

# TRACKING WAGES FOR CSU BACCALAUREATE RECIPIENTS

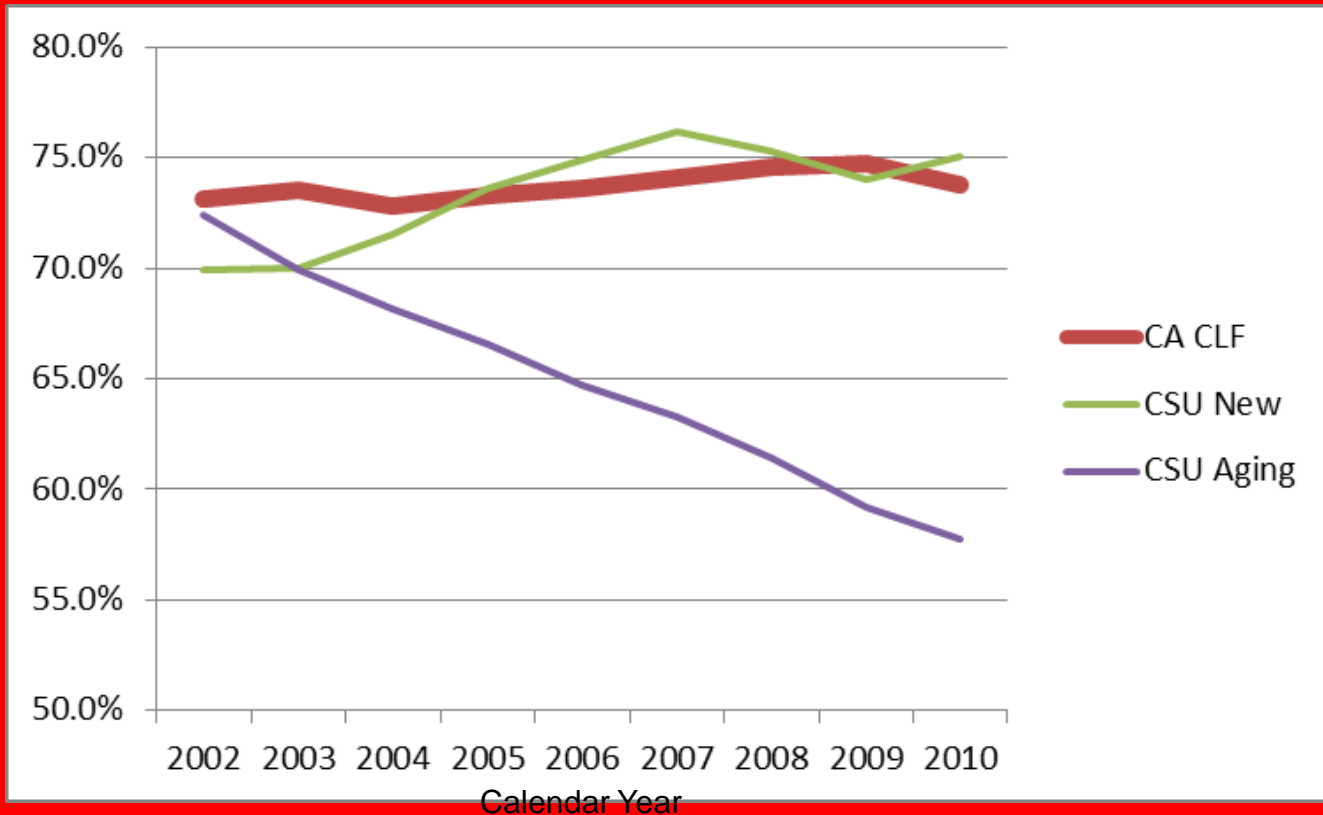
Preliminary Results from the EDD Match Process

**Philip Garcia, Analytic Studies**

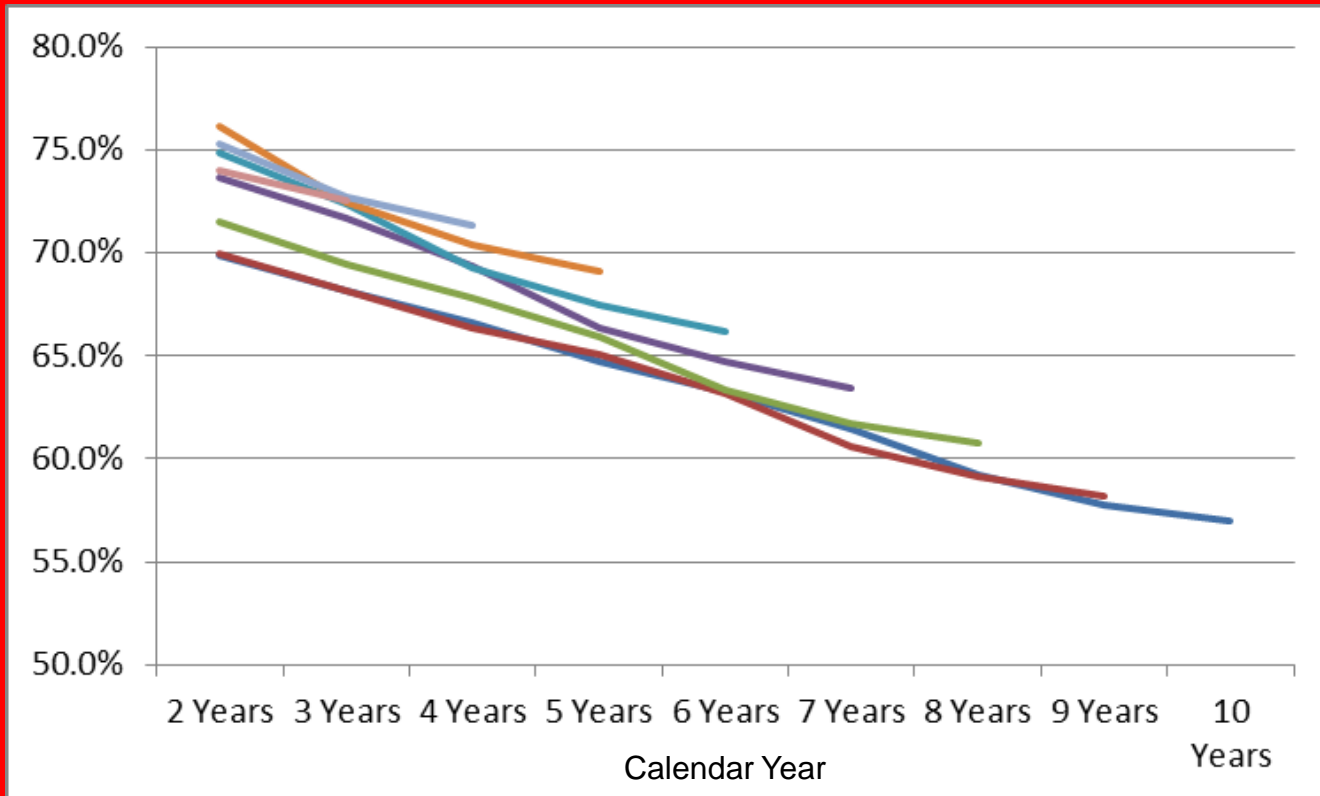
[pgarcia@calstate.edu](mailto:pgarcia@calstate.edu)

**CSU Office of the Chancellor**

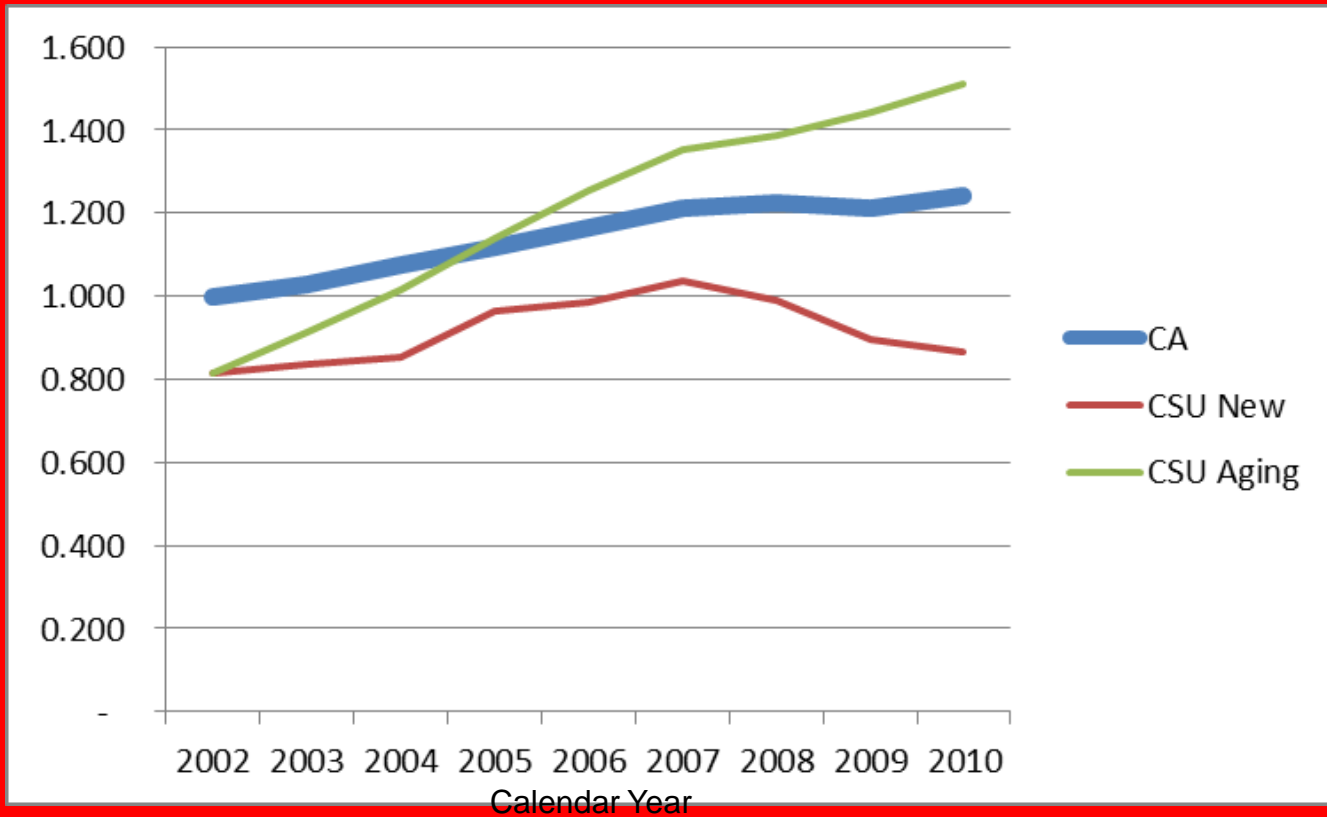
# Selected Match Rates from the EDD Data Base



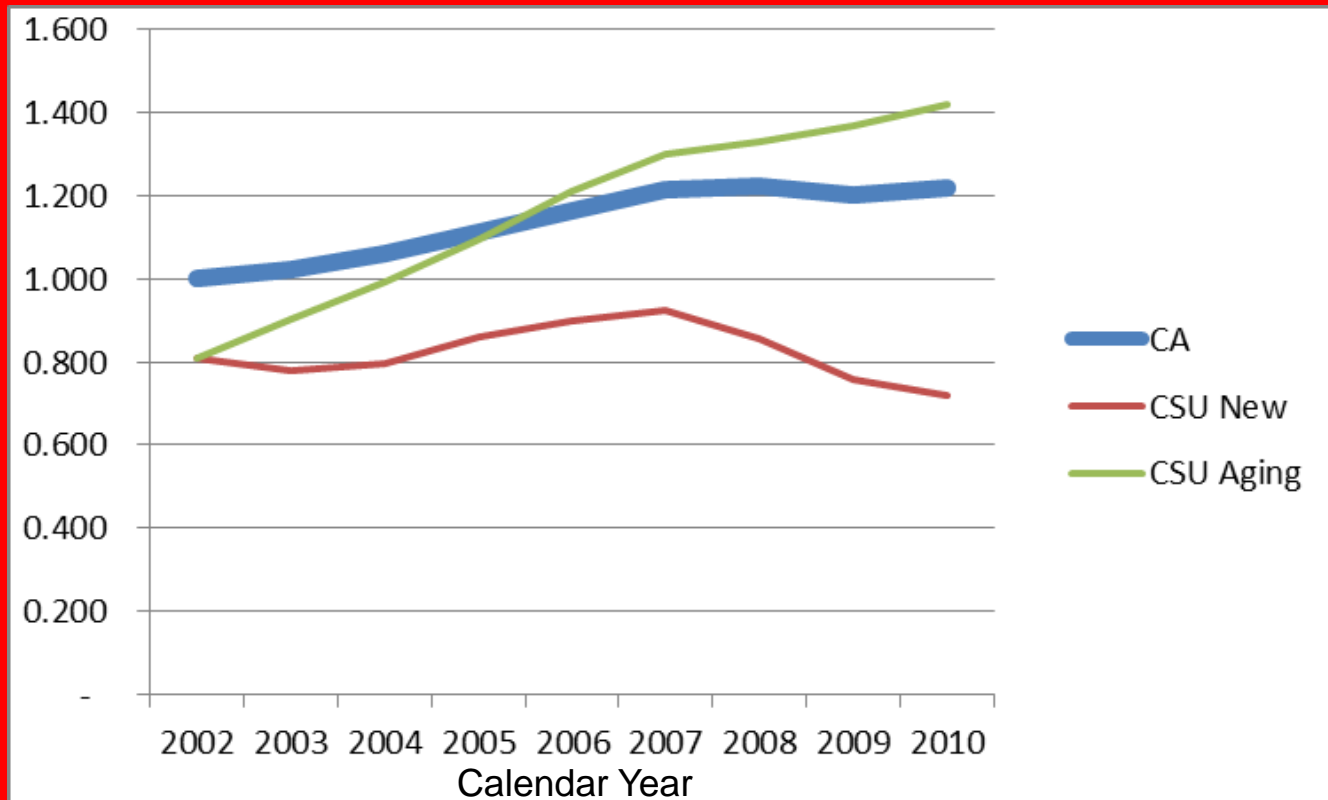
# Time Series Match Rates for Successive Classes



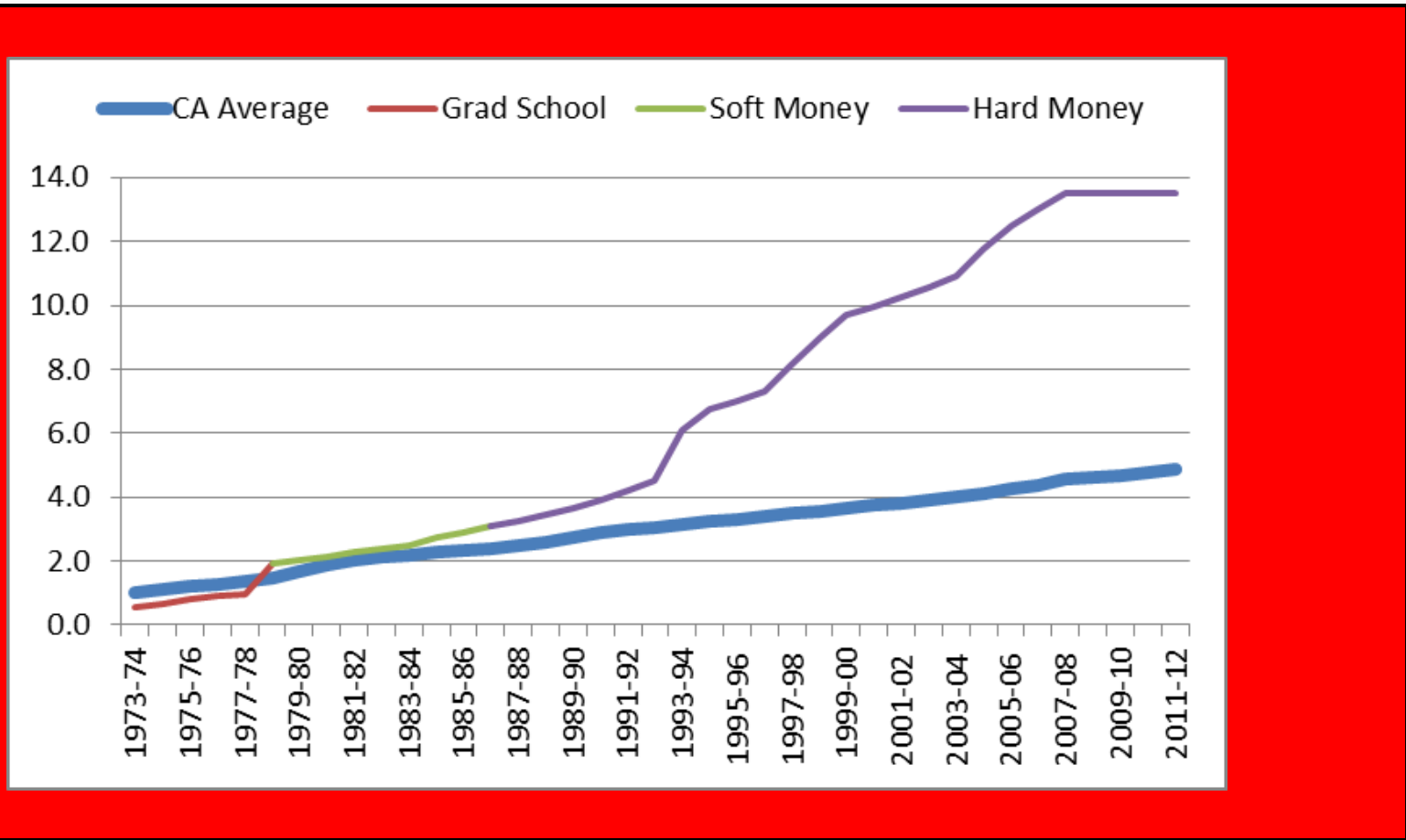
# Indexed Mean Wages for Selected Classes



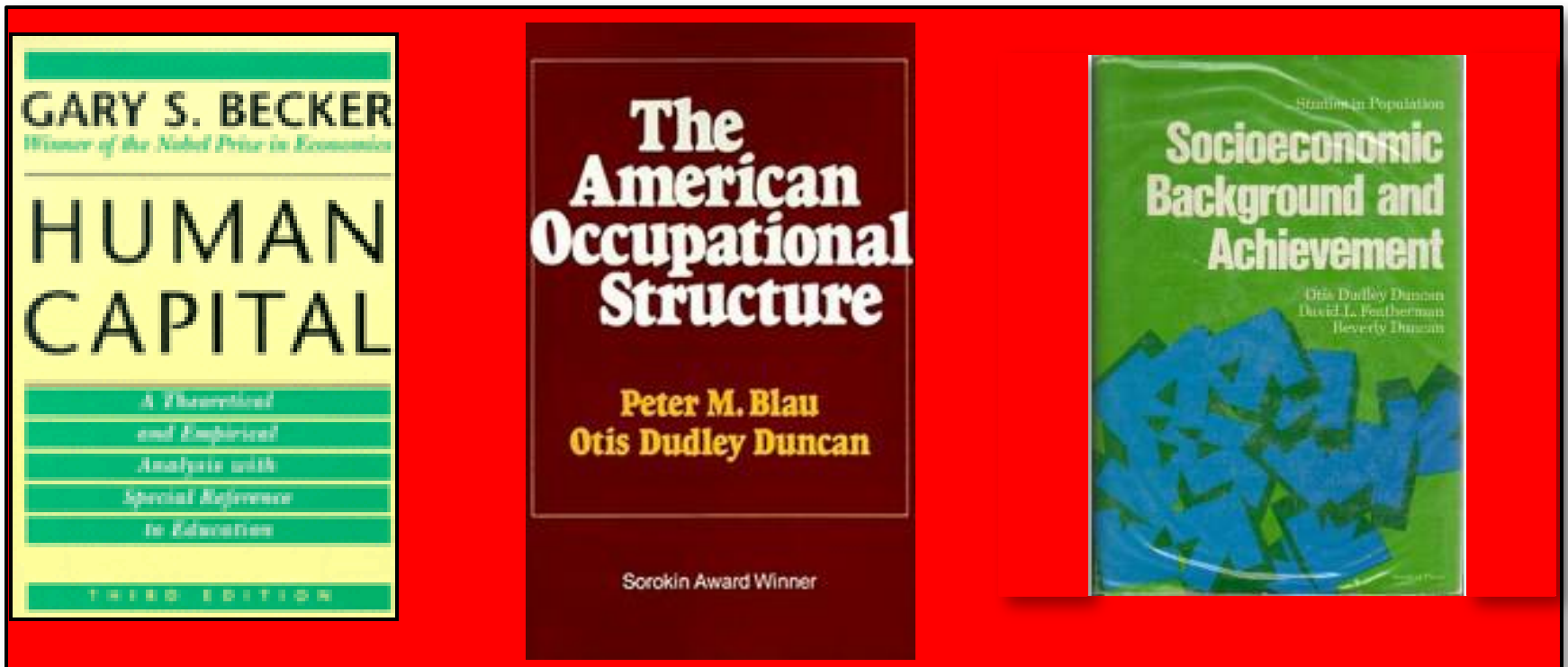
# Indexed Median Wages for Selected Classes



# The Descriptive Wage History of Dr. Phil

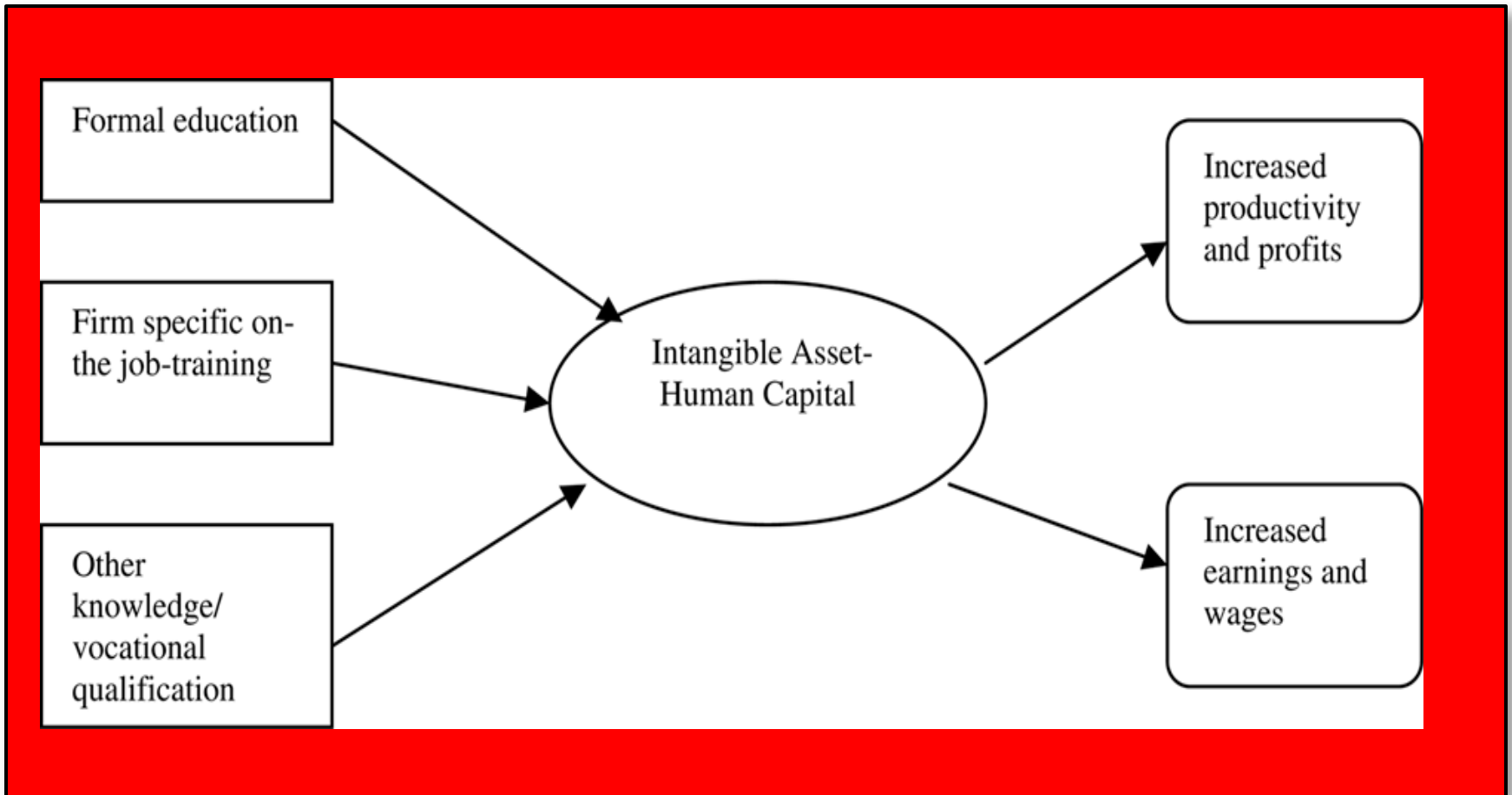


# How Do You Get Beyond Description?



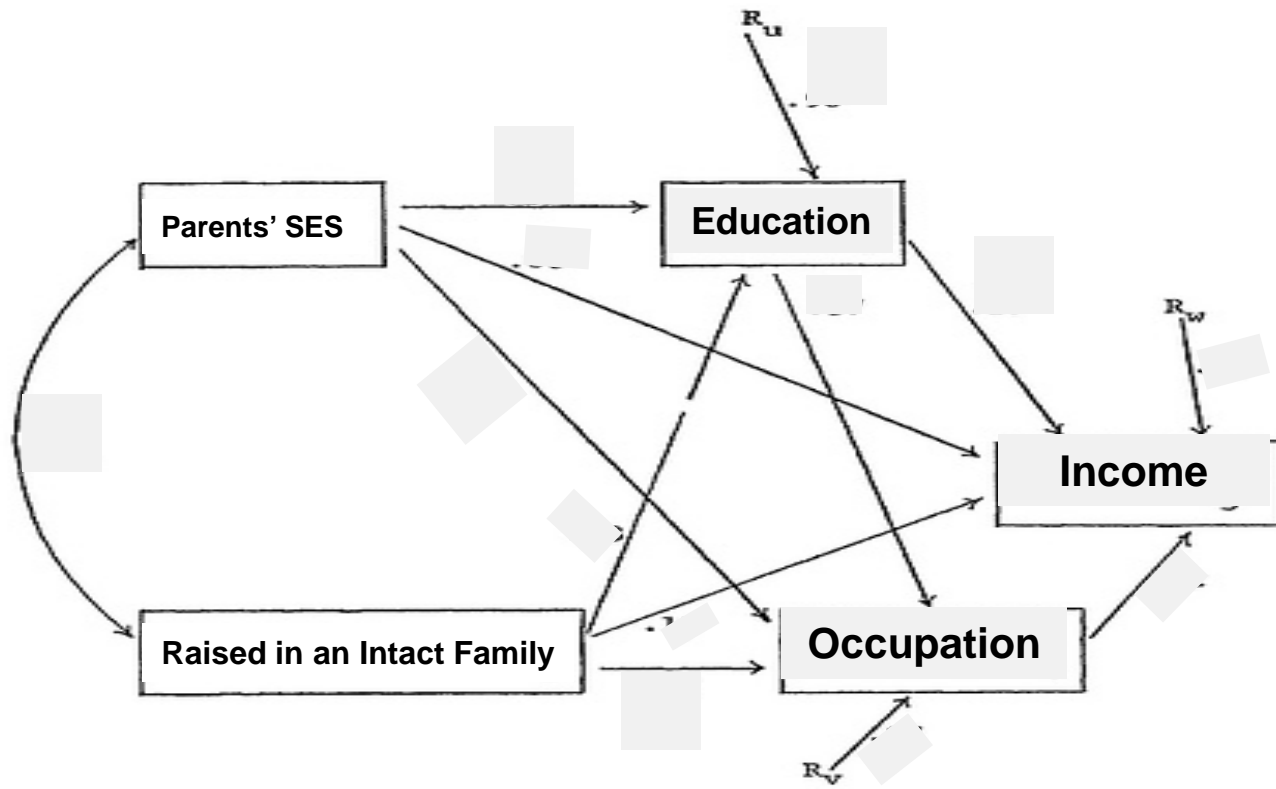
**You need to collect much more data than are housed in IR files.**

# Human Capital Wage Model





# Inter-generational Income Model



Adapted from by Duncan (1970) from the Duncan and Blau social mobility model (1967).

# Other Factors Currently Used by Economists to Assess Wage Differentials

**Nativity**  
**Years in US**  
**Years in Labor Force**  
**Job Tenure**  
**Industrial Sector**  
**Geographic Region**  
**Local Cost of Living**

# Thank You

**Philip Garcia, Analytic Studies**  
[pgarcia@calstate.edu](mailto:pgarcia@calstate.edu)  
**CSU Office of the Chancellor**

# UC Alumni Employment Outcomes

## Reflections On Year One of EDD Wage Data

Chris Furgiuele – UCOP Institutional Research

November 22, 2013

CAIR Annual Conference

Napa, CA

- Presented preliminary UC results at CAIR
  - Five different earnings measures
- Earnings results largely reflected typical earnings trajectory of college graduates
  - \$40K/\$60K/\$80K at 2/5/10 years post-BA
- Cohort Hit Rates 60% to 75%
- Large apparent recessionary effect on data
- Lots of methodological loose ends

# BA Degree Cohort Hit Rate

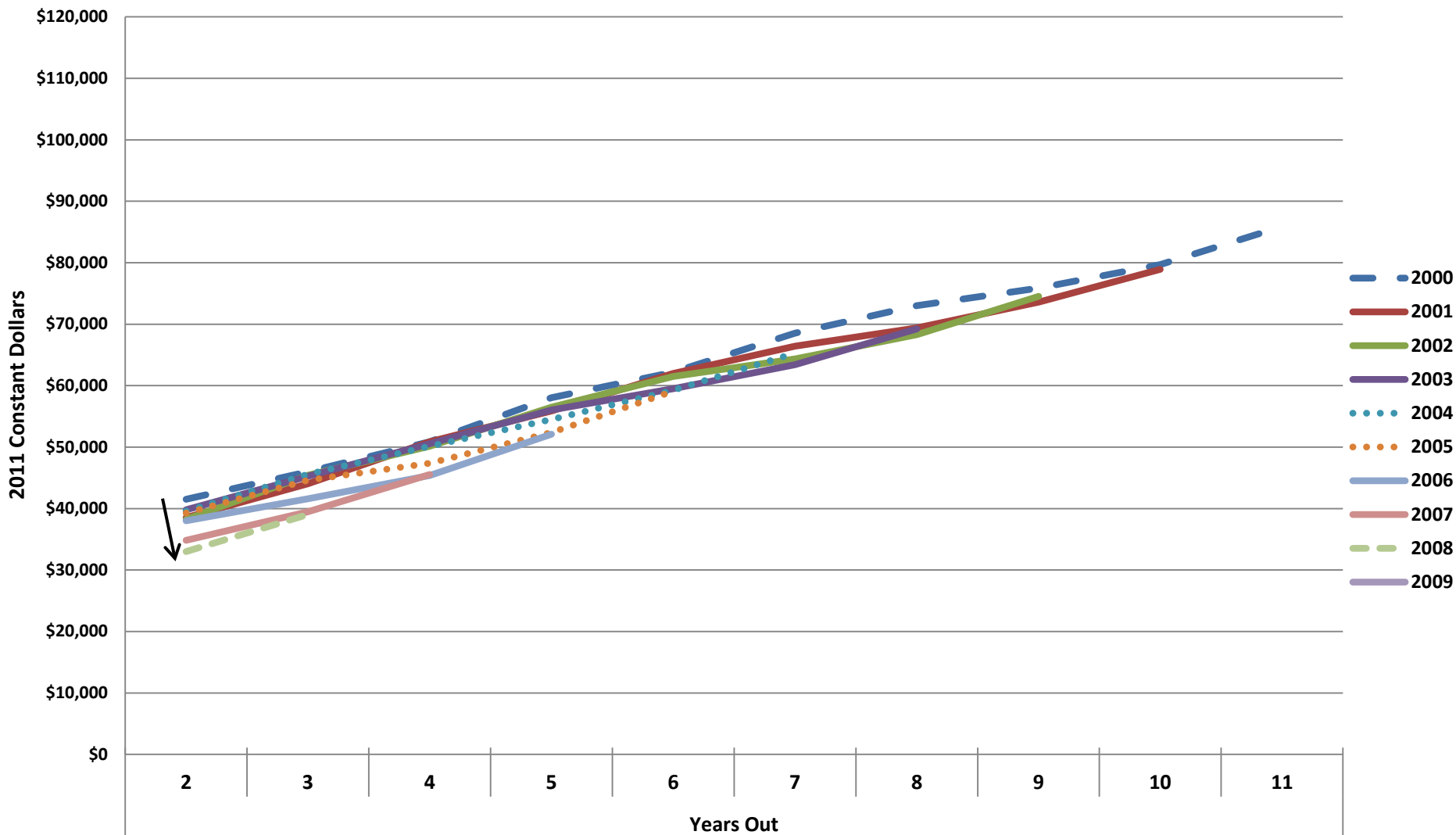
## Hit Rate by Years After Degree Attainment

Cohort	Graduates	2 years	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years	11 years
2000	32,241	76%	72%	70%	70%	69%	68%	66%	64%	63%	62%
2001	34,267	75%	72%	70%	70%	69%	68%	65%	64%	63%	
2002	36,599	76%	72%	70%	70%	69%	66%	65%	64%		
2003	38,001	76%	73%	71%	70%	67%	66%	65%			
2004	40,241	77%	73%	70%	67%	66%	65%				
2005	41,024	77%	72%	67%	66%	65%					
2006	40,908	76%	69%	66%	65%						
2007	41,765	72%	67%	65%							
2008	41,922	69%	66%								
2009	43,962	69%									

Source: UCOP Corporate Student System and EDD Quarterly Wage Data

# Initial Post-Graduate Average Earnings

Estimated Average Annual Earnings by Graduating Cohort Over Time



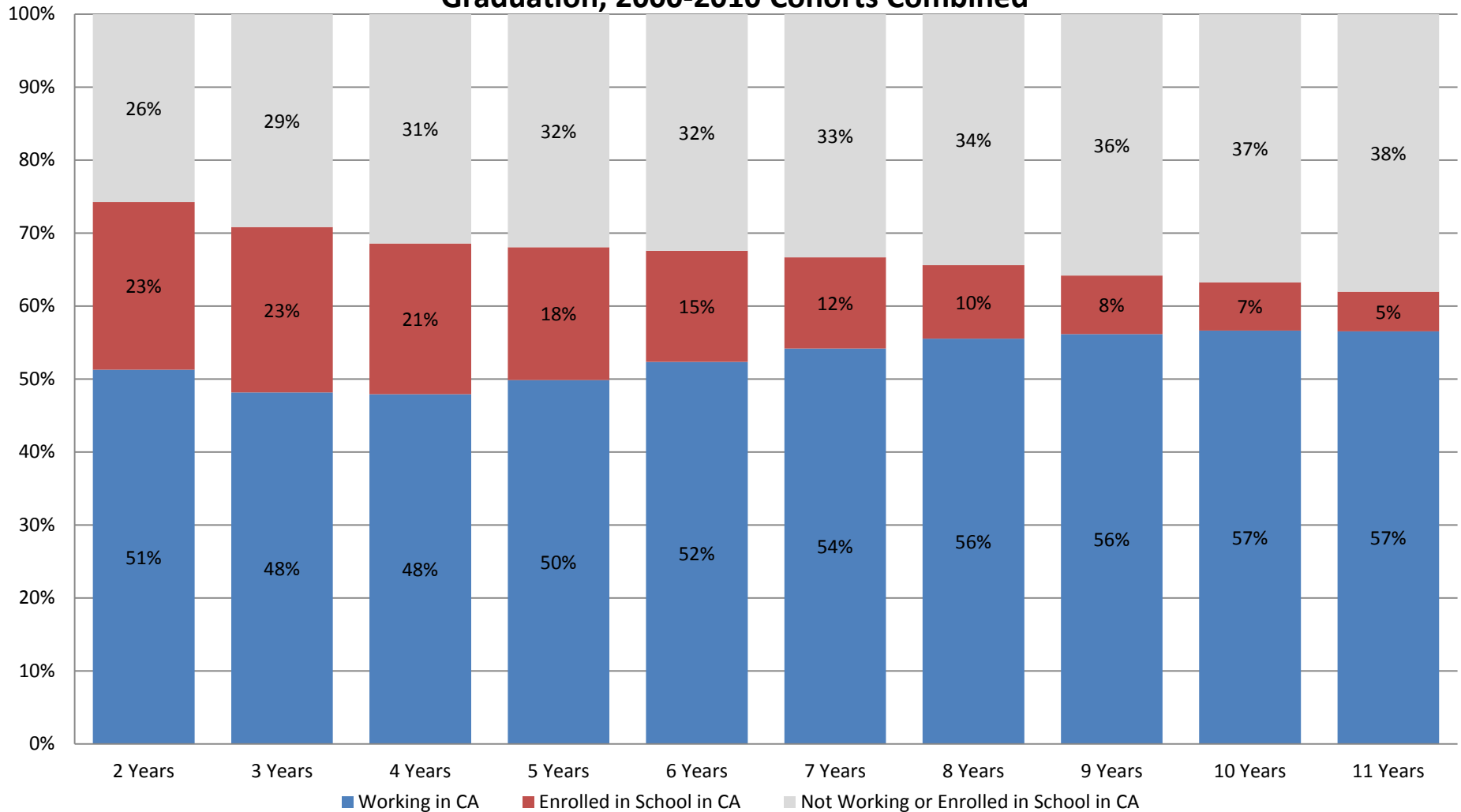
# Since Last Year

- Refined results to account for post-UC school enrollment (NSC Match)
- Acquired additional year of earnings data (through 2012)
- Focus on two earnings measures (unadjusted and annualized)
- Focusing more on hit rates and industry of employment and less on earnings



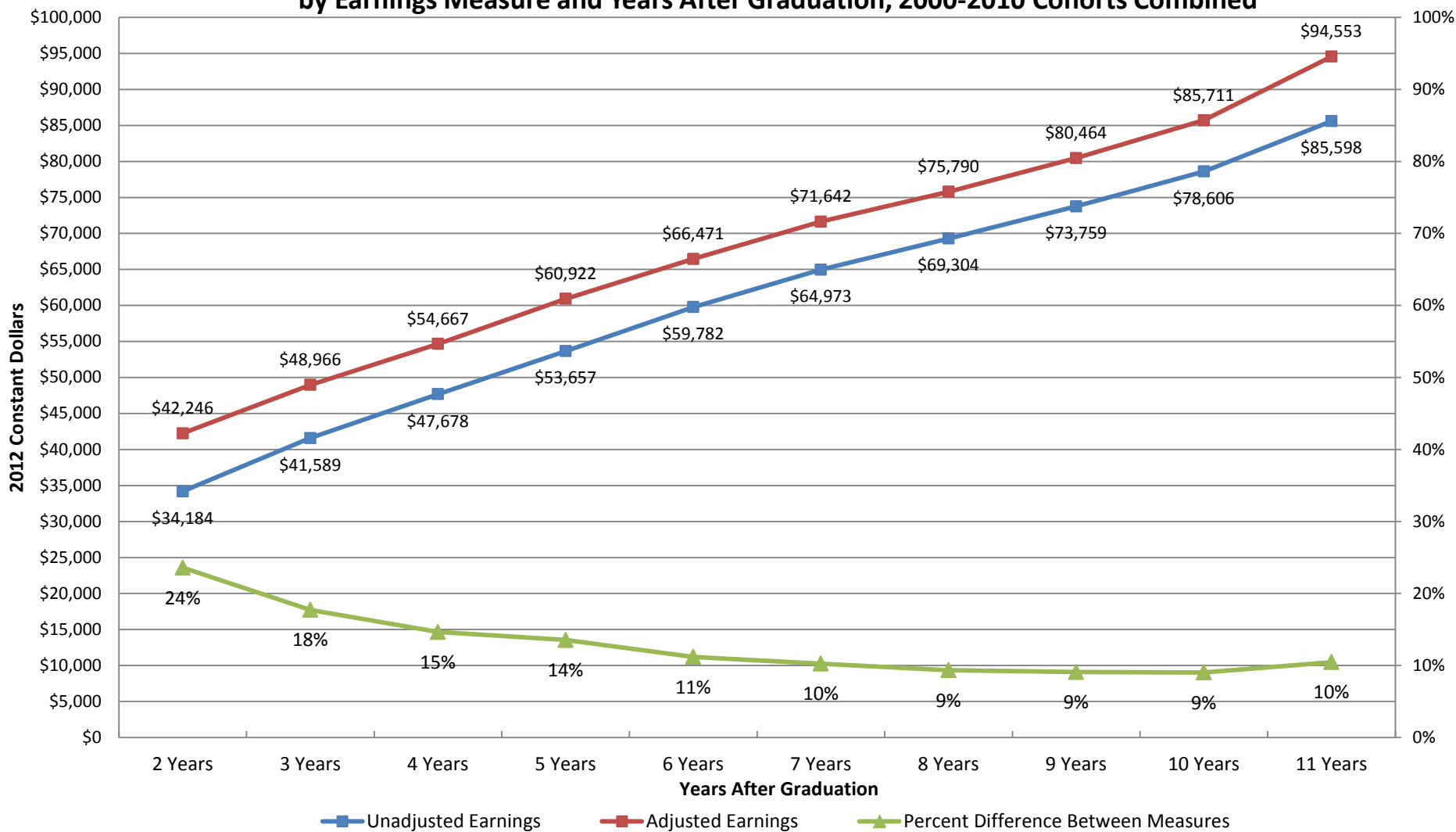
# Increasing Presence in CA Labor Market

CA Labor Market and School Enrollment Status of UC BA Graduates by Years After Graduation, 2000-2010 Cohorts Combined



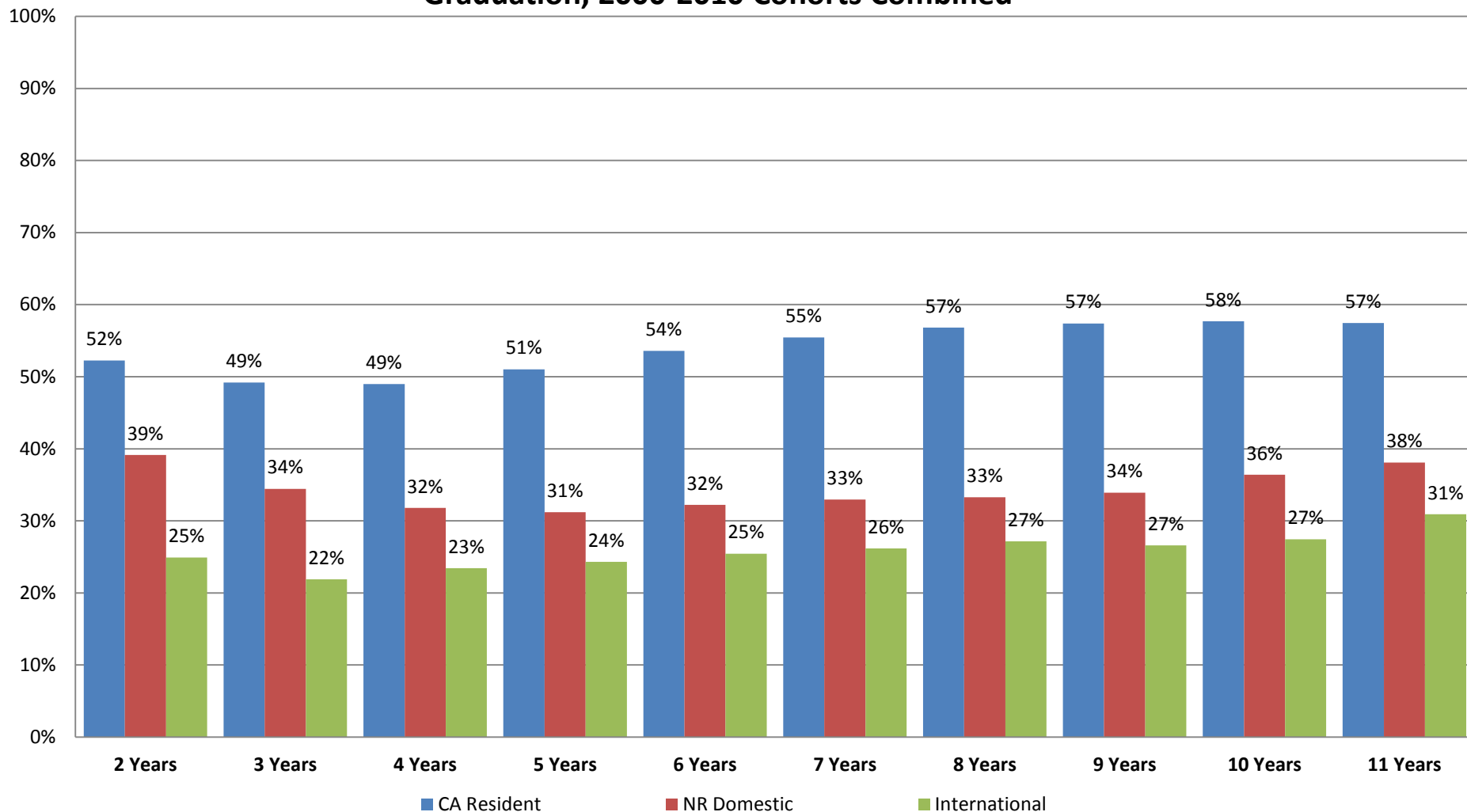
# Difference Between Raw and Adjusted Earnings Declines Over Time

Preliminary Estimated Average Earnings for UC Graduates Working in California by Earnings Measure and Years After Graduation, 2000-2010 Cohorts Combined



# A Significant Proportion of Nonresident UG Remain Employed in CA

Presence of UC BA Graduates in CA W/S Jobs by CA Residency and Years After Graduation, 2000-2010 Cohorts Combined



# Major Challenges

- # Earnings Measures  $\geq$  # Researchers
- Hit rates mask what graduates are doing
- Earnings variation by major, campus create interpretation challenges
- Outliers matter (e.g. professional athletes)
- More of a lifetime earnings story for 4-year university graduates (hard to tell with limited data)
- Heavy recession/cyclical and local economy on earnings data
- EDD data may not add much value over alumni surveys

# Going Forward

- Presented systemwide and campus results to UC leadership
- Continuing conversation with leadership on if/how to move forward with release
- Federal Scorecard?

# Labor Market Resources: Practices and Uses for Higher Education

Patrick Perry

Vice Chancellor of Technology, Research  
& Information Systems

California Community Colleges



# The Big Push



College Affordability and Transparency Center

## College Scorecard


College Scorecards in the U.S. Department of Education's College Affordability and Transparency Center make it easier for you to search for a college that is a good fit for you. You can use the College Scorecard to find out more about a college's affordability and value so you can make more informed decisions about which college to attend.


To start, enter the name of a college of interest to you or select factors that are important in your college search. You can find scorecards for colleges based on factors such as programs or majors offered, location, and enrollment size.


Search for a college by name...




Choose from the following options to begin searching for colleges of interest to you by:

 College Location

 Type of College

 My Area of Interest

 Popular Criteria

 <i>Degree &amp; Major</i>		 <i>Occupation</i>		 <i>Zip Code</i>
 <i>Size</i>	 <i>Size</i>	 <i>Awards Offered</i>	 <i>State</i>	 <i>About the Scorecard</i>
 <i>Campus</i>		 <i>Region</i>		 <i>Distance</i>



# College Scorecard

College Scorecards in the U.S. Department of Education's College Affordability and Transparency Center make it easier for you to search for a college that is a good fit for you. You can use the College Scorecard to find out more about a college's affordability and value so you can make more informed decisions about which college to attend.

To start, enter the name of a college of interest to you or select factors that are important in your college search. You can find scorecards for colleges based on factors such as programs or majors offered, location, and enrollment size.

Search for a college by name...

Choose from the following options to begin searching for colleges of interest to you by:

College Location

Type of College

My Area of Interest

Popular Criteria

MY AREA OF INTEREST

Degree & Major



Occupation



Zip Code



TYPE OF COLLEGE

Size

MY AREA OF INTEREST

Awards Offered

COLLEGE LOCATION

State

HELP

About the Scorecard

TYPE OF COLLEGE

Campus Setting



COLLEGE LOCATION

Region



TYPE OF COLLEGE

Distance Education





# STUDENT SUCCESS SCORECARD



Make a selection

## Student Success Scorecard

In its commitment to increase transfer and degree and certificate attainment, the California Community Colleges Board of Governors has established a performance measurement system that tracks student success at all 112 community colleges.

This scorecard represents an unprecedented level of transparency and accountability on student progress and success metrics in public higher education in the United States. The data available in this scorecard tell how well colleges are doing in remedial instruction, job training programs, retention of students and graduation and completion rates.

With data reported by gender, age and ethnicity, colleges, students and the public can also better determine if colleges are narrowing achievement gaps, which is vitally important for our students and our state's economy.

Please contact us at [scorecard@cccco.edu](mailto:scorecard@cccco.edu) if you have questions about the data or [documentation](#) used to develop the Student Success Scorecard.



College Affordability and Transparency Center  
**College Scorecard**

College Scorecards in the U.S. Department of Education's College Affordability and Transparency Center make it easier for you to search for a college that is a good fit for you. You can use the College Scorecard to find out more about a college's affordability and value so you can make more informed decisions about which college to attend.

To start, enter the name of a college of interest to you or select factors that are important in your college search. You can find scorecards for colleges based on factors such as programs or majors offered, location, and enrollment size.

Search for a college by name...

Choose from the following options to begin searching for colleges of interest to you by:

College Location   
 Type of College   
 My Area of Interest   
 Popular Criteria

<p>MY AREA OF INTEREST</p> <p>Degree &amp; Major</p>		<p>MY AREA OF INTEREST</p> <p>Occupation</p>		<p>COLLEGE LOCATION</p> <p>Zip Code</p>
	<p>TYPE OF COLLEGE</p> <p>Size</p>	<p>MY AREA OF INTEREST</p> <p>Awards Offered</p>	<p>COLLEGE LOCATION</p> <p>State</p>	<p>HELP</p> <p>About the Scorecard</p>
<p>TYPE OF COLLEGE</p> <p>Campus Setting</p>		<p>COLLEGE LOCATION</p> <p>Region</p>		<p>TYPE OF COLLEGE</p> <p>Distance Education</p>

# Start

User 

 Mail	 Desktop	 Finance	
 People	 Weather	 Internet Explorer	 Store <b>11</b>
  Peace envoy to visit Syria to broker ceasefire for Eid...	 Calendar	 Maps	 SkyDrive
 Messaging	 Photos	Sporting News - Injury Report: Week 7 	





# STUDENT SUCCESS SCORECARD



Make a selection

## Student Success Scorecard

In its commitment to increase transfer and degree and certificate attainment, the California Community Colleges Board of Governors has established a performance measurement system that tracks student success at all 112 community colleges.

This scorecard represents an unprecedented level of transparency and accountability on student progress and success metrics in public higher education in the United States. The data available in this scorecard tell how well colleges are doing in remedial instruction, job training programs, retention of students and graduation and completion rates.

With data reported by gender, age and ethnicity, colleges, students and the public can also better determine if colleges are narrowing achievement gaps, which is vitally important for our students and our state's economy.

Please contact us at [scorecard@cccco.edu](mailto:scorecard@cccco.edu) if you have questions about the data or [documentation](#) used to develop the Student Success Scorecard.

Due to the lapse in federal government funding, this website is not available.  
We sincerely regret this inconvenience.

For information about available government services, visit [USA.gov](https://www.usa.gov).

---

Este sitio web no se está disponible durante el cierre del Gobierno.  
Lamentamos profundamente las molestias que esto pueda causar.

Visite [GobiernoUSA.gov](https://www.gobiernoUSA.gov) para informarse sobre los servicios gubernamentales disponibles durante el cierre del Gobierno.



# Federal Scorecard

- Real cost
- Graduation rates
- Student debt
  
- Employment rate
- Graduates' earning potential



# Wage Data

- This data can give you:
  - Employment (but not cleanly; some % of records are not found)
  - Salaries by degree
  - Salary growth over time by degree
  - Employment by industry (snapshot)
  - Movement from/to various industries (over time)
  - Types of employers that employ certain degrees
  - Regional differences in wage for same degree



# You can get wage data, too

- Spencer Wong @EDD  
([Spencer.Wong@EDD.ca.gov](mailto:Spencer.Wong@EDD.ca.gov) )
- You send SSN
- You get back summary (they wont give you quarterly wage records)
- If you segment your SSN's up properly, you can get what you need





# Salary Surfer: Student-Centric

**SalarySurfer**  
California Community Colleges  
Chancellor's Office



STUDENT  
SUCCESS  
INITIATIVE



College of the Siskiyous  
Fire/Emergency Response Technology

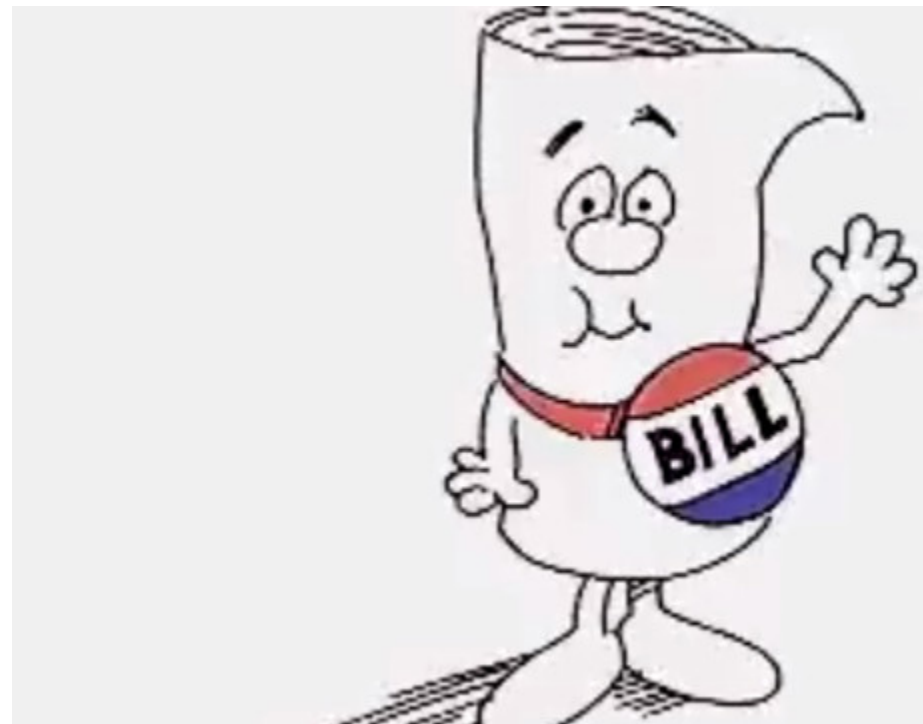
Select a Program of Study

## Salary Surfer

As students and their families make important decisions about investing their time and money in pursuing a college education, the California Community Colleges Chancellor's Office is making available for the first time comparative information about the earnings of recent graduates who received an award in a specific program area at California community colleges.

# How Did We Get This?

- We all passed a bill that makes segment offices authorized repositories of EDD wage data
- We send them SSN's
- They send us quarterly wage records



# The Methodology

- Take all award recipients across 5 years
- Remove those still enrolled or transferred
- Match with EDD wage records
- Slice median wage by TOP Code/Award Type at -2, +2, +5 years before/after award
- If n=10 wages exist, show it
- Mashup w/Program Inventory database



# Salary Surfer

- <http://salarysurfer.cccco.edu/SalarySurfer.aspx>



Curriculum	Award Type	Median Annual Salary		
		2 Years Before	2 Years After	5 Years After
⊕ Administrative Medical Assisting	Certificate	\$20,981	\$29,498	\$29,698
⊕ Cardiovascular Technician	Degree	\$12,298	\$62,211	\$71,841
⊕ Cardiovascular Technician	Certificate	\$14,566	\$56,925	\$66,747
⊕ Clinical Medical Assisting	Degree	\$5,312	\$23,636	N/A
⊕ Clinical Medical Assisting	Certificate	\$5,946	\$26,225	\$34,374
⊕ Dental Assistant	Degree	\$12,310	\$25,824	\$33,178
⊕ Dental Assistant	Certificate	\$12,114	\$26,441	\$29,514
⊖ Dental Hygienist	Degree	\$16,130	\$63,750	\$62,507

College	Program Title	Program Type
<a href="#">Cabrillo College</a>	Dental Hygiene	Degree
<a href="#">Cerritos College</a>	Dental Hygienist	Degree
<a href="#">Cypress College</a>	Dental Hygiene	Degree
<a href="#">Diablo Valley College</a>	Dental Hygiene	Degree
<a href="#">Foothill College</a>	Dental Hygiene	Degree
<a href="#">Fresno City College</a>	Dental Hygiene	Degree
<a href="#">Moreno Valley College</a>	Dental Hygiene	Degree
<a href="#">Oxnard College</a>	Dental Hygiene	Degree
<a href="#">Pasadena City College</a>	DENTAL HYGIENE	Degree
<a href="#">Riverside City College</a>	Dental Hygiene	Degree

Page 1 of 2 (16 items) < [1] 2 >

⊕ Dental Hygienist	Certificate	\$17,885	\$68,856	\$46,585
⊕ Dental Laboratory Technician	Certificate	\$16,200	\$20,665	\$13,454
⊕ Diagnostic Medical Sonography	Degree	\$34,395	\$76,038	\$85,319
⊕ Diagnostic Medical Sonography	Certificate	\$30,019	\$62,572	\$76,604

# Data Mart: Regional Differences

	Award Year 2000-2001 - 2007-2008		
	Median Wage 3 Years After Award	Total Awards	Award to Wage Match Rate
[-] Bakersfield			
[-] Radiologic Technology-122500			
AA/AS Degree Recipient	\$54,542	79	95 %
[-] Cabrillo			
[-] Radiologic Technology-122500			
AA/AS Degree Recipient	\$78,364	87	93 %
[-] Canada			
[-] Radiologic Technology-122500			
AA/AS Degree Recipient	\$85,078	53	87 %
[-] Crafton Hills			
[-] Radiologic Technology-122500			
AA/AS Degree Recipient	\$65,277	29	90 %
[-] Cypress			
[-] Radiologic Technology-122500			
AA/AS Degree Recipient	\$66,192	92	92 %
[-] Foothill			
[-] Radiologic Technology-122500			
AA/AS Degree Recipient	\$81,231	108	94 %
[-] Fresno City			
[-] Radiologic Technology-122500			
AA/AS Degree Recipient	\$67,158	175	93 %

# But Wait...There's More!



# Employment by Industry: NAICS Codes

## 2012 NAICS Definition

T = Canadian, Mexican, and United States industries are comparable.

### Search results for: 62

Number of records found: 92

[62](#) Health Care and Social Assistance<sup>T</sup>

[621](#) Ambulatory Health Care Services<sup>T</sup>

[6211](#) Offices of Physicians<sup>T</sup>

[62111](#) Offices of Physicians<sup>T</sup>

[621111](#) Offices of Physicians (except Mental Health Specialists)

[621112](#) Offices of Physicians, Mental Health Specialists

[6212](#) Offices of Dentists<sup>T</sup>

[62121](#) Offices of Dentists<sup>T</sup>

[621210](#) Offices of Dentists

[6213](#) Offices of Other Health Practitioners<sup>T</sup>

[62131](#) Offices of Chiropractors<sup>T</sup>

[621310](#) Offices of Chiropractors

[62132](#) Offices of Optometrists<sup>T</sup>

[621320](#) Offices of Optometrists



# AS in Rad. Tech: -2 Years, NAICS-2

Years	Industry	Median_Wage	N=	Percent
-2	Health Care/Social Assistance	\$13,692	193	27.7
-2	Retail Trade	12,622	85	12.2
-2	Food Service	7,918	73	10.5
-2	Administrative Support	3,365	43	6.2
-2	Other Services	11,505	26	3.7
-2	Educational Services	7,912	26	3.7
-2	Arts, Entertainment, Recreation	8,652	25	3.6
-2	Construction	6,721	23	3.3



# AS in Rad Tech: +5 Years, NAICS-2

Years	Industry	Median_Wage	N=	Percent
+5	Health Care/Social Assistance	\$69,687	689	83.8
+5	Educational Services	47,160	34	4.1
+5	Public Administration	70,438	34	4.1
+5	Administrative Support	10,053	18	2.2
+5	Professional, Scientific Svcs	29,100	17	2.1
+5	Other Services	12,533	7	0.9
+5	Food Service	13,394	4	0.5
+5	Retail Trade	14,850	3	0.4

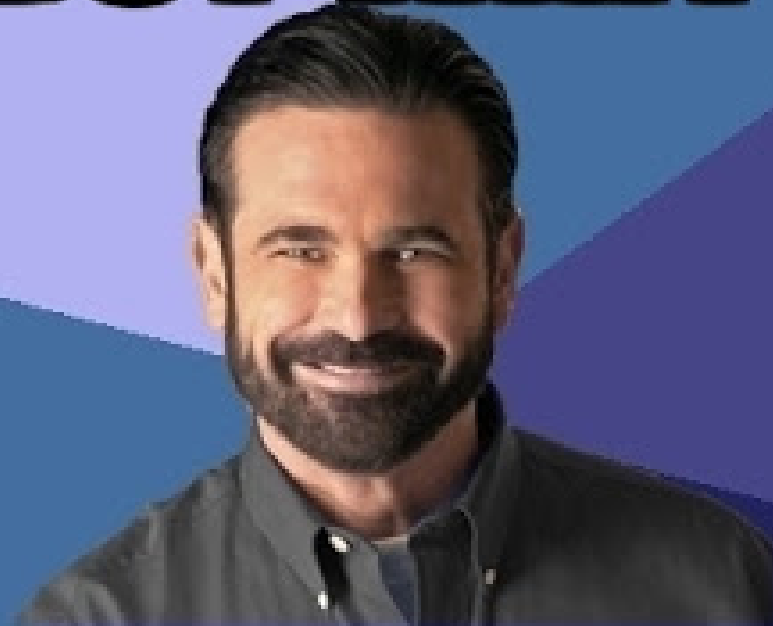


# AS in Rad Tech: +5 Years, NAICS-5

Years	Industry	Median_Wage	N=	Percent
+5	General Medical/Surgical Hospitals	\$73,451	400	48.7
+5	Offices of Physicians	73,064	205	24.9
+5	Diagnostic Imaging Centers	32,668	43	5.2
+5	Executive/Legislative Offices	73,314	27	3.3
+5	Colleges and Universities	76,925	26	3.2
+5	Medical Laboratories	37,529	11	1.3
+5	Ambulatory Emergency Ctrs	9,217	6	0.7
+5	Outpatient Care Centers	55,090	4	0.5



**BUT WAIT**



**THERE'S MORE...**

memegenerator.net



CALIFORNIA COMMUNITY COLLEGES

# Find A Job!

- <http://www.labormarketinfo.edd.ca.gov/aspdotnet/databrowsing/empMain.aspx?menuChoice=emp>
- Surfer 2.0: mashup wages, industry distributions, and ability to find employers (2014 project)



# The Next Frontier (for CC's): Wages of Non-completers

- Generally used in analysis of shorter-term CTE programs or course sequences
  - AKA “CTE Skills Builders”; people who enter and take 1-6 units and leave without certification
- Also appropriate for Apprenticeship sequences
- Fills out a piece of your accountability profile for those previously deemed “unsuccessful”



# Single Course Wages

2 years Before	2 Years After	5 Years After
69,285	81,446	85,654



# Good Uses

- Integrate into college Program Review cycle
- Make it a part of student “decision architecture” (program selection, counseling)
  - Its OK if students pick lower paying degrees...provided its full disclosure
- Use with local business/community advisement structures
- Evaluation of programmatic offerings (expansion, contraction, elimination)





# Nefarious Uses

- Legislature: we'll fund (or provide financial aid) for these programs, but not those
- Assuming lagging indicators of wage are leading indicators (aka Real Estate)
- Overpromotion of monetary outcome as the only outcome of value in higher ed



# Final Thought

- Whose wage outcomes data do you want being seen:
  - The Feds?
  - Or
  - Your own.



# Thank You!

