



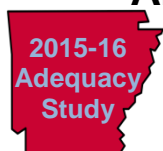
Research Report

Student Achievement

February 9, 2016

Prepared for

**THE HOUSE INTERIM COMMITTEE ON EDUCATION
AND THE SENATE INTERIM COMMITTEE ON EDUCATION**



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INTRODUCTION

In the Arkansas Supreme Court's opinion in the 2002 *Lake View* case, which declared the state's school funding system unconstitutional, the justices agreed with the lower court's assessment that the "State has a remarkably serious problem with student performance."¹ At the time, according to Judge Kilgore's 2001 order, only 16% of 8th graders statewide tested proficient or advanced in math, and 58% of high school graduates entering college required remediation in English or math.²

This report provides information about the progress made by Arkansas's public schools over the last several years, as measured by student test scores, graduation rates, and other education statistics. In general, while Arkansas students have made significant improvements in some areas, they continue to score below the national average on some national assessments, and achievement gaps between student subgroups still remain.

PARCC

HISTORICAL ARKANSAS BENCHMARK DATA

The Arkansas Benchmark exams in math and English Language Arts (ELA) were administered for the last time in 2013-14. As presented in the 2014 adequacy report, Benchmark data that are comparable from 2005 to 2014 showed significant improvement in the percentages of 4th and 8th graders scoring proficient or advanced in both literacy and math. In literacy, the percentage of 4th graders grew from 51% in 2005 to 83% in 2014, and the percentage of 8th graders grew from 57% to 77% during this period. In math, the percentage of 4th graders grew from 50% in 2005 to 76% in 2014, and the percentage of 8th graders grew from 33% to 64% during this period.

2014-15 PARCC DATA

The Arkansas Benchmark exams were replaced with a new exam in 2014-15 known as PARCC. PARCC was created by the Partnership for Assessment of Readiness for College and Careers and is aligned with the new Common Core State Standards (CCSS) in math and English, which all K-12 schools in Arkansas had implemented by 2013-14.³ Both the PARCC and the CCSS have more rigorous expectations for what students are expected to know and be able to perform. Arkansas schools were required to administer the PARCC ELA exam to all students in grades 3-10. Schools also had to administer grade-specific PARCC assessments in math for grades 3-8 and course-based mathematics assessments for Algebra 1 and Geometry and Algebra 2. Additionally, schools had the option to administer PARCC exams in Algebra 2 and 11th grade ELA; therefore, the results from these two exams are not statistically representative of all students statewide.

Due to the change in state assessments, Arkansas students' scores on the PARCC for 2014-15 are not comparable to those of previous Benchmark exams. With that caveat in mind, this report summarizes statewide results from this single year of PARCC testing. PARCC defines student performance across five levels. ADE considers students to be performing on grade level if they score at Level 4 or 5:⁴

Level 1	Did not yet meet expectations
Level 2	Partially met expectations
Level 3	Approached expectations
Level 4	Met expectations
Level 5	Exceeded expectations

¹ *Lake View Sch. Dist. No. 25 v. Huckabee*, 351 Ark. 31, 61 (2002).

² *Lake View Sch. Dist. No. 25 v. Huckabee*, No. 1992-5318 (*Pulaski Cty. Chancery Ct. 2001*).

³ See BLR's Bureau Brief on ACTAAP (Project #16-001-23, November 2015), for more information on the state's assessment system: [http://www.arkleg.state.ar.us/education/K12/AdequacyReports/2016/2015-11-03/04-ACTAAP%20Report,%20BLR%20\(23\).pdf](http://www.arkleg.state.ar.us/education/K12/AdequacyReports/2016/2015-11-03/04-ACTAAP%20Report,%20BLR%20(23).pdf)

⁴ ADE Commissioner's memo #LS-16-039: "PARCC Scores and AIPs," November 24, 2015. <http://adecm.arkansas.gov/ViewApprovedMemo.aspx?Id=1751>

Based on those cut-off scores, approximately 35% of students in grades 3-10 met or exceeded expectations in ELA, and approximately 23% met or exceeded expectations in math.⁵

2015 PARCC ELA Results by Grade and Performance Level

Grade	#Students Tested	% Level 1	% Level 2	% Level 3	% Level 4	% Level 5	TOTAL % Levels 4+5
3	34,871	23.4%	22.7%	24.7%	27.5%	1.7%	29.1%
4	34,946	13.4%	22.4%	30.6%	29.3%	4.3%	33.6%
5	35,051	13.0%	24.2%	30.5%	30.7%	1.6%	32.3%
6	34,850	11.5%	22.4%	33.0%	30.0%	3.1%	33.1%
7	35,432	16.1%	21.0%	28.2%	28.0%	6.8%	34.7%
8	35,344	17.6%	22.4%	27.6%	28.9%	3.5%	32.4%
9	35,291	14.9%	21.5%	27.0%	30.6%	5.9%	36.5%
10	33,522	21.0%	19.0%	23.0%	28.2%	8.8%	37.0%
11*	12,765	12.7%	18.1%	25.9%	33.6%	9.7%	43.3%

* Optional for schools to administer, therefore not statistically representative of all students statewide.

2015 PARCC Math Results by Assessment and Performance Level

Assessment	#Students Tested	% Level 1	% Level 2	% Level 3	% Level 4	% Level 5	TOTAL % Levels 4+5
3	34,931	13.7%	24.0%	30.9%	28.5%	2.9%	31.4%
4	34,987	14.5%	30.5%	30.7%	23.3%	1.0%	24.2%
5	35,103	14.1%	31.5%	30.8%	22.1%	1.5%	23.6%
6	34,874	12.9%	29.3%	33.0%	23.4%	1.4%	24.8%
7	35,247	10.6%	31.5%	36.3%	20.7%	0.9%	24.8%
8 ⁶	28,980	25.1%	30.6%	27.2%	16.8%	0.3%	17.1%
Algebra 1	34,428	10.6%	29.4%	31.7%	27.8%	0.6%	28.4%
Geometry	32,600	7.4%	35.4%	36.3%	19.4%	1.5%	21.0%
Algebra 2*	10,611	28.9%	32.4%	23.9%	14.6%	0.2%	14.9%

* Optional for schools to administer, therefore not statistically representative of all students statewide.

State education officials expected to see a dip in test scores after switching from the Benchmark exams to the PARCC, due to the increased rigor of both the new Common Core standards and the higher-level thinking assessed by the PARCC. According to ADE, approximately 91.5% of students took the computer-based assessment, while the rest took the paper-and-pencil version, which may have had some effect on the results.⁷

⁵ ADE. "Arkansas PARCC Results for Students in Grades 3 through 8 and High School," December 9, 2015. Note: Due to rounding, performance levels for each grade may not add up to 100%.

⁶ According to ADE, data for 8th grade math represents only 83% of all 8th graders in the state, because approximately 17% of these students took the Algebra I exam rather than the 8th grade math exam.

⁷ ADE. "Arkansas PARCC Results for Students in Grades 3 through 8 and High School," December 9, 2015. Note: Due to rounding, performance levels for each grade may not add up to 100%.

STATE COMPARISONS

Most of the 11 other states that administered the PARCC exams in 2014-15 had similarly low percentages of students scoring 4 or 5 on the exam. The following charts compare Arkansas students' results with those in other PARCC states.⁸

PARCC ELA: % Met or Exceeded Expectations, by State

	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11
Arkansas	29.1	33.6	32.3	33.1	34.7	32.4	36.5	37.0	43.3*
Colorado	38.2	41.7	40.5	39.1	41.0	40.9	37.8	37.4	39.9
D.C.	25	26	26	23	25	25	-	-	-
Illinois	34	37	37	33	37	38	-	-	-
Louisiana	37	40	33	38	34	40	-	-	-
Maryland	38.1	40.1	40.1	36.2	38.7	40.4	-	39.7	-
Massachusetts	54	57	63	60	60	64	39	-	39
Mississippi	28.7	29.8	28.1	29.3	31.2	31.1	-	49.4	-
New Jersey	44	51	52	49	52	52	40	37	41
New Mexico	24.9	23.7	23.8	21.9	21.1	22.8	26.8	31.2	44.6
Ohio	-	41.3	39.6	38.5	41.7	41.5	47.1	56.7	-
Rhode Island	37.4	37.6	37.6	34.8	38.3	35.1	32.8	31.4	-
PARCC AVERAGE	35.5	38.2	37.8	36.3	37.9	38.6	37.1	40.0	41.1

- Indicates that the state did not administer that assessment or data is currently unavailable.

* It was optional for Arkansas schools to administer the Grade 11 ELA exam.

PARCC MATH: % Met or Exceeded Expectations, by State

	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Algebra 1	Geometry	Algebra 2
Arkansas	31.4	24.2	23.6	24.8	24.8	17.1	28.4	21.0	14.9*
Colorado	36.7	30.2	30.1	31.7	27.4	18.9	20.4	24	27.8
D.C.	30	28	25	21	14	17	-	-	-
Illinois	36	28	27	26	27	31	-	-	-
Louisiana	37	33	28	26	22	32	-	-	-
Maryland	36.4	30.6	29.9	29.5	21.3	23.2	31.2	-	20.2
Massachusetts ⁹	55	47	55	53	45	53	80 (Gr. 8); 22 (High Sch.)	36	13
Mississippi	33.1	27.2	25.1	24.5	20.2	28.1	27.4	-	-
New Jersey	45	41	41	41	37	24	36	22	24
New Mexico	25.2	18.5	20.4	18.5	15.0	9.1	17.4	12.6	17.7
Ohio	38	34.6	35.2	34.6	30.8	25.9	37	60.5	-
Rhode Island	36.3	26.8	26.7	25.9	25.4	11.9	25.5	13.7	-
PARCC AVERAGE	36.7	30.8	30.6	29.7	25.8	24.3	32.5	27.1	19.6

- Indicates that the state did not administer that assessment or data is currently unavailable.

* It was optional for Arkansas schools to administer the Algebra 2 exam.

⁸ Data gathered from state education department websites. For more information, see <http://www.parcconline.org/assessments/score-results/state-results>.

⁹ According to the MA Department of Education: "While more than half of Massachusetts school districts that serve students in grades 3-8 gave PARCC in the spring, far fewer districts volunteered to use the PARCC high school tests, because the 10th grade MCAS is still a graduation requirement. In addition, some eighth grade students took Algebra I tests instead of eighth grade PARCC math tests."

ACHIEVEMENT GAPS

Consistent with results of previous Benchmark and national assessments, Arkansas's 2015 PARCC results showed significant achievement gaps among students by income (as defined by eligibility for free or reduced-price school lunches (FRL)), race/ethnicity, and gender. These gaps are summarized in the table below. The percentage of non-FRL students who met or exceeded expectations in ELA (across grades 3-10) was more than double that of FRL students (50.5% vs. 23.4%, respectively). Likewise, the percentage of non-FRL students who met or exceeded expectations in math (across grade levels and assessments) was more than double that of FRL students (38.1% vs. 15.7%, respectively). On average, the percentage of female students who met or exceeded expectations was significantly higher than that of male students in ELA (40.1% vs. 27.3%, respectively) and slightly higher than that of male students in math (24.8% vs. 23.2%, respectively). There was a 22.3 percentage point gap among white and African-American students in the percentage of students who met or exceeded expectations in ELA, and a 20.3 percentage point gap among whites and African-Americans in math.

2015 PARCC Results by Demographics: % Met or Exceeded Expectations

	ELA		MATH	
	# VALID SCORES	% Levels 4-5 (Avg. Across Grades 3-10)	# VALID SCORES	% Levels 4-5 (Avg. Across Grades/Course Assessments)
POVERTY				
FRL	174,299	23.4%	171,092	15.7%
Non-FRL	105,008	50.5%	100,058	38.1%
GENDER				
Male	124,341	27.3%	138,138	24.8%
Female	137,043	40.1%	133,012	23.2%
RACE/ETHNICITY				
African American	56,093	17.3%	54,703	9.0%
Asian	4,241	56.4%	4,001	50.7%
Hispanic	32,004	26.5%	31,967	18.4%
Native American or Alaska Native	1,812	34.0%	1,761	24.2%
Native Hawaiian or Pacific Islander	1,734	11.9%	3,806	8.8%
Two or more races	5,461	36.1%	5,284	25.5%
White	177,783	39.6%	171,449	29.3%

ACADEMIC IMPROVEMENT PLANS (AIPS)

Arkansas law provides that a student who does not score at the proficient level, which is determined by the State Board of Education (SBOE), on the end-of-course assessment must be given an Academic Improvement Plan (AIP) that contains remediation activities in the areas in which the student was not proficient.¹⁰ In spring 2015, ADE sent guidance to districts indicating that AIPs for 2015-16 could be based on students' Benchmark results from 2013-14 or other more current reliable data, since districts would not receive PARCC results until after the 2015-16 school year began.¹¹ On November 12, 2015, the SBOE determined that all students scoring at levels 1, 2, and 3 on the PARCC will require an AIP (unless the student had already been assigned an AIP for 2015-16, based on his or her previous Benchmark results). Teachers and administrators must work with parents to develop each student's AIP and determine the

¹⁰ Arkansas Code §§ 6-15-404, 6-15-420, and 6-15-2009.

¹¹ ADE Commissioner's Memo #LS-16-039, "PARCC Scores and AIPs", November 24, 2015: <http://adecm.arkansas.gov/ViewApprovedMemo.aspx?Id=1751>

intensity, rigor, and length of interventions. For example, some students occasionally may need after-school tutoring, while others may need to be pulled out of the regular classroom for more intensive remedial instruction.

ADE does not have data on the number of students who received AIPs in 2015-16 or previous years, nor is it able to estimate the total cost to districts for providing AIPs, since local decisions will vary regarding implementation, length of time needed to determine mastery, and many other factors.

ACT ASPIRE

In summer 2015, Governor Hutchinson's Council on Common Core Review recommended that the SBOE replace the PARCC with the ACT Aspire, and on July 9, 2015, the SBOE voted to accept this recommendation and adopt the ACT Aspire as the state's annual assessment beginning in 2015-16.¹² Therefore, PARCC results from 2014-15 will in no way be comparable to the results of the 2015-16 ACT Aspire.

BLR Survey Data: PARCC and ACT ASPIRE

As part of the adequacy study, the Arkansas Bureau of Legislative Research (BLR) surveyed teachers and interviewed principals in a sample of schools across the state in fall 2015. The BLR also distributed surveys to all 234 superintendents and 22 directors of all open-enrollment charter schools. The principal survey included the following open-ended question: "Please describe your school's experience in implementing PARCC testing in 2015." In general, principals expressed frustration with various aspects of the new exam, particularly the fact that they did not receive test results in time to plan for the following school year (2015-16). While most respondents claimed to have adequate broadband to administer the computer-based exams, some felt that they did not have enough computers or devices to accommodate all students tested.

BLR's surveys and interview protocol also included the following question: "Do you agree with the state's decision to replace PARCC with the ACT Aspire next year [2015-16]?" The following chart summarizes the preliminary results as of February 2016. The vast majority of teachers, principals, and superintendents agreed (at least to some extent) with the decision to replace the PARCC with the ACT Aspire. Two of the main reasons that most survey participants gave about why they supported switching to the ACT Aspire were the shortened amount of time that would be required to administer the ACT Aspire, compared to the PARCC, as well as participants' belief that the ACT Aspire would be more directly aligned with the ACT exam that most Arkansas students take in high school in order to apply for college admissions and scholarships.

BLR Survey Results: "Do you agree with the state's decision to replace PARCC with the ACT Aspire next year?"

Response	# Teachers	# Principals	# Superintendents
Yes	419 (41.9%)	35 (47.9%)	115 (46.2%)
Yes, to some extent	389 (38.9%)	20 (27.4%)	93 (37.3%)
No	138 (13.8%)	16 (21.9%)	38 (15.3%)
No response (blank)	53 (5.3%)	2 (2.7%)	3 (1.2%)
TOTAL RESPONDENTS	999	73	249

¹² Governor's Council on Common Core Review. Memo: "Findings and Recommendations", July 30, 2015: https://static.ark.org/eeuploads/lt-gov/The_Governors_Council_on_Common_Core_Review_-_Findings_and_Recommendations.pdf

BENCHMARK & END-OF-COURSE EXAMS IN SCIENCE & BIOLOGY

Since the 2015 PARCC did not include a science assessment, ADE continued to require schools to test students in biology using the state’s Benchmark science exams for grades 5 and 7 and End-of-Course (EOC) exams in Biology. In 2014-15, 60% of 5th graders scored proficient or advanced, compared to 50% in 2009-10, and 34% of 7th graders scored proficient or advanced on the science benchmark exam, compared to 33% in 2009-10. On the 2014-15 EOC Biology exam, 47% of students scored proficient or advanced, compared to 36% in 2009-10.

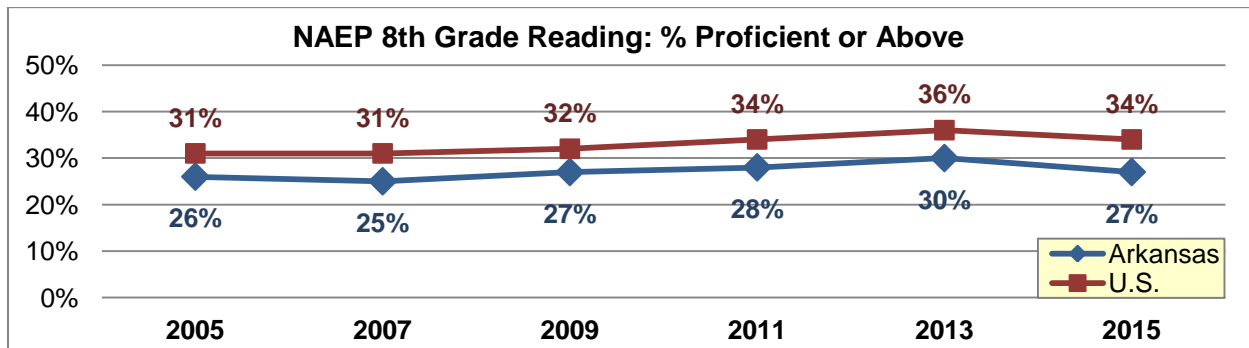
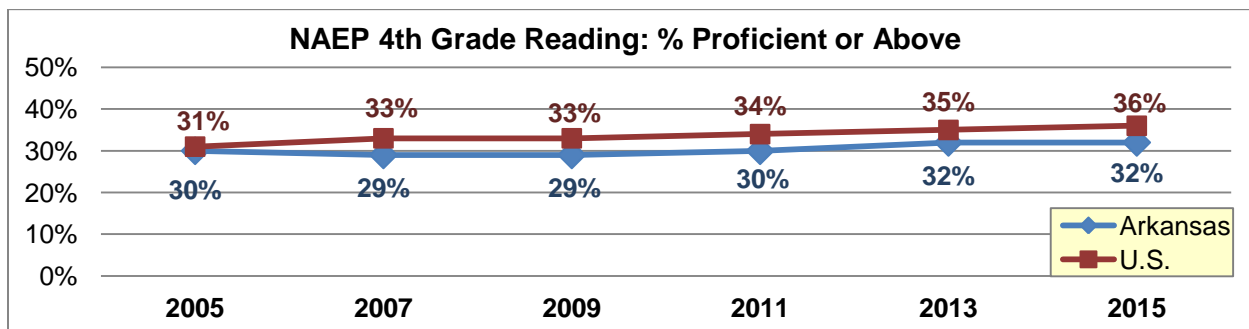
2014-15 Science Benchmark & EOC Biology Scores

	5th Grade	7th Grade	EOC Biology
% Below Basic	10%	25%	17%
% Basic	30%	40%	36%
% Proficient	43%	28%	32%
% Advanced	17%	6%	15%
Total % Proficient or Advanced	60%	34%	47%

NAEP

The National Assessment of Educational Progress (NAEP) is a nationally representative, norm-referenced exam administered to a sample of students in all states in various subjects every other year in certain subjects, such as math and reading. While Arkansas students’ performance on the NAEP has steadily improved since the 1990s, growth has slowed in recent years. Since 2005, Arkansas’s students have improved slightly in 4th and 8th grade reading and 8th grade math, though performance dipped in 8th grade reading and 4th and 8th grade math between 2013 and 2015.¹³ However, Arkansas students still trail behind the national average on all four measures, as indicated in the following charts.¹⁴

READING

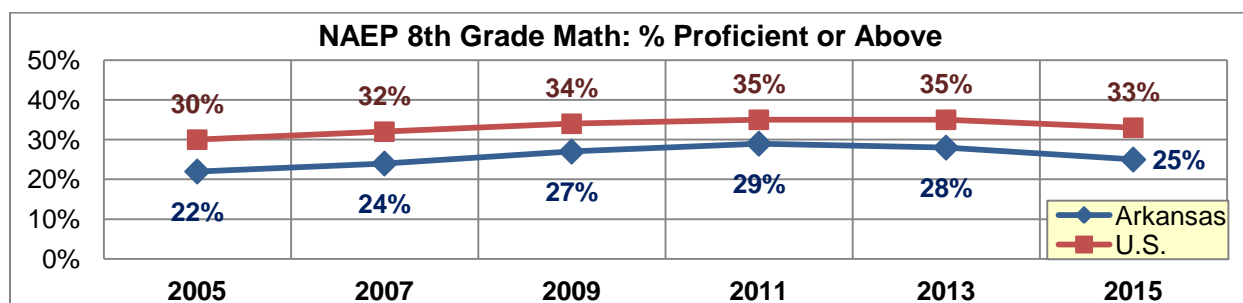
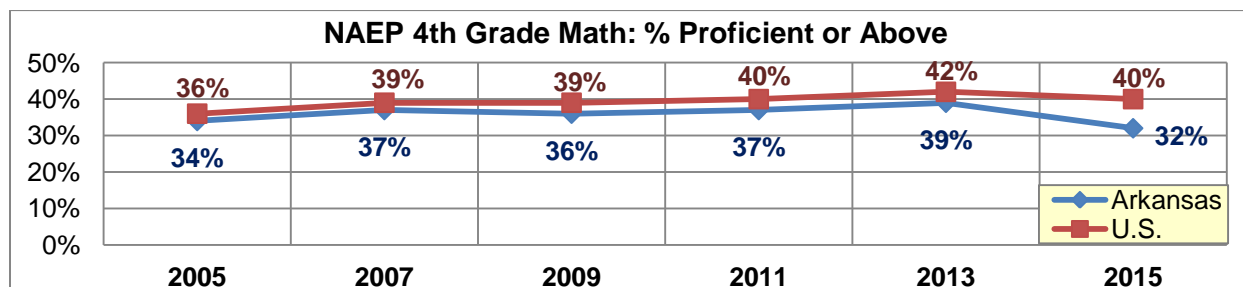


¹³ The latest-available NAEP results in science and writing are from 2011 and 2007, respectively. Arkansas students’ historical performance on both exams was included in BLR’s 2014 adequacy report. Results of the 2015 NAEP science assessment will be released in 2016.

¹⁴ U.S. Department of Education, National Center for Educational Statistics (NCES), various years.

MATH

Arkansas's 4th graders experienced a statistically significant decline in math between 2013 and 2015. Sixteen other states saw similarly dramatic declines, for reasons which aren't yet fully understood by researchers.¹⁵



ADVANCED PLACEMENT (AP)

Under §6-16-1204, Arkansas school districts must provide high school students the opportunity to enroll in at least one Advanced Placement (AP) course in English, math, science, and social studies. AP courses are designed to prepare students for the rigors of college coursework, and students may earn college credit by scoring high enough on the AP exam (which for most public colleges in Arkansas is a score of at least three, on a scale of one to five). There has been a steady increase in Arkansas students' enrollment in AP classes over the past 10 years.¹⁶ According to The College Board, which created AP, 32.7% of Arkansas's public school 11th- and 12th-graders took at least one AP exam in 2014, up from 8.4% in 2004.¹⁷ Arkansas now far surpasses the national average in the percentage of students taking AP exams, which was 21.9% in 2014.

While AP enrollment and test-taking in Arkansas has continued to rise, scores on AP exams are still significantly lower than the national average. According to BLR's analysis of data from The College Board, 32.4% of Arkansas's AP test-takers scored at least a three in 2014-15, qualifying them to receive college credit at many Arkansas colleges and universities, compared to 52.7% nationally.

2015 Avg. AP Scores for Arkansas vs. U.S.

SCORE	ARKANSAS		U.S.	
	# TEST-TAKERS	%	# TEST-TAKERS	%
5	1,959	4.2%	557,708	12.8%
4	4,273	9.2%	840,522	19.3%
3	8,786	19.0%	1,097,677	25.2%
2	13,486	29.2%	972,868	22.3%
1	17,557	38.1%	874,772	20.1%
TOTAL	46,061		4,343,547	
MEAN		2.12		2.82

Source: The College Board, apcentral.collegeboard.org
 Note: Includes scores in any subject. A student taking more than one AP exam is counted more than once.

¹⁵ Heitin, L. (2015, October 28). "Math NAEP Scores Drop for 4th and 8th Grades." *Education Week* blog: http://blogs.edweek.org/edweek/curriculum/2015/10/math_naep_scores_drop_for_4th_8th_grades.html

¹⁶ See BLR's 2015 Bureau Brief on Curriculum Frameworks for more information about AP enrollment : [http://www.arkleg.state.ar.us/education/K12/AdequacyReports/2016/2015-12-15/03-Curriculum%20Frameworks.%20BLR%20\(21\).pdf](http://www.arkleg.state.ar.us/education/K12/AdequacyReports/2016/2015-12-15/03-Curriculum%20Frameworks.%20BLR%20(21).pdf)

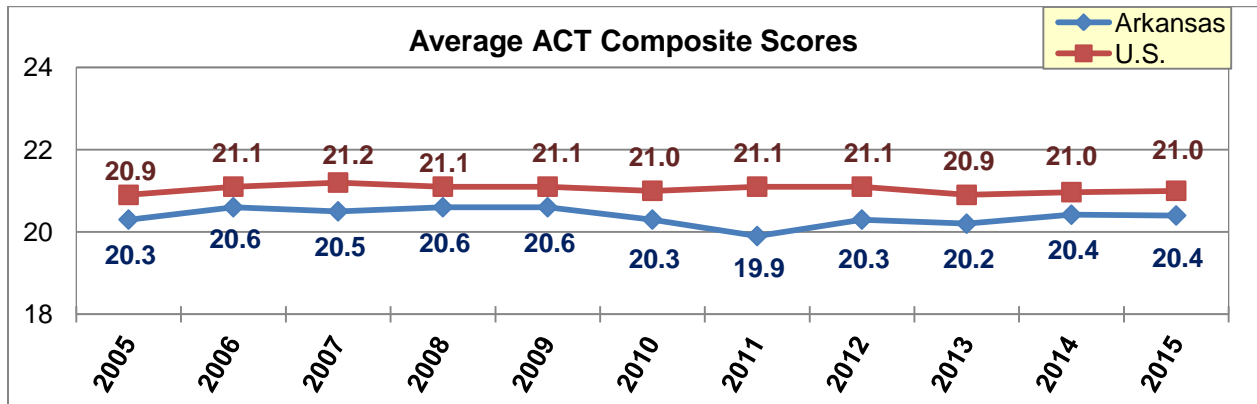
¹⁷ The College Board, "2014 College Board Program Results: Arkansas 2014 Results." Retrieved January 10, 2016, from <https://www.collegeboard.org/program-results/2014/arkansas>

Achievement gaps between student subgroups in Arkansas also remain. For example, the mean score for white test-takers in Arkansas was 2.22, compared to a mean of 1.48 for African-American students; however, the mean score for white students was still not high enough to qualify for college credit.¹⁸

ACT

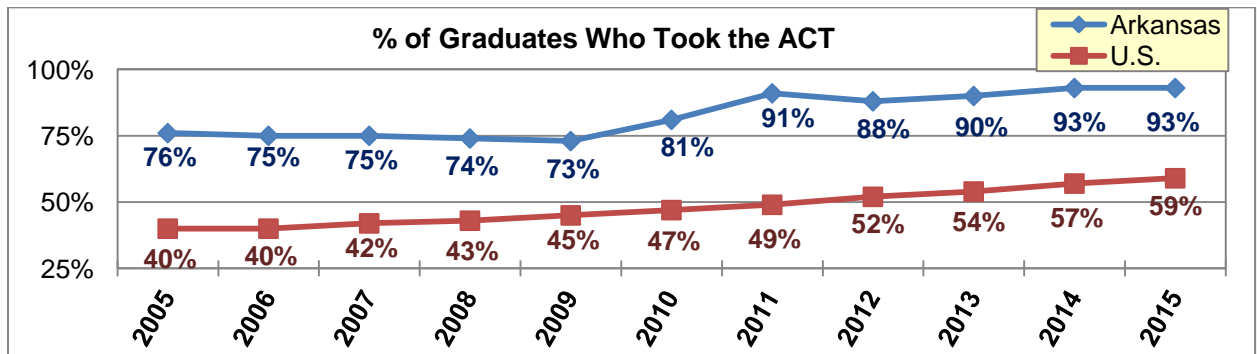
The ACT is a college-readiness assessment taken by more than 1.8 million high school graduates across the country each year. It is also the most commonly-required college entrance exam for postsecondary schools in Arkansas. Under Act 1105 of 2015, a college-bound student in Arkansas must now score a minimum of a 19 on the ACT to qualify for the Academic Challenge Scholarship funded by the Arkansas Scholarship Lottery. This law also eliminates the minimum 2.5 GPA requirement.

Since 2005, the average composite ACT score for Arkansas and the U.S. have remained relatively flat. In 2015, Arkansas’s average composite score was 20.4, vs. 20.3 in 2005. At the same time, the national average has remained virtually the same over this period as well, at 20.9 in 2005 and 21.0 in 2015. Arkansas’s students have scored only slightly below the national composite score from 2005-2015.¹⁹ The good news is that the percentage of students in Arkansas who took the ACT has steadily increased, from 76% in 2005 to 93% in 2015—far surpassing the national average (from 40% to 59% during the same period).



Source: ACT, Inc.

In 2015, 26,995 high school students took the ACT, compared to only 1,207 students who took the SAT, a similar college entrance exam developed by The College Board.²⁰



Source: ACT, Inc.

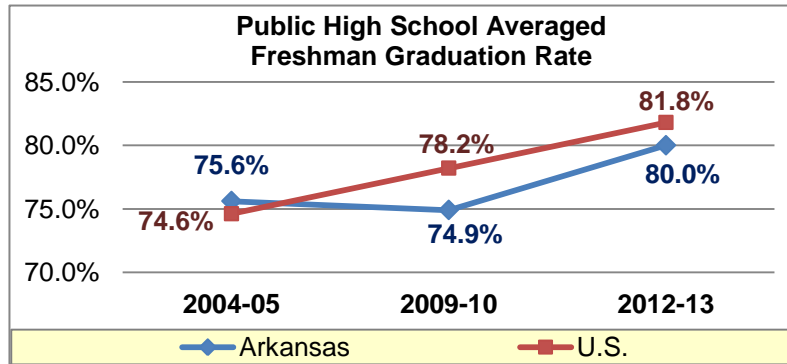
¹⁸ The College Board, “AP Program Participation and Performance Data, 2015”. Retrieved January 10, 2016, from <http://research.collegeboard.org/programs/ap/data/archived>

¹⁹ ACT National and State Scores [2005-2015 data]. Retrieved December 28, 2015, from <https://www.act.org/research/policymakers/cccr15/index.html>

²⁰ The College Board. “2015 College-Bound Seniors: State Profile Report, Arkansas.” Retrieved January 5, 2016, from https://secure-media.collegeboard.org/digitalServices/pdf/sat/AR_15_03_03_01.pdf

HIGH SCHOOL GRADUATION RATES

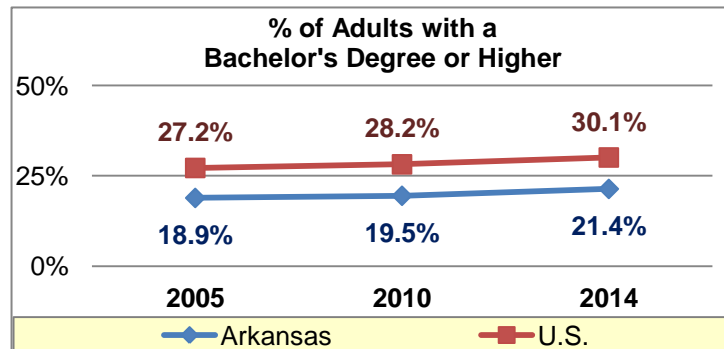
According to the most recent data from the U.S. Department of Education’s National Center from Education Statistics (NCES), the high school graduation rate for Arkansas’s public school students has risen from 74.6% in 2004-05 to 80.0% in 2012-13, roughly on par with the U.S. averages in both years.²¹



HIGHER EDUCATION ATTAINMENT

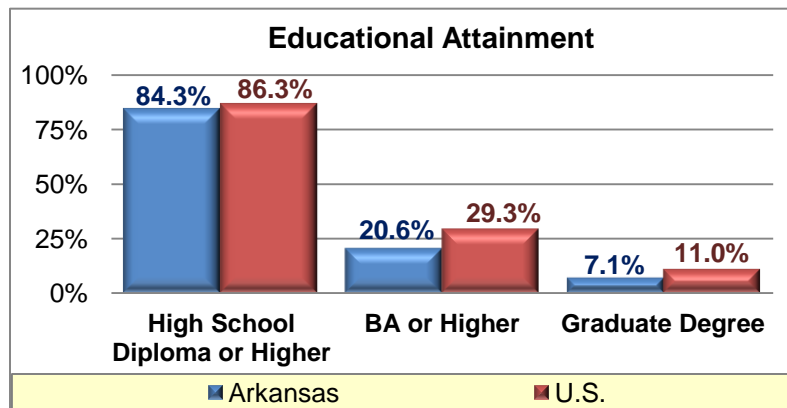
COLLEGE-COMPLETION RATE

According to the most recent five-year averages (2010-2014) from the U.S. Census Bureau, the percentage of Arkansans aged 25 years and over who have earned a bachelor’s degree or higher is 20.6%, below the U.S. average of 29.3%.²² The rates for both Arkansas and the U.S. have held fairly steady since survey data from 2005.



GRADUATE DEGREES

According to the most recent five-year averages (2010-2014) from the U.S. Census Bureau, the percentage of Arkansans aged 25 years and over who have earned a graduate degree is 7.1%, below the national average of 11.0%.²³ The following chart summarizes educational attainment in Arkansas compared to the national average.



²¹ U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD). "State Nonfiscal Survey of Public Elementary/Secondary Education," 1986-87 through 2010-11; "State Dropout and Completion Data File," 2005-06 through 2012-13; *The Averaged Freshman Graduation Rate for Public High Schools From the Common Core of Data: School Years 2002-03 and 2003-04*; *Public School Graduates and Dropouts from the Common Core of Data, 2007-08 and 2008-09*; and *Projections of Education Statistics to 2018*. Retrieved February 3, 2016, from https://nces.ed.gov/programs/digest/d15/tables/dt15_219.35.asp?current=yes; According to DOE, "The averaged freshman graduation rate provides an estimate of the percentage of students who receive a regular diploma within 4 years of entering ninth grade. The rate uses aggregate student enrollment data to estimate the size of an incoming freshman class and aggregate counts of the number of diplomas awarded 4 years later."

²² U.S. Census Bureau, American Community Survey (ACS), 1-Year Estimates, 2005, 2010, 2014.

²³ U.S. Census Bureau, American Community Survey (ACS), 5-Year Estimates, (2010-2014).