

Landscape of Higher Education: Human Capital

Kelcey Edwards & Ellen Sawtell

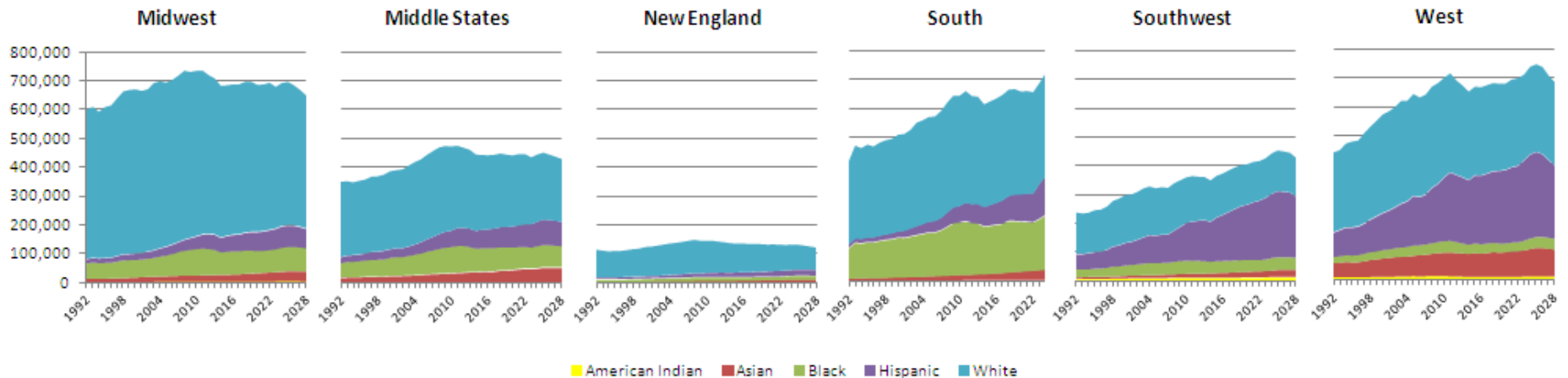
College Board Middle States Regional Forum

Brooklyn, NY

February 15, 2013

The Demographic Wave

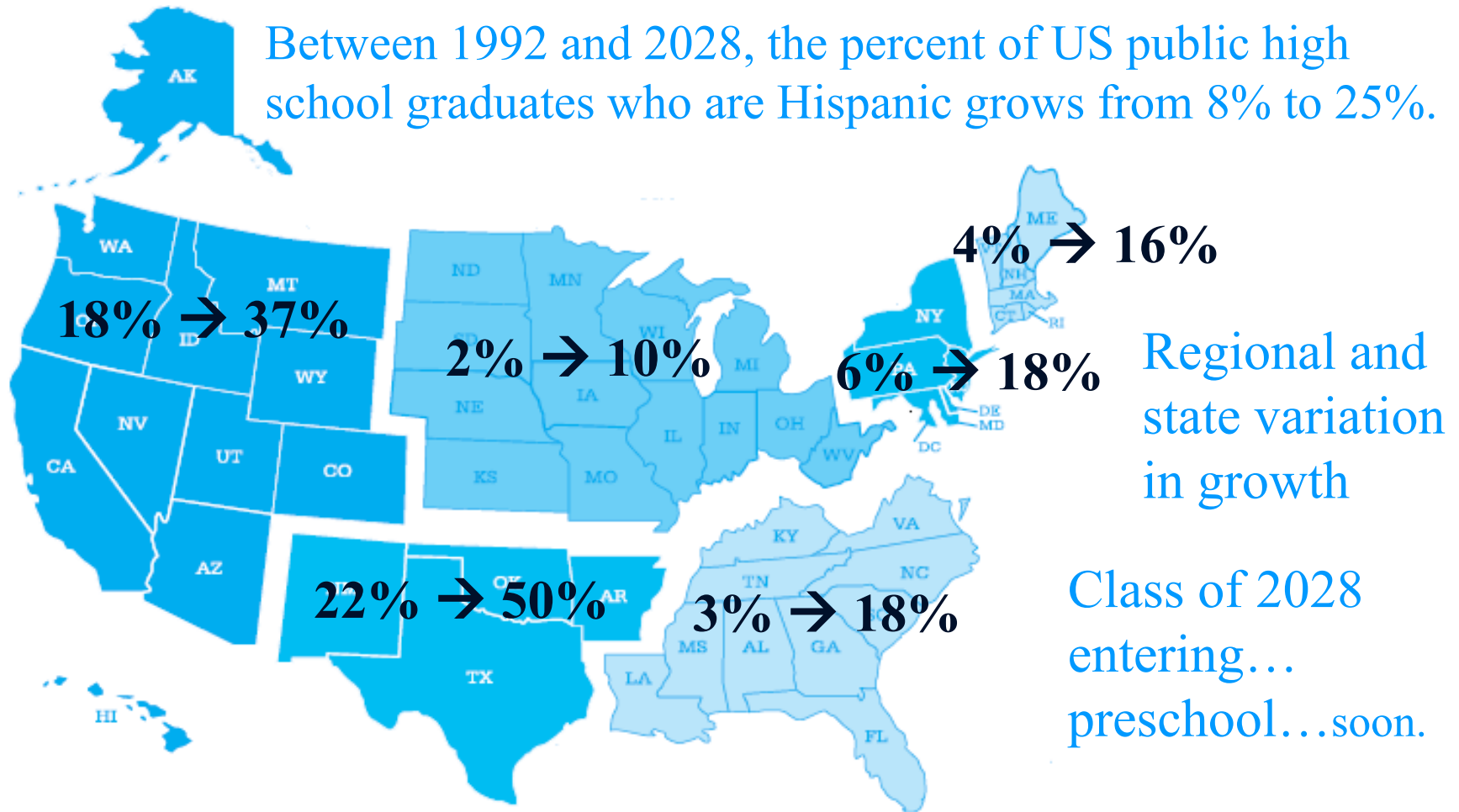
Number of Public High School Graduates by Race/Ethnicity by CB Region: 1992-2028



- Rapid expansion and diversification of graduates
- Regional variation
- Decline in birthrate → drop in mid/late 2020s

Source: Western Interstate Commission for Higher Education (WICHE), *Knocking at the College Door*, March 2008 (1992-1996 estimates) and January 2013 (1997-2028 estimates)

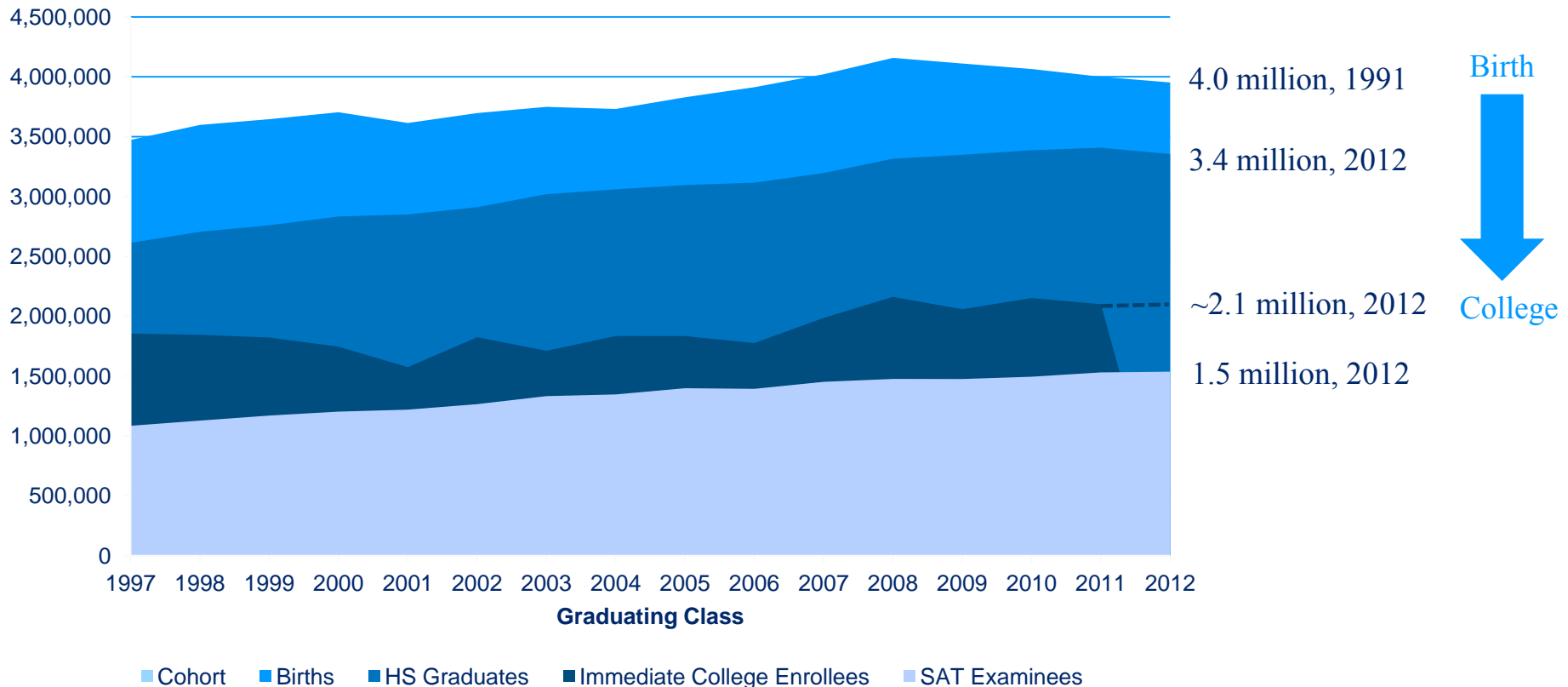
The Demographic Wave



Source: Western Interstate Commission for Higher Education (WICHE), *Knocking at the College Door*, 2008/2013

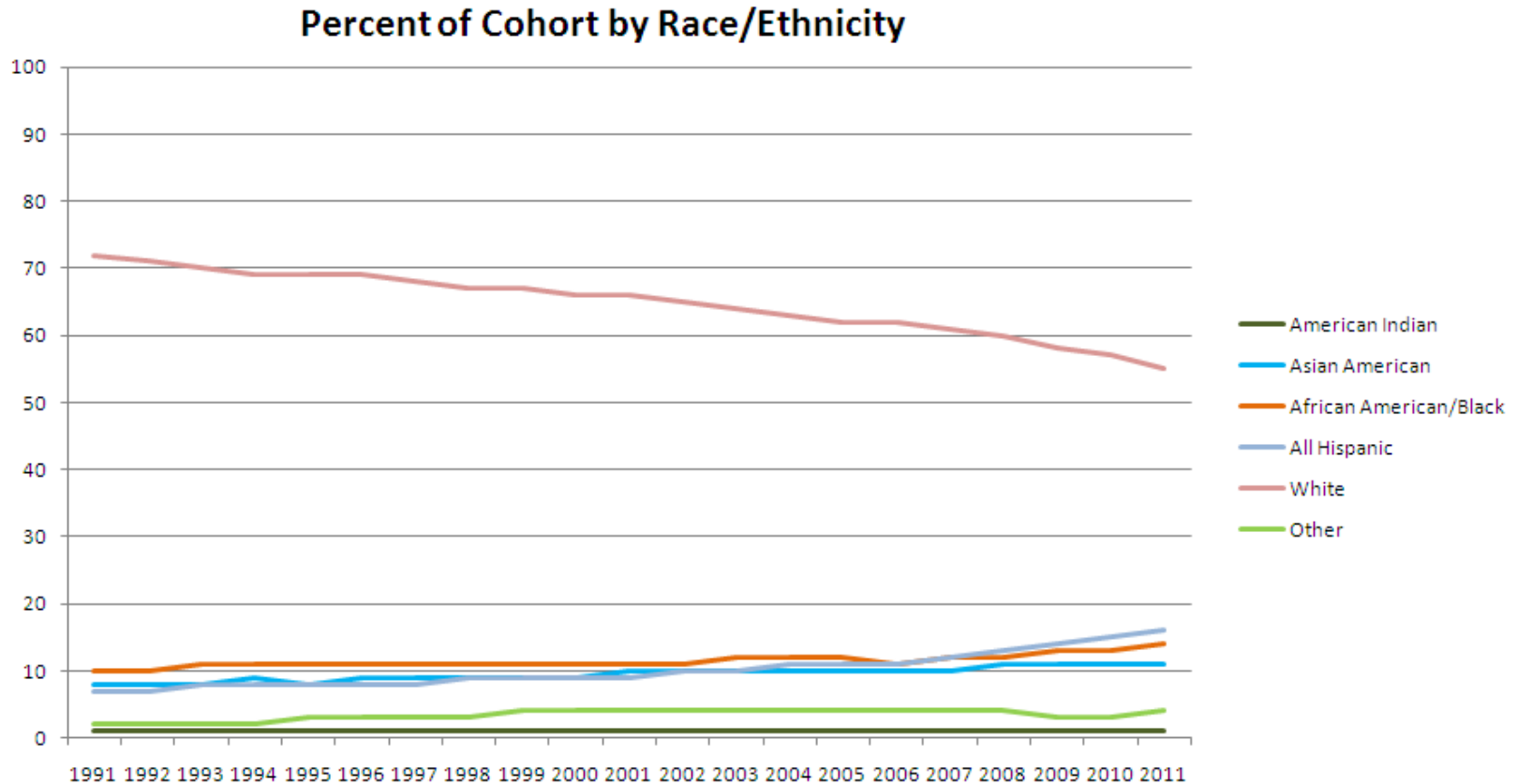
College-Bound Seniors

Number of Births, HS Graduates, and Immediate College Enrollees



Sources: CDC National Center for Health Statistics Monthly Vital Statistics Reports (births); Western Interstate Commission for Higher Education (US high school graduates); NCES Digest of Educational Statistics 2010 (immediate college enrollees); College Board (SAT Examinees in US Cohort)

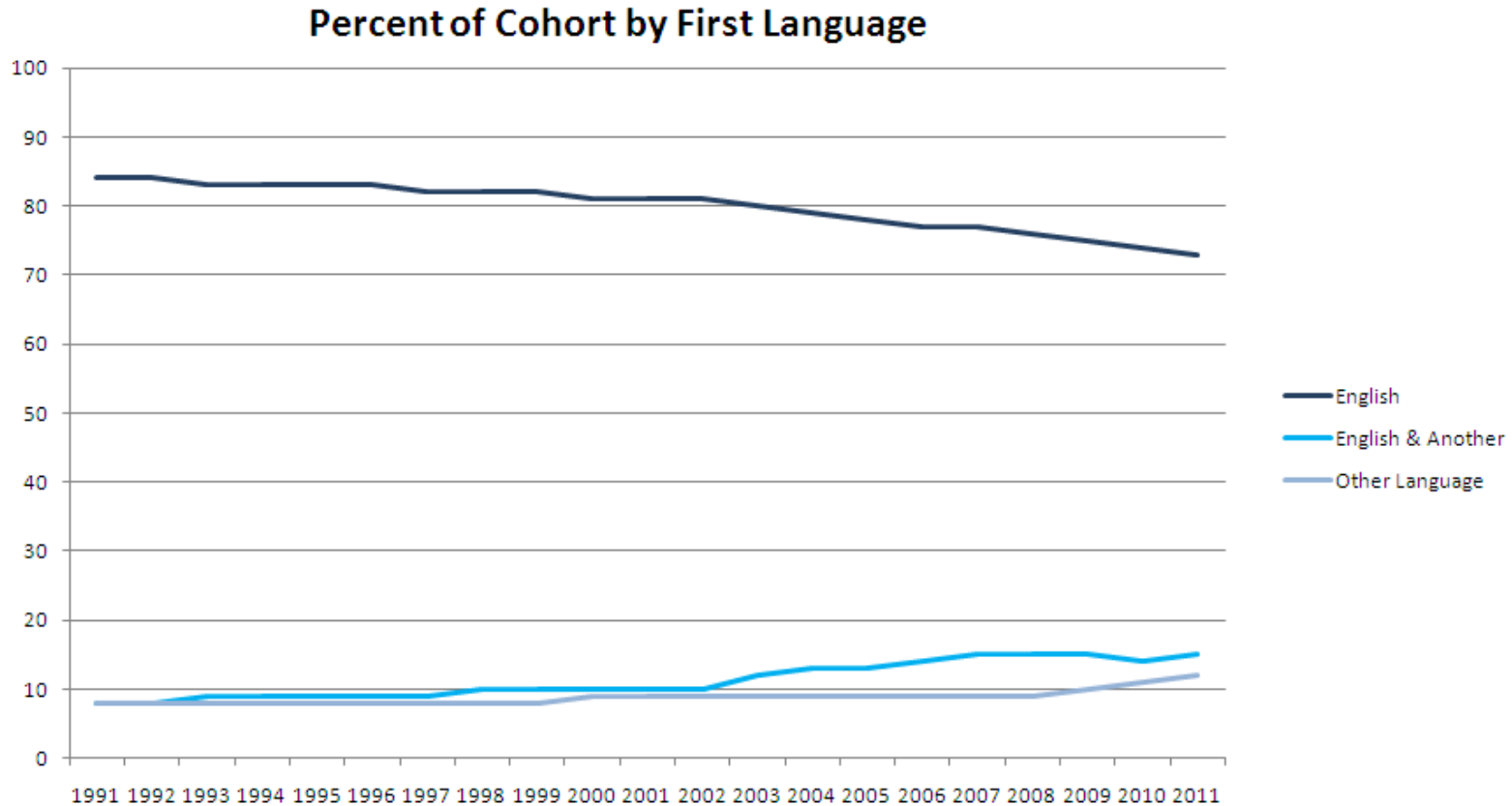
Trends in CBS Student Characteristics



- Increasingly diverse SAT examinees

Source: *College-Bound Seniors 1991-2011 Profile Report analyses of self-reported information from the Student Descriptive Questionnaire (SDQ)*

Trends in CBS Student Characteristics

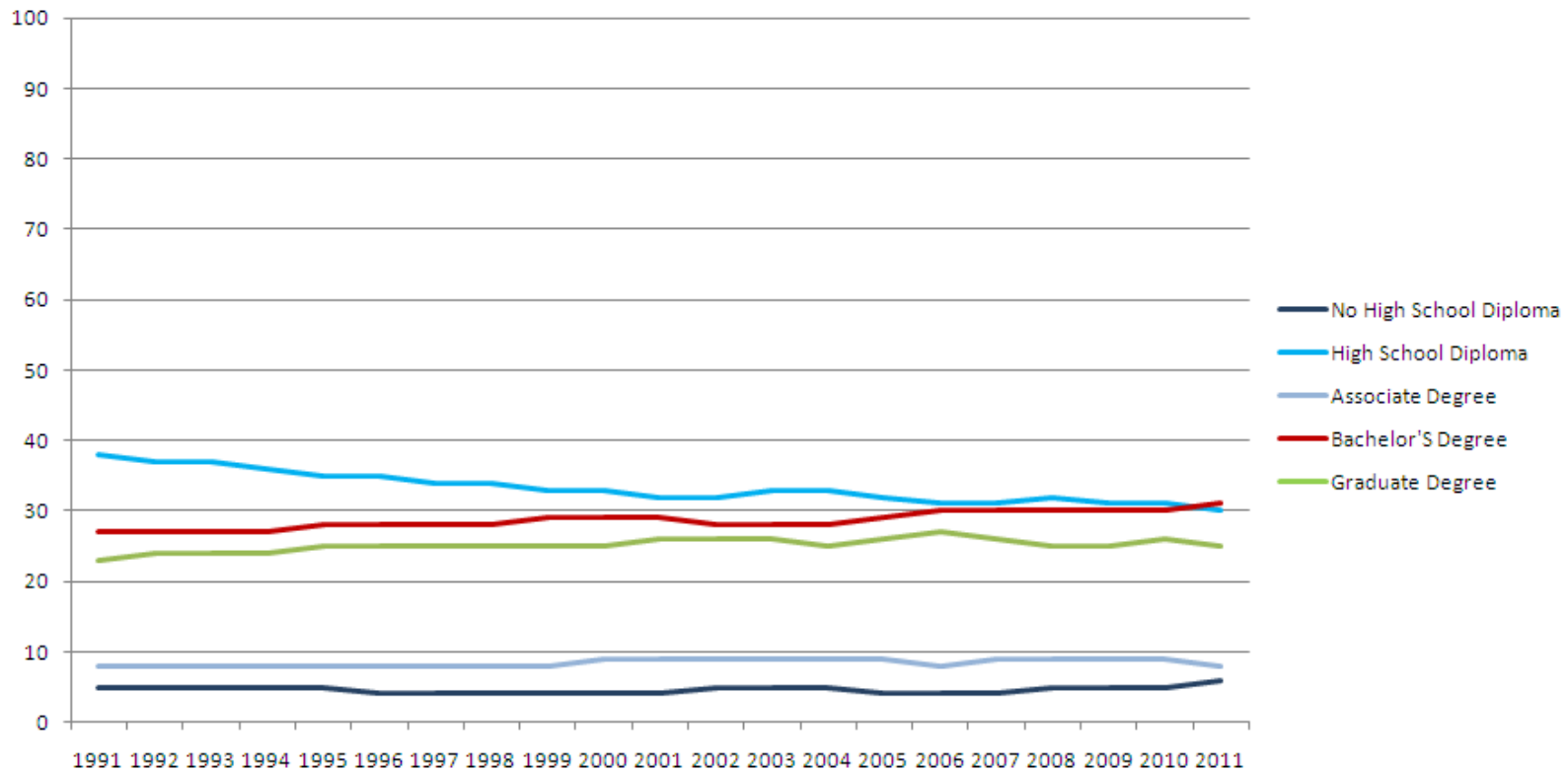


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Trends in CBS Student Characteristics

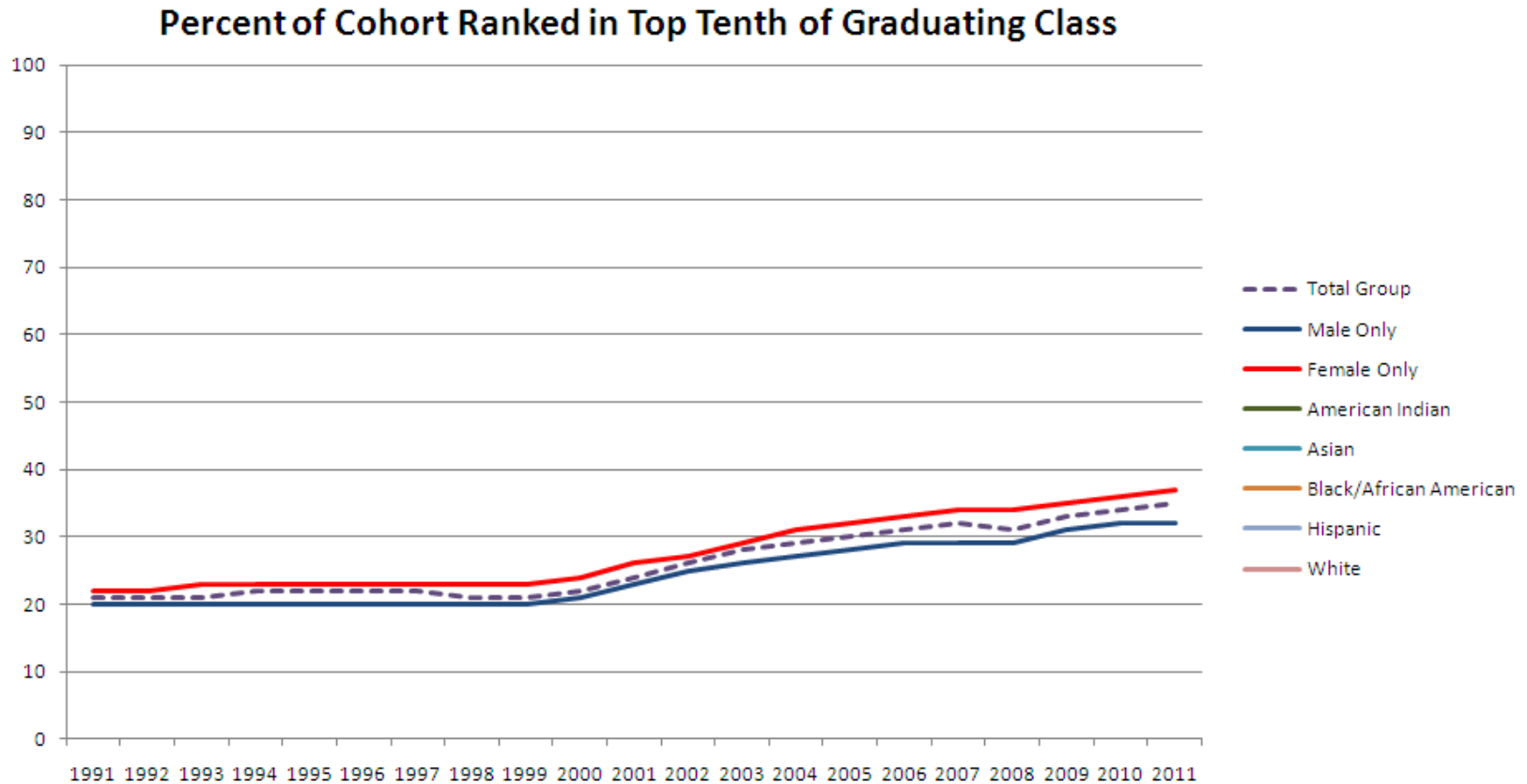
Percent of Cohort by Highest Parent Education



- Steady % First Generation in past 10 years

Source: *College-Bound Seniors 1991-2011 Profile Report* analyses of self-reported information from the Student Descriptive Questionnaire (SDQ)

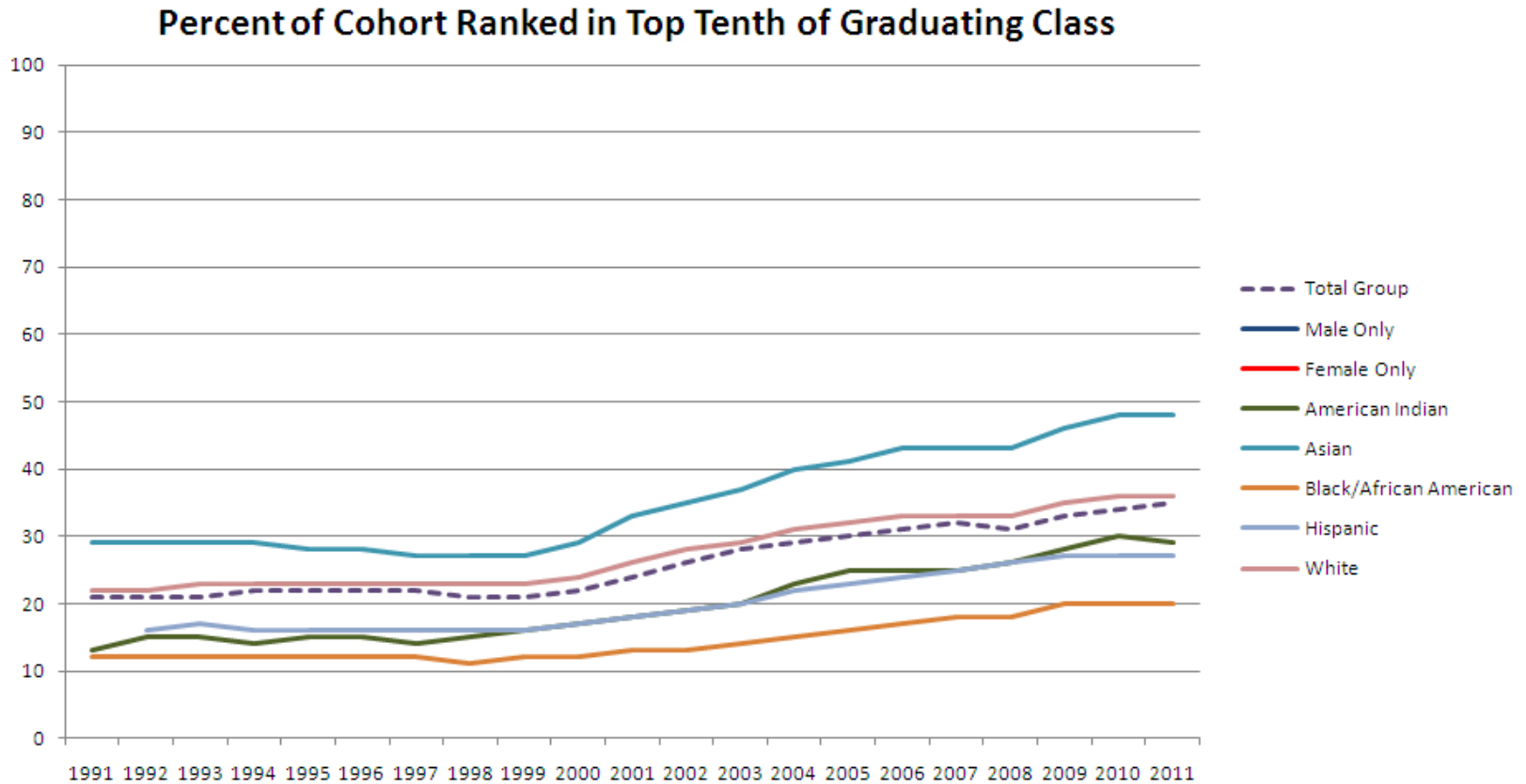
Trends in Academic Preparation - Rank



- **Steady rise across groups; persistent gaps**

Source: *College-Bound Seniors 1991-2011 Profile Report analyses of self-reported information from the Student Descriptive Questionnaire (SDQ)*

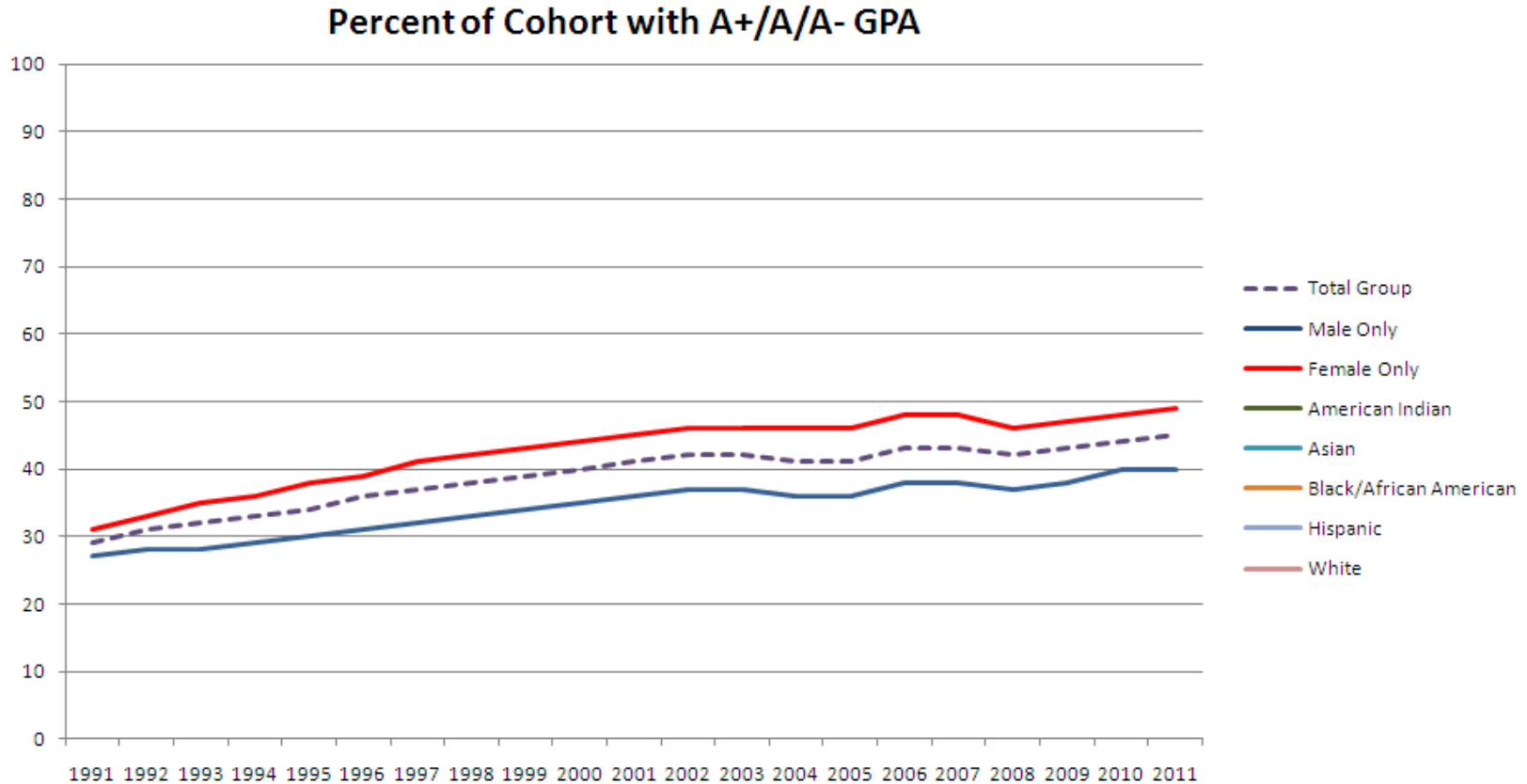
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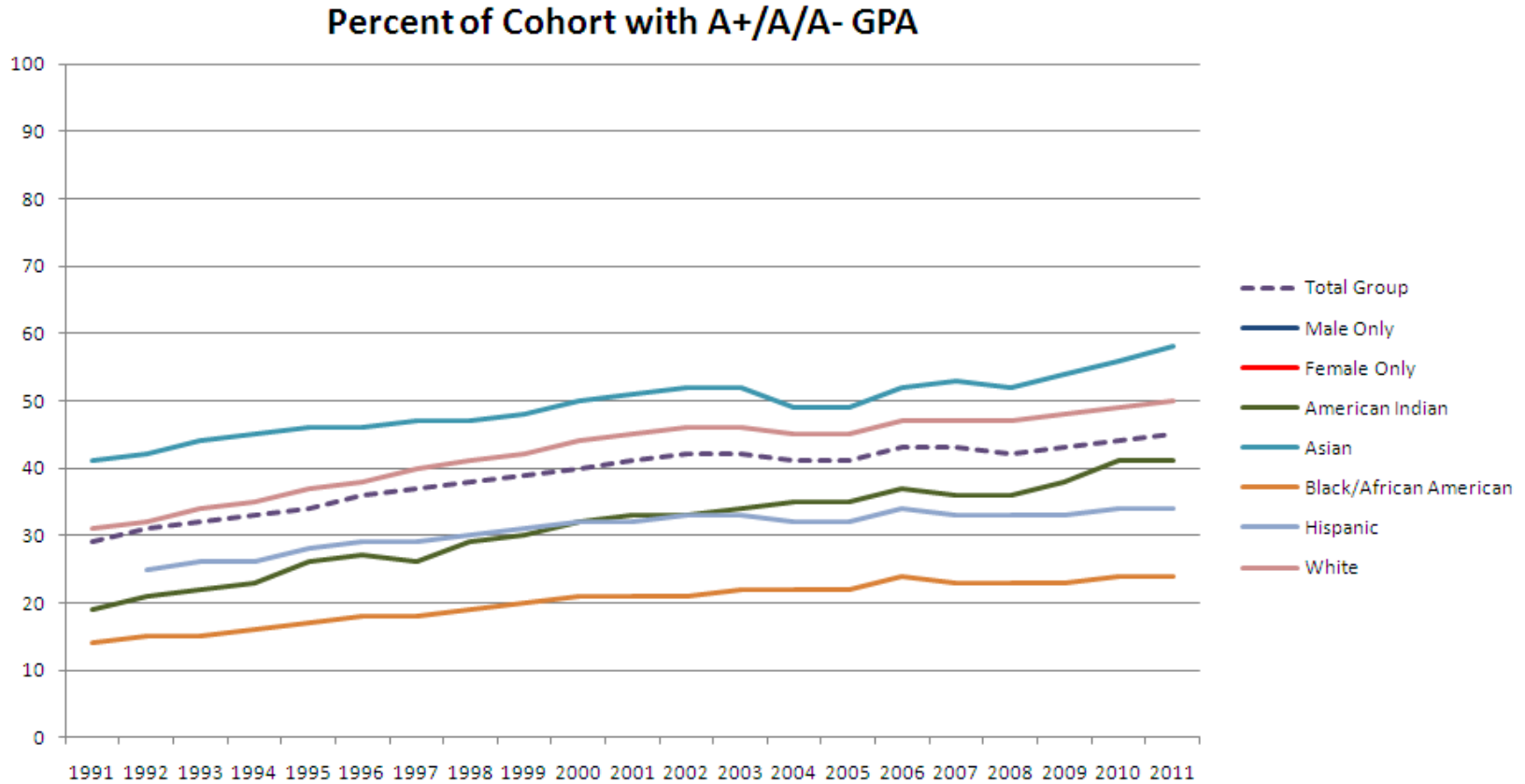
Trends in Academic Preparation - GPA



- Steady rise across groups; persistent gaps

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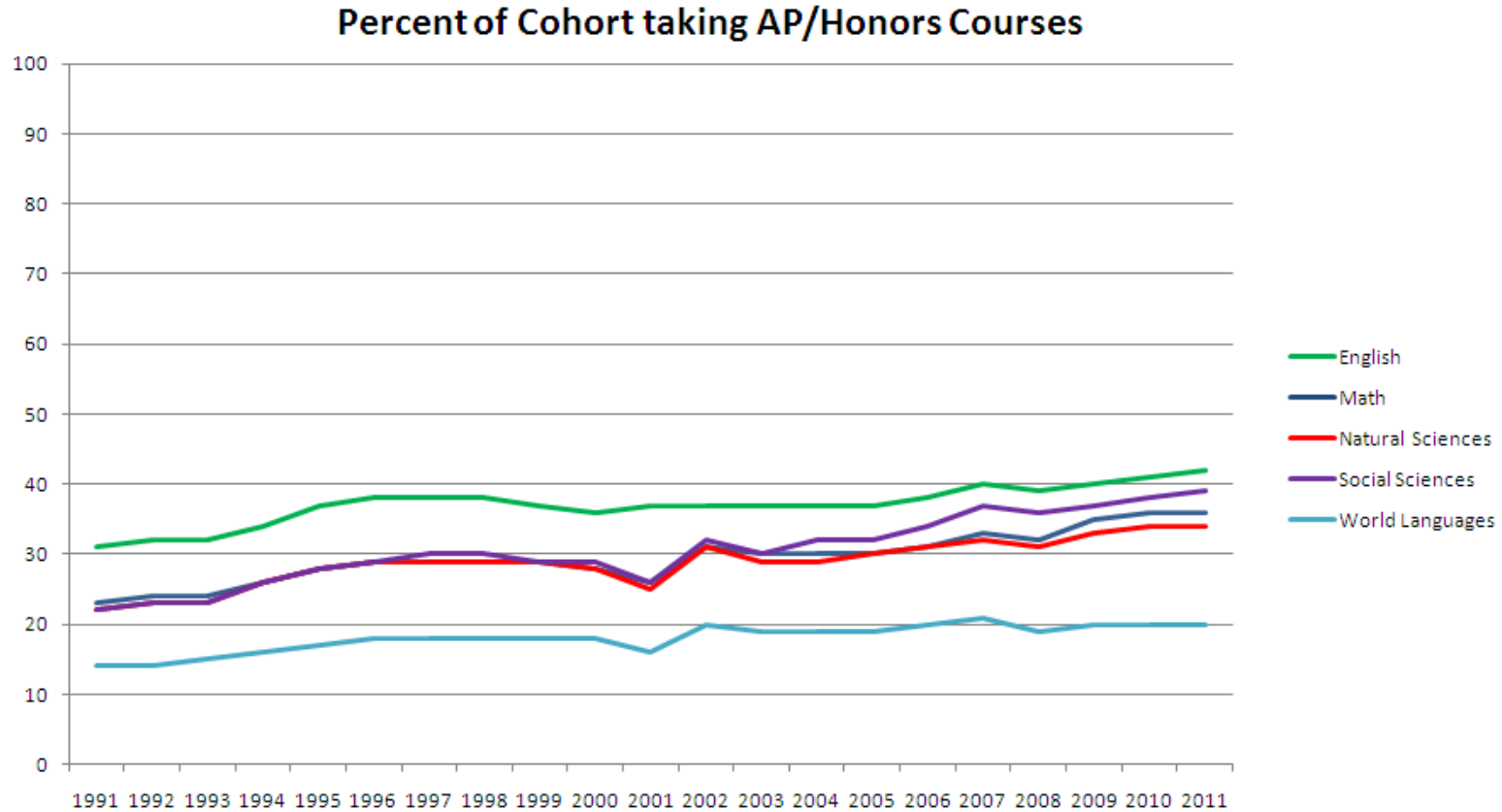
Trends in Academic Preparation - GPA



- Steady rise across groups; persistent gaps

Source: *College-Bound Seniors 1991-2011 Profile Report analyses of self-reported information from the Student Descriptive Questionnaire (SDQ)*

Trends in Academic Preparation – AP/Honors



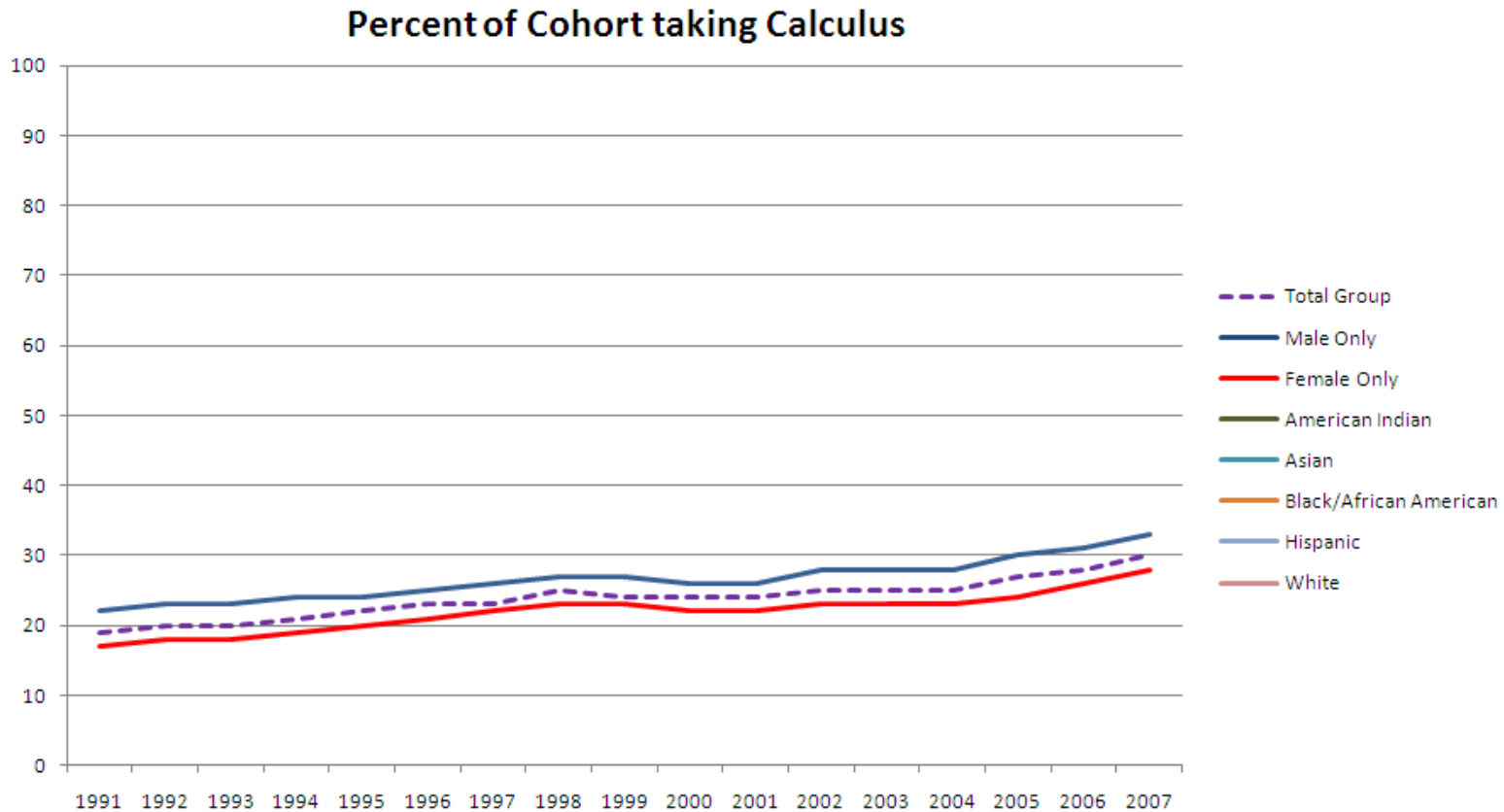
- Steady rise across disciplines

Source: *College-Bound Seniors 1991-2011 Profile Report* analyses of self-reported information from the Student Descriptive Questionnaire (SDQ)

Trends in Academic Preparation – AP/Honors

- Similar, troubling gaps were observed across disciplines
- The difference by race/ethnicity were most notable in:
 - Math
 - In the class of 2011, 48% of Asian examinees indicating taking AP/Honors Math compared to 24% of Black/African American and 30% of Hispanic examinees.
 - Science
 - In the class of 2011, 44% of Asian examinees indicating taking AP/Honors science compared to 23% of Black/African American and 27% of Hispanic examinees.

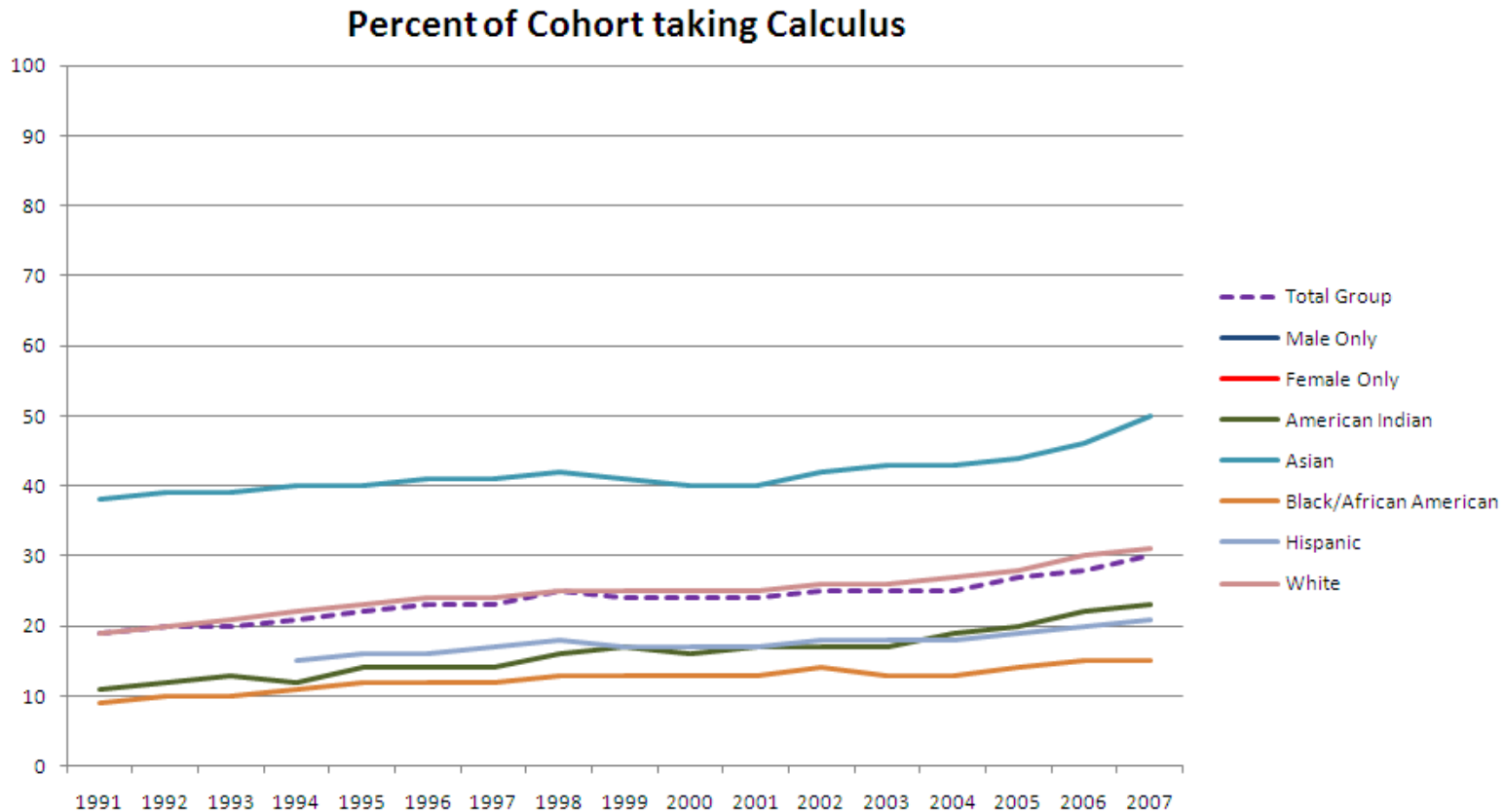
Trends in Academic Preparation – Calculus



- Steady rise across groups; persistent gaps

Source: *College-Bound Seniors 1991-2007 Profile Report analyses of self-reported information from the Student Descriptive Questionnaire (SDQ)*

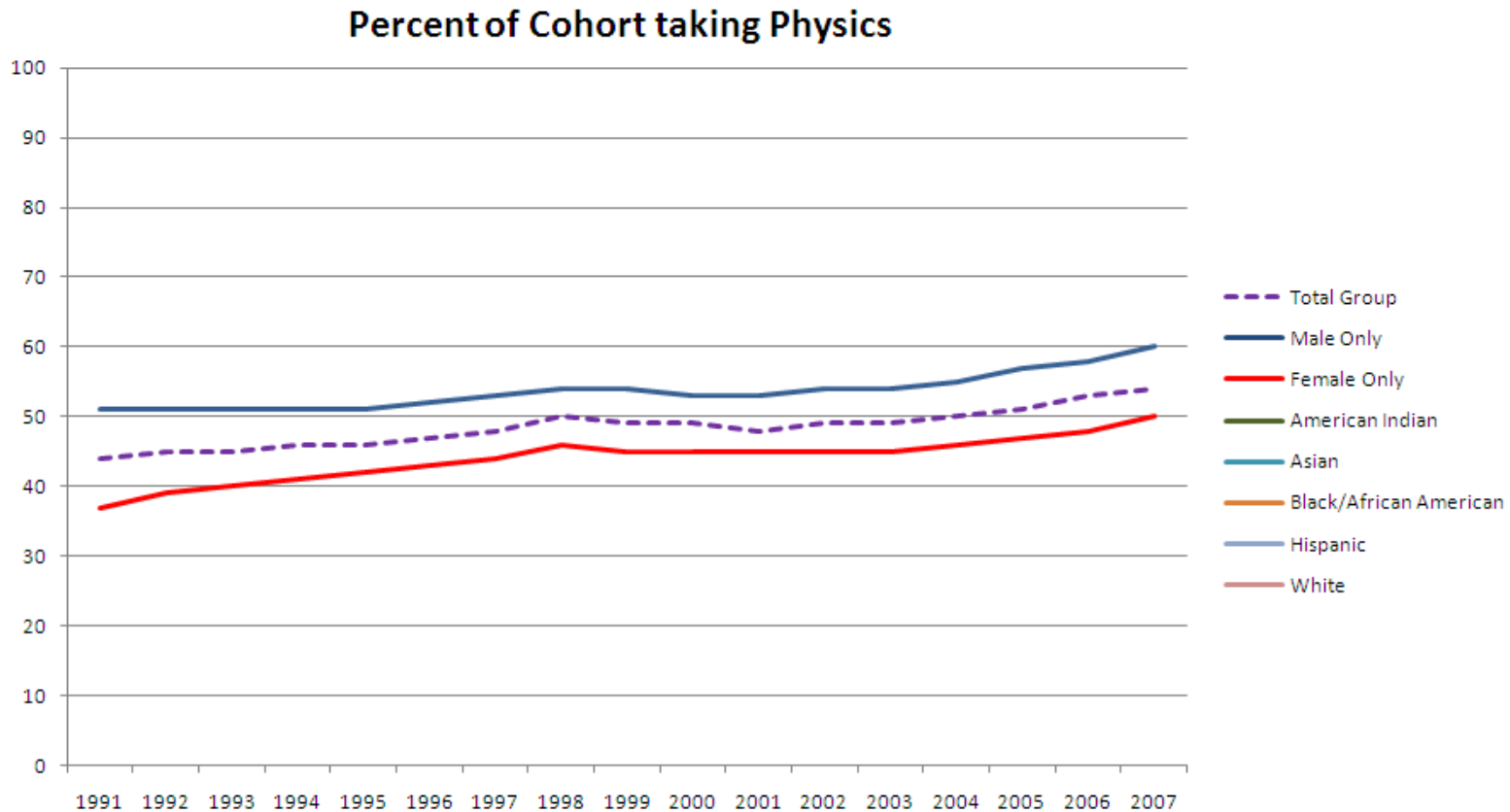
Trends in Academic Preparation – Calculus



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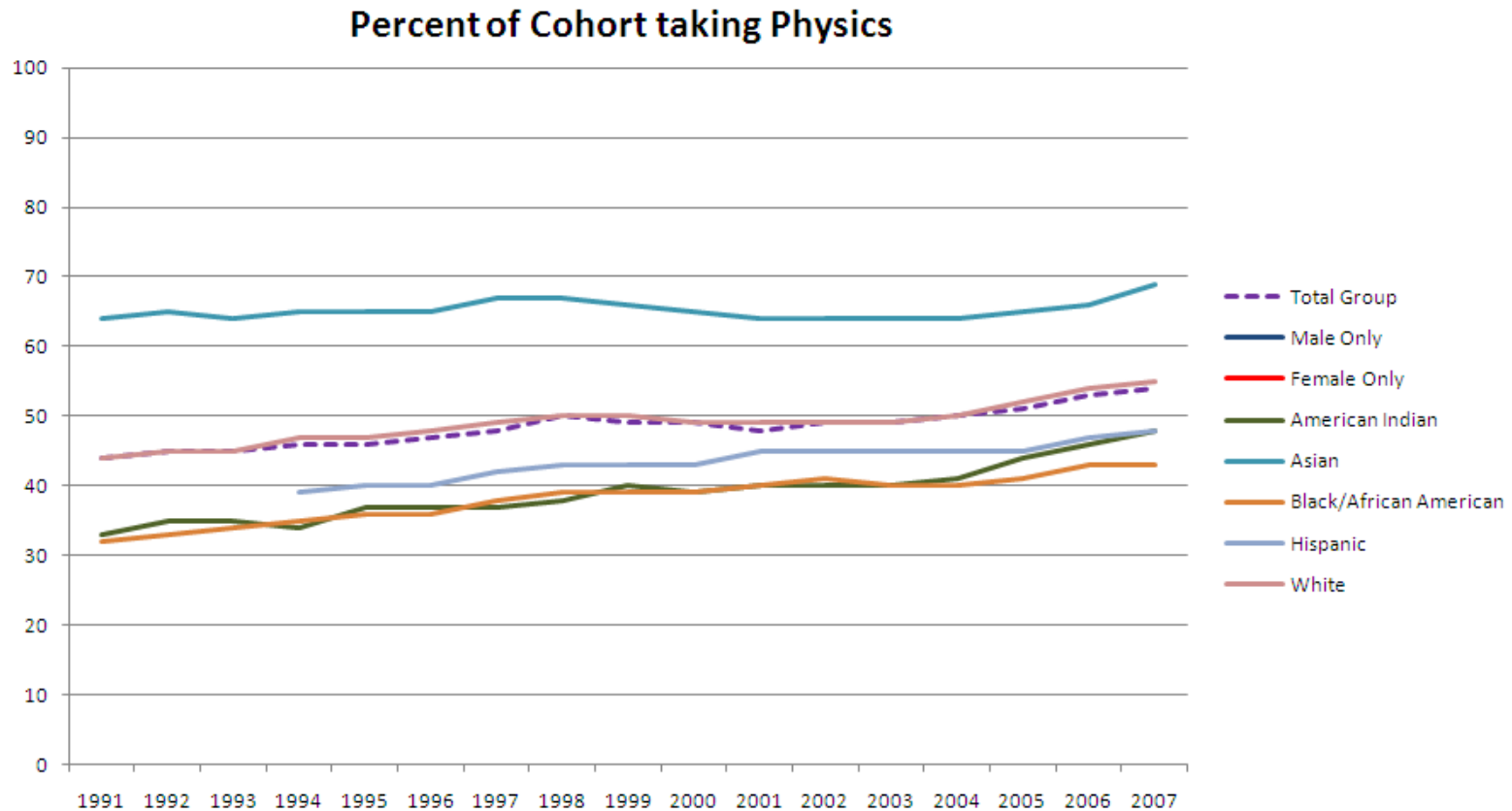
Trends in Academic Preparation – Physics



- Steady rise across groups; persistent gaps

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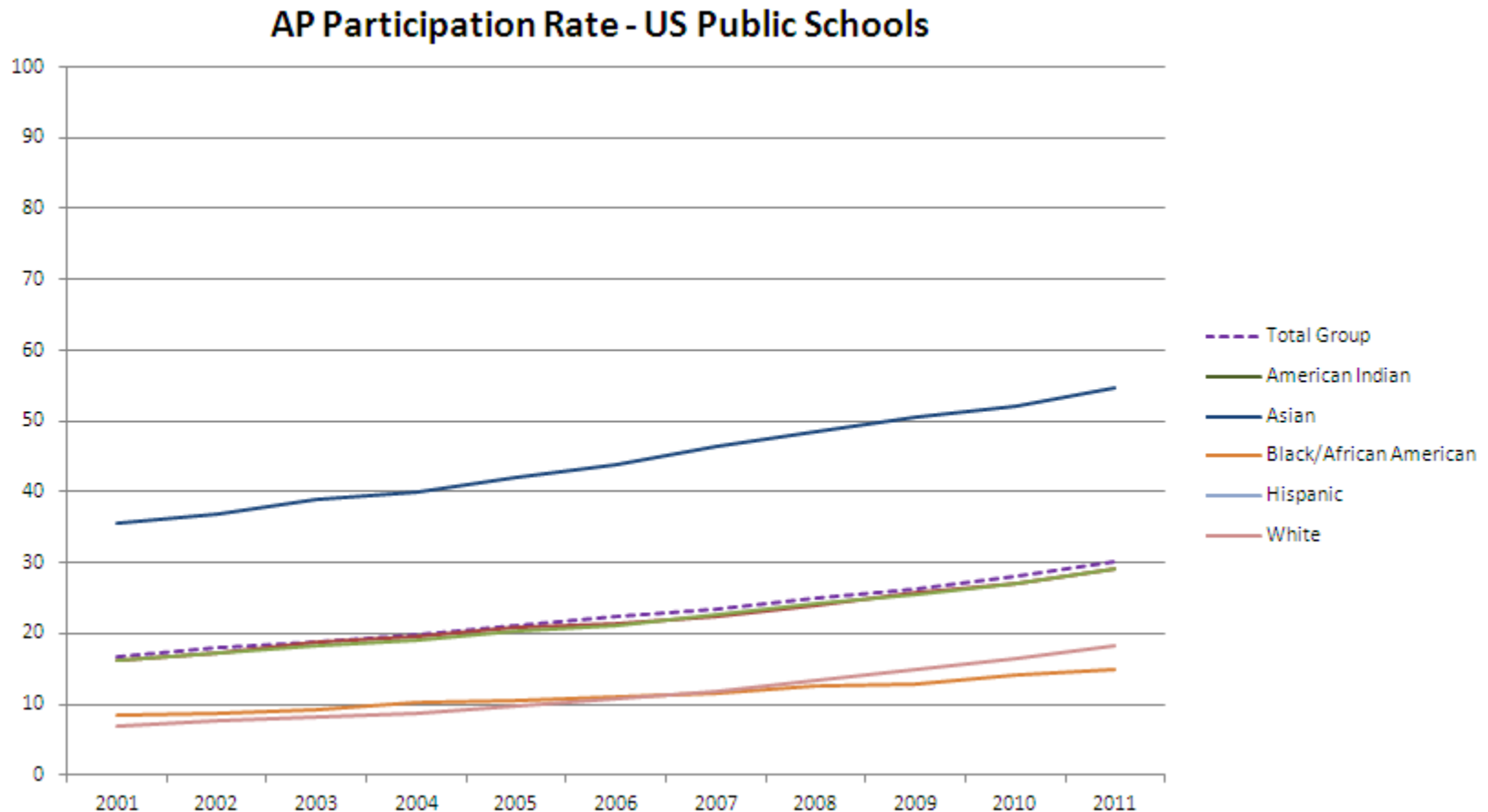
Trends in Academic Preparation – Physics



- Steady rise across groups; persistent gaps

Source: *College-Bound Seniors 1991-2007 Profile Report analyses of self-reported information from the Student Descriptive Questionnaire (SDQ)*

Access to Rigorous Courses



- Steady rise across groups; persistent gaps
- Hispanic and white rates are identical

Performance in Rigorous Courses

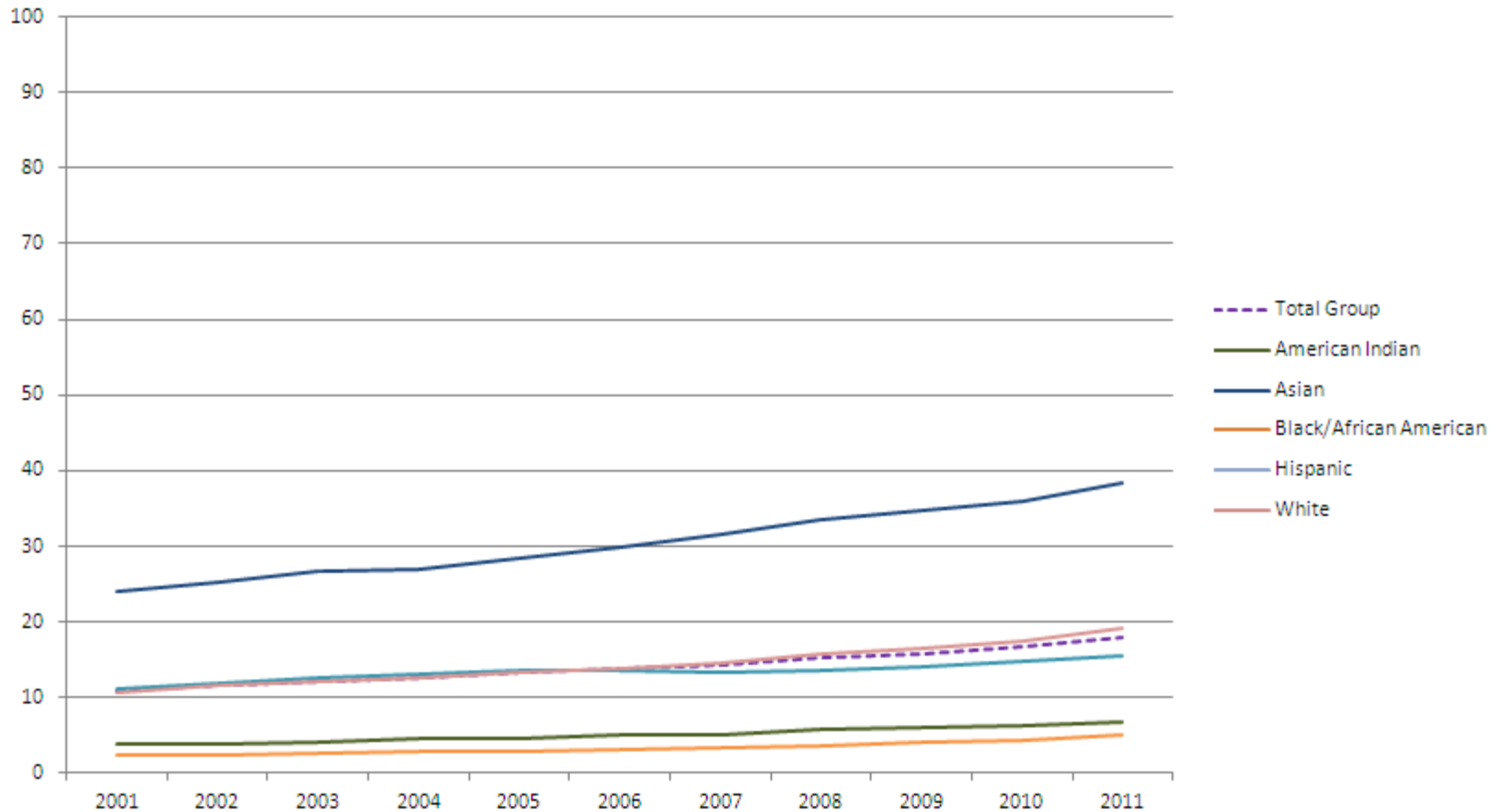
- Equity & Excellence metric
 - Percent of **graduates** scoring 3 or higher on an AP exam during high school.
 - Found in APRN, OSR, etc.
 - **Not** equivalent to ‘pass rate’ which reflects the percent of **examinees** scoring 3 or higher.

Some thoughts on 'Pass Rates'

- It's not that we don't want to talk about them or aren't concerned about students who aren't successful....
- The issue is about interpretation and potential behavior consequences.
 - On a state or national level, they reflect vastly different school/district policies as to who gets into AP, who takes the exam, and how well those students were prepared both prior to and during AP.
 - The easiest way to increase pass rates is to build barriers to entry, as opposed to doing the hard work of making sure that students and teachers have the tools to succeed.
 - It is more efficient/cheaper to decrease the denominator than it is to increase the numerator. Is that good for students?

Performance in Rigorous Courses

AP E&E Rate - US Public Schools



Who's knocking at the college door?

- An increasingly diverse and academically prepared student body
 - Also motivated and confident
- This presents substantial challenges and incredible opportunities

Questions?

- Researchers are encouraged to freely express their professional judgment. Therefore, points of view or opinions stated in College Board presentations do not necessarily represent official College Board position or policy.
- Please forward any questions, comments, and suggestions to:
 - Kelcey Edwards – kedwards@collegeboard.org
 - Ellen Sawtell – esawtell@collegeboard.org

Landscape of Higher Education: Net Price

Greg Perfetto

Middle States Regional Forum

February 15, 2013

Net Price Calculators -- Overview

- Federal Mandate took effect October, 2011
- First year of data collection completed fall 2012
- In accordance with the *Higher Education Opportunity Act* of 2008 (HEOA), by October 29, 2011, each postsecondary institution that participates in Title IV federal student aid programs must post a net price calculator on its website that uses institutional data to provide estimated net price information to current and prospective students and their families based on a student's individual circumstances. This calculator should allow students to calculate an estimated net price of attendance at an institution (defined as cost (price) of attendance minus grant and scholarship aid) based on what similar students paid in a previous year. The net price calculator is required for all Title IV institutions that enroll full-time, first-time degree- or certificate-seeking undergraduate students.

College Board Net Price Calculator

- Early data from first year under mandate
- Broad Representation
 - 318 Colleges
 - Public, Private, Doctoral, Baccalaureate
 - Over 1 Million NPC “hits” since going live.
 - Over 500K completed calculations over the recently completed 12 month cycle, yielding detailed information on net cost, as well as family contribution estimates based on both federal and institutional needs analysis.
- Preliminary look at affordability landscape

Who's coming – By region

Region	Percent of Students	Percent of Schools
New England	10.8%	15.6%
Middle States	26.1%	27.7%
South	22.5%	23.5%
Southwest	4.2%	4.5%
Midwest	19.1%	16.6%
West	13.4%	12.1%
Territories	.2%	NA
Foreign	3.7%	NA

Top 10 states by student residence:
Virginia, New York, California, Maryland, Pennsylvania,
Massachusetts, Illinois, New Jersey, Florida, North Carolina

Who's coming – By Income

Net Price by Income Band (Public vs. Private, BA and up)				
Income Band	NET_PRICE			
	Mean		Percent in Income Group	
	Public	Private	Public	Private
<= \$10,000	\$ 12,814	\$ 14,303	18%	13%
\$10,001 - \$20,000	\$ 15,640	\$ 15,319	3%	3%
\$20,001 - \$30,000	\$ 15,777	\$ 14,975	4%	4%
\$30,001 - \$50,000	\$ 16,666	\$ 16,495	12%	10%
\$50,001 - \$75,000	\$ 20,607	\$ 20,324	14%	13%
\$75,001 - \$100,000	\$ 23,694	\$ 25,451	14%	15%
\$100,001 - \$125,000	\$ 25,748	\$ 30,199	11%	12%
\$125,001 - \$150,000	\$ 27,383	\$ 35,291	9%	11%
\$150,001 - \$200,000	\$ 29,283	\$ 42,809	8%	11%
\$200,001+	\$ 31,895	\$ 49,221	6%	9%
Total	\$ 21,422	\$ 27,419	100%	100%
		Total N	125827	426853

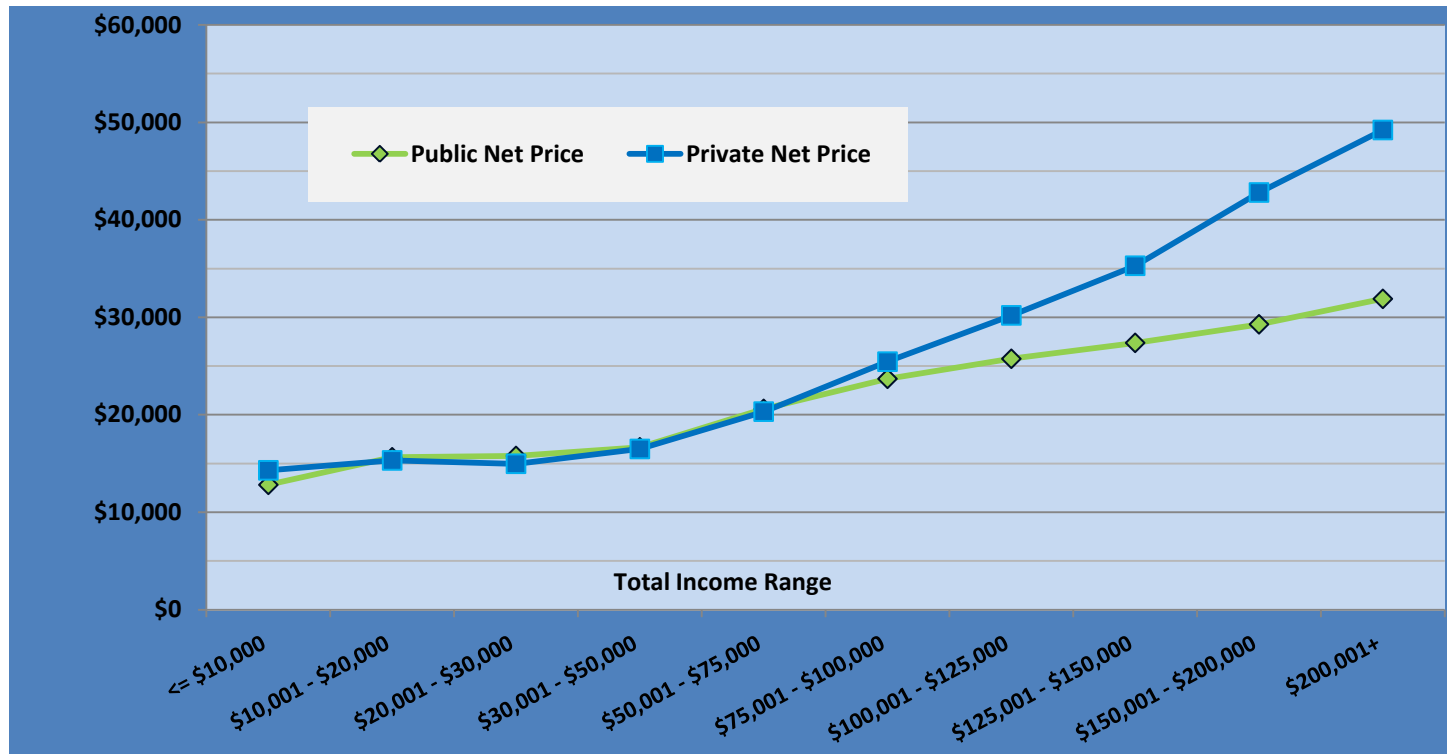
- Overall, 50% about are middle income students
- More higher than lower income (13% <\$10,000 might represent “surfers”)

Net Price – By College Type

Cost, Price and Family Contribution (FM) by College Type						
	NPC Completion Rate	Cost	Net Price	NP/Cost	EFC	N
Private Baccalaureate	82%	\$ 50,827	\$ 25,611	50%	\$ 23,596	159,644
Private Doctoral	79%	\$ 57,028	\$ 28,888	51%	\$ 25,951	204,784
Unclassified	73%	\$ 49,572	\$ 27,813	56%	\$ 23,246	21,716
Private Masters	77%	\$ 43,249	\$ 27,227	63%	\$ 20,296	62,497
Other Private	75%	\$ 41,048	\$ 26,076	64%	\$ 18,469	13,586
Public Baccalaureate	69%	\$ 27,335	\$ 17,644	65%	\$ 14,405	4,500
Public Doctoral	71%	\$ 32,592	\$ 22,246	68%	\$ 20,122	105,231
Public Masters	71%	\$ 23,429	\$ 17,101	73%	\$ 13,522	16,119
Other Public	56%	\$ 17,970	\$ 13,767	77%	\$ 11,230	2,238
For Profit	47%	\$ 36,918	\$ 32,711	89%	\$ 12,424	7,387
Total	77%	\$ 47,470	\$ 26,155	55%	\$ 22,791	597,702

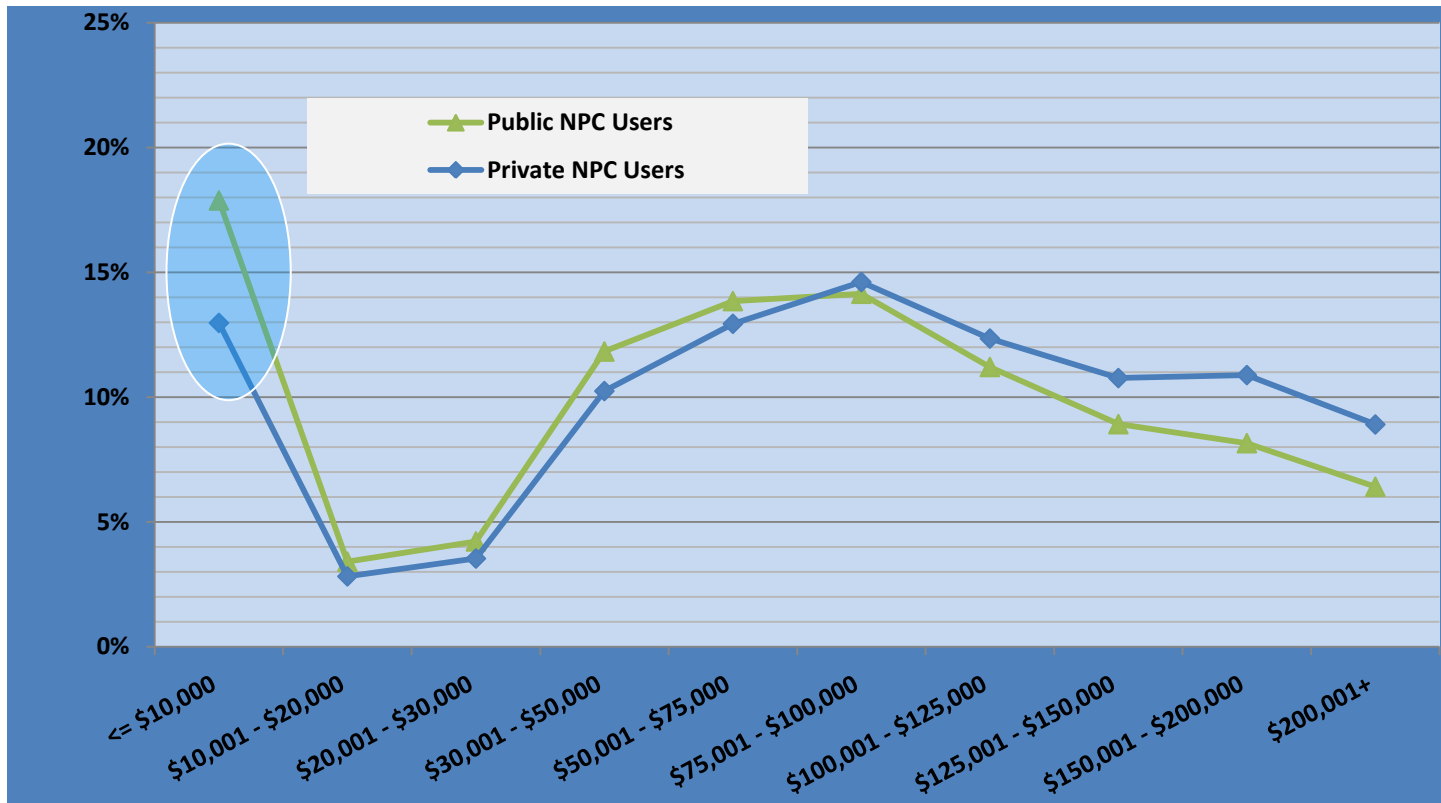
- Overall, Net Price is about 60 to 80% cost for Publics, 50 to 65% for Privates
- Completion rates (hits to full info) generally runs in the 70-80% range for typical Public and Private 4-yr colleges

Net Price – By Income and Type



- Below \$100,000 Public and Private are very similar on Net Price
- Above \$100,000 Net Price diverges with Private > Public

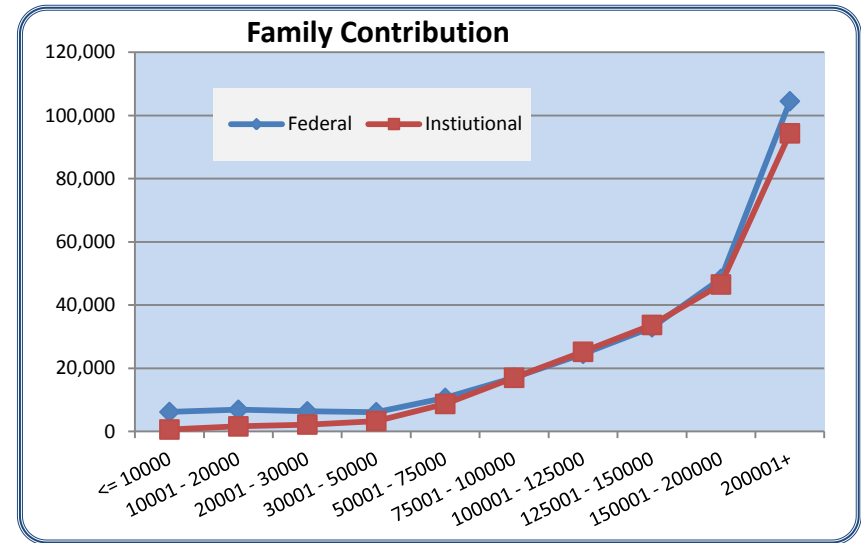
Distribution of Users – By Income and Type



- Similar distribution of NPC users across income levels for Public and Private, with slight shift towards higher income for users at Private Colleges
- The peak at <\$10,000 likely to be driven by “Surfers”

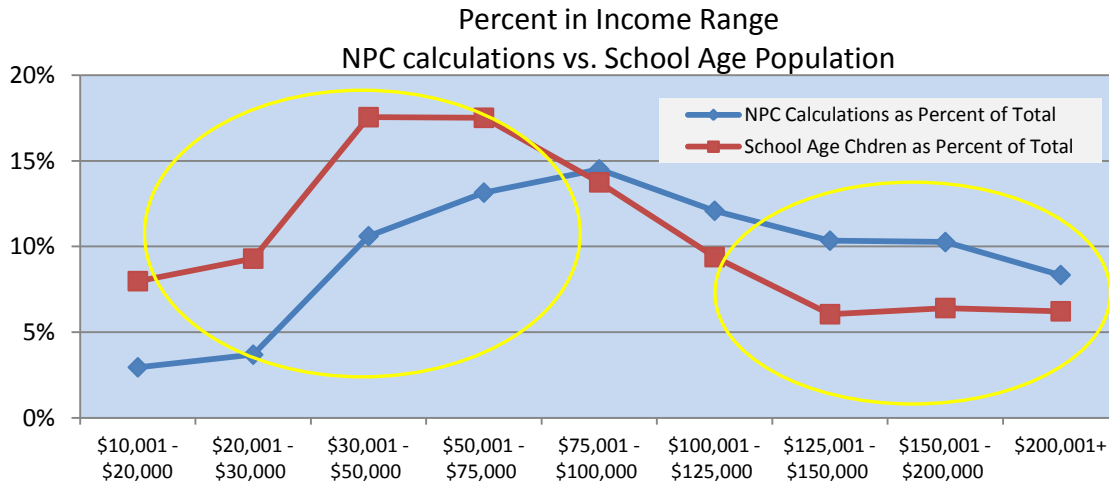
Estimating Contributions for Awarding Federal versus Institutional Funds

Net Price and family Contributions		
Income Bands	Estimated Contribution Institutional Funds	Estimated Contribution Federal Funds
<= \$10,000	\$6,158	\$609
\$10,001 - \$20,000	\$6,862	\$1,598
\$20,001 - \$30,000	\$6,371	\$2,189
\$30,001 - \$50,000	\$6,092	\$3,290
\$50,001 - \$75,000	\$10,618	\$8,708
\$75,001 - \$100,000	\$17,032	\$16,988
\$100,001 - \$125,000	\$24,570	\$25,209
\$125,001 - \$150,000	\$32,963	\$33,707
\$150,001 - \$200,000	\$48,288	\$46,510
\$200,001+	\$104,520	\$94,361
Total	\$28,148	\$25,645



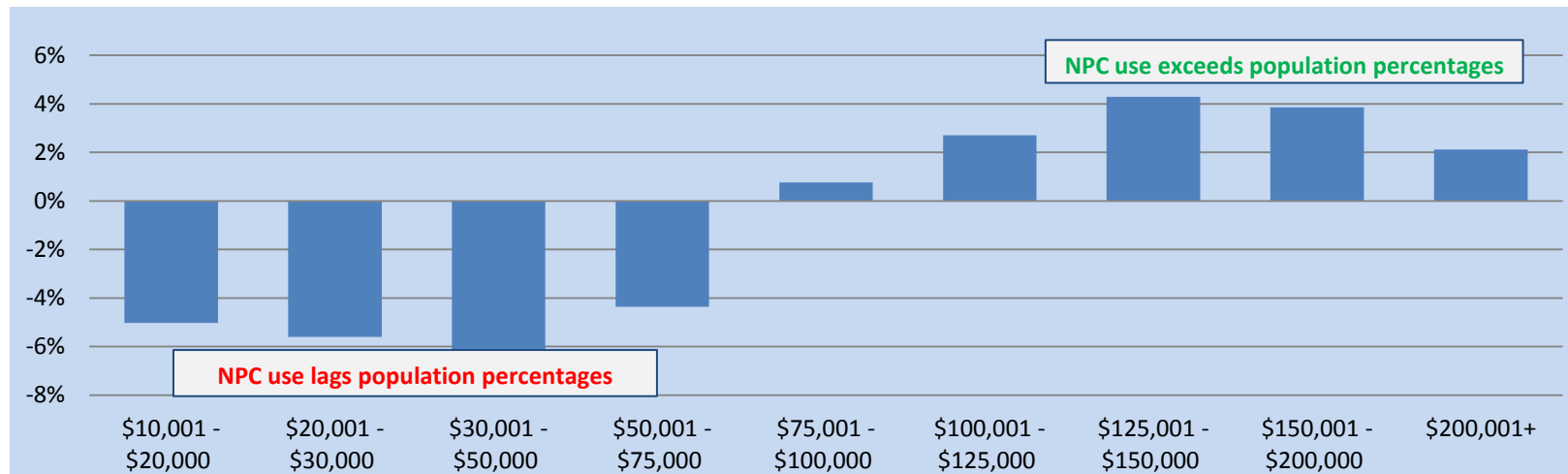
- On average, the expectation for what a family can afford to pay for college in Net Price Estimates appears to be similar at an aggregate level across all income levels for the awarding of federal and institutional money .

Distribution of NPC Users Vs. The Population



- Eliminate Surfers
- Relative to the overall population, NPC usage tends to be over-representative of students from upper-income and very low income families
- Students from Middle-to-lower income families are under-represented

Relative Percentages within Income Group NPC vs. Population



Summary

- Net Price Calculators are in widespread use and provide a pre-application window on families who are concerned about affordability
- Preliminary information suggests that there is general consensus between public and private colleges on expected family contribution across income levels
- Current aid policies appear to cancel out public vs. private prices differences for middle to lower income families, however net prices diverge for families making more than \$75,000 with private education becoming significantly more expensive.
- NPC Calculators are an important tool for communicating more realistic information about net price – versus “sticker price”. However, the early data suggest that the message is not fully reaching students from very low income families and lower middle-income families, and additional opportunities may exist to reach prospective students in this income range.

Questions

Greg Perfetto

Enrollment Research

The College Board

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The Changing Landscape Postsecondary Pathways

The College Board Middle States Regional Forum
Brooklyn, NY February 15, 2013

Douglas T Shapiro, PhD

National Student Clearinghouse Research Center

My Goals Today

- A more complex look at transfer students.
- Move beyond what we typically *think we know* from IPEDS, SLDS, or institutional views of enrollment.
- Better understand the actual enrollment patterns of many students
- Encourage you to start playing “what if” with your own data by linking it with data held by the Clearinghouse.



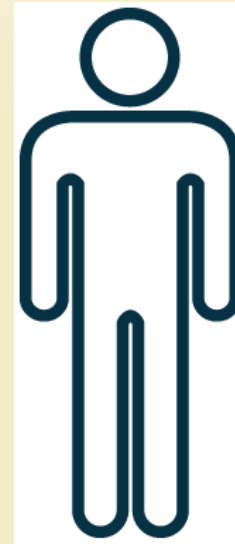
A Tale of Two Students

Traditional
Student



Retention at Same
Institution

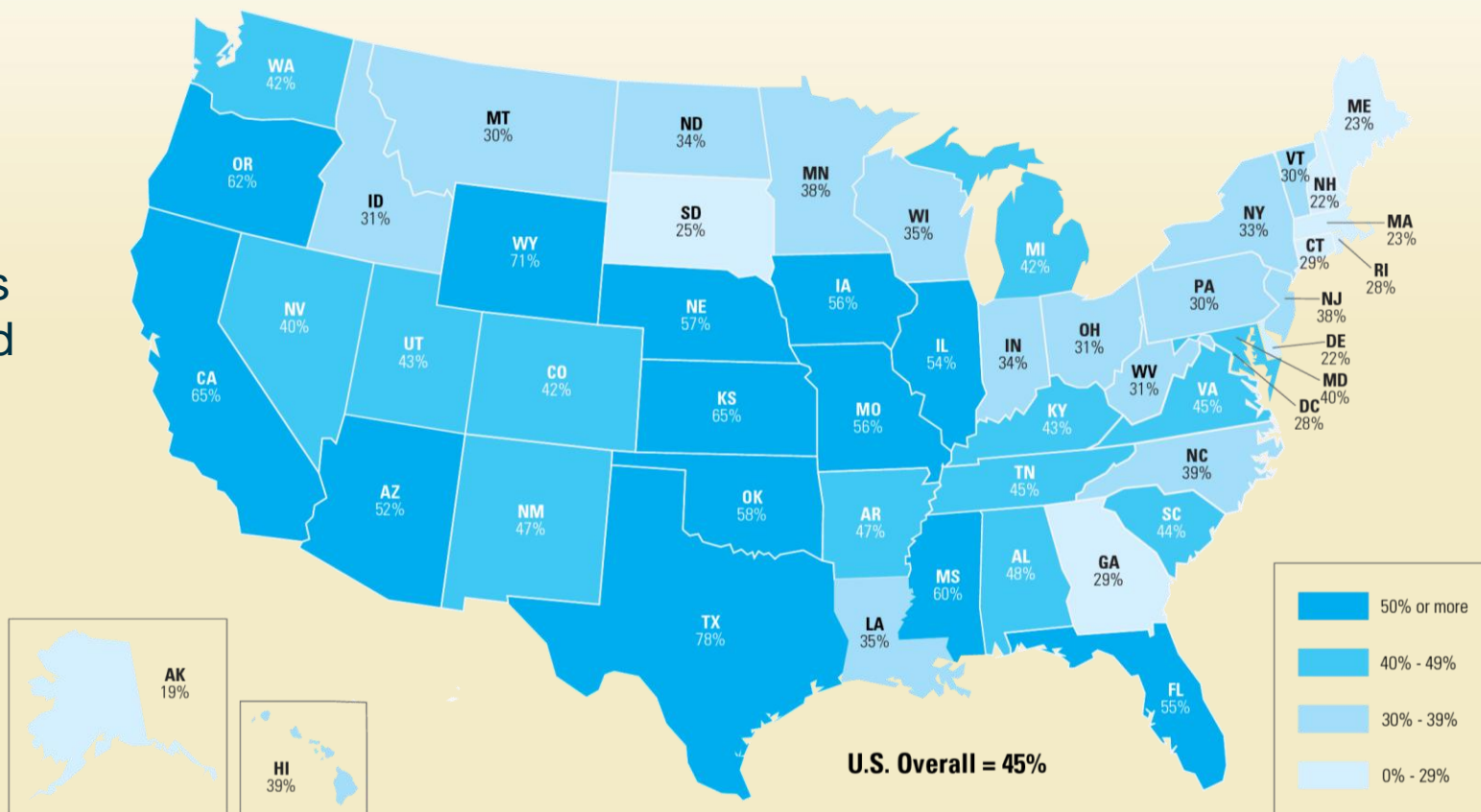
Mobile
Student



Persistence Anywhere

45 Percent of Four-Year Degrees Go to Students with Previous Enrollment in a Two-Year Institution

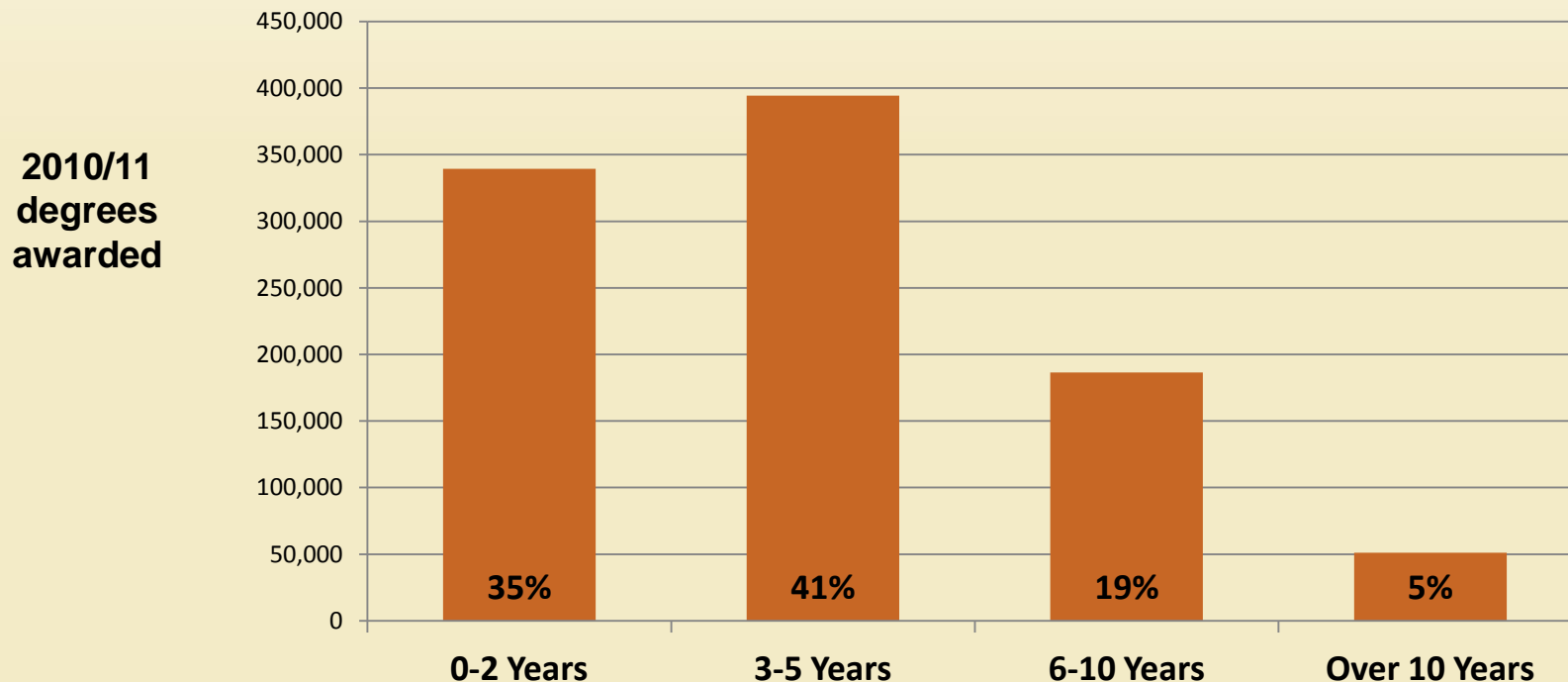
2010/11
degrees
awarded



*Students were considered enrolled at two-year institutions if they had at least one full-time or part-time enrollment at a two-year institution prior to the four-year completion date.

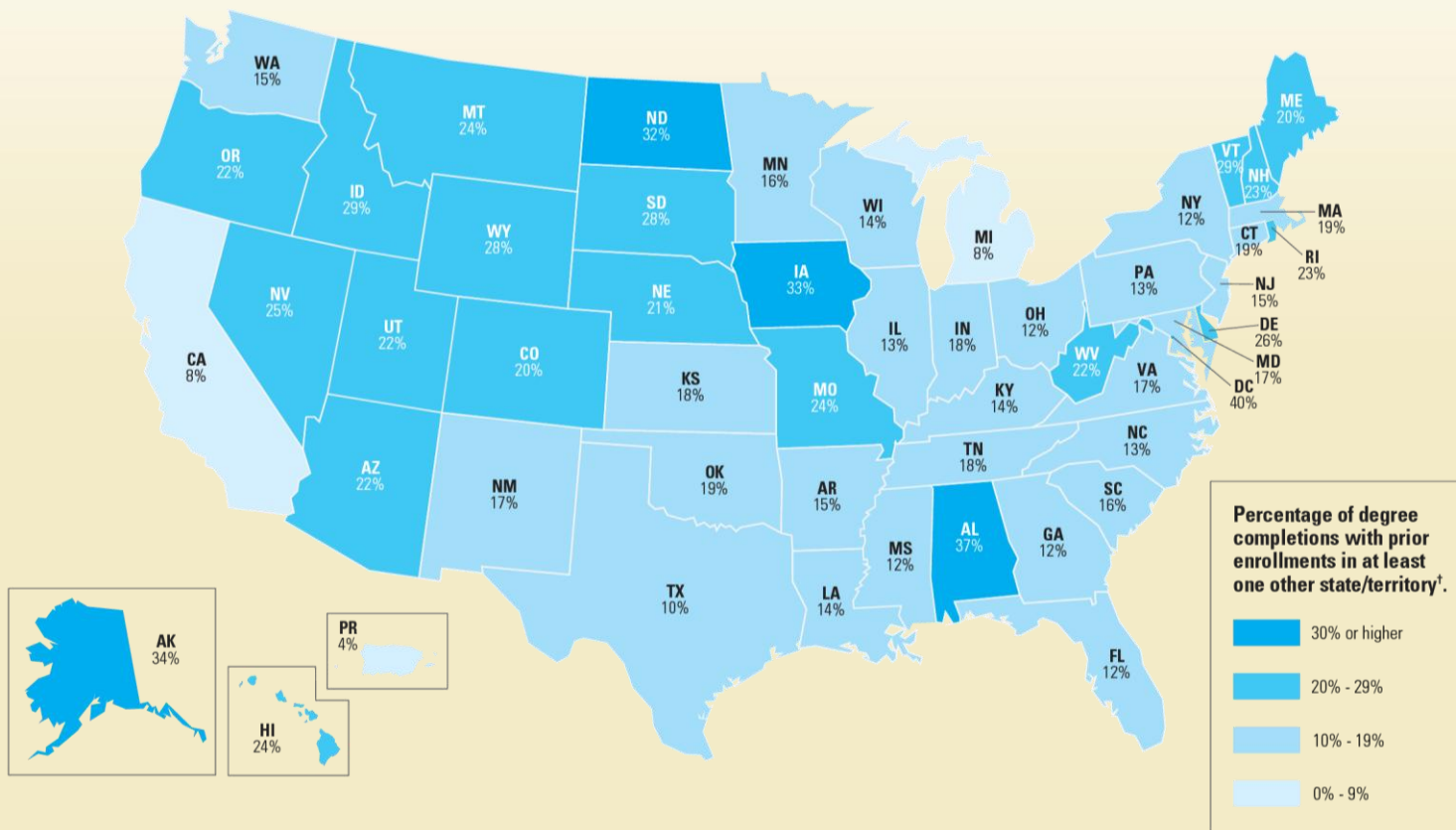
One Quarter of Those Two-Year Enrollments Occurred More Than 5 Years Back

Number of Years Since Most Recent Two-Year Enrollment



15 Percent of Undergraduate Degrees Go to Students with Previous Enrollment in a Different State

2010/11
degrees
awarded

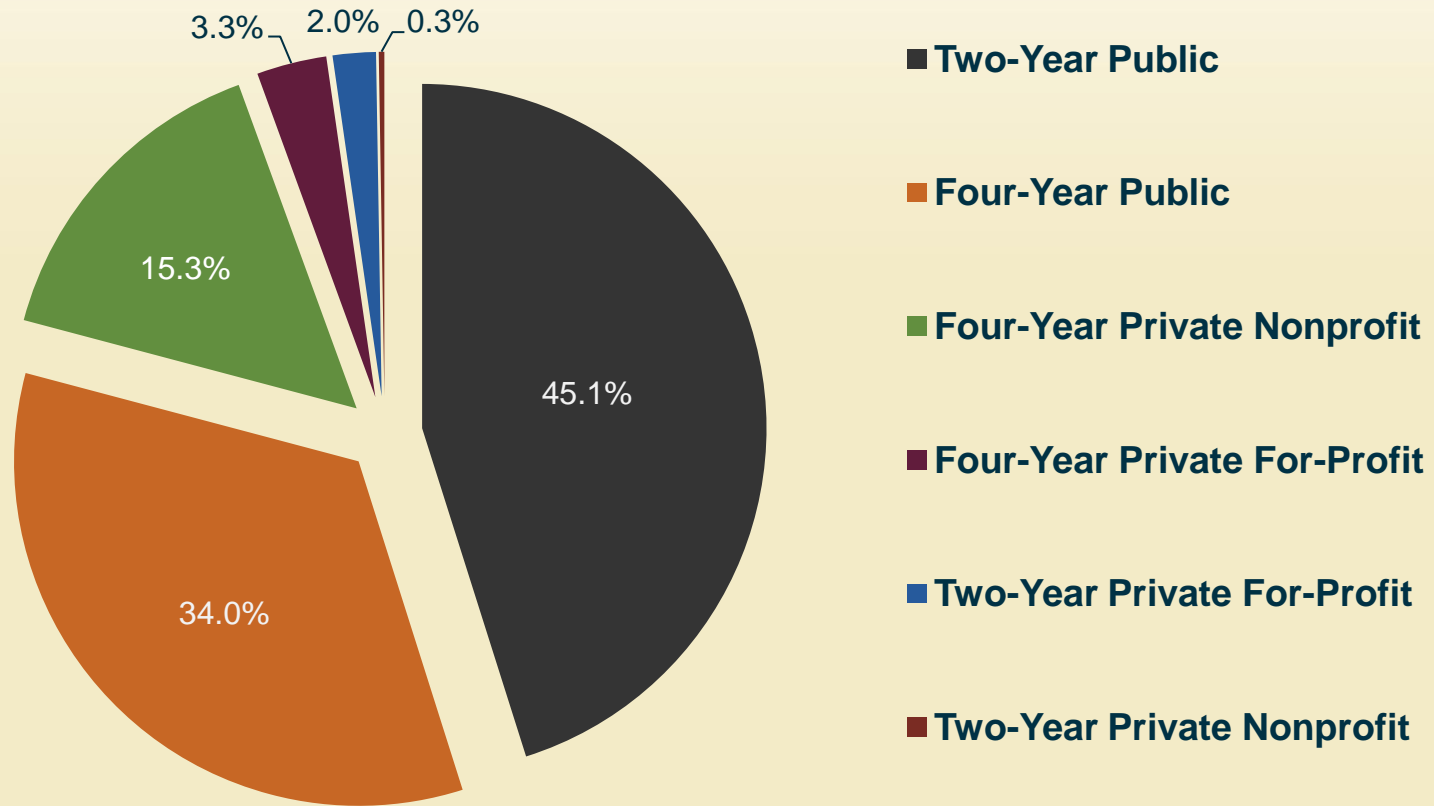


*Students were counted once in each state where they earned a degree between July 1, 2010, and June 30, 2011. Students with any enrollments or degrees from single institutions that span multiple states were excluded from this analysis.

[†]Includes any enrollment status or degree completion that occurred on or before the 2010-11 graduation date.

Entering cohort of fall 2006

- 2.8 million unique students reported to NSC (full- and part-time)



Transfer and Mobility Analysis

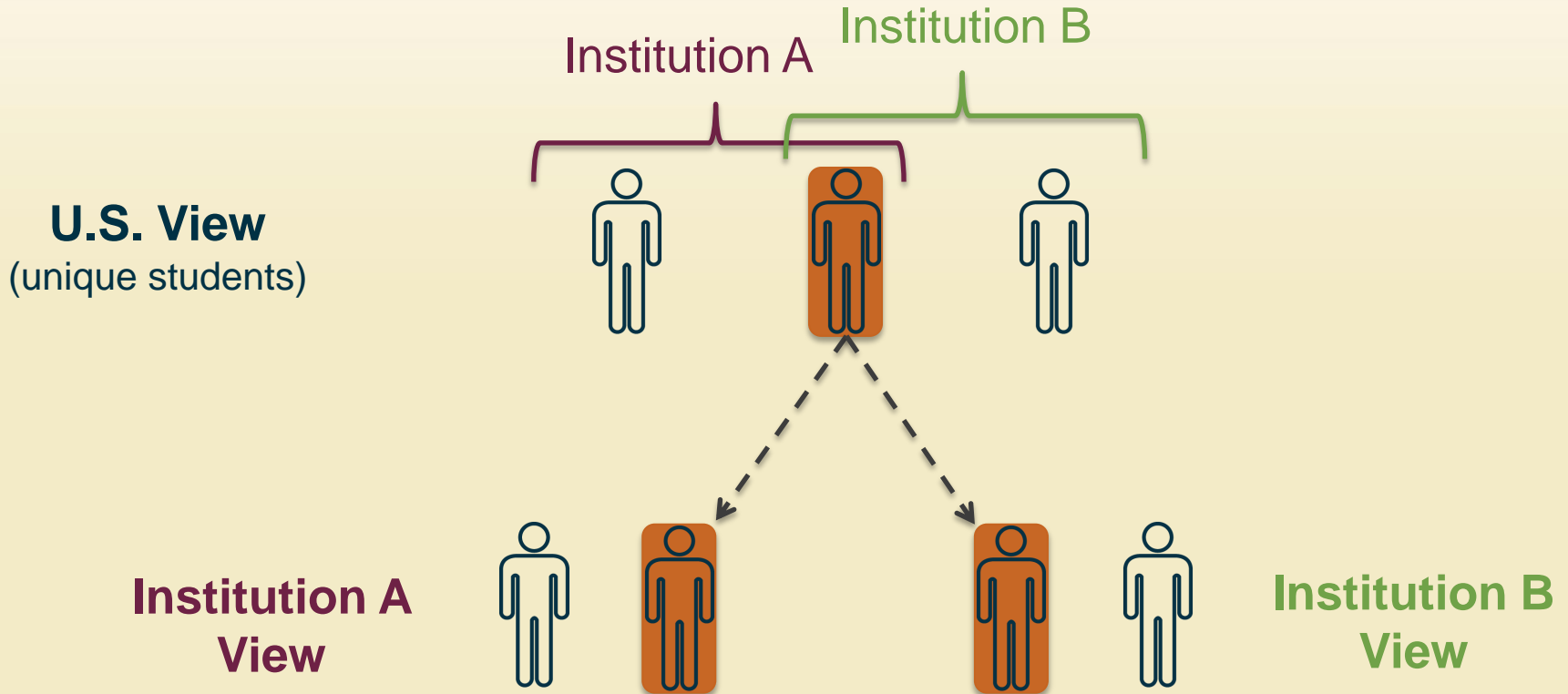
- Tracked each student for up to five years or first degree
- Identified mobility and transfer:
 - *Any change of institution prior to first degree completion*
- All enrollment terms, including summer
- Origin institution
- Destination institution

1/3 of Students Enroll in a Different Institution within 5 Years of Their First Enrollment and Before they Earn a Degree

Prevalence of Transfer and Mobility Among All Students in Entry Cohort, Fall 2006

	N	%
Transfers	923,196	33.1%
Non-Transfers	1,869,765	67.0%
Total	2,792,961	100.0%

That Means *Half* of Each Institution's Students (on average) Also Enrolled Somewhere Else

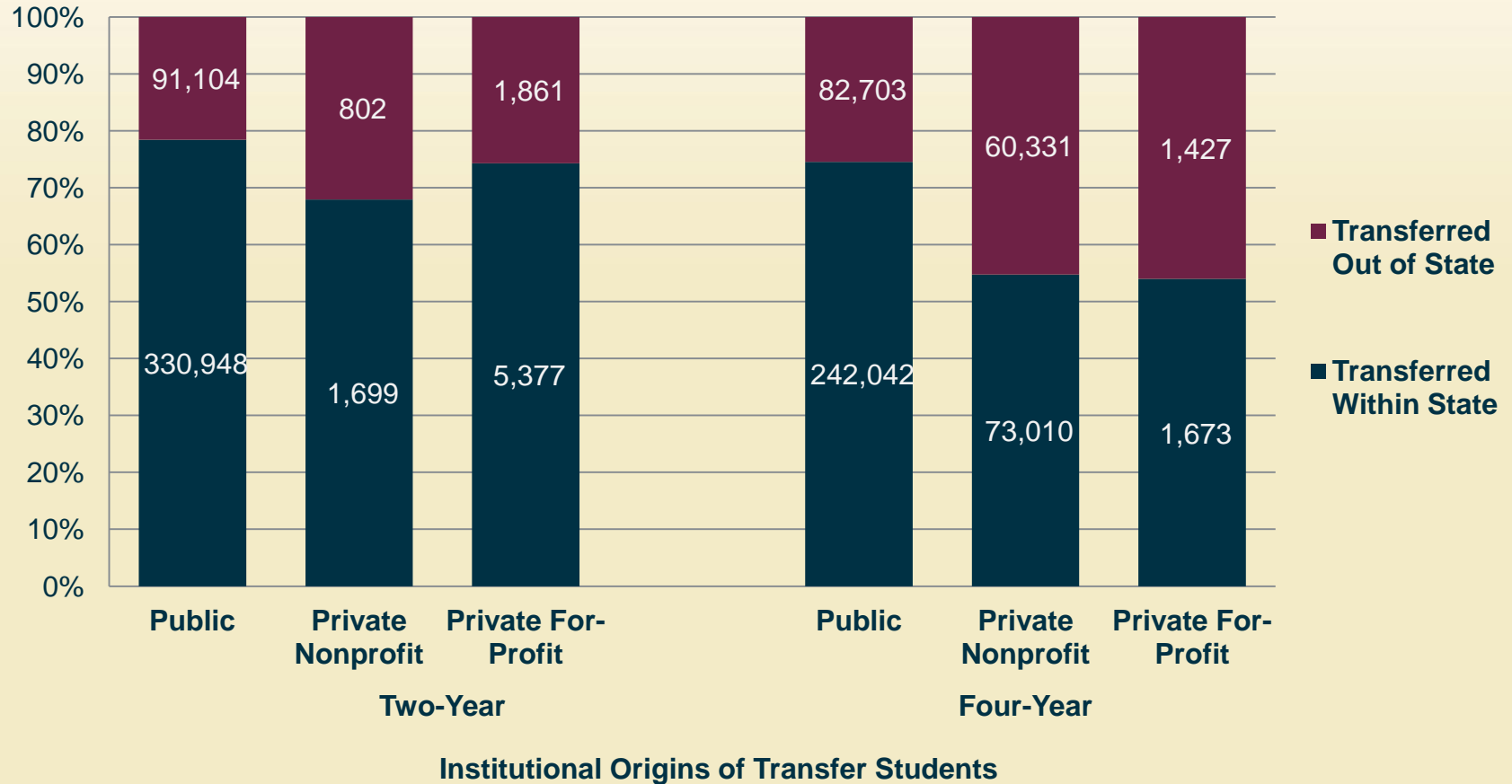


Within the Mobile Students group, One-Quarter Moved More Than Once

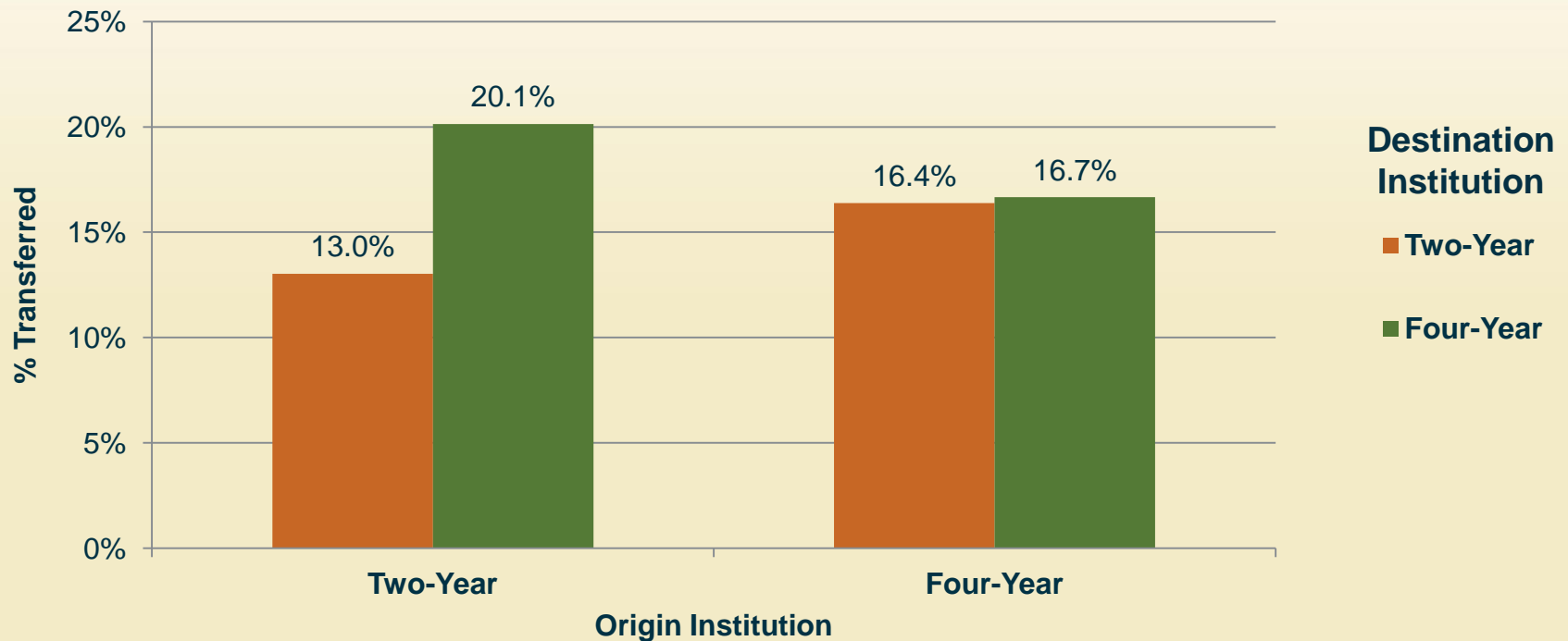
Frequency of Transfer & Mobility, 2006–11

	N	%
Once	688,946	74.6%
Twice	156,638	17.0%
Three Times or More	77,613	8.4%
Total All Mobile Students	923,196	100.0%

27 Percent of All Students Who Changed Institutions Also Crossed a State Line

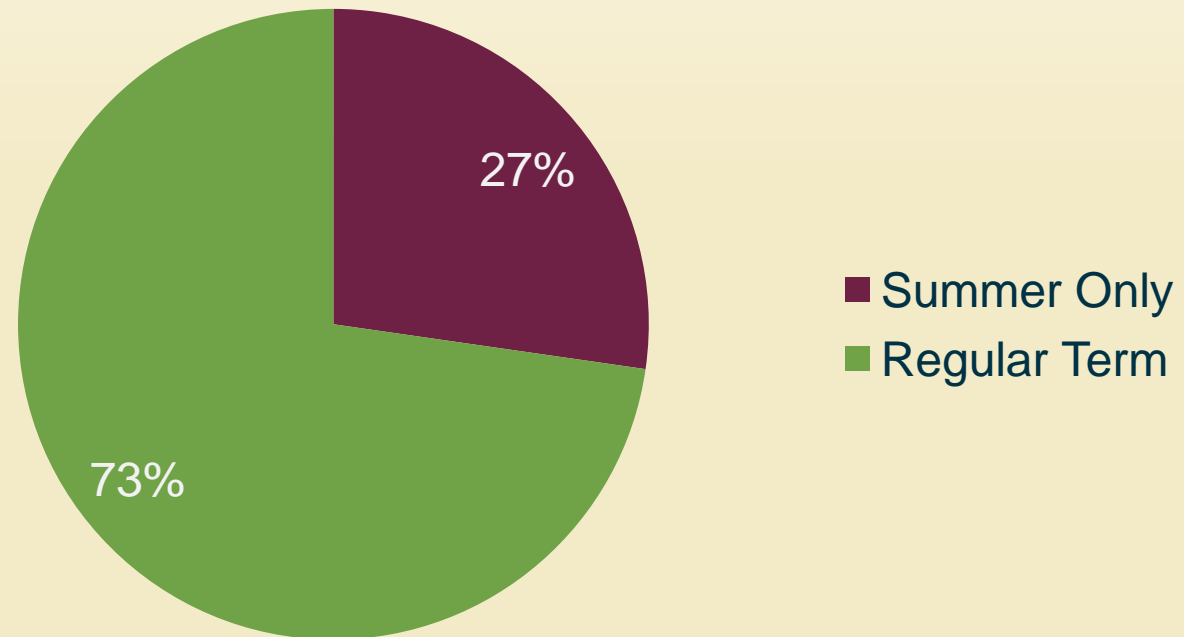


Mobility & Transfer Rates by Level of Origin and Destination Institution

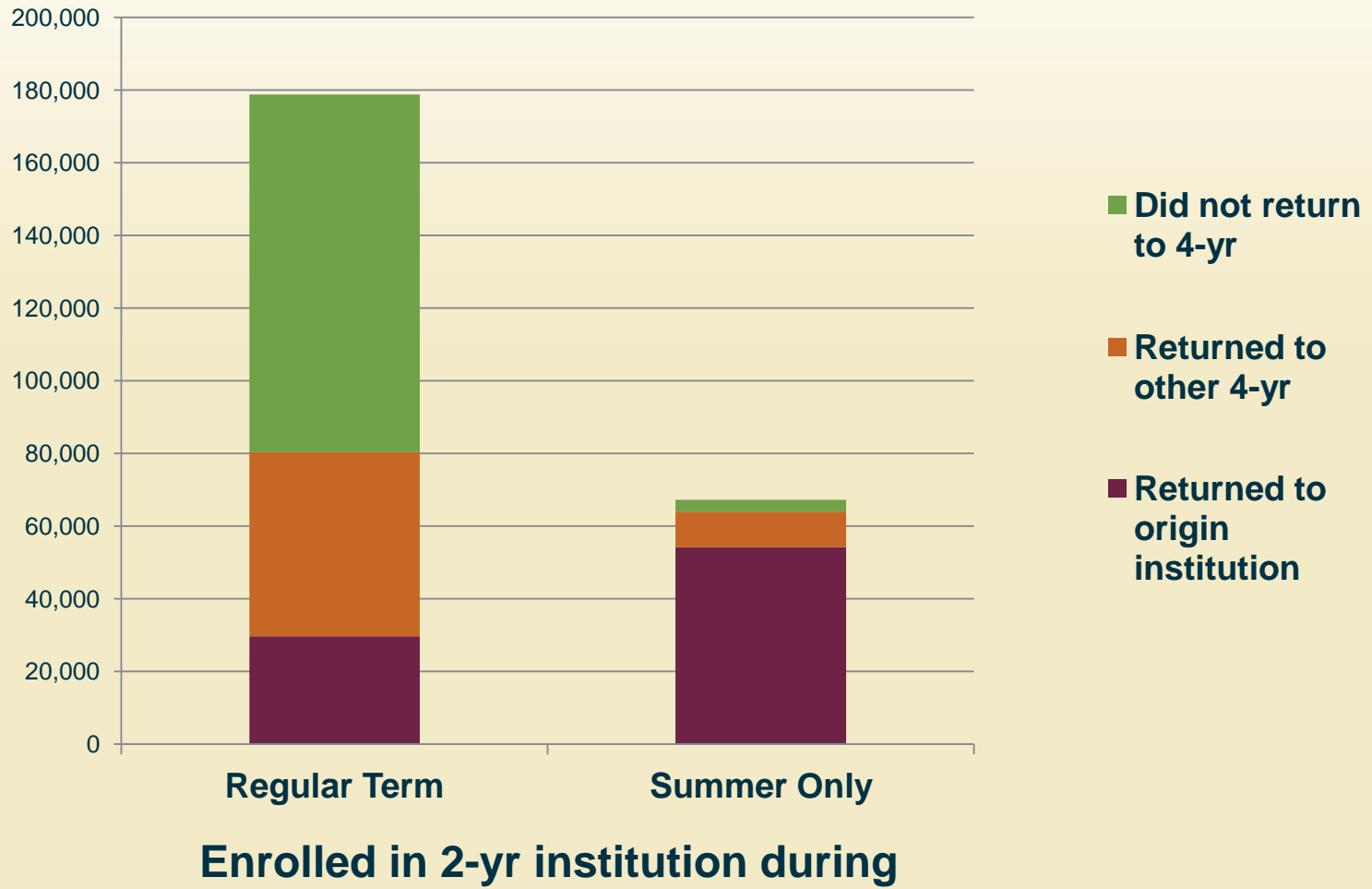


The most common destination was a Two-Year Public Institution: 43% of all transfer and mobility was into a CC.

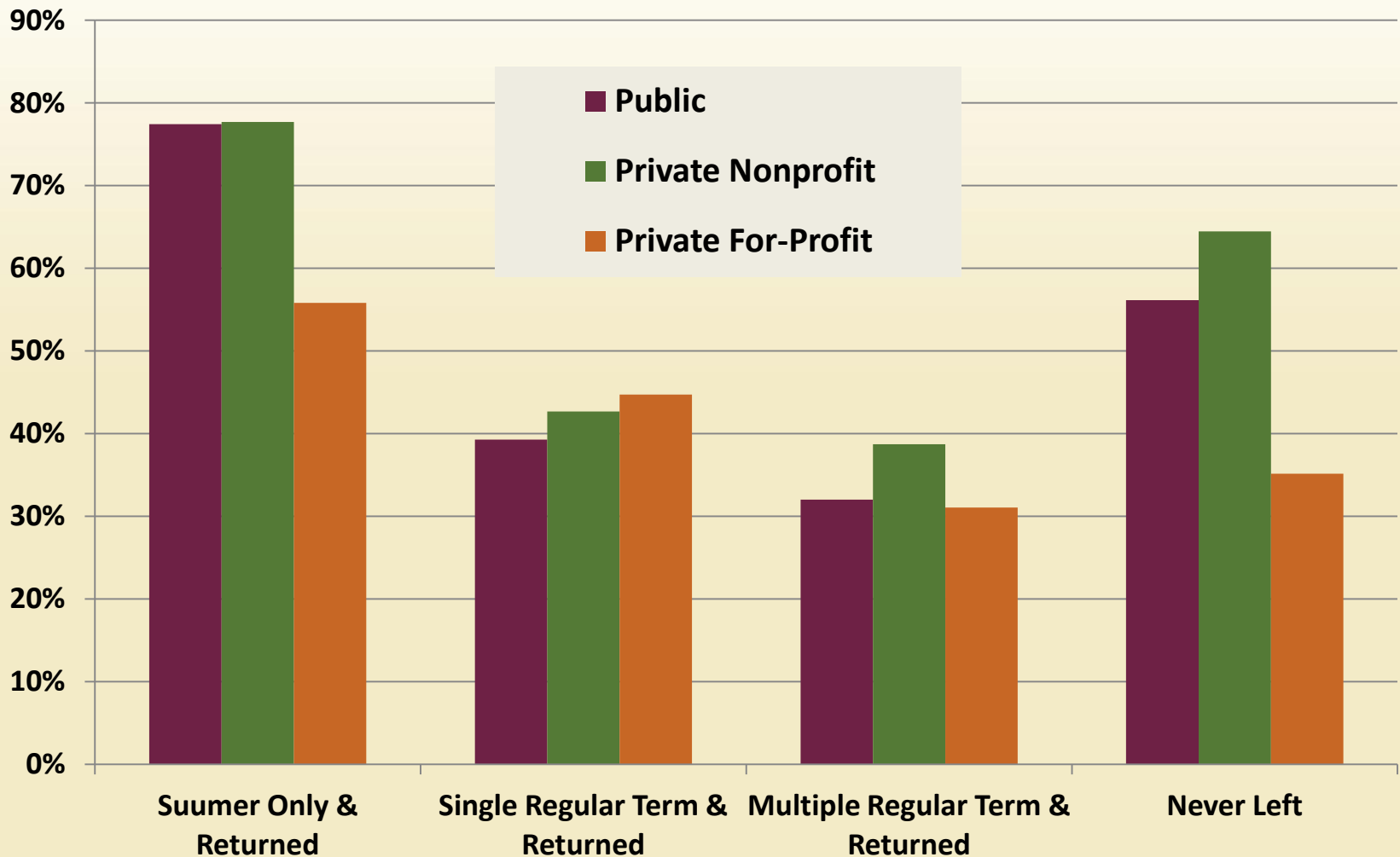
27% of 4-to-2 Mobility or Reverse Transfer Students Enroll at the 2-Year Institution During Summer Only



The Pathways for Reverse Transfers/Mobility

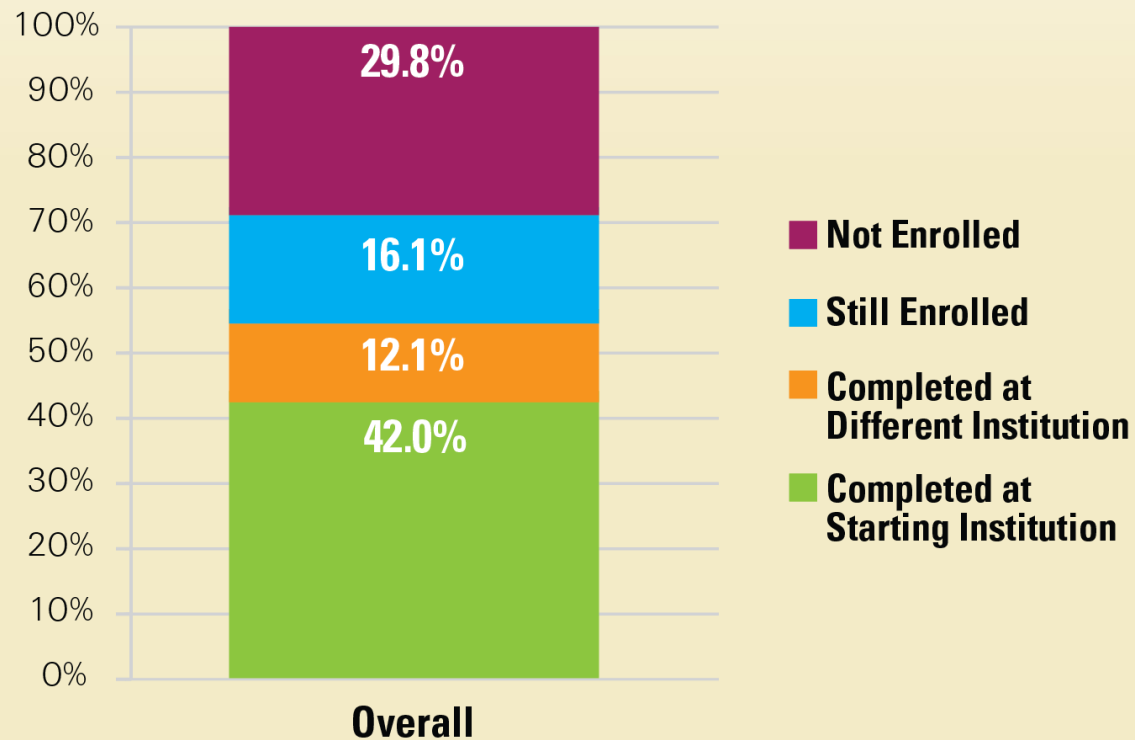


6-Year Completion Rates for Reverse Transfer Students Who RETURNED to Original Institution, vs. Never Left

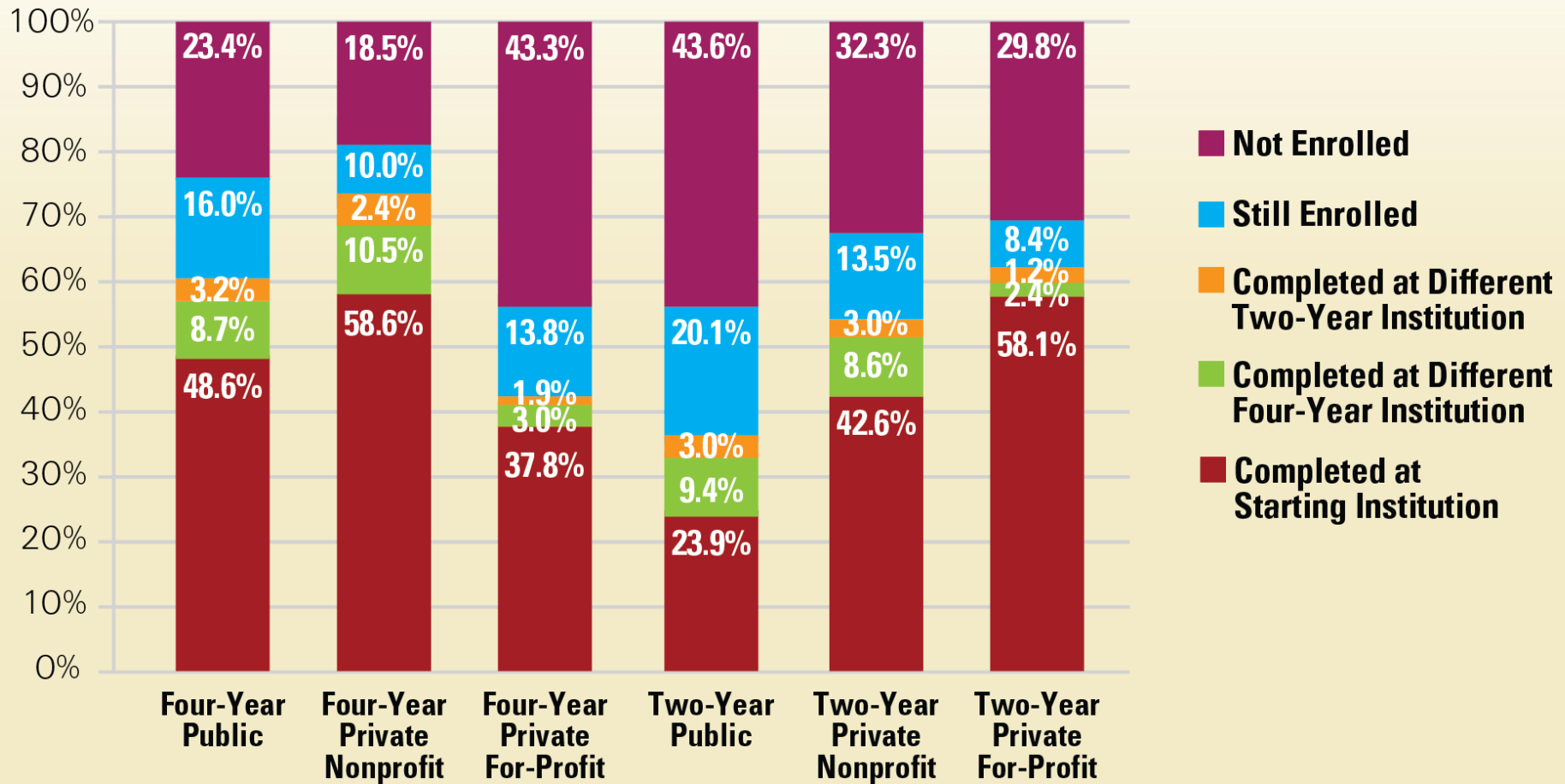


National Completion Rates Including Students Graduating Elsewhere

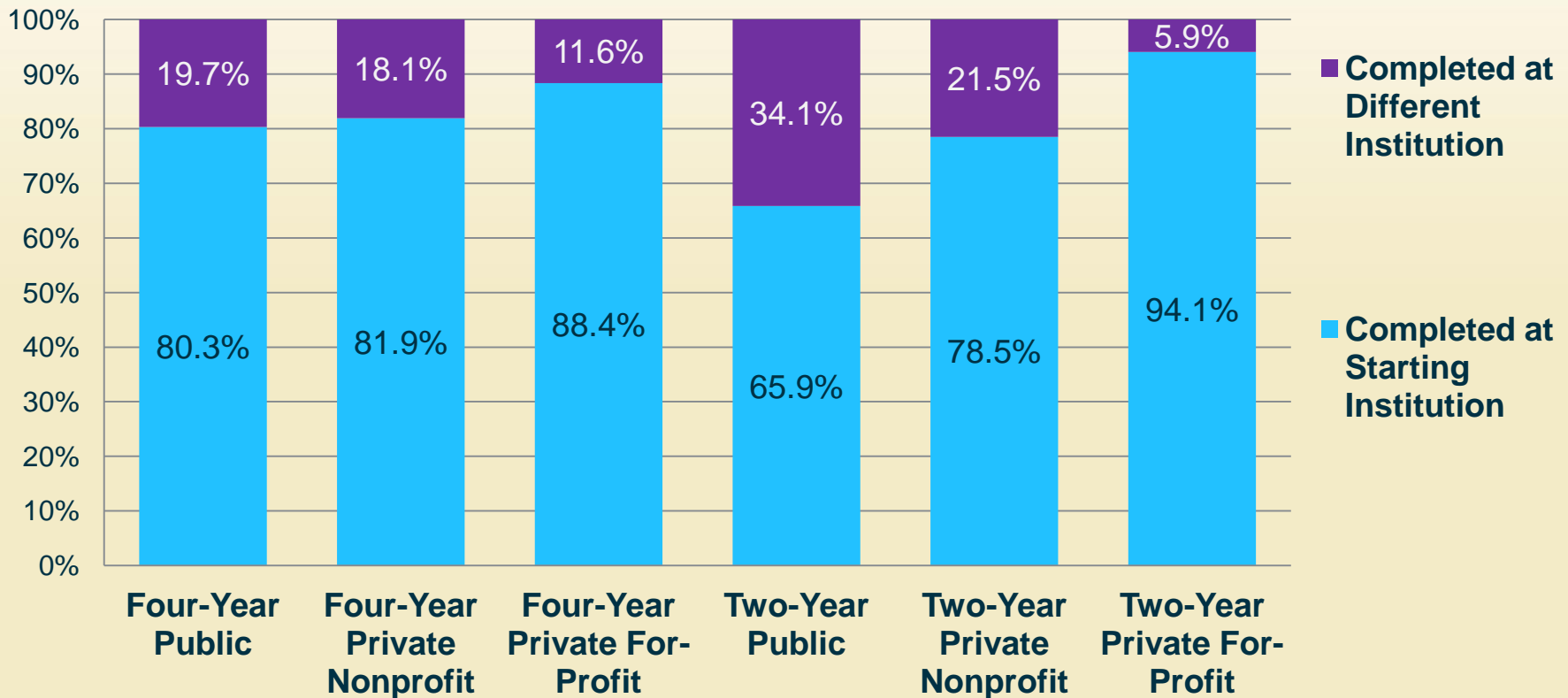
Within six years, 12% of the first-time students graduated at a different institution from where they started



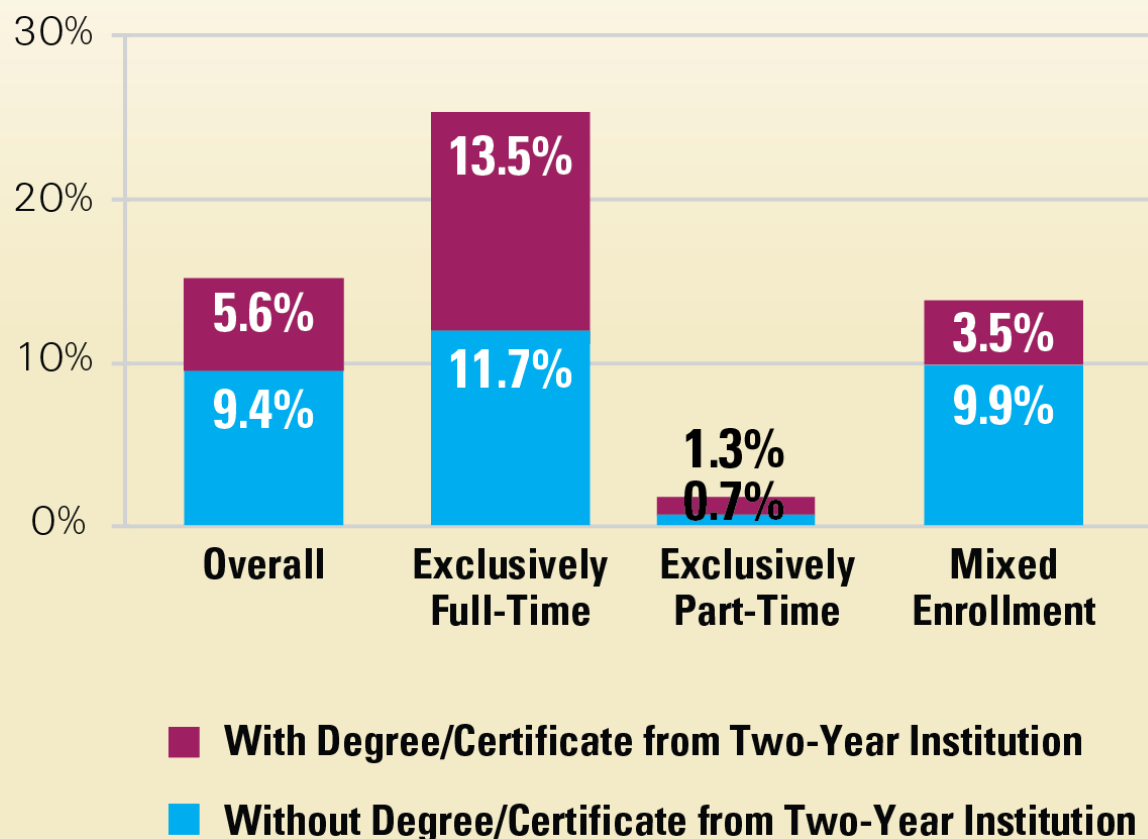
Six-Year Outcomes by Starting Institution



Percent of Completions at Starting vs. Different Institution



Bachelors Completions for Two-Year Starters



Some Key Takeaways

- One-third of all students transferred or enrolled elsewhere at least once within five years
- Over one-fifth graduated elsewhere within 6 years
- Transfer and mobility rates were similar for part- and full-time students, public and private nonprofit students
- Of those who transfer:
 - Most prevalent destination was a public two-year (43 percent)
 - One-quarter of mobile students transfer or move more than once
 - More than one-quarter move across state lines (27 percent)

Traditional View

- 1/2 is hard to forget
- Education as time, place
- Institutional home
- Institutional Graduation rate
- How many students complete vs. dropout
- Fear the data

Mobile View

- 1/2 is hard to ignore
- Education as career, path
- Institutional stepping stone
- Student Completion Rate
- How do institutions bend student trajectories
- Free the data

Final Comments

- For public policy makers
 - Without complete information on student enrollment pathways it is impossible to develop policies that will lead to desired outcomes.
- For institutional policy makers
 - Sound enrollment management demands a clear understanding of the enrollment pathways of your students, *including before and after your institution.*
 - Student outcome metrics should measure all student outcomes

Thank You

Research Center Snapshots and Reports:
<http://research.studentclearinghouse.org/>

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The College Completion Agenda

From “Education for Education’s Sake” to Return
on Investment and Gainful Employment

Patrick J. Kelly



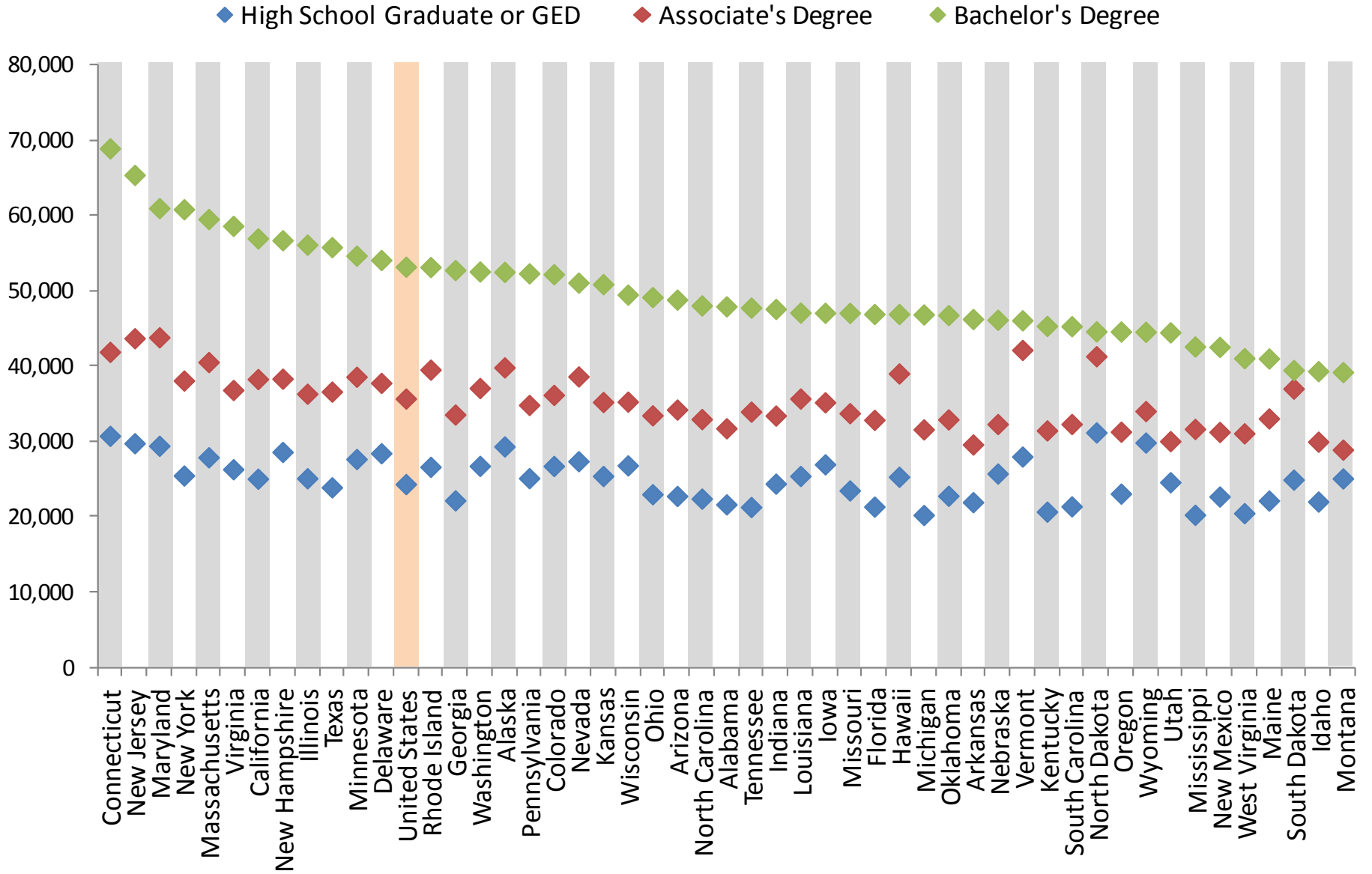
National Center for Higher Education Management Systems

Why ROI and Gainful Employment?

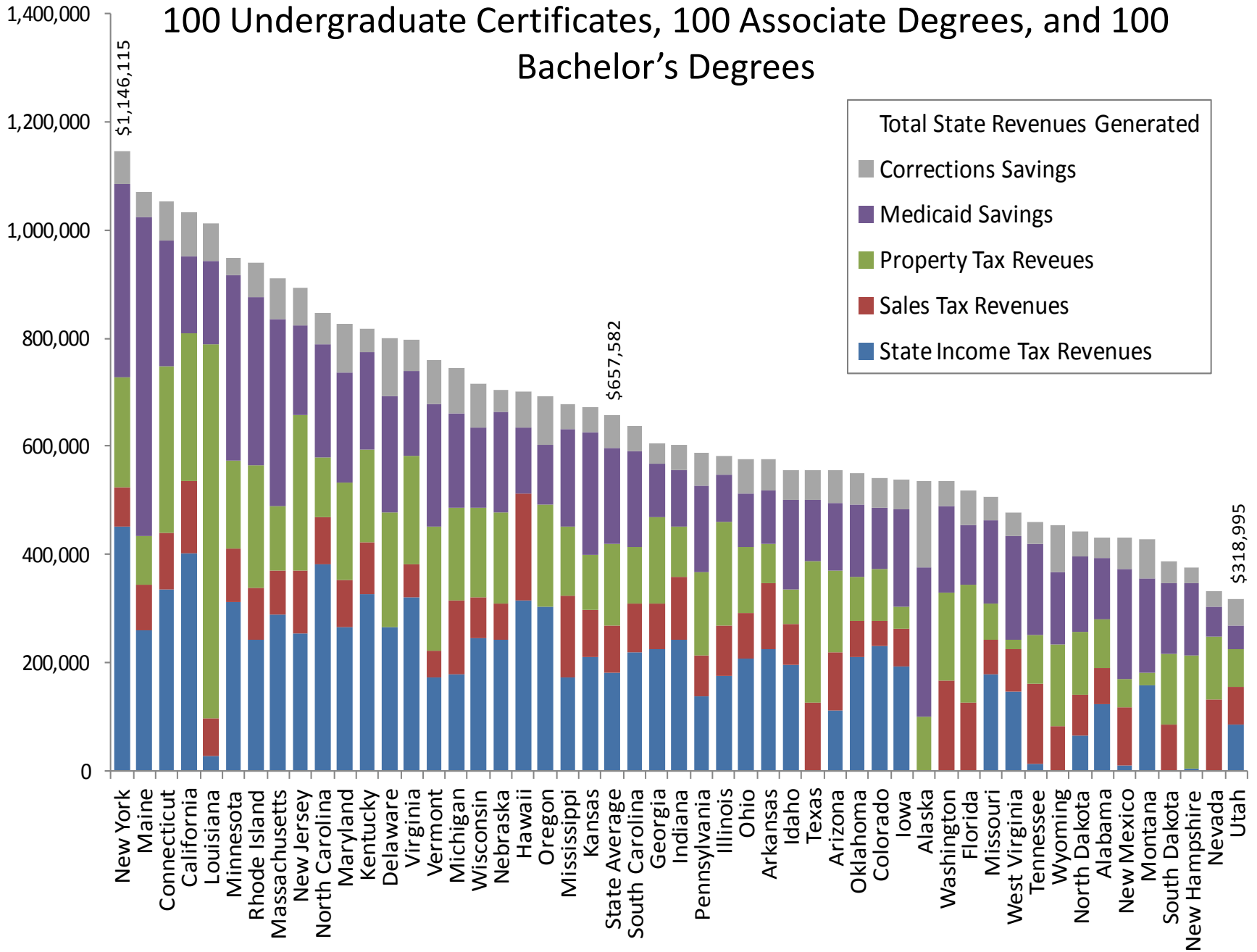
- State policymakers are realizing they can't afford to reach the postsecondary goals they are targeting under "business as usual" scenarios.
- Beyond the Federal concern about Pell grants and loan repayment, the economic recession has led many state policymakers to heightened awareness of the mismatch between the graduates being produced (and their skills) and employer demand.

Return on Investment

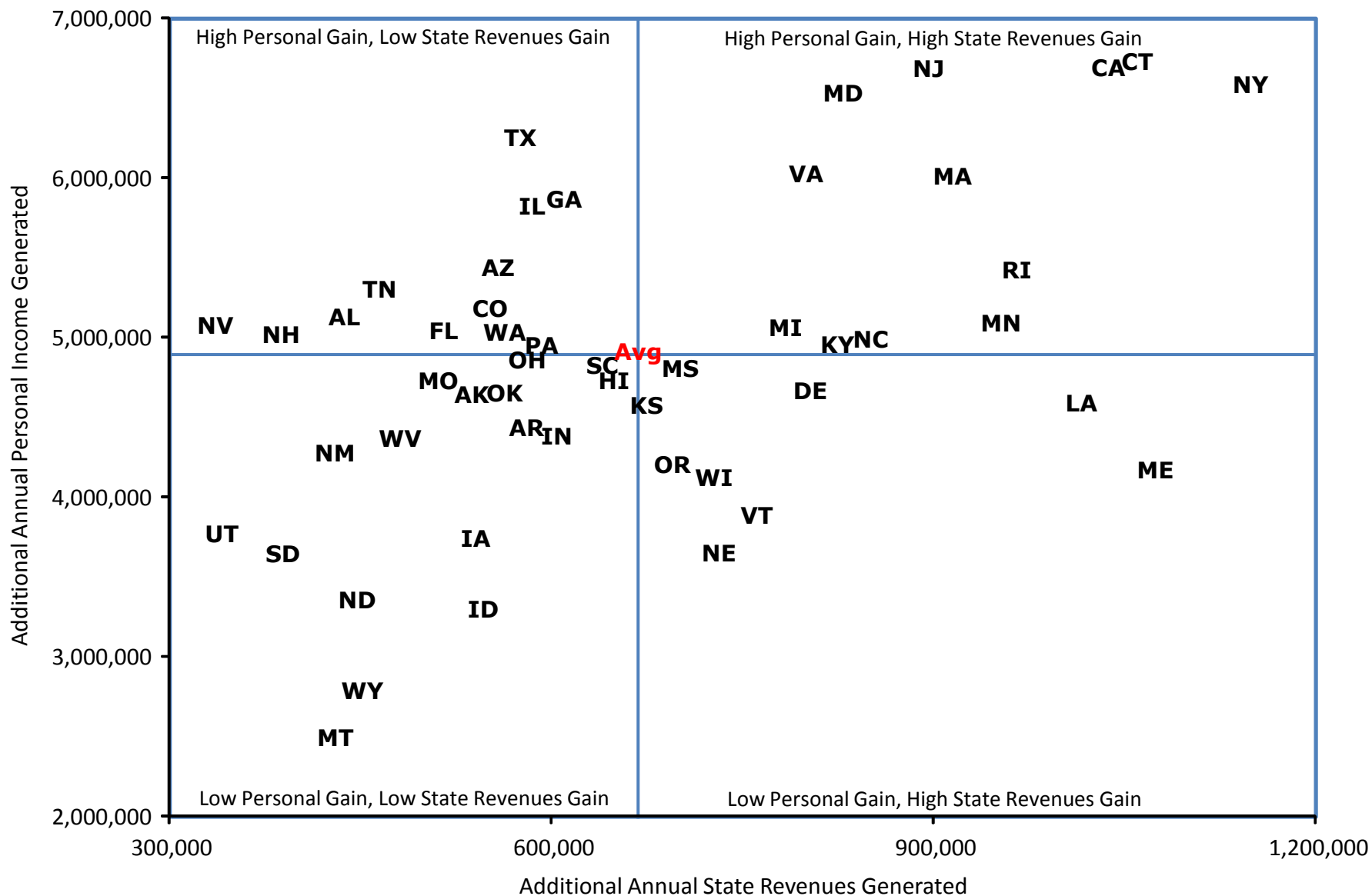
Median Annual Wage Earnings by Level of Education Attained 25 to 64 Year Olds (2010)



State Returns by Source if Each State Produced an Additional 100 Undergraduate Certificates, 100 Associate Degrees, and 100 Bachelor's Degrees



The Personal and State Returns if Each State Produced an Additional 100 Undergraduate Certificates, 100 Associate Degrees, and 100 Bachelor's Degrees



Calculating the Economic Value of Increasing College Credentials by 2025 United States

Start Over

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Increase College Attainment | View Returns on Investment | Instructions and Definitions

Set Postsecondary Performance Goals for Year 2025

Increase College Access

Avg. Performance of Top 3 States

High School Graduation Rate 87.0%

College-Going Rate Directly from High School 75.0%

20 to 39 Year Olds Enrolled in College 2.40%

Increase Number of College Credentials

Public Research 26.0

Public Bachelor's and Master's 24.4

Public Two-Year 42.7

Private Colleges 37.2

Undergraduate Credentials Awarded per 100 Students

Change Enrollment Patterns of Additional First-Time Students

Directly from High School

20 to 39 Year Olds

Public Research 24%

3%

Public Bachelor's and Master's 18%

5%

Public Two-Year 34%

62%

Private Sector 25%

30%

2025 Enrollment patterns of additional first-time students as a result of the improvements made

Must Equal 100% 100%

100%

Optional: Set 2025 College Attainment Goal (%)

60.0

(Current College Attainment of 25 to 64 Year Olds is 38.3%)

Gap: Additional Degrees Needed to Meet **24,305,885**

Results: Additional Undergraduate Credentials Awarded by 2025

Associate's + Bachelor's

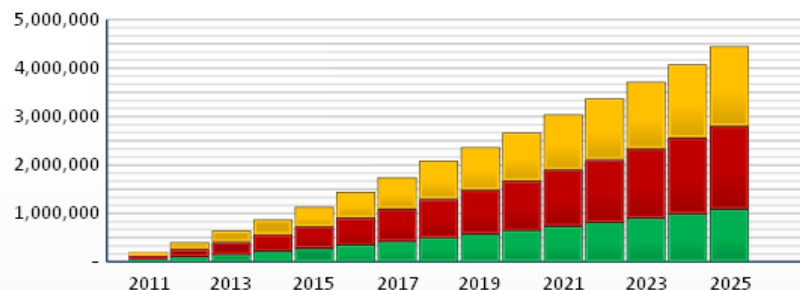
= Additional Degrees **24,415,173**

Undergraduate Certificates

Total Additional Undergraduate Credentials **32,266,610**

Additional Undergraduate Credentials Awarded Annually

Certificates Associate's Bachelor's



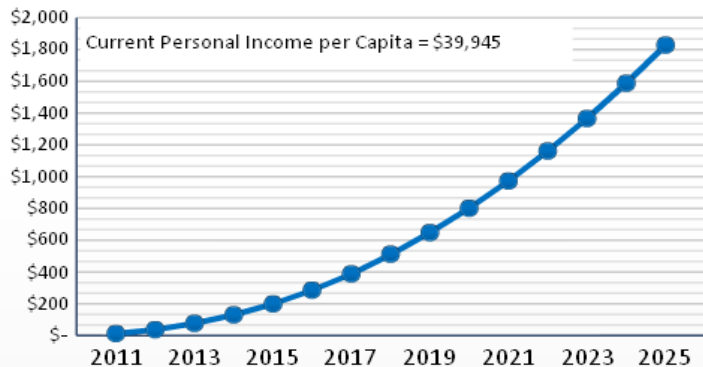
Calculating the Economic Value of Increasing College Credentials by 2025 United States

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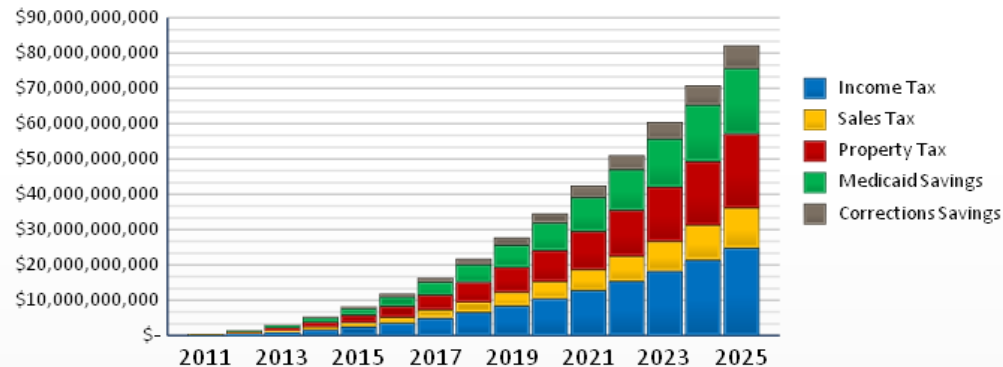
Change in Personal Income per Capita

In Current \$



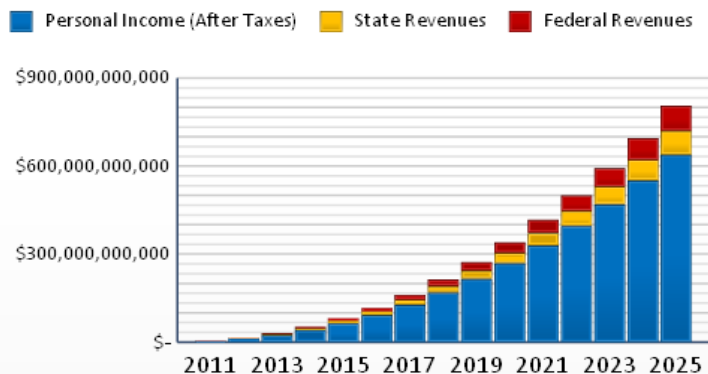
Additional State Revenues Generated

In Current \$



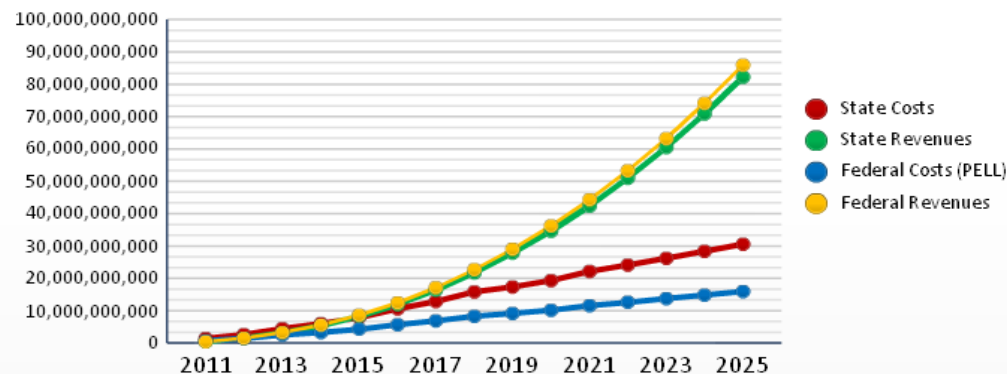
Additional Revenues Generated

In Current \$



State and Federal Costs vs Revenues Generated

In Current \$



Gainful Employment

Environmental Pressures

- Federal Gainful Employment
- Effective utilization of federal SLDS grants
- College attainment/completion goals – state retention of graduates and economic returns
- Increased focus on “credentials of value” – the attainment of credentials of less than two-years in length (primarily) that yield living/competitive wages
- Meeting employment demand in key areas – e.g. health, education, STEM, trades
- Increasing need for employment outcomes data to make the case for continued investment (state and federal policymaking environments)

The Data are Simple

Institution Records

- Completions
- Level of Award (Certificate, Associates, Bachelor's, Masters, Doctorate, Professional)
- CIP Code of Award – Field of Study
- Origin of Student
- Continued Enrollment

Data Available by Term

Employment/Wage Records

- Employed – record in the database (excludes self employed, military, and employed out-of-state)
- Earnings
- Industry of Employment
- Region of Employment

Data Available Quarterly

Link
SSN

Major Questions Answered

- What percentage of the graduates are employed in-state – by level and type of award?
- Are the graduates employed in the region in which they graduate?
- What are their quarterly earnings?
- What industries are the employed in? (only relevant in a few fields)
- What percentage continue to enroll/persist in postsecondary education?

Most Effective Uses of the Data

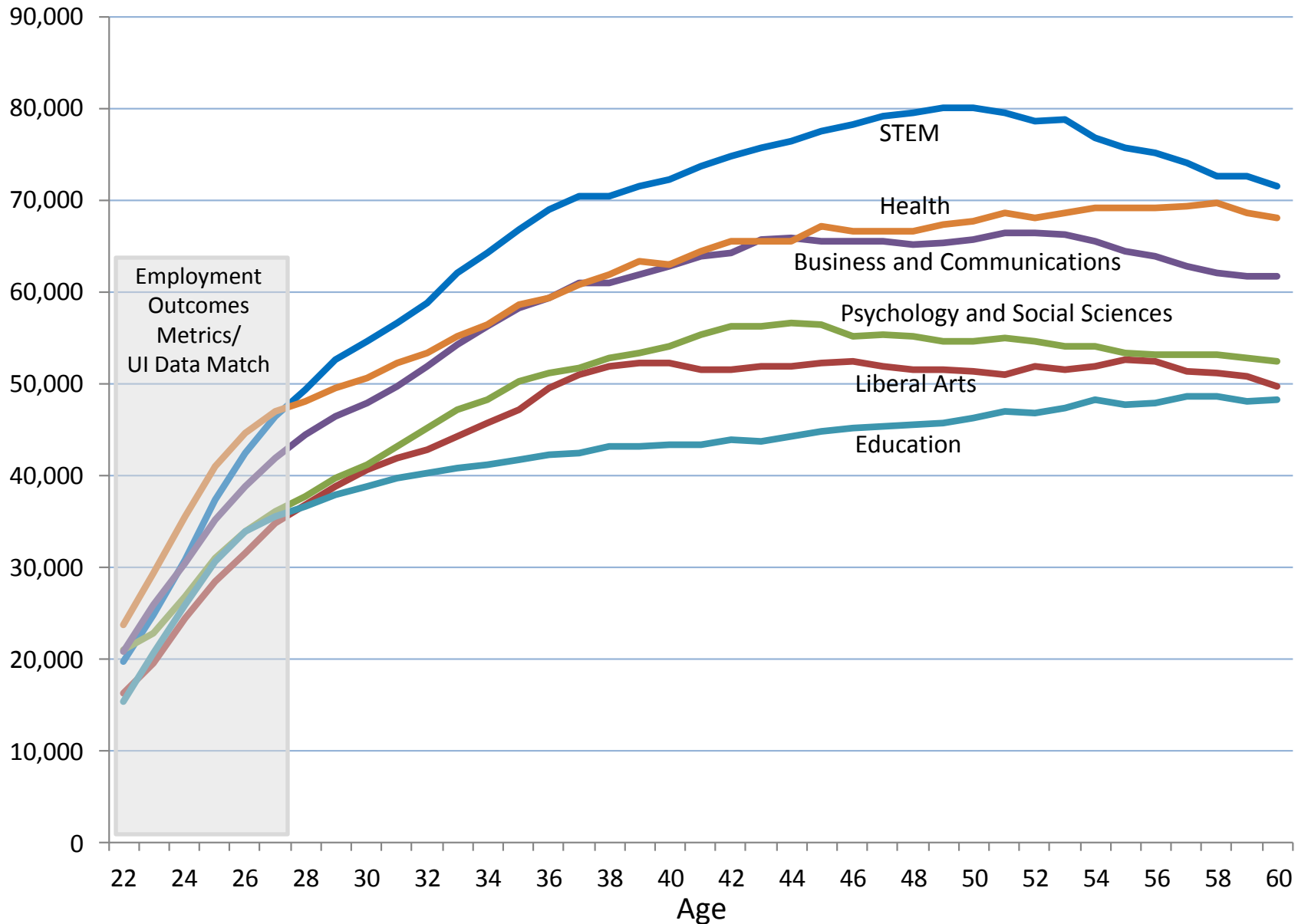
- **State brain drain.** Is the state retaining the graduates it produces? How is it changing over time? (the impact on the degree and attainment goals of the state).
- **State-level supply and demand.** What is the employment status of graduates in key areas of demand for the state? E.g. health and STEM fields, certain trades. Don't fall into the trap of overly detailed program-to-occupation supply and demand studies.
- **Regional supply and demand.** Are institutions producing graduates that meet local employer needs? What are the employment status and wages of the graduates they produce?
- **Information for students and families.** What programs provide the highest wages in the short-run? What programs are more likely to require continued education upon completion?

Institutional Accountability (Difficult)

- Small numbers of graduates for many programs
- It is very difficult to calculate the “value added” by institution – i.e. the likely employment and wages of students had they not completed their college credentials
- The state economy treats graduates from some institutions better than graduates from others (with the same credentials) – the “prestige” factor
- Institutions serving large numbers of place-bound students are victims of their local economy (e.g. a part of the state that has low wages relative to other parts of the state)
- The difficult balance between directing students into programs with competitive wages and providing student choice

Median Annual Wages by General Field of Study and Age (United States)

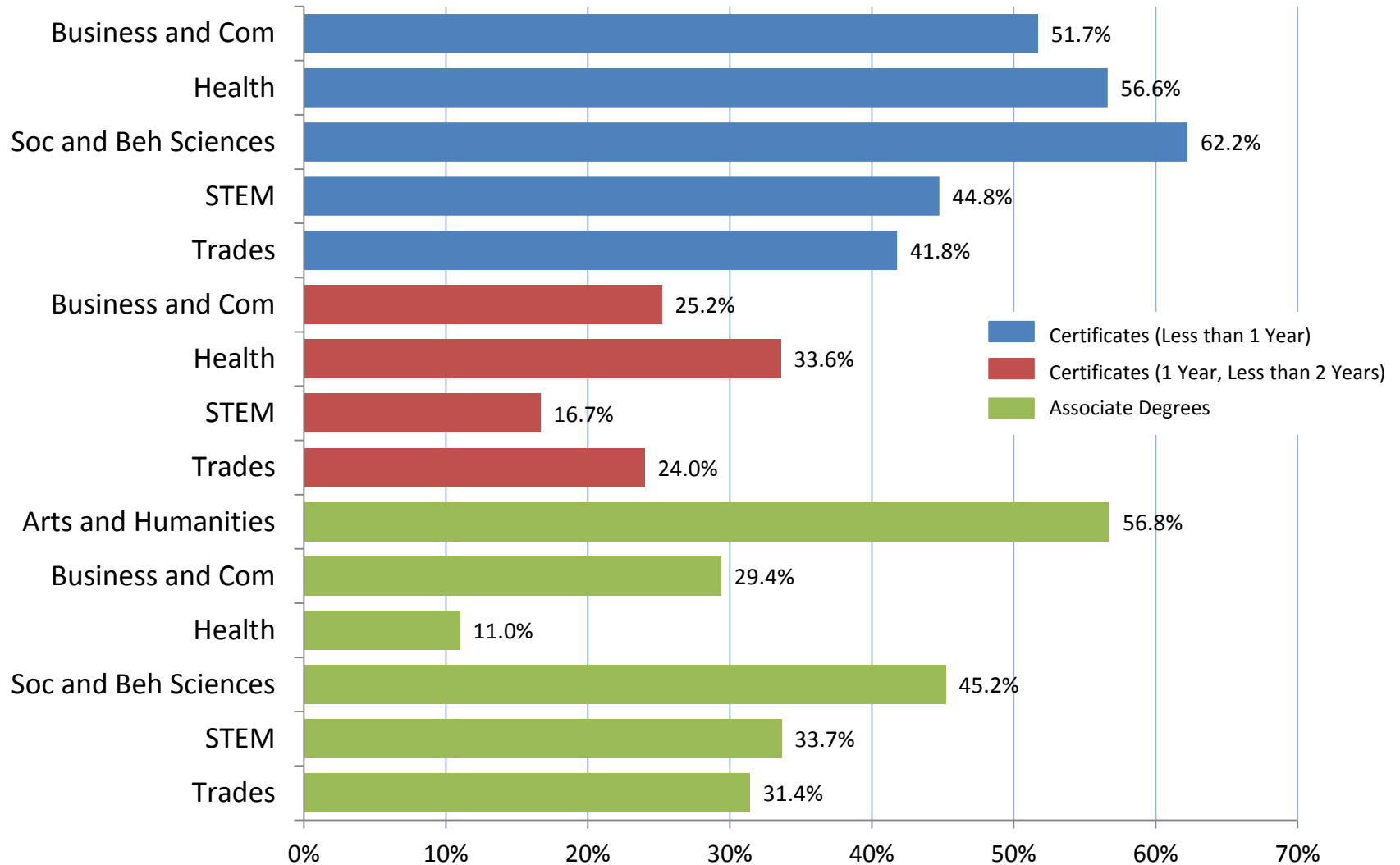
(Includes Only Bachelor's Degree Holders, Not Residents Who Earned Graduate/ Professional Degrees)



How Can We Tell a Story with the Data?

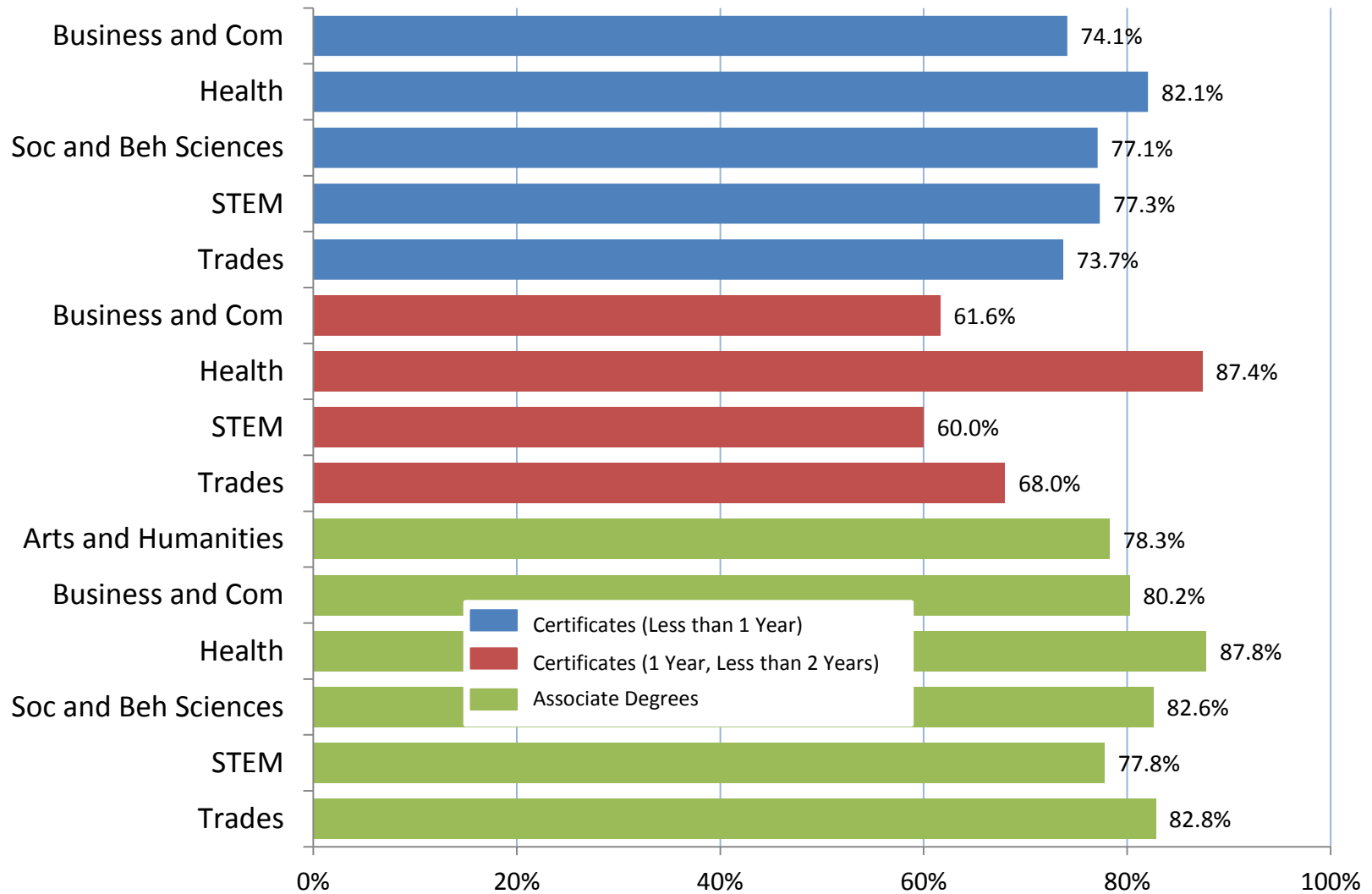
Many Students Re-Enrolled Following Completion

Percentage of 2005-06 Completers Who Continued to Enroll the Following Year



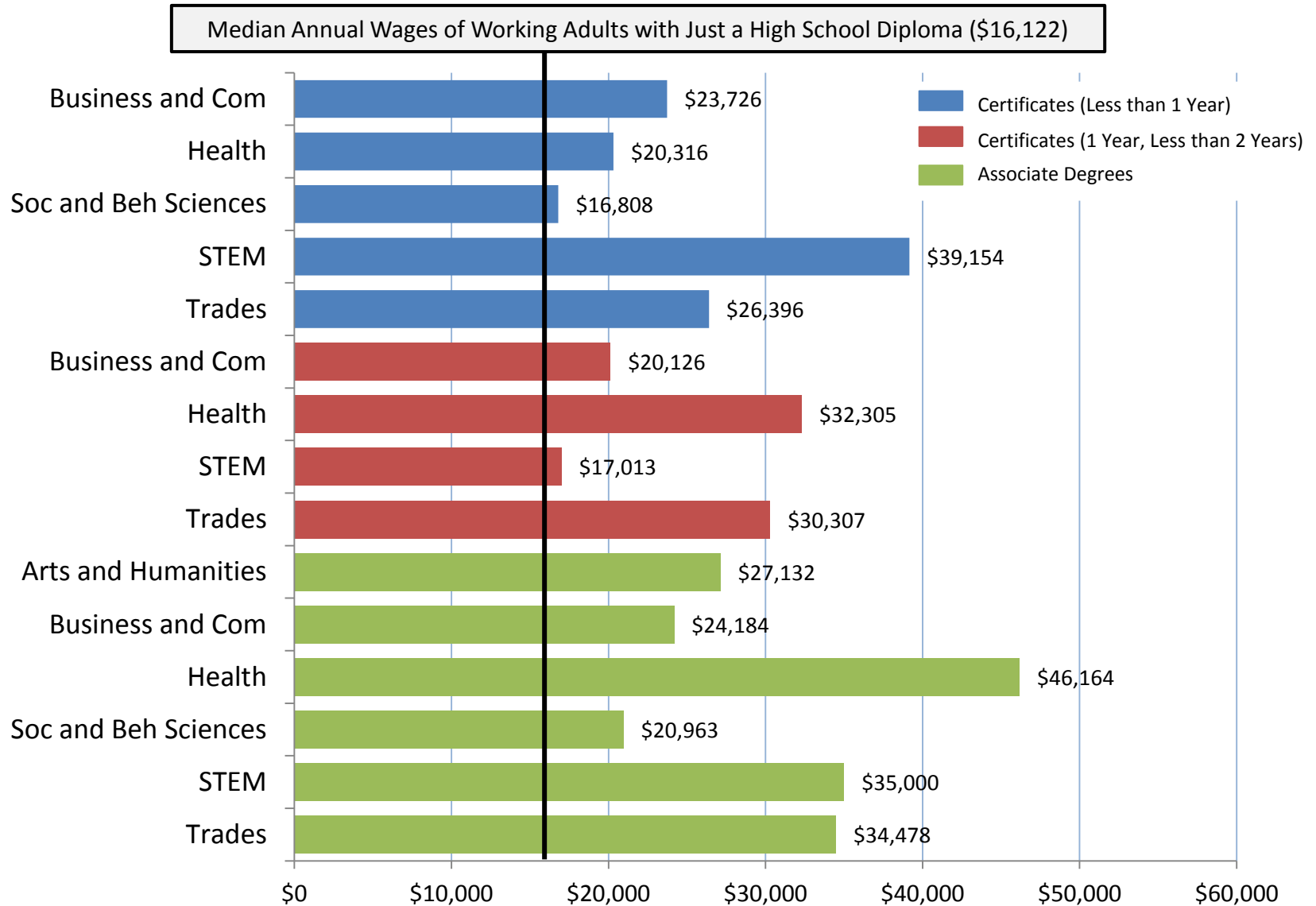
Of Those Who Didn't Re-Enroll, How Many are Employed in State?

Percentage of 2005-06 Completers Who Employed the Following Year



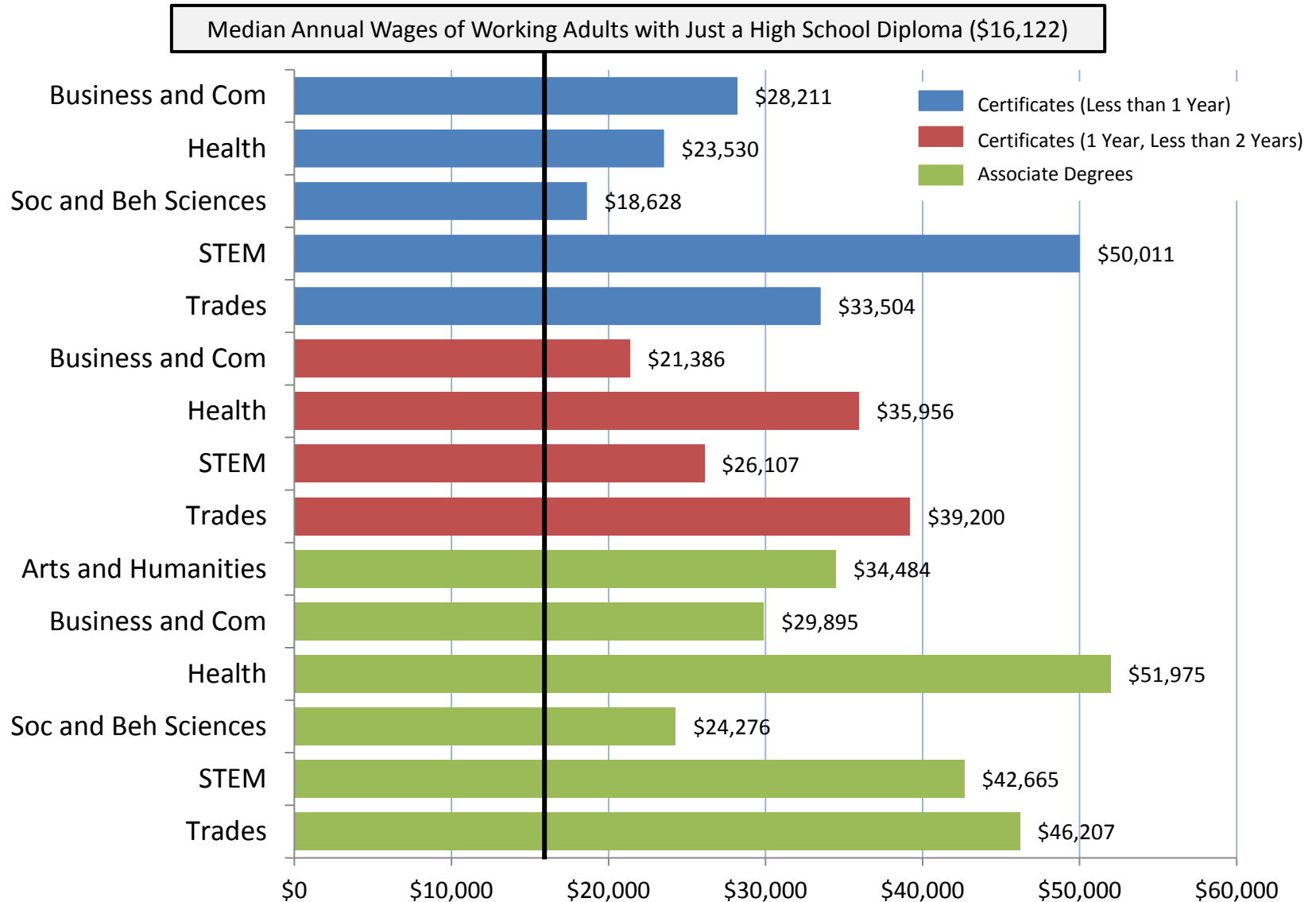
What are Their Median Annual Wages One Year After Completion?

Median Annual Wages of 2005-06 Completers the Following Year



What are Their Median Annual Wages Five Years After Completion?

Median Annual Wages of 2005-06 Completers Five Years After Completion



Making the Case for the Graduating Cohort of 2005-06

Field of Completion	Employed Five Years Following Graduation					Median Annual Earnings					Total Personal Income Generated Above the High School Median Wqgae				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Business and Com	186	179	171	164	156	23,726	24,847	25,969	27,090	28,211	1,414,351	1,557,479	1,683,786	1,793,273	1,885,940
Health	718	674	631	587	543	20,316	21,120	21,923	22,726	23,530	3,011,349	3,369,578	3,657,505	3,875,132	4,022,457
Soc and Beh Sciences	101	97	94	90	86	16,808	17,263	17,718	18,173	18,628	69,290	110,967	149,232	184,084	215,523
STEM	167	161	155	149	143	39,154	41,868	44,582	47,296	50,011	3,846,344	4,145,130	4,411,347	4,644,993	4,846,070
Trades	569	540	510	481	451	26,396	28,173	29,950	31,727	33,504	5,846,134	6,501,676	7,052,382	7,498,251	7,839,282
Business and Com	53	52	52	51	50	20,126	20,441	20,756	21,071	21,386	212,233	225,688	238,670	251,179	263,216
Health	437	418	399	380	361	32,305	33,217	34,130	35,043	35,956	7,071,831	7,145,877	7,185,240	7,189,919	7,159,915
STEM	39	38	37	35	34	17,013	19,287	21,560	23,834	26,107	34,761	119,468	198,491	271,831	339,487
Trades	340	323	306	288	271	30,307	32,530	34,753	36,977	39,200	4,822,859	5,295,734	5,691,905	6,011,373	6,254,138
Arts and Humanities	937	901	865	829	793	27,132	28,970	30,808	32,646	34,484	10,316,407	11,575,985	12,703,234	13,698,156	14,560,749
Business and Com	264	251	239	226	213	24,184	25,612	27,040	28,468	29,895	2,128,389	2,384,345	2,603,891	2,787,026	2,933,751
Health	1,121	1,092	1,064	1,035	1006	46,164	47,617	49,069	50,522	51,975	33,676,903	34,399,922	35,039,411	35,595,369	36,067,796
Soc and Beh Sciences	109	106	102	99	95	20,963	21,791	22,619	23,448	24,276	527,652	598,093	662,737	721,582	774,630
STEM	161	158	154	151	147	35,000	36,916	38,833	40,749	42,665	3,039,345	3,275,094	3,497,429	3,706,350	3,901,856
Trades	159	154	150	145	140	34,478	37,410	40,342	43,275	46,207	2,918,528	3,283,674	3,620,962	3,930,391	4,211,962

Employed Over the
Five Year Period

Median Earnings Over
Five Years

Total Personal Earnings
Above a High School
Wage (\$16,122)

Total Additional Earnings Generated Over the Five Years = **\$438,756,988**

Making the Case for the Graduating Cohort of 2005-06

Total Additional Earnings Over Last Five Years = **\$438,756,988**

Additional State Tax Revenues Generated = **\$68,536,366**

Income Tax	\$37,818,493
Property Tax	\$8,471,451
Sales Tax	\$22,246,422

Savings to the State = **\$25,707,910**

Medicaid	\$20,078,941
Corrections	\$5,628,969

Total Revenues and Savings to the State = **\$94,244,276**