

# The College Completion Agenda

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

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# Why ROI and Employment Outcomes?

- 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

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

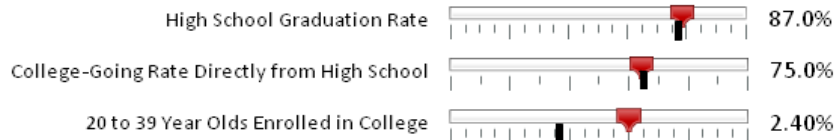
Start Over  
Save Scenario  
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Increase College Attainment View Returns on Investment Instructions and Definitions

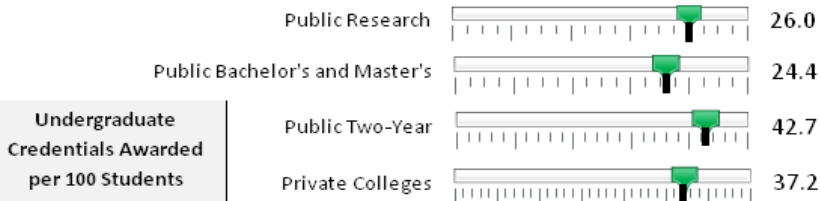
## Set Postsecondary Performance Goals for Year 2025

### Increase College Access

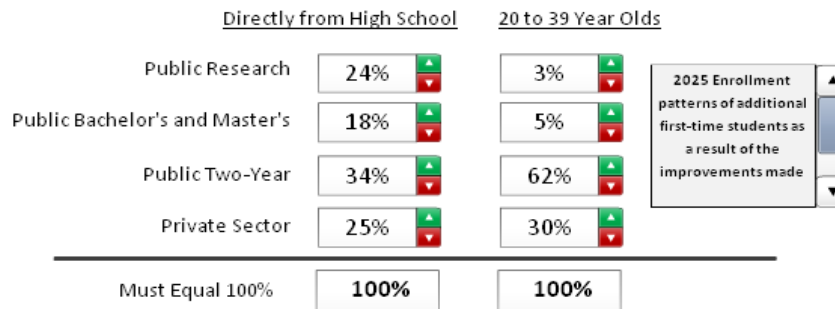
Avg. Performance of Top 3 States



### Increase Number of College Credentials



### Change Enrollment Patterns of Additional First-Time Students



## 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**

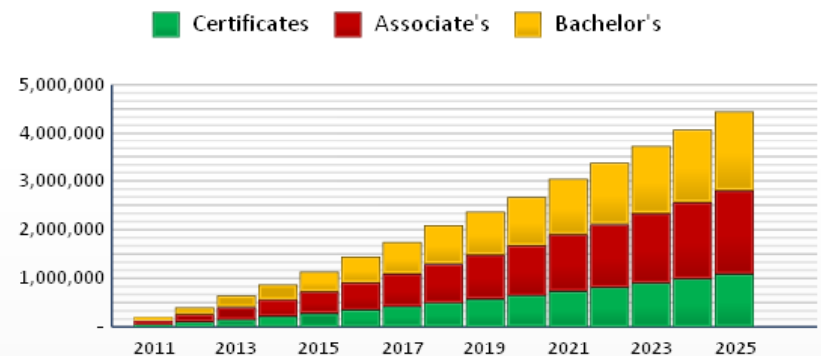
## Results: Additional Undergraduate Credentials Awarded by 2025

Associate's 12,412,476 + Bachelor's 12,002,697  
= Additional Degrees **24,415,173**

Undergraduate Certificates 7,851,437

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

## Additional Undergraduate Credentials Awarded Annually



Note: The default positions reflect current rates and values. The results in 2025 assume linear progress toward goals.

Created by NCHEMS and CLASP

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

Start Over

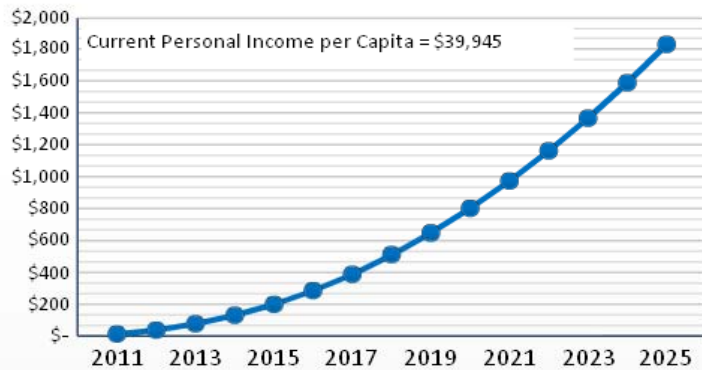
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Increase College Attainment | **View Returns on Investment** | Instructions and Definitions

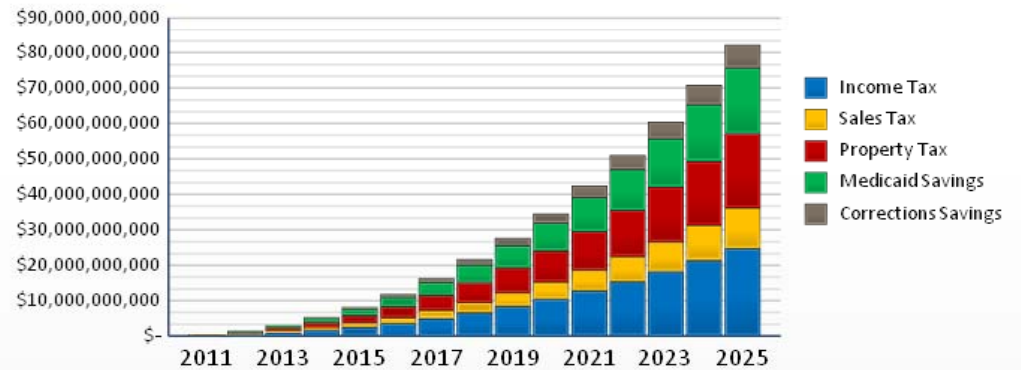
### Change in Personal Income per Capita

In Current \$



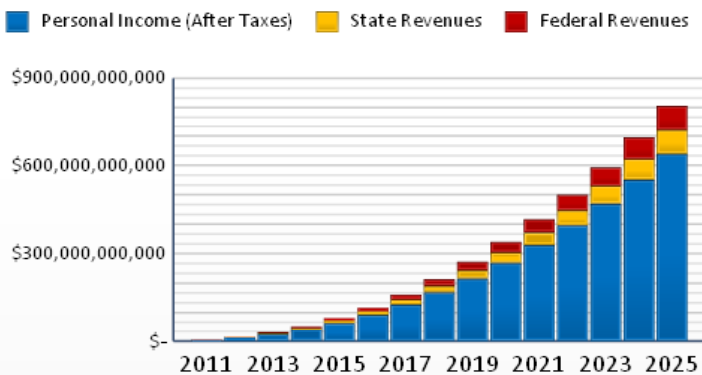
### Additional State Revenues Generated

In Current \$



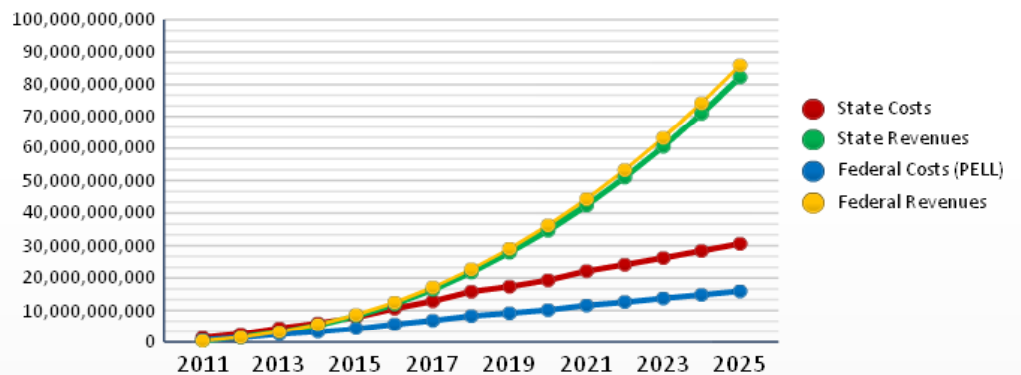
### Additional Revenues Generated

In Current \$



### State and Federal Costs vs Revenues Generated

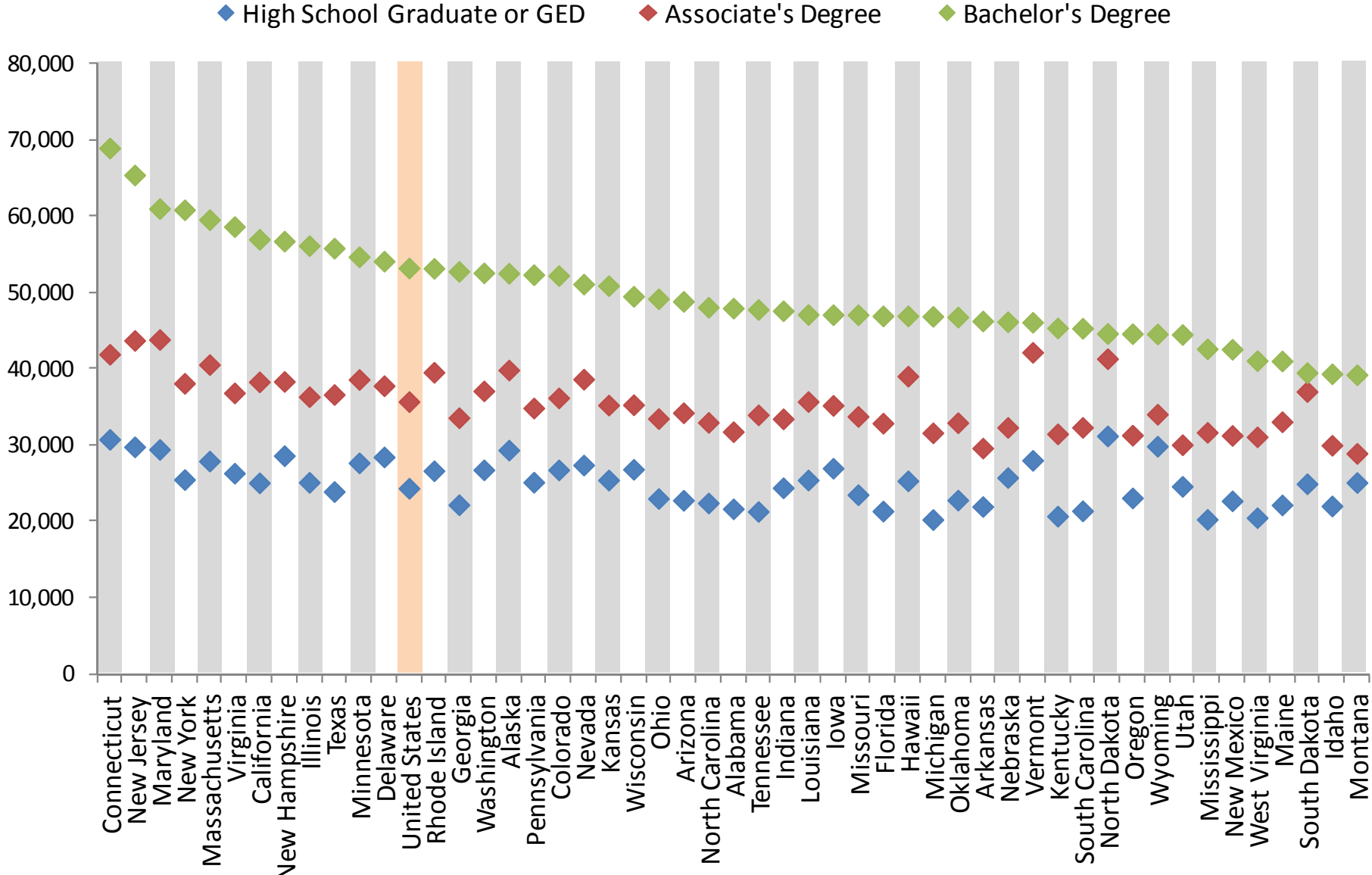
In Current \$



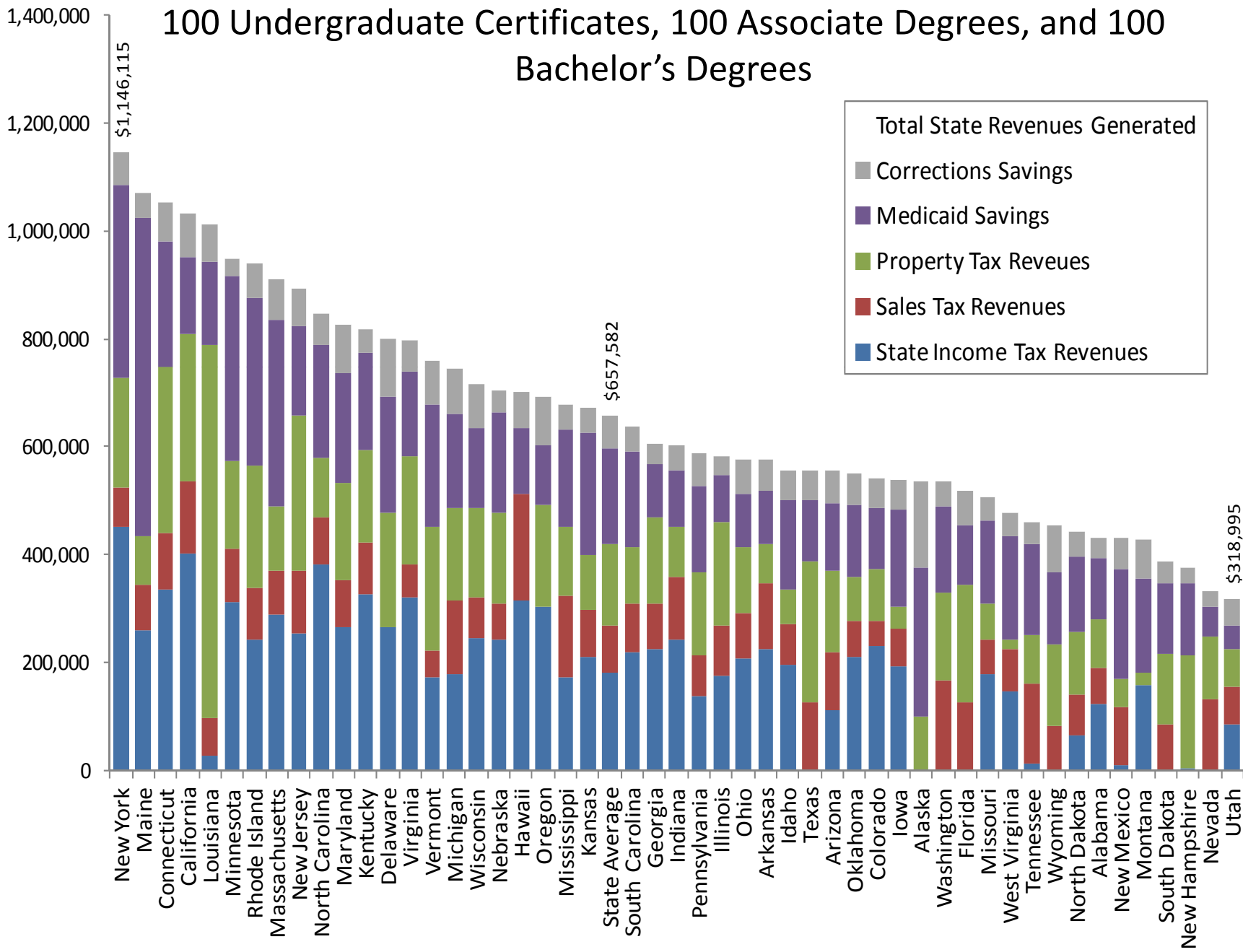
Note: The default positions reflect current rates and values. The results in 2025 assume linear progress toward goals.

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# 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





# Employment Outcomes

# 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 (typically excludes self employed, military, and employed out-of-state)
- Earnings
- Industry of Employment
- Region of Employment

Data Available Quarterly

[Link](#)  
SSN

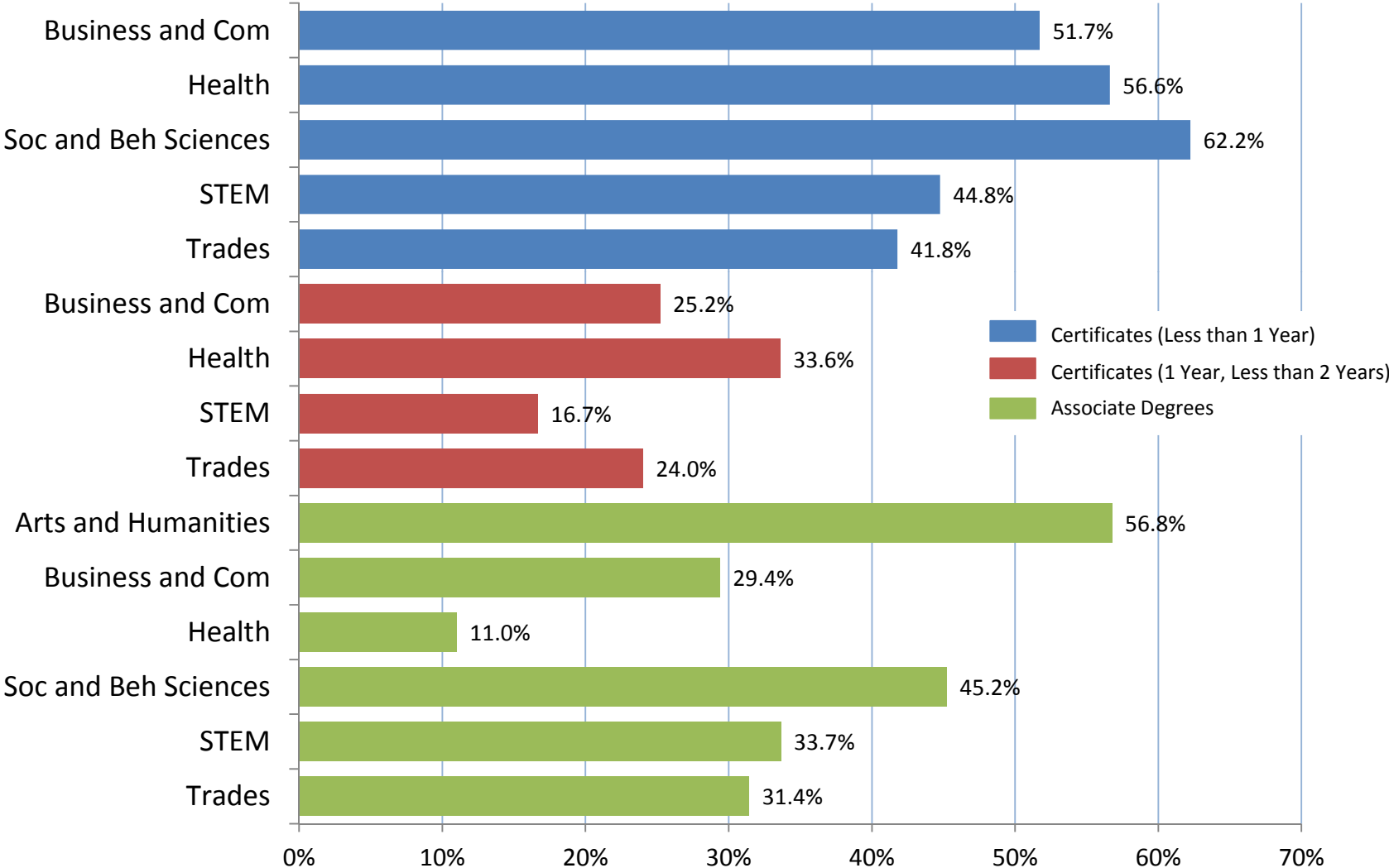
# Major Questions Answered

- 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/annual earnings?
- What industries are the employed in? (only relevant in a few fields)

# How Can We Tell a Story with the Data?

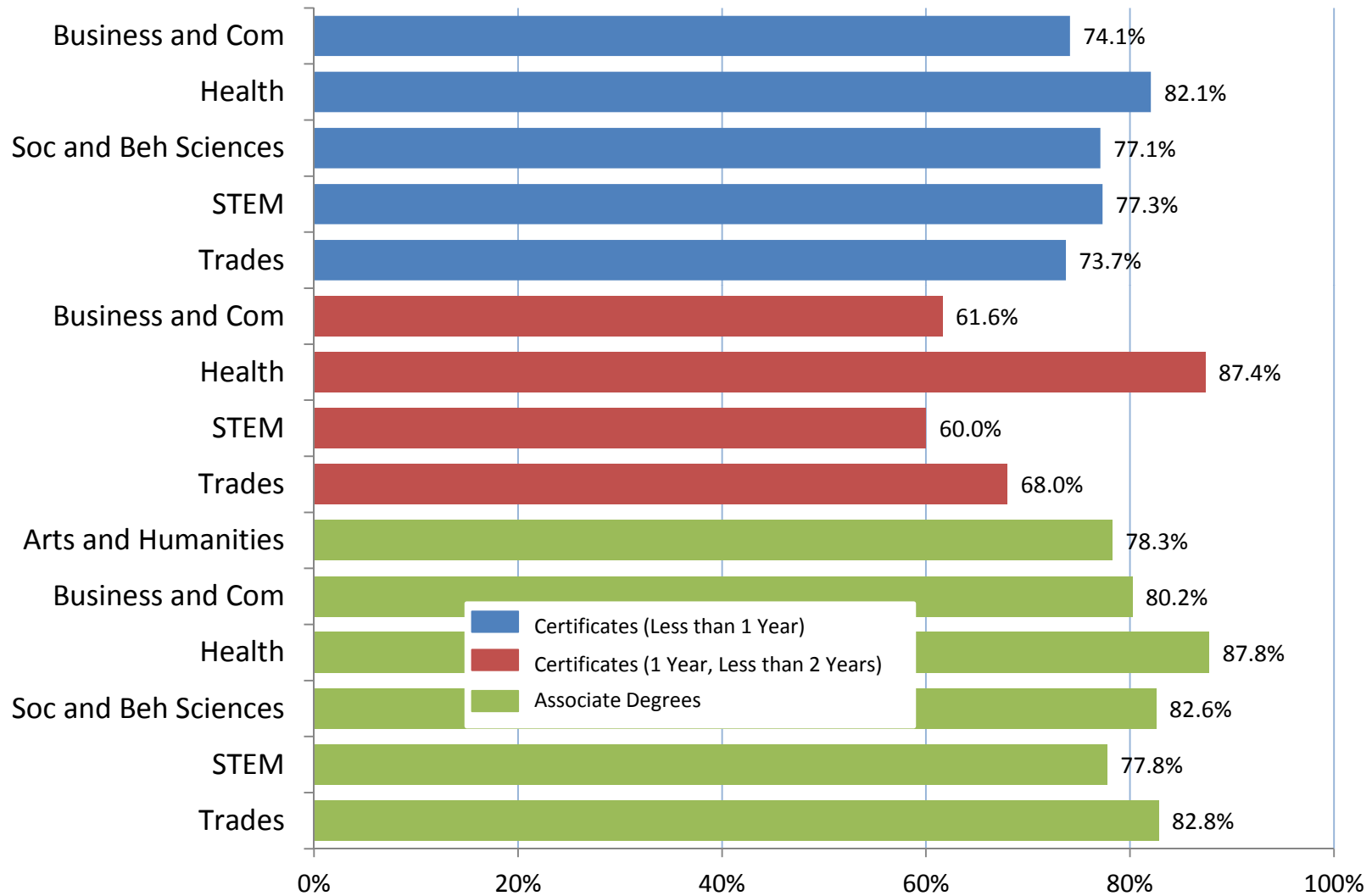
# Many Students Re-Enrolled Following Completion

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



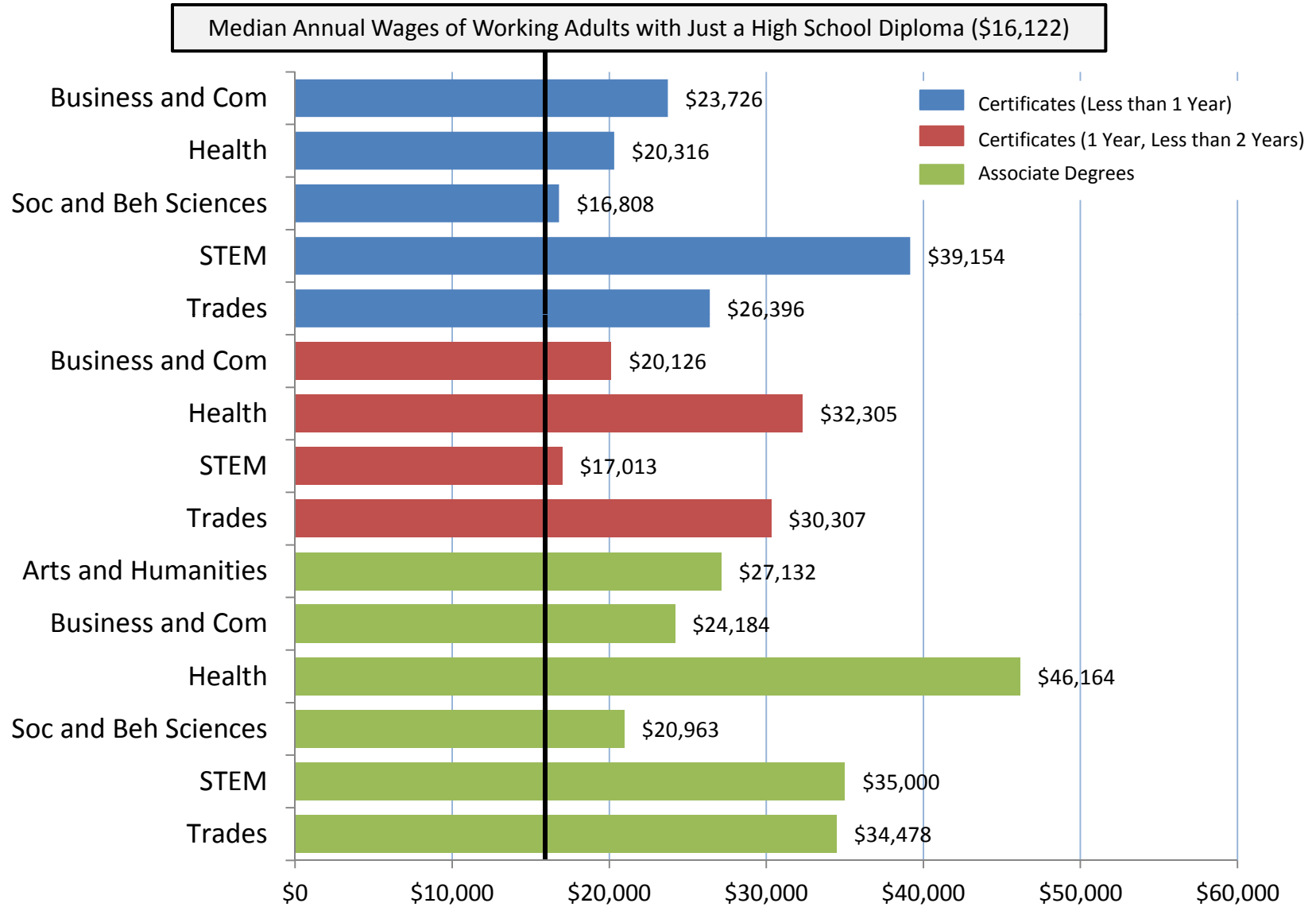
# Of Those Who Didn't Re-Enroll, How Many are Employed in State?

Percentage of 2005-06 Completers Who Employed the Following Year



# What are Their Median Annual Wages One Year After Completion?

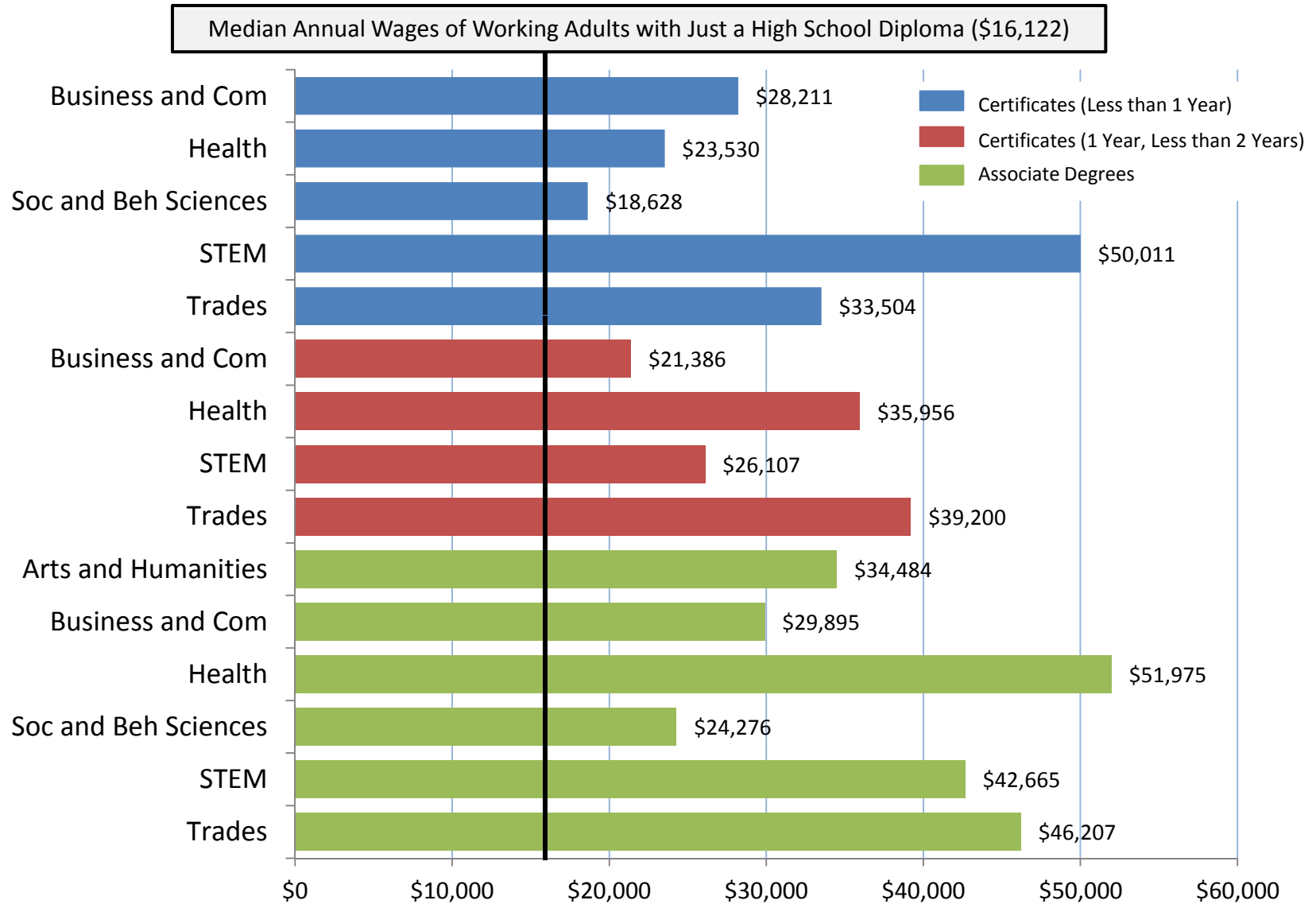
## Median Annual Wages of 2005-06 Completers the Following Year





# 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**

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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**

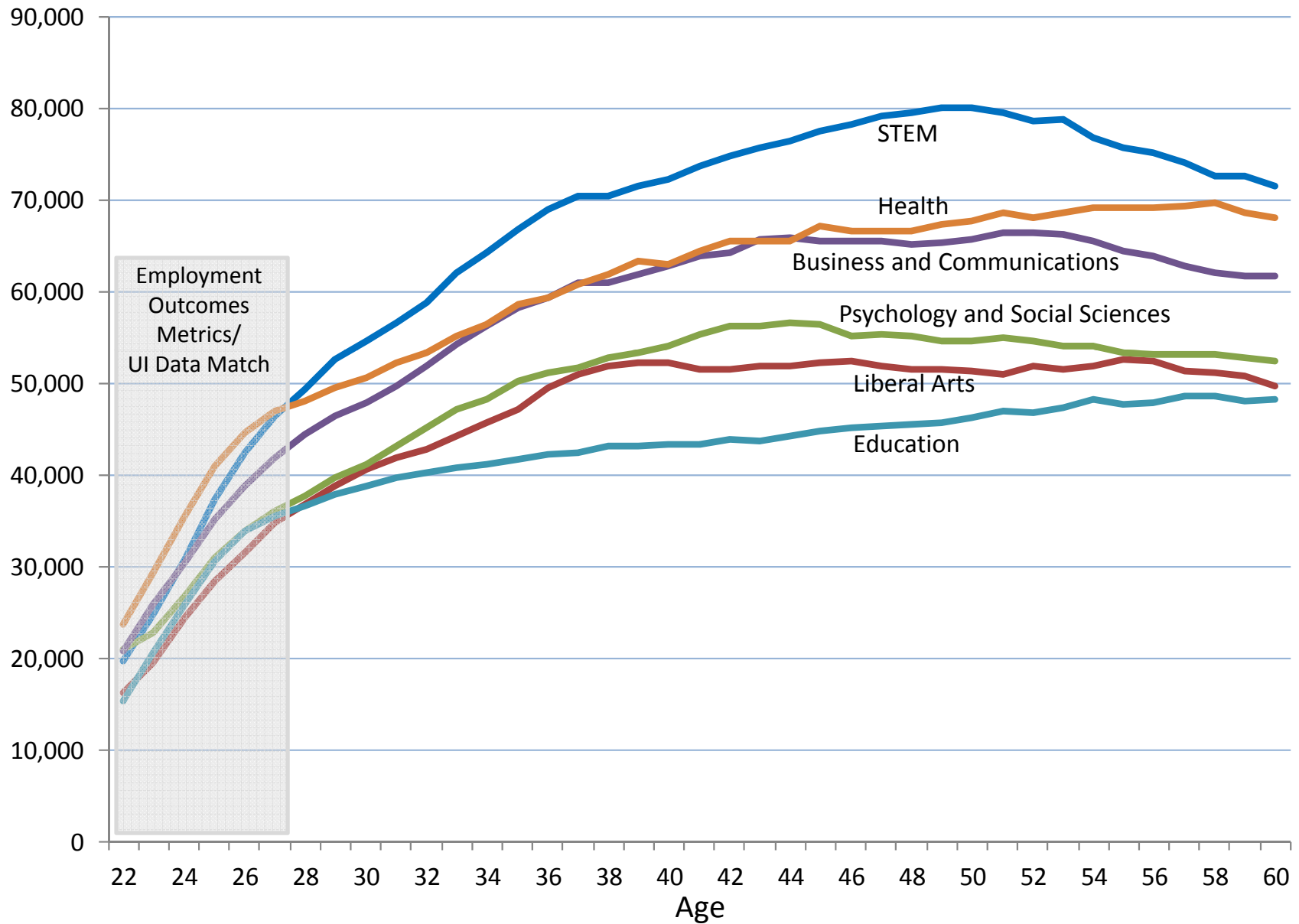
Medicaid	\$20,078,941
Corrections	\$5,628,969

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

# 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)



Source: U.S. Census Bureau, 2010 American Community Survey (Public Use Microdata Sample)

# 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

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