National Center for Higher Education Management Systems

Realizing Kentucky's Educational Attainment Goal: A Look in the Rear View Mirror and Down the Road Ahead

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Realizing Kentucky's Educational Attainment Goal: A Look in the Rear View Mirror and Down the Road Ahead

In 1997, policymakers in Kentucky enacted perhaps the most sweeping higher education reform legislation of any state in the past two decades. Kentucky's Postsecondary Education Improvement Act (House Bill 1) has been heralded by many higher education leaders across the U.S. as one of the great success stories – a rare instance when a state's governor, legislators, higher education leaders, college and university presidents, and business leaders collectively aligned to implement policies that better serve the residents of the state. The legislation immediately kicked off an agenda for Kentucky's higher education enterprise that is built on the public good rather than the individual needs of colleges and universities.

While House Bill 1 contains thoughtful goals (differentiated by mission) specific to research universities, regional universities, and community and technical colleges, it is most admired for its deliberate attention to the quality of life of all Kentuckians. It recognizes that "the achievement of these goals will lead to the development of a society with a standard of living and quality of life that meets or exceeds the national average" and that they "will only be accomplished through increased educational attainment at all levels." It is not just education for education's sake, but the linkages between a more highly educated citizenry, economic prosperity, and better lives.

In the wake of House Bill 1, higher education leaders and stakeholders have diligently worked to implement more effective policies and to set specific targets for the higher education enterprise – in order to realize many of the broad goals identified in the legislation. In addition, a variety of accountability measures have been established at the system, sector, and institutional levels to ensure progress toward the overall goals. Many of the key measures have been revised and recalibrated through a series of three strategic plans led by the Kentucky Council on Postsecondary Education – *Key Indicators of Progress Toward Reform*, *Five Questions, One Mission*, and now *Stronger by Degrees*. But the unwavering goals that continue to guide nearly all of the strategic planning activities in Kentucky higher education are to substantially increase the education levels of working-age adults and increase the production rates of degrees and credentials; both to meet or exceed the national average and meet the future workforce/economic demands of the state.

Now more than halfway to the year 2020, it is important to pause and gauge the progress that Kentucky has made during the past decade, and the gains that need to be made between now and 2020 for Kentucky to realize its college attainment and degree production goals. This brief documents Kentucky's movement on a number of key indicators since 2000 and identifies the additional number of college degree-holders needed between now and 2020. While issues of college preparation, developmental education, retention of college students, and student learning (for example) are critical for Kentucky to reach its overall goals, this report focuses largely on measures directly associated with college completion, the educational attainment of the population, and the impact on the state's economy.

Kentucky's Progress Since 2000

Given the intentional brevity of this report, the many changes in (and additional) postsecondary policies and practices over the past decade are not documented – just several of the key outcomes associated with Kentucky's college attainment and production goals. With all of the efforts policymakers have poured into postsecondary education reform in Kentucky over the past decade, it would be a shame if progress was not reflected in return. It is fairly easy to set a strategic agenda, but much more difficult to carry it out. How has Kentucky fared since the passage of House Bill 1, and the subsequent persistent work among education leaders, policymakers, the state's postsecondary education coordinating board, and institutional presidents and staffs?

Since the year 2000, Kentucky's college attainment rate (associate degrees and higher) among working-aged adults 25 to 64 years old has improved by six percentage points – from 24.5 to 30.5 percent. While Kentucky still lags many states on this measure (currently ranked 45th), it has moved two positions closer to the U.S. average, and the actual percentage change from 2000 to 2009 was the largest of any state in the nation (see Figure 1).

More remarkable, the percentage of college degree-holders among the younger adults – those most likely impacted by many of the recent reform efforts – has improved by more than six percentage points (from 27.3 to 33.7 percent). The most notable change with respect to this age-group is the change in Kentucky's state ranking from 44th in 2000 to 36th in 2009. Over this time period, Kentucky moved more positions in the positive direction than any state in the U.S. Adults in this age-group represent the future of the state's workforce, and are the target population of the college attainment goal set forth by the Council on Postsecondary Education's most recent strategic plan, *Stronger by Degrees*. These data, along with those in Figure 5 below, are displayed for all 50 states in the Appendix A.

Figure 1. **Change in the Percentage of Adults with Associate Degrees and Higher from 2000 to 2009**

College Attainment and Completion Metrics	Kentucky Change from 2000 to 2009					
	Percent Change	Change Ranked Among States	2000	2009	State Rank in 2000	State Rank in 2009
Adults Aged 25 to 64 with College Degrees (Associate and Higher)	24.4	1	24.5	30.5	47	45
Adults Aged 25 to 44 with College Degrees (Associate and Higher)	23.6	2	27.3	33.7	44	36

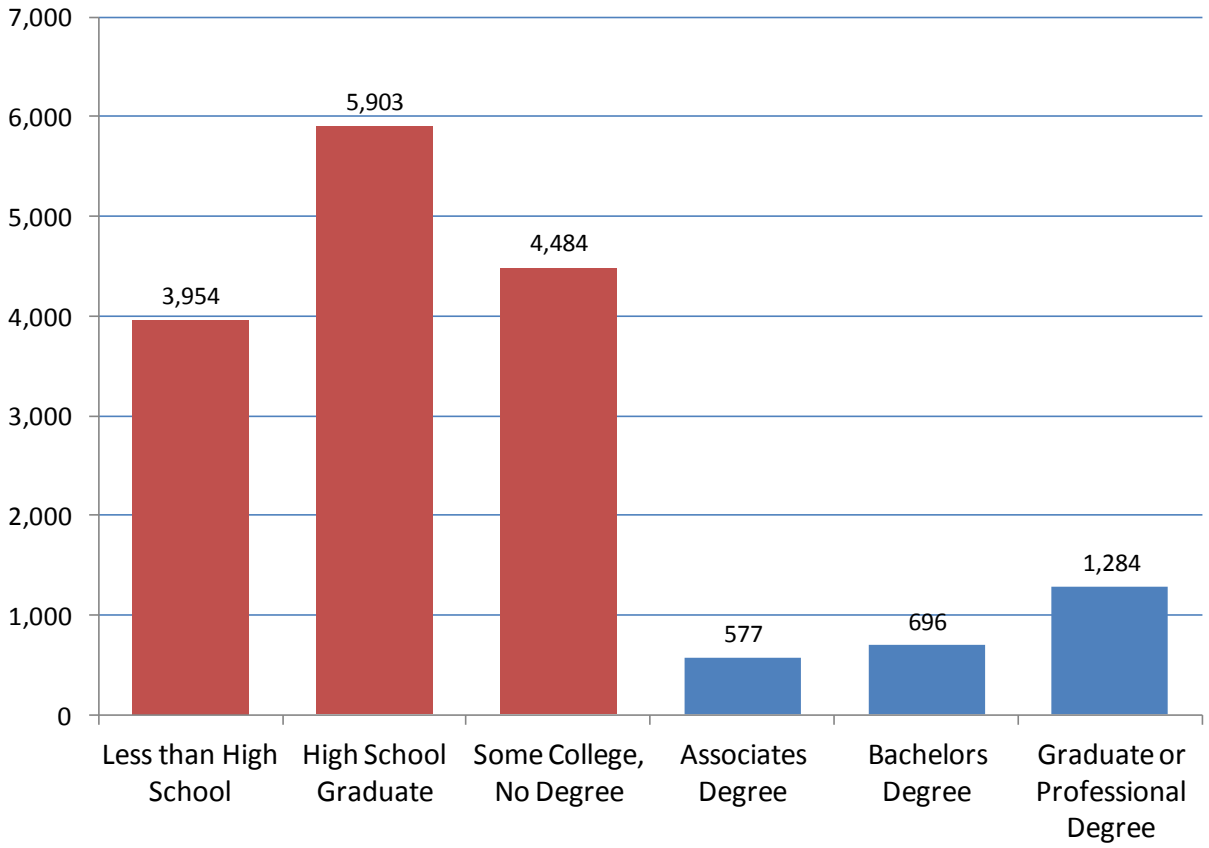
Source: U.S. Census Bureau; 2009 American Community Survey (Public Use Microdata Sample), 2000 Decennial Census

While these movements are impressive, the accumulation of educational capital in states is more complicated than just improving the state's education enterprise. Ultimately, there are three ways to increase educational attainment in a state: importation, attrition, and degree production. More specifically, the state imports more college-educated residents than it exports, undereducated adults age out of the target age-group, and the state increases college degree production. A state can fare well on the first two of these – with little or no attention paid to its postsecondary enterprise – while substantially improving its levels of educational attainment.

Several states – e.g. Colorado, Massachusetts, and Washington – are in enviable positions because of their ability to import substantially more college-educated residents from out-of-state than they export. This phenomenon leads to fairly high levels of educational attainment regardless of the performance of their systems of postsecondary education. This is largely due to strong economic conditions that attract highly-skilled workers from out-of-state, as well as (in some cases) quality of life conditions that are deemed attractive among those considering relocation.

Figure 2 displays the annual net migration of residents aged 22 to 44 in Kentucky from 2005 to 2009. Kentucky is certainly not a "brain-drain" state that loses more college-educated residents than it retains or attracts. It is a slight net-importer of college-degree holders at all levels. However, it has experienced a larger net gain of residents without high school credentials or college degrees. Therefore, Kentucky's recent boost in college attainment has not been the result of importing talent from out-of-state. These data also highlight the need for a strong, effective system of adult education. If Kentucky can strengthen its economic conditions in addition to improving its system of education, it would fare much better in its ability to retain and attract college-educated residents.

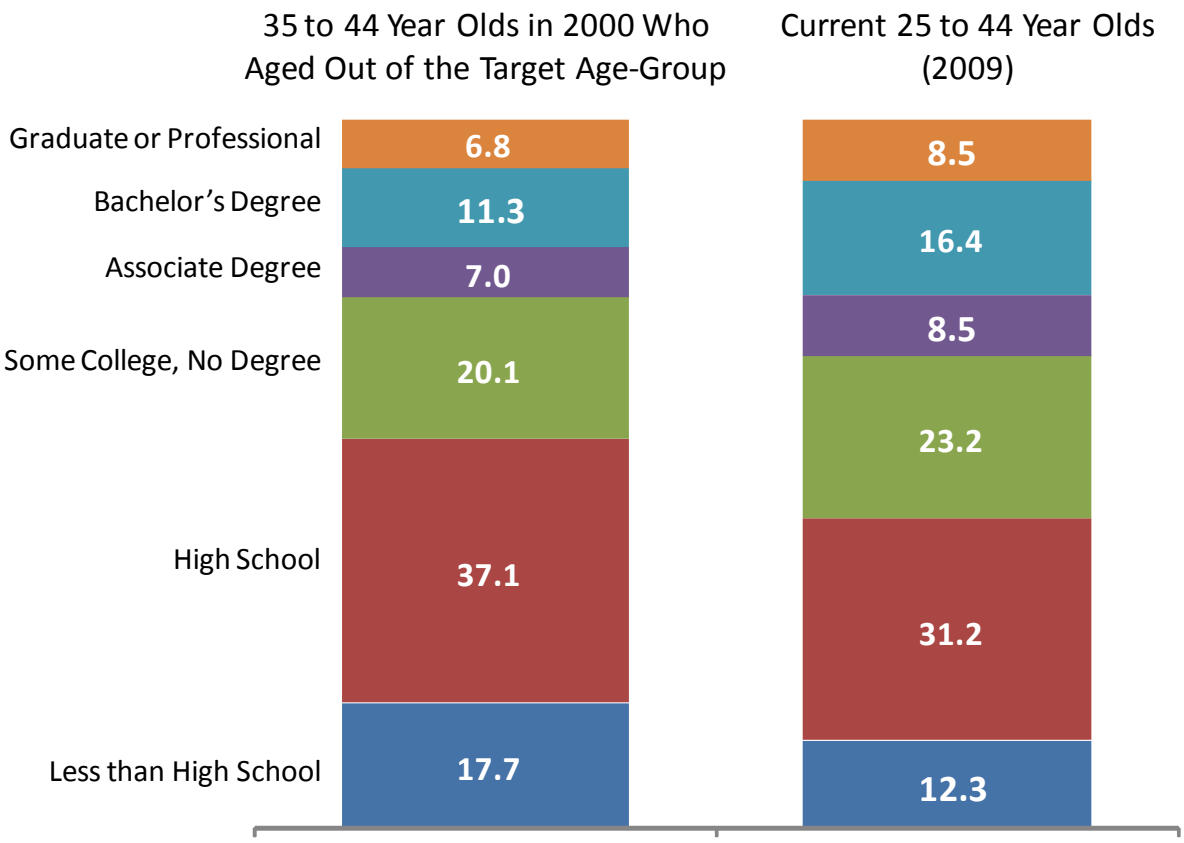
Figure 2. **Average Annual Net Migration of 22 to 44 Year Olds by Education Level 2005 to 2009**



Source: U.S. Census Bureau, 2005-09 American Community Survey (Public Use Microdata Sample)

States that have historical conditions of undereducated adult populations (like Kentucky) tend to improve on the measure of college attainment, in part, as a result of attrition – adults who age out of the cohort are less educated than those that age into it. This is certainly the case in Kentucky (Figure 3).

Figure 3. **Attrition: Adults Who Aged Out of the 25 to 44 Year Old Age-Group vs. Current 25 to 44 Year Olds (from 2000 to 2009)**

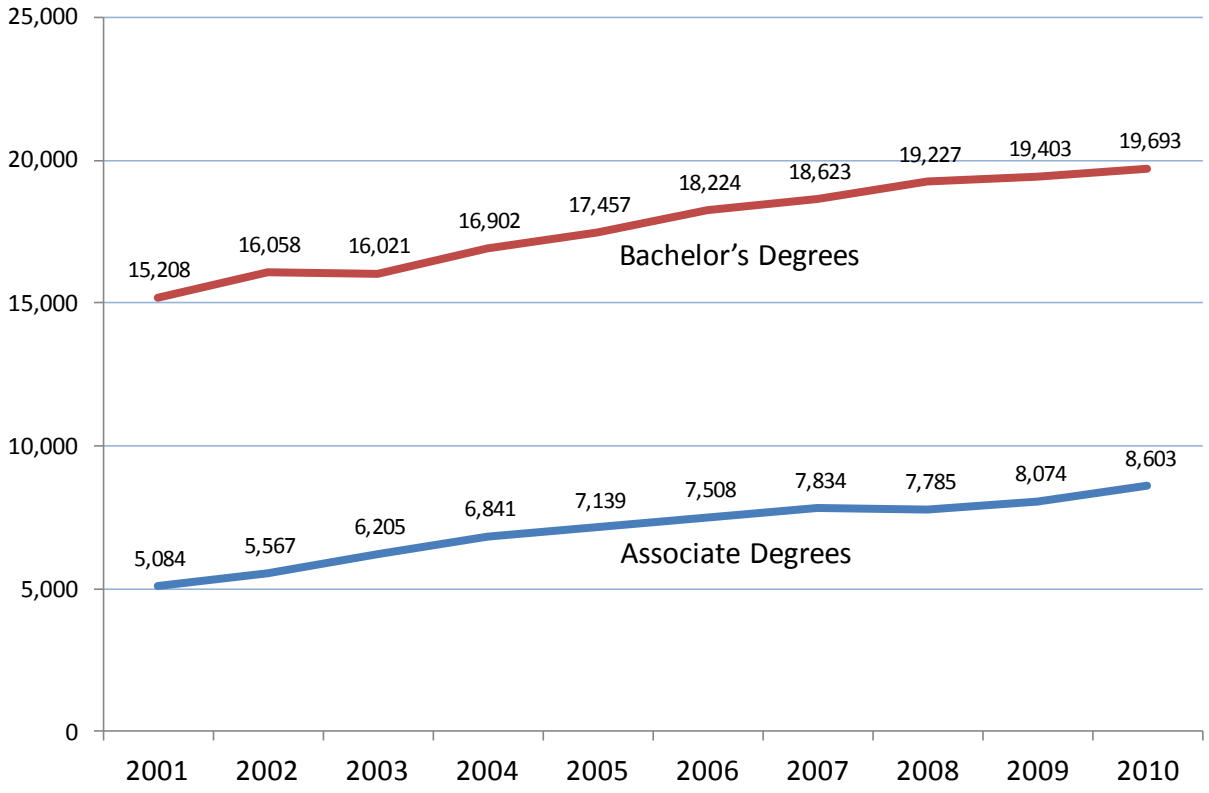


Source: U.S. Census Bureau; 2009 American Community Survey (Public Use Microdata Sample), 2000 Decennial Census

The group of 35 to 44 year olds in 2000 who aged out of the target age-group by 2009 were much less educated than those who aged into it – at all levels of college attainment. Other states that historically have had undereducated adult populations experienced a similar phenomenon – e.g. West Virginia, Mississippi, Arkansas, and Louisiana.

In addition to attrition, improvements in college attainment can also be the result of increased degree production among young working aged adults. In fact, the overall production of associate and bachelor's degrees has increased substantially in Kentucky since 2000 – from 15,000 to nearly 20,000 bachelor's degrees, and 5,000 to nearly 9,000 associate degrees (Figure 4).

Figure 4. **Undergraduate Degree Production from 2000-01 to 2009-10**



Source: Kentucky Council on Postsecondary Education

While only associate and bachelor's degrees are directly tied to the college attainment target, less than two-year certificates awarded largely at the Kentucky Community and Technical College System (KCTCS) grew from 1,977 in 2000-01 to 15,767 in 2009-10 – in large part due to the creation of shorter-term "stackable" certificates. Over the same period, master's degrees increased from 4,984 to 7,329, doctoral degrees from 318 to 512, and professional degrees from 824 to 939.

Given the impressive growth in college attainment rates, credential and degree production, and all of the efforts to reform postsecondary education in Kentucky over the past decade, one would hope to be able to identify more specific areas of improvement that have led to its success. Figure 5 displays Kentucky's change from 2000 to 2009 (relative to other states) on a number of key indicators related to college completion. The results are quite remarkable:

- Six-year graduation rates at four-year institutions (public and private) improved nearly nine percentage points from 2000 to 2009. This is the largest percentage change of any state in the U.S., and Kentucky moved nine positions among the states – from 44th to 35th.
- Three-year graduation rates at two-year institutions increased by roughly the same amount. It was the third highest percentage point change in the U.S., and Kentucky moved from 38th among states to 16th. Some of this improvement, however, might be the result

of more students earning "less than one-year" certificates at KCTCS – a policy that was implemented in 2002 to provide students opportunities to earn short-term stackable certificates in route to longer-term credentials. These students are counted as completers even if they do not earn credentials of one-year or more in length.

- Kentucky had the 5th highest percentage point change in total undergraduate credential and degree production (one year or more in length) of any state in the U.S. This is even more impressive considering that the states ahead of Kentucky (AR, FL, NV, and VA) benefited on this measure largely because of shifting demographics. Unlike Kentucky, each had substantial growth in their college-aged populations – where status quo performance would still have led to increased degree production.
- Finally, the percentage change in the number of undergraduate credentials awarded per 1,000 adults with no college degree was the largest in the U.S. This is a measure of how well states are awarding college credentials relative to the population in need (market penetration). On this metric, Kentucky jumped nine positions from 45th among states in 2000 to 36th in 2009.

Figure 5. **Change on Key College Completion Metrics from 2000 to 2009**

College Attainment and Completion Metrics	Kentucky Change from 2000 to 2009					
	Percent Change	Change Ranked Among States	2000	2009	State Rank in 2000	State Rank in 2009
Six-Year Graduation Rates at Four-Year Institutions (Public and Private)	21.7	1	39.3	47.8	44	35
Three-Year Graduation Rates at Two-Year Institutions (Public and Private)	42.7	3	21.4	30.5	38	16
Undergraduate Credentials (One-Year or More in Length)	55.7	5	23,115	35,999	NA	NA
Undergraduate Credentials Awarded per 1,000 18 to 44 Year Olds with No College Degree	63.0	1	18.4	29.9	45	36

Sources: NCES: IPEDS Graduation Rate and Completion Surveys; U.S. Census Bureau 2009 American Community Survey and 2000 Decennial Census (Public Use Microdata Samples)

For these measures of change, as well as the college attainment measures above, Kentucky is the only state in the U.S. that is ranked in the top five on each. Pure coincidence (like population growth or cohort attrition) might explain a state's high ranking on one or two of these measures. However, Kentucky's "across the board" success on all of them points to the likelihood that the reform efforts are indeed paying off.

The impressive changes in overall credential and degree production and graduation rates, however, have not been uniform across all institutions. The percent change in bachelor's degree production at the public four-year institutions in the past decade ranges from -0.1 percent to 67.6 percent. Kentucky's public institutions increased bachelor's degree production by 30.1 percent, independent colleges and universities increased bachelor's degree production by 27.1 percent, and KCTCS increased associate degree production by 93.1 percent. In addition, the changes in institutional graduation rates range from -8 percent to 18 percent.

Closing the College Attainment Gap between Now and 2020

It may be a good time to acknowledge success as a result of hard work, but the time to declare victory is still on the horizon. Kentucky has to close more ground to realize its college attainment goal. Despite the progress made from 2000 to 2009, there is still a sizable gap in college attainment between Kentucky and the U.S. Figure 6 below displays NCHEMS' estimation of what it will take (by way of increased college degree production) for Kentucky to reach the national average in college attainment among 25 to 44 year olds by the year 2020.

Figure 6. **A Scenario for Kentucky to Reach the U.S. Average in College Attainment among 25 to 44 Year Olds by 2020**

2020 Degree Gap Scenario	United States	Kentucky
Current College Attainment of 25 to 44 Year Olds (2007-09)	39.1%	32.0%
Average Annual Change from 1990 to 2007-09	0.32%	0.47%
Projected College Attainment in 2020 with Annual Change Carried Out	42.6%	37.1%
Percentage College Attainment Gap		5.5%
Projected 25 to 44 Year Olds in 2020		1,210,027
Degree Gap: Additional Degree-Holders Needed to Reach U.S. Average*		66,825
Current Annual Degree Production (2009-10)		28,296
Additional Degree-Holders Needed Annually to Reach U.S. Average by 2020**		1,215
Average Annual Percent Change Needed to Reach U.S. Average by 2020		3.82%
Average Annual Percent Change from 2001 to 2010		3.78%

* 5.5%*1,210,027

** Assumes Linear Progress Towards Goals

The most recent three years of data from the American Community Survey (2007-2009) indicate that 32.0 percent of adults aged 25 to 44 in Kentucky have an associate degree or higher – compared to 39.1 percent for the U.S. The three-year data are used to smooth out much of the statistical error associated with the one-year ACS samples.

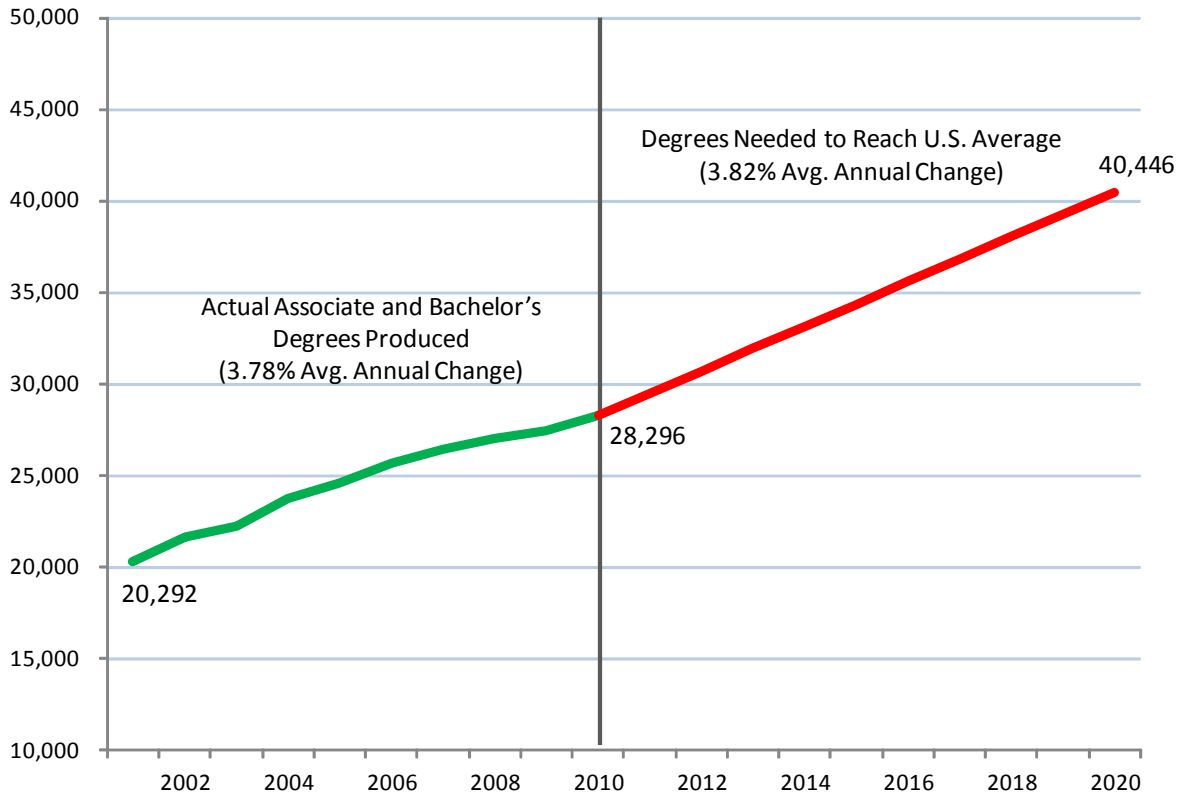
1. To account for natural increases in college attainment rates due to attrition and interstate migration, average annual increases are used to estimate the percentages in 2020. Kentucky's average annual increase has been larger than the U.S. (0.47 vs. 0.32 percentage points annually). With these annual changes are carried out, it is estimated that the college attainment rates will be 37.1 percent in Kentucky compared to 42.6 percent in the U.S. – a gap of 5.5 percent.
2. Recent projections provided by the Kentucky State Data Center estimate that there will be 1.21 million 25 to 44 year olds in the year 2020. The additional 5.5 percent of 25 to 44 year olds needed to close the attainment gap equates to 66,825 additional college degree-holders.
3. The postsecondary education system in Kentucky produced 28,296 associate and bachelor's degrees in 2009-10. In order to close the gap between Kentucky and the U.S. by 2020, the education enterprise would need to produce 1,215 more degrees every year (assuming linear progress toward the goal). This means 1,215 additional degrees in 2010-

11, 2,230 additional degrees in 2011-12, 3,345 additional degrees in 2012-13, etc. This equates to a 3.82 average annual percent change between now and 2020.

While the level of increased performance may seem challenging, it is not unlike what Kentucky experienced during the past decade (Figure 7). From 2000-01 to 2009-10, the average annual percent change in undergraduate degree production was 3.78 percent. The system of postsecondary education in Kentucky must at least maintain (or slightly improve) its past performance to realize its goal.

It should be noted, however, that the 2020 U.S. college attainment estimate is conservative compared to Lumina Foundation's and the Obama Administration's national goals for postsecondary attainment that aspire to move the U.S. toward the most educated countries in the world by 2020 and 2025. In addition, several states have followed suit with similar college attainment goals – e.g. Arkansas, Louisiana, Massachusetts, Mississippi, Oregon, Texas, Utah, and Virginia. These state goals vary depending on their current positions among states – e.g. the average of the Southern Regional Education Board states by 2025 in Mississippi and Louisiana to 66 percent college attainment in Massachusetts. As with any goal, it is important to establish one that is both aspirational and achievable, but acknowledge that it is likely a moving target.

Figure 7. **Undergraduate Degree Production Needed for Kentucky to Reach the U.S. Average in College Attainment Among 25 to 44 Year Olds by 2020**



Source: Kentucky Council on Postsecondary Education, NCHEMS

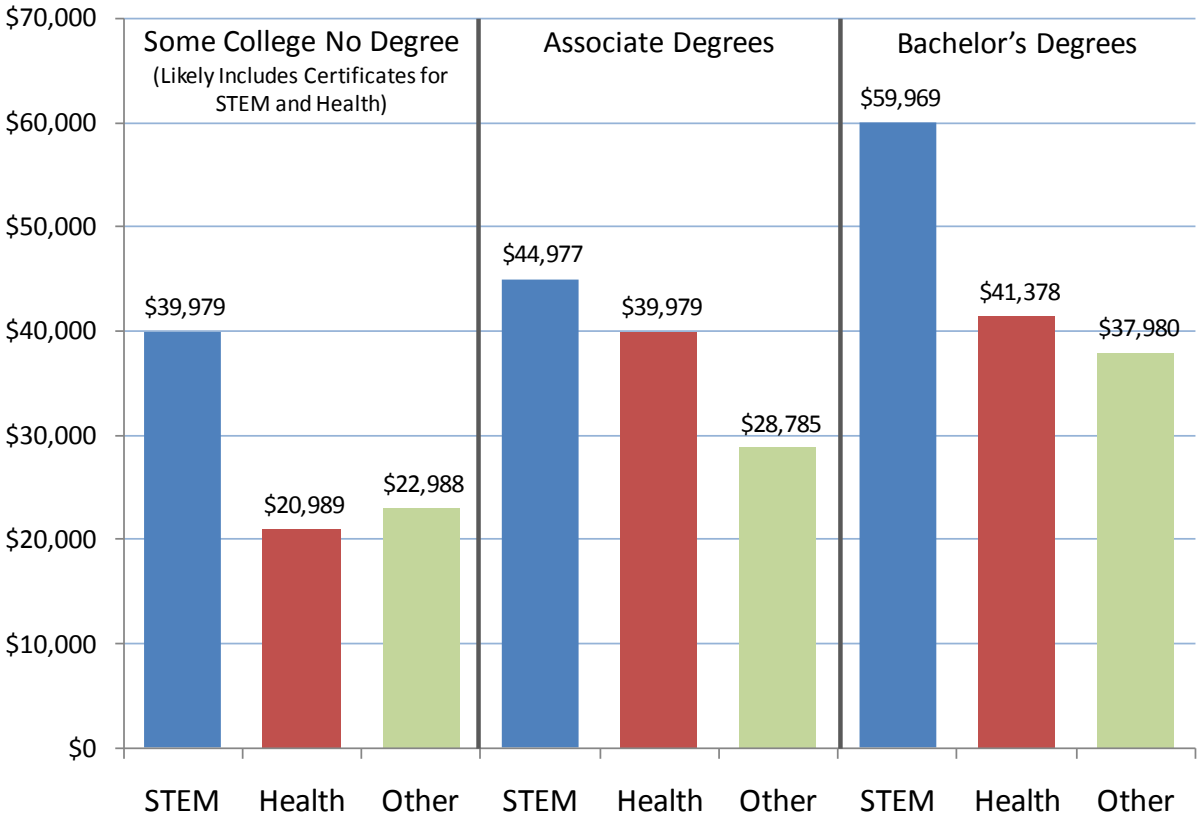
A Focus on Certain Types of Credentials and Degrees

It would be short-sighted to set a target for increasing the numbers of college graduates without any attention paid to the types and levels of credentials produced. In its recent strategic agenda *Stronger by Degrees*, the Council on Postsecondary Education focuses on the production of credentials in science, technology, engineering, and mathematics (STEM) and health. In Kentucky, as in nearly all states, credentials in many health fields are in high demand and provide direct employment opportunities for graduates.

STEM credentials are especially desirable because they are associated with high-paying jobs and the emergence of a high-tech, globally competitive economy. In Kentucky, not unlike many other states, STEM graduates earn substantially more than their peers at all levels of education. Figure 8 displays the median annual earnings in Kentucky of those employed in STEM, health, and other fields. Of note are the high earnings among workers in STEM fields with two-year and less credentials – much higher annual wages than workers in non-STEM fields.

Bachelor's degree-holders in STEM fields earn a great deal more than their counterparts. Associate degree-holders in health fields (most likely nurses) also earn a great deal more than those in non-STEM and non-health fields.

Figure 8. **Median Annual Wages for Working Kentucky Residents by Level and Type**



Source: U.S. Census Bureau, 2009 American Community Survey (Public Use Microdata Sample)

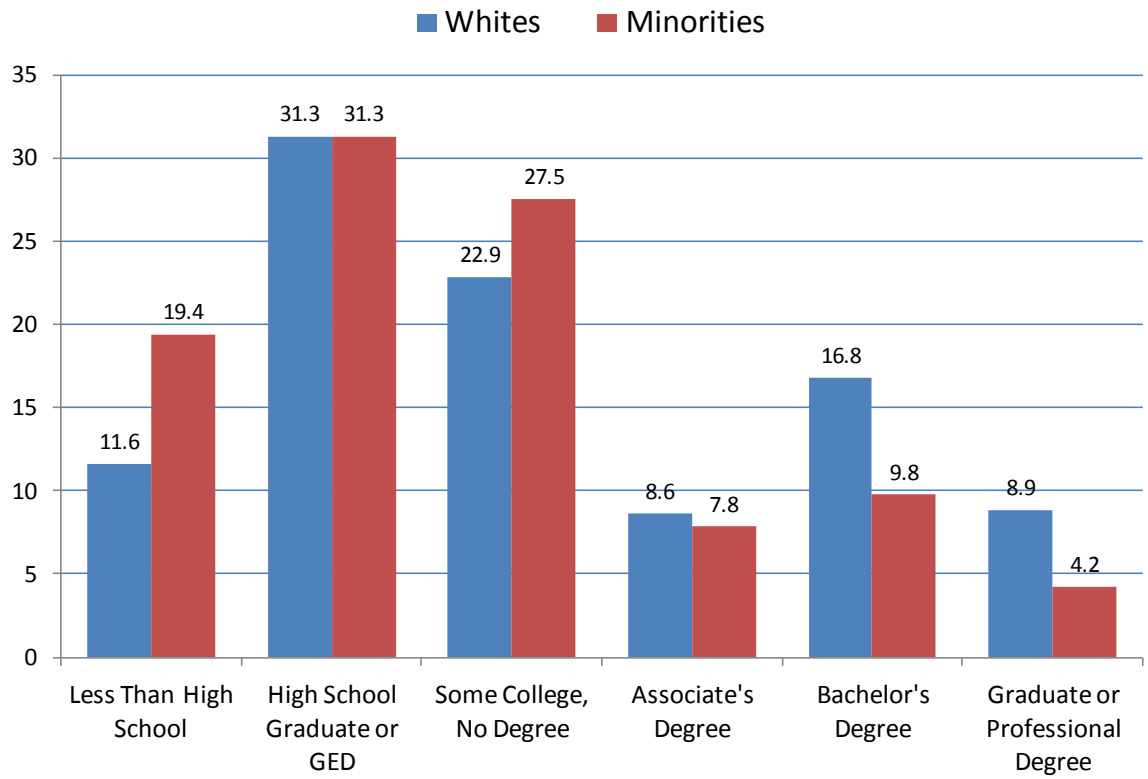
It should be noted, however, Kentucky's focus on STEM production should be accompanied with efforts to increase in-state job opportunities for graduates. Currently, Kentucky ranks 5th among the 50 states in the number of STEM credentials awarded per 1,000 STEM employees. Therefore, STEM credential and degree production relative to the employment base is very high. Only the Dakotas, Mississippi, and Louisiana produce more STEM graduates relative to STEM employment. On the flip-side, Kentucky ranks 43rd among states in the percentage of all jobs in STEM fields, indicating a mismatch between supply and demand. The role of Kentucky's colleges and universities is crucial for the state's economic prosperity; not only to produce more STEM graduates, but to help create an economy that retains them (and even attracts them from out-of-state).

When setting the overall completion targets for the year 2020, it is also useful to address the mix between associate and bachelor's degrees. Between the academic years 2000-01 and 2009-10, the percentage change in associate degrees was 69 percent compared to 29 percent for bachelor's degrees. While completion of any credential is preferable to non-completion, Kentucky already has nearly the same percentage of associate degree-holders as the U.S. (8.2 vs. 8.4 percent). But a large gap still exists between Kentucky and the U.S. among residents with bachelor's degrees and higher. (23.8 vs. 30.7 percent).

Closing Racial/Ethnic and Regional College Attainment Gaps

Also in the *Stronger by Degrees* agenda for postsecondary education, higher education leaders are attentive to closing the education gaps between Whites and minorities, and upper- and lower-income residents. The later is difficult to measure with publicly available data, but the college attainment gaps between Whites and minorities are displayed in Figure 9. White students are much more likely to have completed high school than minority students in Kentucky, and much more likely to have completed a college degree – particularly at the bachelor's level and higher.

Figure 9. **Racial/Ethnic Gaps: Educational Attainment of Whites and Minorities Aged 25 to 44 in 2009 (Minorities – Black, Hispanics, Native Americans)**

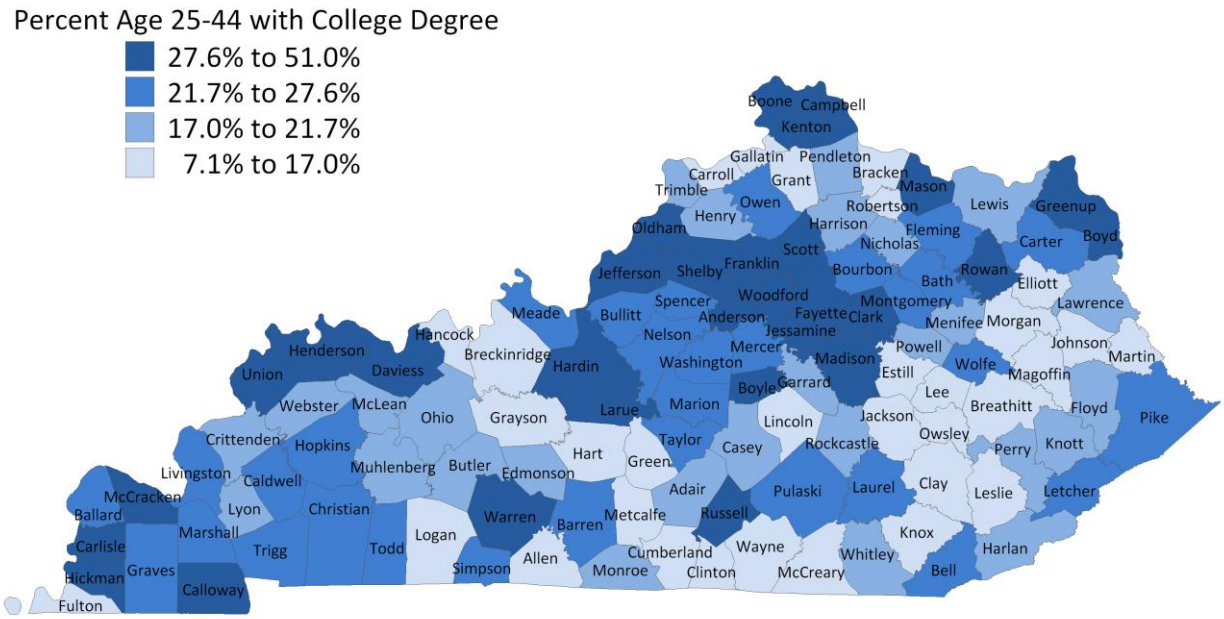


Source: U.S. Census Bureau, 2009 American Community Survey (Public Use Microdata Sample)

Moreover, the gap in college attainment between Whites and minorities aged 25 to 44 has actually widened since the year 2000. In 2000, 26.3 percent of Whites had attained a college degree compared to 16.8 percent of minorities (U.S. Census Bureau, 2000 Decennial Census). By 2009, 34.3 percent of White citizens had attained college degrees compared to 21.8 percent of minorities. While improvements have been made with both populations, the racial/ethnic gap has actually grown from 9.5 percent to 12.5 percent. Efforts to improve high school graduation, college participation and completion rates among minorities in Kentucky are critical for the state to achieve its overall goal.

Like many states, Kentucky also has vast regional disparities in college attainment. The percentage of adults aged 25 to 44 with college degrees varies substantially from county to county and region to region as the following map indicates. (Figure 10)

Figure 10. **Percentage of Adults Aged 25 to 44 with Associate Degrees and Higher by County (2005-09)**



Source: U.S. Census Bureau, 2005-09 American Community Surveys

In addition, only nine of 120 counties in Kentucky have higher rates of college attainment than the U.S. average. For Kentucky to achieve its goals of educational attainment and increased rates of degree production, more successful localized strategies are needed.

The Translation of Educational Progress to Economic Growth and Better Lives

The levels of college attainment continue to rise in Kentucky – moving closer to the national average – but there is a lag in the benefits experienced by Kentuckians in the form of increased personal incomes and economic growth. During the same decade Kentucky gained eight positions among states in college attainment (from 44th to 36th in the nation), it lost four positions in personal income per capita (from 40th to 44th). It also lost four positions among states in the State New Economy Index (from 39th in 1999 to 43rd in 2010). The New Economy Index measures the degree to which state economies are knowledge-based, globalized, entrepreneurial, IT-driven, and innovation-based.

Finally, from 2000 to 2009 Kentucky just maintained its 42nd ranking among states in total research and development expenditures per capita, and gained little ground in competitive (federal) R&D expenditures per capita – ranked 45th in among states 2000 and 43rd in 2009. In addition to continued improvement on key educational outcomes, more effective strategies must be developed and implemented to ensure globally-competitive economic growth, and that Kentucky's college graduates are, in-turn, rewarded with high-paying jobs.

There are few stronger relationships than the one between education and personal income. States with high levels of educational attainment have high personal incomes per capita. Given the economic recession of the past decade, it has been difficult for many states to gain recent ground in economic prosperity. The gap between Kentucky's recent improvements in K-12 and postsecondary education and the income experienced by its residents is likely to close over time. However, in order to attract more knowledge-based industries into the state, and to spur business development from within the state, it is important that stakeholders in Kentucky better promote the state as one that is developing a more highly-educated workforce – at a pace that exceeds any other state in the nation. The long-held perception of Kentucky as a state with a poor system of education needs to somehow be shed.

Conclusion

The improvements Kentucky has made over the past decade on several key postsecondary outcomes – through the hard work of policymakers, the CPE, and institutional leaders – are nothing short of impressive. For Kentucky to realize its goal to improve economic opportunity and the quality of life of all Kentuckians through increases in college attainment and rates of degree production, it must at least experience the same trajectory of progress in the coming decade. Credential and degree completion targets set for the state and the institutions should match or exceed the additional completions estimated by the scenario outlined in Figure 6. While this level of continued progress is aspirational, it is certainly achievable.

Kentucky's new Strategic Agenda *Stronger by Degrees* lays out clear strategies and measures of progress for the state's system of postsecondary education. It identifies four key areas for attention – (1) College Readiness, (2) Student Success, (3) Research, Economic, and Community Development, and (4) Efficiency and Innovation. Undoubtedly, Kentucky has gained some momentum in the first two of these focus areas. It is a leader in the nation in its efforts to align standards and expectations between K-12 and postsecondary education. It has also made substantial progress on many measures of student success – specifically retention and graduation rates.

The third focus area, however, is just as crucial for Kentucky to realize the full intent of House Bill 1 – that increased educational attainment is the means for achieving the overall goal of the "development of a society with a standard of living and quality of life that meets or exceeds the national average." In the coming decade, higher education leaders and policymakers must work even harder to more clearly define postsecondary education's role in community and economic development, ensure greater success in the transformation of research into high-skill job creation, and build more effective relationships between the postsecondary education enterprise and the entities charged with workforce and economic development.

With all the attention paid to Kentucky by policymakers and higher education leaders across the U.S., it is especially rewarding to discover that good policy and practice pay off. While governors, legislators, and higher education leaders come and go, the passage of House Bill 1 and the important work that followed leave a lasting legacy – an example of a state that has largely done it right. However, to stop and rest now would only get Kentucky roughly half way to its 2020 goal.

Appendix A. Percent Change in Completion Rates, 2000 to 2009

Adults Aged 25 to 64 with College Degrees

Source: U.S. Census Bureau; 2000 Decennial Census, 2009 American Community Survey

State	Percent Change	2000	Rank	2009	Rank
Kentucky	24.4	24.5	47	30.5	45
West Virginia	21.5	21.7	50	26.4	50
Iowa	20.9	33.2	25	40.1	17
South Carolina	19.5	29.2	40	34.9	34
North Carolina	18.7	32.0	33	37.9	27
Nevada	18.5	25.6	45	30.4	46
Tennessee	18.5	26.9	44	31.8	42
Arkansas	17.6	23.0	49	27.0	49
North Dakota	17.3	37.2	14	43.7	10
Indiana	17.0	28.2	42	33.0	41
Louisiana	16.8	24.1	48	28.1	48
Alabama	16.6	27.1	43	31.7	44
Mississippi	16.4	24.8	46	28.9	47
South Dakota	16.3	33.1	26	38.6	23
New York	16.3	38.3	10	44.6	6
Missouri	16.0	30.1	39	34.9	33
Pennsylvania	15.9	32.7	28	37.8	28
Maine	15.4	33.4	24	38.6	22
Oregon	15.1	34.5	20	39.8	19
Illinois	15.0	36.0	16	41.4	15
Nebraska	14.9	35.9	17	41.2	16
Minnesota	14.8	39.4	7	45.2	4
Ohio	14.5	30.3	38	34.7	37
Montana	14.3	33.5	23	38.3	25
Rhode Island	14.2	37.3	13	42.6	13
Virginia	13.8	38.1	12	43.4	11
Georgia	13.3	31.9	34	36.2	30
New Jersey	13.3	39.3	8	44.5	7
Wisconsin	13.1	33.8	22	38.2	26
Nation	12.8	33.8		38.1	
Kansas	12.5	35.5	19	40.0	18
Oklahoma	12.4	28.2	41	31.7	43
Hawaii	12.4	38.2	11	42.9	12
Florida	12.3	32.4	30	36.4	29
Delaware	12.1	34.4	21	38.6	24
Michigan	11.7	32.0	32	35.8	31
Maryland	11.6	39.8	6	44.4	8
Massachusetts	10.9	45.3	1	50.2	1
New Hampshire	10.1	40.5	4	44.6	5
Connecticut	9.9	42.2	3	46.4	2
Washington	9.9	38.5	9	42.3	14
Vermont	9.4	40.4	5	44.2	9
Texas	8.8	30.5	37	33.2	40
California	8.5	35.7	18	38.7	21
Idaho	8.5	31.6	35	34.3	38
New Mexico	8.3	31.3	36	33.9	39
Utah	8.3	36.2	15	39.2	20
Colorado	8.0	42.4	2	45.8	3
Arizona	7.7	32.3	31	34.8	36
Wyoming	7.2	32.5	29	34.9	35
Alaska	5.9	33.1	27	35.1	32

Adults Aged 25 to 44 with College Degrees

Source: U.S. Census Bureau; 2000 Decennial Census, 2009 American Community Survey

State	Percent Change	2000	Rank	2009	Rank
Nevada	24.7	23.3	50	29.0	48
Kentucky	23.6	27.3	44	33.7	36
West Virginia	23.3	24.0	48	29.6	47
Louisiana	21.1	25.6	47	31.1	44
Montana	20.6	34.5	24	41.7	18
Arkansas	19.2	24.0	49	28.6	50
Rhode Island	18.1	38.4	15	45.3	10
South Carolina	17.9	30.3	37	35.7	32
Iowa	17.4	39.0	14	45.7	9
New York	16.5	42.3	6	49.3	4
Pennsylvania	15.9	37.5	19	43.4	14
Tennessee	15.8	28.9	41	33.4	37
Missouri	15.6	33.4	29	38.6	23
California	15.4	32.9	32	38.0	25
North Dakota	15.3	43.8	3	50.5	2
Maine	15.2	32.5	34	37.5	29
Hawaii	15.0	36.4	22	41.8	17
Maryland	14.4	40.3	10	46.1	6
Illinois	13.9	39.7	12	45.2	11
Indiana	13.8	31.1	35	35.5	35
Mississippi	13.1	26.4	46	29.9	45
Oregon	13.0	33.3	30	37.6	27
North Carolina	12.9	34.1	26	38.5	24
Ohio	12.2	33.5	28	37.6	28
New Hampshire	12.1	40.9	9	45.9	7
Virginia	11.7	39.3	13	44.0	13
New Jersey	11.7	41.3	7	46.2	5
Nation	11.3	35.0		39.0	
Oklahoma	11.3	28.3	43	31.5	42
Alabama	10.3	29.1	40	32.1	40
Kansas	10.2	37.3	20	41.1	19
Minnesota	9.4	45.2	2	49.4	3
Massachusetts	9.2	49.2	1	53.8	1
Florida	8.6	32.7	33	35.5	34
Nebraska	8.2	40.1	11	43.4	15
Arizona	8.0	30.0	38	32.4	39
Vermont	7.8	41.0	8	44.2	12
Texas	7.7	29.3	39	31.6	41
Connecticut	7.7	42.5	4	45.8	8
Utah	7.1	35.3	23	37.8	26
Washington	6.4	38.1	18	40.5	20
Georgia	6.3	33.6	27	35.7	33
New Mexico	6.0	27.3	45	28.9	49
Wisconsin	5.9	38.2	17	40.5	21
Michigan	5.1	34.4	25	36.1	31
Alaska	3.5	28.6	42	29.6	46
Idaho	3.4	30.4	36	31.4	43
South Dakota	3.2	38.4	16	39.6	22
Wyoming	1.1	32.9	31	33.3	38
Delaware	0.0	36.9	21	36.9	30
Colorado	-0.5	42.4	5	42.2	16

Six-Year Graduation Rates - Four Year Institutions

Source: NCES, IPEDS Graduation Rate Survey

State	Percent Change	2000	Rank	2009	Rank
Kentucky	21.7	39.3	44	47.8	35
Alaska	20.7	22.3	50	26.9	50
Arkansas	18.8	34.7	48	41.2	46
Nebraska	18.7	46.4	33	55.1	25
Louisiana	17.8	34.5	49	40.7	47
Oklahoma	17.2	37.6	46	44.1	42
Georgia	15.7	41.1	41	47.5	36
Idaho	14.1	37.2	47	42.4	44
West Virginia	13.7	38.5	45	43.8	43
Montana	13.0	40.0	42	45.2	40
Mississippi	12.8	45.7	37	51.5	32
Missouri	11.7	50.0	29	55.8	23
Minnesota	11.6	53.9	21	60.2	13
Connecticut	10.4	59.7	10	65.9	3
Kansas	10.2	48.3	31	53.2	30
Tennessee	10.1	46.8	32	51.5	33
Oregon	9.3	51.7	26	56.5	21
Massachusetts	9.1	63.4	3	69.2	1
Arizona	9.0	49.6	30	54.1	28
California	8.9	58.7	12	63.9	6
South Carolina	8.7	53.0	23	57.6	19
New York	7.8	54.9	18	59.2	15
Virginia	7.7	58.7	13	63.2	9
Ohio	7.5	50.9	27	54.7	27
Vermont	6.5	60.0	9	63.9	7
Wisconsin	6.4	54.5	19	58.0	18
Wyoming	6.3	52.1	25	55.4	24
North Dakota	6.2	44.2	38	46.9	39
New Jersey	6.0	59.7	11	63.3	8
Maryland	5.7	60.6	7	64.1	5
Pennsylvania	5.4	62.3	4	65.7	4
Colorado	4.7	50.9	28	53.3	29
United States	4.6	53.0		55.5	
Illinois	4.6	56.0	17	58.6	17
Texas	4.5	46.4	34	48.5	34
Indiana	4.1	54.2	20	56.4	22
Washington	3.8	60.4	8	62.7	11
South Dakota	3.0	43.5	39	44.8	41
North Carolina	2.9	57.2	14	58.9	16
Iowa	2.7	61.2	6	62.9	10
Alabama	1.6	46.2	35	46.9	38
Rhode Island	1.2	65.4	1	66.2	2
Maine	0.0	56.7	15	56.7	20
New Mexico	-0.2	39.5	43	39.4	48
Utah	-1.5	52.3	24	51.5	31
Delaware	-2.3	61.3	5	59.9	14
Michigan	-2.3	56.1	16	54.8	26
New Hampshire	-5.6	64.2	2	60.6	12
Hawaii	-7.8	45.8	36	42.2	45
Florida	-11.4	53.4	22	47.3	37
Nevada	-13.4	41.3	40	35.8	49

Three-Year Graduation Rates - Two Year Institutions

Source: NCES, IPEDS Graduation Rate Survey

State	Percent Change	2000	Rank	2009	Rank
Maryland	63.7	13.3	48	21.8	36
Texas	61.0	15.8	46	25.4	29
Kentucky	42.7	21.4	38	30.5	16
Virginia	35.3	21.9	36	29.6	18
Nevada	34.8	31.7	23	42.7	4
Florida	34.3	35.8	17	48.1	3
Oklahoma	28.6	22.3	35	28.7	22
Ohio	28.3	21.1	40	27.1	25
Oregon	26.9	23.1	33	29.3	20
Wyoming	23.7	43.6	6	53.9	2
North Dakota	20.7	30.7	24	37.0	8
Arkansas	16.5	20.2	41	23.5	34
Rhode Island	12.4	11.0	50	12.4	49
Tennessee	9.9	23.8	31	26.2	26
Washington	9.6	30.0	25	32.9	13
New Jersey	9.6	15.3	47	16.8	43
Georgia	7.0	26.6	28	28.5	23
Massachusetts	3.6	19.5	43	20.2	40
New Mexico	2.7	19.6	42	20.1	41
Colorado	2.3	38.4	15	39.3	6
Wisconsin	0.6	34.5	20	34.7	11
Illinois	-0.2	25.2	30	25.1	31
Alabama	-1.2	21.9	37	21.6	37
Kansas	-2.0	35.1	19	34.4	12
Delaware	-2.5	12.9	49	12.6	48
United States	-2.6	30.0		29.2	
North Carolina	-4.2	21.4	39	20.5	39
South Dakota	-4.9	63.8	1	60.7	1
Utah	-6.1	38.8	14	36.4	10
Mississippi	-6.3	26.9	27	25.2	30
Indiana	-6.6	26.6	29	24.9	32
Iowa	-10.8	36.7	16	32.8	14
California	-11.2	43.0	8	38.2	7
Minnesota	-16.1	35.3	18	29.6	19
Michigan	-16.3	18.2	44	15.2	44
Arizona	-17.4	47.6	3	39.3	5
South Carolina	-18.6	17.2	45	14.0	45
Pennsylvania	-19.7	45.9	4	36.9	9
Hawaii	-21.8	22.9	34	17.9	42
Missouri	-23.5	40.6	12	31.1	15
New York	-24.5	28.3	26	21.4	38
Nebraska	-26.1	41.0	11	30.3	17
Montana	-29.0	34.4	21	24.4	33
Idaho	-34.6	42.5	9	27.8	24
Louisiana	-36.5	45.3	5	28.7	21
New Hampshire	-41.4	43.5	7	25.5	27
West Virginia	-45.0	42.4	10	23.3	35
Maine	-49.0	49.9	2	25.4	28
Connecticut	-50.8	23.7	32	11.7	50
Alaska	-59.6	33.0	22	13.3	47
Vermont	-65.8	39.2	13	13.4	46

Undergraduate Credentials (One-Year or More in Length)

Source: NCES, IPEDS Completion Survey

State	Percent Change	2000	2009
Nevada	75.1	6,984	12,229
Florida	68.5	106,115	178,803
Arkansas	63.8	14,774	24,200
Virginia	56.3	46,749	73,052
Kentucky	55.7	23,115	35,999
Georgia	53.1	45,587	69,815
Texas	53.1	119,472	182,936
Oregon	46.5	21,520	31,518
North Carolina	44.2	52,288	75,383
New Jersey	44.0	39,565	56,963
Colorado	43.3	32,590	46,703
Maryland	42.7	32,340	46,138
Tennessee	40.5	31,807	44,687
United States	39.9	1,957,756	2,739,594
Missouri	39.7	43,892	61,313
Alaska	39.0	2,506	3,483
Indiana	38.4	45,729	63,289
Ohio	36.6	72,921	99,633
Connecticut	35.6	18,652	25,290
Arizona	35.2	41,247	55,778
Minnesota	34.7	42,168	56,789
California	34.0	221,422	296,680
Illinois	33.9	88,278	118,166
Idaho	33.4	10,510	14,024
Pennsylvania	33.1	93,863	124,905
South Carolina	31.2	24,476	32,116
Michigan	30.4	70,245	91,600
Utah	30.1	26,589	34,583
Oklahoma	29.9	23,969	31,134
Maine	29.8	7,947	10,315
New Mexico	29.6	12,238	15,857
Wisconsin	29.0	41,389	53,412
Delaware	28.5	5,939	7,631
Mississippi	28.1	20,122	25,778
Washington	26.6	46,871	59,329
New York	26.2	151,170	190,830
Alabama	24.8	31,456	39,270
Kansas	24.5	23,754	29,583
North Dakota	22.4	7,103	8,692
Massachusetts	21.5	54,202	65,864
Iowa	21.3	30,891	37,479
Rhode Island	20.0	12,005	14,406
Nebraska	19.9	15,689	18,818
New Hampshire	19.9	10,442	12,515
West Virginia	19.8	11,998	14,378
Vermont	18.7	6,285	7,463
Wyoming	17.4	5,189	6,090
South Dakota	15.7	6,599	7,632
Montana	7.6	6,924	7,447
Louisiana	6.7	32,358	34,513
Hawaii	6.1	8,549	9,073

Undergraduate Credentials Awarded per 1,000 18 to 44 Year Olds with No College Degree (Market Penetration)

Source: NCES, IPEDS Completion Survey; U.S. Census Bureau 2000 Decennial Census and 2009 ACS

State	Percent Change	2000	Rank	2009	Rank
Kentucky	63.0	18.4	45	29.9	36
Arkansas	56.4	18.0	47	28.2	43
New Jersey	52.3	18.6	43	28.3	41
Ohio	48.6	22.8	36	33.8	25
West Virginia	46.7	22.1	39	32.5	30
Florida	46.5	25.1	26	36.7	19
Virginia	46.0	23.8	29	34.7	23
Connecticut	44.4	22.6	37	32.6	29
Maryland	43.2	23.2	32	33.2	27
Michigan	43.2	24.9	27	35.7	20
Illinois	43.1	26.0	23	37.2	18
Minnesota	43.1	33.4	9	47.8	5
Nevada	42.8	10.8	50	15.4	49
Pennsylvania	41.8	29.0	14	41.2	12
Missouri	41.7	27.7	18	39.3	14
Indiana	41.4	25.2	25	35.6	21
Colorado	39.9	27.4	20	38.3	16
New York	39.3	30.6	13	42.6	9
Maine	39.3	23.6	30	32.8	28
Tennessee	39.2	18.4	44	25.6	45
United States	38.3	24.5		33.9	
Texas	37.8	18.2	46	25.0	47
Oregon	36.8	22.5	38	30.8	33
Iowa	36.1	39.6	4	53.9	3
Rhode Island	35.7	42.2	2	57.2	2
North Carolina	35.5	21.9	41	29.6	38
Georgia	35.3	18.0	48	24.4	48
Wisconsin	34.1	28.1	17	37.7	17
North Dakota	33.7	43.0	1	57.6	1
California	33.7	21.9	40	29.2	39
Oklahoma	32.5	23.2	31	30.7	34
Mississippi	30.7	22.8	34	29.8	37
South Carolina	29.3	20.3	42	26.2	44
Nebraska	28.5	34.7	8	44.6	7
Massachusetts	27.4	35.6	7	45.4	6
Vermont	26.8	40.7	3	51.6	4
Delaware	26.1	27.2	21	34.3	24
New Hampshir	25.5	33.1	10	41.5	10
Kansas	25.2	32.5	12	40.8	13
New Mexico	22.9	23.0	33	28.3	42
Idaho	22.8	27.5	19	33.8	26
Alabama	21.4	23.8	28	28.9	40
Washington	20.2	28.9	15	34.8	22
Hawaii	17.0	25.9	24	30.3	35
South Dakota	16.2	33.0	11	38.4	15
Arizona	15.9	27.2	22	31.5	32
Wyoming	12.8	36.6	6	41.3	11
Alaska	11.8	12.7	49	14.2	50
Louisiana	11.4	22.8	35	25.4	46
Montana	10.2	28.7	16	31.7	31
Utah	10.1	38.7	5	42.6	8