

Center for Higher Education Policy Studies  
University of Twente  
Enschede, Netherlands  
July 20, 2006

Student Financing of Tertiary Education:  
A View From the United States

Donald E. Heller

PENNSTATE



COLLEGE *of* EDUCATION

CENTER FOR THE STUDY OF HIGHER EDUCATION

## Snapshot of tertiary education in the U.S.

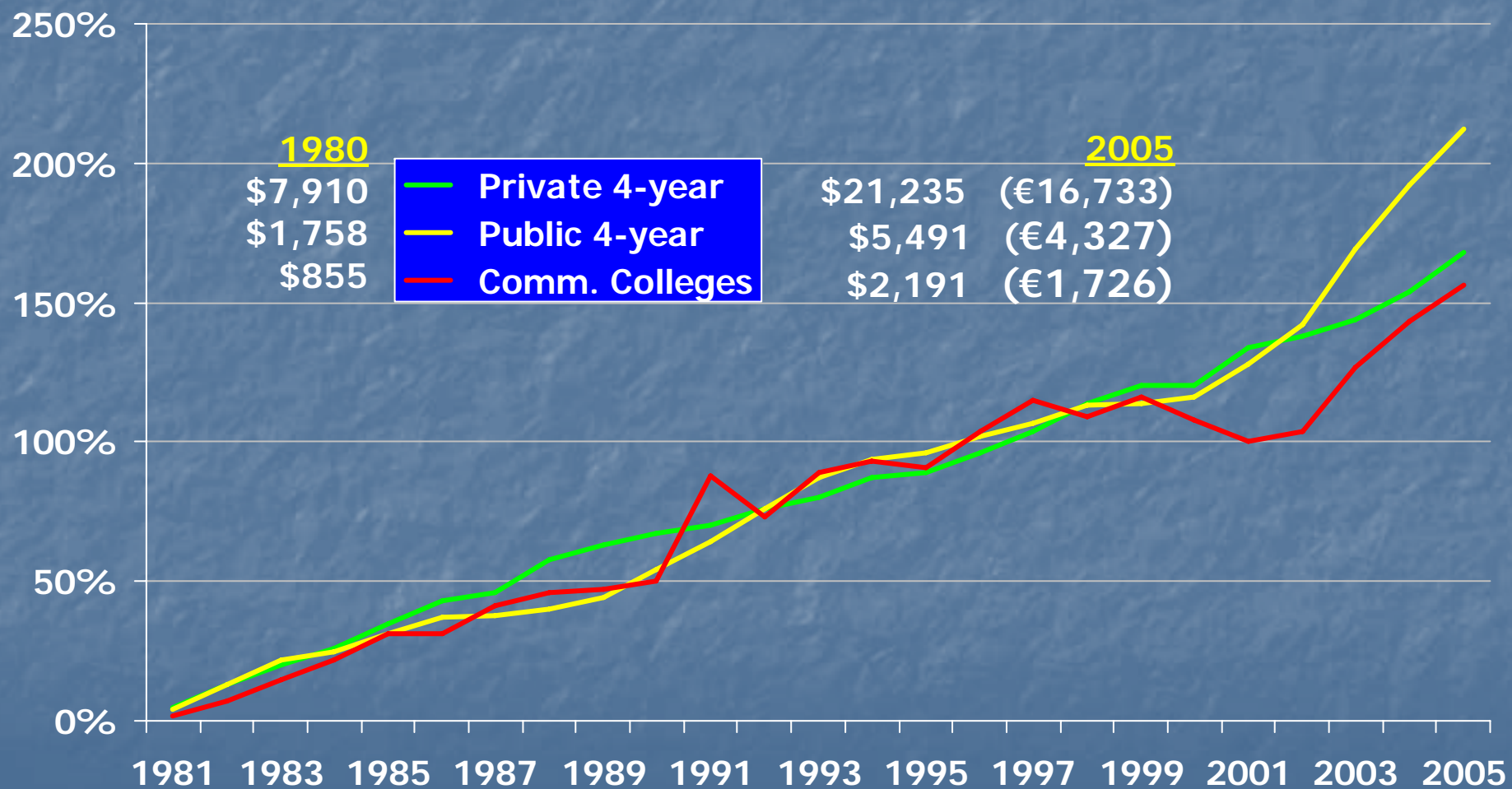
- 4,200 accredited institutions (40% public/60% private)
- 17 million students
  - 75% in public institutions, 25% private
- 1.4 million bachelor's degrees
  - 700,000 sub-baccalaureate degrees/certificates
  - 700,000 post-baccalaureate degrees
- 3.2 million employees (1.2 million faculty)
- Expenditures: approx. \$300 billion (€236 thousand million)

## Brief history of public support for tertiary education

- Earliest colleges during the colonial era were private (Harvard, 1636)
- First “public” institutions often benefited from proceeds of publicly-run lotteries
- State appropriations spurred on by the Morrill Act in 1862
- Earliest public universities charged tuition
  - Tuition charges of \$5 to \$12 from 1855 to 1874
  - \$50 in 1920
  - \$80 by WW II
  - \$298 by 1964
- Biggest increases in the last 25 years
- Financial aid has been offered since the founding of public universities

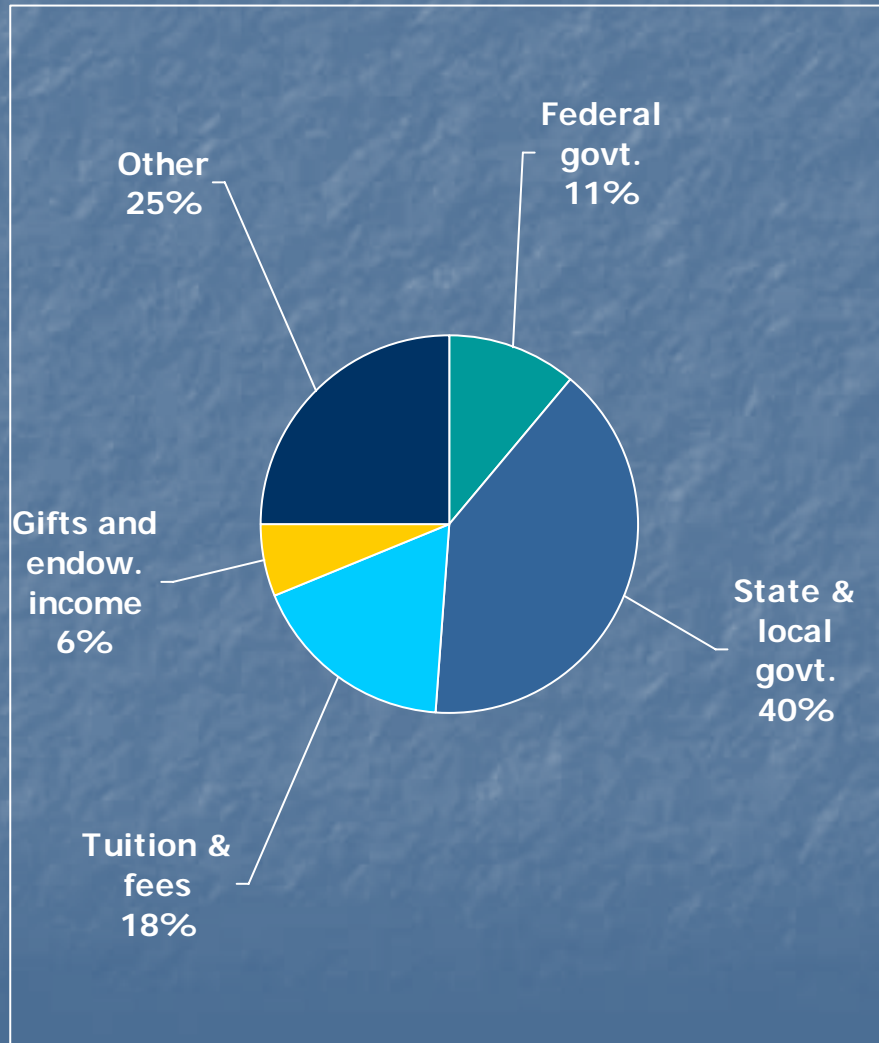
# Changes in tuition prices nationally

Increase in tuition prices since 1980, **constant (2005) dollars**

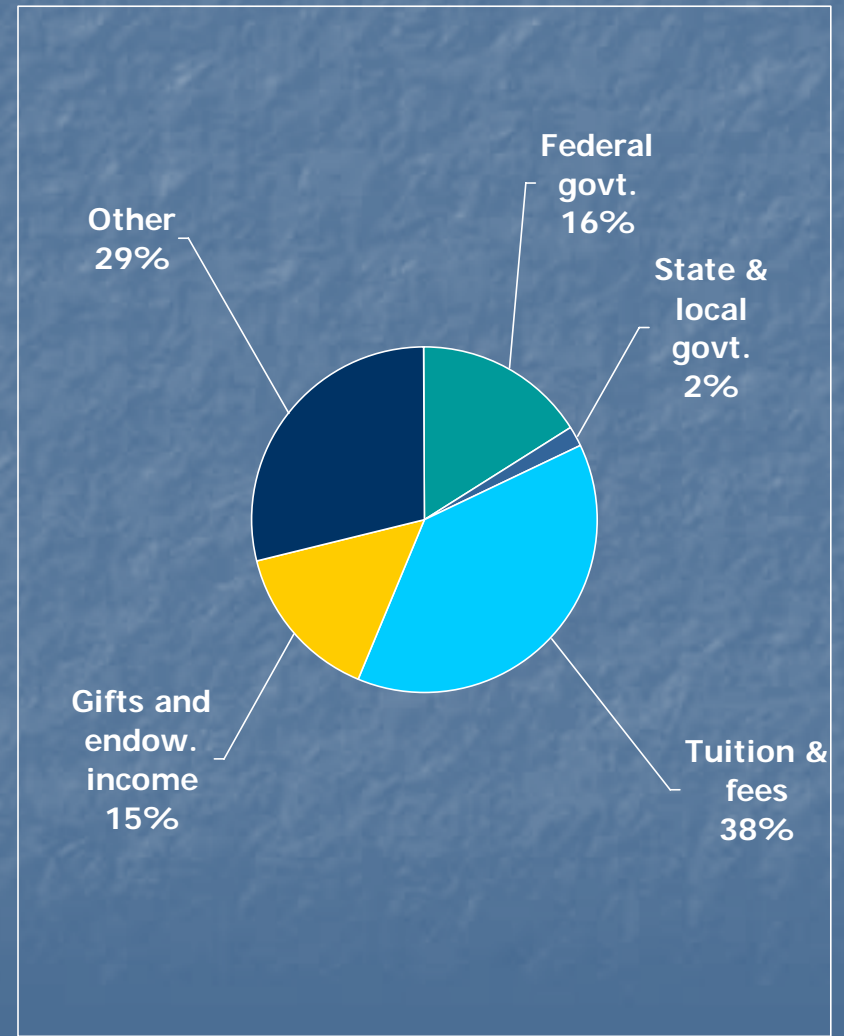


# Sources of revenues, 2000-01

## Public

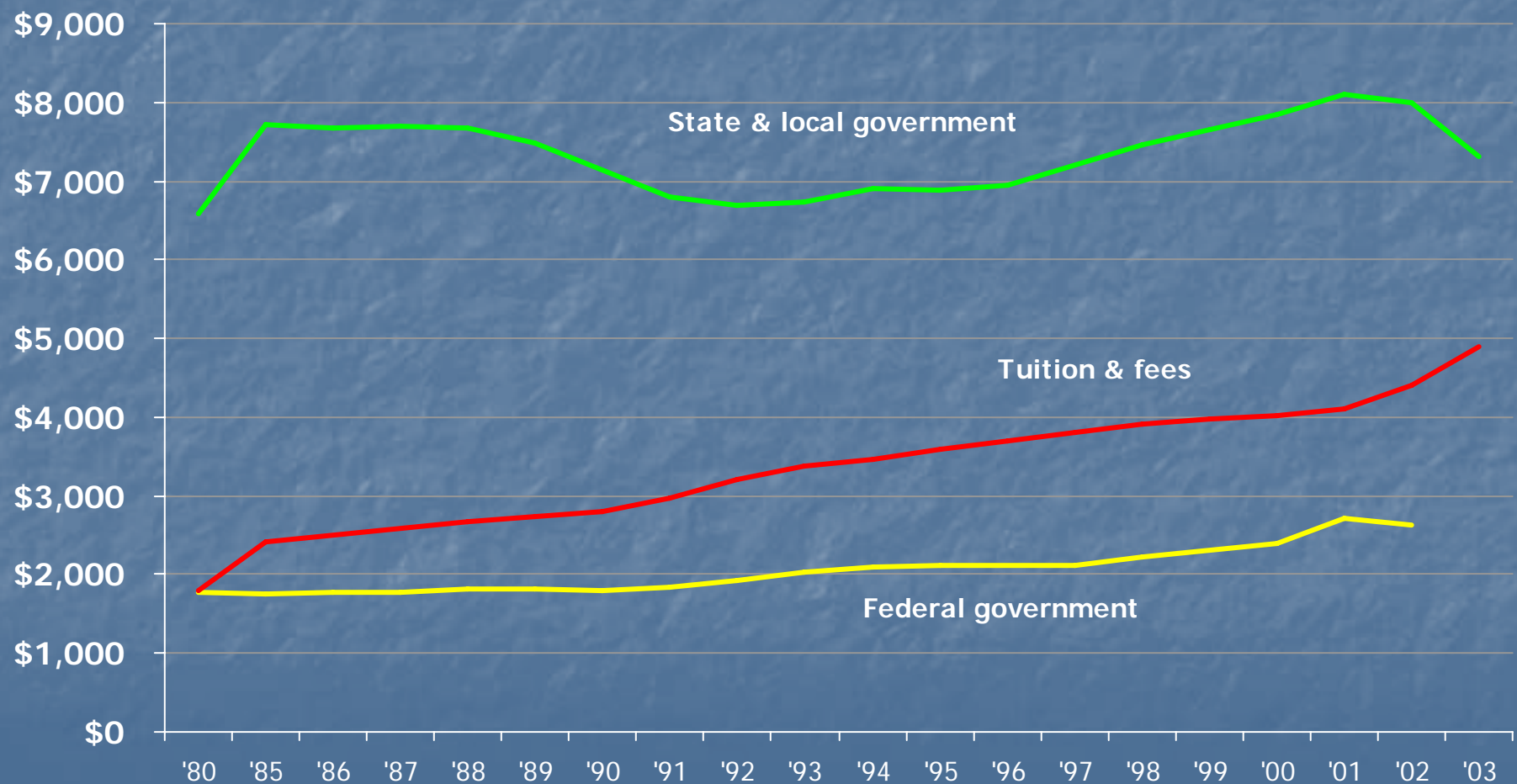


## Private



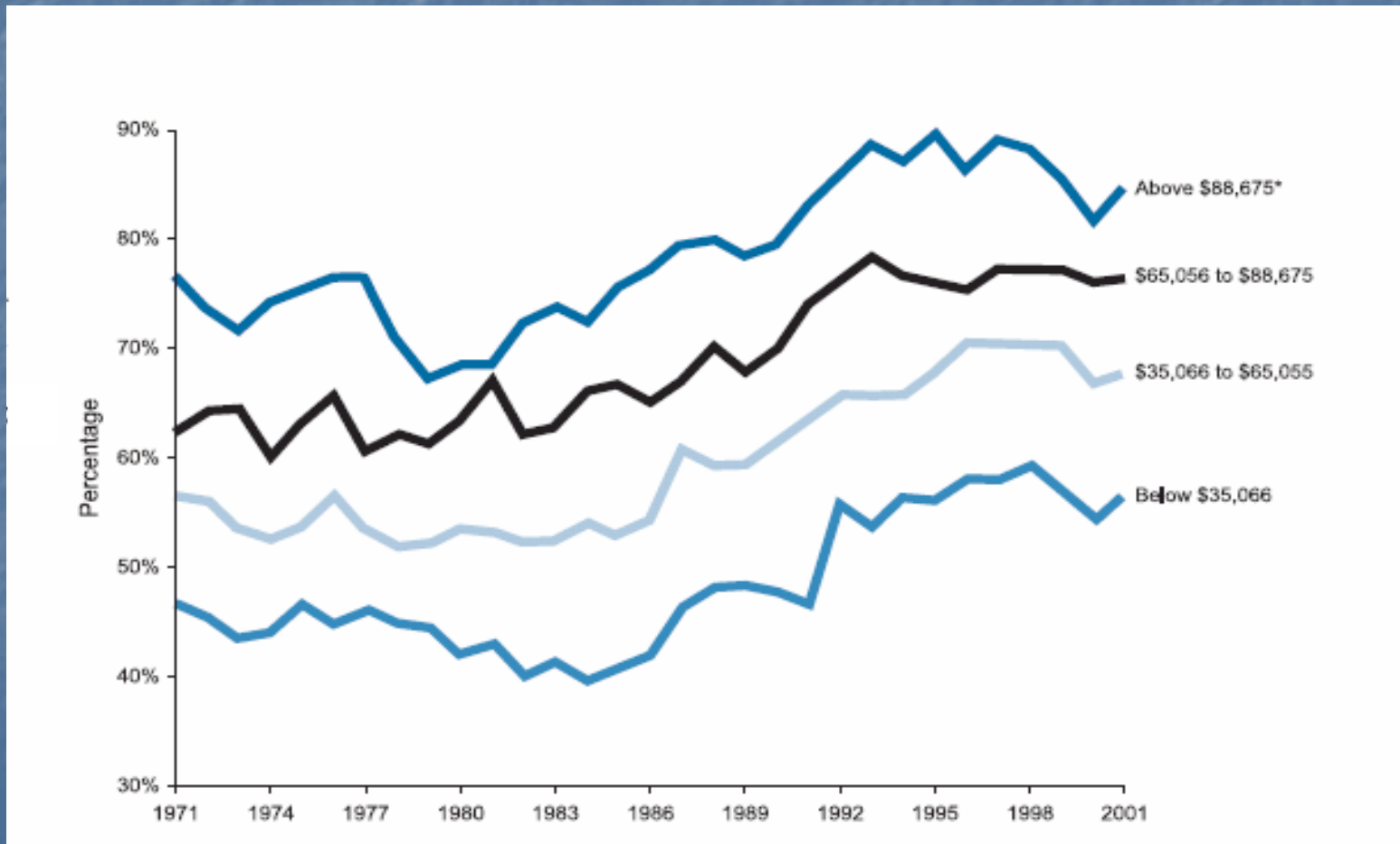
# The changing nature of support since 1980

Revenue per FTE student in public institutions (constant 2003 \$)



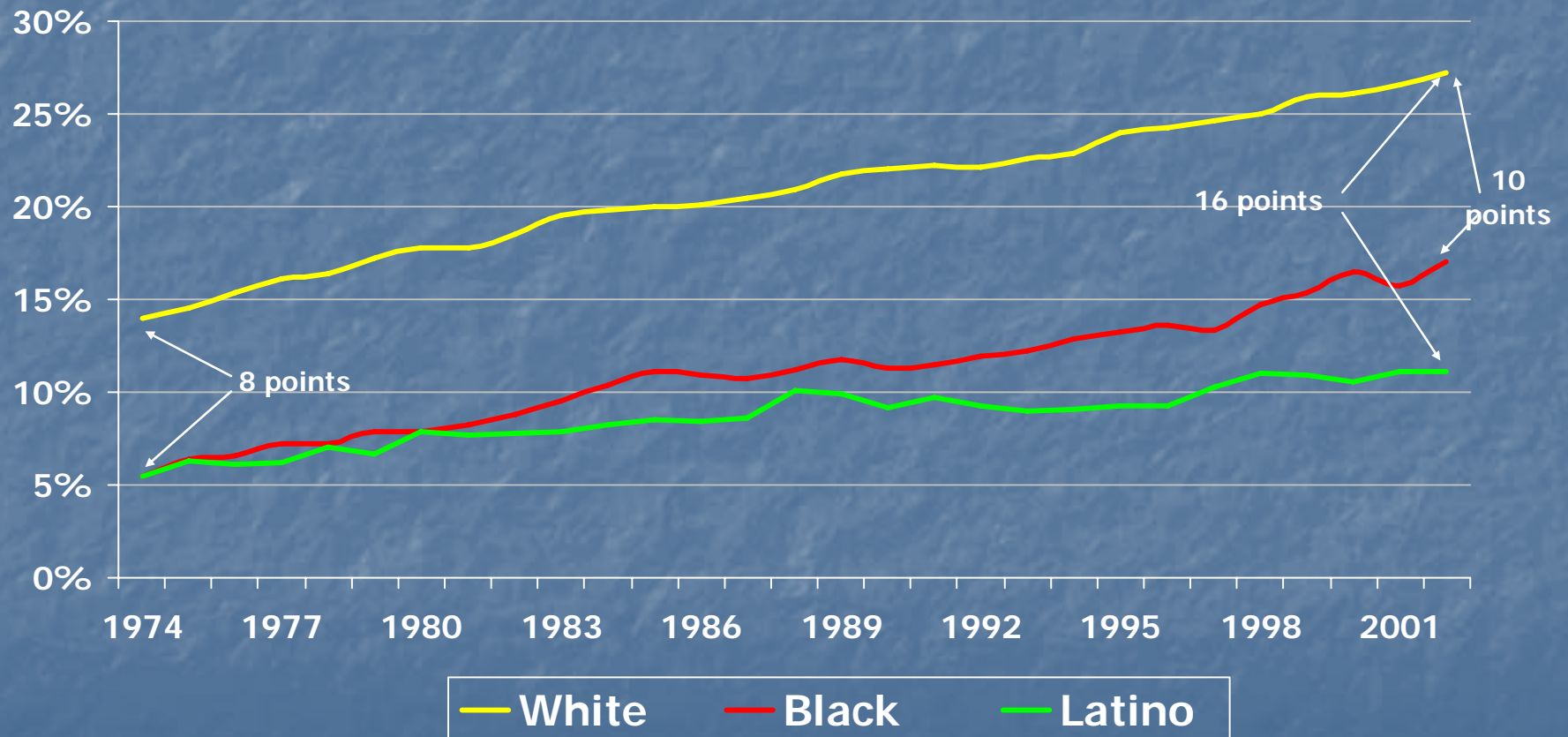
# College participation by income quartile

College participation rates of unmarried 18-24 year olds



# Gap in educational attainment by race

Proportion of population 25 years or older with at least 4 years college



# Overview of trends in student financing

- Financial aid available to students
- Growth of grants over the last decade
  - Institutional grants and state-funded grants
  - Need-based and merit
- Who receives grants – both merit and need
- Impact of grants on college access
- Implications for the future

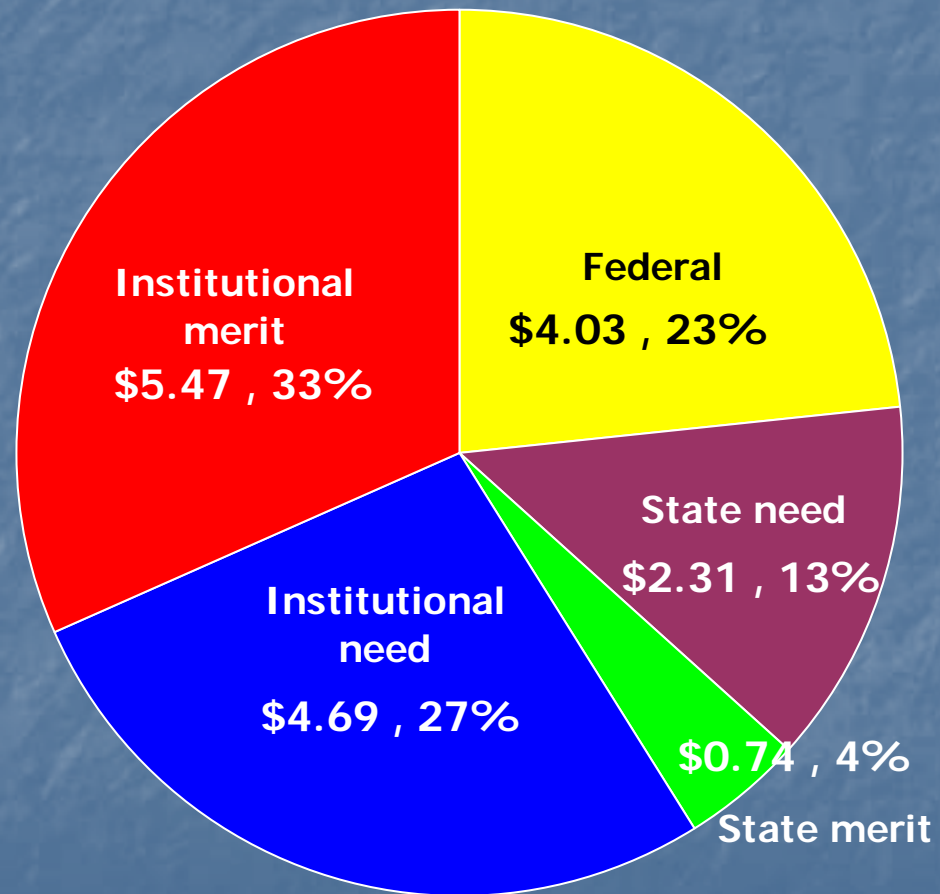
# Financial aid for students

2003-2004 dependent students, billions of dollars

Total paid by students: \$91B

Total grants: \$17.2B (19%)

Total loans: \$17.9B (20%)



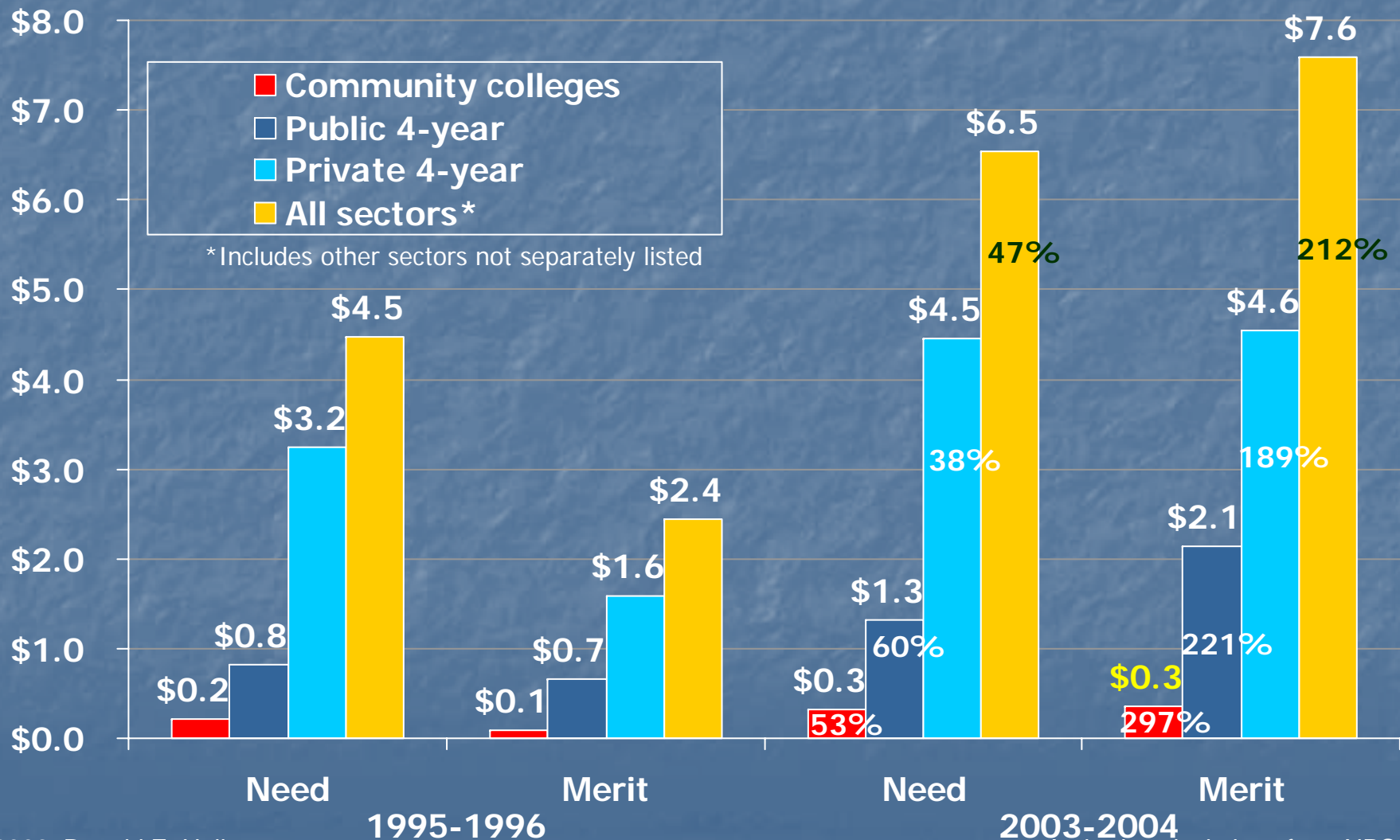
Students attending a single institution full time

# Growth of institutional grants

- Data from the National Postsecondary Student Aid Study
  - Sponsored by National Center for Education Statistics
  - Nationally-representative sample of students
  - Conducted every four years
  - Data from student and parent interviews, institutional records, federal databases (CPS, NSLDS, IPEDS)
- 624 variables (undergraduate)
  - Student & family demographics
  - Student & family finances
  - Student academics (pre-college and college)
  - Student college financing
  - Student college experiences
  - Institutional characteristics
- Sample (undergraduate & graduate)
  - 1,360 PSE institutions
  - 101,000 students

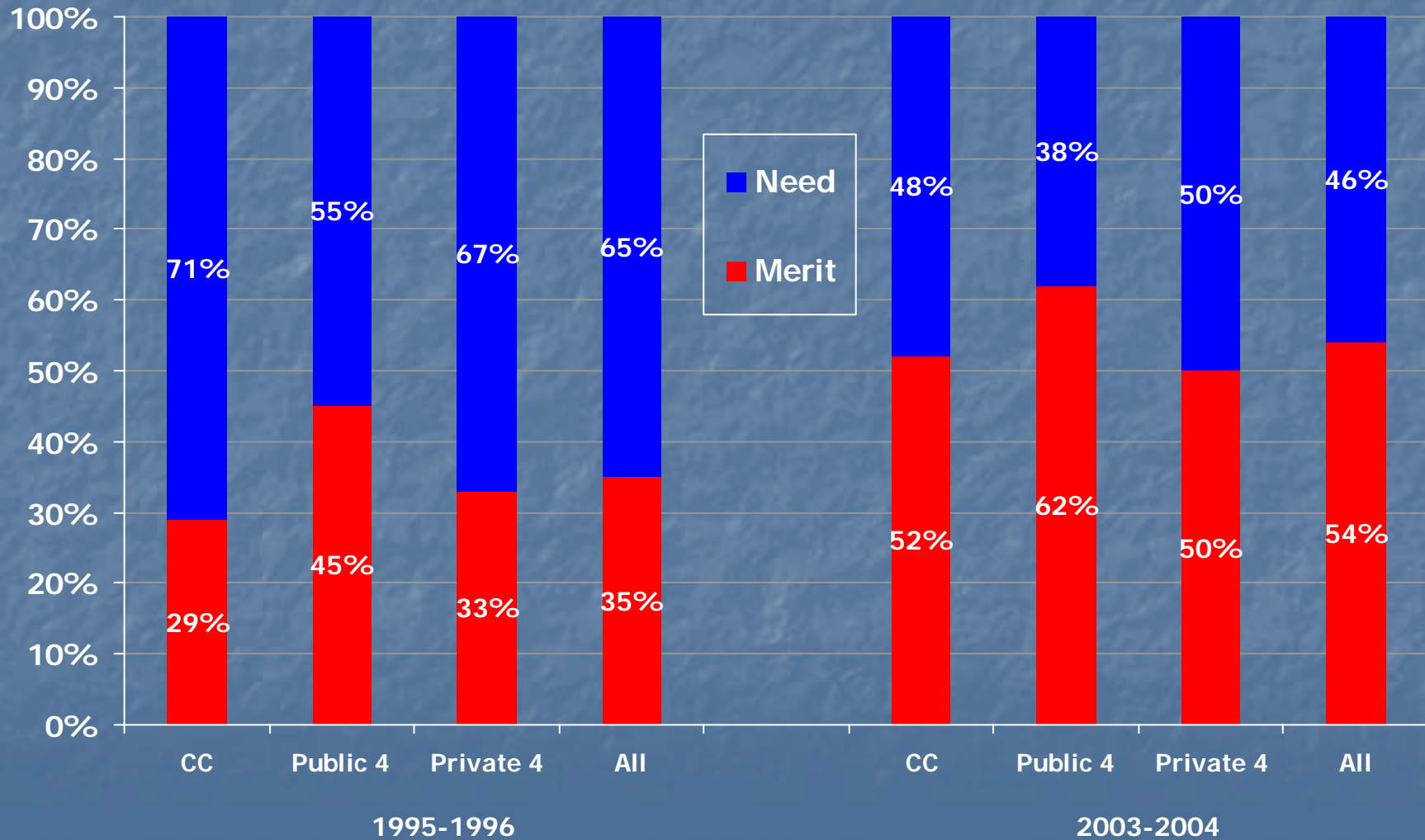
# Institutional grants, 1995-96 and 2003-04

All institutions, billions of dollars



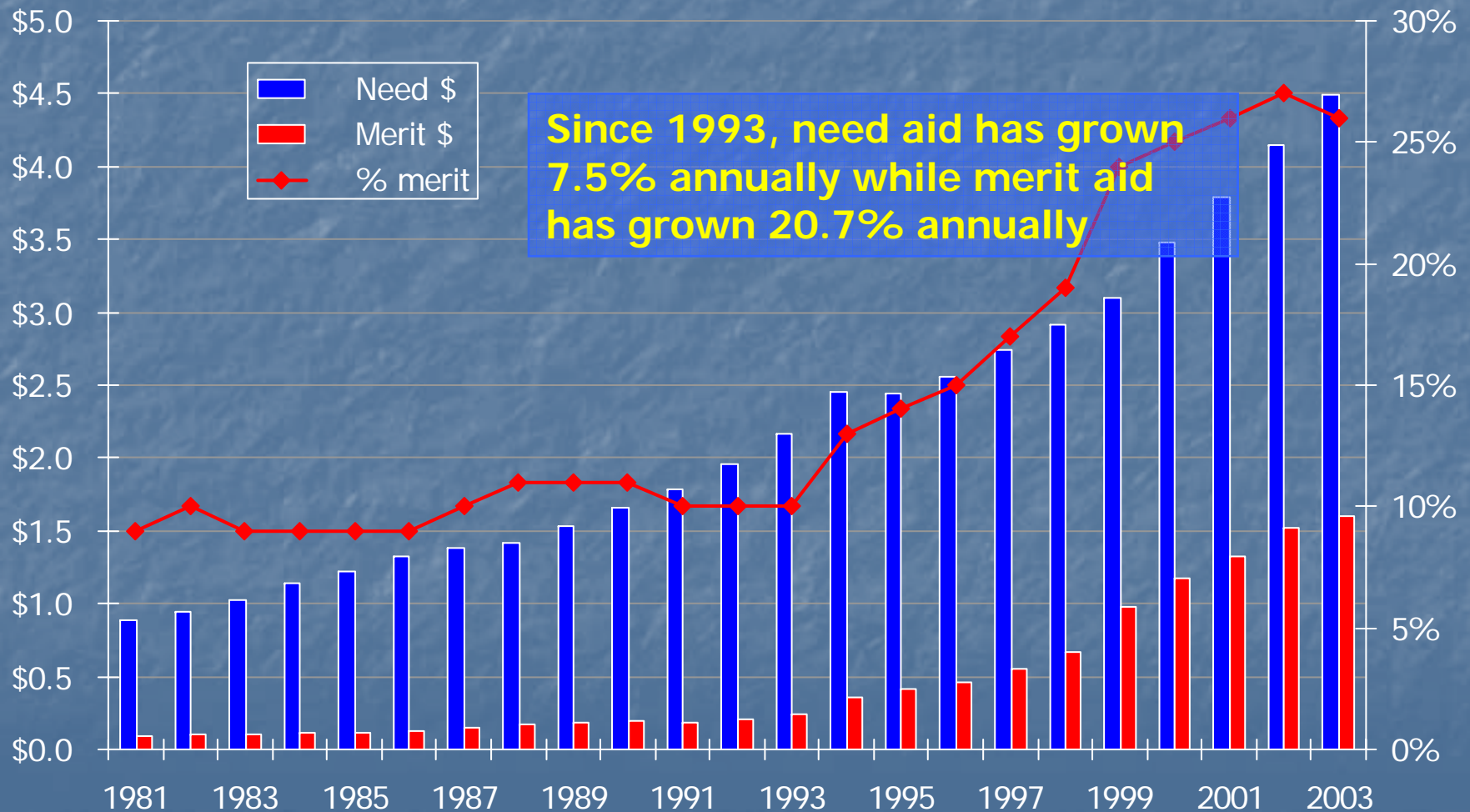
# Institutional grants

All institutions, \$\$ awarded based on need and merit



# State spending on undergraduate grants

Billions of dollars



# Distribution of grant dollars by income quartile

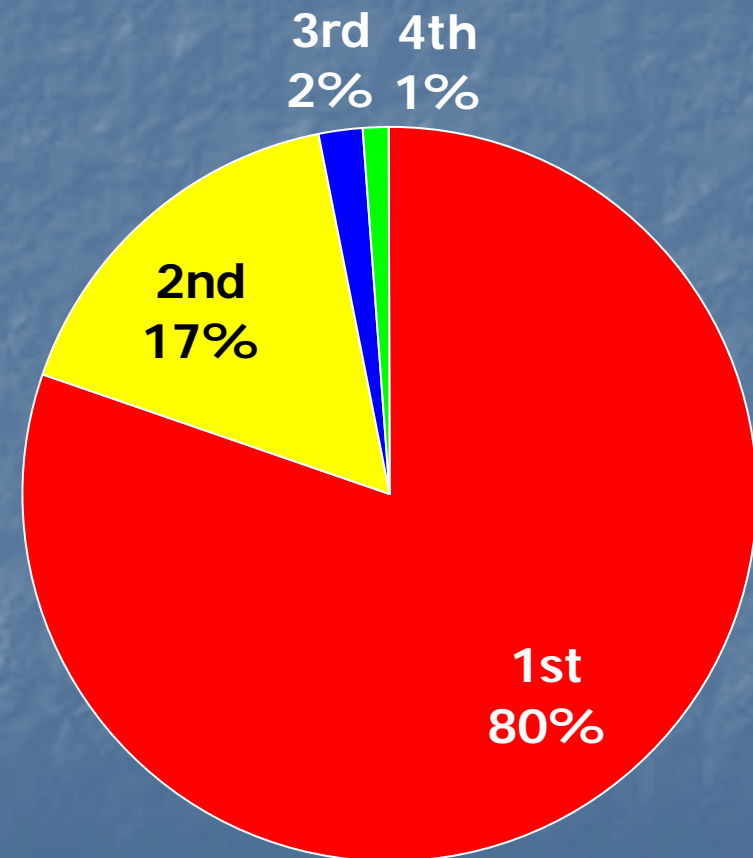
2003-2004 dependent students, all institutions

- Family income quartiles (2002)

- 1<sup>st</sup>: < \$33,346
- 2<sup>nd</sup>: \$33,346 - \$60,175
- 3<sup>rd</sup>: \$60,176 - \$92,433
- 4<sup>th</sup>: > \$92,433

- Census benchmark – Median income of all families with at least one child ages 6 to 17 in 2002: \$54,249

Federal grants, \$4.0B

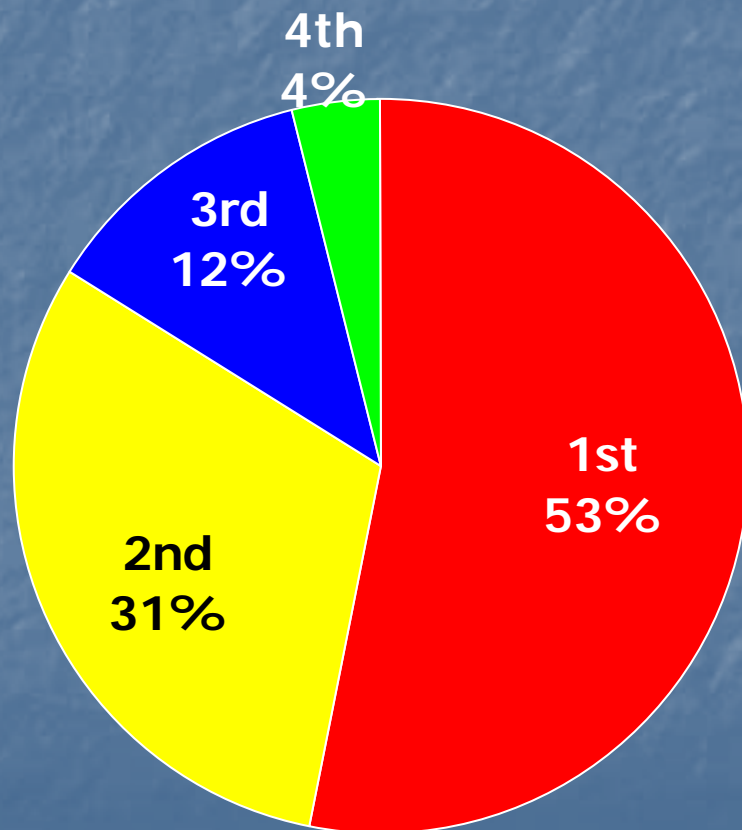


Students attending a single institution full time

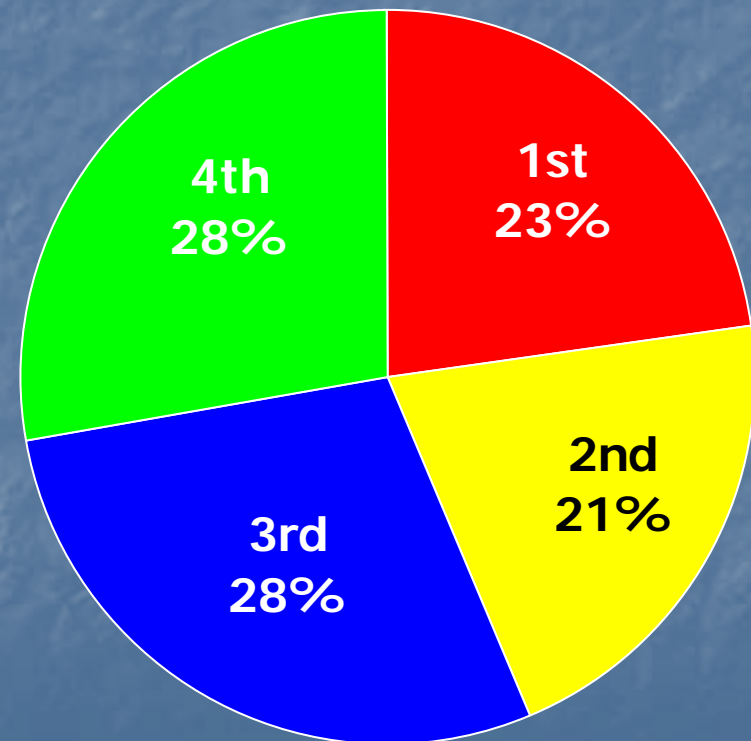
# State grant dollars by income quartile

2003-2004 dependent students, all institutions

Need grants, \$2.3B



Merit grants, \$0.7B



Students attending a single institution full time

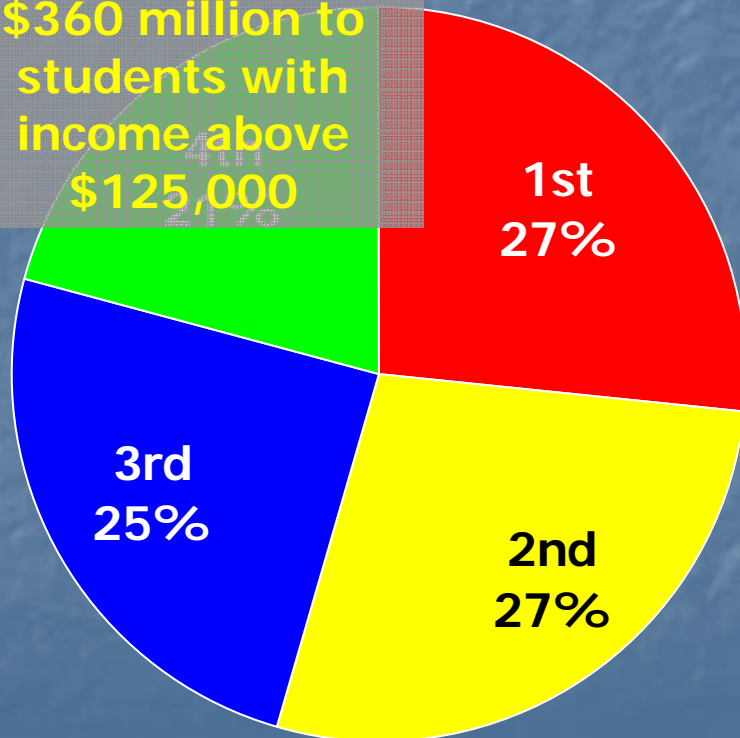
# Institutional grant dollars by income quartile

2003-2004 dependent students, all institutions

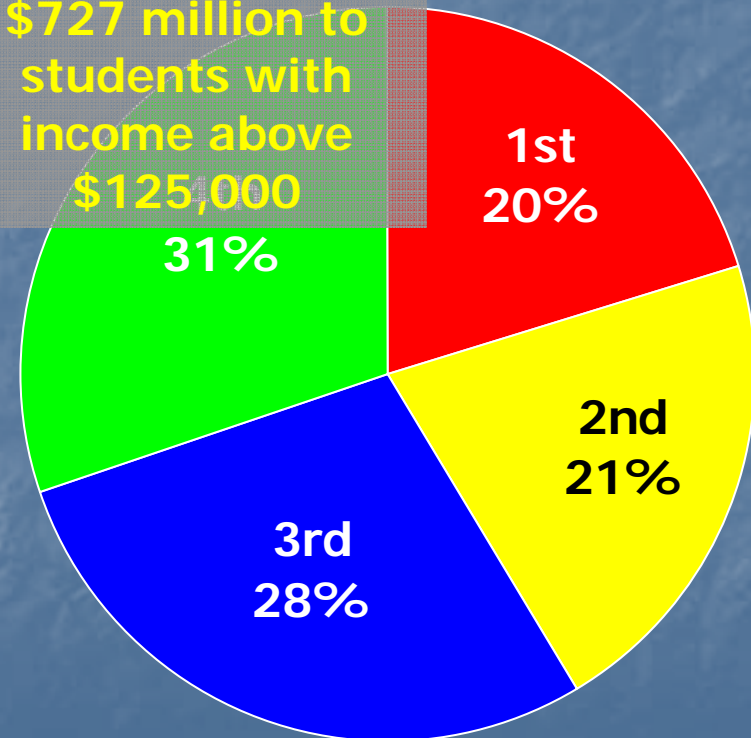
Need grants, \$4.7B

Merit grants, \$5.5B

\$360 million to students with income above \$125,000



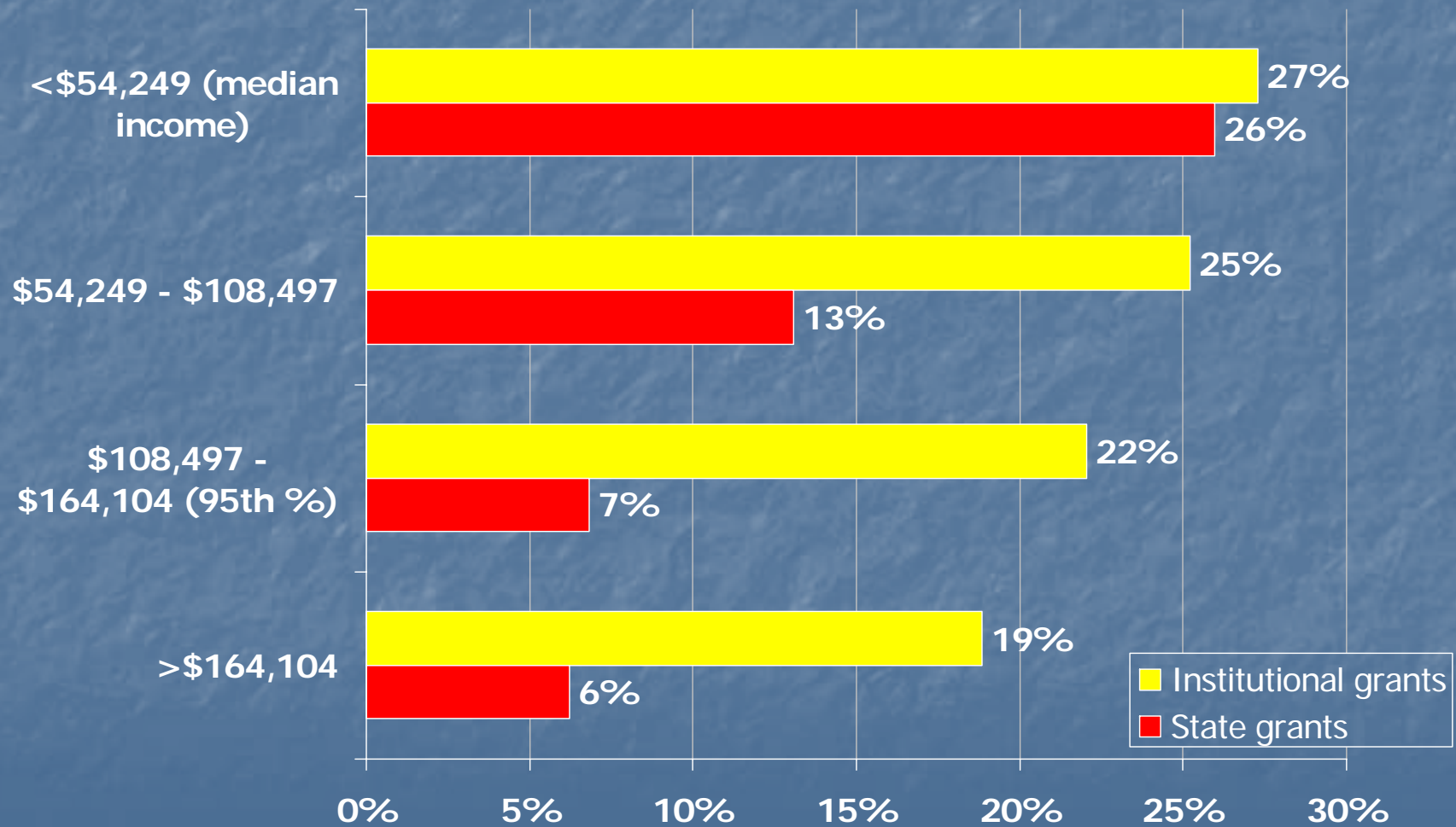
\$727 million to students with income above \$125,000



Students attending a single institution full time

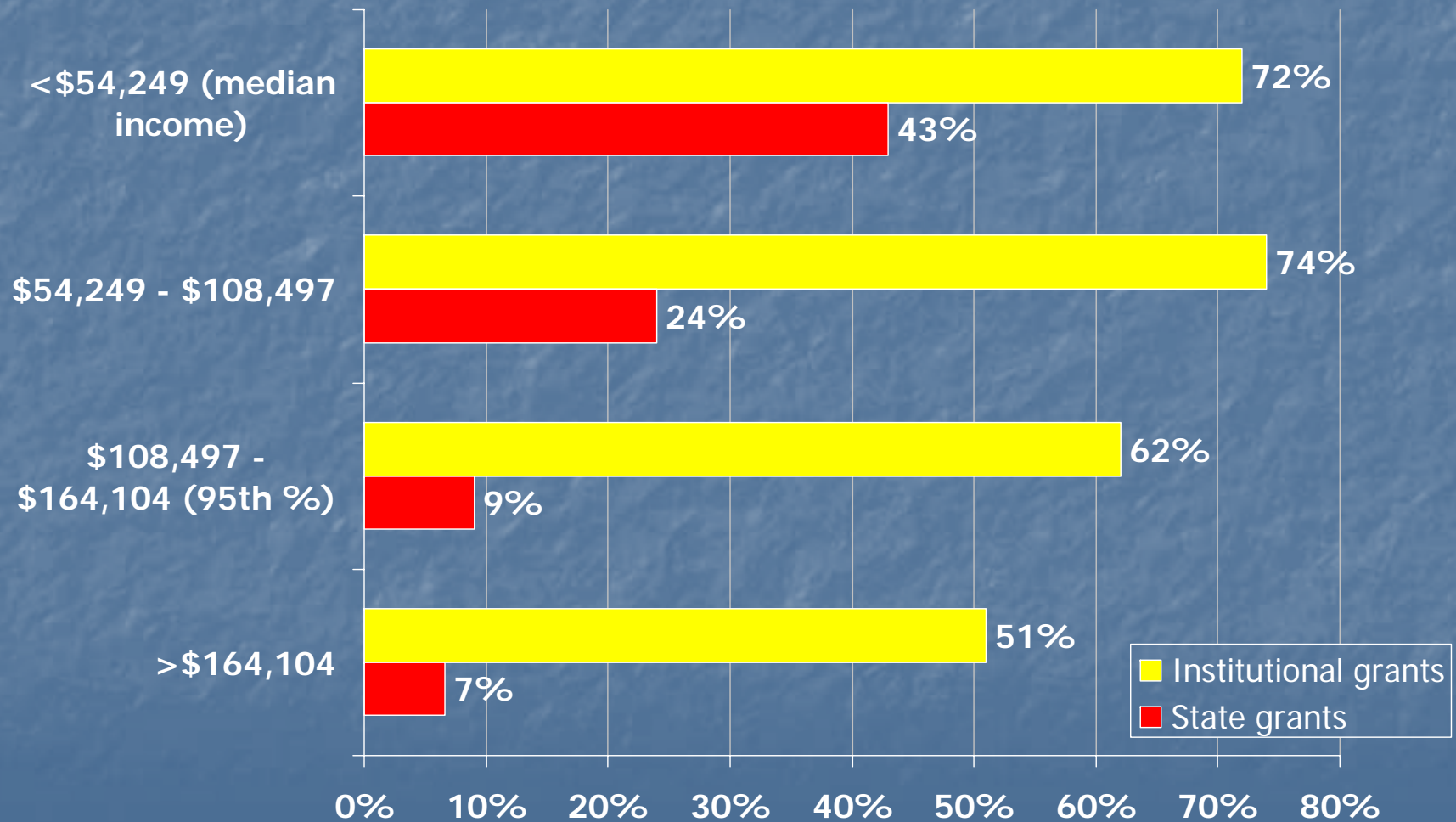
# Grants to high-income students

Dependent students receiving grants, by income



# Grants to high-income students

Dependent students receiving grants, by income – **full-time in 4-yr private**



## State merit scholarship programs

- 14 states have broad-based, entitlement programs
- Many funded from lottery and other non-appropriation sources
- Total of \$1.6B, or 26% of state grant spending
- Criteria used are generally grades and/or test scores (SAT, ACT, state NCLB)
- Three primary policy objectives articulated
  - Promote college access and attainment
  - Encourage the “best and brightest” to attend college in-state
  - Reward or encourage students to work hard and achieve academically

## State merit scholarship programs

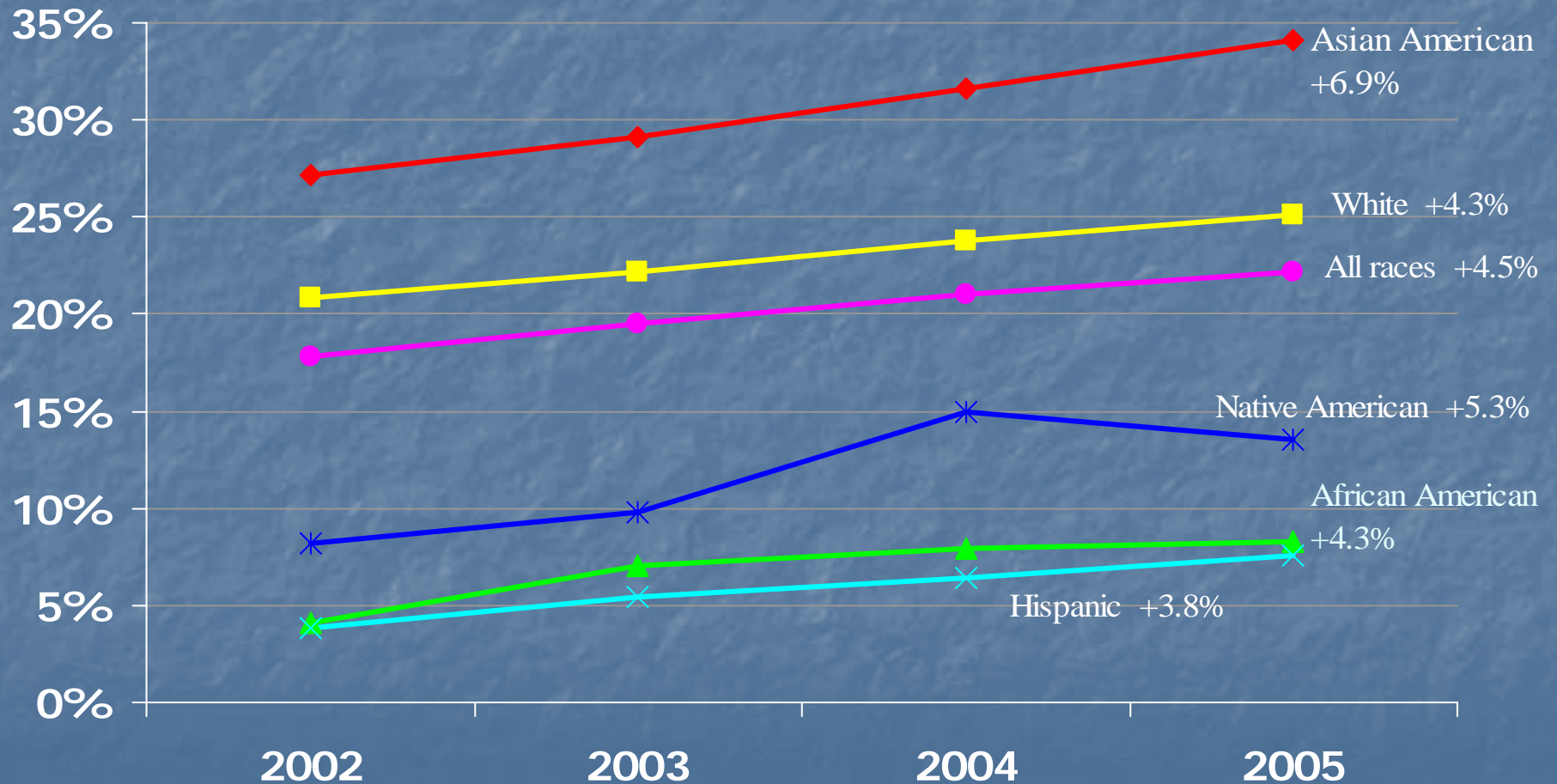
- Findings from two reports of The Civil Rights Project at Harvard University
  - 90% of expenditures on the Georgia HOPE Scholarship Program subsidized existing college participation; program has led to an increase in the gap in college participation between white and African American students
  - HOPE participants were more likely to engage in detrimental academic behavior in college
  - In all states studied, minority and lower-income students were less likely to qualify for the scholarships

## Massachusetts' Adams Scholarship Program

- Announced by Governor Mitt Romney in his State of the Commonwealth Address in 2004
- Based on students' scores on the 10<sup>th</sup> grade Mass. Comprehensive Assessment System English and Math tests
- Students must achieve a specified performance level *and* score in the top 25% in their district
- Provide free tuition for up to 4 years at any public college or university in the state

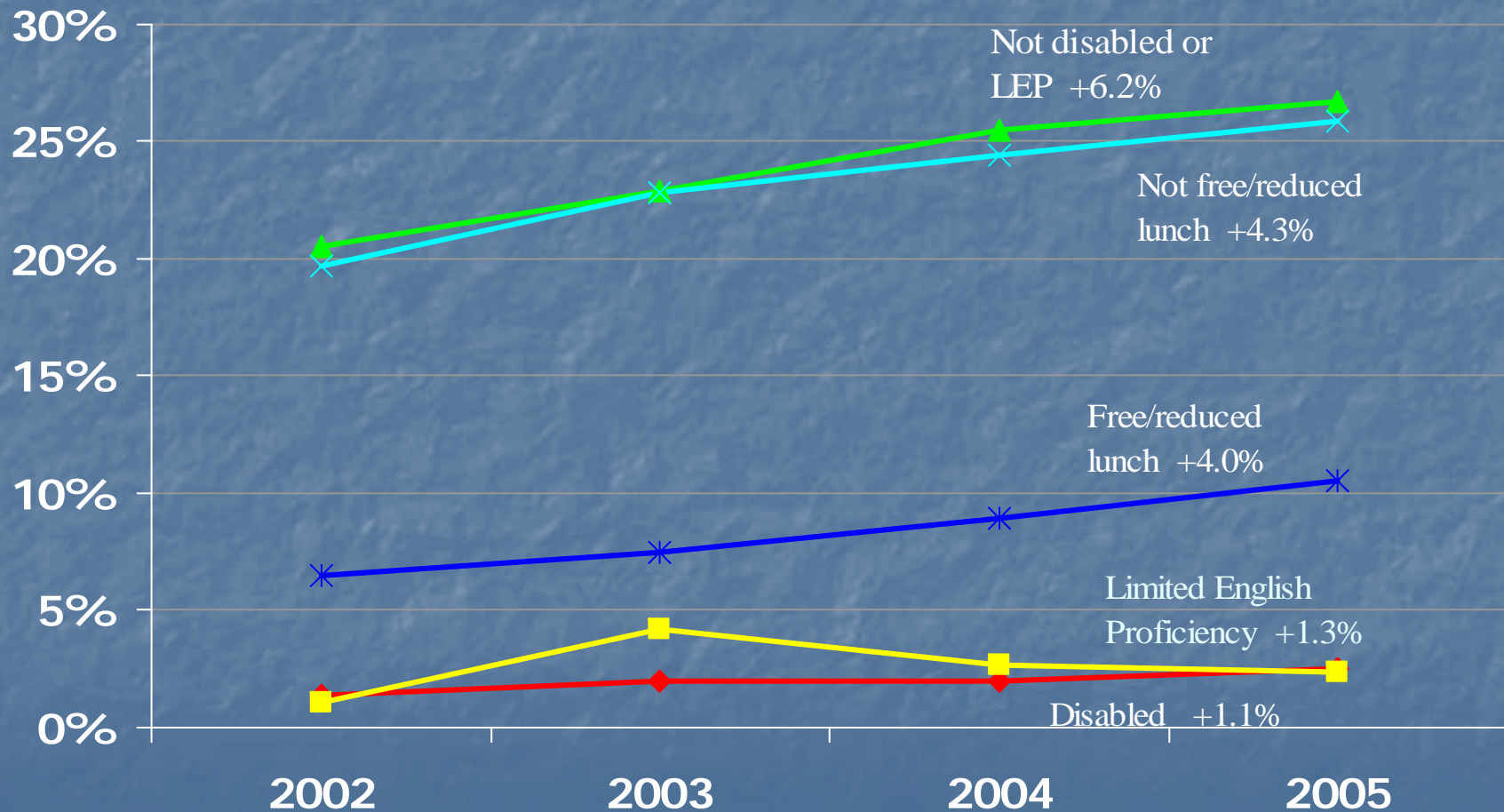
# Adams Scholarship results

## Proportion of students qualifying by race



# Adams Scholarship results

## Proportion of students qualifying by student status



## Other objectives of state merit aid programs

- Retaining “best and brightest” students in-state
  - Yes, but no evidence that these students stay in the state when they enter the labor force
  - Would states be better off following the Colorado model of simply importing educated workers?
- Rewarding or encouraging students to work hard
  - No evidence that these scholarship programs provide an incentive effect for students
  - Evidence that they do encourage some detrimental behaviors while enrolled in college in order to retain the scholarships

## Implications for the future of student financing

- Little evidence that trend toward merit aid will abate either in states or institutions
- Little help from the federal government – Pell Grant maximum has increased just 1% in the last five years, while tuition prices have increased by one-third
- President's 2007 budget adds a merit component to Pell with bonuses for students maintaining a 3.0 GPA
- Handful of institutions have made commitments of aid to low-income students, but largely elite institutions enrolling few of these students
- Continued challenges to affirmative action in admissions, financial aid, and college preparation programs