

## Outline—Draft 11/23/2009

### Mississippi Policy Audit

#### Observations and findings from data analysis

Graduation rates need to be seen in broader context of the educational attainment of the state's population.

- Educational attainment is highly correlated with the strength of a state's economy, personal income, and other indicators of quality of life for all Mississippians:
  - Increased workforce participation
  - Decreased rates of incarceration
  - Improved health outcomes
  - Reduced participation in Medicaid and other social service programs
  - Greater participation in artistic, cultural, and civic pursuits
  - Higher levels of volunteerism and social engagement
- Mississippi has the lowest level of per capita income in the nation and the second lowest percentage of its working-age population with a bachelor's degree or higher. (Appendix, Figure 1)
- As the relationship between educational attainment and personal income has become stronger over the past 30 years (correlation increased from .64 in 1980 to .83 in 2005), Mississippi's position in relationship to other states remained essentially the same. While Mississippi has made some improvement, most other states have improved substantially. (Appendix, Figure 2)
- Mississippi ranks 49<sup>th</sup> among the states in the percentage of the population ages 25-64 with a bachelor's degree or higher. At the same time, however, Mississippi has done much better than many states in getting its students through to at least an associate degree (29<sup>th</sup> among the states). (Appendix, Figures 3, 4, and 5)
- Substantial differences exist in the educational levels of Whites and African Americans at every level. Only 12% of African Americans have a bachelor's degree or higher compared to 24% of Whites. If all minority groups had the same educational attainment as Whites, the annual personal income in Mississippi would be \$7 billion higher. (Appendix, Figures 6 and 7)
- Mississippi lags far behind the U.S. as well as many countries in the education levels of its population. (Appendix, Figure 8)

- Many other states\* are establishing goals for achieving a level of educational attainment of their population comparable to the best performing countries (55% of the population with an associate degree or higher). Setting a goal linked to best performing countries may not be realistic for Mississippi. (Appendix, Figures 9 and 10)

\*Kentucky – “Double the Numbers” – United States (U.S.) Average  
 Tennessee – Southern Regional Education Board (SREB) Average  
 Colorado and Arizona – 55% Numbers  
 Oregon – 40% Baccalaureate Degrees /40% Associate Degrees/20% High School Diplomas  
 Texas – Closing the Gap – 55% numbers by 2030  
 Minnesota and Virginia – Best Performing – 55%

Other states, for example, are setting goals related to the United States (U.S.) or Southern Regional Education Board (SREB) averages; however, it is important to establish an explicit goal and related benchmarks. The following illustrates the challenges for meeting the SREB and U.S. averages from the current level of 21,008 degrees per year, accounting for loss of college educated residents through out-migration: (Appendix, Figure 11)

***SREB Average by 2025***

Mississippi would need to produce an additional 117,140 additional degrees per year by 2025 or an average incremental increase of 766 additional degrees per year.

• Projected 25-64 Year Olds in 2025	1,500,207
• 44.5% with College Degrees (Associate and Higher)	667,592
• 25-47 Year Olds w/College Degrees (who will still be in the cohort in 2025)	261,282
• Maintaining Recent (2005-2007) Annual Net Migration of College Degree Holders	(62,305)
• Degrees Produced at Current Annual Rate by 2025 (20,675 per Year)	351,475
• <b>Gap: Additional Degrees (Associate and Bachelor's) Needed by 2025</b>	<b>117,140</b>

***US Average by 2025***

Mississippi would need to produce an additional 147,144 additional degrees by 2025 or an average of an additional 962 degrees per year.

• Projected 25-64 Year Olds in 2025	1,500,207
• 46.5% with College Degrees (Associate and Higher)	697,596
• 25-47 Year Olds with College Degrees (Who will Still be in the Cohort in 2025)	261,282
• Maintaining Recent (2005-2007) Annual Net Migration of College Degree Holders	(62,305)
• Degrees Produced at Current Annual Rate by 2025 (20,675 per Year)	351,475
• <b>Gap: Additional Degrees (Associate and Bachelor's) Needed by 2025</b>	<b>147,144</b>

To reach this higher level of production of associate and bachelor degrees, Mississippi would need to increase substantially the progress of students through every stage of the education pipeline by:

- Increasing high school graduation rates
- Maintaining college-going rates even as high school graduation rates increase
- Increasing the number of degrees granted per students enrolled in college, including increasing the number of students who transfer successfully from community colleges
- Increasing the number of degrees granted to adults with a high school diploma but no college-level education. This will also require increasing the number of adults with a high school diploma who earn a General Education Development (GED) or similar high school equivalent credential. (Appendix, Figure 12)
- Mississippi faces serious challenges at every level of the education pipeline for both African American and White students, but the attainment gaps are more severe for African Americans. (Appendix, Figures 13)
  - Mississippi ranks 45<sup>th</sup> among the states in the percentage of high school graduates. (Appendix, Figure 14)
  - Mississippi has the highest college-going rate for students directly out of high school, but this rate is high primarily because so few students complete high school. As the percentage of students completing high school increases, Mississippi will face a challenge in maintaining the current high college going rate. (Appendix, Figure 15)
  - Mississippi Community and Junior Colleges (CJCs) award more associate degrees per 1,000 adults age 18-44 with no college degree than the national average, but awards substantially fewer postsecondary certificates and diplomas than the national average. This reflects the historic emphasis of CJCs on college transfer associate degrees as opposed to short term workforce certification. (Appendix, Figures 17 and 18)
  - Institutions of Higher Learning (IHLs), both public and independent, award substantially fewer bachelor's degrees per 1000 adults age 18-44 with no college degree than most states. (Appendix, Figure 19)
  - The overall system of higher education (CJCs, IHLs, and independent colleges and universities) awards substantially fewer degrees per 100 full-time equivalent students than the best performing states. (Appendix, Figure 20)
- As indicated above, Mississippi must increase the college participation and success rates for adults without a postsecondary education credential in order to raise their level of educational attainment.
  - 21.4% of the population age 25-44 has some college but no degree, a percentage higher than the U.S. average. This is a promising target group to get more adults through to a postsecondary certificate or degree. (Appendix, Figure 21)
  - 37% of the population age 25-44 has a high school education but no college and another 16% of that population has less than a high school diploma. Mississippi is not making a substantial effort to get adults back into the education system compared to other states. The state enrolls fewer adults in postsecondary education than all but eleven states, and awards fewer GEDs to adults age 25-44 than the national average. (Appendix, Figure 22 to 27)

- Mississippi awards more GEDs to adults ages 16-24 per 1,000 adults in this age group than the national average. The reasons for this higher rate may be the number of students that are home-schooled who obtain a GED and the number of non-public school students who obtain a GED. It is also an indication that the adult education system is playing a substantial role in serving youth who dropped out of high school. (Appendix, Figure 28)

## **Observations and findings from policy audit**

### **Long-term goals for educational attainment of Mississippi's population**

- No long-term goals formally established to raise the educational attainment of the state's population linked to the state's future economy and quality of life for every Mississippian
- No metrics and public reporting method for monitoring performance and progress toward goals
- No setting responsible for establishing and gaining consensus around long-term goals and for monitoring and reporting on performance

### **Alignment of K-12 and higher education expectations for college-level learning**

- The Mississippi State Board of Education has recently adopted new curriculum frameworks and state assessments and is implementing a new accountability model for schools and school districts. The overall goal is to increase Mississippi performance to the national average. The changes were prompted by data showing substantial gaps in the performance of Mississippi 4<sup>th</sup> and 8<sup>th</sup> grade students on National Assessment of Educational Progress (NAEP) in language arts and mathematics, and in the ACT assessments of college readiness. The previous assessment, the Mississippi Curriculum Test, found high percentages of Mississippi students proficient in language arts and mathematics, these results contrasted sharply with low percentages on NAEP. The new Mississippi Curriculum Test (MCT2) was first administered in 2008 with schools receiving accountability ratings in fall of 2009. Successful implementation of the changes will depend to a substantial degree on the preparation of teachers to teach the new curriculum and on the quality of leadership at the school and district levels.
- Mississippi has taken important first steps to align postsecondary and K-12 standards, curricula, and assessments:
  - The State Board of Education made an effort to engage a wide range of stakeholders in the development of the changes but not to the extent of engaging higher education in a major effort to align curriculum and assessments between the two levels.
  - College Readiness Standards have been developed in four subject areas (Language Arts, Mathematics, Biology and U.S. History) through a collaborative effort involving K-12 curriculum specialists and higher education representatives). These are aligned with the new curriculum being implemented by the State Board of Education.
  - The IHL is examining the adequacy of the college placement instruments currently being used (predominantly *Acuplacer*, a College Board product) in terms of alignment with the new K-12 assessments, alignment with ACT (which is the dominant college entrance assessment), and adequacy for placement purposes.

- The Department of Education makes a major effort to communicate to schools and counselors the level of academic preparation required for college level study, using the ACT definitions of college ready.
- P-16 councils are in place in most regions of the state, but are in the early stages of development. Gaps remain in fully understanding the role and functions of these councils. The lack of adequate funding limits their capacity to carry out these functions except out of the good will and dedication of key higher education and K-12 leaders. The quality and effectiveness of these entities therefore varies significantly across the state.
- A state P-16 Council is in place but is only in the early stages of defining an agenda. Leadership changes in the key entities may have hindered full implementation.
- The Mississippi State Board for Community and Junior Colleges (SBCJC) recently revised its statewide curriculum (linked to the uniform course numbering system) with specified learning outcomes which are used by all CJsCs in the state. It is not clear the extent to which these revisions took place in collaboration with K-12 or IHL, to ensure alignment of curricula and assessments for students moving through the education pipeline from high school, to an associate degree, and transfer to a university.
- The federally funded Gear Up Program serves as an important means to communicate with students and parents beginning at the 7<sup>th</sup> grade the requirements for being college ready and for providing necessary student support services. This program reaches only a fraction of the state's 7<sup>th</sup> and 8<sup>th</sup> grade students.

### **Teacher preparation**

- The new K-12 curriculum will not result in significant improvements in student learning unless teachers have the competence in subject matter and pedagogy to deliver the intended curriculum in the classroom. In spite of the promising direction of the reforms, Mississippi faces an extraordinary challenge in professional development of existing teachers and preparing new teachers (either graduates of schools/colleges of education or alternatively certified teachers) to teach curricula in line with the new expectations.
- Many of the candidates for the teaching profession begin at CJsCs with exceptionally low ACT scores (e.g., 14). These students then represent a significant percentage of the students seeking to transfer to universities to earn a bachelor's degree. The challenge of getting these students up to the level of competence in subject matter and pedagogy needed for teaching in line with the new K-12 curriculum is daunting.
- IHL is implementing the recommendations of the *Blue Ribbon Committee for the Redesign of Teacher Preparation* which should have an impact over time.
- Mississippi schools hire only a few new teachers each year so a major focus must be on professional development. In spite of this reality, budget cuts have led to elimination of summer institutes and other means to address this need at anywhere near the needed scale.
- Colleges/Schools of Education appear to play a varying role in professional development for teachers in their regions. Some clearly are very active; others are not. There appears to be no explicit IHL mandate that this must be a fundamental commitment of all colleges/schools of education—for the faculty to be deeply engaged in professional development in the field, especially in the schools where their students have their clinical training.

- An overall assessment of the K-12/higher education connections in Mississippi is that the state has many of the right “pieces” in place or in some stage of development. The key ingredients that are lacking are:
  - A comprehensive, coordinated and sustainable strategy to pull the pieces together and hold key players accountable for performance
  - Alignment of financing and policy leadership to move from small initiatives to system-wide implementation
  - A venue for setting goals and measuring and reporting on progress across the whole system: K-12, adult education, CJs and IHL institutions (see Policy Leadership)
  - A sense of urgency that unless the state acts immediately in a coordinated manner it will continue to lag other states in the region and nation in the competitiveness of its workforce and other measures of quality of life.

### **Admissions requirements and developmental education**

- CJs do not require the ACT and are open-access institutions. Students are placed in developmental education using high school grade point average, results of a placement test (mainly using *Acuplacer*, although there is some use of COMPASS, an ACT product, and in some cases, a “home-grown” placement assessment).
- Because CJs receive funding per credit hour for students in developmental education, there is no explicit financial incentive for the colleges to move students as quickly as possible to courses in which students can earn credit toward a degree.
- By Board policy, all IHL institutions have common admissions requirements. The institutions use a comprehensive process to assess a student’s readiness for college-level study, including ACT scores, high school grade point averages, and other available evidence. Based on this evidence, students are (1) placed in regular courses in the fall semester, (2) placed in regular courses with needed support services, or (3) referred to a summer developmental education program. If students successfully complete the summer developmental education program, and perform satisfactorily on *Acuplacer*, they are permitted to enroll in regular courses in the following fall semester. About 97% [participants enrolled summer of 2009=343] of those completing the summer program succeed in being placed in regular courses but they reportedly take longer to complete a degree (only 25% complete a bachelor’s degree in six years).
- Discussions are underway concerning the feasibility of administering a college placement assessment at the 10<sup>th</sup> grade level to give students an early indication of their level of preparation. No decision has been made as to whether this should be a College Board or ACT assessment.
- IHL recently developed a high school feedback report but it is too early to assess the impact of this report on high school actions.
- It was not clear how the admissions process for IHL institutions is coordinated with CJs. For example, some students may be referred to CJs if they fail to meet the initial screening requirements or students who fail to meet requirements after the summer program may be referred to CJs and given an opportunity to transfer at a later time if their academic performance improves. This may occur in some regions of Mississippi but not on a consistent basis across the state.
- Because the cost of attending a CJ is only a fraction of the cost of attending an IHL institution, there are strong financial incentives for students to attend CJs even though

they would be qualified for university-level study. The result is that CJs and IHL institutions compete for many of the same students.

- Redesign of developmental education courses is being undertaken on a small scale under the IHL course redesign initiative. No strategy or funding is available to bring these efforts to scale in a manner that would have a significant impact across the system.

### **Transfer and articulation**

- Formal policies and agreements are in place, but in practice arrangements are negotiated on an institution-by-institution basis. System-wide policies appear to have little impact.

### **Gaps in data for longitudinal analysis**

- The SBCJC has limited authority over locally governed CJs. As a result there is limited data capacity at the system level. This leads to gaps in consistent information across all CJs in basic information such as percentage of students referred to developmental education, the success of students who complete developmental education in getting into courses in which they earn credits toward degree, the percentage of students who intend to transfer and end up doing so, the number of students who transfer without earning a degree, etc.
- Limited staff capacity in IHL and SBCJC for maintaining longitudinal data systems due to budget limitations and staff turnover
- A history of lack of communication and coordination between SBCJC and IHL
- Focus of recent federally-assisted development of a longitudinal student information system on Workforce Investment Act (WIA), not on the pipeline of getting more people through to a postsecondary certificate or degree

### **Finance policy**

- The funding of neither CJC nor IHL institutions is allocated in a manner to clearly provide incentives for institutions to improve retention and graduation rates or to increase overall degree production.
  - CJs: funding allocations provide no incentives for completion. (e.g., for achieving "momentum points" from developmental education to credit bearing courses, to certified credentials, to an associate degree, to transfer, or to achieve other student goals). The SBCJC as a limited authority, coordinating entity serves primarily as an advocate for the budget request as developed by the presidents to the Governor and State Legislature. The Board plays no significant role in strategic planning for the system as a whole and even less of a role in linking funding policy to incentives for performance and change.
  - IHL: history of across-the-board increases in both state appropriations and tuition with no changes in percentages allocated to each institution based on performance or other indicators. There is no link between funding policy and strategic planning. Any proposals to alter the funding methodology in a way that would potentially shift state funding among institutions have been suspended.
  - The IHL Board focuses primarily on institutional budget requests and the allocation of state appropriations. It does not function as a governing board that holds each President accountable, through the Commissioner, for the effective use of *all* institutional revenues (tuition and fees, non-state funding, etc.) to achieve an institution's mission and strategic plan and, in particular, to accomplish IHL priorities.

In other words, there is no board requirement or practice to link strategic planning and strategic budgeting at either the system or institutional levels.

- Student aid
  - Mississippi’s limited student financial aid programs are not aligned with the goal of getting more students through the education pipeline to degrees
  - Only one program that is somewhat related to this goal is the Higher Education Legislative Plan (HELP) program, but this program is basically a merit program with a need component. It is targeted at students who have high grade point average (GPA) and ACT scores who have completed a specified core curriculum. Students must maintain good academic performance in college to maintain the grants.

### **Policy leadership**

- A divided system of governance:
  - IHL Board and Commissioner for a statewide governing board
  - SBCJC: statewide coordinating board with limited authority for system leadership of locally governed institutions
  - Boards of Trustees for fifteen CJC districts
- A history of lack of communication and coordination between SBCJC and IHL (and to a degree, with the State Board of Education)—although new leadership is making important strides in bridging this gap
- No strategic plan for IHL—although a set of priorities
- No link between planning and budgeting
- No venue for formulating and monitoring progress toward achieving a state-wide, long-term public agenda
- Lack of data to support monitoring/accountability

### **Assumptions/Realities**

- Severe fiscal constraints
  - Structural state budget deficits projected into the future
  - Phase out of American Recovery and Reinvestment Act (ARRA) funds
  - Limitation of in-state tuition as a revenue source because of low income levels and lack of a comprehensive state need-based student financial aid program
- Mississippi’s educational attainment gap is the consequence of years of neglect; it will take time to reach regional or national, let alone global competitiveness. Progress will only come through sustained, coordinated reform and step-by-step progress measured against national benchmarks, with monitoring, accountability, and public reporting on progress
- Obligation to abide by the intent and spirit of the Ayers Settlement

## Recommendations/Alternatives

### Establish Overall Goal

- Increase the educational attainment and skill levels of the state's working-age population benchmarked to the national average by 2025
- Rationale:
  - Globally competitive workforce, enhance the state's future economy, improve quality of life for the state's citizens
  - Need to overcome legacy of past neglect
- Focus:
  - Increased production of associate and baccalaureate degrees and certificates with workplace value
  - Adults as well as recent high school graduates

### Establish the state level Education Achievement Council to monitor and report on progress toward long-term goals and for accountability by:

- Sustaining attention to agenda
- Maintaining the current membership of Graduation Rate Task Force
  - Providing for replacement of members
  - Perhaps increasing business/civic representation
- Focusing on leading agenda, not on displacing the governing and coordinating responsibilities of the IHL and SBCJC boards
- Establishing long-term goals and benchmarks
- Monitoring and reporting on progress toward goals in an annual report card

### Implement expectations for “college ready”

- Place high priority on implementation of the recently developed College Readiness Standards. Make clear that these apply to all secondary school students seeking some postsecondary education whether at a CJC or an IHL institution
- Implement common placement assessments across the system, including CJsCs and IHLs. Ensure alignment of these assessments with K-12 assessments
- Align a “general education core” available at all CJsCs for transfer students. These should build on the College Readiness Standards. Ensure that all students who transfer have mastered the College Readiness Standards before they transfer.
- Mandate that the schools/colleges of education play an active role in professional development of teachers. Hold the colleges of education accountable for demonstrating their contributions to improved teacher performance in their immediate regions and especially in the schools used for clinical training of teachers.

### **Clarify institutional missions**

- Make a clear distinction in the missions of IHLs:
  - Research universities
  - Regional universities/regional stewardship
- Maintain current placement and screening process for IHLs, but increase communication to students, counselors and others about the different levels of preparation required for success for each of the universities.
- Strengthen the links between IHLs and CJC's concerning the referral to CJC's of students who are not college-ready to the level required for success at the universities. Provide these students with an opportunity to transfer to a university if their academic preparation and performance improves and they can demonstrate readiness for transfer.

### **Make developmental education a statewide priority**

- Developmental education redesign pilots initially supported by Lumina Foundation Funds
- Consideration of a new statewide jointly developed by IHLs and CJC's to design and deliver developmental education

### **Transfer and articulation**

- Most students enter community colleges with expectation of transfer but a relatively small percentage actually transfers, leaving many students with accumulated course work that is not recognized by employers
- Need for simple, straight-forward system: accepting Associate of Arts (AA) degrees for full credit toward Bachelor of Arts/Bachelor of Sciences (BA/BS) degrees
- But, also need to concentrate on selected number of critical majors (dual admission) – a transfer core with additional courses guaranteed for acceptance in most popular majors.
- Website for information on transfer and articulation

### **Longitudinal data system**

- Critical gap: community colleges link to IHL
- Include K-12, adult education, and, if possible, the independent sector higher education institution (on voluntary basis)
- Consider jointly staffed unit between IHL and CJC System
- A connection to workforce data with a broader emphasis on the entire education pipeline

### **Incentives for regional collaboration to get more students through the system to higher levels of achievement with more effective use of resources**

- Build on existing successes
- Emphasize links with K-12/adult education
- Shared accountability for moving students through pipeline

## **Student financial aid**

- Redesign the HELP program to target 7<sup>th</sup> graders with significant financial need and provide incentives for these students to stay in school, take the right curriculum, and pursue postsecondary education.

## **Institutional finance**

- Establish policy of aligning financing policy with long-term goals
- IHL: Acknowledge political and fiscal realities limiting ability to changing funding allocations *among* IHL institutions, but point out that the IHL Board could take actions to use finance policy to leverage change *within* each university: IHL Board agreement with each university to reserve “X”% of general revenue (state appropriations and tuition) for strategic change initiatives consistent with IHL strategic plan (emphasizing retention/graduation, degree production)
- SBCJC: Recommend that the funding formula be modified to allocate a percent of funding based on “momentum points” based on intermediate points of success

## **System leadership**

### ***IHL Board***

- Clarify responsibilities
  - Policy leadership for system to achieve goals established by Education Achievement Council
  - Support effective leadership/governance of each four year institution
  - Mission differentiation – Research versus regional
  - Student financial aid, statewide and need based, for students attending all institutions
- Strategic plan for system emphasizing contribution of IHL institutions to strategic goals of state (Education Achievement Council)
- Performance agreements with each institution linked to:
  - System priorities and state public agenda
  - Presidential evaluation and institutional leadership/budgeting
- Board’s use of time to focus on high level policy issues

### ***State Board for Community and Junior Colleges***

- Clarify responsibility for strategic leadership within its coordinating authority
- Strategic plan for CJC system emphasizing contribution of these institutions to the strategic goals of state (Education Achievement Council)
- Leading statewide initiatives that improve education achievement:
  - Alignment of curriculum and learning outcomes with both college readiness expectations and “transfer ready”
  - Common college placement assessments
  - Regional collaborative with K-12 and IHL institutions

# Appendix

Figure 1.

## Relationship Between Educational Attainment, Personal Income, and Economic Strength

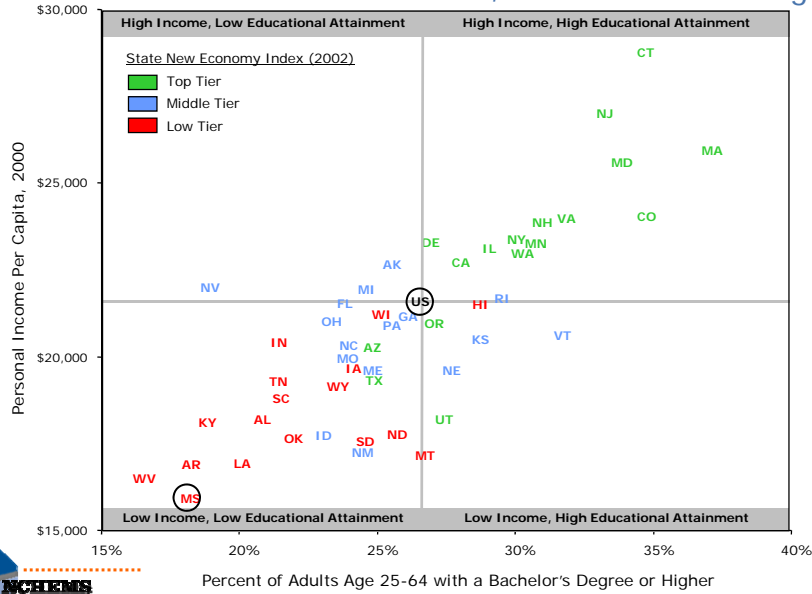
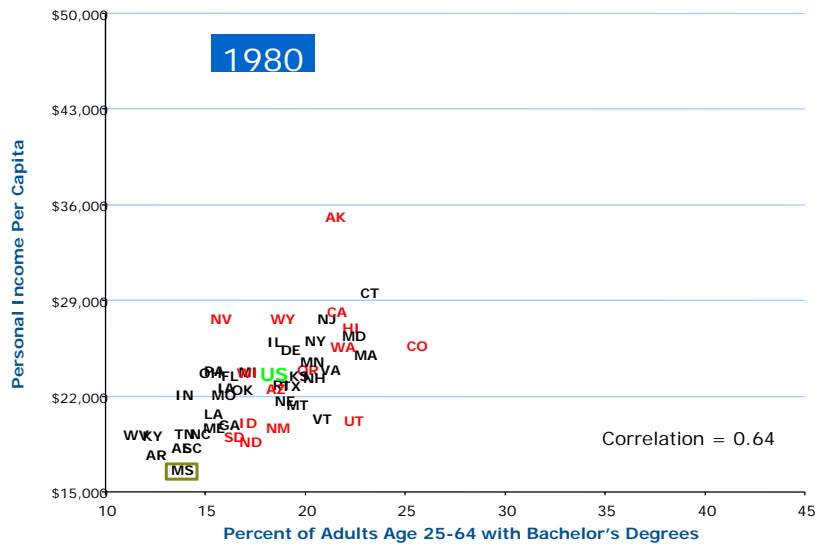


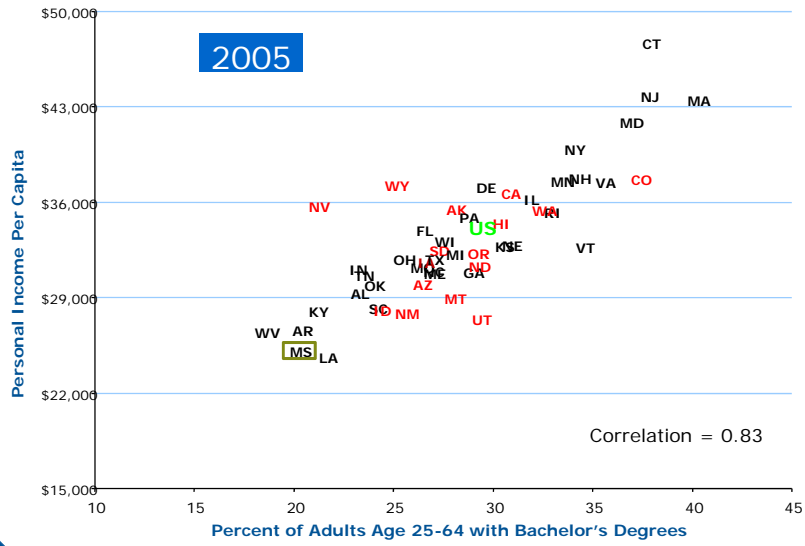
Figure 2.

## Educational Attainment and Income



Source: U.S. Census Bureau, Decennial Census and American Community Survey

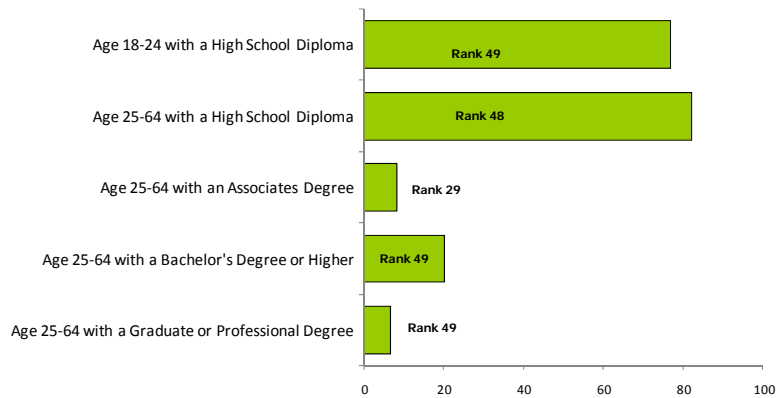
## Educational Attainment and Income



Source: U.S. Census Bureau, Decennial Census and American Community Survey

Figure 3.

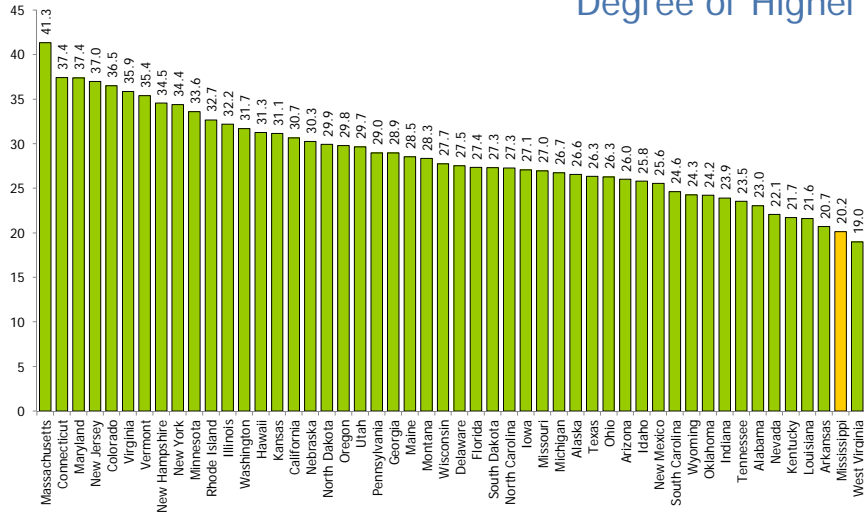
## Educational Attainment & Rank Among States Mississippi 2007 (percent)



Source: U.S. Census Bureau, 2007 American Community Survey.

Figure 4.

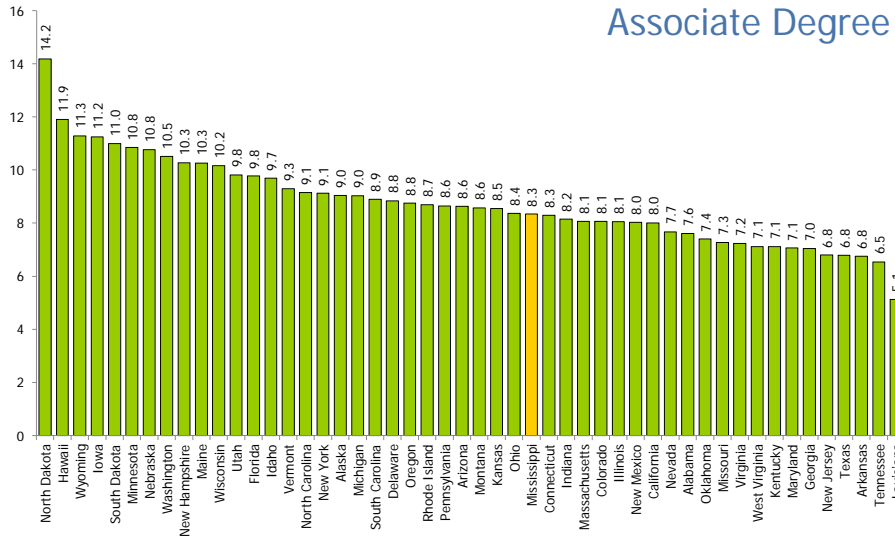
Percent of Population Ages 25-64 with a Bachelor's Degree or Higher



Source: U.S. Census Bureau, 2007 American Community Survey.

Figure 5.

Percent of Population Ages 25-64 with an Associate Degree

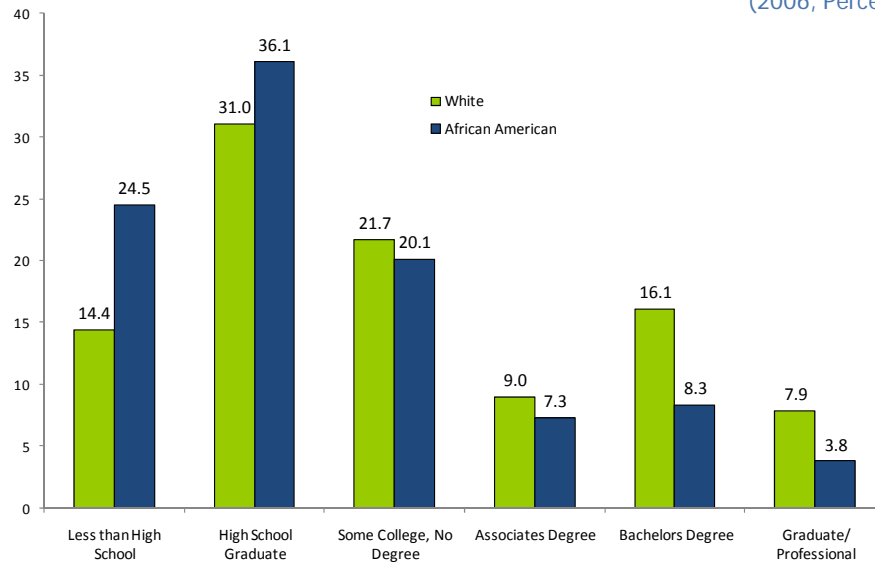


Source: U.S. Census Bureau, 2007 American Community Survey.

**Figure 6.**

## Difference in Education Attainment Between Whites and African Americans

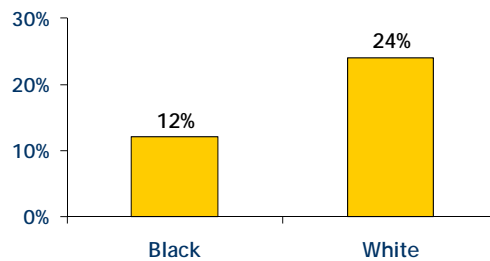
(2006, Percent)



Source: U.S. Census Bureau, 2006 American Community Survey (ACS) Public Use Microdata Sample (PUMS) File.

**Figure 7.**

If all racial/ethnic groups had same educational attainment, annual personal income in Mississippi would be \$7 BILLION higher!



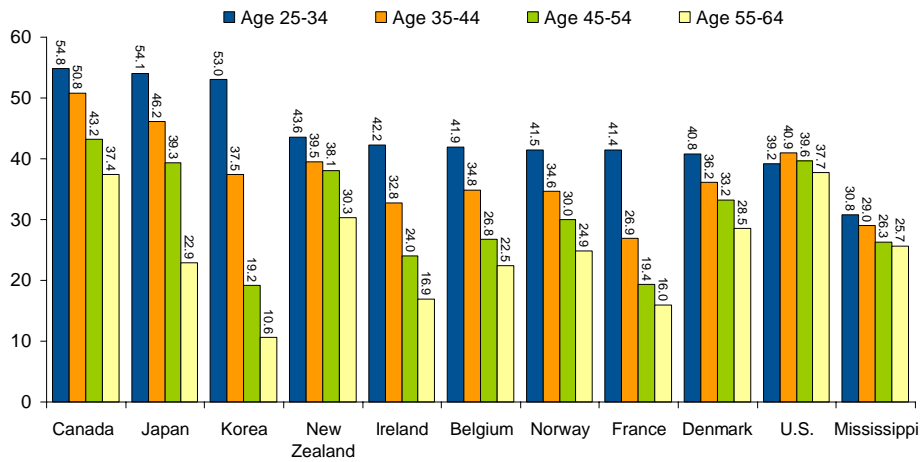
Mississippi Population with Bachelor's Degree



Source: Measuring Up 2008: The National Center for Public Policy in Higher Education

**Figure 8.**

Percent of Adults with an Associate Degree or Higher by Age Group – Mississippi, U.S. & Leading OECD Countries



Source: OECD, Education at a Glance 2008

**Figure 9.**

Reaching Goal by 2025 (55%) – Mississippi

- 825,114 Number of Individuals to Attain 55% Goal
- 231,759 Number of Individuals (Age 25-44) Who Already Have Degrees
- 593,355 Additional Degree Production Needed (2005 to 2025)
- 406,220 Degrees Produced at Current Annual Rate of Production
- 21,058 Additional Residents with College Degrees from Net Migration
- 208,193 Additional Degrees Needed
- 10,410 Additional Degrees Needed per Year (currently produce 20,311 in all Sectors)
- 57.5% Increase in Annual Associate and Bachelor's Degree Production Needed (in Public Sector Only)

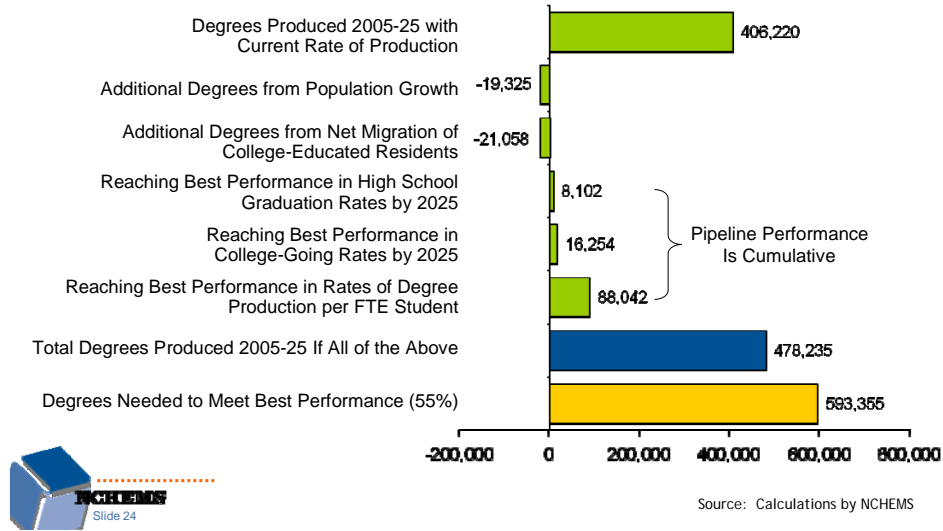


**Figure 10.**



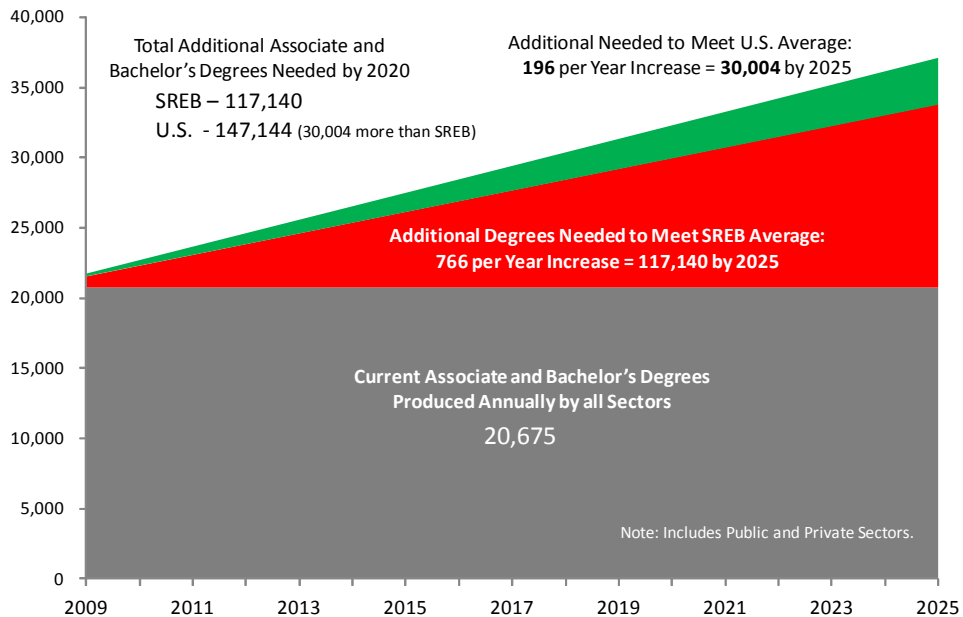
## How Can Mississippi Reach International Competitiveness?

Current Degree Production Combined with Population Growth and Migration and Improved Performance on the Student Pipeline Measures



**Figure 11.**

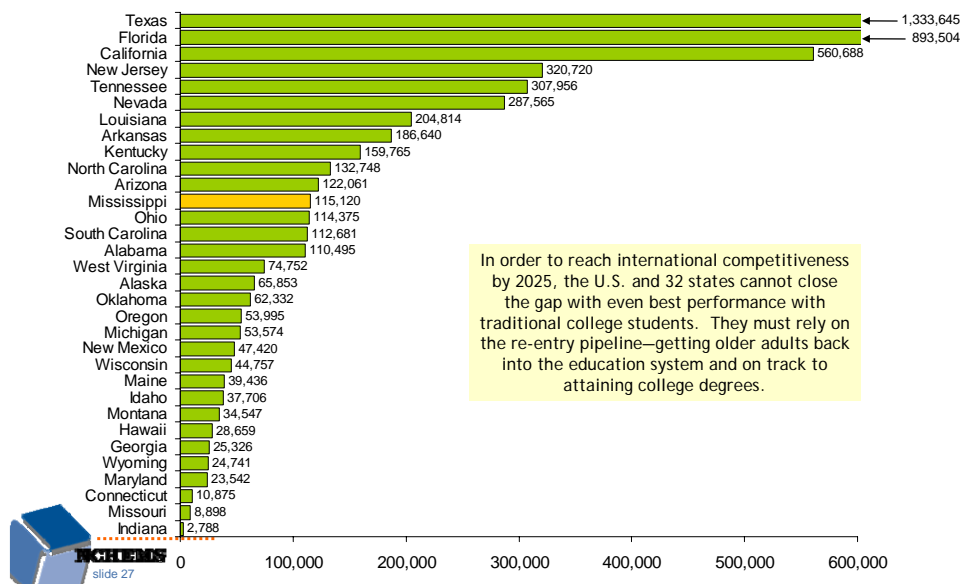
## Additional Degree Production Needed for Mississippi to Match SREB and U.S. Averages in Educational Attainment by 2025



Sources: NCES, IPEDS Completions Survey; U.S. Census Bureau, American Community Survey and Population Projections; Calculations by NCHEMS

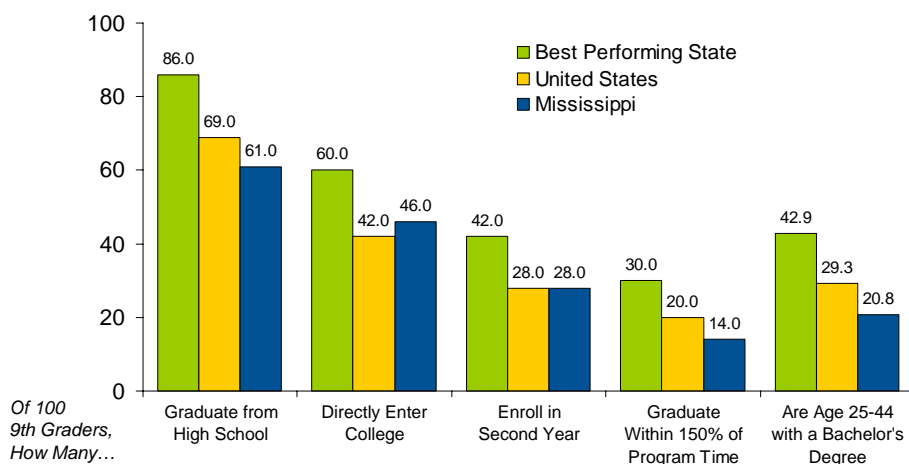
**Figure 12.**

Even Best Performance with Traditional College-Age Students at Each Stage of the Educational Pipeline Will Leave Gaps in More than 30 States



**Figure 13.**

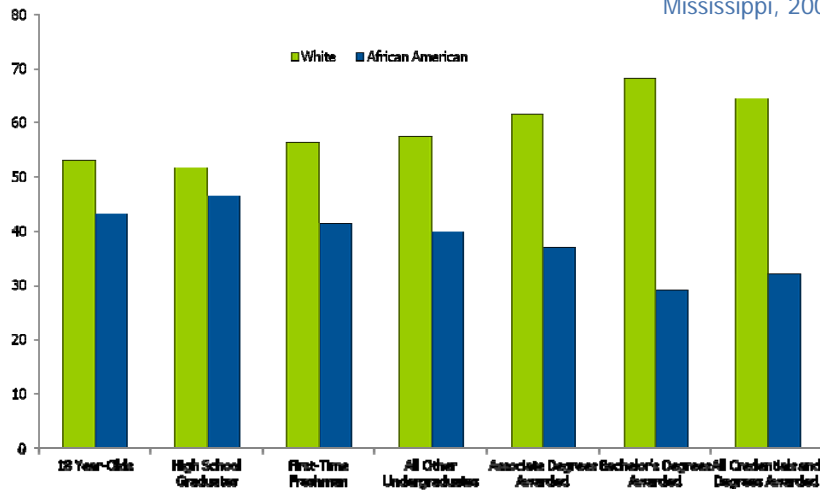
Student Pipeline, 2006



Sources: (1) Tom Mortenson, Postsecondary Opportunity: Chance for College by Age 19. (2) NCES, IPEDS 2006 Retention Rate File and 2006 Graduation Rate File. (3) U.S. Census Bureau, 2006 American Community Survey.

Figure 14.

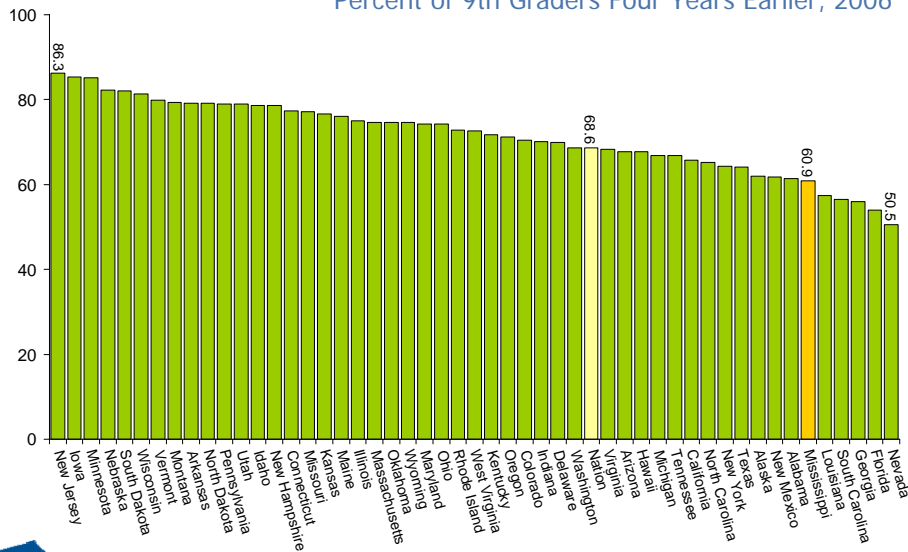
Percent of Whites & African Americans at Each Stage of the Education Pipeline  
Mississippi, 2005



Sources: U.S. Census Bureau 2005 Population Estimates. NCES Common Core of Data 2004-05 High School Diploma Recipients. NCES, IPEDS Fall 2005 Enrollments File, 2004-05 Completions File.

Figure 15.

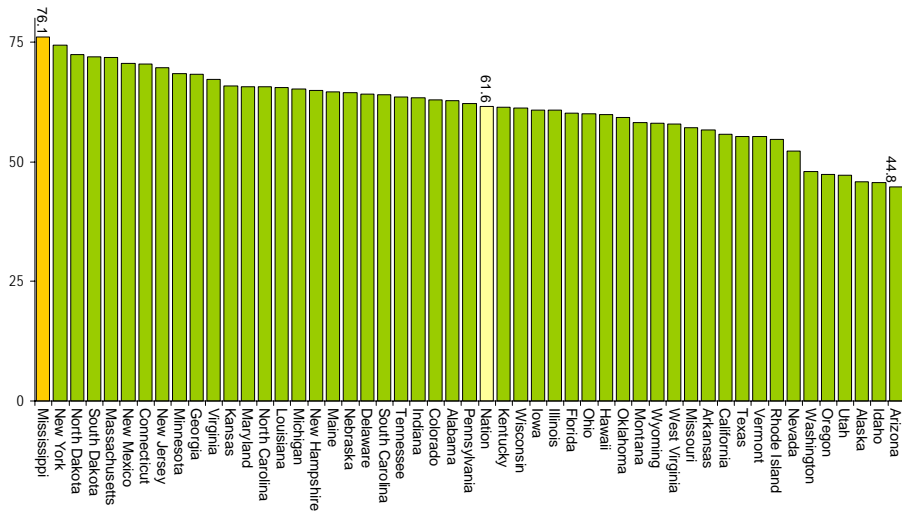
High School Graduation Rates - Public High School Graduates as a Percent of 9th Graders Four Years Earlier, 2006



Source: Tom Mortenson, Postsecondary Opportunity

Figure 16.

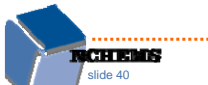
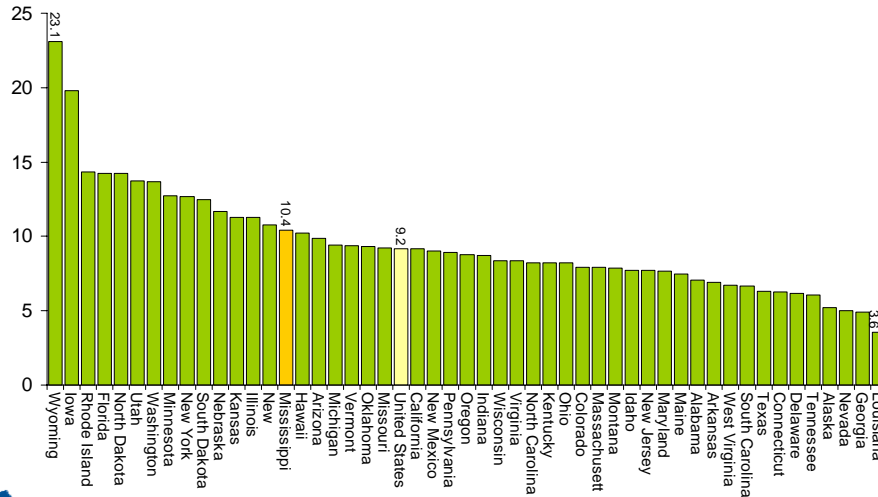
College-Going Rates—First-Time Freshmen Directly Out of High School as a Percent of Recent High School Graduates, 2006



Source: Tom Mortenson, Postsecondary Opportunity

Figure 17.

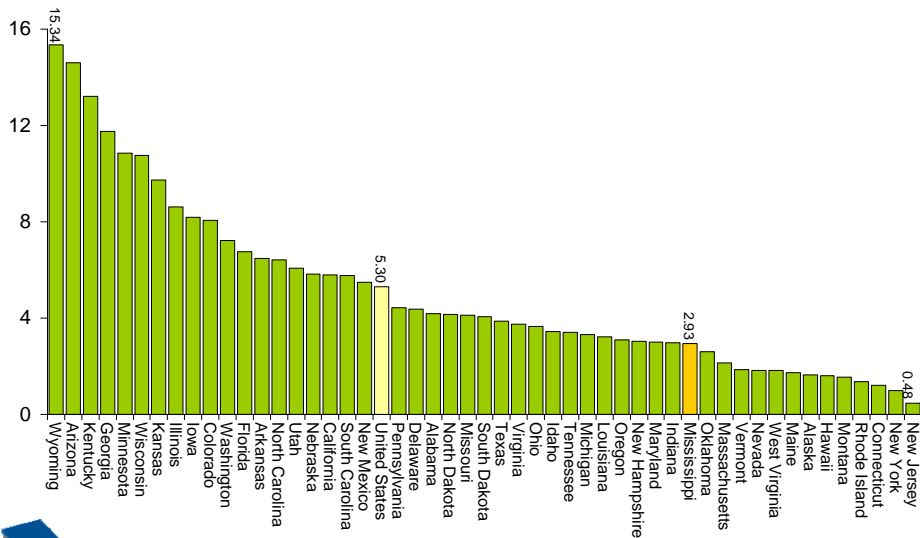
Associate Degrees Awarded at All Colleges per 1,000 Adults Age 18-44 with No College Degree, 2006



Source: NCES, IPEDS Completions Survey 2005-06; U.S. Census Bureau, 2006 ACS

Figure 18.

Certificates & Diplomas Awarded at All Colleges per 1,000 Adults Age 18-44 with No College Degree, 2006

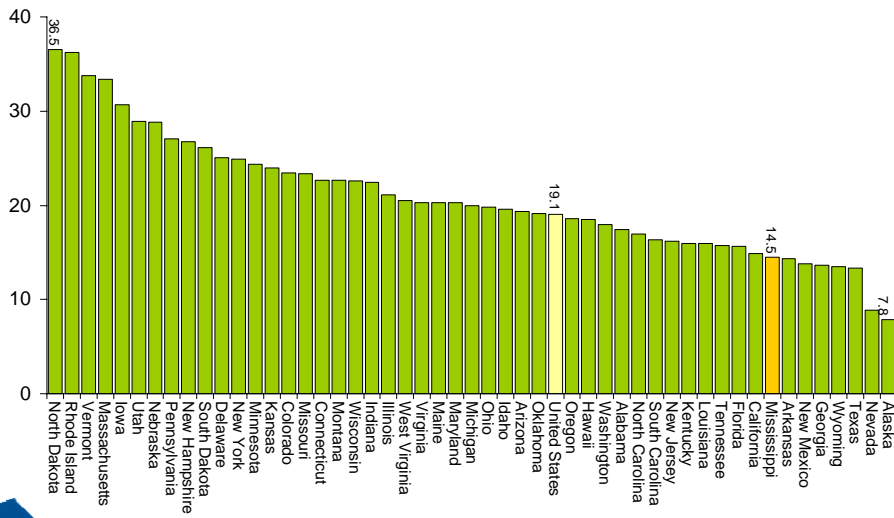


Source: NCES, IPEDS Completions Survey 2005-06; U.S. Census Bureau, 2006 ACS



Figure 19.

Bachelor's Degrees Awarded at All Colleges per 1,000 Adults Age 18-44 with No College Degree, 2006

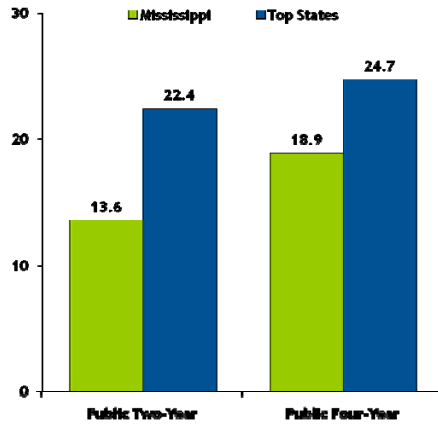


Source: NCES, IPEDS Completions Survey 2005-06; U.S. Census Bureau, 2006 ACS



Figure 20.

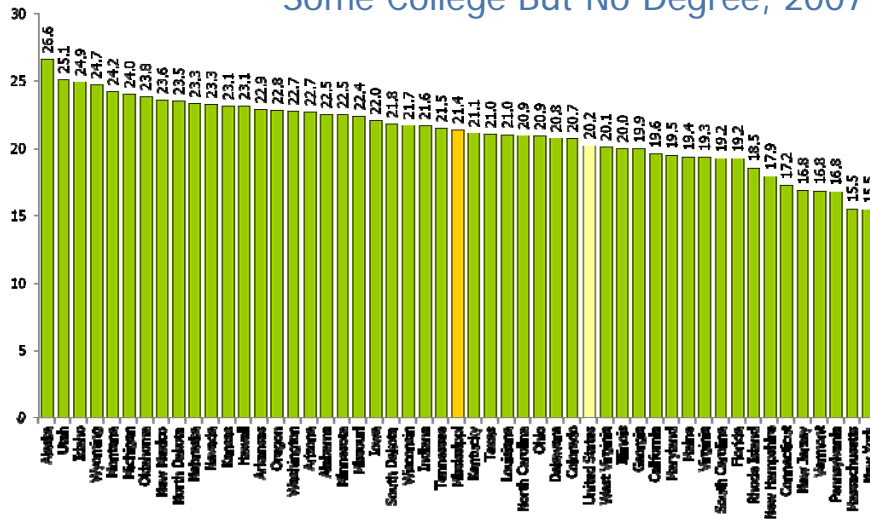
Performance: Undergraduate Degrees Awarded Per 100 Full-Time Equivalent Students



Source: NCES, IPEDS Completions, Enrollment and Finance Surveys

Figure 21.

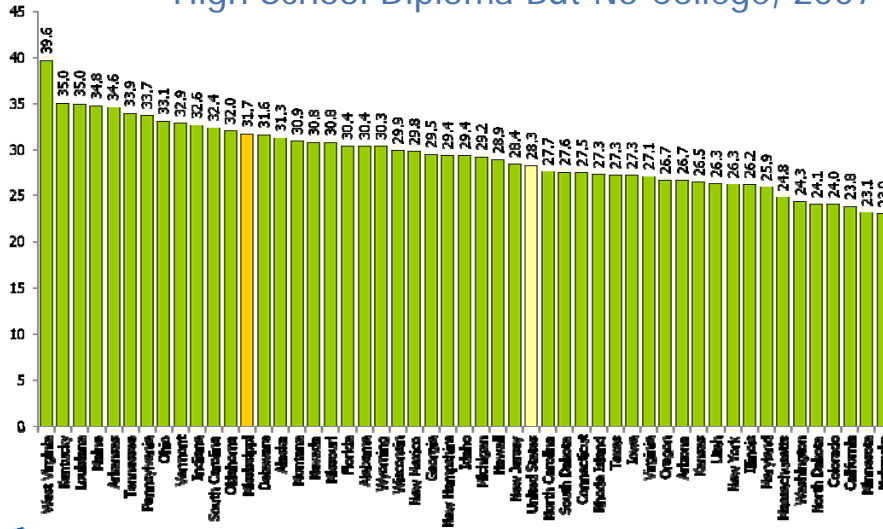
Percent of the Adult Population, Age 25-44 with Some College But No Degree, 2007



Source: U.S. Census Bureau, 2007 American Community Survey; Tables B15001 and C15001

Figure 22.

Percent of the Adult Population, Age 25-44 with a High School Diploma But No College, 2007

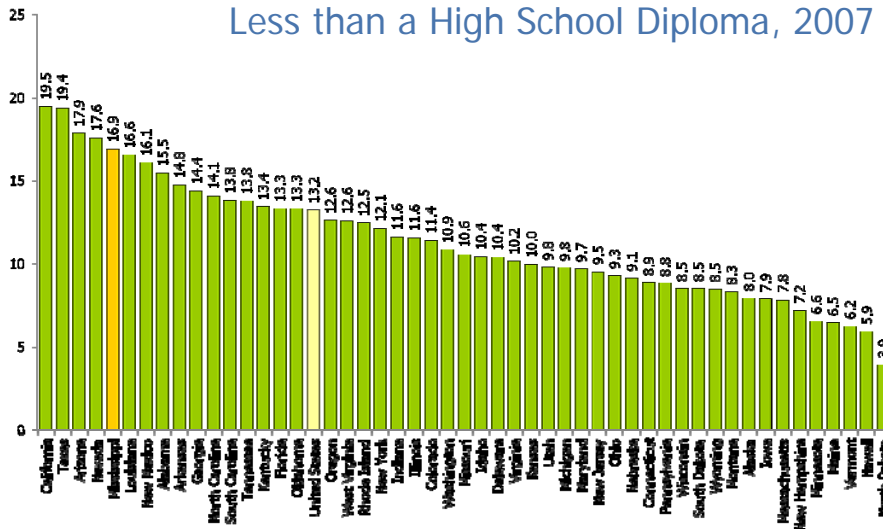


Source: U.S. Census Bureau, 2007 American Community Survey, Tables B15001 and C15001

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Figure 23.

Percent of the Adult Population, Age 25-44 with Less than a High School Diploma, 2007

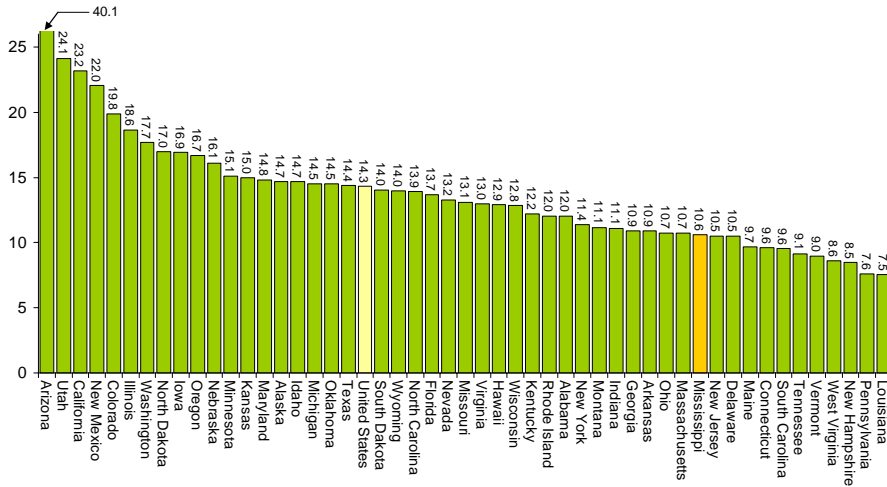


Source: U.S. Census Bureau, 2007 American Community Survey, Tables B15001 and C15001

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Figure 24.

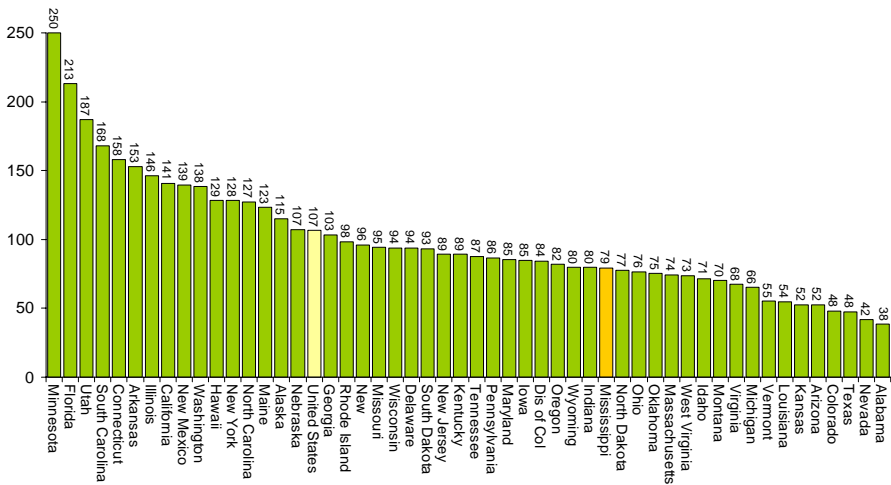
Enrollment of Residents Age 25-49 as a Percentage of those Residents with a High School Diploma but No College, 2005



Source: NCES, IPEDS Enrollment Survey; U.S. Census Bureau 2005 ACS

Figure 25.

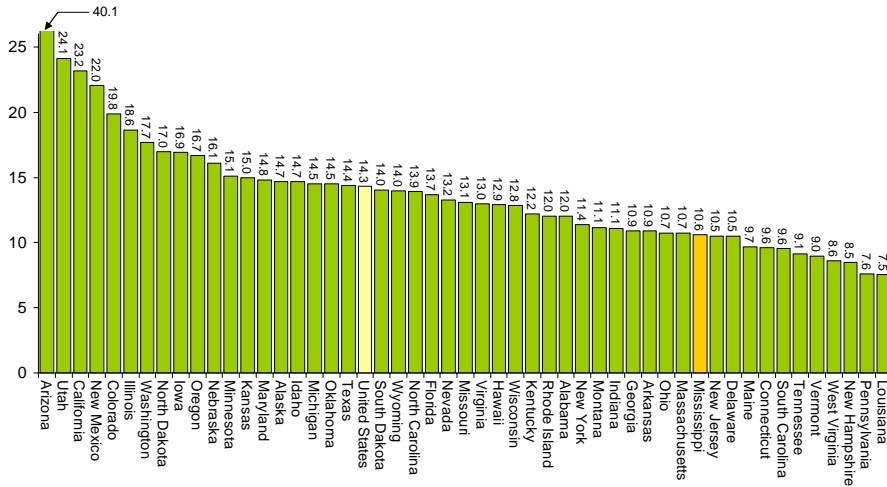
Enrollment of Residents Age 25-44 in State-Administered Adult Education Programs per 1,000 Residents Age 25-44 with Less than a High School Diploma, 2005



Source: U.S. Department of Education

Figure 26.

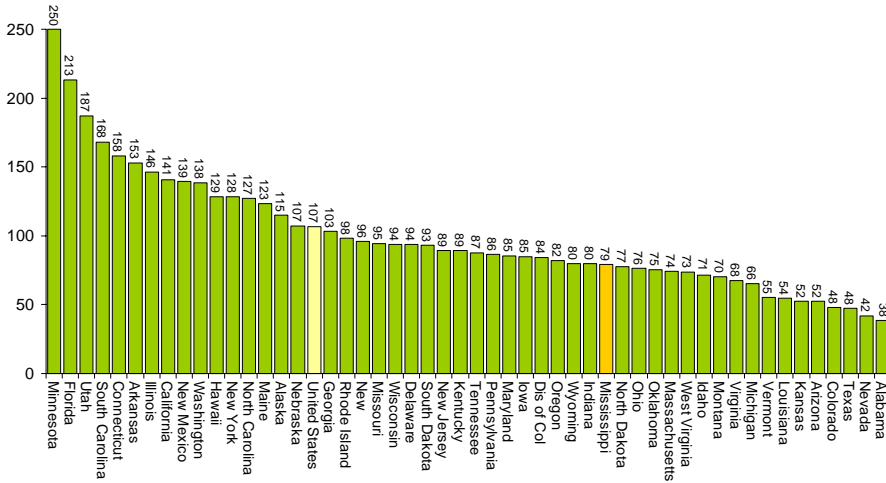
Enrollment of Residents Age 25-49 as a Percentage of those Residents with a High School Diploma but No College, 2005



Source: NCES, IPEDS Enrollment Survey; U.S. Census Bureau 2005 ACS

Figure 27.

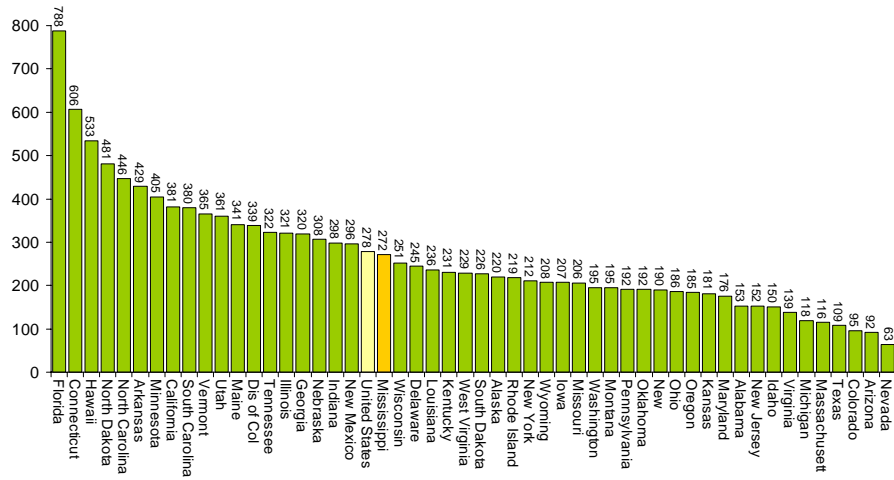
Enrollment of Residents Age 25-44 in State-Administered Adult Education Programs per 1,000 Residents Age 25-44 with Less than a High School Diploma, 2005



Source: U.S. Department of Education

**Figure 28.**

Enrollment of Residents Age 16-24 in State-Administered Adult Education Programs per 1,000 Residents Age 16-24 with Less than a High School Diploma, 2005



\*Age 16-24 with no high school diploma or equivalent, not enrolled  
Source: U.S. Department of Education

