

The University of California as an Engine of Social Mobility: Successes, Challenges, and Concerns

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Structure of Presentation

- **Why this issue is important**
- **Data analysis and results**
- **Findings and Discussion**
- **Conclusions**

Purpose of This Research

Examine access and graduation rates for disadvantaged students who entered UC as a freshman

Disadvantaged students:

- Underrepresented Minorities (URM's)—American Indian, African American, and Chicano/Latino students
- Low Income — family annual income below \$40,000 (2001 constant dollars)
- First Generation—neither parent has a bachelor's degree

Why this issue is important

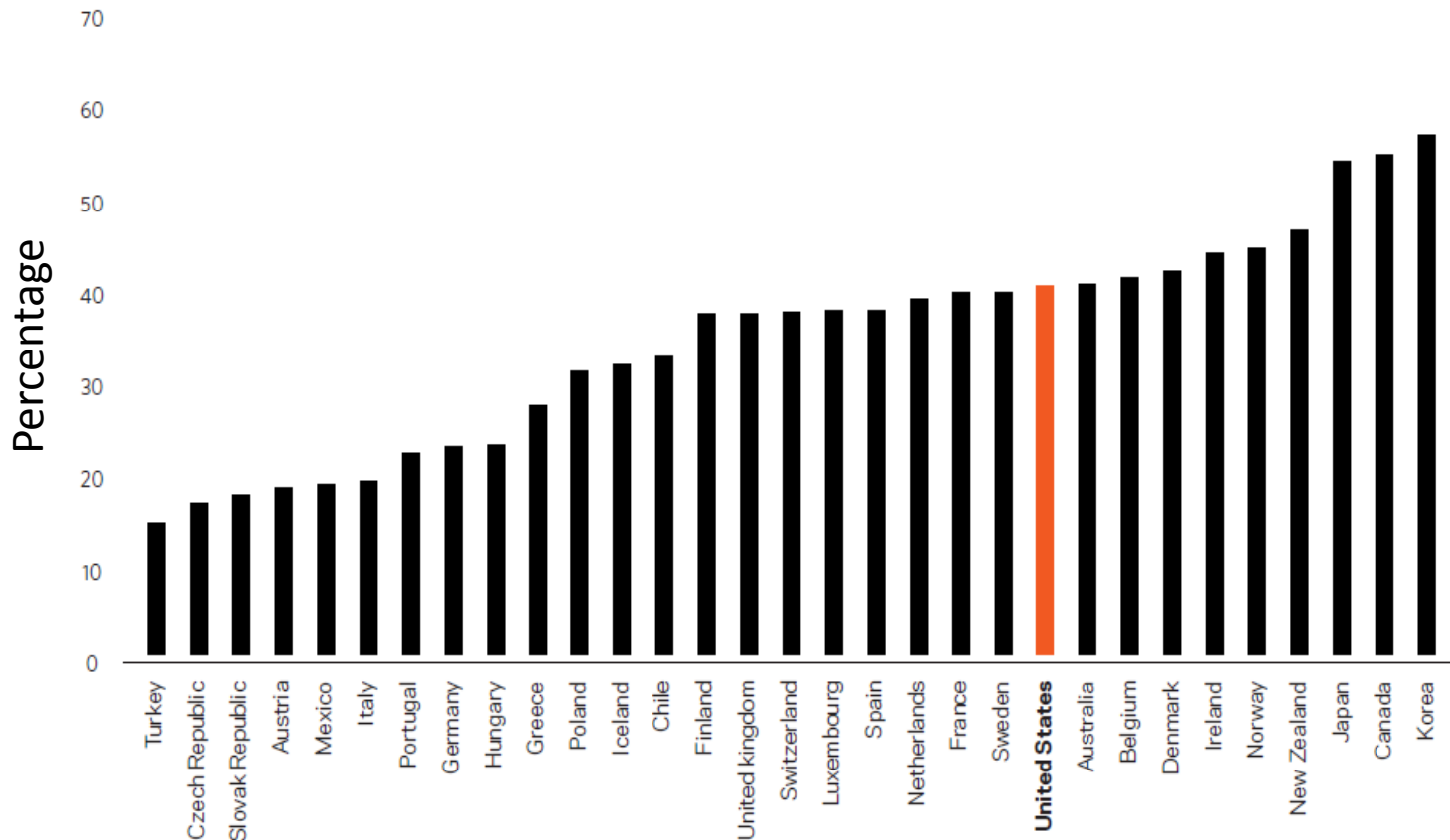
1. Labor Market Perspective
2. Social Justice and Equity

Why this issue is important—Labor Market Perspective

- U.S. needs to increase the number of college graduates to stay economically competitive globally
- Higher levels of education closely linked with economic productivity
- U.S. now ranks 10th in the world, where it once was 1st in college degree attainment

Why this issue is important—Labor Market Perspective

- Attainment of college degrees, 25 – 34 year olds in OECD countries, 2010



Source: OECD, *Education at a Glance (2010)* (extracted from *The Undereducated America* by Anthony P. Carnevale & Stephen J. Rose)

Why this issue is important—Labor Market Perspective

- An increasing “skills gap”
- California will need 1 million more college graduates by 2025 than it’s producing to meet employer needs – PPIC
- Consequences on economic growth, economic productivity, tax and revenue base and health of the state

Why this issue is important – Gaps in Graduation Rates

Percent of Adults, 25-34 Years Old, with Associate Degree or Higher

- 19 % -- Chicano/Latinos
- 29 % -- African-Americans
- 69 % -- Asians
- 49 % -- Whites

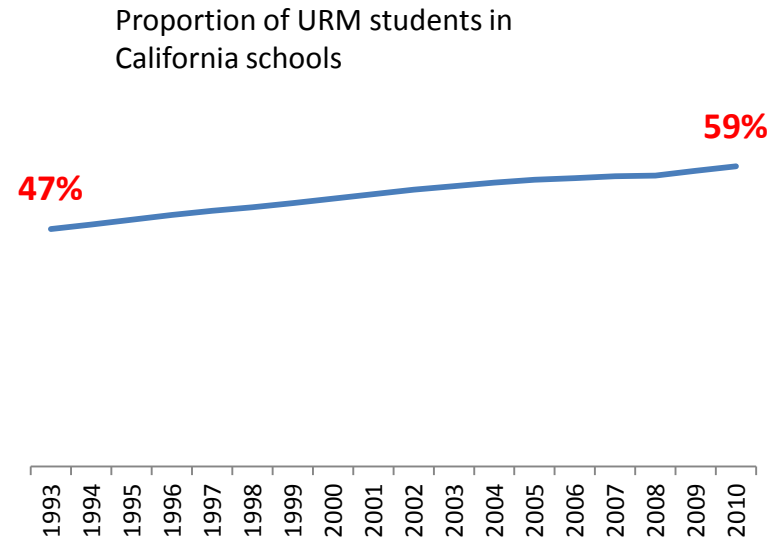
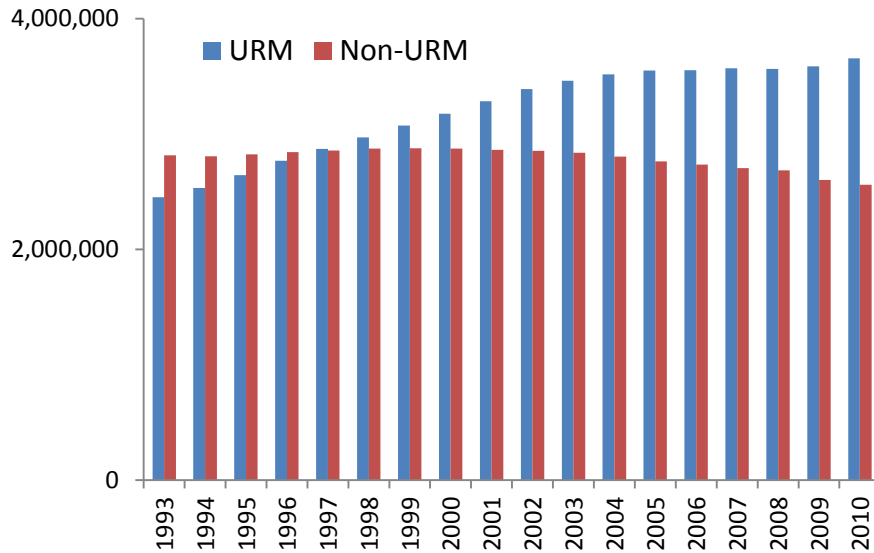
Source: College Board, 2011

Why this issue is important – Changing demographics in CA

- CA has the largest number of Hispanics of any state in the U.S. – 14 million
- Hispanics constituted 38 % of California population in 2010 – vs. 28% in 2000
- Hispanic population is growing rapidly, especially number of Hispanic youth
- African-Americans number 2.2 million, about 6% of California's population

Why this issue is important –CA school enrollments are changing

Proportion of URM students in CA schools, 1993 - 2010



- URM students include American Indian, African American, and Chicano/Latino students.

Source: California Department of Education Data System

Why this issue is important— Social Justice and Equity

Education benefits the individual:

- Higher wages – median wages: \$55,700 -- \$22,000 more than for high school grad
- Higher rates of employment – high school grads are 2.6 times more likely to be unemployed
- More civic participation
- Better health

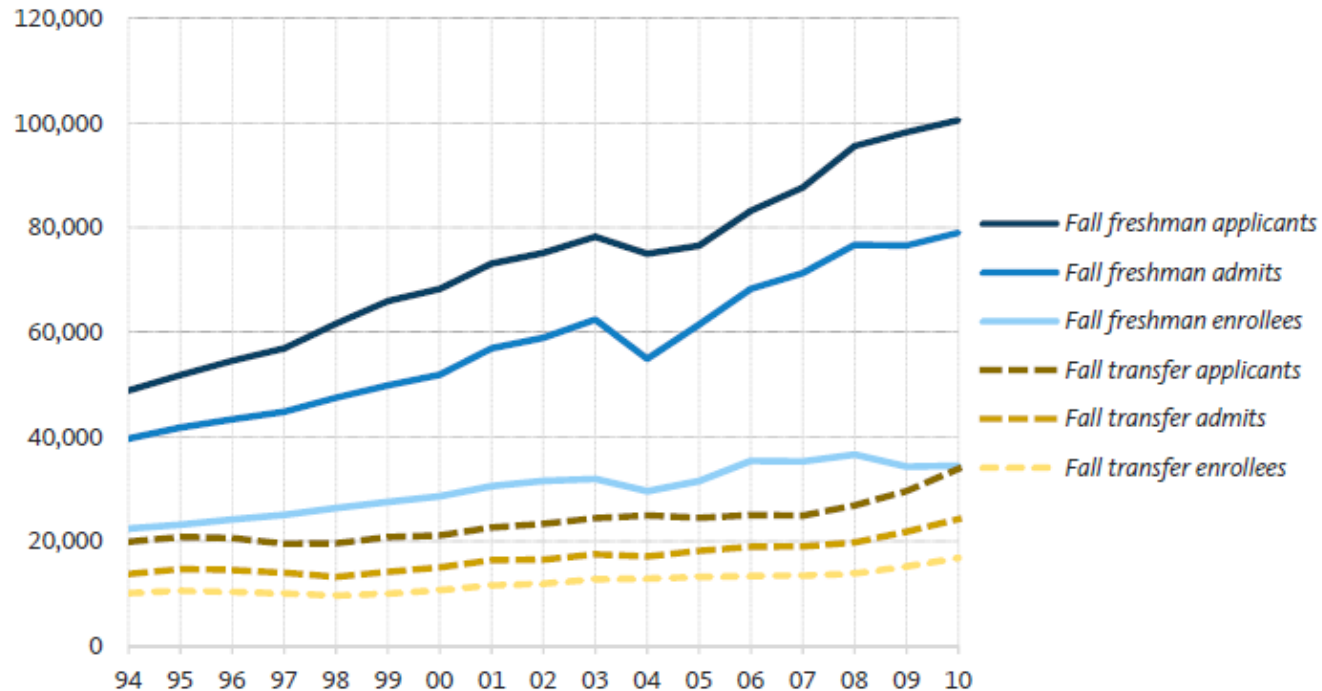
Source: College Board, 2010 Education Pays

Data Analysis and Results

- **Access**
- **Success (graduation rates)**
- **Challenges**

Data Analysis and Results—Access

Trend of UC applicants, admits, and first time enrollees

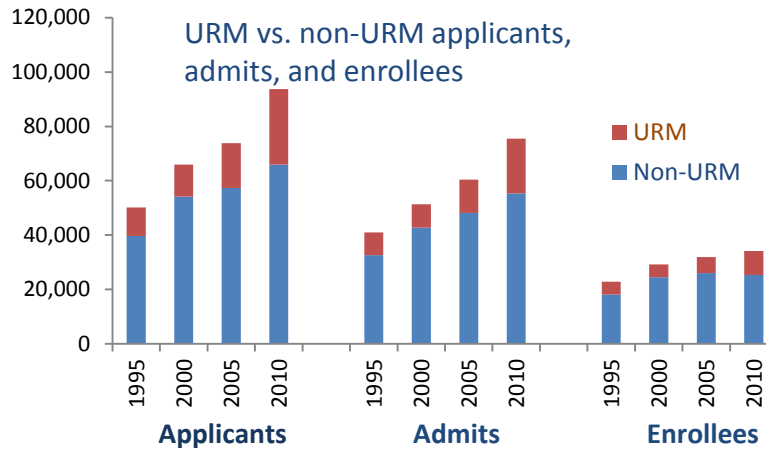


- Since 1994, freshman applicants and admits to UC have nearly doubled; freshman enrollments have increased by about 60%, but are still falling short of demand.

Source: UC Annual Accountability Report 2011 (data were extracted from UC Corporate Student System), <http://www.universityofcalifornia.edu/accountability/documents/accountabilityreport11.pdf>

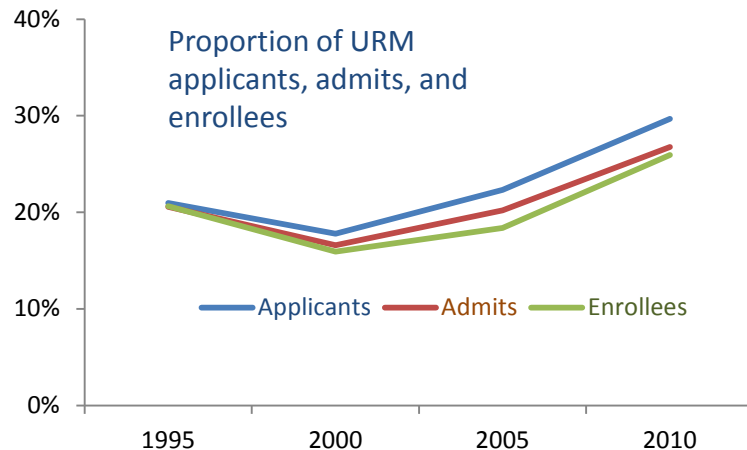
Data Analysis and Results—Access

Applicants, admits, and enrollees—URM vs. non-URM students



Increase from 1995 to 2010

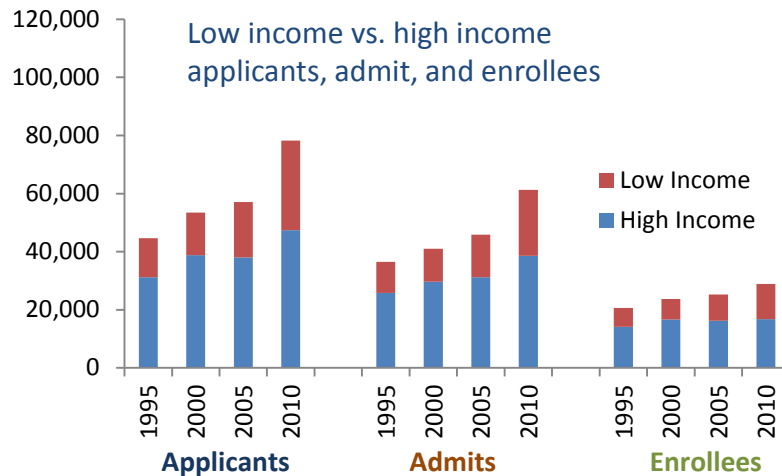
Applicants:	Non-URM	66%
	URM	164%
Admits:	Non-URM	70%
	URM	139%
Enrollees:	Non-URM	39%
	URM	88%



- URM students have been becoming more representative in UC applicant and admit pools and also among enrolled students since 1995.

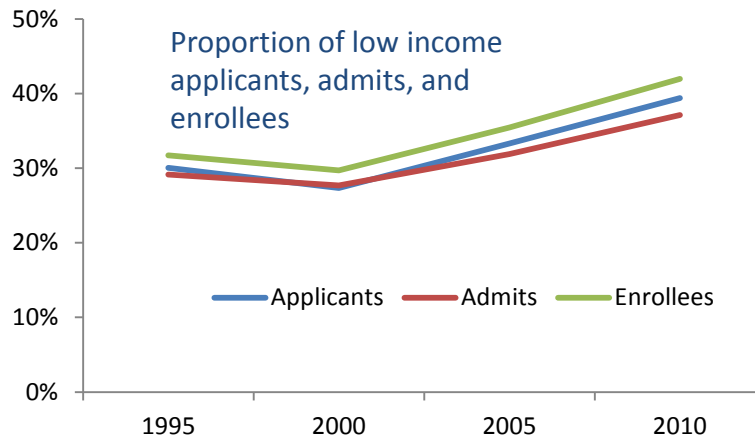
Data Analysis and Results—Access

Applicants, admits, and enrollees—low income vs. high income students



Increase from 1995 to 2010

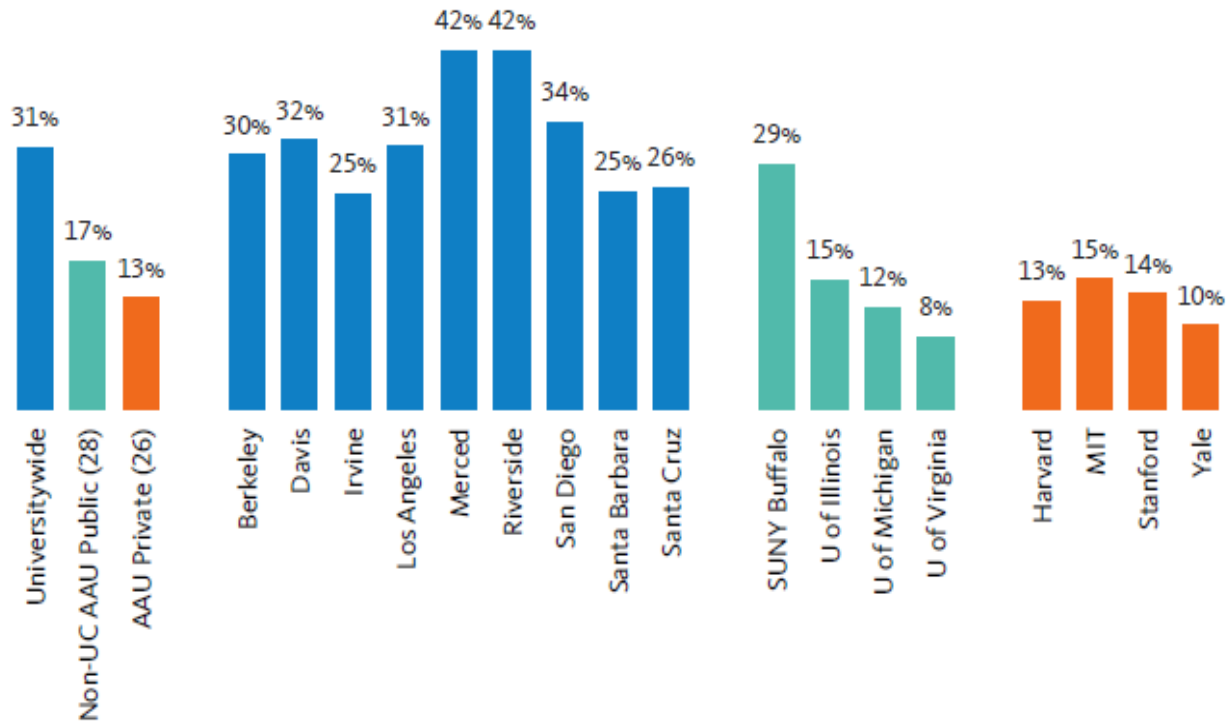
Applicants:	High Income	52%
	Low Income	130%
Admits:	High Income	49%
	Low Income	114%
Enrollees:	High Income	19%
	Low Income	85%



- Applicants, admit, and enrollees from low income families have been increasing.

Data Analysis and Results—Access

Undergraduate Pell Grant recipients: UC and comparison institutions, 2008-09

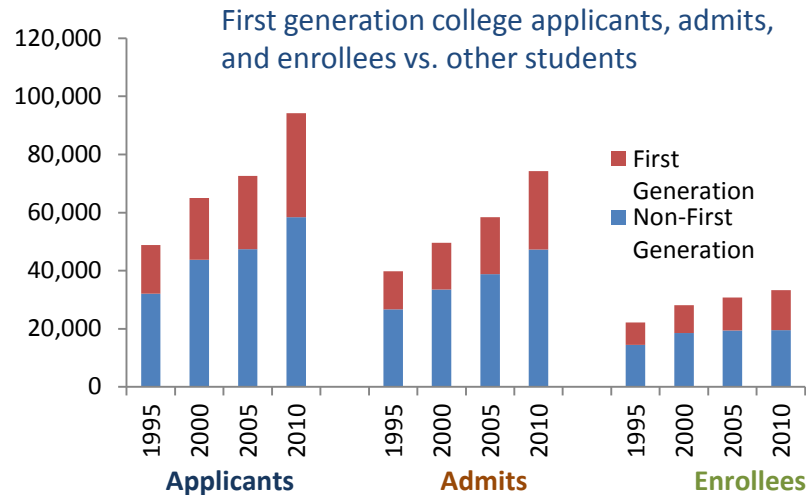


- UC enrolls a higher percent of Pell Grant recipients than any other top research university in the country.
- The proportion of UC undergraduates receiving Pell Grants went up from 31% in 2008-09 to 39% in 2010-11.
- Anticipate that over 40% of freshmen for Fall 2011 will be Pell Grant recipients.

Source: UC Annual Accountability Report 2011 (extracted from NPSAS and UC Corporate Student System), <http://www.universityofcalifornia.edu/accountability/documents/accountabilityreport11.pdf>

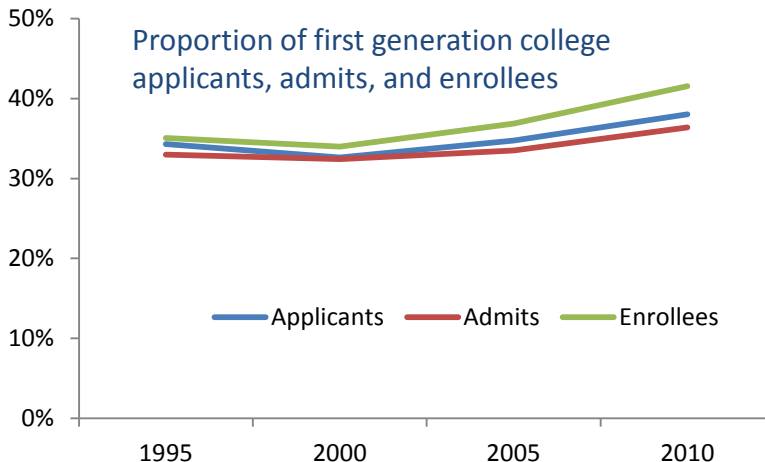
Data Analysis and Results—Access

Applicants, admits, and enrollees—first generation vs. non-first generation students



Increase from 1995 to 2010

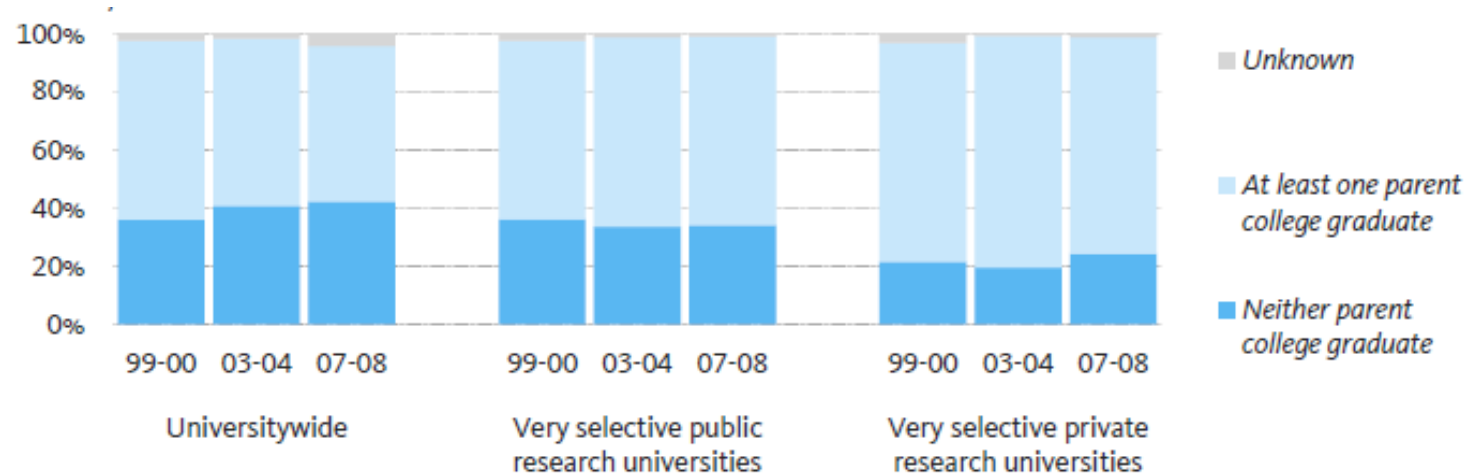
Applicants:	Non-First Generation	82%
	First Generation	114%
Admits:	Non-First Generation	77%
	First Generation	106%
Enrollees:	Non-First Generation	35%
	First Generation	78%



- First generation college students have been becoming more representative in UC applicant and admit pools and also among enrolled students.

Data Analysis and Results—Access

UC enrollment—first generation vs. non-first generation students

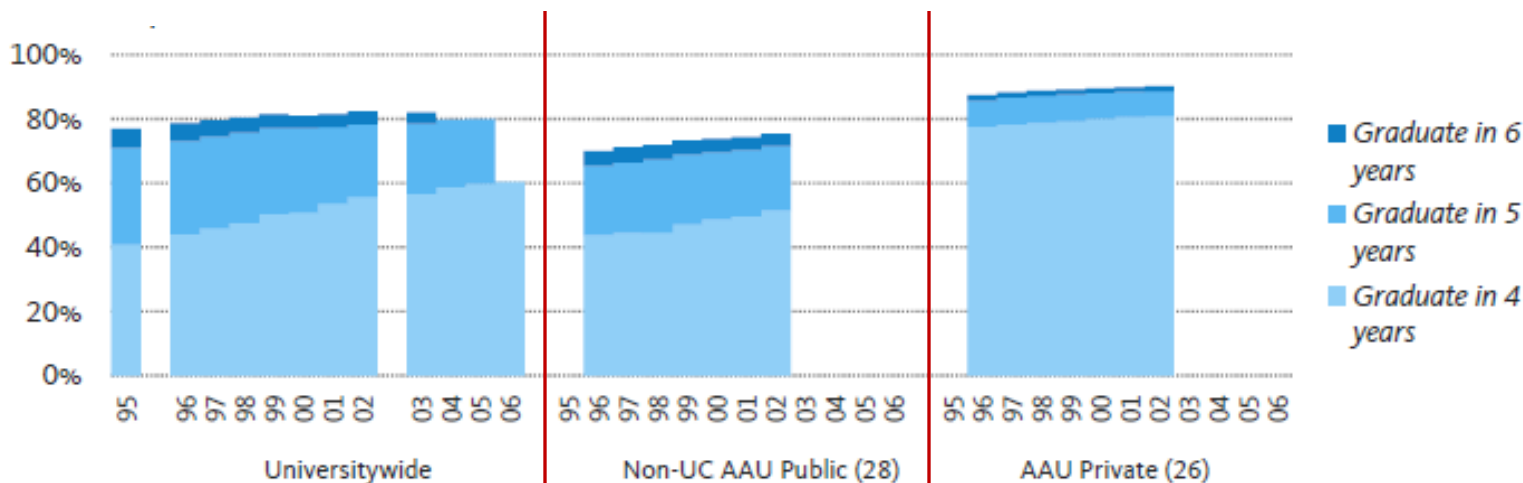


- UC enrolls a higher percent of first-generation college students than other very selective public and private universities.
- For 2011, we anticipate that about 45% of our new freshman students will be first-generation.

Source: UC Annual Accountability Report 2011 (data were extracted from NPSAS and UC Corporate Student System), <http://www.universityofcalifornia.edu/accountability/documents/accountabilityreport11.pdf>

Data Analysis and Results—Success

UC freshman graduation rates: entering cohorts from Fall 1995 to 2006

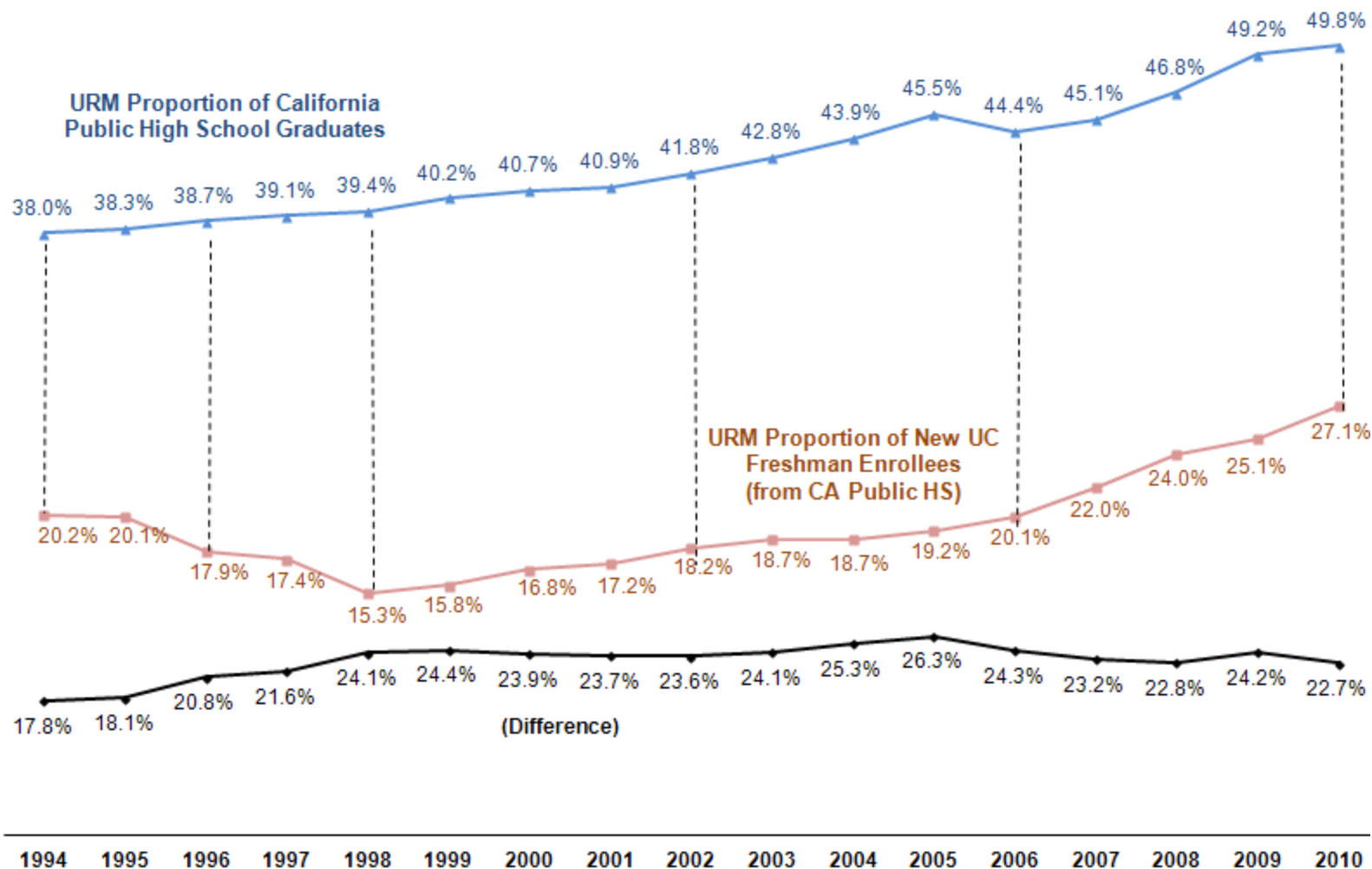


- Both four- and six-year graduation rates have improved substantially since 1995. They are better than the average graduation rates of students at AAU public institutions.

Source: UC Annual Accountability Report 2011 (extracted from UC Corporate Student System), <http://www.universityofcalifornia.edu/accountability/documents/accountabilityreport11.pdf>

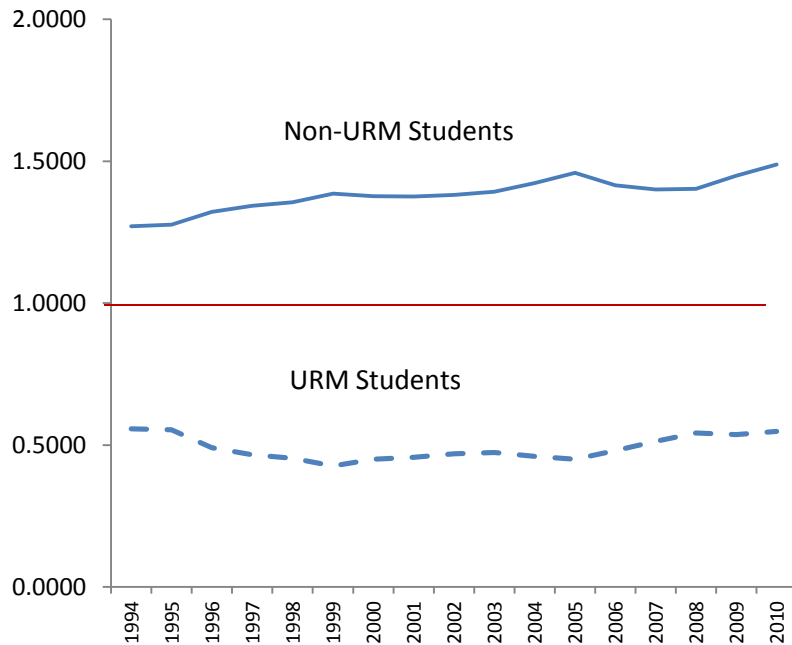
Data Analysis and Results—Access Challenges

Gap between CA public high school URM graduates and UC URM enrollees



Data Analysis and Results—Access Challenges

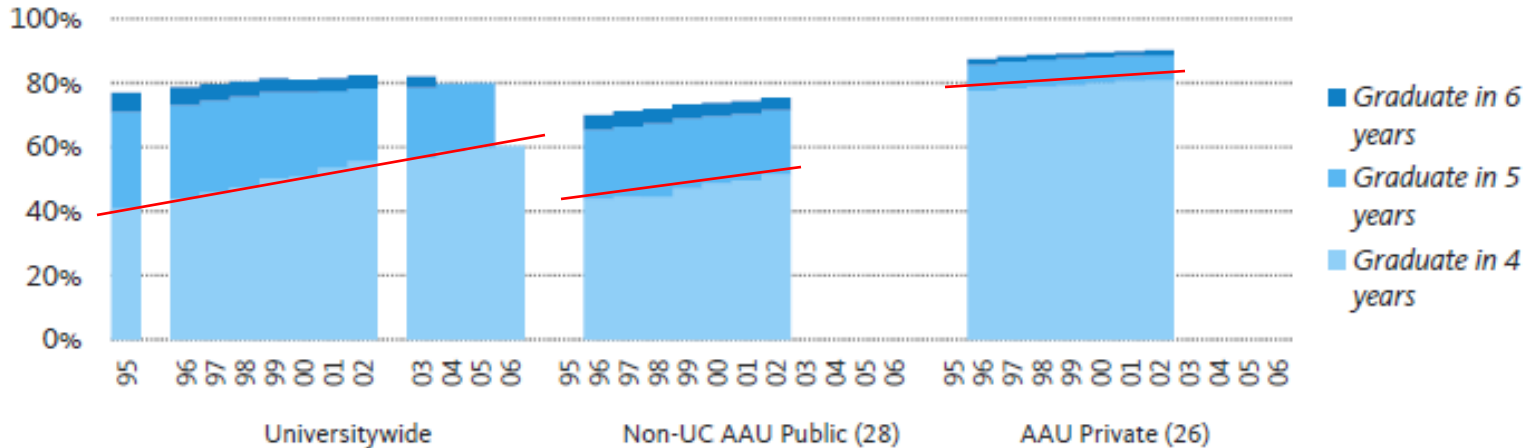
Location quotient of UC non-URM vs. URM students



The location quotient compares the student body ethnicity composition to that of the university's catchment area. In this case, the student body includes all enrollees from CA public high schools and the population of the university's catchment area includes CA public high school graduates. The location quotient is simply a ratio of race/ethnicity proportions. A value close to one suggests that, for a given race or ethnicity, the enrollment population matches that of its state population. A value less than one indicates that the population of a race/ethnic category is less than that of the catchment area. A value greater than one means the proportion of an ethnic category is greater than that of the catchment area.

Data Analysis and Results—Success Challenges

Four year graduation rates are rising rapidly, but compared with private universities, they are still low by about 20 percentage points

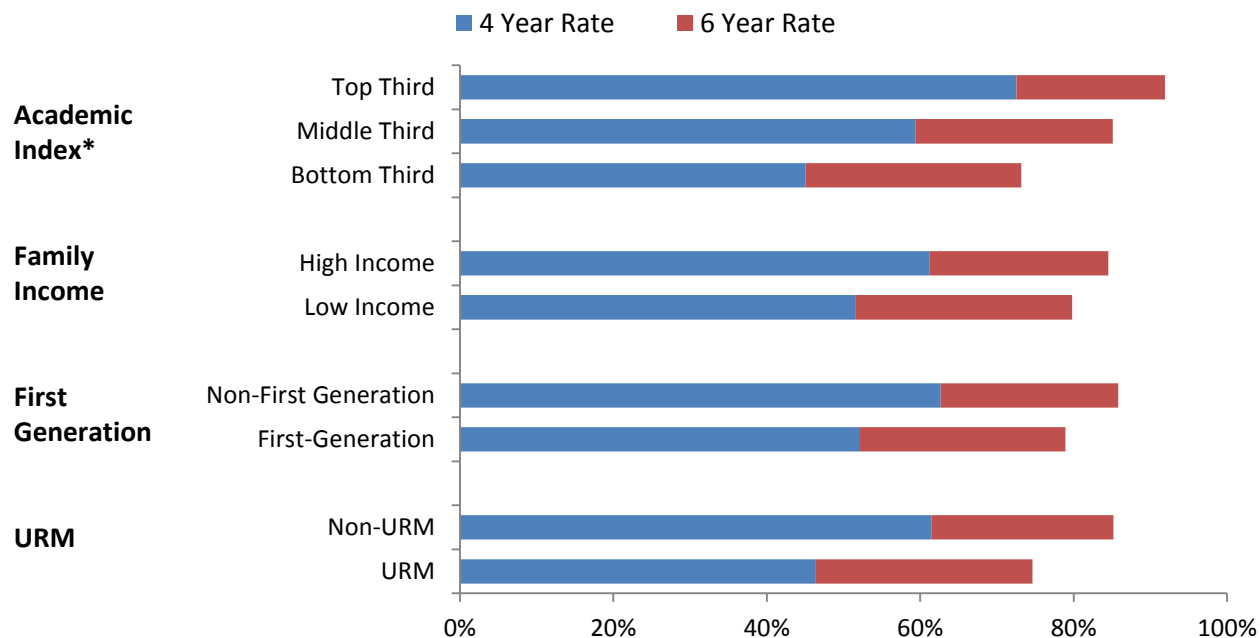


- Previous research findings (e.g. Geiser & Santelices, 2007) show that pre-college academic performance is significant in predicting four year graduation, but it can only explain a very small portion (around 8%) of variation of this, so there are a lot of college variables that contribute to four year graduation rates.

Source: UC Annual Accountability Report 2011 (extracted from UC Corporate Student System), <http://www.universityofcalifornia.edu/accountability/documents/accountabilityreport11.pdf>

Data Analysis and Results—Success Challenges

Gap in graduation rates



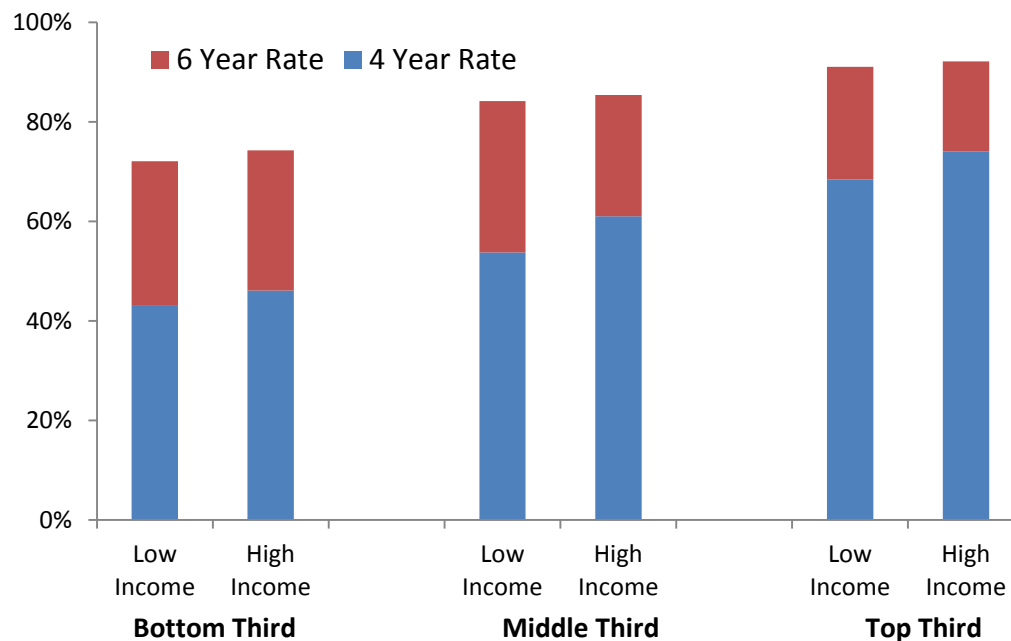
- Overall, UC graduation rate is very good.
- In general, disadvantaged students have a lower graduation rate than other students.

*Note: Academic Index=High School GPA * 1000 + Test Score (SAT Reasoning or ACT)*

Source: UC Corporate Student System

Data Analysis and Results—Success Challenges

Freshman graduation rates controlling for academic index: low income vs. high income students, 2004 entering cohort

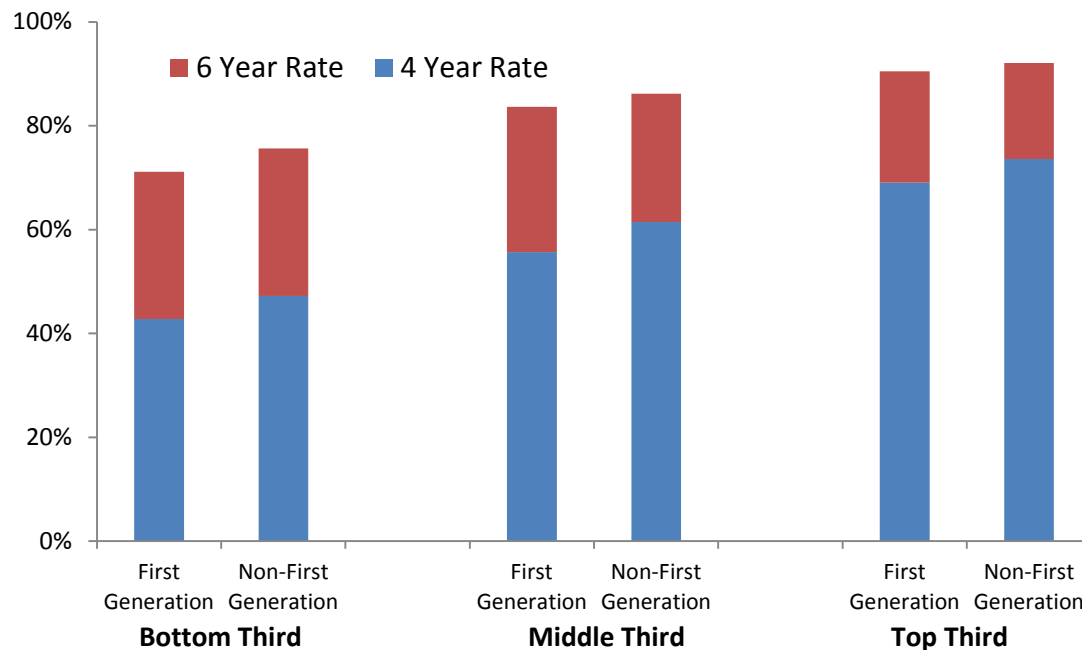


- Controlling for academic index, the difference in six year graduation rates between low income and high income students are almost eliminated, but low income students take a little bit longer to graduate than other students, as shown by lower 4-year graduation rates.

Source: UC Corporate Student System

Data Analysis and Results—Success Challenges

Freshman graduation rates controlling for academic index: first generation vs. non-first generation college students, 2004 entering cohort

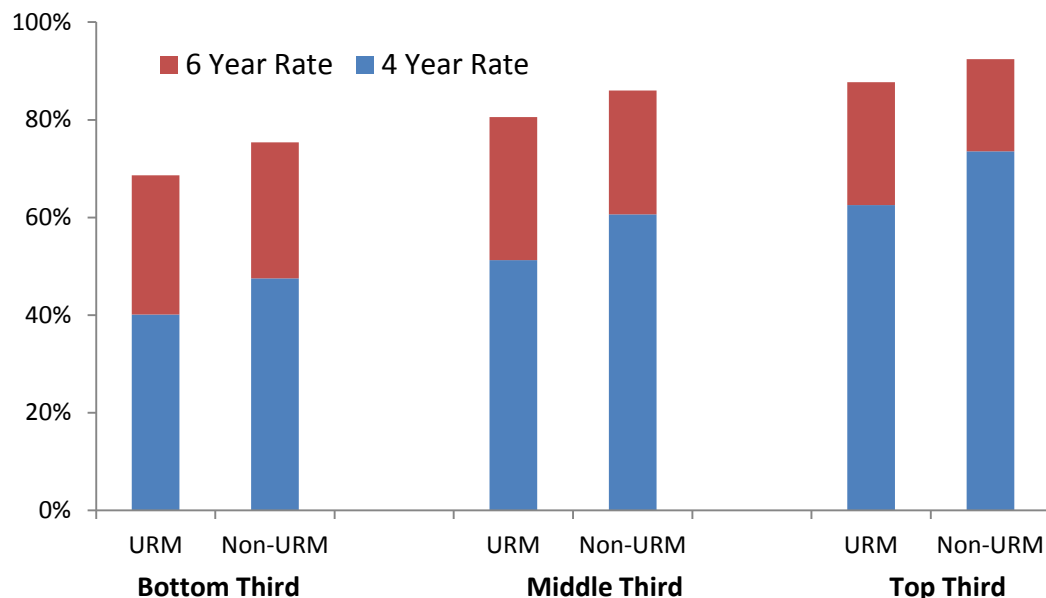


- Controlling for academic index, on average, the four year graduation rates of first generation college students are slightly lower than that of non-first generation students, but the six year graduation rates are close.

Source: UC Corporate Student System

Data Analysis and Results—Success Challenges

Freshman graduation rates controlling for academic index: URM vs. Non-URM students, 2004 entering cohort



- Controlling for academic index, the gap in graduation rates between URM students and non-URM students still exists, particularly the gap in four year graduation rates.

Source: UC Corporate Student System

Data Analysis and Results—Success Challenges

How "URM", "Low Income" and "First Generation" are correlated to graduation—Logistic Regression Coefficients and Odds Ratios

	Graduates in 4 Years			Graduates in 6 Years		
	Estimate	Significance	Odds Ratio	Estimate	Significance	Odds Ratio
Intercept	-4.6991	0.0000	0.0091	-4.2469	0.0000	0.0143
Unweighted High School GPA	0.0008	0.0000	1.0008	0.0010	0.0000	1.0010
Test Score	1.0556	0.0000	2.8736	1.2149	0.0000	3.3698
URM	-0.2864	0.0000	0.7510	-0.2650	0.0000	0.7672
Low Family Income	-0.2045	0.0000	0.8151	-0.0672	0.0977	0.9350
First Generation	-0.1358	0.0000	0.8730	-0.1714	0.0000	0.8425

Controlling for other variables, on average,

- URM's are 0.7510 times less likely to graduate in four years than non-URM students and 0.7672 times less likely to graduate in six years.
- low income students are 0.8151 times less likely to graduate within four years, but statistically, there is no difference in six year graduation rates between them.
- first generation college students are 0.8730 times less likely to graduate within four years and 0.8425 times less likely to graduate within six years.

Findings and Discussion—Access

- UC is doing a good job, especially compared to its AAU peers, admitting and enrolling large numbers of low income and first generation students.
- UC is also making good progress admitting and enrolling larger numbers of under-represented minority students
- And the disadvantaged students UC graduates look very much like other students 5, 10, and 20 years after graduation from college.

Socio-Economic Mobility – Low vs. High SES Students

UC Classes of 1989, 1999, and 2004

	LOW SES	HIGH SES
EMPLOYED FULL OR PART-TIME	88%	84%
LOOKING FOR WORK	4%	3%
SATISFIED WITH CAREER TO DATE	83%	84%
WORKING IN SAME (OR RELATED) FIELD AS UNDERGRADUATE MAJOR	60%	66%
PERSONAL INCOME \$50K - \$100K	55%	46%
PERSONAL INCOME OVER \$100,000	21%	29%

Findings and Discussion—Access

- How Has UC Been Able to Increase Access for Disadvantaged Groups?
 1. Strong institutional commitment
 2. Admissions policies
 3. Generous financial aid

1. Strong institutional commitment

UC seeks to enroll, and graduate a student body that:

- demonstrates high academic achievement or exceptional personal talent
- encompasses the broad diversity of backgrounds characteristic of California

In fact, one of UC's major goals:

- to ensure that all academically well-prepared HS grads, regardless of race, ethnicity or social class, are afforded the opportunity to earn a baccalaureate degree.

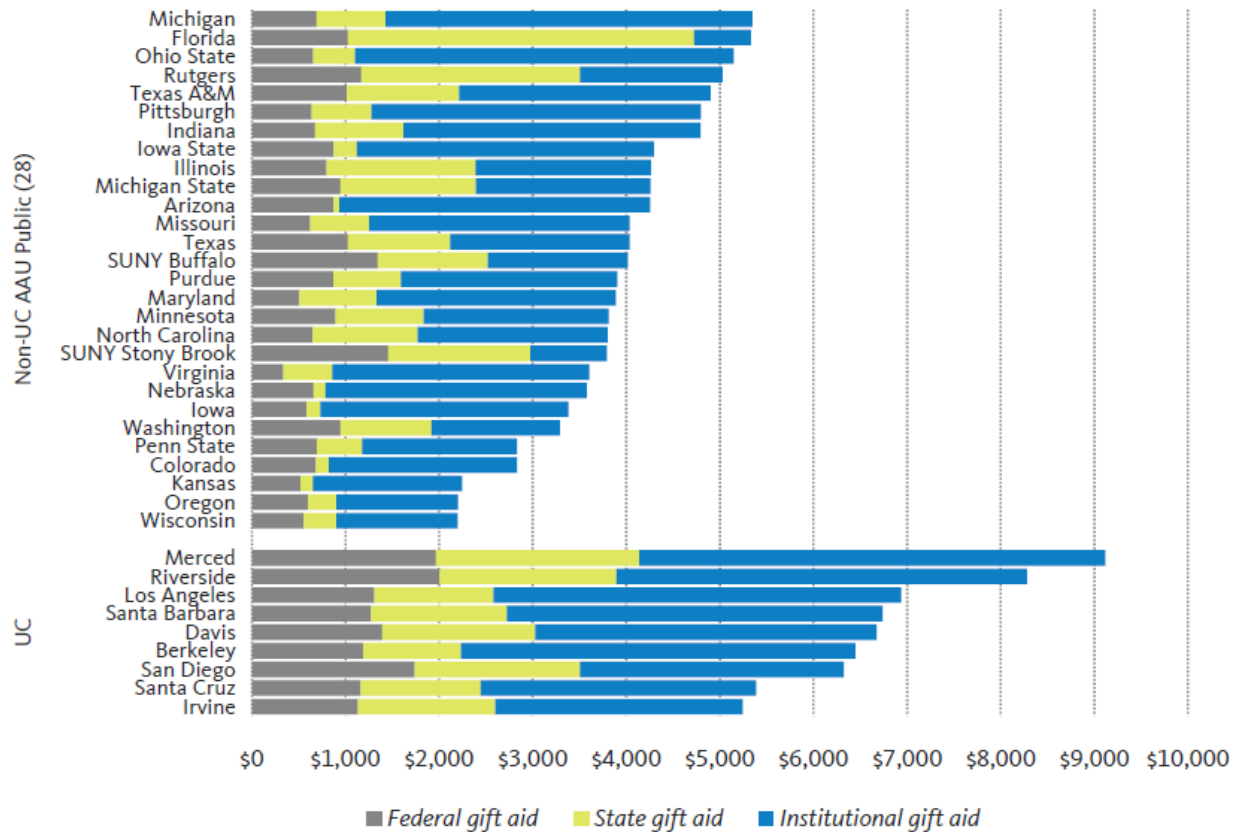
2. Admissions policies

- Recognize student achievements within the context of opportunities available;
- New admissions policy, effective Fall 2012
 - Designed to broaden the pool of students – from all ethnic and racial groups and from low performing high schools -- who will be considered for admission to UC
 - Comprehensive review at all campuses.

Findings and Discussion—Access

3. Generous financial aid policies

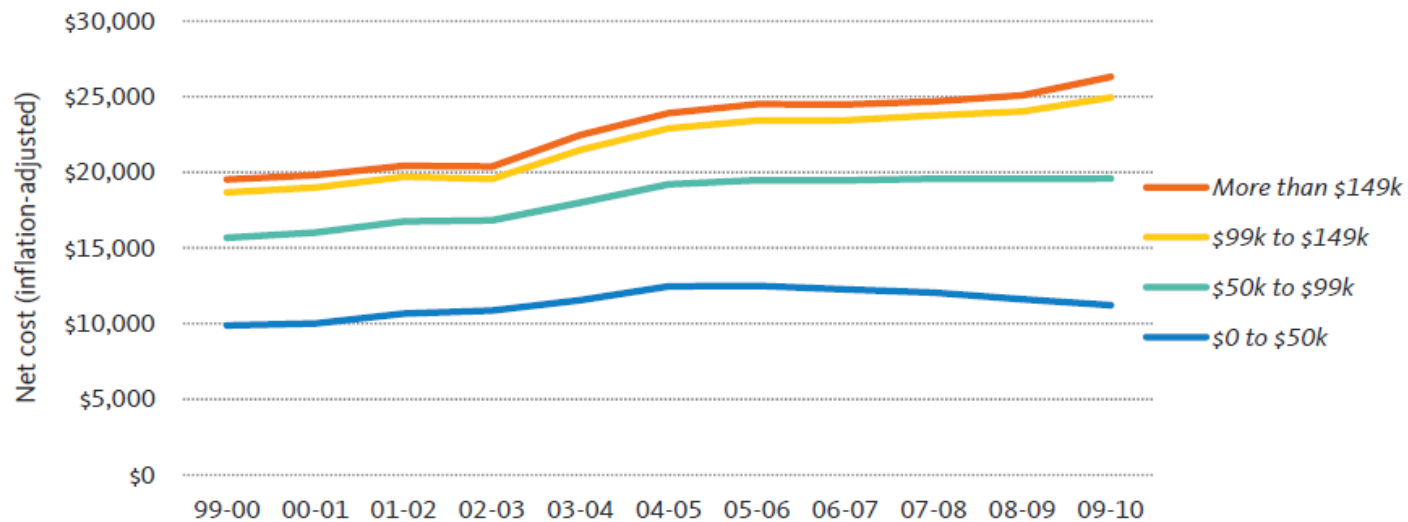
Per capita gift aid to entering freshmen, 2008-09



Findings and Discussion—Access

3. Generous financial aid policies –

Net cost of attending UC by family income, 1999-00 to 2009-10



Completion

- UC's six-year graduation rates are very good
 - 83 % in six years – fall 2004
- Graduation rates for disadvantaged students are almost as good
 - 80 % -- low income
 - 79 % -- first generation
 - 75 % -- URM

Why such high graduation rates at UC?

1. High admissions standards
2. Campus policies
3. Increasing institutional selectivity

1. High admissions standards:

- Admits from top 12 ½ percent of CA high school students
- Control over high school curriculum – “A thru G” requirements
- Increasing competition for admissions
- Academic qualifications are rising
 - For entering freshmen, fall 2011, projected high school GPA of 3.86
- Campuses are becoming more selective

2. Campus policies

- Campus policies encourage students to graduate more quickly
- Eg., streamlining requirements for high unit majors
- Changing culture and expectations
- Higher graduation rates are associated with shorter time-to-degree.

3. Institutional selectivity

- Rising selectivity may encourage higher graduation rates among all students, especially those less well prepared academically
- Students who were less well prepared academically were more likely to graduate from more selective institutions than less selective ones (Bowen, Chingos & McPherson, 2009).

Challenges and Concerns:

- Admissions – entering freshman class is still not representative of diversity of CA
- Gaps in graduation rates between URM students and white and Asian students
- Increasing number of students, including disadvantaged students, seeking admission
- Reductions in state support and increases in tuition
- Possible cutbacks to federal and state financial aid

Thank you and questions!