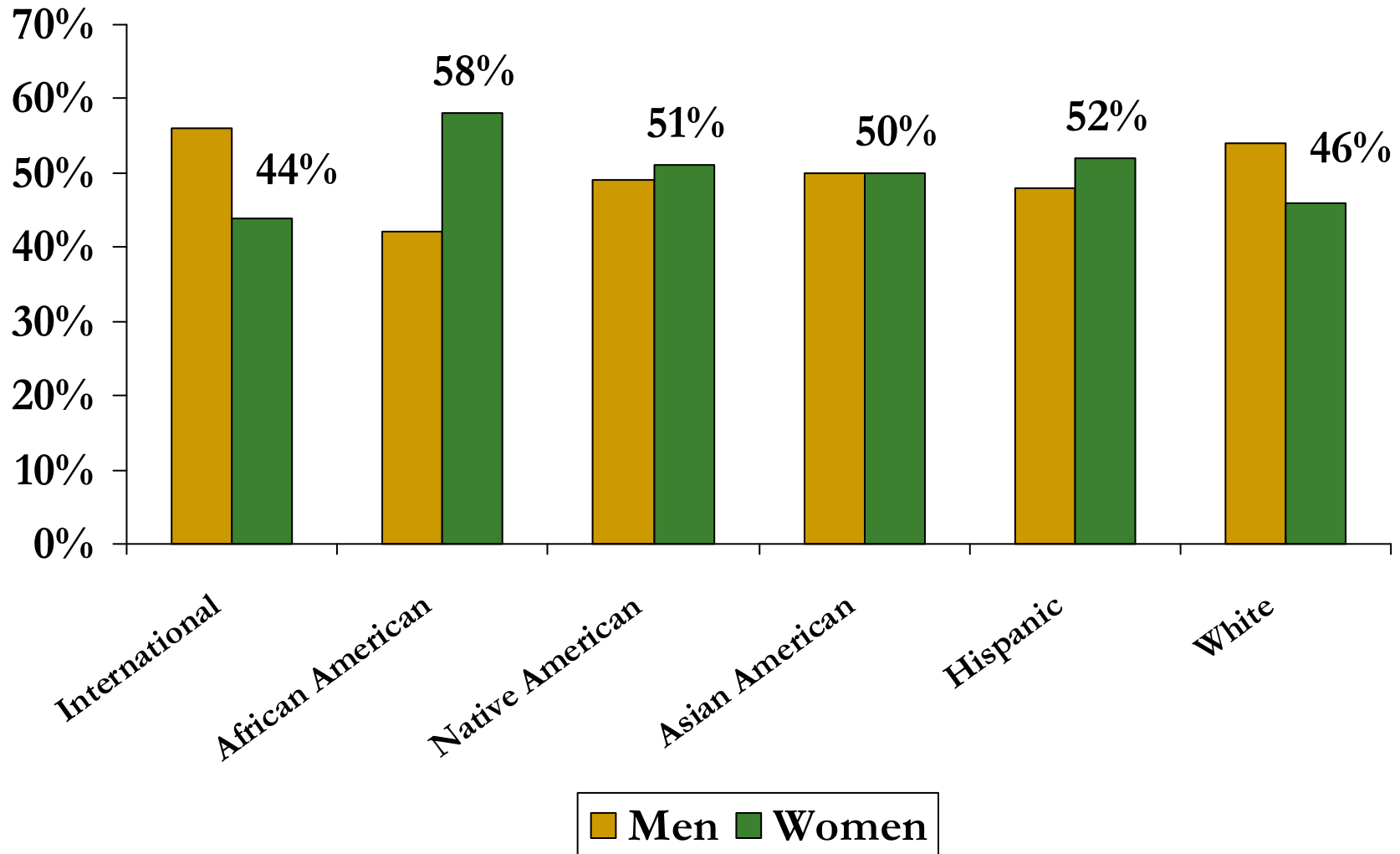
NE Enrollment Patterns: Full-Time



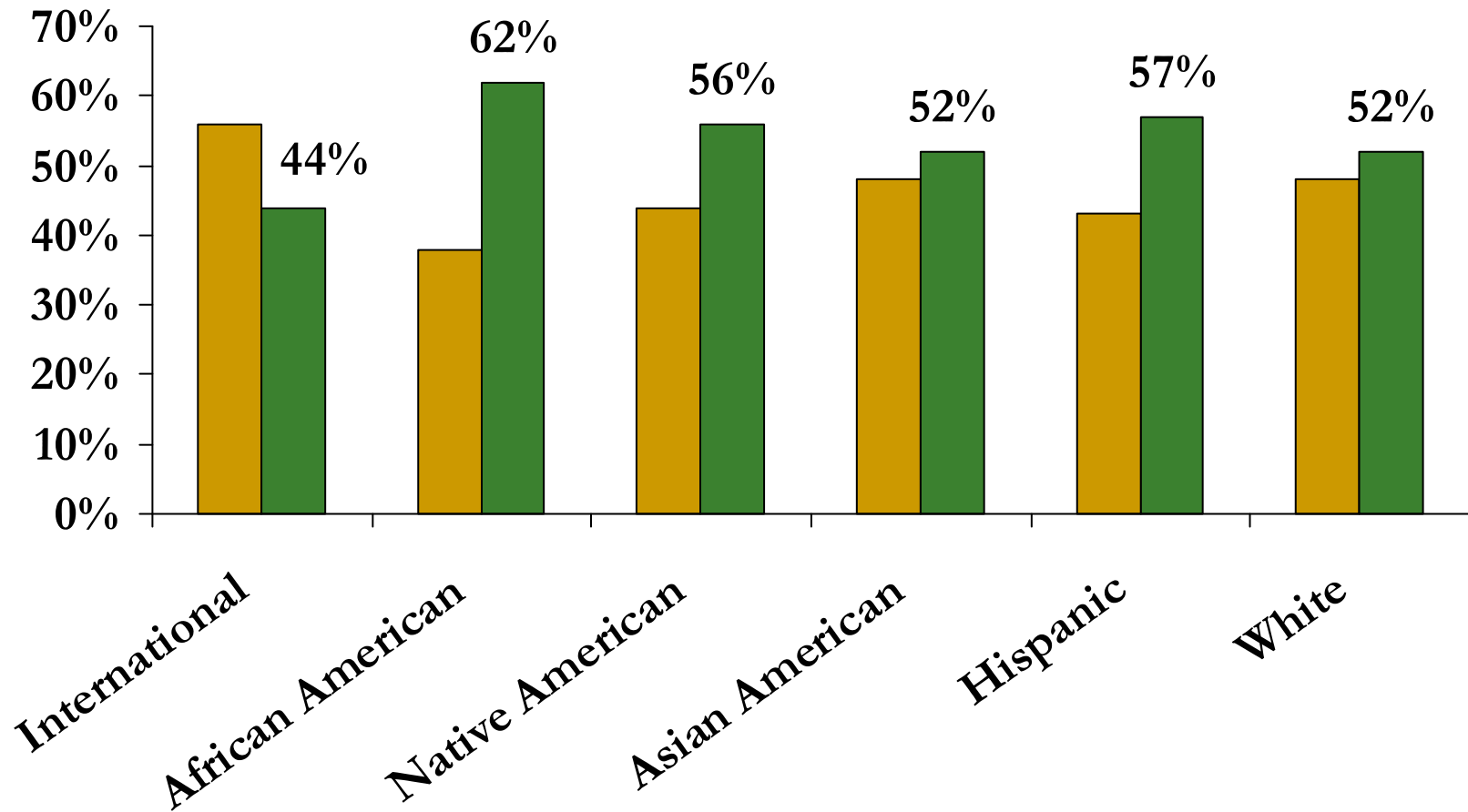
NE Enrollment Patterns: Part-Time



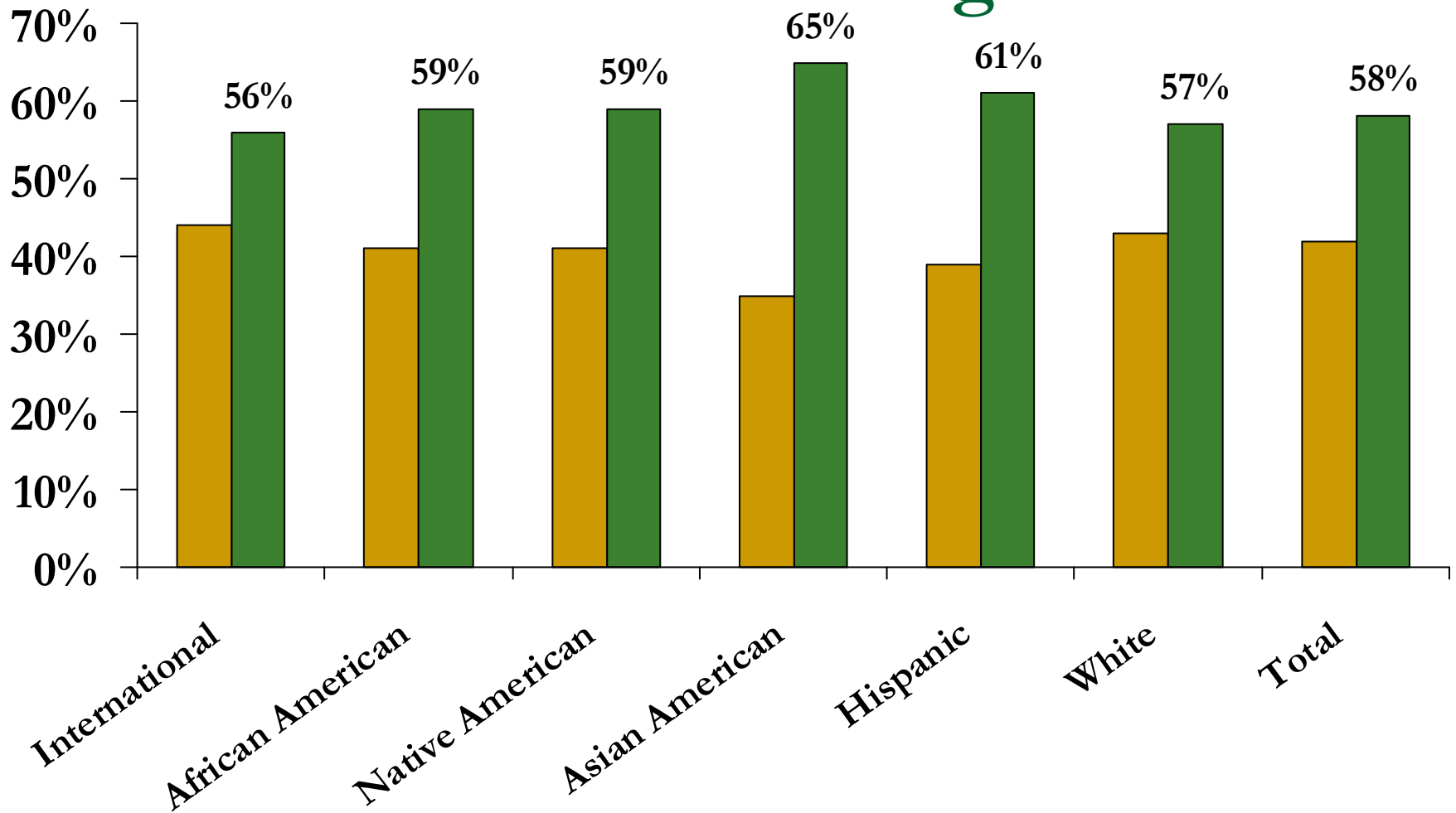
Enrollment at Ivy League



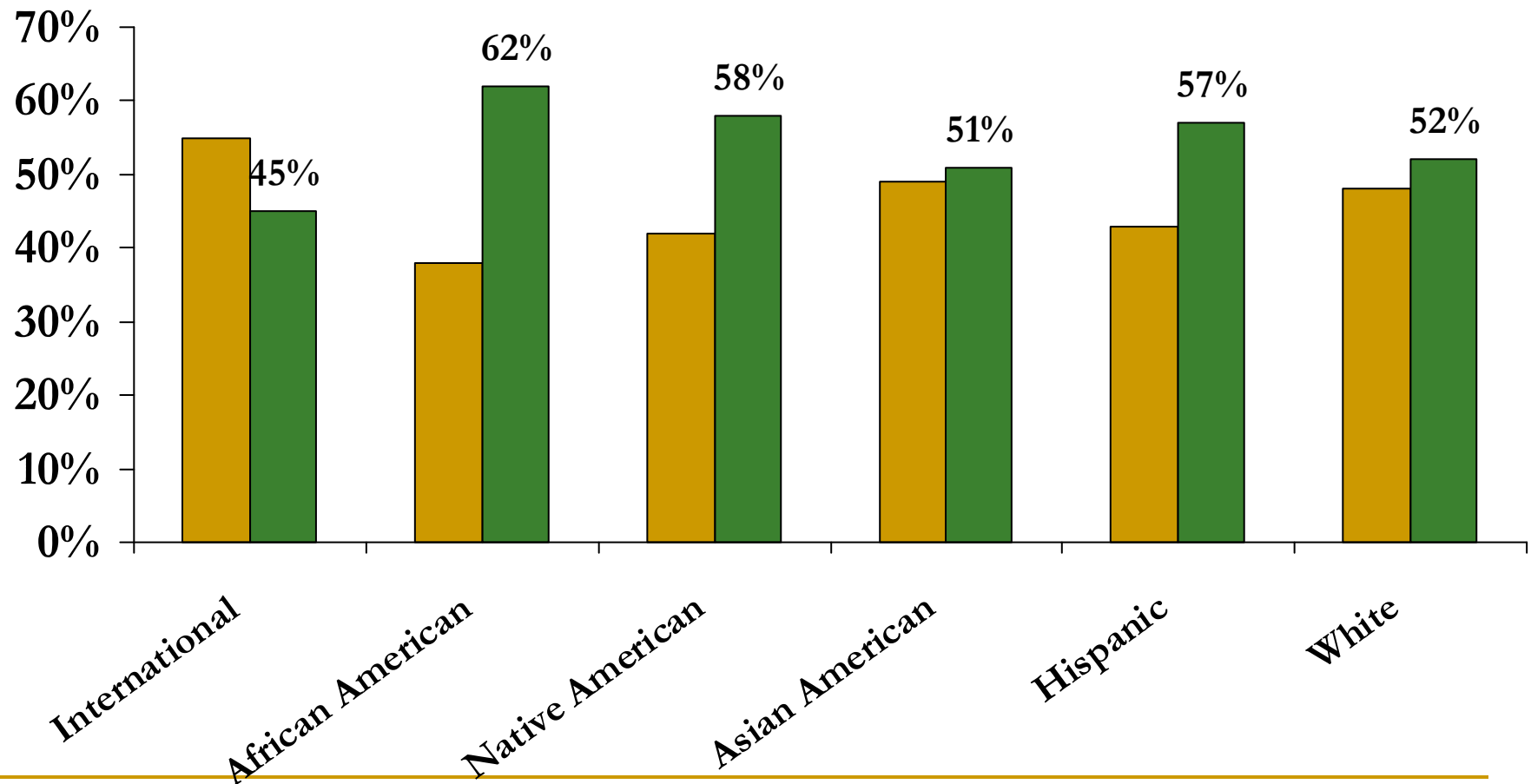
Doctoral (minus technical universities)



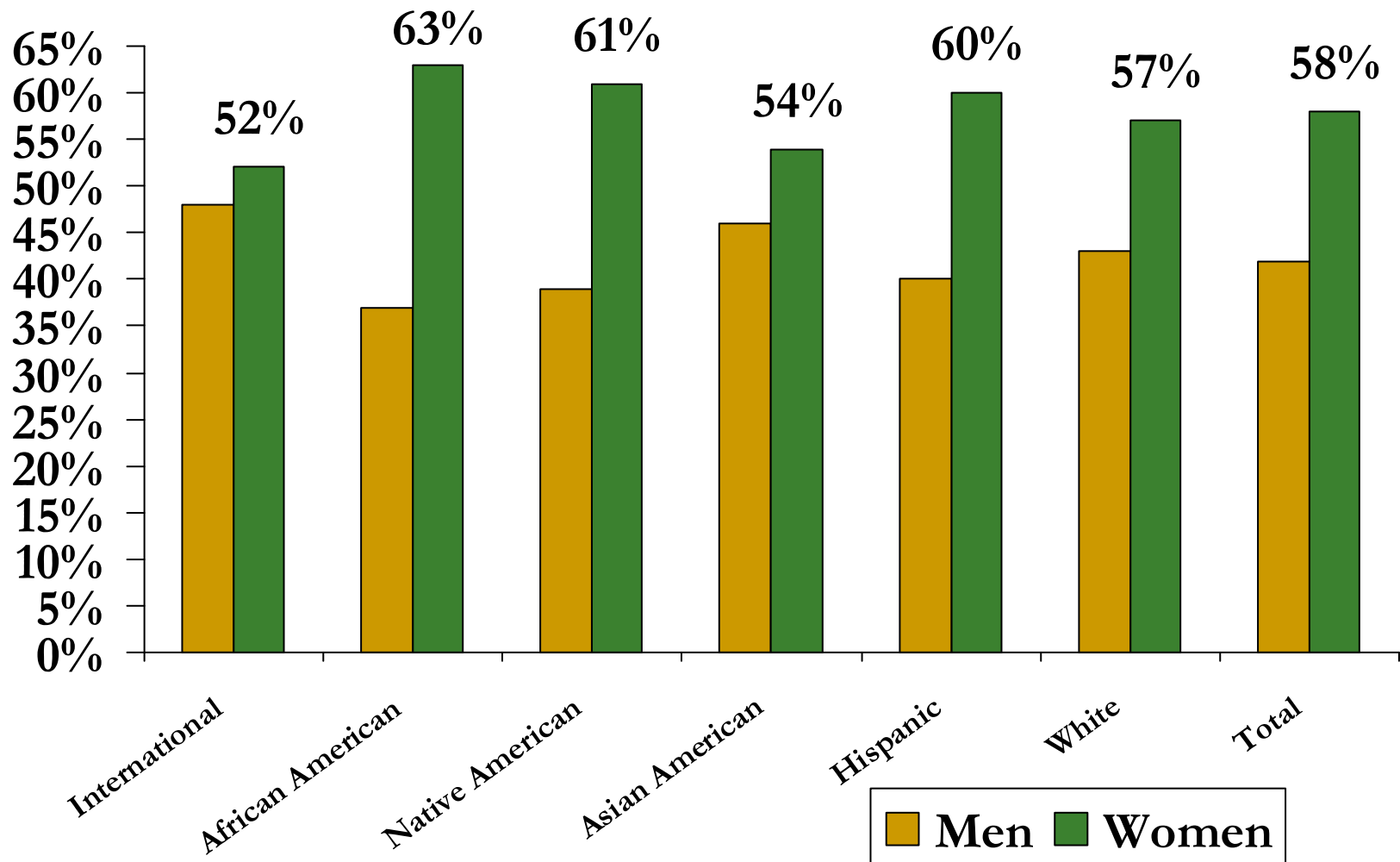
Enrollment at Private Liberal Arts Colleges



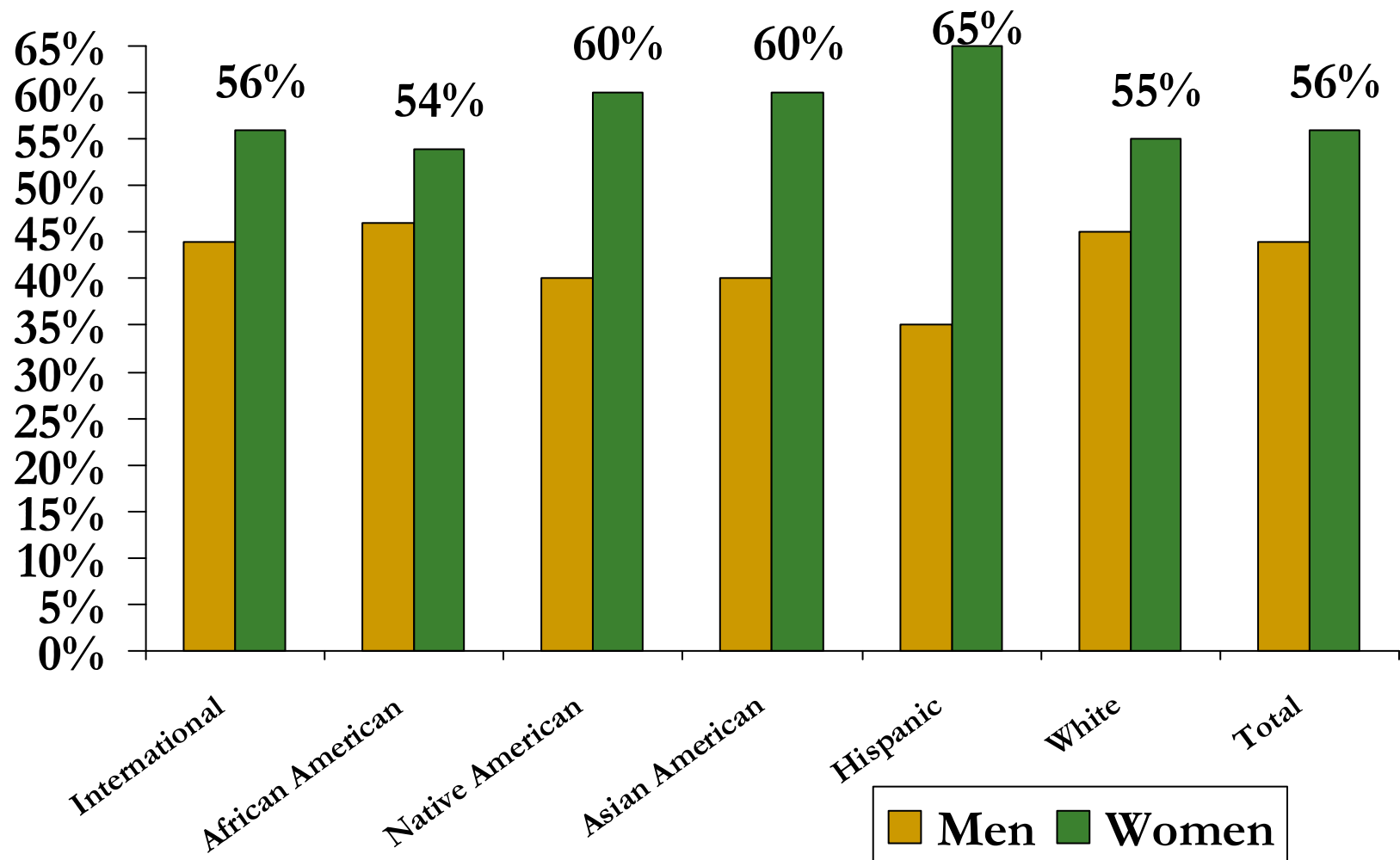
Enrollment at Public Research Universities



Public Master's Universities

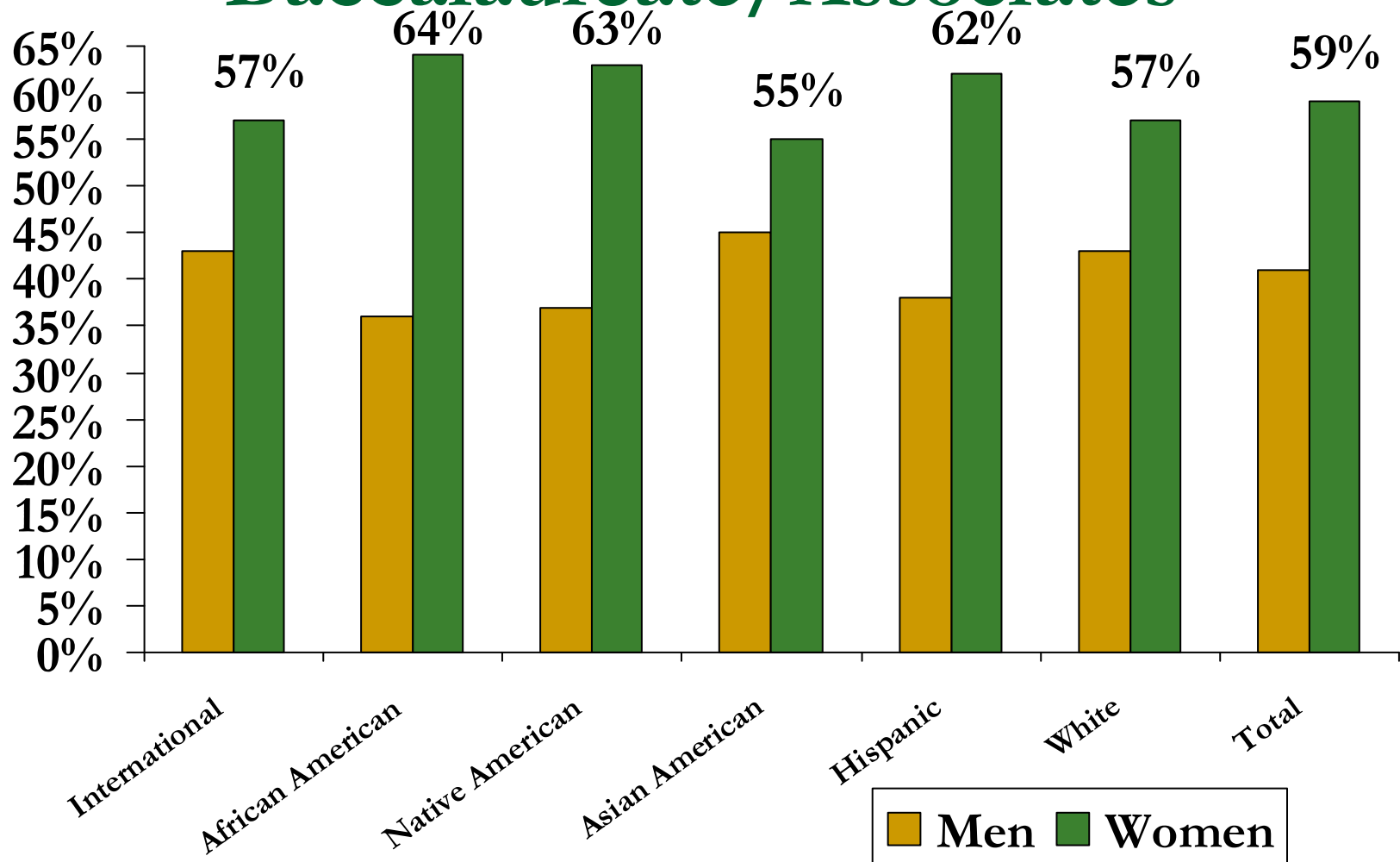


Public Liberal Arts Colleges

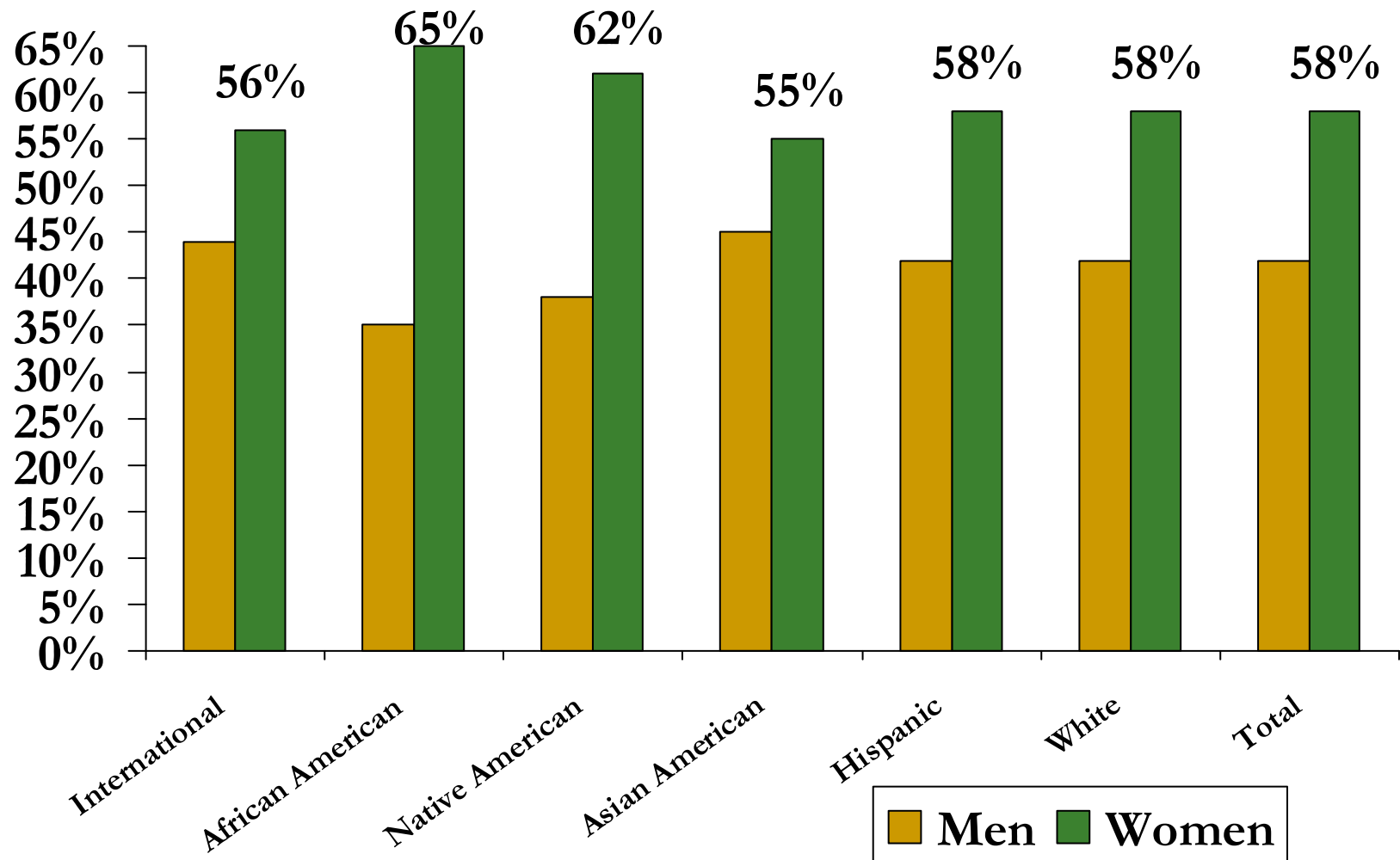


Public General

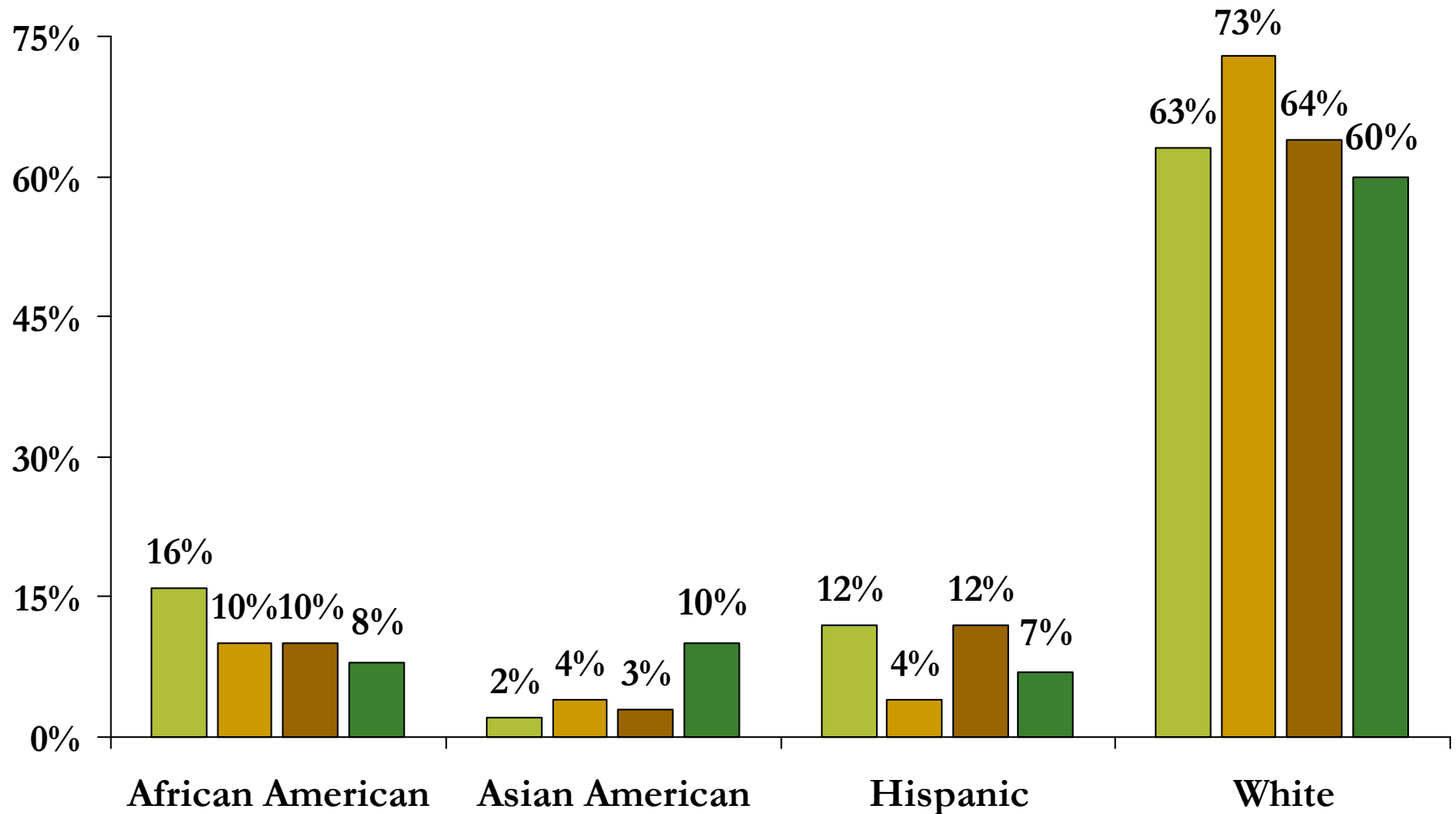
Baccalaureate/Associates



Public Two-Year Colleges



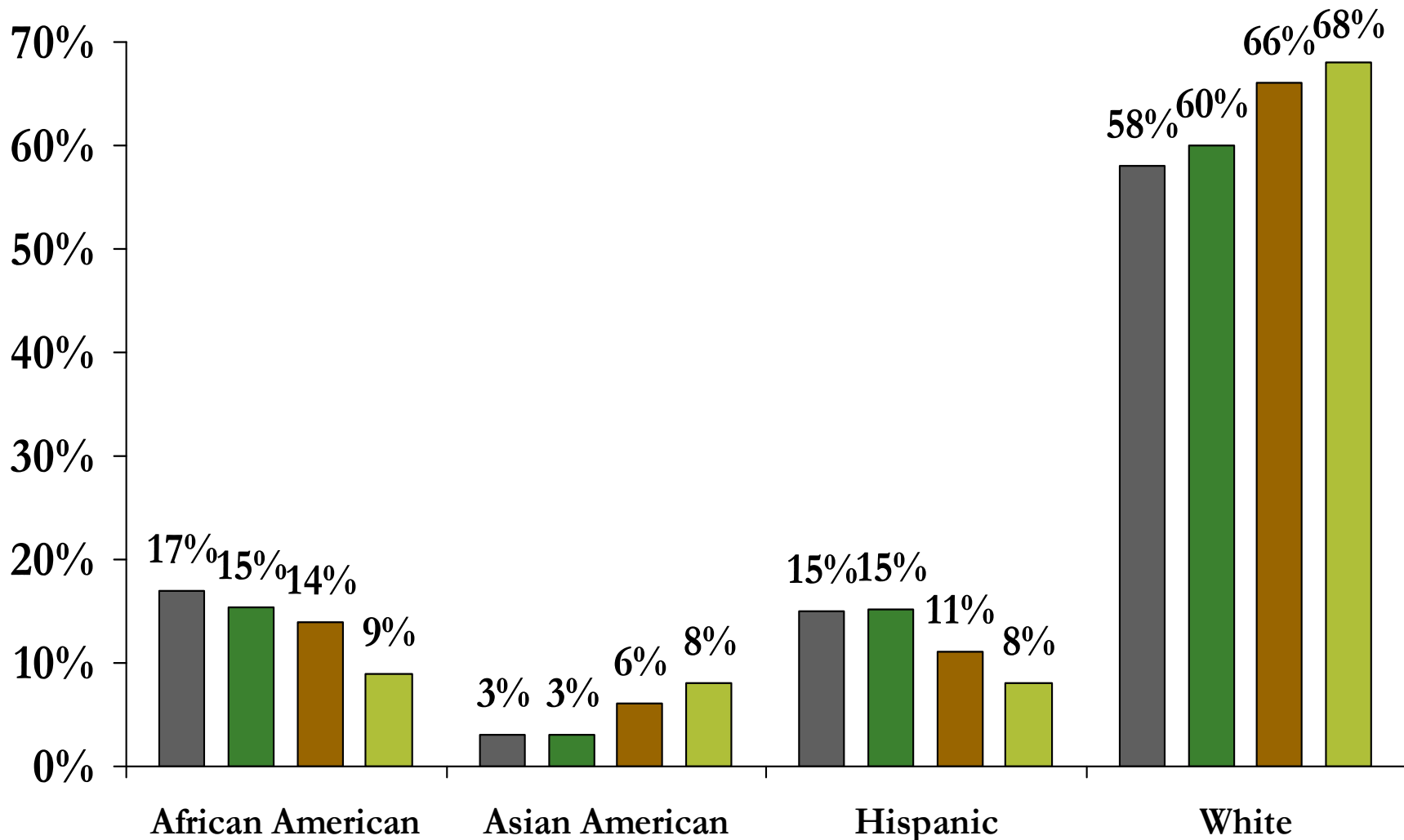
Race by Type of Private College



November 2006 NEAIR -- The Changing Demographics of Higher Education

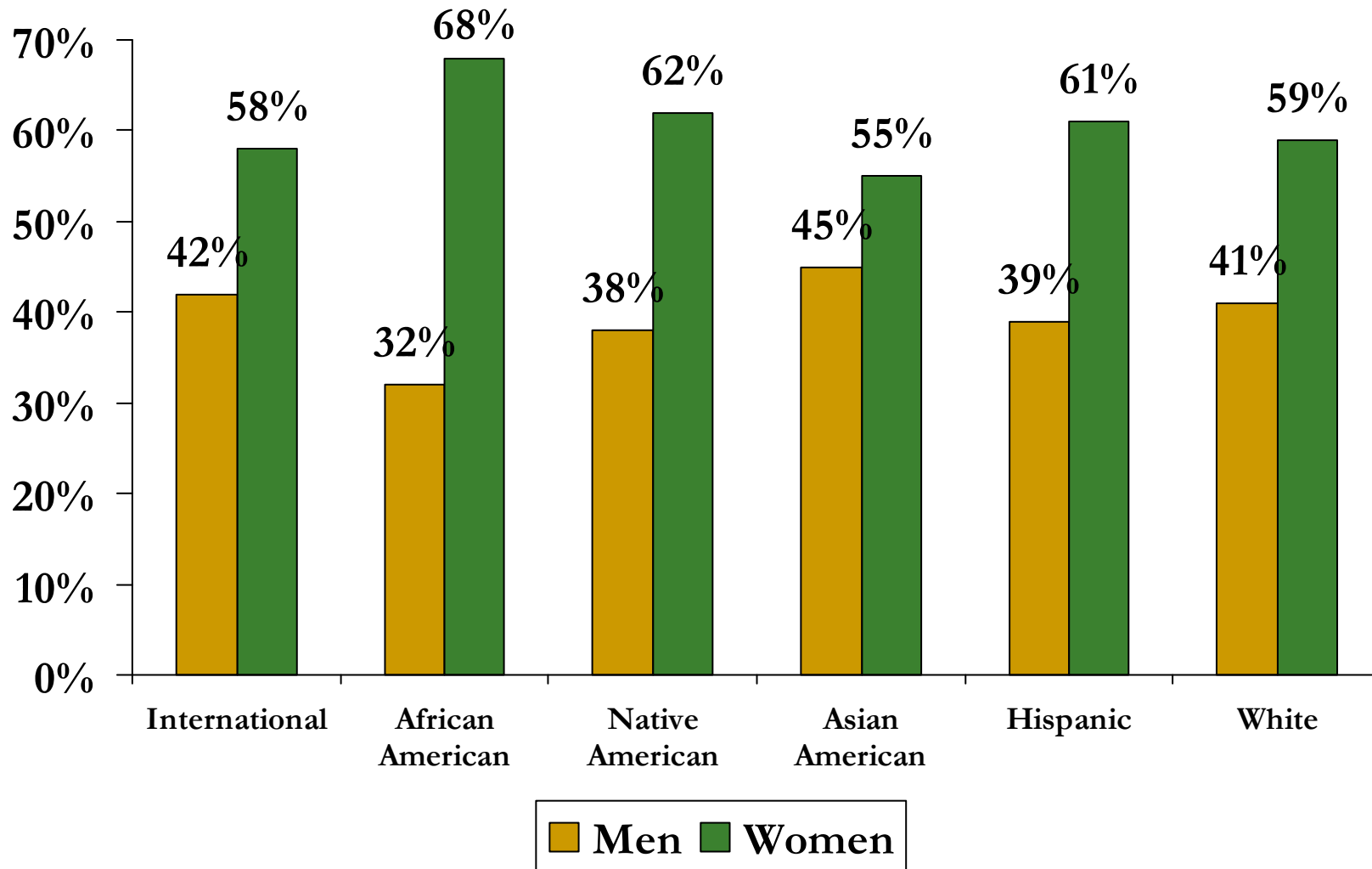
Bachelors/Associates
 Liberal Arts
 Masters
 Universities

Race by Type of Public College

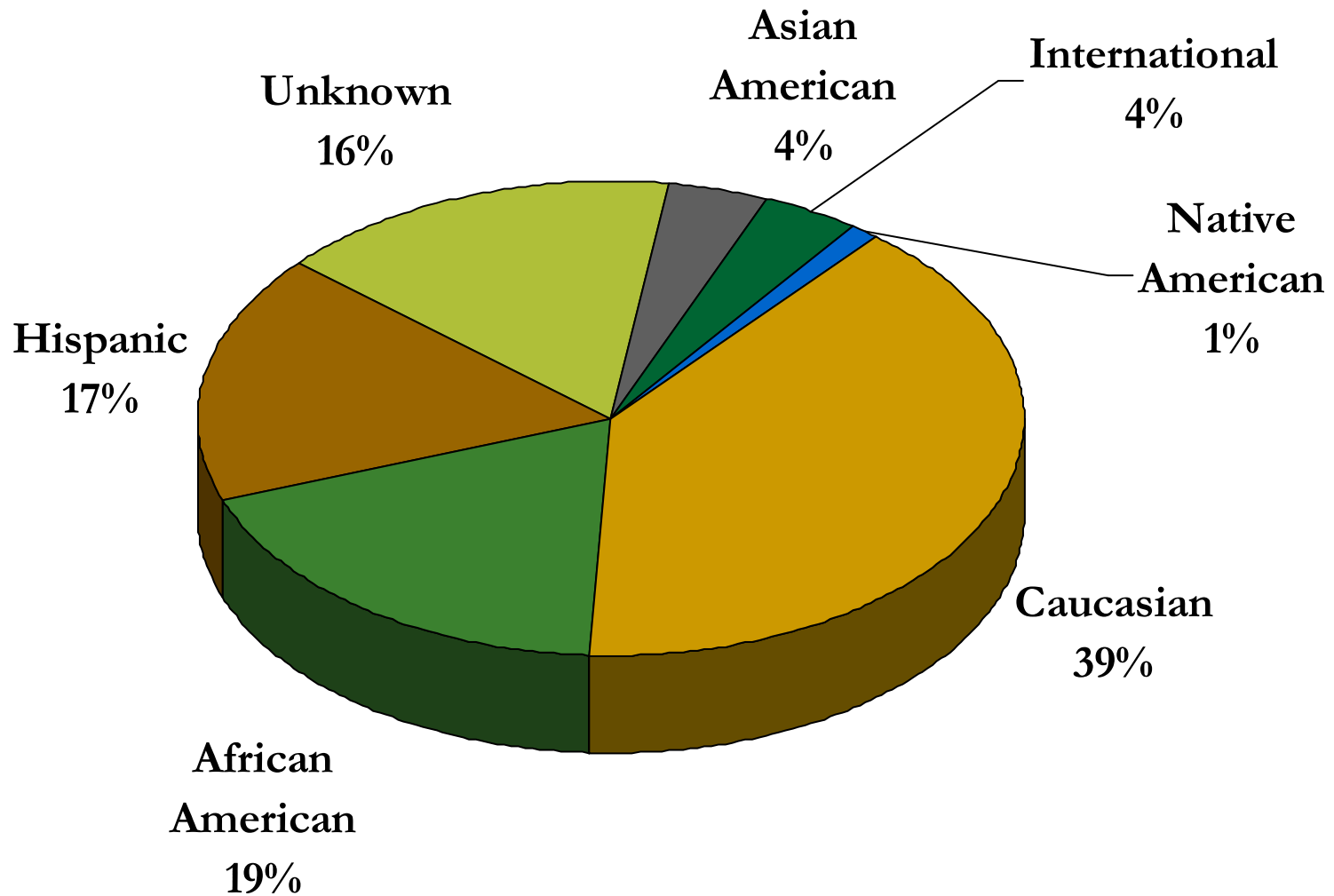


Bachelors/Associates
 Public LA
 Public Masters
 Research

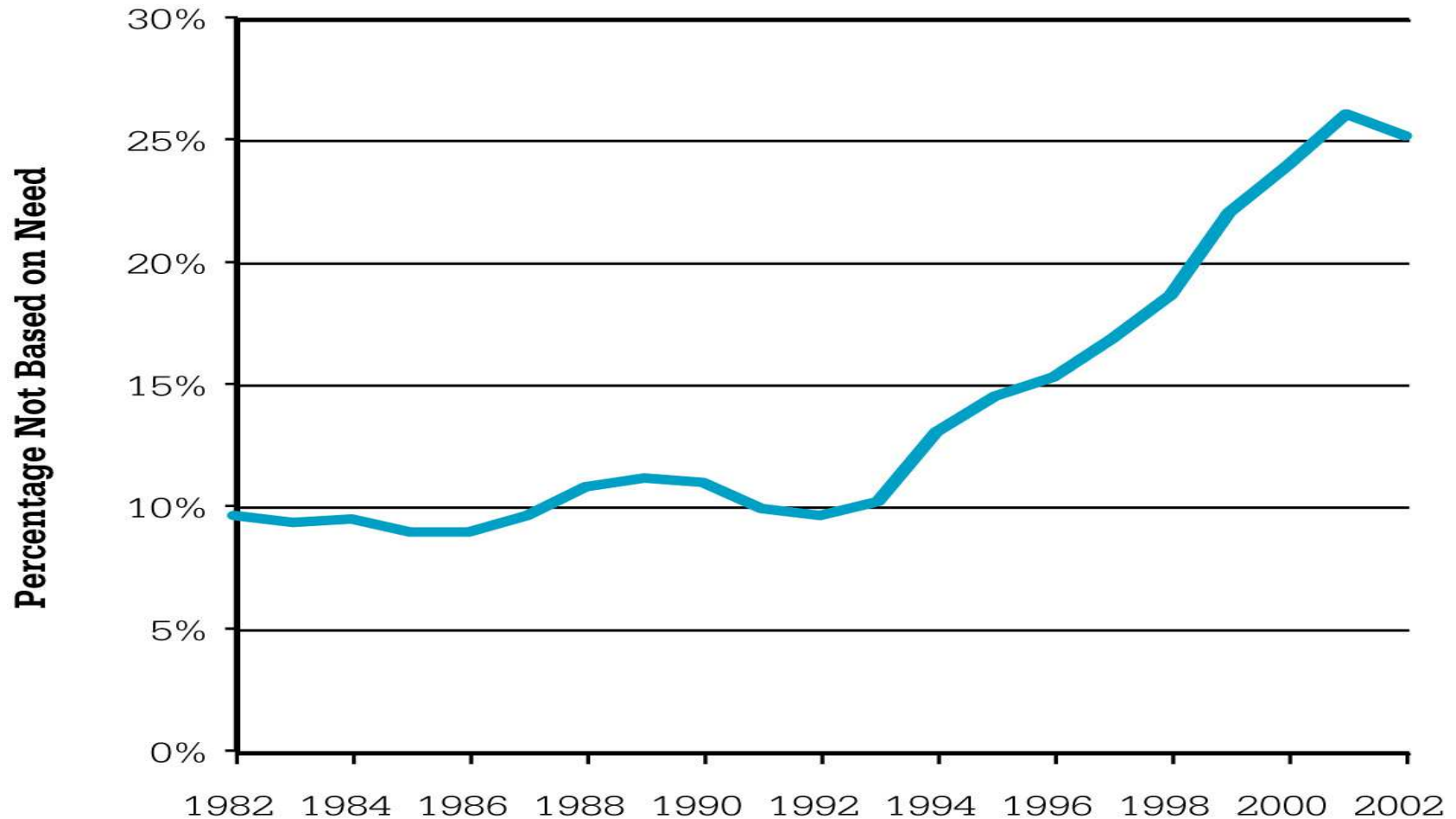
For Profit Colleges



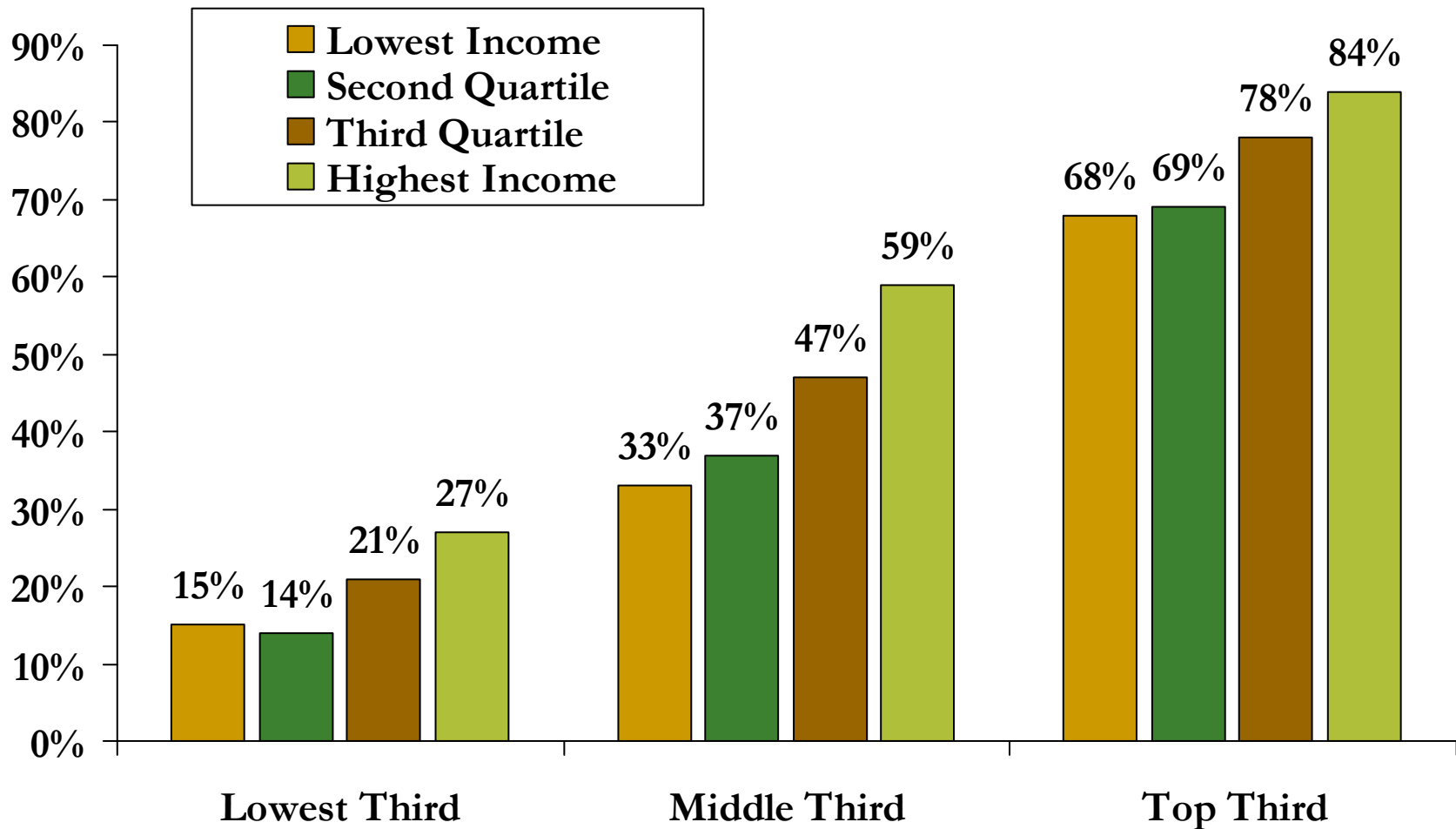
For Profit Colleges



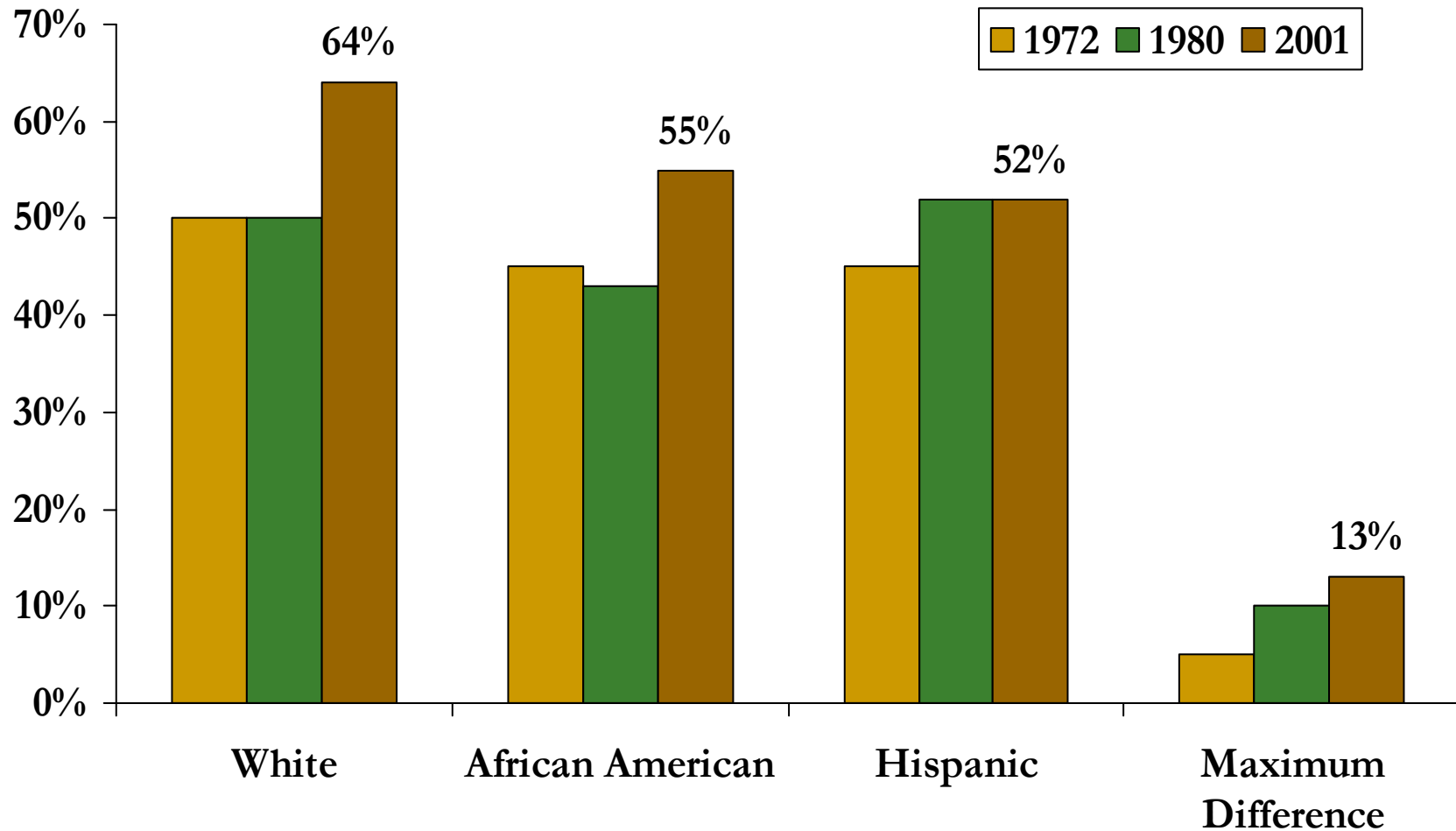
Percent of Total Undergraduate State Aid Not Based on Need, 1982 to 2002



Four-Year College & University Enrollment Rates of 1992 HS Graduates by Family Income and Math Test Scores

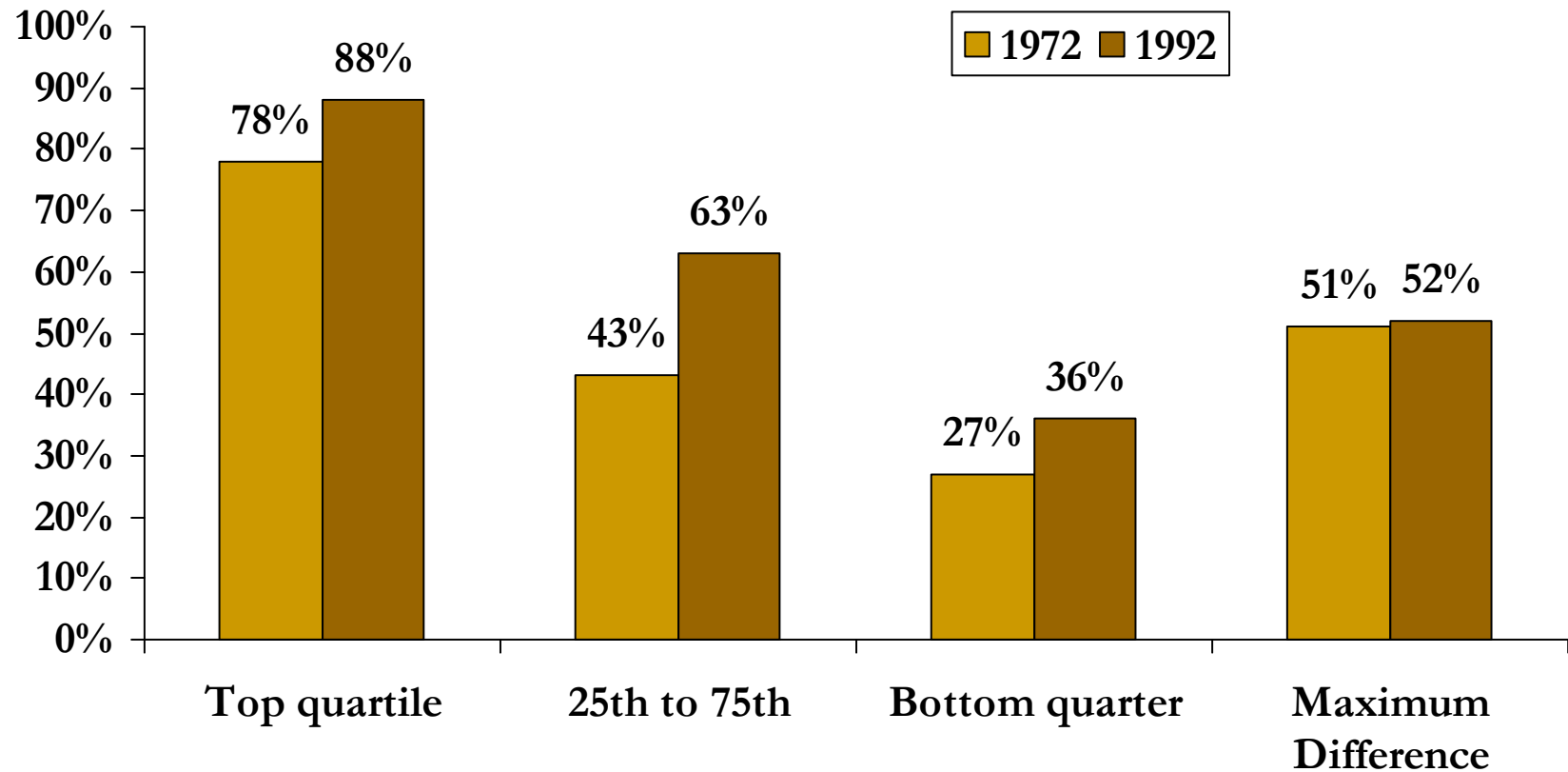


College Entrance within One-Year of High School Graduation



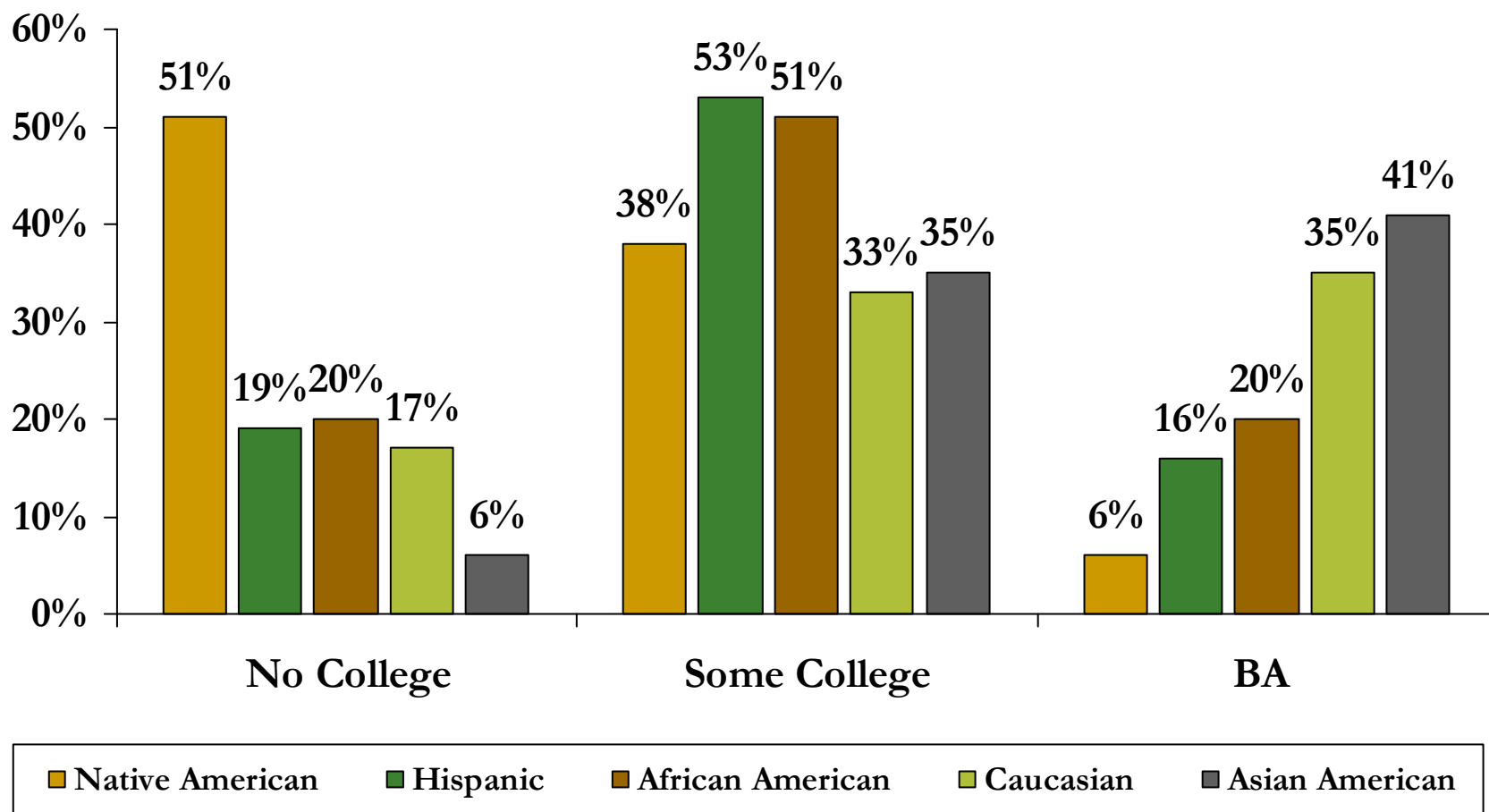
Source: Higher Education and the Color Line, Pg 37.

College Entrance within 2.5 years of graduation by SES

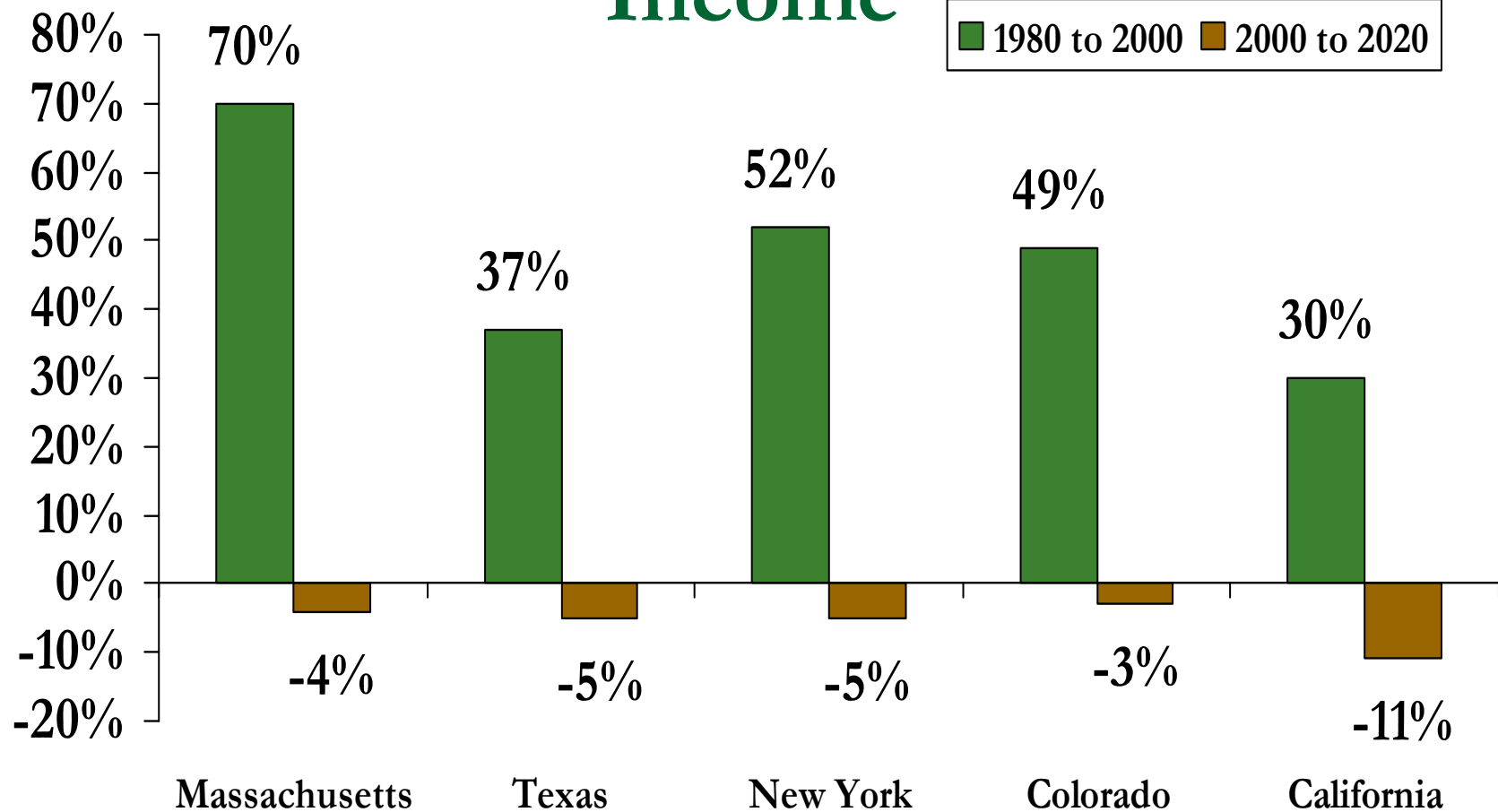


Source: Higher Education and the Color Line, pg. 37.

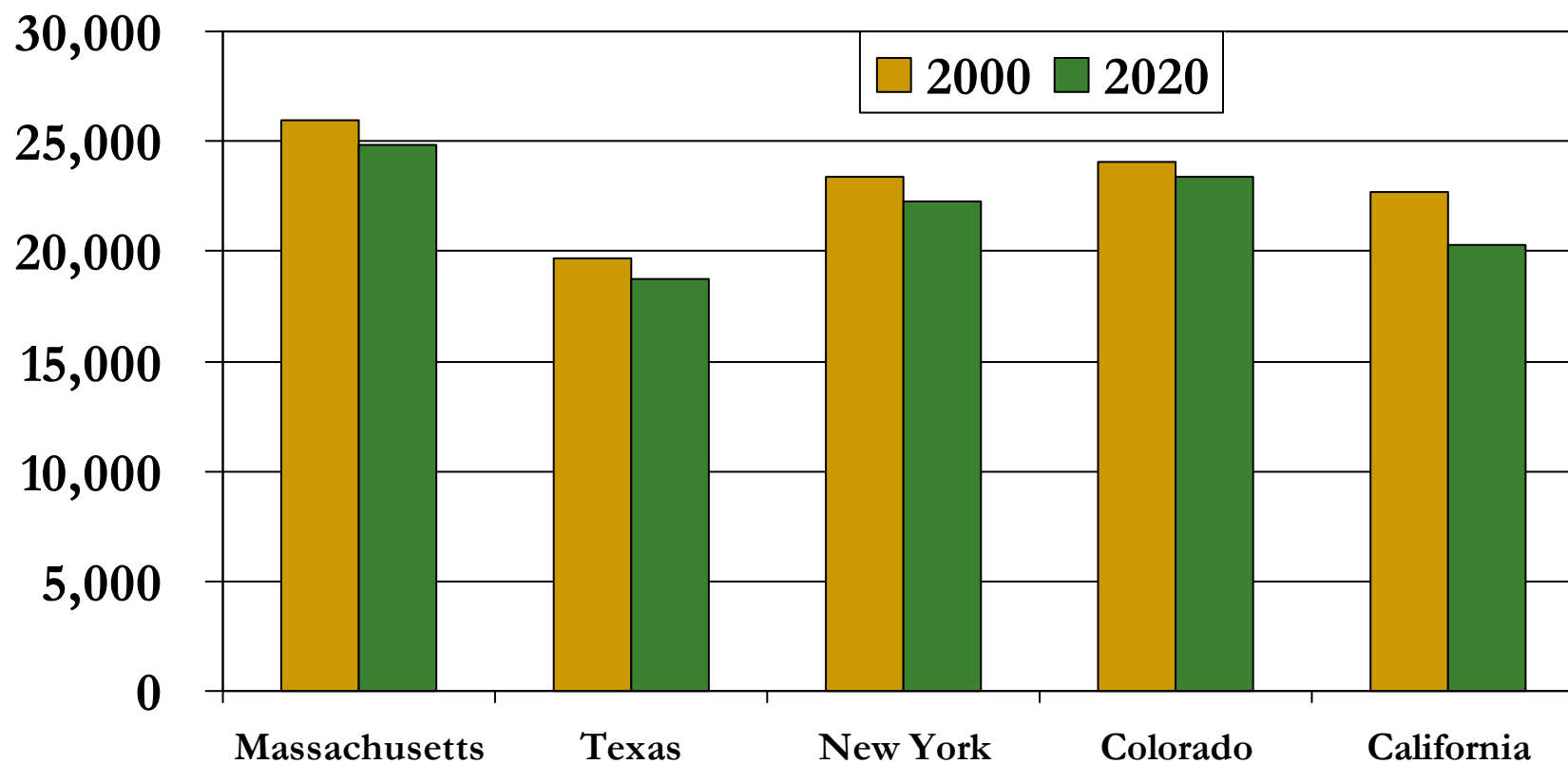
Levels of Education for the High School Class of 1992 (by 2000)



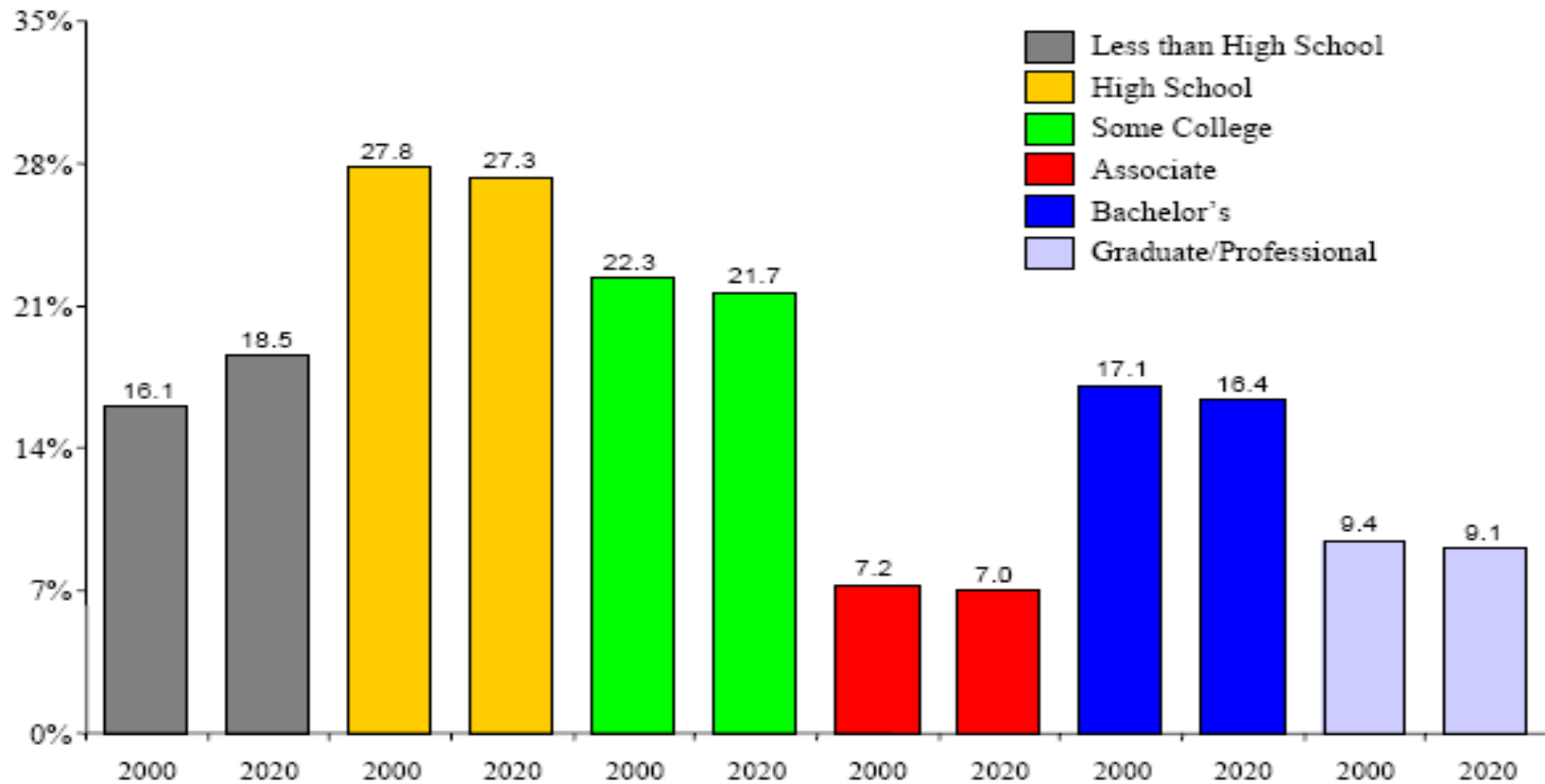
Implications for the States – Changes in Personal per Capita Income



Implications for the States – Personal per Capita Income



Percent Changes in Educational Attainment, 2000-2020 Projections:(25-64 Year-Olds)



Source: U.S. Census Bureau, Public Use Microdata Samples (Based on 2000 Census) and U.S. Population Projections

Summary

- HS graduation projections
 - in NE going down over all
 - Increases in groups with lower college continuation rates
 - Increasing in states that do not export students
 - Will affirmative actions changes/legal cases stifle enrollment by students of color in states like California and Texas?

Summary

- Male/Female ratios not likely to improve
- Colleges in NE going to have to work harder just to maintain market share – expand marketing efforts and develop new strategies

Implications

- More competition for fewer students in the North East
 - More expense to attempt to recruit students from outside the region
 - Will college going rates increase for different ethnic groups? Are we ready?
 - Will the pressure to maintain/increase market share lead to a growth in discounting and increase in state and institutional merit aid awards?
-

Demographic Changes Likely to Widen the Access Gap

- Next wave of high school graduates will look much different than today
- Number of high school graduates increasing
 - Till 2009, falls to 2004 levels in 2014, then growth will surpass 2008 levels
- Increases in underrepresented minorities
- Increases in some areas of country but not others
- Rising tuition and fees Federal and State aid patterns make colleges appear unaffordable
- Income differences by race/ethnicity will challenge access for Blacks/Hispanics

Growing interest in State Data Bases May Also Affect Enrollment Managers

- Easier to track institutional outcomes.
- Given current linear simplistic thinking of policy makers, this could disadvantage schools that are less selective.
- May see more nuanced definitions of persistence and continuing that may help institutions that attract large numbers of mobile students

Summing Up: Moody's 2006 Higher Ed Outlook

- Continued higher education participation rate increases across all demographic groups
- Heightened competition for students in demographically vibrant states, as colleges & universities seek to expand their traditional markets
- Potential increases in financial aid/tuition discounting above the rate of tuition growth, especially in demographically challenged states

Moody's 2006 Higher Ed Outlook

Enrollment/Demand Trends

- Many institutions in states with difficult demographic environments reaching out beyond their core markets to recruit additional out of state students. (*approximately 80% of students enroll in their home state*)
- Building a presence in a new market may take several years to effectively develop and translate into real revenue growth from stronger out-of-state enrollment

Moody's 2006 Higher Ed Outlook

Enrollment/Demand Trends

- Further demand for graduate and professional programs, and education adult programs, although this is a highly competitive and often cyclical market and necessitates careful management
- The community colleges may experience the most rapid growth, as first generation college attendees enroll, leading to institutions to focus more on transfer populations

Broad Institutional Enrollment Management Considerations

- Does your staff (the faculty and administrators) resemble in the composition of future student body?
- Will your strategy be to target these new groups of students or will you attempt to adapt to changes as they occur?
- What are the financial resources (including financial aid) necessary to meet the institution's enrollment goals?
- If students come in with weaker preparation, what will be your response?
- What will be the impact on retention and graduation?

Specific Implications for Enrollment Managers? It Depends

- Institutional type and sector
 - Public or private
 - Two year or four year
 - Selective or less selective
- Geographical location
- Institutional draw (market position)

More.....

- Direction of campus aid policies hard to discern
 - For the moment, growing competition around merit aid
 - Growing public attention on negative effects of merit aid
 - Emerging focus on need based aid
 - There is a finite amount of money campuses can spend on aid

Additional Implications for Enrollment Managers

- Some institutions will enroll student bodies that are less academically prepared than current classes.
- Some institutions will see shrinking enrollments because of declines in the number of high school graduates in their states or regions.
- Some institutions may need to expand or alter their recruitment strategies and redefine the target populations they seek to attract and enroll.
- The racial and ethnic composition of students on campus may be markedly different from current classes.

Emerging Era of the Community College?

- Demographic shifts pose potential problems – they have more in common characteristics of students attending 2 year colleges
- Students starting in 2 year colleges may already have a predisposition for publics
- Public policy trends could result in longer term student shifts toward community colleges which could result in more students at publics

How do we use this data?

- Enrollment projections modeling
 - Trends in applications by state and region
 - Average market share over recent years
 - Projections of applicants by state and racial/ethnic group
- Enrollment management research opportunities
 - Strategies for increasing market share
 - Strategies for expanding recruiting areas
 - Communications/publications strategies – publish in difference languages (especially for parents), hire multi-lingual recruiters
 - Consider new financial aid/financing strategies

What do these colleges have in common?

- Bradford College
- Westbrook College
- Ricker College
- Trinity College
- Notre Dame

No longer exist or exist under a different name

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