

Turning Around Lowest-Achieving Schools in Georgia

A Five-Year Quantitative Dashboard

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Executive Summary¹

Georgia's Race to the Top (RT3) application charges the Governor's Office of Student Achievement (GOSA) with the task of evaluating the fidelity of implementation and the effectiveness of turnaround efforts in Georgia's lowest achieving schools. In fall 2010, the Georgia Department of Education (GaDOE) identified 40 schools as "persistently lowest-achieving" within RT3 districts. Each school adopted a reform model and aggressive reform plans that would lead to dramatic improvement in three years. Georgia's RT3 statewide evaluation focuses on three goals: how well RT3 projects prepared students for college and career success, how well the lowest achieving schools were "turned around", and how well RT3 projects created great teachers and leaders. This report is the second GOSA report to address the lowest achieving schools reform area. In 2012, GOSA published its first report in the reform area: *A Qualitative Report on Early Stage Implementation in Georgia*.

The goal of this report is to provide the GaDOE, the Governor's Office, educators, parents, and other stakeholders an evaluation of the progress occurring in Georgia's LAS through a quantitative analysis of longitudinal school data. It serves as a dashboard for leading and lagging indicators of turnaround efforts. GOSA seeks to identify whether schools made changes in leading indicators at the start of implementation and whether the schools saw improvement in the lagging indicators as their grant work comes to an end.

Since this report only includes descriptive statistics, the outcomes presented should not be interpreted as causal results of interventions. GOSA's quasi-experimental study of ten lowest-achieving middle schools, scheduled to be published in summer 2015, will provide more causal evidence of impact.

This report finds that, while some schools have made strides to improve student achievement, most have fallen short of the grant's expectations for dramatic increases. The majority of schools had either a small change or no statistically significant change in chronic absenteeism, out-of-school suspension rates, and dropout rates. Although many schools had statistically significant increases in standardized test scores, particularly in high schools, the gains only outpaced gains in the state's average by a few percentage points. In addition, despite increased graduation rates in many schools, the gap with the state average remained relatively unchanged.

¹ The contents of this report were developed under a grant from the U.S. Department of Education. However, those contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the Federal Government.

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Table of Abbreviations

ARRA	American Recovery and Reinvestment Act	GaDOE	Georgia Department of Education
GOSA	Governor's Office of Student Achievement	LAS	Lowest Achieving Schools
NI-5	Needs Improvement-5	US ED	U.S. Department of Education
RT3	Race to the Top	SIG	School Improvement Grant

I. Introduction and Background

As part of the American Recovery and Reinvestment Act (ARRA) of 2009, the U.S. Department of Education (US ED) allocated over \$3 billion to school reform through Title I School Improvement Grants (SIG) to states to focus on turning around the lowest 5% of their schools.² Georgia received more than \$122 million in ARRA funds to support this work.³

As a complement to the SIG, Georgia's 2010 Race to the Top (RT3) application identified 40 "persistently lowest-achieving" schools located within the 26 RT3 partner districts. Twenty-six of these schools, referred to in this report as LAS, were designated as "persistently lowest-achieving" because they were already receiving a SIG grant. The remaining 14 schools were identified by the Georgia Department of Education (GaDOE) as any middle school or high school designated as Needs Improvement-5 (NI-5) or higher in 2010 under the state's former accountability system of Adequate Yearly Progress (AYP). A school was designated as NI-5 or higher if it had missed AYP for five or more years without making AYP for two consecutive years.⁴ Twenty of the 26 SIG schools made up the SIG Cohort 1 and began implementing the three-year grant during the 2010-2011 school year.⁵ For the purposes of this report, these schools are grouped together as 2010-2011 LAS. One school closed prior to implementation (Avondale High School). The remaining 19 schools began implementation during the 2011-2012 school year. For the purposes of this report, these schools are grouped together as 2011-2012 LAS.

Selection Criteria for Lowest-Achieving Schools

School must be located in a Race to the Top partner district and meet one of the following criteria.		
Any school receiving a federal school improvement grant (SIG). ⁱ	OR	Any middle or high school designated as NI-5 or higher. ⁱⁱ
 26 schools (all high schools)		 14 schools (4 high and 10 middle schools)
ⁱ Appendix A includes the criteria for how schools become eligible to receive SIG grants. ⁱⁱ School has missed AYP for five or more years without making AYP for two consecutive years.		
Adapted from: Georgia Department of Education, <i>Georgia's Race to the Top Application</i> , June 1, 2010, p. 38.		

² "Georgia's Race to the Top (RT3) Plan." *Georgia's Race to the Top (RT3) Plan*. Georgia Department of Education, n.d. Web. 07 Oct. 2014. <<http://www.gadoe.org/race-to-the-top/Pages/default.aspx>>.

³ Abrevaya, Sandra. "Georgia to Receive More Than \$122 Million to Turn Around Its Persistently Lowest Achieving Schools." *U.S. Department of Education*. U.S. Department of Education, 06 Apr. 2010. Web. 21 Sep. 2014. <<http://www.ed.gov/news/press-releases/georgia-receive-more-122-million-turn-around-its-persistently-lowest-achieving-s>>.

⁴ Georgia Department of Education. *Georgia's Race to the Top Application*, Sep. 21, 2010, p.38.

⁵ Shearer, Niah, and Sam Rauschenberg. *Turning Around Lowest-Achieving Schools: A Qualitative Report on the Early Stage Implementation in Georgia*. Rep. Atlanta: Governor's Office of Student Achievement, 2012.

As a whole, Georgia's RT3 districts' statements of work and SIG applications identified increasing student achievement through higher graduation rates and test scores as main goals for the grants. To address these challenges, US ED and GaDOE provided a list of non-negotiable requirements and recommendations to help guide schools in their work.⁶ In addition, schools selected reform models. RT3/SIG required schools to select one of the four models⁷:

- **Transformation.** This model requires the district to replace the principal, implement a rigorous staff evaluation and development system, institute a comprehensive instructional reform, increase learning time and apply community-oriented school strategies, and provide greater operational flexibility and support for the school.
- **Turnaround.** This model requires the district to replace the principal and rehire no more than 50% of the staff, give greater principal autonomy, and implement other prescribed and recommended strategies.
- **Restart.** This model requires the district to convert or close and reopen a school under a charter school operator, charter management organization, or education management organization.
- **School closure.** This model requires the district to close the school and enroll the students in other schools in the district that are higher achieving.

All but four schools selected the Transformation model. Beach High School, Groves High School, and Laney High School selected to implement the Turnaround model, and Avondale High School closed. Table 1 lists Georgia's LAS, their districts, funding category, and implementation group.

⁶ See appendix A for non-negotiable list.

⁷ "The Purpose of the School Improvement Grants." *Handbook on effective implementation of school improvement grants*. Ed. Perlman, Carole L., and Sam Redding. Lincoln: Center on Innovation & Improvement (2011). Page 3.

Table 1: List of 40 Race to the Top Lowest-Achieving Schools

School	District	Category	Group
Crim High School	Atlanta Public Schools	SIG Cohort I	2010-2011 LAS
Douglass High School	Atlanta Public Schools	SIG Cohort I	2010-2011 LAS
Therrell School of Health and Science	Atlanta Public Schools	RT3	2011-2012 LAS
Harper-Archer Middle School	Atlanta Public Schools	RT3	2011-2012 LAS
Therrell School of Law, Government and Public Policy	Atlanta Public Schools	SIG Cohort II	2011-2012 LAS
Fitzgerald High School	Ben Hill County	RT3	2011-2012 LAS
Rutland High School	Bibb County	SIG Cohort I	2010-2011 LAS
Northeast High School	Bibb County	SIG Cohort I	2010-2011 LAS
Southwest High School	Bibb County	SIG Cohort I	2010-2011 LAS
Central High School	Bibb County	SIG Cohort II	2011-2012 LAS
William S. Hutchings Career Center	Bibb County	SIG Cohort I	2010-2011 LAS
Burke County High School	Burke County	SIG Cohort I	2010-2011 LAS
Beach High School	Chatham County	SIG Cohort I	2010-2011 LAS
Groves High School	Chatham County	SIG Cohort II	2011-2012 LAS
Lovejoy Middle School	Clayton County	RT3	2011-2012 LAS
Dade County High School	Dade County	SIG Cohort I	2010-2011 LAS
Freedom Middle School	DeKalb County	RT3	2011-2012 LAS
McNair High School	DeKalb County	SIG Cohort I	2010-2011 LAS
Avondale High School	DeKalb County	RT3	Closed
Towers High School	DeKalb County	SIG Cohort II	2011-2012 LAS
McNair Middle School	DeKalb County	RT3	2011-2012 LAS
Clarkston High School	DeKalb County	SIG Cohort I	2010-2011 LAS
Albany High School	Dougherty County	SIG Cohort II	2011-2012 LAS
Henry County High School	Henry County	SIG Cohort I	2010-2011 LAS
Greenville High School	Meriwether County	SIG Cohort II	2011-2012 LAS
Greenville Middle School	Meriwether County	RT3	2011-2012 LAS
Baker Middle School	Muscogee County	RT3	2011-2012 LAS
Spencer High School	Muscogee County	SIG Cohort I	2010-2011 LAS
Eddy Middle School	Muscogee County	RT3	2011-2012 LAS
Jordan Vocational High School	Muscogee County	SIG Cohort I	2010-2011 LAS
Peach County High School	Peach County	SIG Cohort I	2010-2011 LAS
Hawkinsville High School	Pulaski County	SIG Cohort I	2010-2011 LAS
Butler High School	Richmond County	RT3	2011-2012 LAS
Josey High School	Richmond County	SIG Cohort I	2010-2011 LAS
Laney High School	Richmond County	SIG Cohort I	2010-2011 LAS
Glenn Hills High School	Richmond County	SIG Cohort I	2010-2011 LAS
Murphey Middle Charter School	Richmond County	RT3	2011-2012 LAS
Griffin High School	Spalding County	SIG Cohort I	2010-2011 LAS
Cowan Road Middle School	Spalding County	RT3	2011-2012 LAS
Newbern Middle School	Valdosta City	RT3	2011-2012 LAS

II. Methodology and Data

This report is a longitudinal, quantitative analysis of school-level data trends. The Governor's Office of Student Achievement collected and analyzed data on the 39 schools identified as "persistently lowest achieving" through RT3.⁸ Data spanned from the 2009-2010 school year through the 2013-2014 school year. The analysis provides descriptive statistics that examine changes in data from year to year and measures the statistical significance of those changes.⁹

To evaluate the progress of LAS, the report considers two types of data: "leading" and "lagging" indicators. Leading indicators are metrics that help gauge whether a school is on track midstream, allowing for adjustments to be made.¹⁰ Examples of leading indicators include student attendance and student discipline rates. These metrics help determine the atmosphere for learning in the school. Changes in these kinds of metrics should be noticeable in the first year of reform efforts. Lagging indicators are student achievement metrics that often take two or more years before measurable growth occurs. Examples of lagging indicators include standardized test scores and graduation rate.

The theory of change for school turnarounds posits that if a school improves its leading indicators in the first two years of grant work, then it will see improvements in lagging indicators by the third year.¹¹ Based upon research on school turnaround indicators, GOSA selected nine indicators to evaluate in this report, six leading and three lagging.¹² Where possible, data from publicly available sources, such as GOSA's Report Card, were used. In some cases, GOSA used aggregated Georgia Department of Education data available through Georgia's Academic and Workforce Analysis and Research Data System (GAAWARDS), the statewide longitudinal data system.

Leading Indicators

- A. **Staff (teacher and administration) retention.** The percentage of teachers/administrators who were employed by the school in year one, two, three, and four of implementation who were also employed by the school the year before implementation (Source: GAAWARDS).
- B. **Teacher experience.** The average years of experience for teachers in each school. The data are aggregated to the school level. Individual teacher data are not used (Source: GOSA Report Card).

⁸ Since Avondale High School was closed, it was not included in the analysis.

⁹ Formula can be found in Appendix C.

¹⁰ Pallin, Emily. "Evaluating School Turnaround: Establishing benchmarks and metrics to assess school turnaround. School Turnaround." *Mass Insight Education*. Rep. Boston: Mass Insight Education, (2010): Page 7.

¹¹ Pallin, Evaluating School Turnaround, (2010). Page 11-15.

¹² Pallin, Evaluating School Turnaround, (2010). Page 1-35.

Kowal, Julie, and Joe Ableidinger. "How to Know when Dramatic Change Is on Track: Leading Indicators of School Turnarounds." *Public Impact*, (2011).Page 1-20.

Center on Innovation & Improvement, Mid-Atlantic Comprehensive Center, and Appalachia Regional Comprehensive Center. *School Improvement Grants Online Tool: Monitoring and Evaluating Transformations by FEDERAL REQUIREMENTS*. Lincoln, Illinois: Academic Development Institute, 2011. PDF. Page 1-7.

- C. **Student attendance.** The percentage of students who missed fewer than six days of school (Source: GOSA Report Card).
- D. **Student discipline.** The number of students receiving out-of-school suspension divided by the total number of students enrolled in the fall of the school year (Source: GAAWARDS).
- E. **Student retention.** The total number of students retained in-grade divided by the total number of students enrolled in the fall of the school year. The state average is calculated as the total number of students retained divided by the by-grade sum of fall enrollment for a given year (Source: GOSA Report Card).
- F. **Dropout rate.** The total number of students who dropped out of school for grades 9-12 divided by the total number of students enrolled in the fall of the school year. The state average percentage of students who dropped out of school for grades 9-12 includes all high schools in this report (Source: GOSA Report Card).

Lagging Indicators

- A. **Standardized test scores.** The percentage of students who met or exceeded state standards for both the End of Course Test (EOCT) and the Criterion-Referenced Competency Test (CRCT). EOCTs were administered to high school students, and CRCTs were administered to students in grades 3 through 8. GOSA calculated the state average for CRCT scores to include only grades 6 through 8 because no LAS served students under grade 6 (Source: GOSA Report Card).
- B. **Graduation rate.** The four-year cohort graduate rate. This indicator is only available for 2010-2011 forward because the state's graduation rate calculation method changed in 2010-2011. The four-year high school graduation rate defines the cohort when the student first becomes a freshman, and the rate is calculated using the number of students who graduate within four years¹³ (Source: GOSA Report Card, as calculated by the Georgia Department of Education).
- C. **College enrollment.** The number of students who enrolled in a college within 16 months of graduating from high school divided by the total number of high school graduates for the given year (Source: GOSA Report Card, c(11) Report).

Data are presented throughout the report in charts and tables. For ease of discussion, the percentages throughout the report are rounded to the nearest tenth. The report is organized to take the reader through the expectations of each indicator and then the actual data trends. The next section presents the results and findings for the leading indicator.

¹³ "Indicators." *The Governor's Office of Student Achievement*. The Governor's Office of Student Achievement, n.d. Web. 07 Oct. 2014. <<https://gosa.georgia.gov/indicators>>.

III. Leading Indicators

A. Staff Retention

Research suggests that chronically failing schools often continue down the same path because correct leadership is not in place. Competencies of successful turnaround school leaders differ from those of other school leaders.¹⁴ Therefore, schools undergoing turnaround reform should replace the current principal with a leader who possesses turnaround leadership skills.

Having effective teachers in place is also essential for continuing reform efforts. Research from Public Impact shows that successful turnaround leaders typically do not replace all or even most of teachers at the start of implementation, but they do replace key leaders who help drive change.¹⁵ Remaining teachers either support the changes or leave on their own.

As explained in the introduction, each school undergoing turnaround selected a reform model. Thirty-six of Georgia's LAS chose the Transformation model, and three schools, Beach High School, Groves High School, and Laney High School, chose the Turnaround model. The Transformation model requires that the principal be replaced and that staff undergo rigorous evaluations. The Turnaround model requires the principal be replaced and that no more than 50% of staff is rehired.¹⁶

Therefore, Transformation model schools should retain less than 100% of administrators and likely less than 100% of teachers in year one. Turnaround model schools should retain less than 100% of administrators and 50% or less of teachers in year one. Staff retention in years two and three will vary by school.

In general, Georgia lowest achieving schools have retained staff to the levels required by the reform model.

- On average, 63% of administrators in 2010-2011 LAS and 72% of administrators in 2011-2012 LAS were retained in the first year of implementation. This percentage decreased each year of implementation to around 21% and 23%, respectively, in the 2013-2014 school year.
- On average, around 73% of teachers in Georgia's LAS were retained in the first year of implementation. This percentage decreased each year of implementation to around 40% in the 2013-2014 school year for 2010-2011 LAS and 44% for 2011-2012 LAS.

¹⁴ Kowal, Julie, and Joe Ableidinger. "How to Know when Dramatic Change Is on Track: Leading Indicators of School Turnarounds." *Public Impact* (2011). Page 9.

¹⁵ Ibid.

¹⁶ The Georgia Department of Education's Office of School Turnaround (now Office of School Improvement) received a waiver from the U.S. Department of Education that allowed districts to retain the school leader if he/she was hired within the previous two years to implement improvement initiatives.

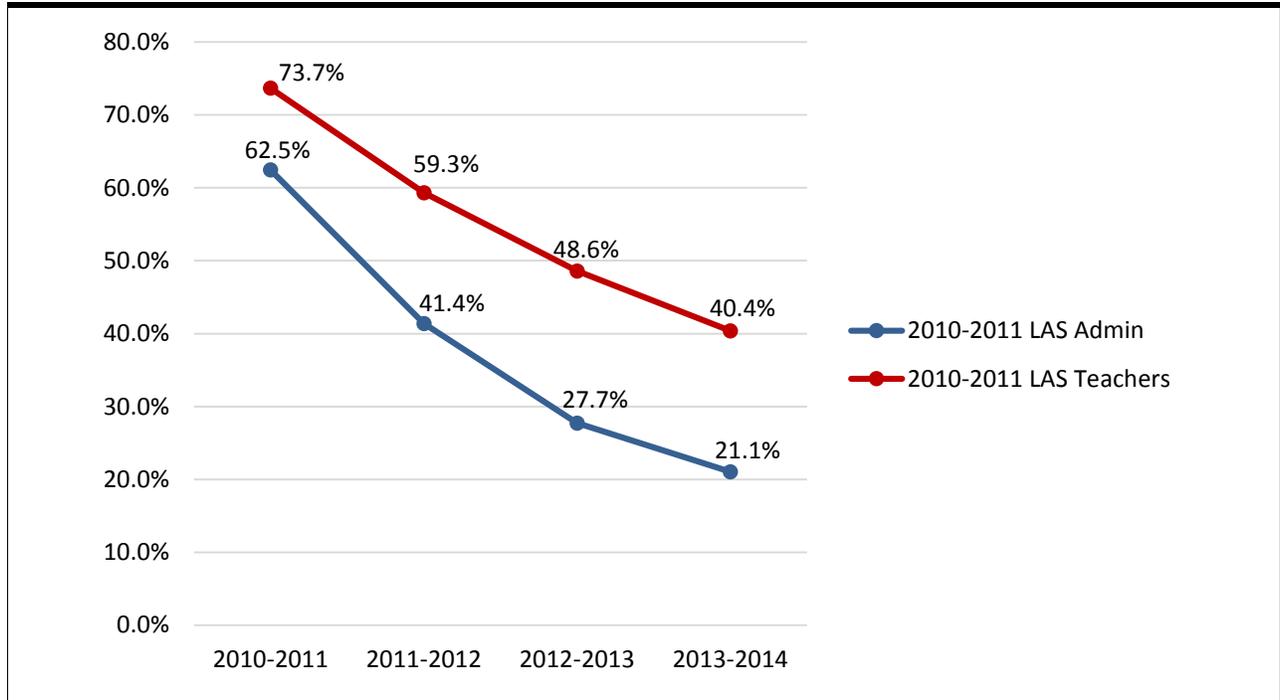
- Ten schools did not replace an administrator in year one of implementation. The remaining 29 schools either replaced at least one administrator or reduced the number of administrators.
- All 36 Transformation model schools had less than 100% teacher retention in year one.
- For the Turnaround schools, both Beach and Laney retained less than 50% of teachers in year one. However, Groves High School retained 53% of teachers in year one.

Figure 1 shows 2010-2011 LAS averages for administrators and teachers across all four years after implementation. Figure 2 shows 2011-2012 averages for administrators and teachers across all three years of implementation.

Table 2 lists the number of administrators employed in the 2009-2010 school year for each 2010-2011 LAS and then the percentage of those who were retained each following year. Table 3 lists the number of administrators employed in the 2010-2011 school year for each 2011-2012 LAS and then the percentage of those who were retained each year that follows.

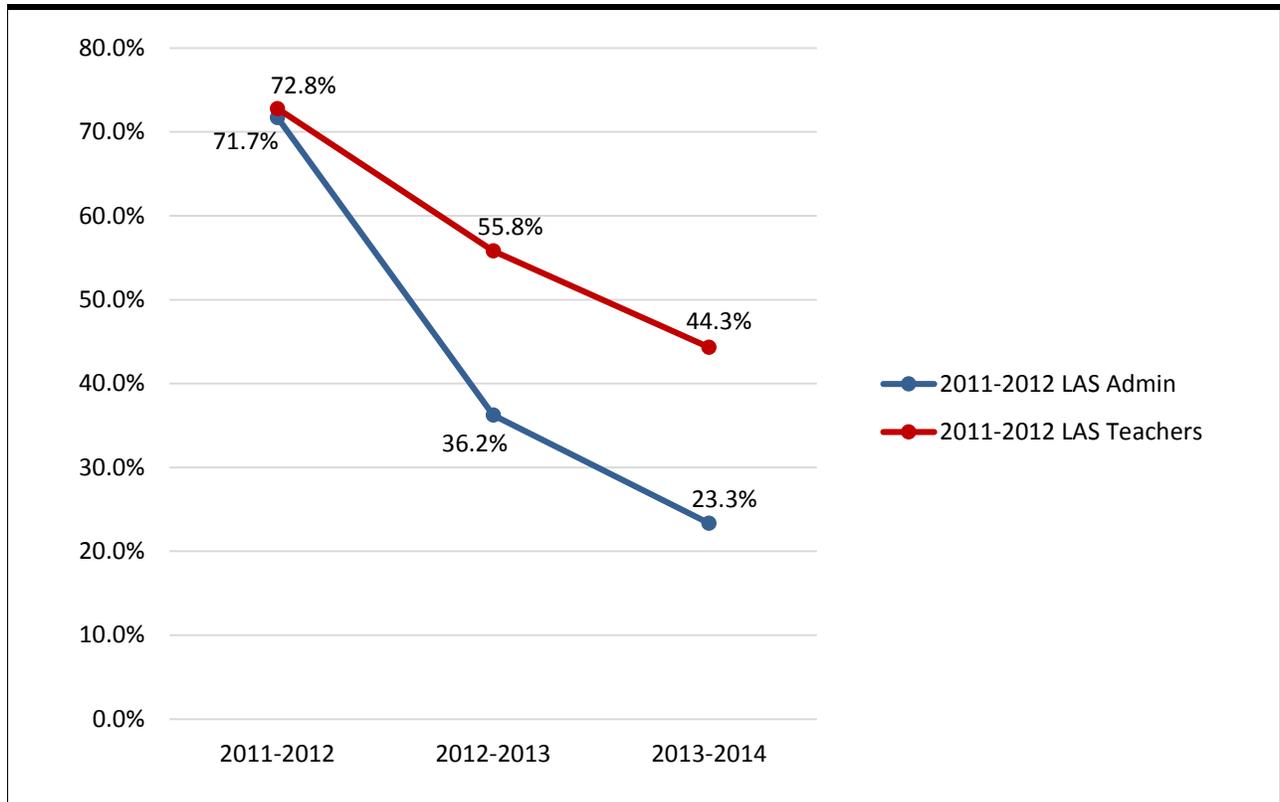
Table 4 lists the number of teachers employed in the 2009-2010 school year for each 2010-2011 LAS and then the percentage of those who were retained each year that follows. Table 5 lists the number of teachers employed in the 2010-2011 school year for 2011-2012 LAS and then the percentage of those who were retained each following year.

Figure 1: 2010-2011 LAS Percent (%) of Staff Retained Who Were Employed by the School the Year Before Implementation



2010-2011 LAS: Crim HS, Douglass HS, Northeast HS, Rutland HS, Southwest HS, Hutchings CC, Burke HS, Beach HS, Dade HS, Clarkston HS, McNair HS, Henry HS, Jordan Voc. HS, Spencer HS, Peach HS, Hawkinsville HS, Glenn Hills HS, Josey HS, Laney HS, and Griffin HS

Figure 2: 2011-2012 LAS Percent (%) of Staff Retained Who Were Employed by the School the Year Before Implementation



2011-2012 LAS: Harper-Archer MS, Therrell Health Science, Therrell Law, Fitzgerald HS, Central HS, Groves HS, Lovejoy MS, Freedom MS, McNair MS, Towers HS, Albany HS, Greenville HS, Greenville MS, Baker MS, Eddy MS, Butler HS, Murphey MS, Cowan Rd MS, and Newbern MS

Table 2: 2010-2011 LAS Percent of Administrators Retained Who Were Employed by the School the Year Before Implementation

District	School	# Admin 2009-2010	2010- 2011 (Yr 1)	2011- 2012 (Yr 2)	2012- 2013 (Yr 3)	2013- 2014 (Yr 4)	Trend
Atlanta Public Schools	Crim High School	5	40.0%	0.0%	0.0%	0.0%	
Atlanta Public Schools	Douglass High School	6	50.0%	33.3%	33.3%	16.7%	
Bibb County	Northeast High School	5	20.0%	0.0%	0.0%	0.0%	
Bibb County	Rutland High School	6	33.3%	33.3%	16.7%	16.7%	
Bibb County	Southwest High School	7	28.6%	28.6%	28.6%	14.3%	
Bibb County	William S. Hutchings Career Center	3	66.7%	33.3%	33.3%	0.0%	
Burke County	Burke County High School	4	75.0%	50.0%	50.0%	0.0%	
Chatham County	Beach High School	3	0.0%	0.0%	0.0%	0.0%	
Dade County	Dade County High School	2	50.0%	50.0%	0.0%	0.0%	
DeKalb County	Clarkston High School	5	80.0%	80.0%	60.0%	60.0%	
DeKalb County	McNair High School	7	85.7%	57.1%	28.6%	14.3%	
Henry County	Henry County High School	5	60.0%	20.0%	20.0%	20.0%	
Muscogee County	Jordan Vocational High School	5	100.0%	60.0%	40.0%	40.0%	
Muscogee County	Spencer High School	5	100.0%	60.0%	60.0%	80.0%	
Peach County	Peach County High School	7	71.4%	57.1%	14.3%	14.3%	
Pulaski County	Hawkinsville High School	3	66.7%	66.7%	66.7%	66.7%	
Richmond County	Glenn Hills High School	4	75.0%	50.0%	0.0%	0.0%	
Richmond County	Josey High School	4	100.0%	75.0%	50.0%	25.0%	
Richmond County	Laney High School	3	66.7%	33.3%	33.3%	33.3%	
Spalding County	Griffin High School	5	80.0%	40.0%	20.0%	20.0%	

The year before implementation for 2010-2011 LAS was 2009-2010.

Table 3: 2011-2012 LAS Percent of Administrators Retained Who Were Employed by the School the Year Before Implementation

District	School	# Admin 2010-2011	2011- 2012 (Yr 1)	2012- 2013 (Yr 2)	2013- 2014 (Yr 3)	Trend
Atlanta Public Schools	Harper-Archer Middle School	4	75.0%	25.0%	0.0%	
Atlanta Public Schools	Therrell School of Health and Science	1	100.0%	0.0%	0.0%	
Atlanta Public Schools	Therrell School of Law, Government and Public Policy	2	100.0%	0.0%	0.0%	
Ben Hill County	Fitzgerald High School	4	100.0%	75.0%	75.0%	
Bibb County	Central High School	5	80.0%	0.0%	0.0%	
Chatham County	Groves High School	6	66.7%	33.3%	33.3%	
Clayton County	Lovejoy Middle School	3	0.0%	0.0%	0.0%	
DeKalb County	Freedom Middle School	4	75.0%	50.0%	25.0%	
DeKalb County	McNair Middle School	4	100.0%	25.0%	0.0%	
DeKalb County	Towers High School	5	60.0%	0.0%	0.0%	
Dougherty County	Albany High School	3	66.7%	66.7%	0.0%	
Meriwether County	Greenville High School	3	100.0%	100.0%	100.0%	
Meriwether County	Greenville Middle School	2	50.0%	50.0%	50.0%	
Muscogee County	Baker Middle School	4	25.0%	25.0%	0.0%	
Muscogee County	Eddy Middle School	3	33.3%	33.3%	0.0%	
Richmond County	Butler High School	5	60.0%	60.0%	40.0%	
Richmond County	Murphey Middle Charter School	3	100.0%	66.7%	66.7%	
Spalding County	Cowan Road Middle School	4	100.0%	50.0%	25.0%	
Valdosta City	Newbern Middle School	7	71.4%	28.6%	28.6%	

The year before implementation for 2011-2012 LAS was 2010-2011.

Table 4: 2010-2011 LAS Percent of Teachers Retained Who Were Employed by the School the Year Before Implementation

District	School	# Teachers 2009-2010	2010- 2011 (Yr 1)	2011- 2012 (Yr 2)	2012- 2013 (Yr 3)	2013- 2014 (Yr 4)	Trend
Atlanta Public Schools	Crim High School	48	85.4%	66.7%	58.3%	45.8%	
Atlanta Public Schools	Douglass High School	113	64.6%	49.6%	39.8%	26.5%	
Bibb County	Northeast High School	57	59.6%	40.4%	31.6%	26.3%	
Bibb County	Rutland High School	72	77.8%	65.3%	51.4%	44.4%	
Bibb County	Southwest High School	60	80.0%	48.3%	38.3%	36.7%	
Bibb County	William S. Hutchings Career Center	29	82.8%	62.1%	44.8%	37.9%	
Burke County	Burke County High School	90	86.7%	68.9%	62.2%	53.3%	
Chatham County	Beach High School	76	31.6%	30.3%	25.0%	19.7%	
Dade County	Dade County High School	51	70.6%	64.7%	52.9%	47.1%	
DeKalb County	Clarkston High School	70	80.0%	75.7%	65.7%	52.9%	
DeKalb County	McNair High School	72	70.8%	52.8%	37.5%	23.6%	
Henry County	Henry County High School	75	80.0%	57.3%	48.0%	41.3%	
Muscogee County	Jordan Vocational High School	71	87.3%	67.6%	60.6%	50.7%	
Muscogee County	Spencer High School	70	81.4%	72.9%	68.6%	58.6%	
Peach County	Peach County High School	83	73.5%	60.2%	43.4%	39.8%	
Pulaski County	Hawkinsville High School	31	77.4%	67.7%	61.3%	54.8%	
Richmond County	Glenn Hills High School	70	82.9%	71.4%	52.9%	41.4%	
Richmond County	Josey High School	68	66.2%	63.2%	51.5%	41.2%	
Richmond County	Laney High School	60	48.3%	38.3%	26.7%	23.3%	
Spalding County	Griffin High School	95	86.3%	63.2%	51.6%	42.1%	

The year before implementation for 2010-2011 LAS was 2009-2010.

Table 5: 2011-2012 LAS Percent of Teachers Retained Who Were Employed by the School the Year Before Implementation

District	School	# Teachers 2010-2011	2011- 2012 (Yr 1)	2012- 2013 (Yr 2)	2013- 2014 (Yr 3)	Trend
Atlanta Public Schools	Harper-Archer Middle School	55	76.4%	65.5%	45.5%	
Atlanta Public Schools	Therrell School of Health and Science	30	70.0%	43.3%	30.0%	
Atlanta Public Schools	Therrell School of Law, Government and Public Policy	26	61.5%	42.3%	26.9%	
Ben Hill County	Fitzgerald High School	62	83.9%	62.9%	58.1%	
Bibb County	Central High School	84	78.6%	61.9%	50.0%	
Chatham County	Groves High School	102	52.9%	43.1%	33.3%	
Clayton County	Lovejoy Middle School	45	84.4%	71.1%	64.4%	
DeKalb County	Freedom Middle School	66	83.3%	66.7%	53.0%	
DeKalb County	McNair Middle School	61	68.9%	41.0%	24.6%	
DeKalb County	Towers High School	68	69.1%	51.5%	35.3%	
Dougherty County	Albany High School	56	69.6%	58.9%	53.6%	
Meriwether County	Greenville High School	29	65.5%	55.2%	37.9%	
Meriwether County	Greenville Middle School	28	85.7%	53.6%	53.6%	
Muscogee County	Baker Middle School	30	80.0%	60.0%	46.7%	
Muscogee County	Eddy Middle School	37	73.0%	51.4%	35.1%	
Richmond County	Butler High School	69	79.7%	72.5%	50.7%	
Richmond County	Murphey Middle Charter School	42	57.1%	50.0%	47.6%	
Spalding County	Cowan Road Middle School	38	65.8%	50.0%	39.5%	
Valdosta City	Newbern Middle School	62	77.4%	59.7%	56.5%	

The year before implementation for 2011-2012 LAS was 2010-2011.

B. Average Years of Experience

The average years of experience indicator is intended to show any significant changes in the makeup of teachers in a school. Changes in years of experience are not indicators of changes in teacher effectiveness. On average, teachers with some experience tend to be more effective than new or inexperienced teachers.¹⁷ However, teachers gradually reach a plateau after three to five years of teaching.¹⁸ One study found that on average, teachers with 20 years of experience are not much more effective than those with 5 years.¹⁹ In fact, some studies find that teachers' effectiveness actually declines towards the end of their career.²⁰

In all of Georgia's lowest achieving schools, the average teacher years of experience was between five and twenty years.

- On average, teachers in Georgia's lowest achieving schools had about 12 years of experience. This is one year less than the state average.
- Beach High School had the lowest average years of experience, about eight years, across the years of implementation.
- Therrell School of Law, Government, and Public Policy had the highest average years of experience, about 16 years, across the years of implementation.
- Almost all schools saw limited change (less than five years of increase or decrease) in teachers' average years of experience from before implementation to the school year 2013-2014, with the only exception being Eddy Middle School, which had a decrease of about eight years in 2013-2014 as compared to the year before implementation.

Figure 3 compares 2010-2011 LAS and 2011-2012 LAS with the state average across all five years. Table 6 lists the average years of experience and statistical significance for each 2010-2011 LAS. Table 7 lists the average years of experience and statistical significance for each 2011-2012 LAS.

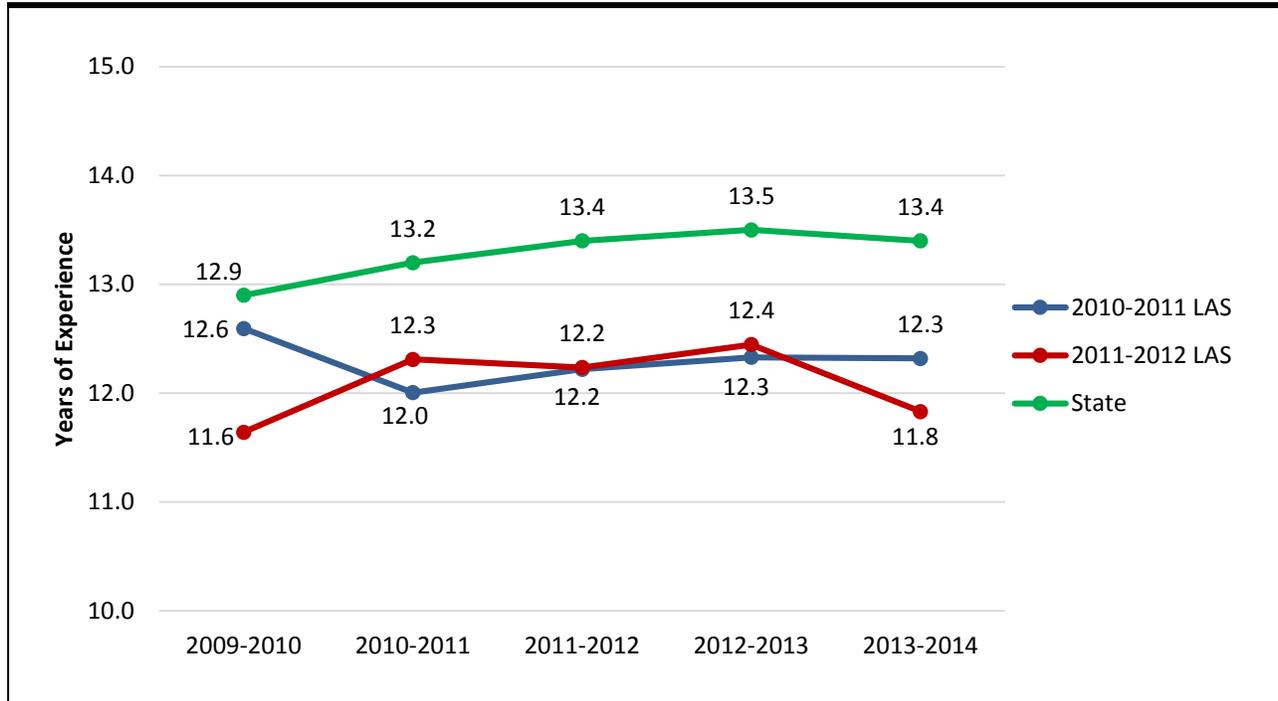
¹⁷ Kane, Thomas J., Jonah E. Rockoff, and Douglas O. Staiger. "What does certification tell us about teacher effectiveness? Evidence from New York City." *Economics of Education Review* 27.6 (2008). Page 615-631.

¹⁸ Clotfelter, Charles T., Helen F. Ladd, and Jacob L. Vigdor. "Teacher credentials and student achievement: Longitudinal analysis with student fixed effects." *Economics of Education Review* 26.6 (2007). Page 673-682.

¹⁹ Ladd, Helen F. "Value-added modeling of teacher credentials: Policy implications." second annual CALDER research conference, "The Ins and Outs of Value-Added Measures in Education: What Research Says," Washington, DC, November. Vol. 21. 2008.

²⁰ Ibid.

Figure 3: Average Years of Experience for Teachers



2010-2011 LAS: Crim HS, Douglass HS, Northeast HS, Rutland HS, Southwest HS, Hutchings CC, Burke HS, Beach HS, Dade HS, Clarkston HS, McNair HS, Henry HS, Jordan Voc. HS, Spencer HS, Peach HS, Hawkinsville HS, Glenn Hills HS, Josey HS, Laney HS, and Griffin HS

2011-2012 LAS: Harper-Archer MS, Therrell Health Science, Therrell Law, Fitzgerald HS, Central HS, Groves HS, Lovejoy MS, Freedom MS, McNair MS, Towers HS, Albany HS, Greenville HS, Greenville MS, Baker MS, Eddy MS, Butler HS, Murphey MS, Cowan Rd MS, and Newbern MS

Table 6: 2010-2011 LAS' Teachers Average Years of Experience

District	School	2009- 2010 (Yr 0)	2010- 2011 (Yr 1)	2011- 2012 (Yr 2)	2012- 2013 (Yr 3)	2013- 2014 (Yr 4)	Trend	Change Yr4-Yr0
Atlanta Public Schools	Crim High School	13.1	13.3	14.7	17.0	16.4		3.3
Atlanta Public Schools	Douglass High School	14.9	13.3	14.8	13.6	13.1		-1.8
Bibb County	Northeast High School	10.2	9.7	9.7	8.8	11.5		1.3
Bibb County	Rutland High School	12.7	11.8	11.6	12.4	12.6		-0.1
Bibb County	Southwest High School	12.6	12.3	11.1	10.8	12.2		-0.4
Bibb County	William S. Hutchings Career Center	13.1	11.9	10.3	10.5	9.7		-3.4
Burke County	Burke County High School	11.9	11.6	12.1	12.6	13.4		1.5
Chatham County	Beach High School	10.8	7.2	7.7	7.7	10.2		-0.6
Dade County	Dade County High School	14.6	13.3	13.9	12.8	13.1		-1.5
DeKalb County	Clarkston High School	11.1	10.8	9.8	10.8	9.7		-1.4
DeKalb County	McNair High School	10.6	11.8	10.6	11.6	9.3		-1.3
Henry County	Henry County High School	14.8	14.5	13.9	13.6	12.5		-2.3
Muscogee County	Jordan Vocational High School	15.2	14.2	14.9	14.4	13.9		-1.3
Muscogee County	Spencer High School	11.0	12.2	13	12.8	12.7		1.7
Peach County	Peach County High School	11.0	11.2	10.7	11.1	11.5		0.5
Pulaski County	Hawkinsville High School	12.8	12.3	15.0	15.3	15.2		2.4
Richmond County	Glenn Hills High School	13.5	14.0	13.8	13.3	13.3		-0.2
Richmond County	Josey High School	13.8	13.8	14.0	15.0	14.1		0.3
Richmond County	Laney High School	12.5	9.7	11.2	11.2	10.9		-1.6
Spalding County	Griffin High School	11.7	11.2	11.6	11.3	11.1		-0.6

Yellow cells indicate rates that equal or are above the state average: 12.9 in 2009-2010, 13.2 in 2010-2011, 13.4 in 2011-2012, 13.5 in 2012-2013, and 13.4 in 2013-2014.

Green numbers indicate the increase in teachers' average years of experience from 2009-2010 to 2013-2014.

Red numbers indicate the decrease in teachers' average years of experience from 2009-2010 to 2013-2014.

Table 7: 2011-2012 LAS' Teacher Average Years of Experience

District	School	2009- 2010 (Yr -1)	2010- 2011 (Yr 0)	2011- 2012 (Yr 1)	2012- 2013 (Yr 2)	2013- 2014 (Yr 3)	Trend	Change Yr3-Yr0
Atlanta Public Schools	Harper-Archer Middle School	9.8	12.3	14.3	14.4	13.4		1.1
Atlanta Public Schools	Therrell School of Health and Science	11.5	12.0	12.6	13.5	11.5		-0.5
Atlanta Public Schools	Therrell School of Law, Government and Public Policy	13.5	12.5	15.5	17.4	16.1		3.6
Ben Hill County	Fitzgerald High School	13.9	15.0	15.9	14.9	15.3		0.3
Bibb County	Central High School	13.5	14.5	13.4	12.7	12.2		-2.3
Chatham County	Groves High School	12.5	11.8	10.1	12.9	13.3		1.5
Clayton County	Lovejoy Middle School	10.2	11.8	11.1	10.6	12.6		0.8
DeKalb County	Freedom Middle School	12.4	12.8	11.8	12.9	12.3		-0.5
DeKalb County	McNair Middle School	9.1	11.0	9.9	12.4	9.9		-1.1
DeKalb County	Towers High School	10.1	10.7	9.0	9.6	10.2		-0.5
Dougherty County	Albany High School	13.2	13.1	14.8	14.7	13.9		0.8
Meriwether County	Greenville High School	11.1	10.1	9.5	13.8	11.2		1.1
Meriwether County	Greenville Middle School	14.8	13.6	14.9	10.8	12.4		-1.2
Muscogee County	Baker Middle School	8.2	11.5	12.0	11.2	10.5		-1.0
Muscogee County	Eddy Middle School	15.4	16.6	14.9	11.8	8.8		-7.8
Richmond County	Butler High School	12.2	11.8	11.9	13.5	10.7		-1.1
Richmond County	Murphey Middle Charter School	10.3	11.7	8.7	9.3	9.5		-2.2
Spalding County	Cowan Road Middle School	9.9	10.2	9.8	8.8	8.9		-1.3
Valdosta City	Newbern Middle School	9.6	10.9	12.4	11.3	12.1		1.2

Yellow cells indicate rates that equal or are above the state average: 12.9 in 2009-2010, 13.2 in 2010-2011, 13.4 in 2011-2012, 13.5 in 2012-2013, and 13.4 in 2013-2014.

Green numbers indicate the increase in teachers' average years of experience from 2010-2011 to 2013-2014.

Red numbers indicate the decrease in teachers' average years of experience from 2010-2011 to 2013-2014.

C. Student Attendance

Student attendance is also a leading indicator of school turnaround efforts because increasing the number of days a student is in school is a precondition of increasing student outcomes. Student attendance rates are positively and significantly related to standardized test performance and serve as a predictor of school dropout rates.²¹ Therefore, schools undergoing effective turnaround reform should increase student attendance each year during implementation. To gauge progress on this measure, GOSA tracks the percentage of students missing fewer than six days of school to provide an indicator of chronic absenteeism rather than simply evaluating average school attendance.

In general, Georgia's lowest achieving schools had a smaller percentage of students who missed fewer than six days compared to the state average. This gap slightly widened for both 2010-2011 LAS and 2011-2012 LAS by the 2013-2014 school year, meaning that attendance worsened as a whole.

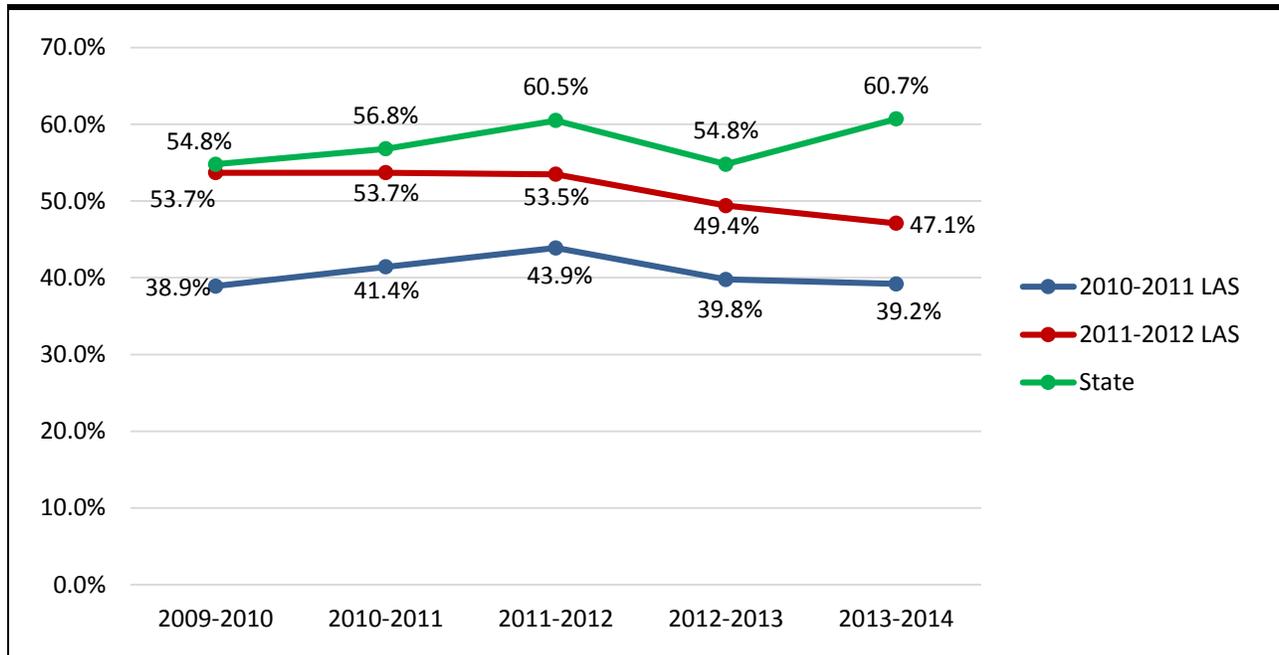
- Nine schools had a statistically significant increase in the percentage of students missing fewer than six days of school from the year prior to implementation to 2013-2014.
- Sixteen schools had statistically significant decreases.
- The remaining nine schools had no statistically significant change.
- Only one school, Albany High School, saw an increase in the percentage of students missing fewer than six days of school each year of implementation and had an overall statistically significant increase from the year prior to implementation to 2013-2014.

Figure 4 shows the 2010-2011 LAS and 2011-2012 LAS and state averages across all five years. Table 8 lists the attendance rates and statistical significance for each 2010-2011 LAS. Table 9 lists the student attendance rates and statistical significance for each 2011-2012 LAS.

²¹ Lamdin, Douglas J. "Evidence of student attendance as an independent variable in education production functions." *The Journal of Educational Research* 89.3 (1996). Page 155-162.

Pallin, Evaluating School Turnaround. (2010). Page 15.

Figure 4: Percent (%) of Students Who Missed Fewer than Six Days of School



2010-2011 LAS: Crim HS, Douglass HS, Northeast HS, Rutland HS, Southwest HS, Hutchings CC, Burke HS, Beach HS, Dade HS, Clarkston HS, McNair HS, Henry HS, Jordan Voc. HS, Spencer HS, Peach HS, Hawkinsville HS, Glenn Hills HS, Josey HS, Laney HS, and Griffin HS

2011-2012 LAS: Harper-Archer MS, Therrell Health Science, Therrell Law, Fitzgerald HS, Central HS, Groves HS, Lovejoy MS, Freedom MS, McNair MS, Towers HS, Albany HS, Greenville HS, Greenville MS, Baker MS, Eddy MS, Butler HS, Murphey MS, Cowan Rd MS, and Newbern MS

Table 8: 2010-2011 LAS' Percent of Students Who Missed Fewer Than Six Days of School

District	School	2009- 2010 (Yr 0)	2010- 2011 (Yr 1)	2011- 2012 (Yr 2)	2012- 2013 (Yr 3)	2013- 2014 (Yr 4)	Trend	Change Yr4 - Yr0
Atlanta Public Schools	Crim High School	26.0%	10.6%	12.1%	11.8%	12.2%		Decrease
Atlanta Public Schools	Douglass High School	27.8%	33.5%	26.1%	25.7%	23.3%		Decrease
Bibb County	Northeast High School	33.8%	42.7%	41.1%	42.3%	34.2%		Not Sig.
Bibb County	Rutland High School	37.6%	36.3%	41.0%	43.1%	42.2%		Increase
Bibb County	Southwest High School	28.3%	24.0%	38.4%	28.0%	36.1%		Increase
Bibb County	William S. Hutchings Career Center	41.8%	41.5%	44.7%	39.7%	35.5%		Decrease
Burke County	Burke County High School	42.1%	52.5%	63.2%	45.6%	45.2%		Increase
Chatham County	Beach High School	29.8%	27.0%	82.8%	61.5%	62.2%		Increase
Dade County	Dade County High School	36.7%	62.0%	42.0%	38.2%	48.2%		Increase
DeKalb County	Clarkston High School	53.5%	46.4%	45.6%	45.7%	N/A		N/A
DeKalb County	McNair High School	35.8%	37.6%	42.8%	41.7%	N/A		N/A
Henry County	Henry County High School	45.9%	44.7%	47.0%	46.0%	20.3%		Decrease
Muscogee County	Jordan Vocational High School	37.0%	31.3%	26.8%	30.3%	34.8%		Not Sig.
Muscogee County	Spencer High School	37.5%	36.7%	24.8%	26.4%	26.4%		Decrease
Peach County	Peach County High School	66.7%	62.5%	60.7%	44.6%	50.9%		Decrease
Pulaski County	Hawkinsville High School	48.1%	41.9%	40.2%	43.0%	51.6%		Not Sig.
Richmond County	Glenn Hills High School	41.9%	59.7%	55.6%	32.0%	32.1%		Decrease
Richmond County	Josey High School	33.5%	44.3%	45.6%	40.7%	33.0%		Not Sig.
Richmond County	Laney High School	30.8%	56.7%	51.0%	64.2%	64.9%		Increase
Spalding County	Griffin High School	30.6%	36.6%	46.3%	45.0%	52.2%		Increase

Confidence interval for proportions – change in percent of students who missed fewer than six days of school from 2009-2010 to 2013-2014: $p < .05$

Yellow cells indicate rates that equal to or are above the state average: 54.8% in 2009-2010, 56.8% in 2010-2011, 60.5% in 2011-2012, 54.8% in 2012-2013, and 60.7% in 2013-2014.

Green text indicates a statistically significant increase in percent of students who missed fewer than six days of school from 2009-2010 to 2013-2014.

Red text indicates a statistically significant decrease in percent of students who missed fewer than six days of school from 2009-2010 to 2013-2014.

Not Sig. indicates no statistically significant change in percent of students who missed fewer than six days of school.

Table 9: 2011-2012 LAS' Percent of Students Who Missed Fewer Than Six Days of School

District	School	2009- 2010 (Yr -1)	2010- 2011 (Yr 0)	2011- 2012 (Yr 1)	2012- 2013 (Yr 2)	2013- 2014 (Yr 3)	Trend	Change Yr3 - Yr0
Atlanta Public Schools	Harper-Archer Middle School	74.0%	59.5%	46.5%	53.1%	37.6%		Decrease
Atlanta Public Schools	Therrell School of Health and Science	38.7%	33.7%	42.2%	32.3%	39.0%		Not Sig.
Atlanta Public Schools	Therrell School of Law, Government and Public Policy	46.1%	38.9%	36.9%	28.5%	40.9%		Not Sig.
Ben Hill County	Fitzgerald High School	36.3%	49.3%	56.1%	49.6%	47.8%		Not Sig.
Bibb County	Central High School	48.4%	52.6%	51.6%	43.1%	44.5%		Decrease
Chatham County	Groves High School	45.5%	31.8%	79.2%	63.1%	59.0%		Increase
Clayton County	Lovejoy Middle School	47.8%	63.9%	62.7%	57.3%	62.5%		Not Sig.
DeKalb County	Freedom Middle School	55.7%	57.4%	59.2%	55.9%	N/A		N/A
DeKalb County	McNair Middle School	62.6%	55.9%	55.7%	45.6%	N/A		N/A
DeKalb County	Towers High School	49.4%	45.7%	35.2%	38.9%	N/A		N/A
Dougherty County	Albany High School	49.0%	42.3%	45.1%	46.6%	50.1%		Increase
Meriwether County	Greenville High School	48.2%	61.9%	54.1%	41.5%	47.0%		Decrease
Meriwether County	Greenville Middle School	82.4%	71.6%	58.0%	51.2%	49.7%		Decrease
Muscogee County	Baker Middle School	66.6%	54.1%	46.0%	57.7%	31.8%		Decrease
Muscogee County	Eddy Middle School	62.4%	71.3%	70.5%	69.0%	51.4%		Not Sig.
Richmond County	Butler High School	35.1%	40.7%	37.2%	36.4%	34.6%		Decrease
Richmond County	Murphey Middle Charter School	67.2%	74.3%	70.8%	56.6%	53.2%		Decrease
Spalding County	Cowan Road Middle School	46.6%	49.0%	45.4%	45.0%	44.9%		Decrease
Valdosta City	Newbern Middle School	58.9%	67.1%	63.2%	56.8%	59.1%		Decrease

Confidence interval for proportions – change in percent of students who missed fewer than six days of school from 2010-2011 to 2013-2014: $p < .05$

Yellow cells indicate rates that equal to or are above the state average: 54.8% in 2009-2010, 56.8% in 2010-2011, 60.5% in 2011-2012, 54.8% in 2012-2013, and 60.7% in 2013-2014.

Green text indicates a statistically significant increase in percent of students who missed fewer than six days of school from 2010-2011 to 2013-2014.

Red text indicates a statistically significant decrease in percent of students who missed fewer than six days of school from 2010-2011 to 2013-2014.

Not Sig. indicates no statistically significant change in percent of students who missed fewer than six days of school.

D. Student Suspension Rate

Student suspension rates provide another leading indicator of school turnaround efforts. In general, schools with higher suspension rates have higher rates of student dropout and lower standardized test scores.²² However, Mass Insight's School Turnaround Group indicates that the trend in discipline incidents can be counterintuitive in schools undergoing turnaround intervention. Schools undergoing these reforms could see an increase in the number of suspensions in year one. This can be for many reasons, including students at first rebelling against increased rigor, changes in staff, and changes in how discipline is enforced.²³ Taking all of this into account, the expected suspension rate trend for schools undergoing reform is an increase in year one and then a decline in the years after.

In general, the majority of Georgia's lowest achieving schools have not followed the expected pattern of statistically significant increases in student suspensions in year one and then statistically significant reductions in the following years. The 2010-2011 LAS' gap with the state average closed slightly, but the 2011-2012 LAS gap widened slightly.

- On average, almost one-fourth of students in Georgia's lowest achieving schools received out-of-school suspensions every year. This is almost three times the state average each year.
- Only four schools, Beach High School, Jordan Vocational High School, Groves High School, and Towers High School, had statistically significant increases in suspension rates in year one and then statistically significant decreases in the following years.
- Eight schools had a reduction in out-of-school suspension rates in all years after implementation. Seven schools had an increase in out-of-school suspension rates in all years after implementation.
- Three schools, Northeast High School, William S. Hutchings Career Center, and Dade County High School, had a significant reduction in out-of-suspension rate in the 2013-2014 school and the rates were below the state average.

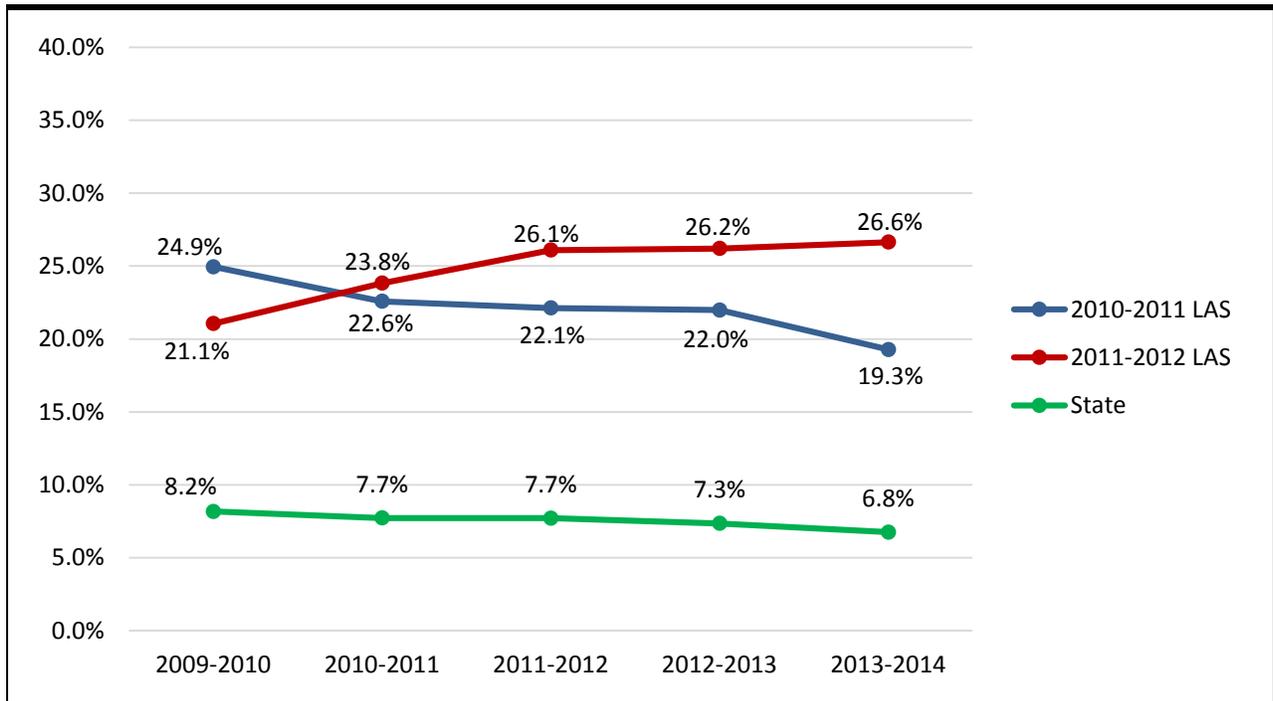
Figure 5 compares the 2010-2011 LAS and 2011-2012 LAS with the state average across all five years. Table 10 lists the suspension rates and statistical significance for each 2010-2011 LAS. Table 11 lists the suspension rates and statistical significance for each 2011-2012 LAS.

²² Losen, Daniel J., and Russell J. Skiba. "Suspended education: Urban middle schools in crisis." (2010).
Lee, Talisha, et al. "High suspension schools and dropout rates for black and white students." *Education and Treatment of Children* 34.2 (2011). Page 167-192.

Gregory, Anne, Russell J. Skiba, and Pedro A. Noguera. "The Achievement Gap and the Discipline Gap Two Sides of the Same Coin?" *Educational Researcher* 39.1 (2010). Page 59-68.

²³ Pallin, Evaluating School Turnaround. (2010).Page 26.

Figure 5: Percent (%) of Students Suspended Out-of-School



2010-2011 LAS: Crim HS, Douglass HS, Northeast HS, Rutland HS, Southwest HS, Hutchings CC, Burke HS, Beach HS, Dade HS, Clarkston HS, McNair HS, Henry HS, Jordan Voc. HS, Spencer HS, Peach HS, Hawkinsville HS, Glenn Hills HS, Josey HS, Laney HS, and Griffin HS

2011-2012 LAS: Harper-Archer MS, Therrell Health Science, Therrell Law, Fitzgerald HS, Central HS, Groves HS, Lovejoy MS, Freedom MS, McNair MS, Towers HS, Albany HS, Greenville HS, Greenville MS, Baker MS, Eddy MS, Butler HS, Murphey MS, Cowan Rd MS, and Newbern MS

Table 10: 2010-2011 LAS' Out-of-School Suspension Rate

District	School	2009- 2010 (Yr 0)	2010- 2011 (Yr 1)	2011- 2012 (Yr 2)	2012- 2013 (Yr 3)	2013- 2014 (Yr 4)	Trend	Change Yr1-Yr0	Change Yr4-Yr1
Atlanta Public Schools	Crim High School	N/A	12.1%	27.3%	18.1%	16.8%		N/A	Increase
Atlanta Public Schools	Douglass High School	27.4%	29.7%	31.0%	36.9%	36.7%		Increase	Increase
Bibb County	Northeast High School	31.5%	20.6%	16.1%	14.6%	4.8%		Decrease	Decrease
Bibb County	Rutland High School	25.6%	18.1%	18.9%	27.1%	23.0%		Decrease	Increase
Bibb County	Southwest High School	50.6%	26.8%	34.2%	35.6%	21.4%		Decrease	Decrease
Bibb County	William S. Hutchings Career Center	14.8%	16.8%	18.9%	14.6%	4.8%		Not Sig.	Decrease
Burke County	Burke County High School	23.1%	18.9%	15.2%	24.1%	23.3%		Decrease	Increase
Chatham County	Beach High School	34.9%	39.9%	36.9%	34.7%	24.2%		Increase	Decrease
Dade County	Dade County High School	6.4%	7.7%	5.3%	7.5%	4.1%		Not. Sig.	Decrease
DeKalb County	Clarkston High School	14.7%	14.7%	15.4%	13.2%	14.6%		Not Sig.	Not. Sig.
DeKalb County	McNair High School	11.9%	25.8%	26.6%	35.0%	36.7%		Increase	Increase
Henry County	Henry County High School	17.8%	15.3%	14.9%	12.8%	12.7%		Decrease	Decrease
Muscogee County	Jordan Vocational High School	25.3%	32.3%	24.0%	26.0%	22.7%		Increase	Decrease
Muscogee County	Spencer High School	30.1%	25.6%	21.9%	13.4%	18.6%		Decrease	Decrease
Peach County	Peach County High School	7.1%	9.2%	5.8%	9.9%	9.5%		Increase	Not Sig.
Pulaski County	Hawkinsville High School	27.8%	15.7%	15.3%	16.8%	14.0%		Decrease	Not Sig.
Richmond County	Glenn Hills High School	11.5%	20.6%	16.3%	19.1%	34.8%		Increase	Increase
Richmond County	Josey High School	47.1%	42.2%	48.5%	35.5%	28.0%		Decrease	Decrease
Richmond County	Laney High School	36.3%	33.1%	28.7%	21.2%	17.5%		Not Sig.	Decrease
Spalding County	Griffin High School	30.3%	26.7%	21.3%	23.3%	17.4%		Decrease	Decrease

An increase in out-of-school suspensions in the first year, followed by decreases in the years following, is expected in turnaround schools.²⁴

Confidence interval for proportions – change in percent of out-of-school suspensions from 2009-2010 to 2010-2011 and change in the percent of out-to-school suspensions from 2010-2011 to 2013-2014: $p < .05$

Yellow cells indicate rates that are equal or below the state average for that year, 8.2% in 2009-2010, 7.7% in 2010-2011 and 2011-2012, 7.3% in 2012-2013, and 6.8% in 2013-2014.

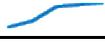
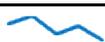
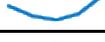
Red text indicates a statistically significant increase in out-of-school suspension rates from 2009-2010 to 2010-2011 or 2010-2011 to 2013-2014.

Green text indicates a statistically significant decrease in out-of-school suspension rates from 2009-2010 to 2010-2011 or 2010-2011 to 2013-2014.

Not Sig. indicates no statistically significant change in student out-of-school suspension rates.

²⁴ Pallin, Evaluating School Turnaround. (2010).Page 26.

Table 11: 2011-2012 LAS' Out-of-School Suspension Rate

District	School	2009- 2010 (Yr -1)	2010- 2011 (Yr 0)	2011- 2012 (Yr 1)	2012- 2013 (Yr 2)	2013- 2014 (Yr 3)	Trend	Change Yr1- Yr0	Change Yr3- Yr1
Atlanta Public Schools	Harper-Archer Middle School	7.6%	22.4%	30.8%	33.4%	38.7%		Increase	Increase
Atlanta Public Schools	Therrell School of Health and Science	14.1%	38.4%	37.8%	30.4%	28.1%		Not Sig.	Decrease
Atlanta Public Schools	Therrell School of Law, Government and Public Policy	22.5%	32.2%	34.5%	19.2%	24.6%		Not Sig.	Decrease
Ben Hill County	Fitzgerald High School	10.1%	10.1%	8.1%	10.1%	10.6%		Not Sig.	Increase
Bibb County	Central High School	25.9%	28.4%	13.1%	20.9%	19.6%		Decrease	Increase
Chatham County	Groves High School	31.6%	21.2%	29.6%	21.9%	19.9%		Increase	Decrease
Clayton County	Lovejoy Middle School	19.6%	12.8%	15.2%	14.6%	15.5%		Increase	Not Sig.
DeKalb County	Freedom Middle School	24.3%	21.8%	23.1%	17.7%	20.7%		Not Sig.	Decrease
DeKalb County	McNair Middle School	7.9%	17.1%	41.8%	44.2%	49.2%		Increase	Increase
DeKalb County	Towers High School	34.4%	30.3%	39.2%	35.3%	26.3%		Increase	Decrease
Dougherty County	Albany High School	17.6%	17.9%	12.1%	21.3%	18.5%		Decrease	Increase
Meriwether County	Greenville High School	16.6%	19.9%	12.9%	16.2%	10.3%		Decrease	Not Sig.
Meriwether County	Greenville Middle School	8.8%	13.4%	16.4%	20.8%	22.8%		Not Sig.	Increase
Muscogee County	Baker Middle School	27.4%	36.3%	38.0%	47.6%	51.8%		Not Sig.	Increase
Muscogee County	Eddy Middle School	32.9%	25.5%	36.0%	36.5%	32.5%		Increase	Not Sig.
Richmond County	Butler High School	31.5%	32.5%	33.2%	23.8%	29.4%		Not Sig.	Decrease
Richmond County	Murphey Middle Charter School	33.0%	29.1%	27.4%	30.0%	37.1%		Not Sig.	Increase
Spalding County	Cowan Road Middle School	17.6%	21.2%	23.5%	21.7%	20.0%		Not Sig.	Decrease
Valdosta City	Newbern Middle School	16.5%	22.5%	23.2%	32.3%	30.7%		Not Sig.	Increase

An increase in out-of-school suspensions in the first year, followed by decreases in the years following, is expected in turnaround schools.²⁵

Confidence interval for proportions – change in percent of out-of-school suspensions from 2010-2011 to 2011-2012 and change in percent of out-of-school suspensions from 2011-2012 to 2013-2014: $p < .05$

Yellow cells indicate rates that are equal or below the state average for that year: 8.2% in 2009-2010, 7.7% in 2010-2011 and 2011-2012, 7.3% in 2012-2013, and 6.8% in 2013-2014.

Red text indicates a statistically significant increase in out-of-school suspension rates from 2010-2011 to 2011-2012 or 2011-2012 to 2013-2014.

Green text indicates a statistically significant decrease in out-of-school suspension rates from 2010-2011 to 2011-2012 or 2011-2012 to 2013-2014.

Not Sig. indicates no statistically significant change in student out-of-school suspension rates.

²⁵ Pallin, Evaluating School Turnaround. (2010). Page 26.

E. Student In-Grade Retention

Student in-grade retention, which occurs when a student is in the same grade two school years in a row, is another leading indicator of school turnaround efforts.²⁶ Students are typically retained in-grade if they do not meet the academic or social skill levels to move on to the next grade, and retention is a strong predictor of school dropouts.²⁷ As such, schools undergoing turnaround reform should see a decrease in student in-grade retention rates each year during implementation.

As a whole, Georgia's lowest achieving schools have had small but statistically significant reductions in student retention. The gap with the state average decreased in both cohorts, with a larger improvement in the 2011-2012 cohort.

- On average, about 11% of students in Georgia's lowest achieving schools were retained in-grade each year, which is three times the state average. The in-grade retention rate gap with the state average narrowed for both 2010-2011 LAS and 2011-2012 LAS by the 2013-2014 school year.
- Nineteen schools had statistically significant decreases in retention rates from the year prior to implementation to the 2013-2014 school year.
- Four schools had statistically significant increases. Eleven schools had no statistically significant change and the remaining schools had insufficient data.²⁸
- Of LAS middle schools with enough students to report, the majority had lower retention rates than LAS high schools.²⁹

Figure 6 shows the group (2010-2011 LAS and 2011-2012 LAS) and state averages across all five years. Table 12 lists the retention rates and statistical significance for each 2010-2011 LAS. Table 13 lists the retention rates and statistical significance for each 2011-2012 LAS school.

²⁶ "Indicators." The Governor's Office of Student Achievement. The Governor's Office of Student Achievement, n.d. Web. 22 Aug. 2014. <<https://gosa.georgia.gov/indicators>>.

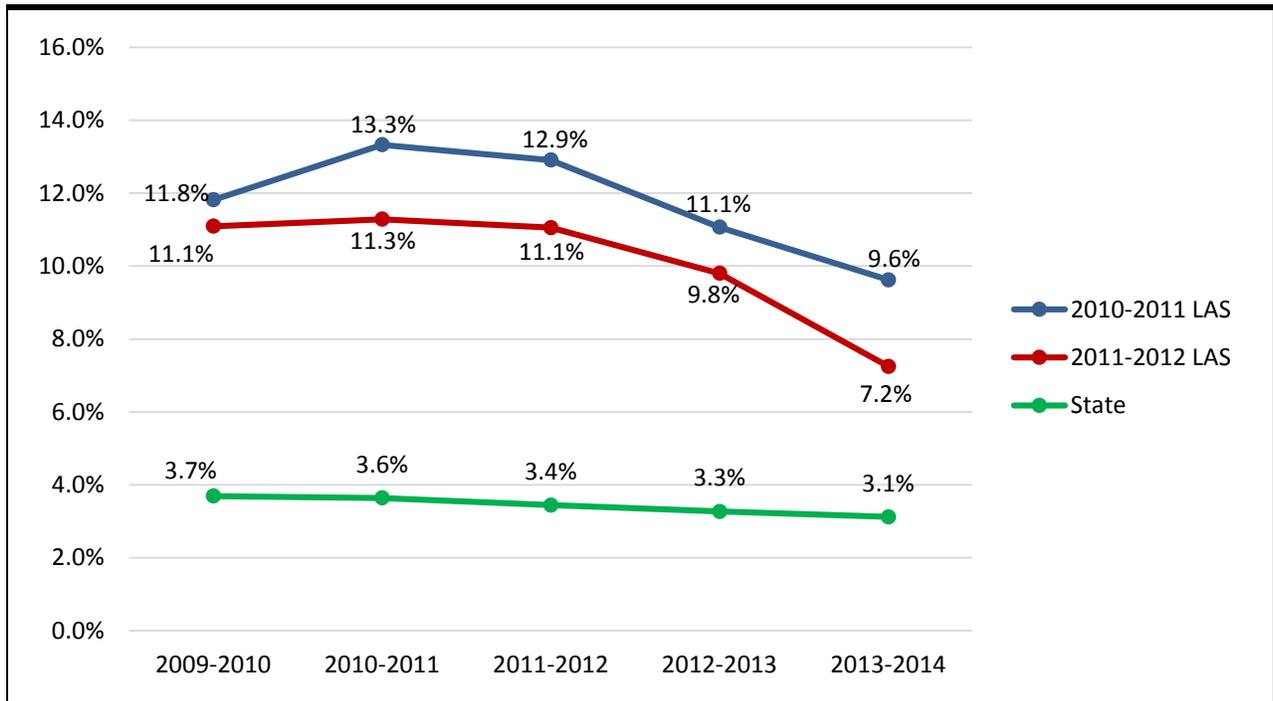
²⁷ Llagas, Charmaine, and Thomas D. Snyder. *Status and trends in the education of Hispanics*. National Center for Education Statistics, US Department of Education, Institute of Education Sciences, 2003.

Jimerson, S. R., Anderson, G. E. and Whipple, A. D. (2002), Winning the battle and losing the war: Examining the relation between grade retention and dropping out of high school. *Psychol. Schs.*, 39: 441–457.
doi: 10.1002/pits.10046

²⁸ Insufficient data is a result of there being Too Few Students to report. GOSA does not report on groups of fewer than 10 students.

²⁹ Middle schools without enough data had Too Few Students to report. Lower middle school retention rates pull down 2011-2012 LAS average retention rate.

Figure 6: Percent (%) of Students Retained in Grade



2010-2011 LAS: Crim HS, Douglass HS, Northeast HS, Rutland HS, Southwest HS, Hutchings CC, Burke HS, Beach HS, Dade HS, Clarkston HS, McNair HS, Henry HS, Jordan Voc. HS, Spencer HS, Peach HS, Hawkinsville HS, Glenn Hills HS, Josey HS, Laney HS, and Griffin HS

2011-2012 LAS: Harper-Archer MS, Therrell Health Science, Therrell Law, Fitzgerald HS, Central HS, Groves HS, Lovejoy MS, Freedom MS, McNair MS, Towers HS, Albany HS, Greenville HS, Greenville MS, Baker MS, Eddy MS, Butler HS, Murphey MS, Cowan Rd MS, and Newbern MS

Table 12: 2010-2011 LAS' Student In-Grade Retention Rate

District	School	2009-2010 (Yr 0)	2010-2011 (Yr 1)	2011-2012 (Yr 2)	2012-2013 (Yr 3)	2013-2014 (Yr 4)	Trend	Change Yr4 - Yr0
Atlanta Public Schools	Crim High School	42.7%	43.8%	59.0%	38.2%	34.6%		Decrease
Atlanta Public Schools	Douglass High School	14.2%	10.5%	27.4%	13.2%	15.8%		Not Sig.
Bibb County	Northeast High School	5.6%	19.4%	10.1%	12.0%	10.8%		Increase
Bibb County	Rutland High School	12.0%	16.8%	12.9%	15.9%	12.9%		Not Sig.
Bibb County	Southwest High School	7.8%	16.4%	8.2%	14.3%	8.8%		Not Sig.
Bibb County	William S. Hutchings Career Center	6.9%	15.2%	8.2%	10.7%	7.5%		Not Sig.
Burke County	Burke County High School	7.5%	11.0%	8.8%	8.0%	11.0%		Increase
Chatham County	Beach High School	24.2%	22.4%	18.7%	17.3%	8.3%		Decrease
Dade County	Dade County High School	5.0%	5.4%	3.3%	2.2%	4.0%		Not Sig.
DeKalb County	Clarkston High School	9.4%	14.4%	13.6%	10.5%	15.2%		Increase
DeKalb County	McNair High School	13.4%	17.2%	3.3%	11.8%	13.3%		Not Sig.
Henry County	Henry County High School	9.0%	7.3%	6.3%	6.1%	4.4%		Decrease
Muscogee County	Jordan Vocational High School	8.6%	6.8%	7.0%	3.8%	3.8%		Decrease
Muscogee County	Spencer High School	10.9%	8.9%	9.3%	6.7%	6.1%		Decrease
Peach County	Peach County High School	10.5%	9.5%	12.1%	5.6%	4.1%		Decrease
Pulaski County	Hawkinsville High School	8.9%	3.7%	3.2%	4.6%	3.6%		Decrease
Richmond County	Glenn Hills High School	13.5%	7.6%	10.0%	10.8%	10.7%		Decrease
Richmond County	Josey High School	7.3%	12.8%	11.6%	14.8%	9.2%		Not Sig.
Richmond County	Laney High School	10.5%	8.3%	9.1%	5.2%	6.7%		Decrease
Spalding County	Griffin High School	8.3%	9.0%	16.3%	9.7%	1.7%		Decrease

Confidence interval for proportions – change in student retention rate from 2009-2010 to 2013-2014: $p < .05$

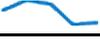
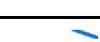
Yellow cells indicate rates that equal or are below the state average: 3.7% in 2009-2010, 3.6% in 2010-2011, 3.4% in 2011-2012, 3.3% in 2012-2013, and 3.1% in 2013-2014.

Green text indicates a statistically significant decrease in student retention rates from 2009-2010 to 2013-2014.

Red text indicates a statistically significant increase in student retention rates from 2009-2010 to 2013-2014.

Not Sig. indicates no statistically significant change in student in-grade retention rates.

Table 13: 2011-2012 LAS' Student In-Grade Retention Rate

District	School	2009- 2010 (Yr -1)	2010- 2011 (Yr 0)	2011- 2012 (Yr 1)	2012- 2013 (Yr 2)	2013- 2014 (Yr 3)	Trend	Change Yr3 - Yr0
Atlanta Public Schools	Harper-Archer Middle School	TFS	TFS	TFS	TFS	4.0%		N/A
Atlanta Public Schools	Therrell School of Health and Science	22.0%	29.1%	28.2%	22.3%	18.4%		Decrease
Atlanta Public Schools	Therrell School of Law, Government and Public Policy	22.7%	29.1%	35.2%	23.4%	6.8%		Decrease
Ben Hill County	Fitzgerald High School	9.7%	12.6%	11.6%	5.5%	6.0%		Decrease
Bibb County	Central High School	10.6%	15.3%	10.9%	8.3%	10.1%		Decrease
Chatham County	Groves High School	21.4%	22.6%	19.9%	21.2%	13.1%		Decrease
Clayton County	Lovejoy Middle School	TFS	TFS	TFS	TFS	TFS		N/A
DeKalb County	Freedom Middle School	1.2%	2.7%	2.2%	1.3%	1.2%		Decrease
DeKalb County	McNair Middle School	TFS	4.3%	1.5%	TFS	TFS		N/A
DeKalb County	Towers High School	10.7%	18.9%	14.3%	11.5%	9.1%		Decrease
Dougherty County	Albany High School	5.7%	11.7%	9.4%	8.1%	9.4%		Decrease
Meriwether County	Greenville High School	3.6%	7.3%	7.3%	5.8%	4.9%		Not Sig.
Meriwether County	Greenville Middle School	TFS	TFS	TFS	TFS	TFS		N/A
Muscogee County	Baker Middle School	TFS	5.1%	TFS	5.8%	5.6%		Not Sig.
Muscogee County	Eddy Middle School	4.2%	5.4%	5.1%	4.0%	3.5%		Not Sig.
Richmond County	Butler High School	14.0%	9.9%	9.8%	12.8%	13.8%		Increase
Richmond County	Murphey Middle Charter School	TFS	2.3%	2.5%	TFS	1.6%		Not Sig.
Spalding County	Cowan Road Middle School	TFS	1.8%	3.3%	1.6%	TFS		N/A
Valdosta City	Newbern Middle School	7.4%	2.4%	4.6%	5.7%	1.3%		Decrease

Confidence interval for proportions – change in student retention rate from 2010-2011 to 2013-2014: $p < .05$

“TFS” = too few students, GOSA does not report on fewer than 10 students

“N/A” = data not available

Yellow cells indicate rates that are equal or below the state average: 3.7% in 2009-2010, 3.6% in 2010-2011, 3.4% in 2011-2012, 3.3% in 2012-2013, and 3.1% in 2013-2014.

Green text indicates a statistically significant decrease in student retention rates from 2010-2011 to 2013-2014.

Red text indicates a statistically significant increase in student retention rates from 2010-2011 to 2013-2014.

Not Sig. indicates no statistically significant change in student in-grade retention rates.

F. Student Dropout Rate

Researchers identify student dropout rate as both a leading and lagging indicator of school turnaround.³⁰ Federal SIG metric requirements include student dropout rates as a leading indicator. However, Mass Insight Education concludes that student dropout rates are the lagging indicator that corresponds with student attendance rates and student in-grade retention rates. In either case, higher student dropout rates lead to fewer students attaining a high school diploma. Schools undergoing effective turnaround reform should show decrease in student dropout rates each year during implementation. The 9th-12th grade dropout rate is used for this indicator, so only high schools are included below.

In general, Georgia's lowest achieving schools have not had statistically significant reductions in student dropout rates.

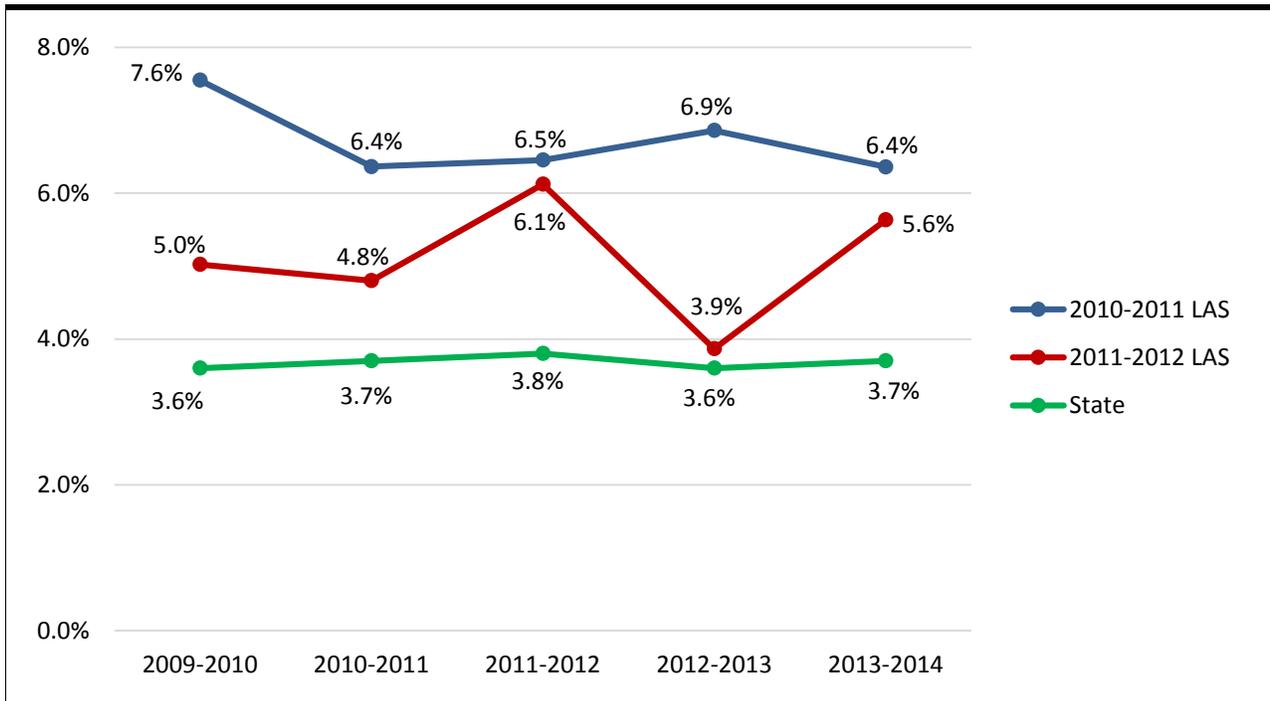
- For 2010-2011 LAS high schools, the average dropout rate decreased from 7.6% to 6.4% in the first year of implementation, but it climbed to 6.9% by 2012-2013 before dropping back to 6.4% in 2013-2014. The state high school average dropout rate hovered around 3.6%.
- For 2011-2012 LAS high schools, the average dropout rate increased from 4.8% to 6.1% in the first year of implementation, but it dropped to 3.9% in the second year, just above the state average. However, the dropout rate rose again to 5.6% in the third year.
- Only two schools, Crim High School and Burke County High School, had reductions in student dropout rates each year of implementation. Most notably, Crim High School's dropout rate decreased from 64.7% in the year prior to implementation to 25.5% in the fourth year of implementation.
- Only two schools, Burke County High School and Greenville High School, had student dropout rates lower than the state average each year of implementation.
- Seven schools, Crim High School, Rutland High School, Burke County High School, Dade County High School, Henry County High School, Laney High School, and Fitzgerald High School, had a statistically significant reduction in student dropout rates from the year prior to implementation to the 2013-2014 school year. Eight schools had a statistically significant increase, and 14 schools had no statistically significant change.

Figure 7 shows 2010-2011 LAS, 2011-2012 LAS high schools, and state averages across all four years. Table 14 lists the dropout rates and statistical significance of each 2010-2011 LAS. Table 15 lists the dropout rates and statistical significance of each 2011-2012 LAS high school.

³⁰ Pallin, Evaluating School Turnaround. (2010). Page 15.

Center on Innovation & Improvement, Mid-Atlantic Comprehensive Center, and Appalachia Regional Comprehensive Center. *School Improvement Grants Online Tool: Monitoring and Evaluating Transformations by FEDERAL REQUIREMENTS*. Lincoln, Illinois: Academic Development Institute, 2011. PDF. Page 7.

Figure 7: Percent (%) of Students Who Dropped Out of High School



2010-2011 LAS: Crim HS, Douglass HS, Northeast HS, Rutland HS, Southwest HS, Hutchings CC, Burke HS, Beach HS, Dade HS, Clarkston HS, McNair HS, Henry HS, Jordan Voc. HS, Spencer HS, Peach HS, Hawkinsville HS, Glenn Hills HS, Josey HS, Laney HS, and Griffin HS

2011-2012 LAS High Schools: Therrell Health Science, Therrell Law, Fitzgerald HS, Central HS, Groves HS, Towers HS, Albany HS, Greenville HS, and Butler HS

Table 14: 2010-2011 LAS' Percent of Students Who Dropped Out of School

District	School	2009- 2010 (Yr 0)	2010- 2011 (Yr 1)	2011- 2012 (Yr 2)	2012- 2013 (Yr 3)	2013- 2014 (Yr 4)	Trend	Change Yr4 – Yr0
Atlanta Public Schools	Crim High School	64.7%	37.3%	34.8%	29.6%	25.5%		Decrease
Atlanta Public Schools	Douglass High School	4.6%	8.1%	10.6%	9.5%	11.7%		Increase
Bibb County	Northeast High School	5.9%	8.7%	6.1%	8.2%	6.5%		Not Sig.
Bibb County	Rutland High School	9.0%	7.6%	6.8%	5.6%	6.8%		Decrease
Bibb County	Southwest High School	8.5%	8.4%	5.8%	9.8%	9.8%		Not Sig.
Bibb County	William S. Hutchings Career Center	3.3%	4.4%	2.9%	5.5%	3.8%		Not Sig.
Burke County	Burke County High School	5.7%	2.8%	2.2%	1.9%	1.0%		Decrease
Chatham County	Beach High School	5.4%	3.6%	3.6%	4.8%	5.5%		Not Sig.
Dade County	Dade County High School	4.2%	1.7%	0.8%	2.7%	2.2%		Decrease
DeKalb County	Clarkston High School	2.3%	3.9%	6.3%	7.8%	7.9%		Increase
DeKalb County	McNair High School	4.0%	5.5%	6.2%	4.1%	5.0%		Not Sig.
Henry County	Henry County High School	5.9%	5.7%	7.1%	5.7%	3.4%		Decrease
Muscogee County	Jordan Vocational High School	7.9%	6.6%	7.1%	8.1%	9.4%		Not Sig.
Muscogee County	Spencer High School	4.5%	4.2%	5.8%	4.4%	5.5%		Not Sig.
Peach County	Peach County High School	2.2%	4.0%	4.3%	4.9%	2.9%		Not Sig.
Pulaski County	Hawkinsville High School	3.2%	2.2%	2.8%	5.3%	5.2%		Increase
Richmond County	Glenn Hills High School	0.6%	4.2%	2.3%	6.2%	3.1%		Increase
Richmond County	Josey High School	2.0%	1.9%	5.8%	3.9%	6.1%		Increase
Richmond County	Laney High School	3.9%	1.3%	3.2%	3.7%	1.3%		Decrease
Spalding County	Griffin High School	3.2%	5.2%	4.6%	5.5%	4.6%		Increase

Confidence interval for proportions--change in student dropout rate from 2009-2010 to 2013-2014: $p < .05$

Yellow cells indicate rates that are equal to or below the 9-12 state average: 3.6% in 2009-2010, 3.7% in 2010-2011, 3.8% in 2011-2012, 3.6% in 2012-2013, and 3.7% in 2013-2014.

Green text indicates a statistically significant decrease in student dropout rates from 2009-2010 to 2013-2014.

Red text indicates a statistically significant increase in student dropout rates from 2009-2010 to 2013-2014.

Not Sig. indicates no statistically significant change in student dropout rates.

Table 15: 2011-2012 LAS High Schools' Percent of Students Who Dropped Out of School

District	School	2009- 2010 (Yr -1)	2010- 2011 (Yr 0)	2011- 2012 (Yr 1)	2012- 2013 (Yr 2)	2013- 2014 (Yr 3)	Trend	Change Yr3 – Yr0
Atlanta Public Schools	Therrell School of Health and Science	4.3%	3.3%	14.6%	5.0%	5.2%		Not Sig.
Atlanta Public Schools	Therrell School of Law, Government and Public Policy	5.1%	6.3%	10.7%	4.8%	6.8%		Not Sig.
Ben Hill County	Fitzgerald High School	4.1%	7.0%	3.9%	1.9%	3.8%		Decrease
Bibb County	Central High School	8.0%	6.7%	4.0%	5.7%	7.3%		Not Sig.
Chatham County	Groves High School	8.0%	3.6%	2.1%	3.8%	6.8%		Increase
DeKalb County	Towers High School	6.2%	5.6%	6.8%	3.2%	5.6%		Not Sig.
Dougherty County	Albany High School	2.8%	5.1%	4.5%	4.1%	6.4%		Not Sig.
Meriwether County	Greenville High School	1.7%	2.6%	3.0%	2.6%	3.5%		Not Sig.
Richmond County	Butler High School	5.0%	3.0%	5.5%	3.7%	5.3%		Increase

Confidence interval for proportions--change in student dropout rate from 2010-2011 to 2013-2014: $p < .05$

Yellow cells indicate rates that are equal or below the 9-12 state average: 3.6% in 2009-2010, 3.7% in 2010-2011, 3.8% in 2011-2012, 3.6% in 2012-2013, and 3.7% in 2013-2014.

Green text indicates a statistically significant decrease in student dropout rates from 2010-2011 to 2013-2014.

Red text indicates a statistically significant increase in student dropout rates from 2010-2011 to 2013-2014.

Not Sig. indicates no statistically significant change in student dropout rates.

IV. Lagging Indicators

A. Standardized Test Scores

Standardized test scores are a lagging indicator of school turnaround efforts because effective turnarounds typically demonstrate a statistically significant increase in year two or three.³¹ GOSA used two standardized tests employed in Georgia to measure the progress of lowest achieving schools, the End of Course Tests (EOCT) and the Criterion-Referenced Competency Tests (CRCT). For the years examined in this study, Georgia high school students took EOCTs that align with Georgia's state-mandated content standards associated with a specific course.³² This report examines the scores in one course in each core subject: American Literature and Composition, Biology, Mathematics II, and US History. In grades 3 to 8, Georgia students took CRCTs, which measure the skills and knowledge described in state-mandated content standards in reading, English language arts, mathematics, science and social studies.³³

2010-2011 LAS are all high schools, so no CRCT data are included for these schools. 2011-2012 LAS include both high schools and middle schools. Therefore, both EOCT and CRCT data are included for 2011-2012 LAS.

i. End of Course Tests (EOCT)

As a whole, Georgia's lowest achieving schools have had statistically significant increases in EOCT scores in each subject every year. While these increases were similar to changes in performance at the state level, the lowest achieving schools did outgain the state in all four subjects.

- The gap between both LAS groups' American Literature and Composition scores and the state average slightly narrowed for both 2010-2011 LAS and 2011-2012 LAS. For 2010-2011 LAS, the gap narrowed by 5 percentage points. For 2011-2012 LAS, it narrowed by 3 percentage points.
- Scores on the Biology EOCT also saw the gains relative to the state average. For 2010-2011 LAS, the gap decreased from roughly 26 percentage points to 22 percentage points. For 2011-2012 LAS, the gap decreased from roughly 22 percentage points to 17 percentage points.
- The gap with the state average narrowed slightly in Mathematics II, from 25 to 19 percentage points for 2010-2011 LAS and from 26 to 22 percentage points for 2011-2012 LAS. It should be noted that in 2013-2014, Georgia changed from Mathematics II to Analytic Geometry for EOCT

³¹Pallin, Evaluating School Turnaround. (2010). Page 25.

³² "End of Course Tests (EOCT)." *End of Course Tests (EOCT)*. Georgia Department of Education, n.d. Web. 14 Sept. 2014. <<http://www.gadoe.org/curriculum-instruction-and-assessment/assessment/pages/eoct.aspx>>.

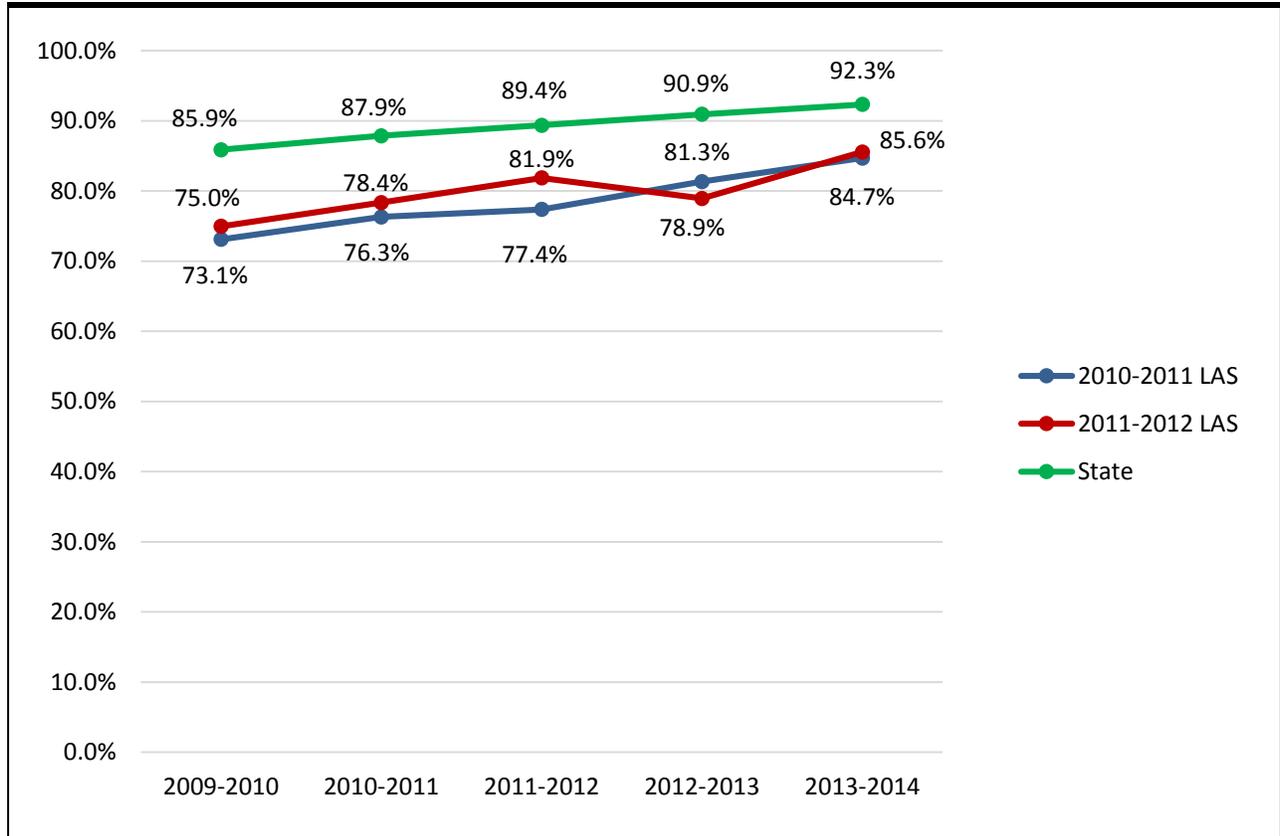
³³ "Criterion-Referenced Competency Tests (CRCT)." *Criterion-Referenced Competency Tests (CRCT)*. Georgia Department of Education, n.d. Web. 14 Sept. 2014. <<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/Assessment/Pages/CRCT.aspx>>.

tests. Therefore, the information on Mathematics II is based on data from 2009-2010 to 2012-2013.

- In U.S. History, the gap narrowed by 2 percentage points for 2010-2011 LAS and by 4 percentage points for 2011-2012 LAS.
- Fourteen of the 29 high schools had statistically significant increases in three or more subjects from the year before implementation to the 2013-2014 school year. Ten had statistically significant increases in two subjects. Two schools had statistically significant increases in only one subject. The remaining three schools had no statistically significant gains.
- Five schools had a statistically significant decrease in a subject from the year prior to implementation to the 2013-2014 school year.

Figures 8-11 show the 2010-2011 LAS, 2011-2012 LAS, and state averages for each EOCT subject across all five years. Table 17 provides each school's results over that time for each EOCT subject for each 2010-2011 LAS. Table 18 provides the same information for 2011-2012 LAS.

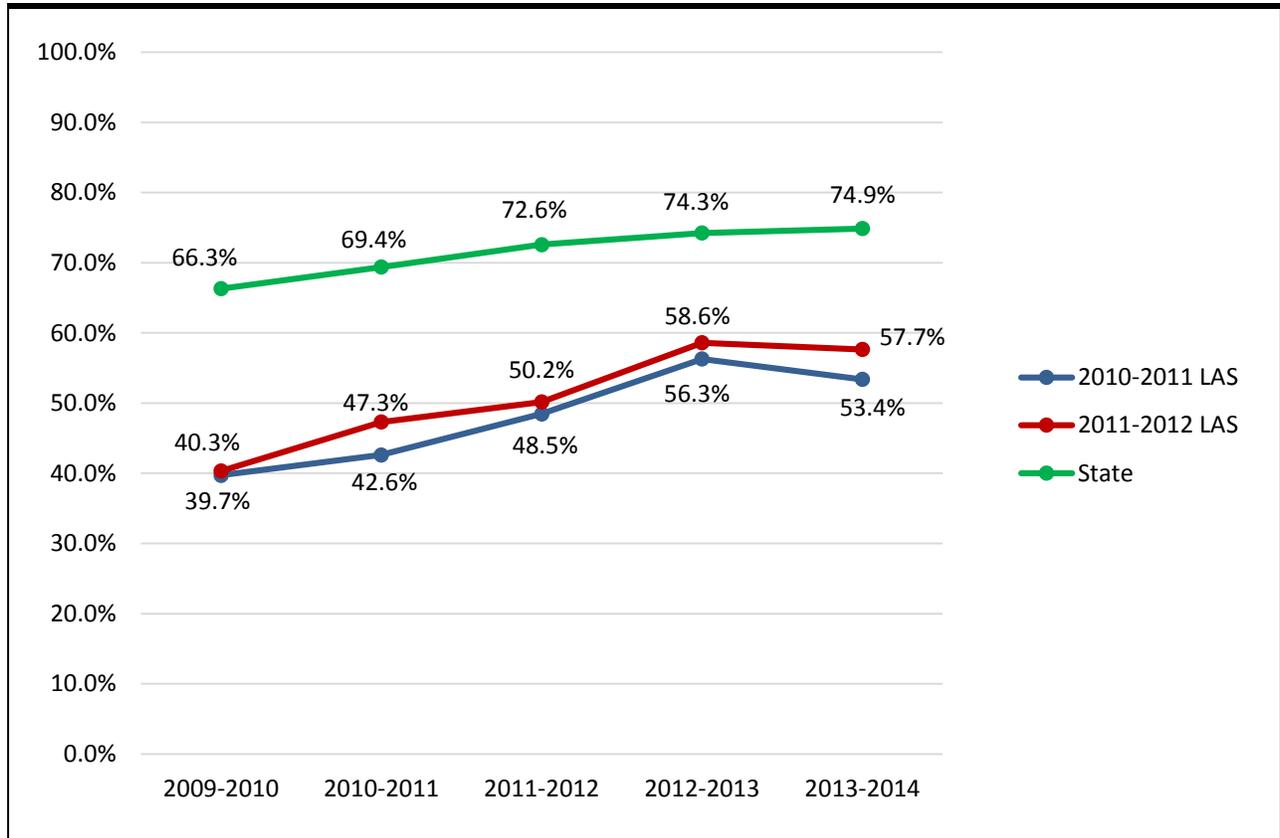
Figure 8: Percent (%) of Students Who Meet or Exceed State Standards on American Literature and Composition End-of-Course-Test



2010-2011 LAS: Crim HS, Douglass HS, Northeast HS, Rutland HS, Southwest HS, Hutchings CC, Burke HS, Beach HS, Dade HS, Clarkston HS, McNair HS, Henry HS, Jordan Voc. HS, Spencer HS, Peach HS, Hawkinsville HS, Glenn Hills HS, Josey HS, Laney HS, and Griffin HS

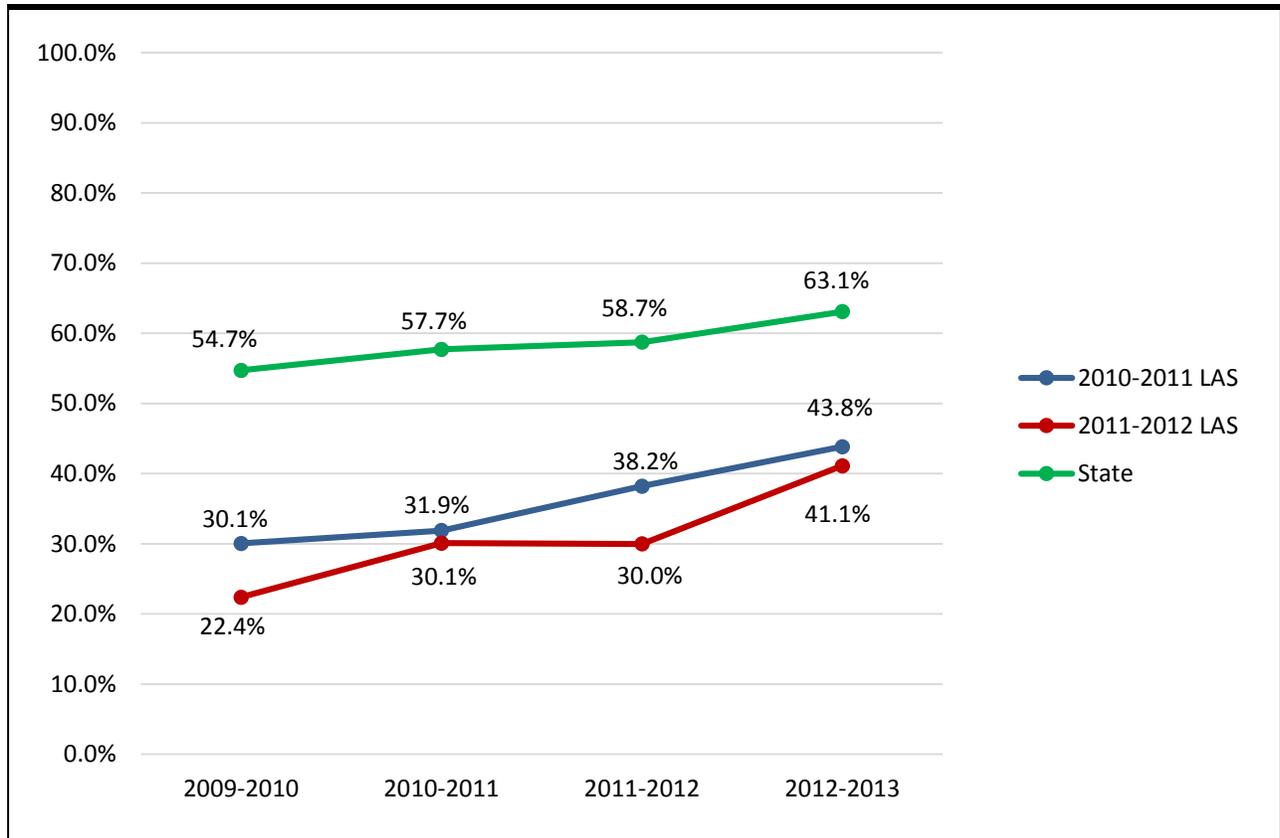
2011-2012 LAS: Therrell Health Science, Therrell Law, Fitzgerald HS, Central HS, Groves HS, Towers HS, Albany HS, Greenville HS, and Butler HS

Figure 9: Percent (%) of Students Who Meet or Exceed State Standards on Biology End-of-Course-Test



Refer to Figure 8 for a list of schools included in the graph.

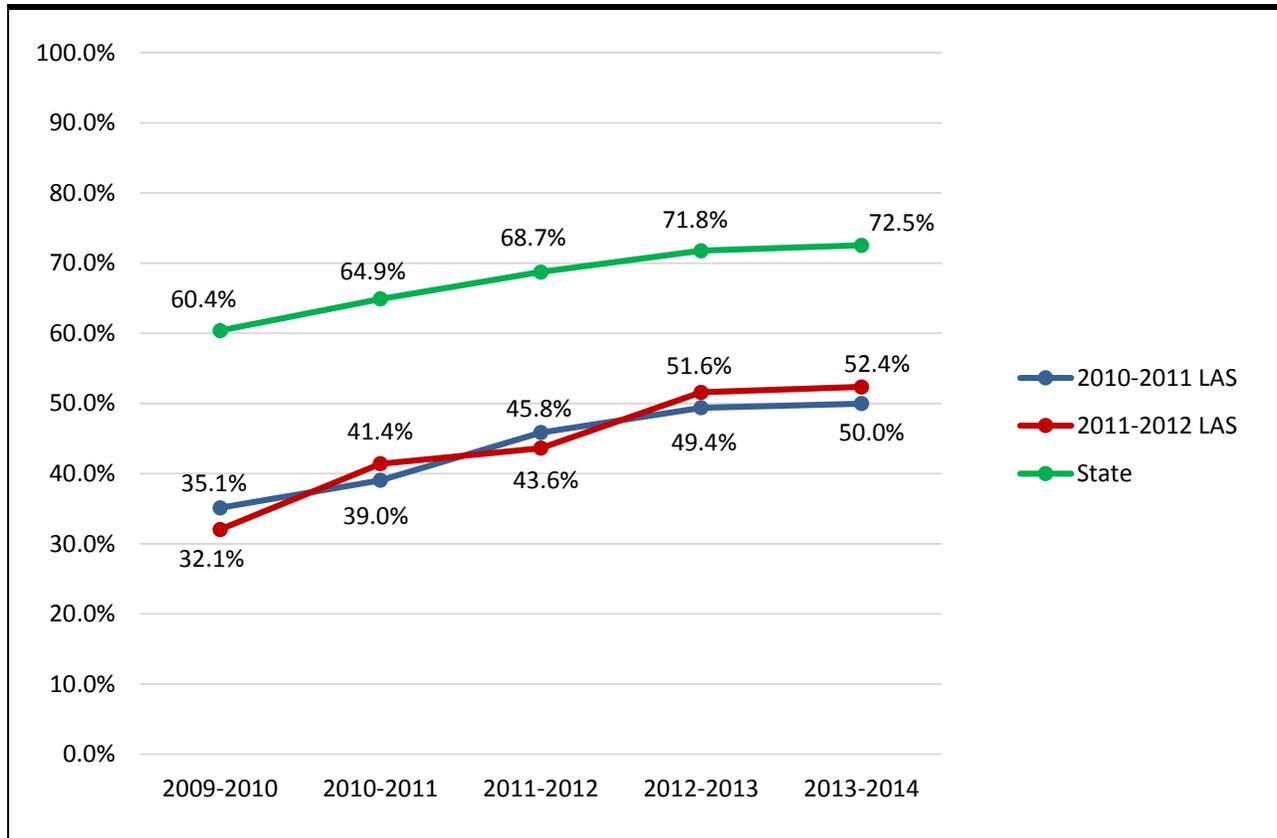
Figure 10: Percent (%) of Students Who Meet or Exceed State Standards on Mathematics II End-of-Course-Test



In 2013-2014, Georgia changed from Mathematics II to Analytic Geometry for EOCT tests. As such, 2013-2014 school year is not included.

Refer to Figure 8 for a list of schools included in the graph.

Figure 11: Percent (%) of Students Who Meet or Exceed State Standards on US History End-of-Course-Test



Refer to Figure 8 for a list of schools included in the graph.

Table 17: 2010-2011 LAS Significant Changes from Before to After Implementation

District	School	Subjects with Sig. Increase	Subjects with Sig. Decrease
Atlanta Public Schools	Crim High School	1 of 4 subjects: AL	0
Atlanta Public Schools	Douglass High School	4 of 4 subjects: AL, B, M2, US H	0
Bibb County	Northeast High School	2 of 4 subjects: B, M2	1 of 4 subjects: US H
Bibb County	Rutland High School	3 of 4 subjects: AL, B, M2	0
Bibb County	Southwest High School	4 of 4 subjects: AL, B, M2, US H	0
Bibb County	William S. Hutchings Career Center	2 of 4 subjects: B, M2	0
Burke County	Burke County High School	3 of 4 subjects: AL, B, US H	1 of 4 subjects: M2
Chatham County	Beach High School	4 of 4 subjects: AL, B, M2, US H	0
Dade County	Dade County High School	4 of 4 subjects: AL, B, M2, US H	0
DeKalb County	Clarkston High School	2 of 4 subjects: B, US H	0
DeKalb County	McNair High School	2 of 4 subjects: AL, M2	1 of 4 subjects: B
Henry County	Henry County High School	2 of 4 subjects: M2, US H	0
Muscogee County	Jordan Vocational High School	3 of 4 subjects: AL, B, US H	0
Muscogee County	Spencer High School	3 of 4 subjects: AL, B, US H	0
Peach County	Peach County High School	0	1 of 4 subjects: B
Pulaski County	Hawkinsville High School	2 of 4 subjects: B, M2	0
Richmond County	Glenn Hills High School	3 of 4 subjects: AL, M2, US H	0
Richmond County	Josey High School	3 of 4 subjects: AL, B, M2	0
Richmond County	Laney High School	4 of 4 subjects: AL, B, M2, US H	0
Spalding County	Griffin High School	4 of 4 subjects: AL, B, M2, US H	0

Confidence interval for proportions – change in student meets or exceeds rate from 2010-2011 to 2013-2014 for AL, B, and US H, and from 2010-2011 to 2012-2013 for M2: $p < .05$

EOCT Abbreviations: American Literature and Composition (AL), Biology (B), Mathematics II (M2), and US History (US H)

Green text indicates a statistically significant increase in three or more subjects.

Table 18: 2011-2012 LAS High Schools Significant Changes from Before to After Implementation

District	School	Subjects with Increase	Subjects with Decrease
Atlanta Public Schools	Therrell School of Health and Science	2 of 4 subjects: B, M2	0
Atlanta Public Schools	Therrell School of Law, Government and Public Policy	1 of 4 subjects: M2	0
Ben Hill County	Fitzgerald High School	0	0
Bibb County	Central High School	2 of 4 subjects: M2, US H	0
Chatham County	Groves High School	4 of 4 subjects: AL, B, M2, US H	0
DeKalb County	Towers High School	2 of 4 subjects: B, US H	1 of 4 subjects: M2
Dougherty County	Albany High School	2 of 4 subjects: B, US H	0
Meriwether County	Greenville High School	3 of 4 subjects: AL, B, M2	0
Richmond County	Butler High School	0	0

Confidence interval for proportions – change in student meets or exceeds rate from 2010-2011 to 2013-2014 for AL, B, and US H, and from 2010-2011 to 2012-2013 for M2: $p < .05$

EOCT Abbreviations: American Literature and Composition (AL), Biology (B), Mathematics II (M2), and US History (US H)

Green text indicates a statistically significant increase in three or more subjects.

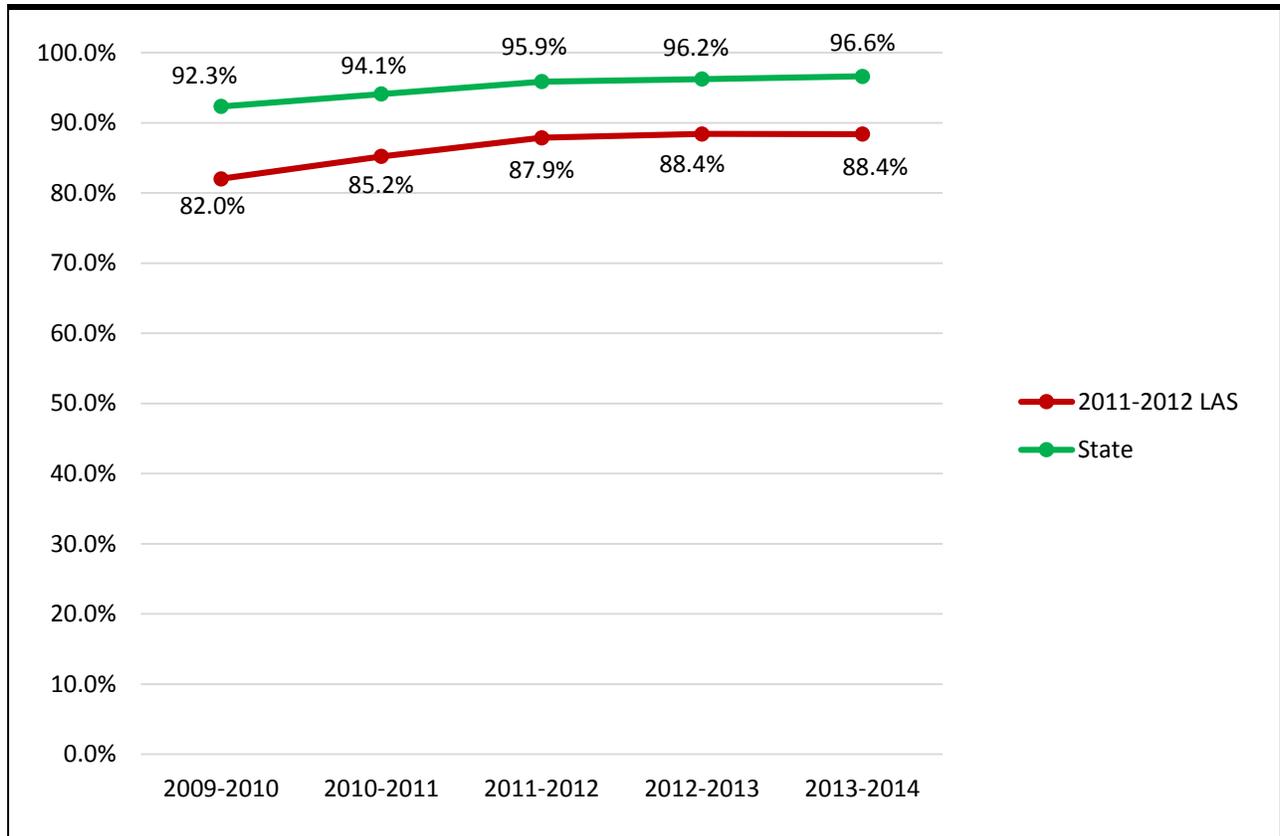
ii. Criterion-Referenced Competency Tests (CRCT)

CRCT scores for LAS middle schools increased in Reading, Science, and Social Studies. However, these improvements largely mirror gains in the state average. The LAS' scores for English Language Arts and Math declined from 2010-2011 to 2013-2014.

- In reading, LAS middle schools decreased the gap with the state average from 9 to 8 percentage points between 2010-2011 and 2013-2014.
- In math, the gap with the state average increased from 18 to 24 percentage points.
- In ELA, the gap widened from 9 to 12 percentage points.
- In science, the gap closed slightly from 30 to 28 percentage points.
- In social studies, the gap decreased by 8 percentage points, from 34 to 26 percentage points.
- Only one LAS middle school, Lovejoy Middle School, had statistically significant increases in four or more subjects from 2011-2012 to 2013-2014.
- Seven schools had increases in two or three subjects. Two schools had a statistically significant increase in only one subject.
- Six schools had statistically significant decreases in one or two subjects from 2011-2012 to 2013-2014.

Figures 12-16 show the 2011-2012 LAS middle schools' and state averages for each CRCT subject across all five years. Table 19 lists the statistical significant change for each CRCT subject for every 2011-2012 LAS middle school.

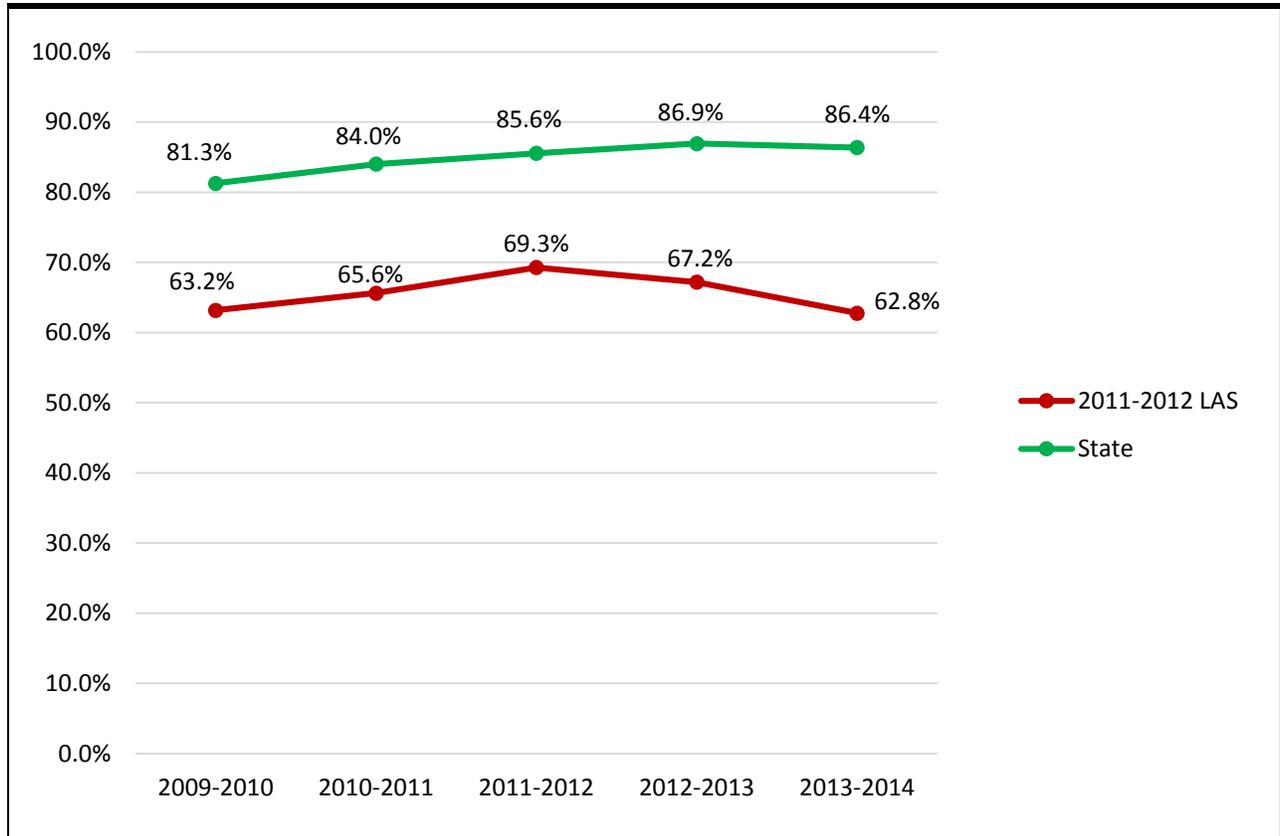
Figure 12: Percent of Students Who Meet or Exceed State Standards on Reading CRCT



2011-2012 LAS: Harper-Archer MS, Lovejoy MS, Freedom MS, McNair MS, Greenville MS, Baker MS, Eddy MS, Murphey MS, Cowan Rd MS, and Newbern MS

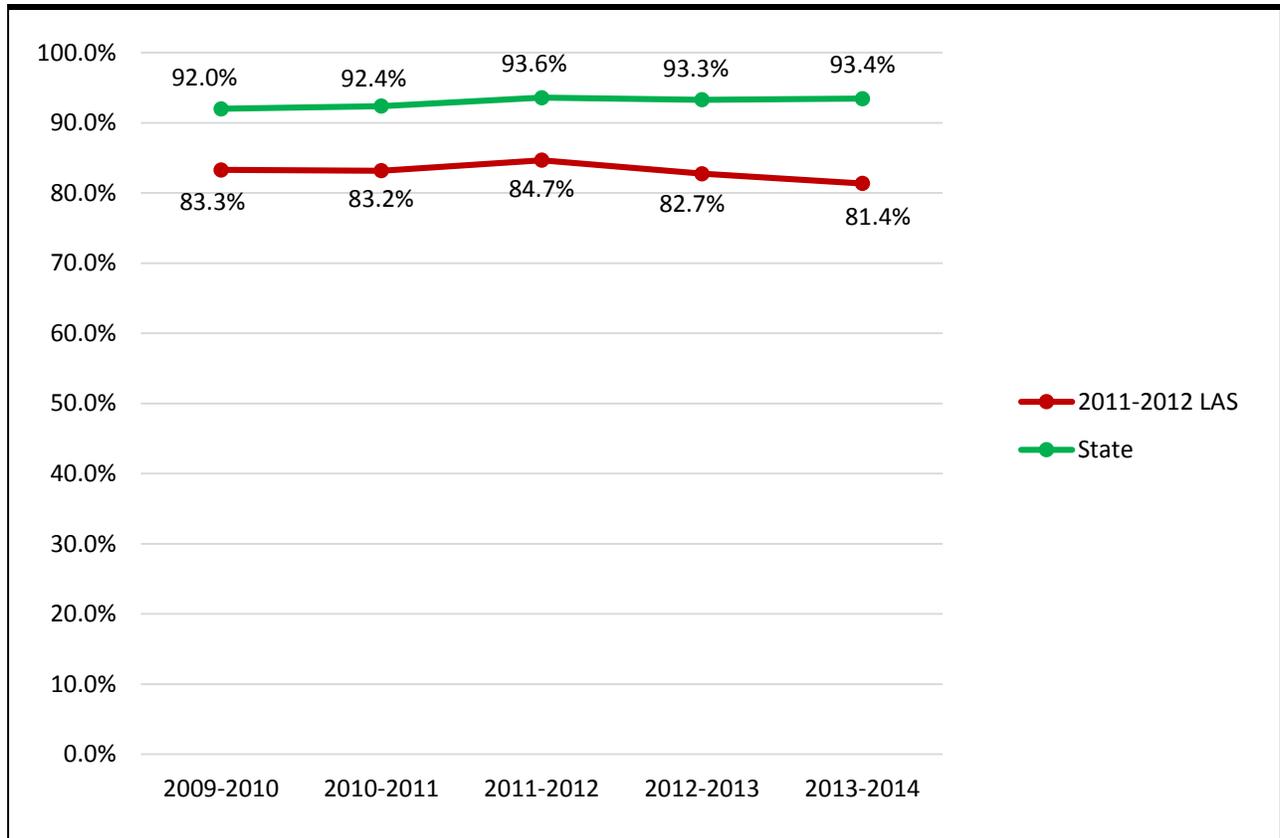
State scores are the average of grade 6, 7, and 8 CRCT scores

Figure 13: Percent of Students Who Meet or Exceed State Standards on Mathematics CRCT



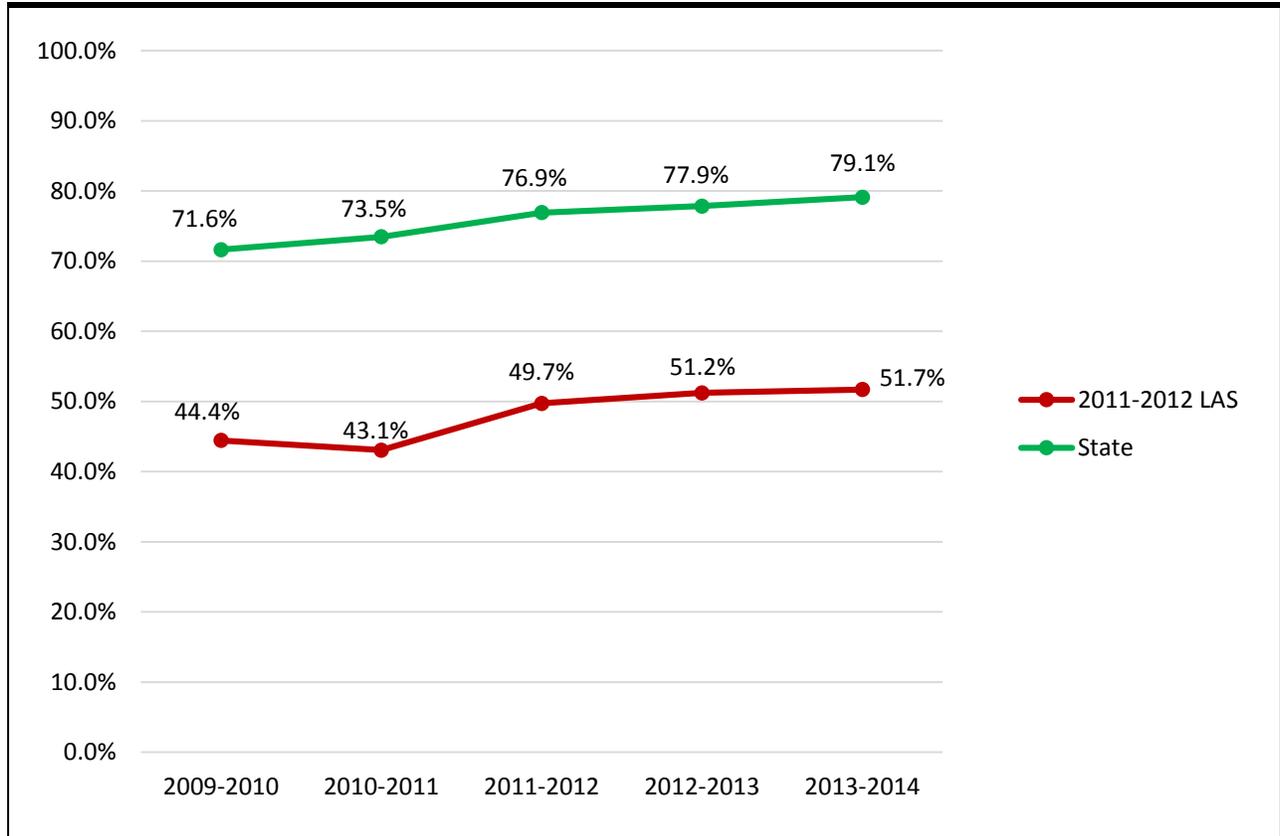
Refer to Figure 12 for a list of schools included in the graph.

Figure 14: Percent of Students Who Meet or Exceed State Standards on English Language Arts CRCT



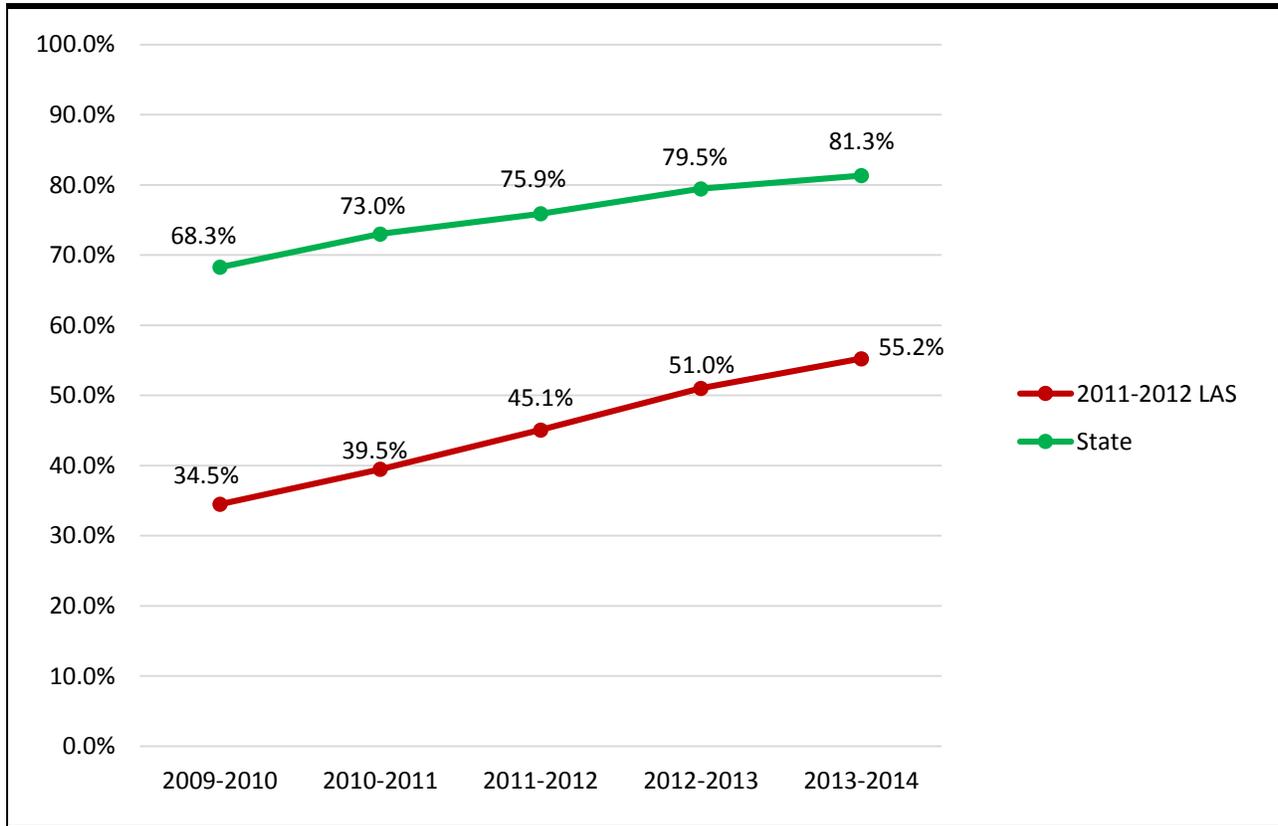
Refer to Figure 12 for a list of schools included in the graph.

Figure 15: Percent of Students Who Meet or Exceed State Standards on Science CRCT



Refer to Figure 12 for a list of schools included in the graph.

Figure 16: Percent of Students Who Meet or Exceed State Standards on Social Studies CRCT



Refer to Figure 12 for a list of schools included in the graph.

Table 19: 2011-2012 LAS Middle Schools Significant Changes in CRCT Scores by Subject from Before to After Implementation

District	School	Subjects with Increase	Subjects with Decrease
Atlanta Public Schools	Harper-Archer Middle School	3 of 5 subjects: R, S, SS	0
Clayton County	Lovejoy Middle School	4 of 5 subjects: ELA, R, S, SS	0
DeKalb County	Freedom Middle School	1 of 5 subjects: SS	2 of 5 subjects: ELA, M
DeKalb County	McNair Middle School	1 of 5 subjects: SS	2 of 5 subjects: ELA, M
Meriwether County	Greenville Middle School	2 of 5 subjects: S, SS	1 of 5 subjects: M
Muscogee County	Baker Middle School	2 of 5 subjects: S, SS	1 of 5 subjects: M
Muscogee County	Eddy Middle School	3 of 5 subjects: R, S, SS	0
Richmond County	Murphey Middle Charter School	3 of 5 subjects: R, S, SS	0
Spalding County	Cowan Road Middle School	3 of 5 subjects: M, S, SS	1 of 5 subjects: ELA
Valdosta City	Newbern Middle School	3 of 5 subjects: R, S, SS	1 of 5 subjects: M

Confidence interval for proportions – change in student meets or exceeds rate from 2010-2011 to 2013-2014: $p < .05$
 CRCT Abbreviations: English Language Arts (ELA), Mathematics (M), Reading (R), Science (S), and Social Studies (SS)
 Green indicates a significant increase in four or more subjects.

B. Graduation Rate

Graduation rate also serves a lagging indicator of school turnaround efforts because significant improvements in this metric are not expected until the third year of implementation. Mass Insight Education identifies graduation rate as a lagging indicator that corresponds with attendance rate and in-grade retention rate.³⁴ According to federal requirements, while improvements in lagging indicators, such as graduation rate, should happen by year three, gradual increases could be seen in years one and two.³⁵ Therefore, schools undergoing effective turnaround reform should see an increase in graduation rates each year of implementation, with the largest increase occurring in year three.

In Georgia, the graduation rate calculation changed in 2010-2011 to meet federal requirements.³⁶ Therefore, comparisons to prior years are not possible. For 2010-2011 LAS, change in graduation rate is calculated as the difference from year one (2010-2011 school year) to year four (2013-2014 school year) because comparable graduation rate data from the year before implementation are not available. For 2011-2012 LAS, the change is still calculated as the difference between the graduation rate of the year before implementation (2010-2011 school year) and year three (2013-2014 school year). Since the graduation rate is a high school metric, data are only presented for the 29 high schools.

In general, more than half of Georgia's lowest achieving schools saw a statistically significant increase in graduation rate from the 2010-2011 school year to the 2013-2014 school year. However, these gains generally mirrored gains in the state's graduation rate.

- On average, 54% to 60% of students in Georgia's lowest achieving schools graduated from high school each year. This is at least 10 percentage points lower than the state average. Both rates increased slightly between 2010-2011 and 2013-2014.
- Sixteen schools had a statistically significant increase in graduation rate from 2010-2011 school year to 2013-2014 school year. Six schools had a statistically significant decrease, and seven had no statistically significant change.
- Southwest High School, Beach High School, Jordan Vocational High School, Laney High School, Griffin High School, and Albany High School had an increase in graduation rate every year since implementation.
- Only two schools, Dade County High School and Fitzgerald High School, had graduation rates above the state average every year during implementation.

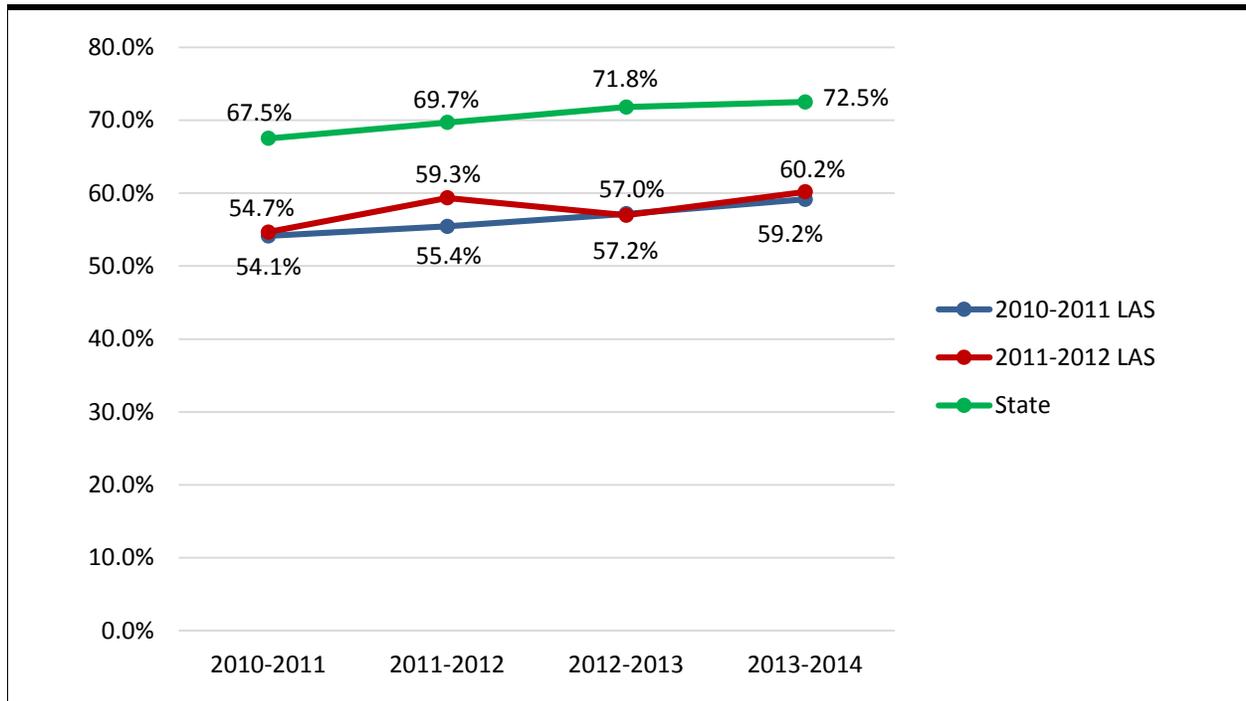
Figure 17 shows the 2010-2011 LAS and 2011-2012 LAS and state averages across all four years. Table 20 lists the graduation rates and statistical significance for each 2010-2011 LAS. Table 21 lists the graduation rates and statistical significant for each 2011-2012 LAS.

³⁴ Pallin, Evaluating School Turnaround. (2010). Page 15.

³⁵ Center on Innovation & Improvement, Mid-Atlantic Comprehensive Center, and Appalachia Regional Comprehensive Center. *School Improvement Grants Online Tool: Monitoring and Evaluating Transformations by FEDERAL REQUIREMENTS*. Lincoln, Illinois: Academic Development Institute, 2011. PDF. Page 7.

³⁶ "Indicators." The Governor's Office of Student Achievement. The Governor's Office of Student Achievement, n.d. Web. 22 Aug. 2014. <<https://gosa.georgia.gov/indicators>>.

Figure 17: Percent (%) of Students Who Graduated from High School



In 2010-2011, Georgia changed from a proxy rate calculation to a Cohort rate calculation for graduation rate. As such, prior years are not included.

2010-2011 LAS: Crim HS, Douglass HS, Northeast HS, Rutland HS, Southwest HS, Hutchings CC, Burke HS, Beach HS, Dade HS, Clarkston HS, McNair HS, Henry HS, Jordan Voc. HS, Spencer HS, Peach HS, Hawkinsville HS, Glenn Hills HS, Josey HS, Laney HS, and Griffin HS

2011-2012 LAS: Therrell Health Science, Therrell Law, Fitzgerald HS, Central HS, Groves HS, Towers HS, Albany HS, Greenville HS, and Butler HS

Table 20: 2010-2011 LAS' Graduation Rate

School District	School Name	2010-2011 (Yr 1)	2011-2012 (Yr 2)	2012-2013 (Yr 3)	2013-2014 (Yr 4)	Trend	Change Yr4 - Yr1
Atlanta Public Schools	Crim High School*	7.5%	4.2%	7.5%	6.0%		Not Sig.
Atlanta Public Schools	Douglass High School	47.6%	40.5%	49.6%	42.5%		Decrease
Bibb County	Northeast High School	51.8%	47.2%	52.5%	65.0%		Increase
Bibb County	Rutland High School	59.0%	64.1%	72.3%	59.3%		Not Sig.
Bibb County	Southwest High School	38.3%	39.1%	45.6%	56.1%		Increase
Bibb County	William S. Hutchings Career Center	68.3%	71.6%	58.7%	54.7%		Decrease
Burke County	Burke County High School	67.4%	74.7%	77.9%	76.6%		Increase
Chatham County	Beach High School	51.9%	55.4%	64.7%	70.0%		Increase
Dade County	Dade County High School	70.6%	80.1%	80.7%	76.9%		Increase
DeKalb County	Clarkston High School	54.7%	44.2%	53.8%	51.9%		Decrease
DeKalb County	McNair High School	53.0%	47.0%	46.6%	52.4%		Not Sig.
Henry County	Henry County High School	72.8%	77.3%	77.7%	69.3%		Decrease
Muscogee County	Jordan Vocational High School	43.6%	45.7%	56.1%	63.1%		Increase
Muscogee County	Spencer High School	61.7%	60.3%	54.6%	66.0%		Increase
Peach County	Peach County High School	61.1%	66.6%	63.3%	68.6%		Increase
Pulaski County	Hawkinsville High School	71.7%	70.3%	73.4%	72.3%		Not Sig.
Richmond County	Glenn Hills High School	45.9%	57.1%	42.2%	50.5%		Increase
Richmond County	Josey High School	46.7%	51.7%	49.6%	43.8%		Not Sig.
Richmond County	Laney High School	47.3%	48.8%	51.3%	72.7%		Increase
Spalding County	Griffin High School	61.7%	62.9%	65.1%	65.5%		Increase

*Crim High School is an alternative school serving many students who are academically off track. As such, the graduation rate is much lower than other LAS.

Confidence interval for proportions--change in graduation rate from 2010-2011 to 2013-2014: $p < .05$

Yellow cells indicate rates that are equal to or above the state average for that year: 67.5% in 2010-2011, 69.7% in 2011-2012, 71.8% in 2012-2013, and 72.5% in 2013-2014.

Green text indicates a statistically significant increase in graduation rate from 2010-2011 to 2013-2014.

Red text indicates a statistically significant decrease in graduation rate from 2010-2011 to 2013-2014.

Not Sig. indicates no statistically significant change in graduation rate.

Table 21: 2011-2012 LAS High Schools' Graduation Rate

School District	School Name	2010-2011 (Yr 0)	2011-2012 (Yr 1)	2012-2013 (Yr 2)	2013-2014 (Yr 3)	Trend	Change Yr3 – Yr0
Atlanta Public Schools	Therrell School of Health and Science	49.2%	67.7%	46.3%	54.7%		Not Sig.
Atlanta Public Schools	Therrell School of Law, Government and Public Policy	65.7%	38.7%	48.9%	52.0%		Decrease
Ben Hill County	Fitzgerald High School	64.9%	73.7%	83.5%	74.2%		Increase
Bibb County	Central High School	52.1%	52.8%	66.4%	54.7%		Not Sig.
Chatham County	Groves High School	51.5%	62.9%	54.3%	64.7%		Increase
DeKalb County	Towers High School	43.9%	47.2%	44.1%	53.7%		Increase
Dougherty County	Albany High School	54.5%	66.3%	66.7%	76.6%		Increase
Meriwether County	Greenville High School	62.8%	78.2%	64.2%	75.0%		Increase
Richmond County	Butler High School	47.3%	46.6%	38.4%	35.9%		Decrease

Confidence interval for proportions – change in graduation rate from 2010-2011 to 2013-2014: $p < .05$

Yellow cells indicate rates that are equal to or above the state average for that year: 67.5% in 2010-2011, 69.7% in 2011-2012, 71.8% in 2012-2013, and 72.5% in 2013-2014.

Green text indicates a statistically significant increase in graduation rate from 2010-2011 to 2013-2014.

Red text indicates a statistically significant decrease in graduation rate from 2010-2011 to 2013-2014.

Not Sig. indicates no statistically significant change in graduation rate.

C. College Enrollment

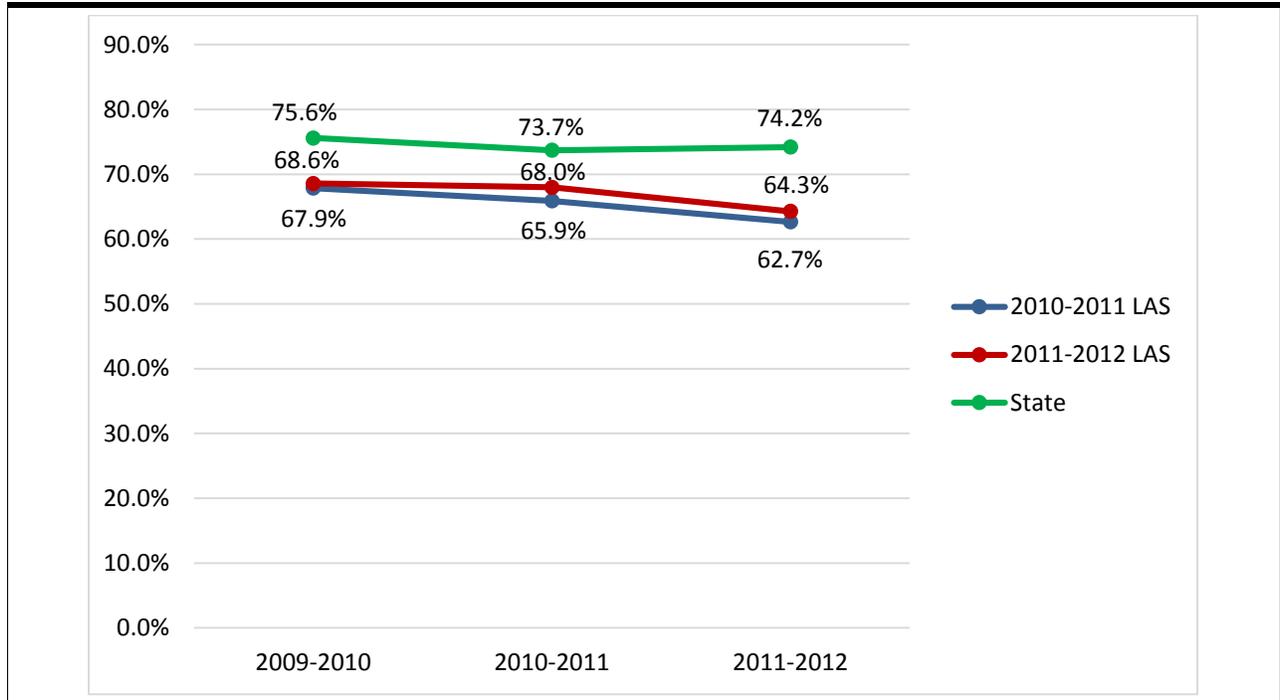
College Enrollment rate also serves as a lagging indicator of school turnaround efforts because significant improvements in this metric are not expected until the third year of implementation. GOSA tracks college enrollment as the percentage of students who enroll in college within 16 months of graduating from high school, which aligns with federal reporting of college enrollment in the c(11) report. For example, the figures for 2009-2010 represent the percentage of 2009-2010 high school graduates that enrolled in college courses within 16 months of graduation. Therefore, the data for this indicator are lagged to allow for 16 months after a student graduates. As a result, college enrollment information is available only for students graduating in 2009-2010 through 2011-2012. Since information for the third year of implementation is not yet available, these data should be interpreted more as a baseline than as outcomes.

Both the state average and the averages for the two groups of LAS decreased slightly from 2009-2010 to 2011-2012. In both groups, the gap widened slightly.

- The state's college enrollment rate has hovered between 73 and 75%. The LAS enrollment rate decreased from roughly 68% to 64% from 2009-2010 to 2011-2012.
- Nine schools had an increase in college enrollment rates over the three-year period. However, only one school, Fitzgerald High School, had a statistically significant increase in college enrollment.
- In 20 schools, the college enrollment rate decreased over the three-year period, but the change was not statistically significant.
- Three schools, Hawkinsville High School, Central High School, and Albany High School, had a college enrollment rate above the state average in all three years.

Figure 18 shows the 2010-2011 LAS, 2011-2012 LAS and state averages from 2009-2010 to 2011-2012. Table 22 lists the college enrollment rates and statistical significance for each 2010-2011 LAS. Table 23 lists the college enrollment rates and statistical significance for each 2011-2012 LAS.

Figure 18: Percent (%) of Students Who Enrolled in College within 16 months of Graduating High School



2009-2010 data represents those students who graduated high school in 2010. 2010-2011 data represents those students who graduated high school in 2011. 2011-2012 data represents those students who graduated high school in 2012.

2010-2011 LAS: Crim HS, Douglass HS, Northeast HS, Rutland HS, Southwest HS, Hutchings CC, Burke HS, Beach HS, Dade HS, Clarkston HS, McNair HS, Henry HS, Jordan Voc. HS, Spencer HS, Peach HS, Hawkinsville HS, Glenn Hills HS, Josey HS, Laney HS, and Griffin HS

2011-2012 LAS: Therrell Health Science, Therrell Law, Fitzgerald HS, Central HS, Groves HS, Towers HS, Albany HS, Greenville HS, and Butler HS

Table 22: 2010-2011 LAS' College Enrollment Rate

School District	School Name	2009- 2010 (Yr 0)	2010- 2011 (Yr 1)	2011- 2012 (Yr 2)	Trend	Change Yr2 – Yr0
Atlanta Public Schools	Crim High School	42.5%	40.0%	40.6%		Not Sig.
Atlanta Public Schools	Douglass High School	70.5%	58.6%	56.1%		Decrease
Bibb County	Northeast High School	73.8%	72.7%	79.2%		Not Sig.
Bibb County	Rutland High School	79.7%	80.2%	65.2%		Decrease
Bibb County	Southwest High School	75.0%	69.6%	69.5%		Not Sig.
Bibb County	William S. Hutchings Career Center	67.3%	75.7%	77.1%		Not Sig.
Burke County	Burke County High School	75.8%	68.5%	60.5%		Decrease
Chatham County	Beach High School	65.5%	62.1%	68.7%		Not Sig.
Dade County	Dade County High School	65.9%	66.2%	63.6%		Not Sig.
DeKalb County	Clarkston High School	62.6%	56.8%	65.6%		Not Sig.
DeKalb County	McNair High School	81.4%	71.8%	56.6%		Decrease
Henry County	Henry County High School	71.1%	63.5%	62.4%		Decrease
Muscogee County	Jordan Vocational High School	58.4%	59.2%	50.0%		Not Sig.
Muscogee County	Spencer High School	53.0%	52.9%	51.0%		Not Sig.
Peach County	Peach County High School	79.4%	75.1%	68.2%		Decrease
Pulaski County	Hawkinsville High School	76.9%	81.0%	74.7%		Not Sig.
Richmond County	Glenn Hills High School	70.6%	69.4%	50.0%		Decrease
Richmond County	Josey High School	56.0%	61.9%	57.9%		Not Sig.
Richmond County	Laney High School	58.9%	62.0%	67.0%		Not Sig.
Spalding County	Griffin High School	72.9%	70.7%	69.2%		Not Sig.

Confidence interval for proportions – change in graduation rate from 2009-2010 to 2011-2012: $p < .05$

Yellow cells indicate rates that are equal to or above the state average for that year: 75.6% in 2009-2010, 73.7% in 2010-2011, and 74.2% in 2011-2012.

Red text indicates a statistically significant decrease in college enrollment from 2009-2010 to 2011-2012.

Not Sig. indicates no statistically significant change in college enrollment.

Table 23: 2011-2012 LAS' College Enrollment Rate

School District	School Name	2009- 2010 (Yr -1)	2010- 2011 (Yr 0)	2011- 2012 (Yr 1)	Trend	Change Yr1 - Yr0
Atlanta Public Schools	Therrell School of Health and Science	73.3%	72.9%	57.4%		Decrease
Atlanta Public Schools	Therrell School of Law, Government and Public Policy	66.7%	66.7%	61.0%		Not Sig.
Ben Hill County	Fitzgerald High School	74.2%	72.7%	80.4%		Increase
Bibb County	Central High School	87.7%	78.3%	82.4%		Not Sig.
Chatham County	Groves High School	60.2%	65.1%	55.0%		Decrease
DeKalb County	Towers High School	65.6%	72.1%	56.8%		Decrease
Dougherty County	Albany High School	81.0%	77.9%	83.1%		Not Sig.
Meriwether County	Greenville High School	48.6%	51.6%	41.8%		Not Sig.
Richmond County	Butler High School	60.0%	54.5%	60.6%		Not Sig.

Confidence interval for proportions – change in graduation rate from 2009-2010 to 2011-2012: $p < .05$

Yellow cells indicate rates that are equal to or above the state average for that year: 75.6% in 2009-2010, 73.7% in 2010-2011, and 74.2% in 2011-2012.

Green text indicates a statistically significant increase in college enrollment from 2010 to 2011.

Red text indicates a statistically significant decrease in college enrollment from 2010 to 2011.

Not Sig. indicates not statistically significant change in college enrollment.

VI. Conclusion

At the end of the 2013-2014 school year, all of Georgia's LAS had completed three years of turnaround reform. The goal of this report is to show descriptive statistics on a range of leading and lagging indicators of performance. The data represent only snapshots of outcomes and should not be interpreted as causal relationships with the LAS interventions.

While some schools have made strides in improving student achievement, most schools have fallen short of the grant's expectations for dramatic increases. The majority of schools had either no statistically significant change or a decrease in the percentage of students missing fewer than six days of school during implementation. The same negative effect was seen in student out-of-school suspension rates. More than half of the schools either saw an increase in the percentage of students suspended or had no statistically significant change. On average, the student dropout rate declined less than one percentage point. Although many schools had statistically significant increases in standardized test scores, particularly in high schools, the gap between LAS and the state average narrowed only slightly. In addition, graduation rates have increased in many LAS, but the gap with the state average remained relatively unchanged.

VII. Appendix A. School Improvement Grant Eligibility Criteria

U.S. Department of Education Eligibility Criteria for SIG

School Improvement Grant Eligibility Criteria

Tier I schools: any Title I school in improvement, corrective action, or restructuring that:

- (1) is among the lowest-achieving 5% of those schools in the State (or the lowest- achieving five such schools); or
- (2) is a high school that has a three-year average graduation rate < 60%.

Calculations to identify **Tier I** schools were based on:

- (1) 2009-10 Title I schools in improvement, corrective action, and restructuring,
- (2) lack of progress in academic achievement over a two-year period for all students in reading/language arts and math combined

Tier II Schools: any secondary school that is eligible for, but does not receive, Title I, Part A funds and

- (1) is among the lowest-achieving 5% of such secondary schools in the State or the lowest- achieving five such secondary schools); or
- (2) is a high school that has a three-year average graduation rate <60%.

Calculations to identify **Tier II** schools were based on

- (1) Proficiency combined with lack of progress over time for all students
- (2) Proficiency based on combined scores for reading/language arts and math for all students
- (3) Lowest-achieving schools chosen from lowest to highest proficiency rates stopping at 5%

*SIG also defines Tier III eligibility. However, only Tier I and II schools were selected as lowest-achieving schools
Source: Georgia Department of Education & Georgia's Race to the Top Application

VIII. Appendix B. Lowest-Achieving School Non-negotiable List

Each Race to the Top Lowest-Achieving School must:

- Allow a GaDOE school improvement specialist to provide direct supervision over grant implementation and be directly involved in decisions regarding the replacement of staff.
- Allow the GaDOE to conduct an intensive diagnostic of school needs (GAPSS) at the beginning and at the end of the grant.
- Participate in all relevant GaDOE and/or US ED professional learning or meetings (Summer Leadership Academy and other training for lowest-achieving schools).
- Hire at least one full time math coach.
- Hire at least one full-time graduation coach.
- Maintain or place a high performing principal who has autonomy over staffing and budgets.
- Add a minimum of 60 additional hours to the school year for all students.
- Establish a minimum of 60 minutes per week of common planning time for teachers without reducing time devoted to student instruction.
- Implement the new Teacher and Leader Effectiveness Systems (TKES and LKES).
- Implement the Common Core Georgia Performance Standards (CCGPS) and use Georgia's Frameworks in core academic subjects.
- Implement an assessment plan aligned to CCGPS and use assessment results to inform curriculum, instruction and individual interventions.

Adapted from: Georgia Department of Education, "Non-Negotiable Contract Elements and Customized Contract Expectations for School Improvement and Race to the Top (Lowest-Achieving Schools)," July 1, 2012.

IX. Appendix C. Confidence Interval for Proportions Formula

To calculate the statistical significance between the schools indicator average the year before implementation to the most recent school year with available data GOSA used the formula for the 95% confidence interval for proportions retooled to calculate the z score rather than obtaining the actual interval.

$$z = \frac{\text{Final Year \%} - \text{First Year \%}}{\sqrt{(\text{First Year \%} * (1 - \text{First Year \%})) / (\text{Final Year } n)}}$$

If $z \leq -1.96$, the final year is worse than the first year.

If $z \geq 1.96$, the final year is better than the first year.

If $-1.96 < z < 1.96$, there is no statistical difference.