The Challenge: Educating and Preparing Students for a Changing World

Presented to the Legislative Finance Committee

December 8th, 2015

Council of University Presidents

Educate Locally to Compete Globally

- Test scores from the Program for International Student Assessment (PISA) are viewed by policymakers and analysts as an indicator of future economic competitiveness in the world.
- 2012 assessment results show U.S. teenagers average in reading and science, and below average in math compared to 64 other countries.
- Since the PISA test was first given in 2000,U.S. students' test scores have remained about the same
- "Our scores are stagnant. We are not seeing any improvement for our 15- year-olds. But our ranking is slipping because a lot of these other countries are improving." (Jack Buckley, Commissioner, National Center for Education Statistics)

International Students Advance While US Students' Scores Do Not Improve

National Center for Education Statistics
Average scores of 15-year-old students on PISA assessment by education system: 2012

	System	Math
	OECD average	**494**
1	Shanghai-China	613
2	Singapore	573
3	Hong Kong-China	561
4	Chinese Taipei	560
5	Korea, Republic of	554
6	Macao-China	538
7	Japan	536
8	Liechtenstein	535
9	Switzerland	531
10	Netherlands	523
11	Estonia	521
12	Finland	519
13	Canada	518
14	Poland	518
15	Belgium	515
16	Germany	514
17	Vietnam	511
18	Austria	506
19	Australia	504
20	Ireland	501
21	Slovenia	501
22	Denmark	500
23	New Zealand	500
24	Czech Republic	499
25	France	495
26	United Kingdom	494
27	Iceland	493
28	Latvia	491
29	Luxembourg	490
30	Norway	489
31	Portugal	487
32	Italy	485
33	Spain	484
34	Russian Federation	482
35	Slovak Republic	482
36	**United States**	**481**

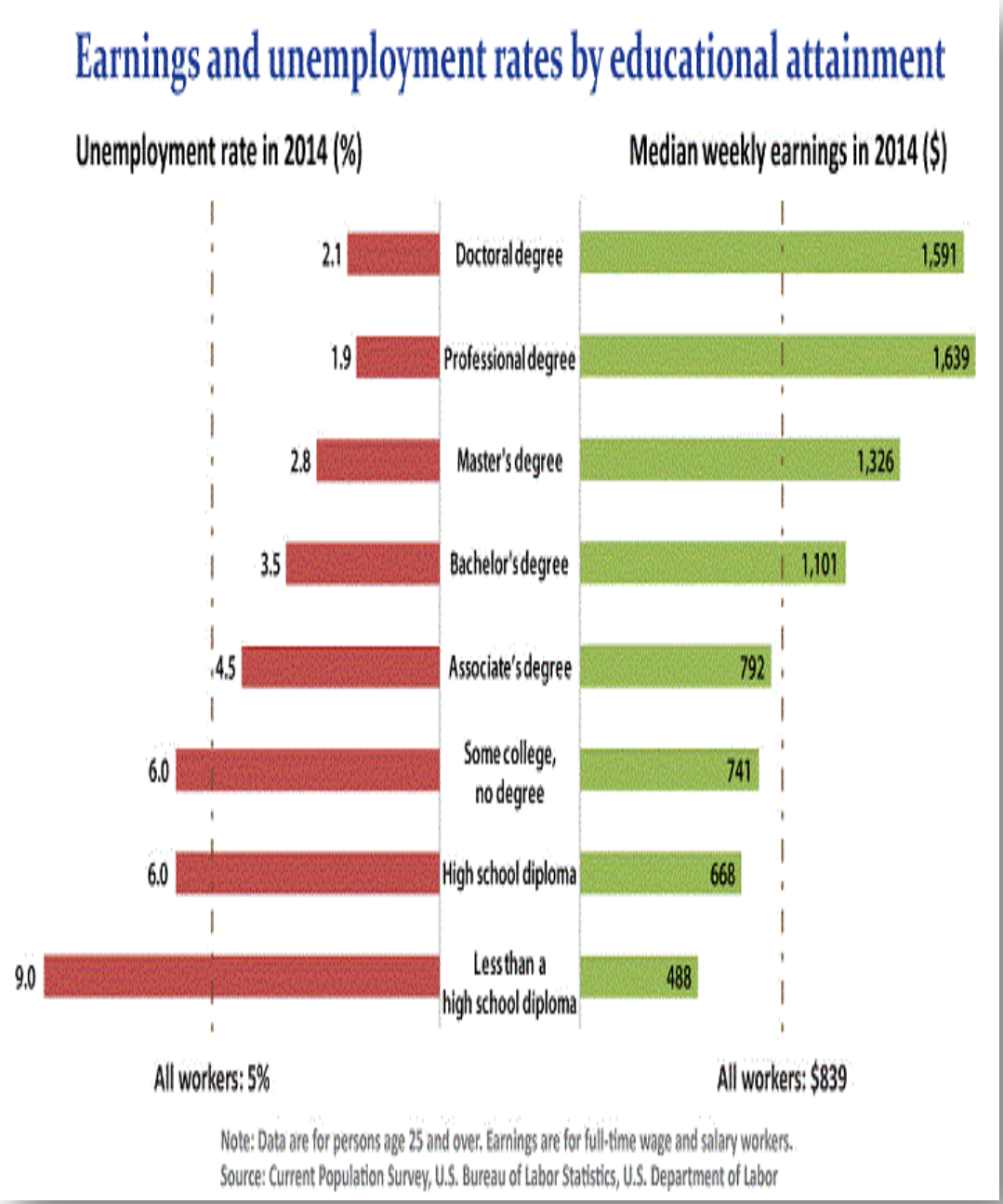
System	Literacy
OECD average	**496**
Shanghai-China	570
Hong Kong-China	545
Singapore	542
Japan	538
Korea, Republic of	536
Finland	524
Ireland	523
Canada	523
Chinese Taipei	523
Poland	518
Estonia	516
Liechtenstein	516
New Zealand	512
Australia	512
Netherlands	511
Switzerland	509
Macao-China	509
Belgium	509
Vietnam	508
Germany	508
France	505
Norway	504
United Kingdom	499
United States	**498**

System	Science
OECD average	**501**
Shanghai-China	580
Hong Kong-China	555
Singapore	551
Japan	547
Finland	545
Estonia	541
Korea, Republic of	538
Vietnam	528
Poland	526
Canada	525
Liechtenstein	525
Germany	524
Chinese Taipei	523
Netherlands	522
Ireland	522
Australia	521
Macao-China	521
New Zealand	516
Switzerland	515
Slovenia	514
United Kingdom	514
Czech Republic	508
Austria	506
Belgium	505
Latvia	502
France	499
Denmark	498
United States	**497**

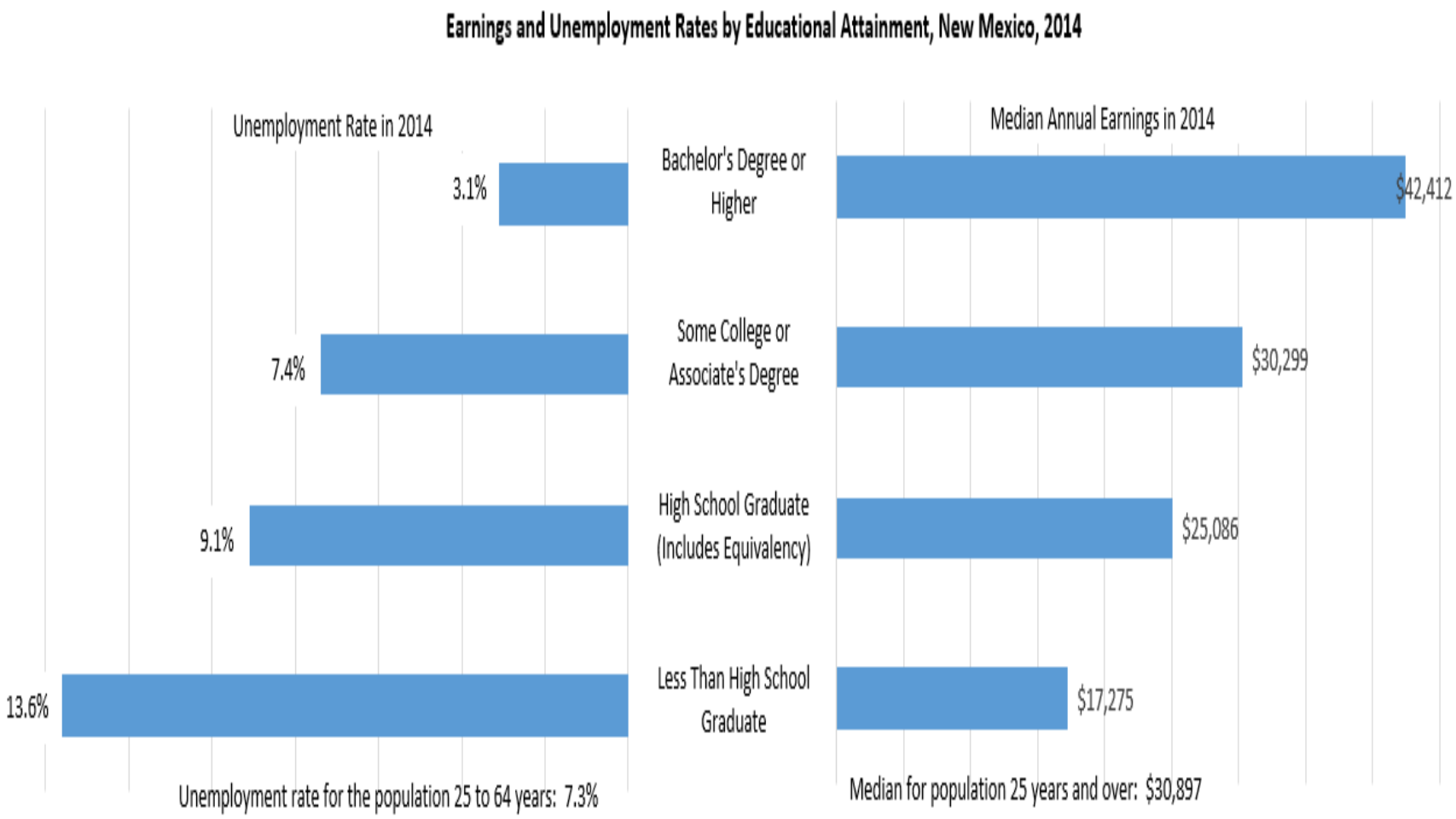
PISA is an international assessment that measures 15-year-old students in reading, math, and science literacy every three years. PISA is coordinated by the Organization for Economic Cooperation and Development, and tests are conducted in the United States by the National Center for Educational Statistics.

2014 US Workforce: The More You Learn The More You Earn

- Earnings increase and unemployment decreases with additional years of education.
- Employers are more likely to hire, invest in and promote college graduates.



New Mexico's Workforce

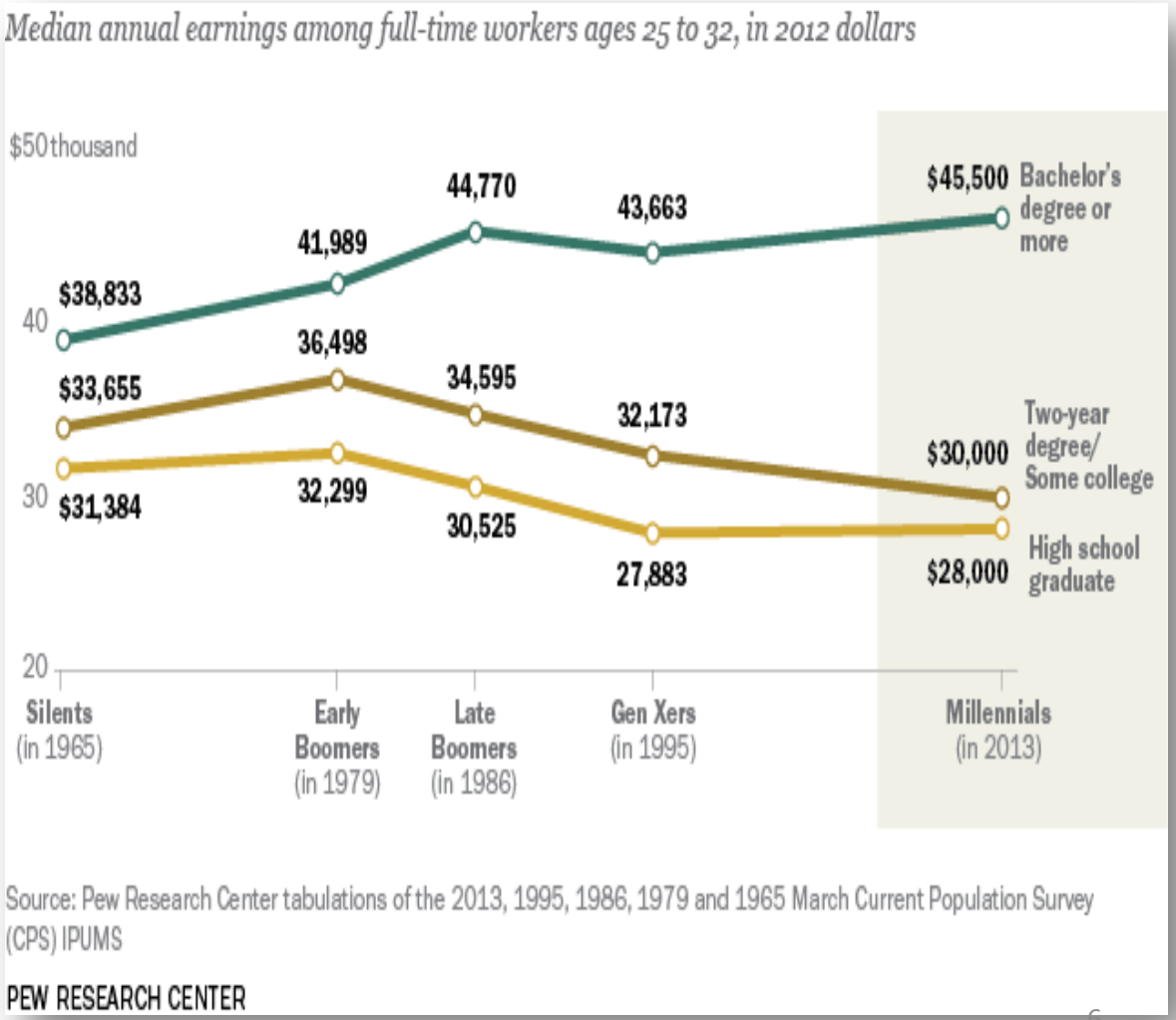


Source: U.S. Census Bureau, American Community Sruvey, 2014 1-Year Estimates, Table S2301: Employment Status and Table S1501: Educational Attainment

Note: Median annual earnings are for the population 25 years and over with earnings. The unemployment rate is for the population 25 to 64 years.

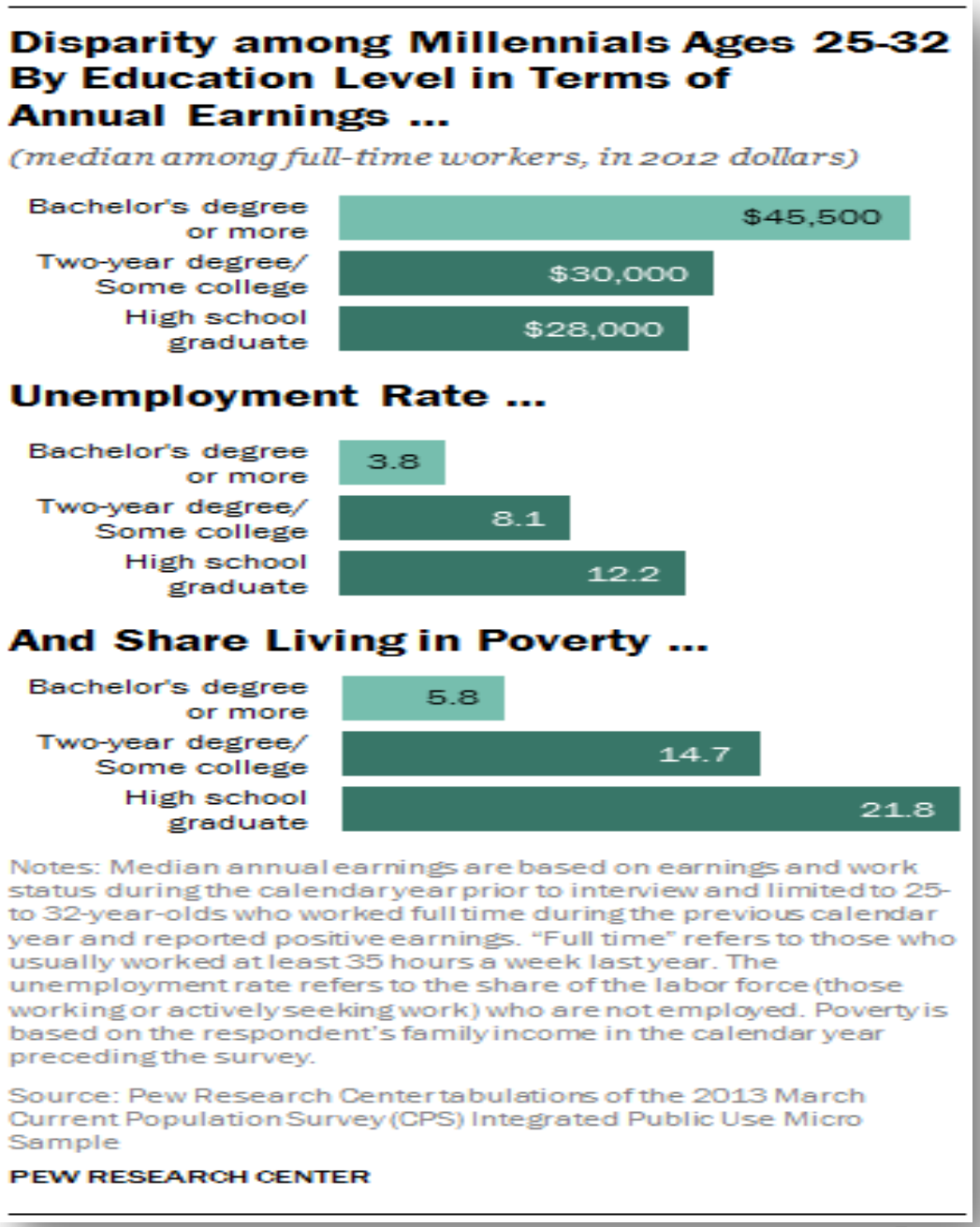
Today's Bachelor's Degree is Worth More Than in Previous Generations

- Average earning levels between young adults with and without a Bachelor's degree has stretched to it's widest gap in 50 years.
- For the "Silents" generation born between 1925 and 1942, a Bachelor's degree resulted in 15% more annual income than a two-year degree.
- For the Millennial generation that difference has ballooned to more than 50%.



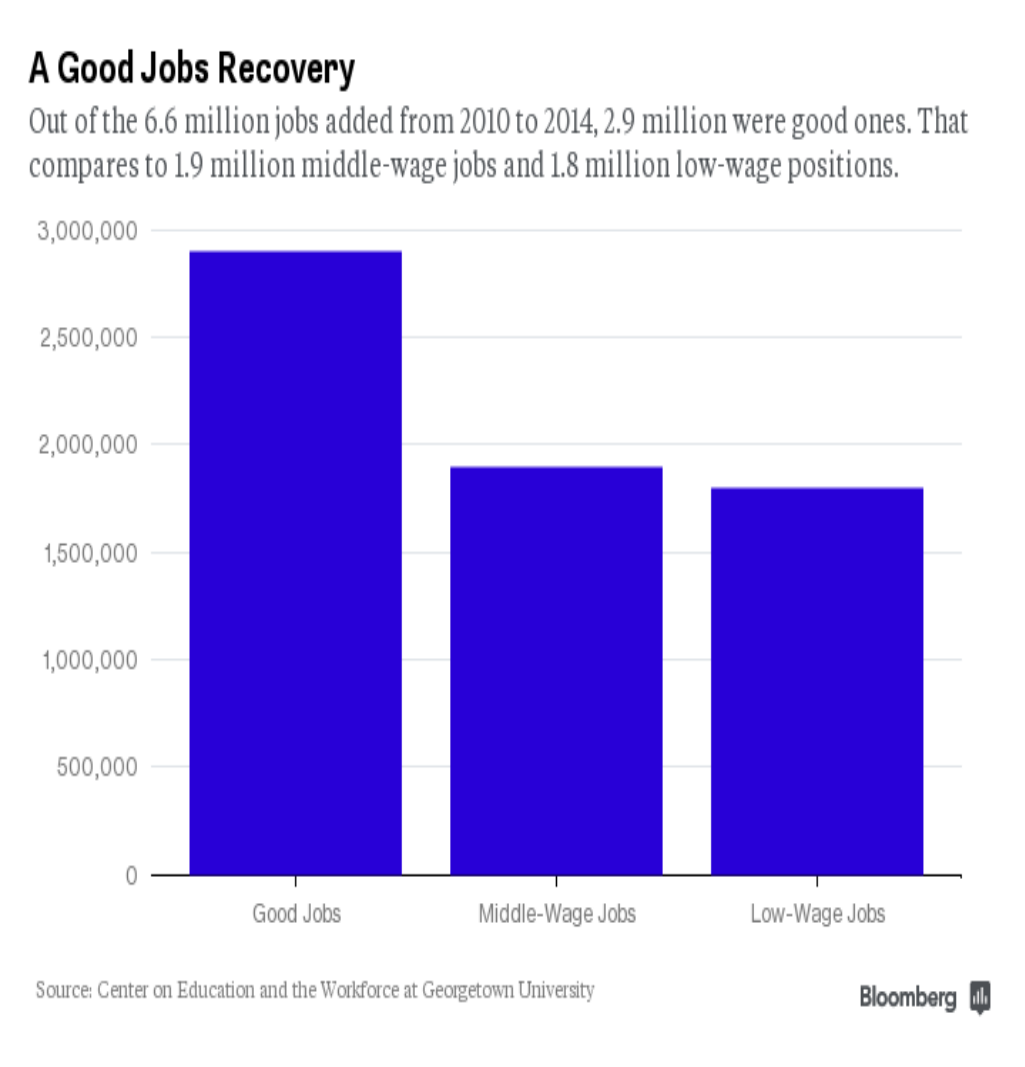
Bachelor's Degrees: A Great Return on Investment

- College-educated Millennials earn more and have lower unemployment and poverty rates than their less-educated peers.
- College graduates are more likely to be involved citizens.
- College graduates contribute far more in tax revenues and require far less in government assistance.
- College graduates place less of a burden on the health care system.
- College educated parents spend more time with their children and are more attentive to their developmental needs.
- Healthy and growing economies need college graduates.



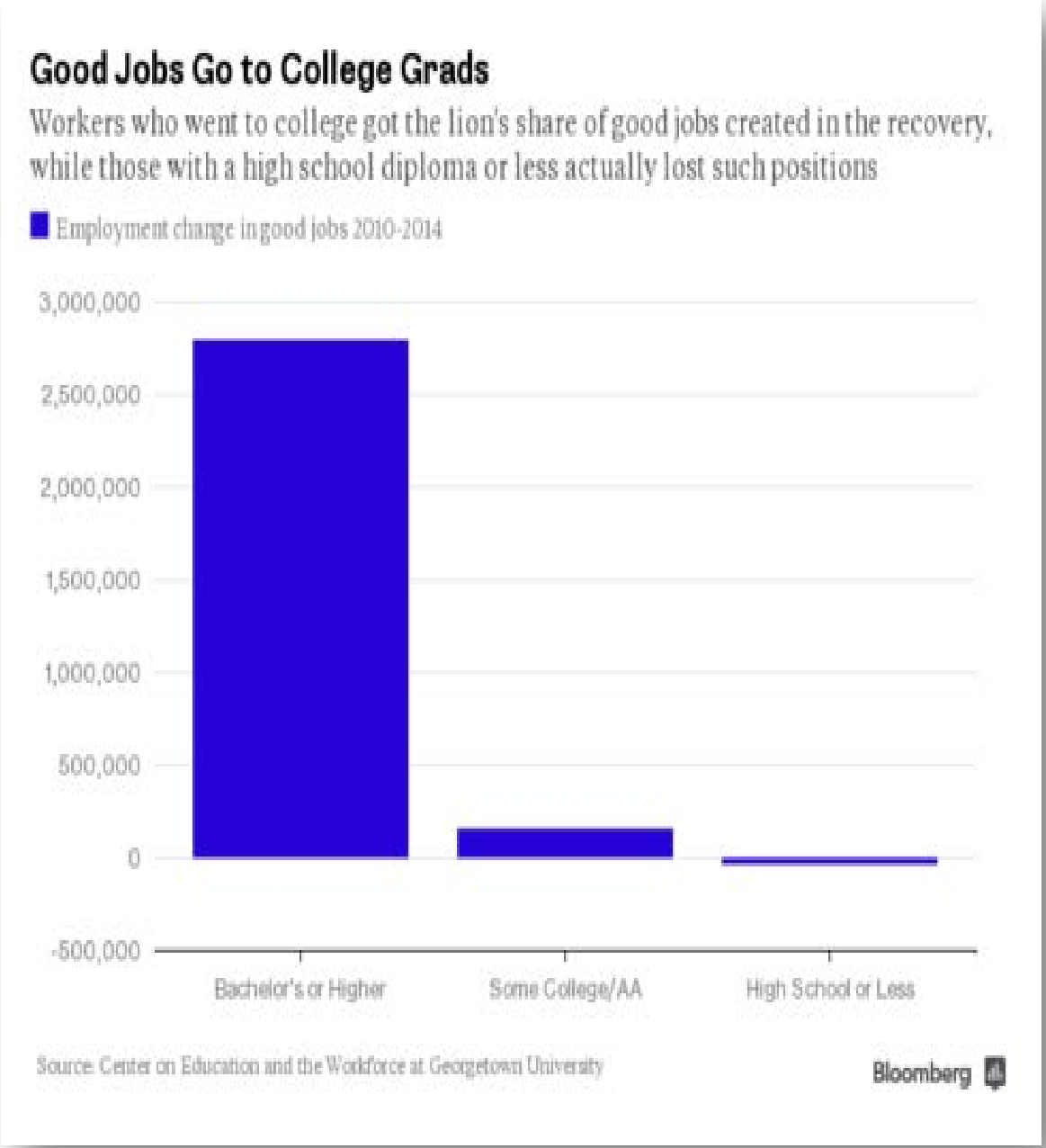
In Economic Recovery, *Good* Jobs Have Grown the Most

- "Good Jobs are Back: College Graduates are First in Line." A report from Georgetown University reveals that between 2010-20214 the economy added 6.6 million new jobs and the majority—2.9 million—are "good jobs." These are jobs that pay more than $53,000 per year, are full-time, and offer health insurance and retirement benefits.
- Middle-wage jobs pay $32,000-$53,000 per year. These job opportunities remain 900,000 below their pre-recession employment levels.
- Low-wage jobs offer less than $32,000 per year. They have recovered from recession job losses—but, are still growing at a slower rate than good jobs.

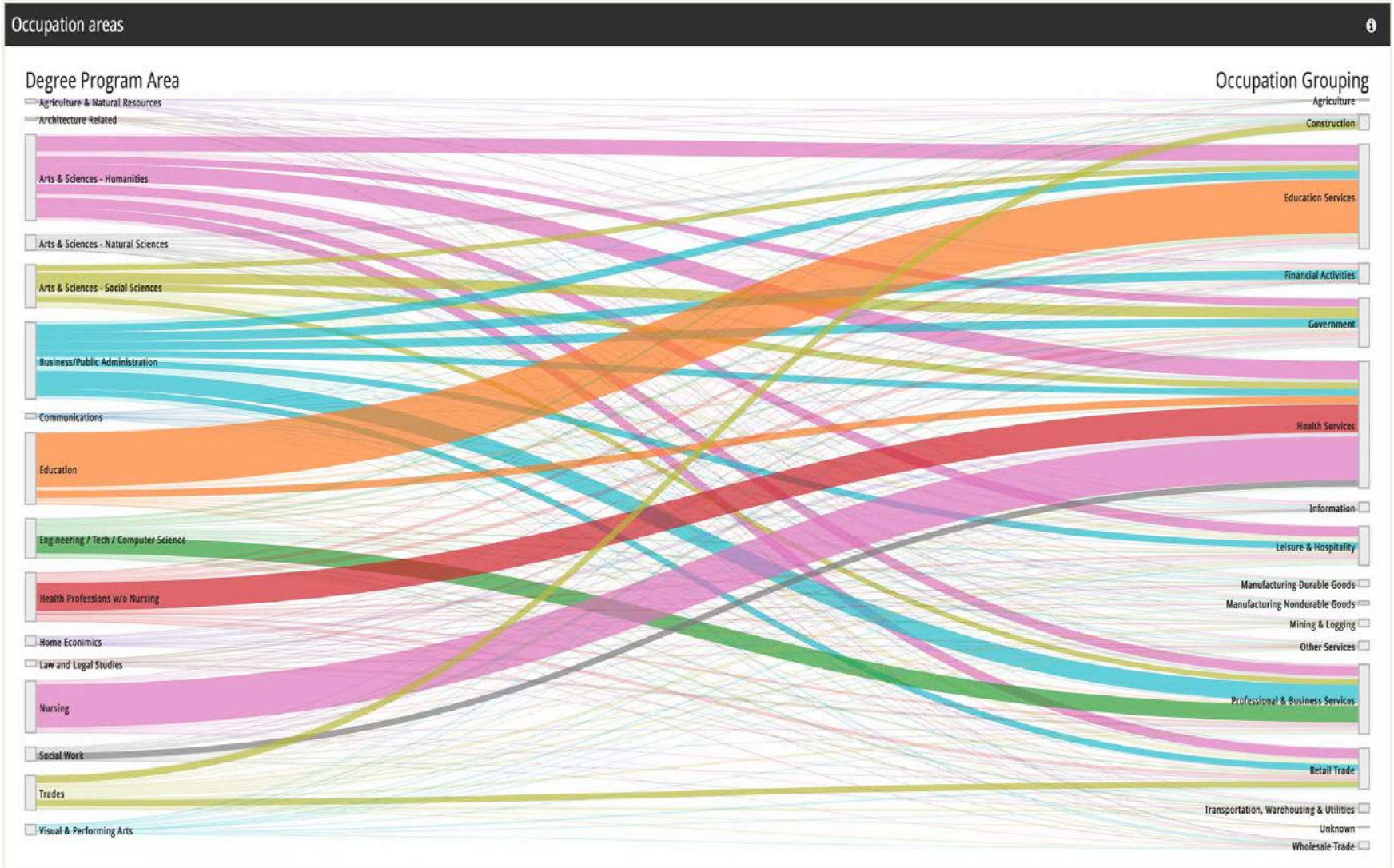


Since the Recovery, 97% of “Good Jobs” have Gone to People with Bachelor’s Degrees

- Of the 2.9 million "good jobs" created during the recovery from 2010 to 2014, 2.8 million — or 97 percent — have gone to workers with at least a bachelor's degree.
- "The numbers are clear: postsecondary education is important for gaining access to job opportunities in the current economy," researchers Anthony Carnevale, Tamara Jayasundera and Artem Gulish wrote in the report. "Job seekers with bachelor's degrees or higher have the best odds of securing good jobs."
- Having a college degree also offers a certain level of job security during turbulent economic times, according to the Georgetown report. Between 2008 and 2010, college-educated workers saw fewer job losses than workers without degrees, and they have seen greater job gains since that time, the report states.

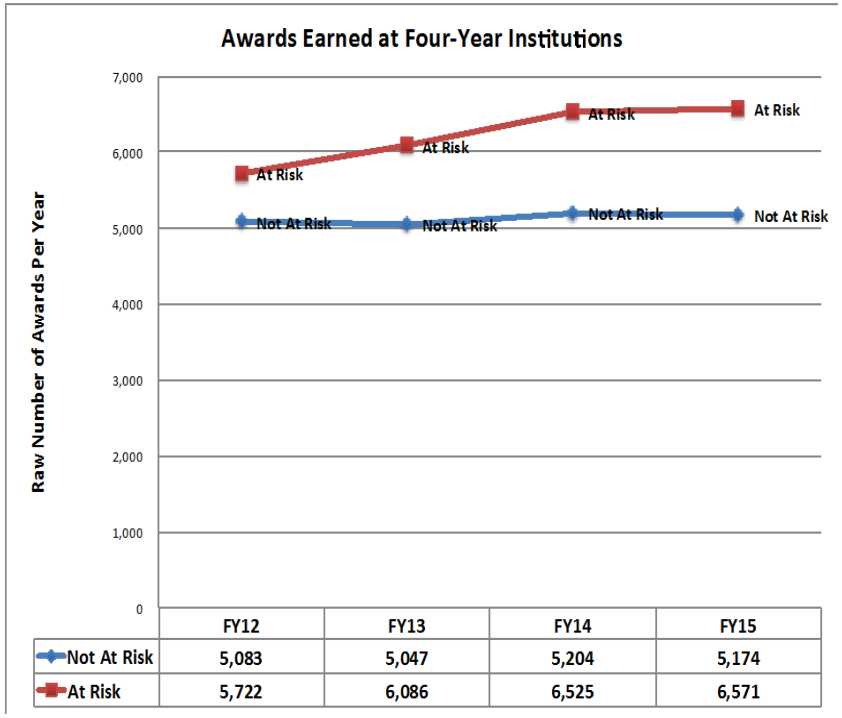


Education Offers Career Choices – It's Not a Straight Line
What Matters Most is Getting That Degree

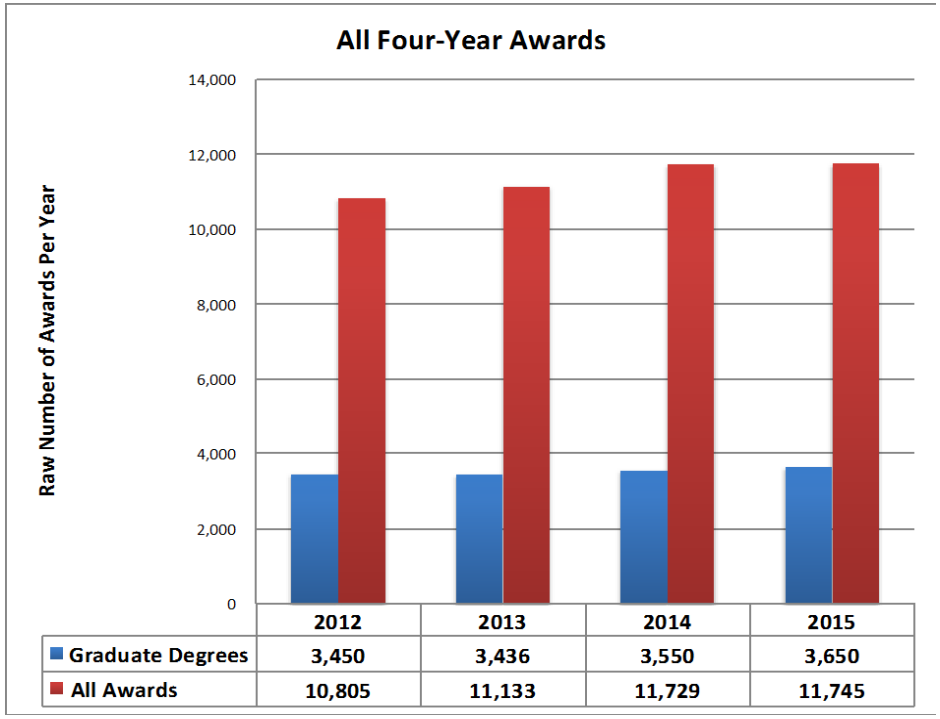


Data Source — New Mexico Department of Work Force Solutions - Unemployment Insurance - Wage Record Data

University Student Success Efforts Are Yielding Positive Results



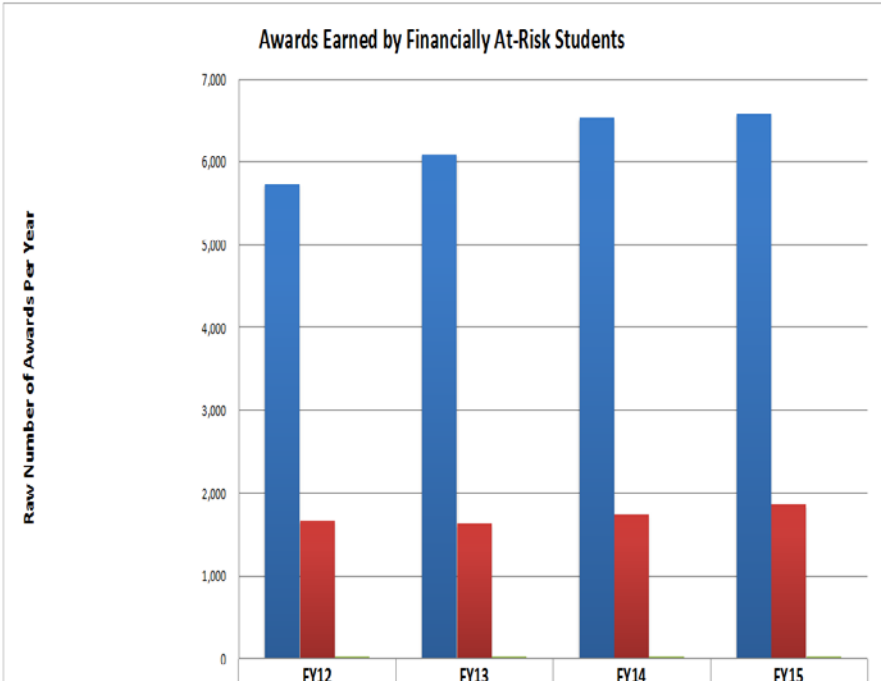
	FY12	FY13	FY14	FY15
Not At Risk	5,083	5,047	5,204	5,174
At Risk	5,722	6,086	6,525	6,571



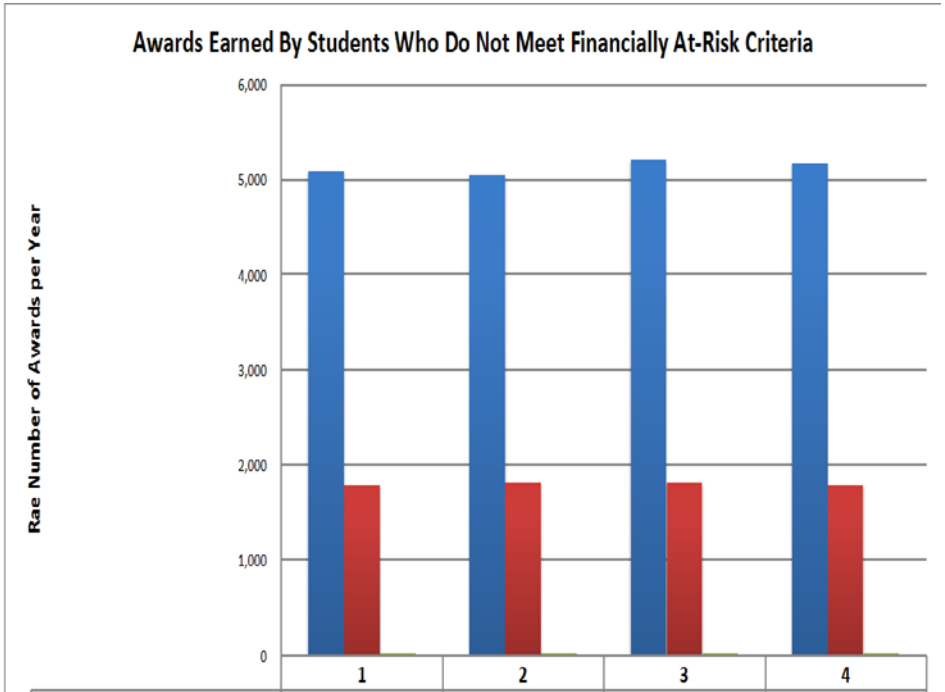
	2012	2013	2014	2015
Graduate Degrees	3,450	3,436	3,550	3,650
All Awards	10,805	11,133	11,729	11,745

Students at financial risk are outpacing all others in earning degrees.

Bachelor's and Master's Degree Attainment Among Financially At- Risk Students Steadily Climbing

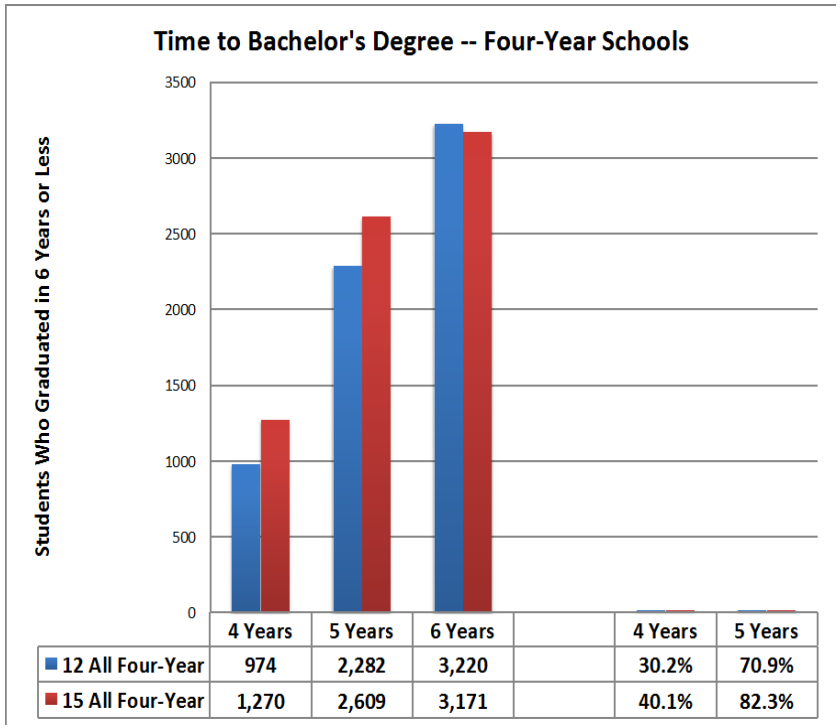


	FY12	FY13	FY14	FY15
Total At RIsk	5,722	6,086	6,525	6,571
Graduate Degrees At Risk	1,661	1,626	1,739	1,860
Graduate Degrees as % of Total	29%	27%	27%	28%

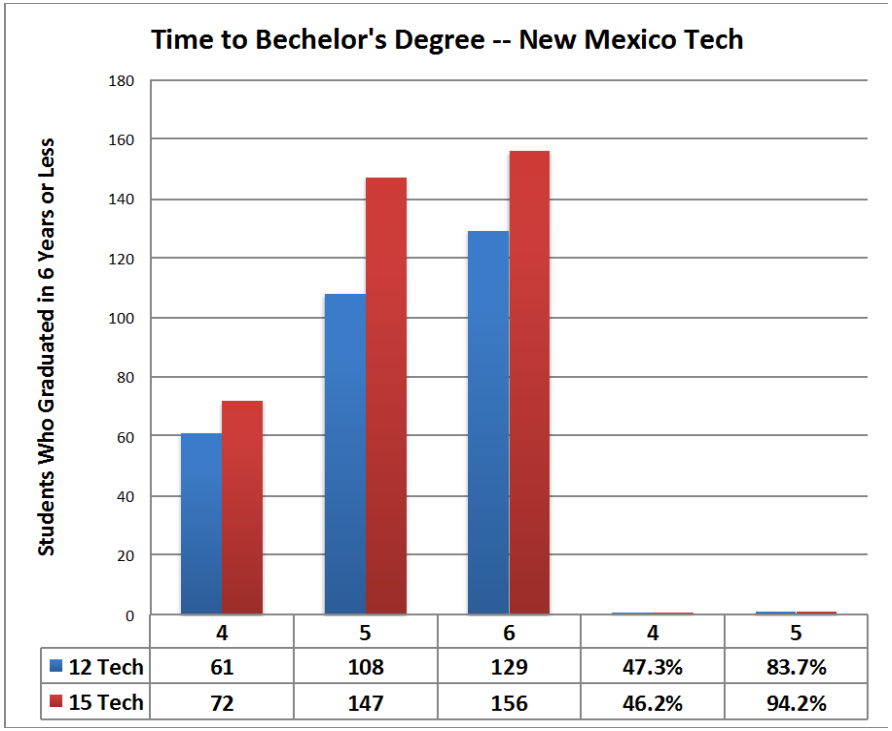


	1	2	3	4
Total Not At RIsk	5,083	5,047	5,204	5,174
Graduate Degrees Not At Risk	1,789	1,810	1,811	1,790
Graduate Degrees as % of Total	35%	36%	35%	35%

Efforts to Improve Time-to-Degree Are Paying Off



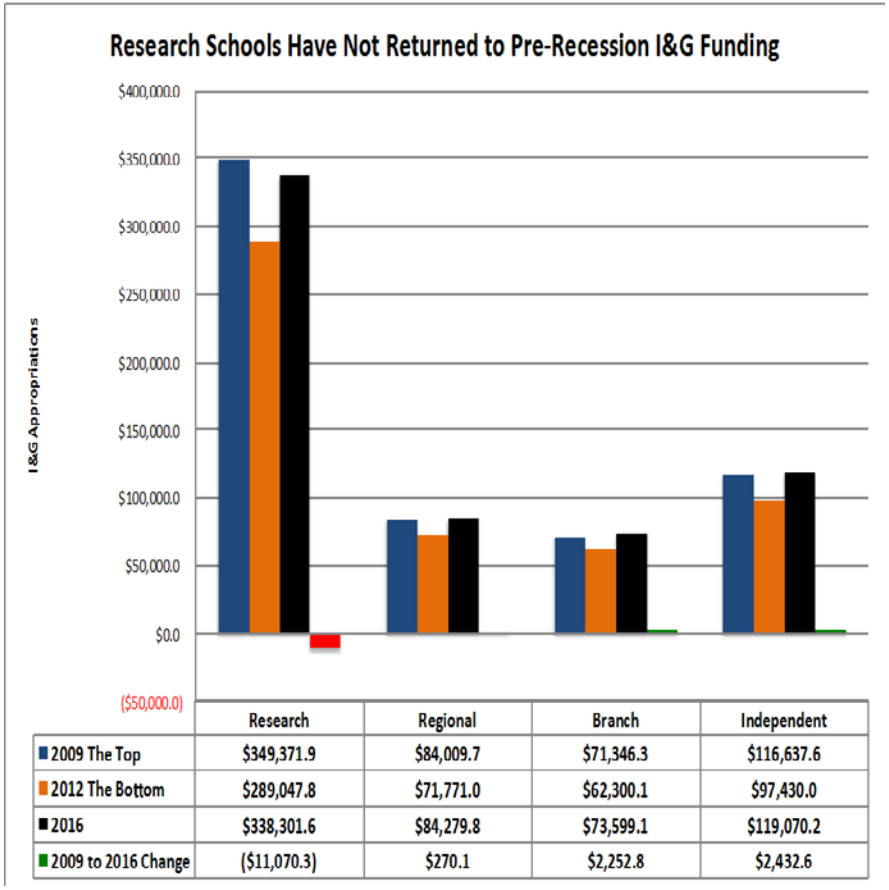
	4 Years	5 Years	6 Years		4 Years	5 Years
12 All Four-Year	974	2,282	3,220		30.2%	70.9%
15 All Four-Year	1,270	2,609	3,171		40.1%	82.3%



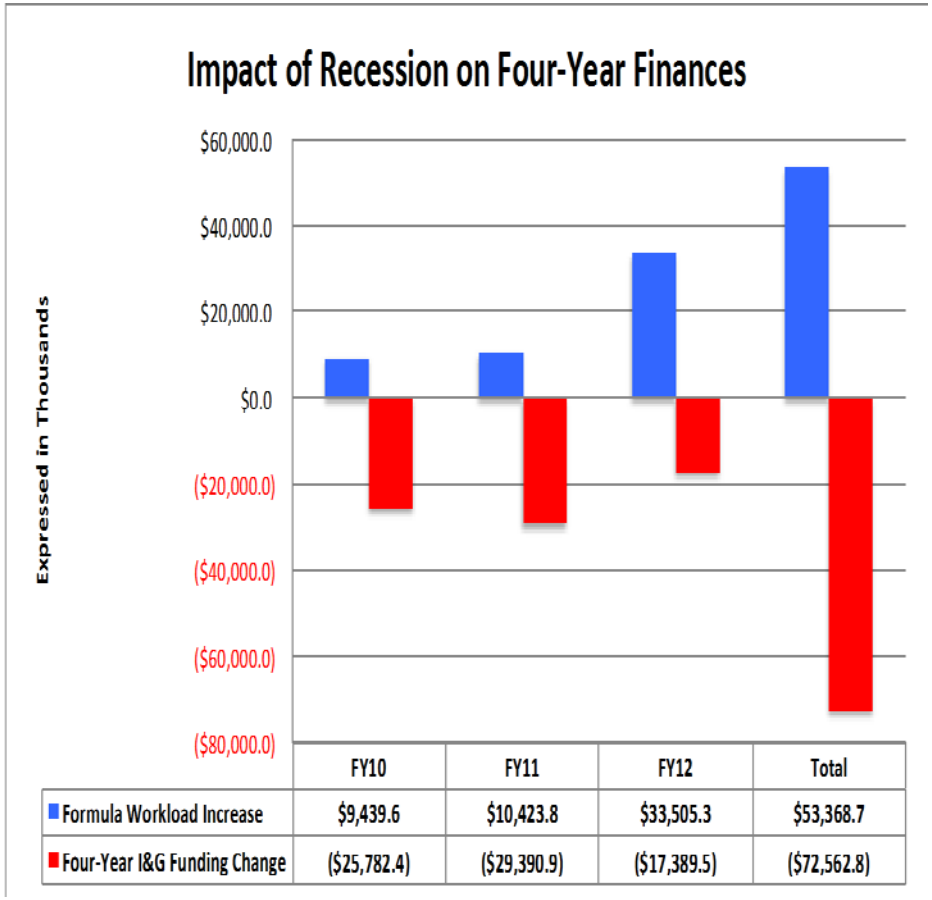
	4	5	6	4	5
12 Tech	61	108	129	47.3%	83.7%
15 Tech	72	147	156	46.2%	94.2%

Universities have seen an 11 percent increase in the number of students completing bachelor's degrees in five years from FY 2012 to FY 2015. Over 82 percent of students completing within the 6 year time frame graduated in five years, an increase of nearly 12 percent.

The Recession Hit Universities Particularly Hard



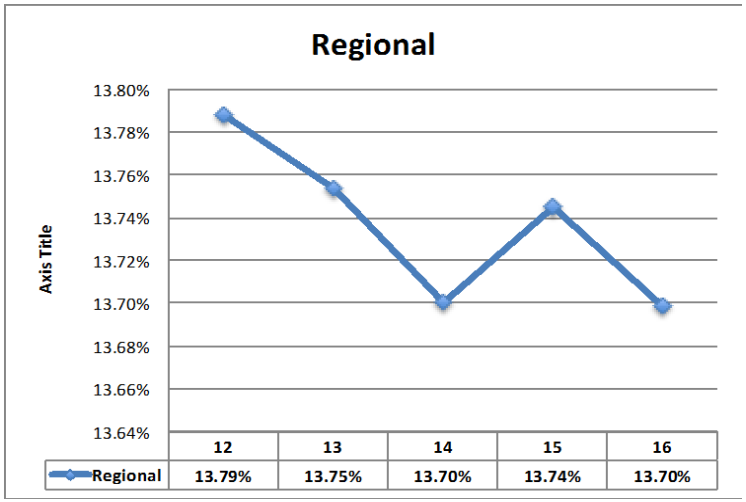
	Research	Regional	Branch	Independent
2009 The Top	$349,371.9	$84,009.7	$71,346.3	$116,637.6
2012 The Bottom	$289,047.8	$71,771.0	$62,300.1	$97,430.0
2016	$338,301.6	$84,279.8	$73,599.1	$119,070.2
2009 to 2016 Change	($11,070.3)	$270.1	$2,252.8	$2,432.6

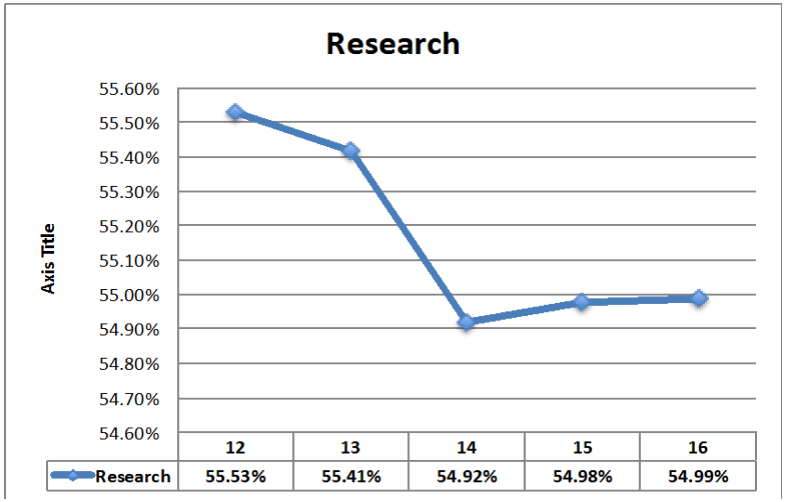


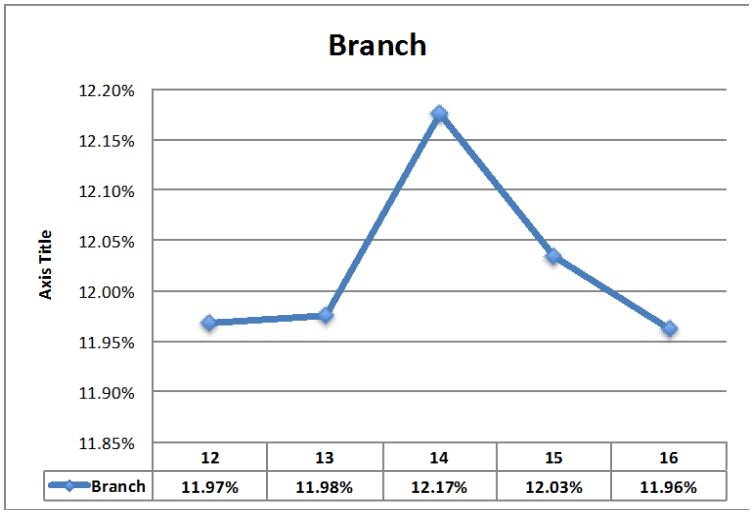
	FY10	FY11	FY12	Total
Formula Workload Increase	$9,439.6	$10,423.8	$33,505.3	$53,368.7
Four-Year I&G Funding Change	($25,782.4)	($29,390.9)	($17,389.5)	($72,562.8)

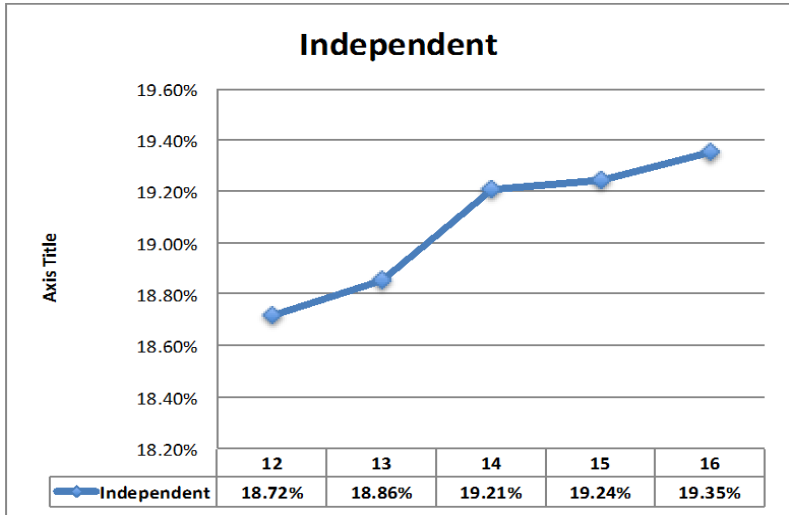
In three years, instructional funding to the state's universities was reduced by $72.5 million while concurrently serving more students at a cost of $53.4 million. The combined effect was a net $125.9 million impact. Within higher education, three of the four sectors have returned to FY 2009 funding levels. The exception is the state's research institutions, which are still $11 million below their initial FY 2009 funded level.

After the Recession University Sector Shares of I&G Funding Continued to Decline Under Performance Funding

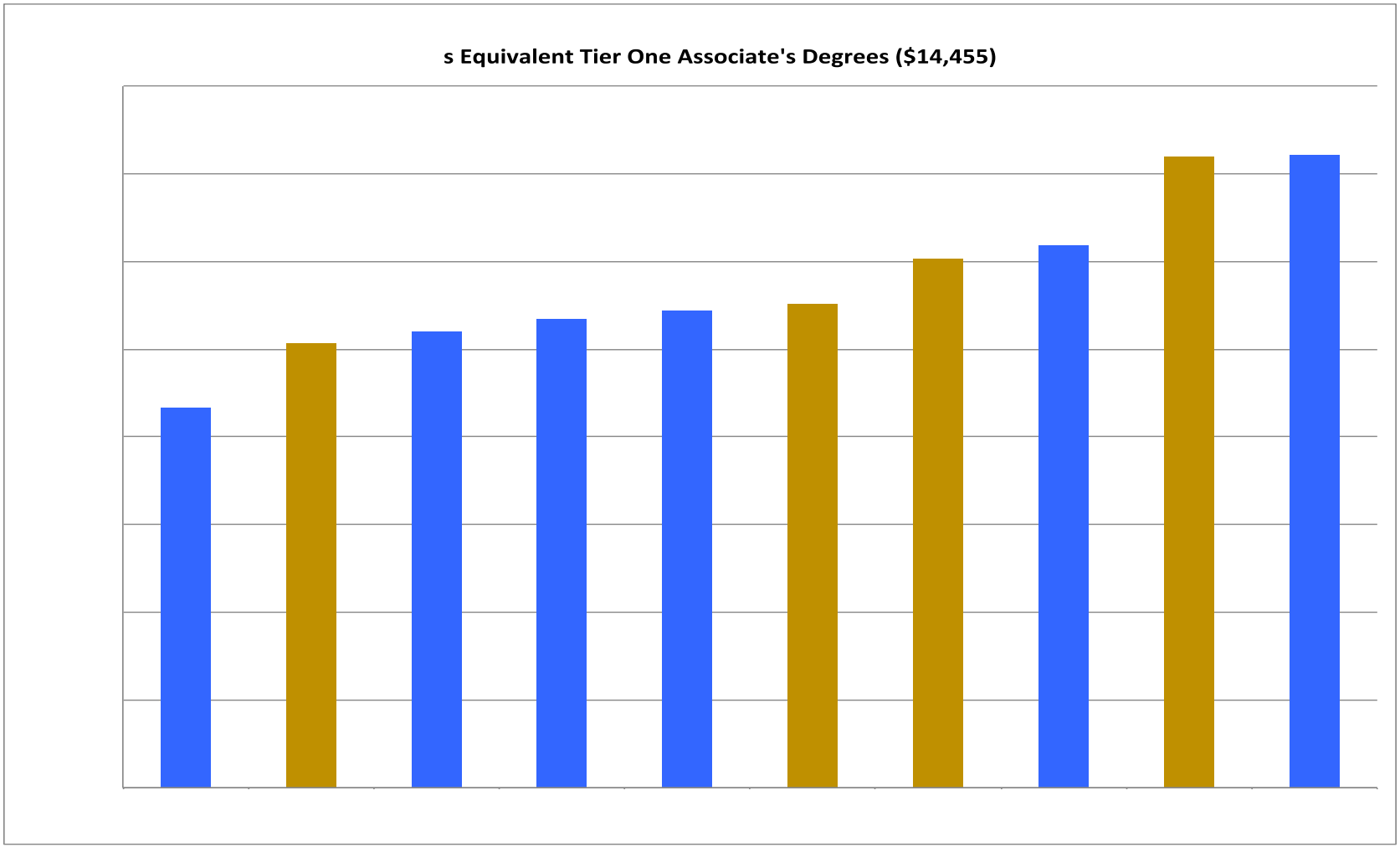






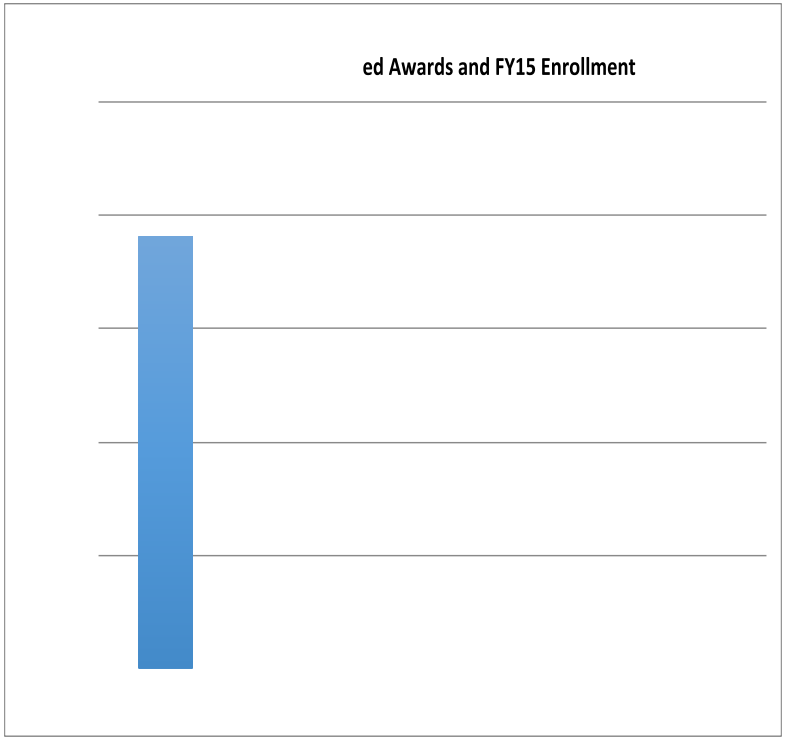


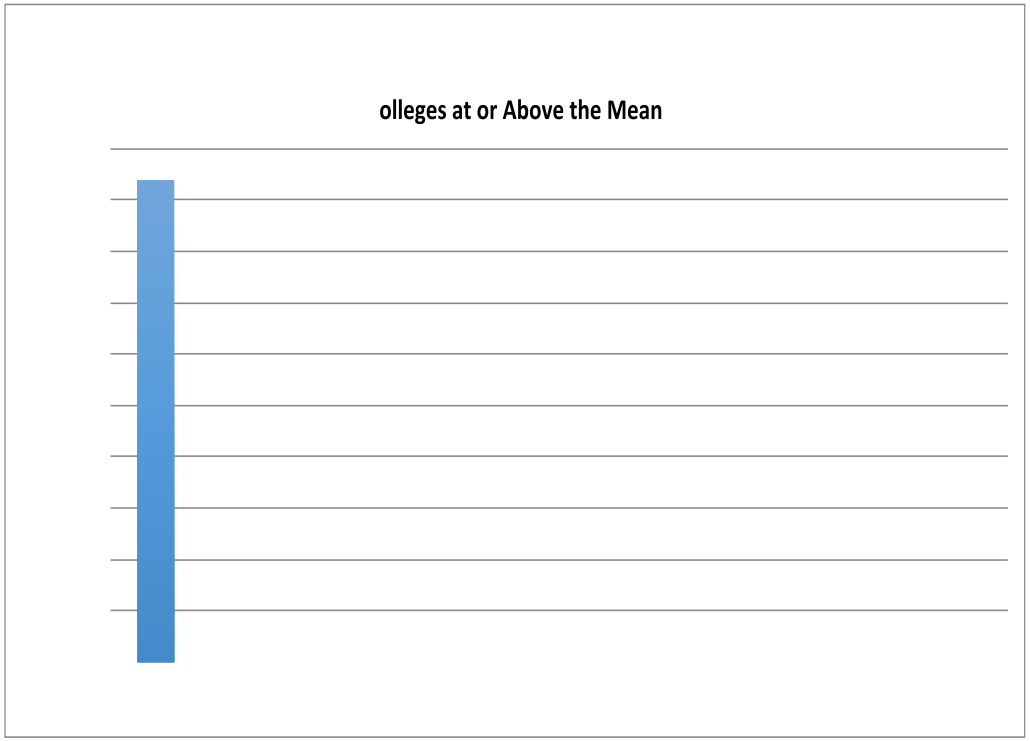
Comparative Analysis Shows Cost Effectiveness Against an External Standard



With the advent of performance-based funding, measuring productivity is a topic of growing interest in higher education finance and literature. This chart shows the relative cost of producing Tier 1 Associate's degrees by dividing the total value of degree production by the Tier One Associate's degree value to determine the equivalent numbers of degrees produced and then dividing I&G funds by the number of Associate degree equivalents.

Measuring Enrollment-Based Productivity





The two essential inputs in higher education are students and funding. These charts look at degree production relative to enrollment. Using equivalent Associate's degrees as the outcome, FTE enrollment becomes the divisor to determine relative levels of production per student.

Questions?