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Comparative Analysis of 2018 High School Graduation Rates Among School Districts

Public Schools of South Carolina

February 26, 2019

by

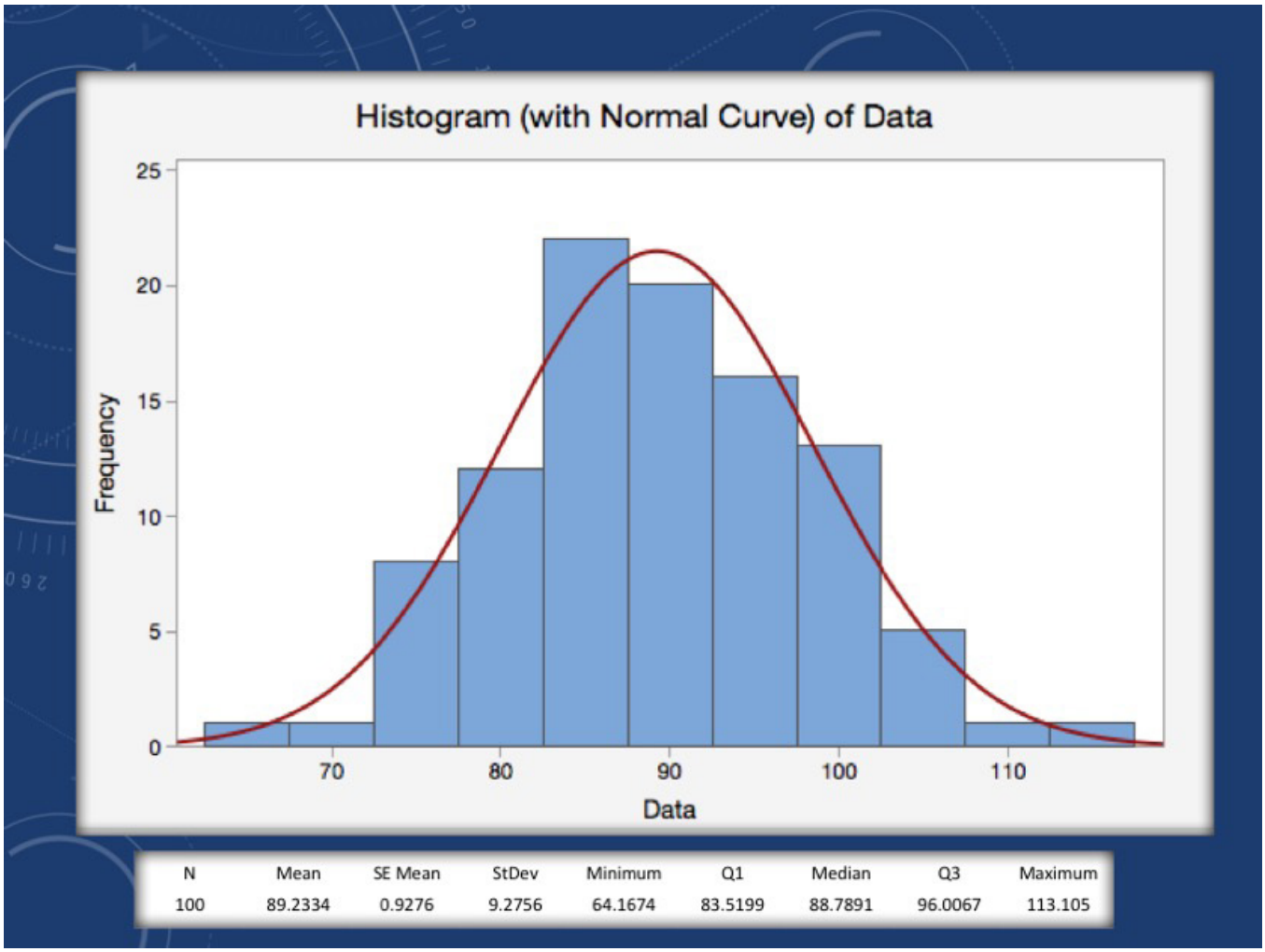
David C. Wilson, MSEE

Founder / CEO
Wilson Consulting Services, LLC
Conway, SC 29527

ACCREDITED BUSINESS

It must be demonstrated . . .

We are proponents and advocates of literacy in STEM and statistics in a technological and data-driven world.



N	Mean	SE Mean	StDev	Minimum	Q1	Median	Q3	Maximum
100	89.2334	0.9276	9.2756	64.1674	83.5199	88.7891	96.0067	113.105

STEM = ∑(Science, Technology, Engineering, Mathematics)

Comparative Analysis of 2018 High School Graduation Rates Among School Districts

Public Schools of South Carolina

South Carolina School Districts—Map*

*Courtesy of South Carolina Department of Education. This footnote is applicable to this map wherever it appears throughout this report.

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Location of report:
https://www.wilsonconsultingservices.net/wcs_acgrdist_sc_19.pdf

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The Author

There is much said about the dropout rates and graduation rates from public schools at the national, state, and local levels. A high school diploma is not only a growing need, but it also is paramount in today's world, where technological literacy is expected. A high school diploma is required in almost any endeavor, whether it is admission to college, to military service, or to a technical school, or whether one is applying for apprenticeship or for a job, and so on. The work spectrum of every field is large enough to encompass a multitude of skills; the list is infinite. A high school diploma is the starting point to gain entrance to this vast work spectrum.

The way South Carolina has allowed its public schools districts to be formed is an interesting phenomenon. Some school districts are countywide, and some counties have more than one school district. For example, Greenville County has about seventy-six thousand students and one school district, while neighboring Spartanburg County has fifty thousand students and seven school districts.

There are numerous reports about graduation rates of students in states and districts nationwide. Many of these reports use statistics compiled from the National Center for Education Statistics; this paper uses those compiled from the South Carolina Department of Education. Although this report has a total of fifty-two pages (including the covers), each page is virtually an independent report, serving as a quick summary of several parameters and their measures at a glance. The advantage of this report is that the reader can quickly view the graduation rates of every school district in South Carolina on one page or three pages at a glance. It allows parents, students, and others see at a glance how their school district compares with other public-school districts in South Carolina and how their racial ethnicity compare to those of other school districts.

Although the analysis of adjusted cohort graduation rates (ACGR) for this paper found no cause and effect relationship between quality and ACGR, high school graduation rates will most likely continue to serve as an accountability measure under the revised federal education law—the Every Student Succeeds Act.

Serving the community is one of our highest priorities. Thank you for letting us share this report with you.

Sincerely,

David C. Wilson, MSEE
Founder and CEO

David C. Wilson

David C. Wilson is an electrical engineer by training as well as an adjunct mathematics professor—now retired. He is a statistical consultant, family history researcher, author, and self-publisher.

Wilson is a graduate of the former Chestnut Consolidated High School (Horry County, South Carolina) and an army veteran. He earned his bachelor's and master's degrees in electrical engineering from the City College of New York and Manhattan College, respectively.

Wilson has worked in the engineering areas of product development, quality, and reliability for more than 35 years with multinational corporations such as IBM, General Electric, and Honeywell.

During his 25+ years as an adjunct professor, he taught engineering, mathematics, and statistics at Dutchess Community College (NY), Quinnipiac University (CT), and Horry Georgetown Technical College (SC). Additionally, he served one year with the prestigious IBM Faculty Loan Program.

He and his wife, Beverly, have two adult sons and six grandchildren. They reside in Conway, South Carolina.

Executive Summary

This report provides an independent comparative analysis of South Carolina's 2018 adjusted cohort graduation rate (ACGR) for its eighty-two traditional school districts. This includes the ACGRs by rank and percentile rank. All analyses will be depicted in a comparative analysis format with narratives, tables, and graphs.

Although quality is generally associated with ACGR, the analysis suggests that higher-performing schools do not have a higher ACGR. For example, the overall rating and assessment performance of 232 high schools showed ratings had no effect on their ACGRs. There was no correlation between the overall rating or assessment scores and ACGR; the effect was statistically insignificant in every measure.

On the basis of analysis documented in this paper, one can conclude that the ACGR in South Carolina is not necessarily a good measure of how well prepared young people are for work or college.

The three most notable statistics in this report are the following: (1) South Carolina Public Charter School District attained the lowest ACGR (64 percent) among school districts, (2) school district performance or overall ratings do not have any effect on their ACGR, and (3) white students who always outperformed African American students academically by wide margins, in this situation, indicated no statistical difference in ACGR between the two groups.

Key Statistics

- Of the eighty-two public school districts in South Carolina, the graduation rate per district has not improved in the past four years. Although there may have been slight variations from year to year, and the overall ACGR may have decreased or increased slightly, the increase over the four years is statistically insignificant.
- Of the eighty-two public school districts in South Carolina, there is no statistical correlation between the ACGR and the number of cohorts, assessment performance, and overall ratings of more than two hundred high schools (see Section 5).
- Although white cohorts (83.6 percent) graduated at a slightly higher rate than African American cohorts (82.8 percent), the difference between the two groups is statistically insignificant. This was determined after comparing the two groups in 82 school districts and a sample of 209 public high schools in South Carolina. Additionally, the difference between African American cohorts (82.8) and Hispanic or Latino cohorts (81.1 percent) is statistically insignificant, as well as Hispanic and white cohorts. Other reports might show slightly different ACGRs and outcomes. Hence, there is no statistical difference in the 2018 ACGR among the groups.
- The South Carolina overall ACGR (81 percent) places the state at the 28th percentile rank among its districts. This means that the state performed better than 28 percent of districts in terms of graduation rate. Comparatively speaking, York School District Four has a graduation rate (94.4 percent) that ranks it number 1 at the 99th percentile, which means that the district's ACGR was better than 99 percent of all other districts' graduating cohorts.
- In 2018, Greenville County School District had the largest number of graduating cohorts by far (4,582), and the district of Horry County Schools was second (2,716). Bamberg Two and Barnwell Nineteen had the smallest of the eighty-two school districts (36 and 36).

*The South Carolina public school report card and other news outlets reported that the state's ACGR for African Americans cohorts is 76.9 percent. However, the computed ACGR for the eighty-two school districts in this report is 82.8 percent. Therefore, for this report African American cohorts will use an ACGR of 82.8 percent. The ACGR of 82.8 percent is more closely aligned with reports of South Carolina's overall ACGR from the National Center for Education Statistics over the past two years.

Section I

Introduction

It must be demonstrated . . .

1.1 Introduction

The purpose of this report is to share with the general public an independent comparative analysis of South Carolina's four-year on-time graduation rate. All graduation analyses throughout this paper are based on the school year 2017–2018. There is significant variation among school districts' graduation rates within the state and within districts. This includes schools in all eighty-five districts, with the exception of special schools such as the Governor's Schools, SC School for the Deaf and the Blind, and Department of Juvenile Justice; therefore, a total of eighty-two school districts are examined in this paper. When the state is listed among the rankings, the rankings will extend from one to eighty-three. The graduation rates in percentages are the adjusted cohort graduation rates, which are the four-year on-time cohorts.

In light of the fact that the analysis in this paper examined eighty-two districts out of the eighty-five, there might be some differences in total overall ACGR* for the state. However, the exclusion of the special districts from this report allows for a more equitable comparison among the traditional school districts located throughout the forty-six counties.

The report is broken down into the two traditional areas of statistics—descriptive statistics and inferential statistics. The descriptive statistics includes primarily Sections II, III, and IV and inferential statistics is in Section V. The descriptive statistics delivers the information using tables, graphs, and narratives. The tabular format provides more detail and depicts the school districts' information in alphabetical order. The graphical format organizes the information by performance in descending order, from the best to the worst-performing districts. Both formats have their own advantages; for example, the tabular presentation shows several parameters in horizontal form associated with specific districts that are easy to locate, as they are in alphabetical order. If the reader locates a school district on a graph, he or she can find additional information in the table that could not fit on the graph. Otherwise, on the tabular format, the reader can see multiple parameters at the same time, whereas the graphs in this report are limited to one measure per graph.

The use of measures in this report are percent, rank, and percentile rank. To make a comparison, a percentage is part of a whole. Therefore, the meaning of rank in this report is the standing in a hierarchy of numbers, whereas percentile rank is the percentage of scores in its frequency distribution that is equal to or better than the rank. For example, a test score that is greater than 60 percent of the scores of people taking the test is said to be at the 60th percentile, where sixty is the percentile rank. The intervals between percentiles are not equally distributed, as in percentage designation. The ACGR is in percentage, which has been converted from percent to rank and percentile rank, as shown in Tables **3.2.1** and **3.3.1.**

In analyzing the ACGR, the author ranked each district—rank and percentile rank—based on the ACGR. Therefore, rank and percentile rank are included in the tables of tabular analysis as well as the charts in the graphical analysis. The ranking integers were computed and assigned to a district based on the ACGR and range of districts, starting with one (1) as being the best.

Additionally, a comparative analysis was performed to view the ACGR relative to rank and percentile within each racial and ethnic group. The impact of district enrollment size, assessment performance, and racial ethnicity among districts' ACGRs were also examined (**see Section V**).

The data in tabular format (**Table 3.1.1**) profiles cohorts' graduation rates by district. The overall graduation rate (81.0 percent) in South Carolina

*ACGR represent the percentage of students who successfully complete high school in four years with a regular high school diploma.

1.1 Introduction, cont.

equates to about four out of five students who start ninth grade and graduate in four years with regular high-school diplomas, four years of starting ninth grade.

The four-year ACGR is the number of students who graduate in four years with regular high-school diplomas divided by the number of students who form the adjusted cohort for the graduating class. For any given cohort, students who are entering grade 9 for the first time form a cohort that is subsequently "adjusted" by adding any students who transfer into the cohort later during the next three years and subtracting any students who transfer out, emigrate to another country, or pass away during that same period. This definition is provided in federal regulation 34 C.F.R. §200.19(b)(1)(i)–(iv). The process was implemented in 2010–12.

ACGR CALCULATIONS

The four-year graduation rate is calculated by dividing the number of students who graduate within four years, including the summers following their fourth year of high school, with regular high-school diplomas, by the number of students who form the adjusted cohort for that graduating class. Students who drop out of high school remain in the adjusted cohort—that is, the denominator of the cohort used for computing the graduation rate.

For example, a ninth-grade class at a high school consists of one hundred students (cohorts). From the beginning of the freshman class and during the four years, fifteen students dropped out, five students transferred in, and three students emigrated to another county. The adjusted cohort (denominator) at graduation is 102 students. If eighty-seven cohorts (numerator) receive regular high-school diplomas, the graduation rate is computed as follows:

Numerator: 87
Denominator: 100 + 5 – 3 = 102
Graduation rate: Numerator/Denominator
= (87/102)100 = 85.3%

The four-year adjusted cohort graduation rate strictly adheres to section 1111(b)(2)(C)(vi) of the Elementary and Secondary Education Act, which defines graduation rate as the "percentage of students who graduate from secondary school with a regular diploma in the standard number of years."

ACGR Comparison by Racial Ethnicity

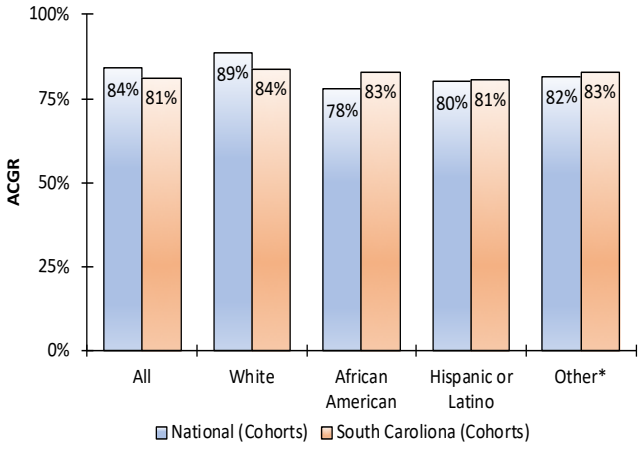


Figure 1.1.1 Adjusted cohort graduation rate by racial ethnicity.

ACGR Grouped by District Ranges

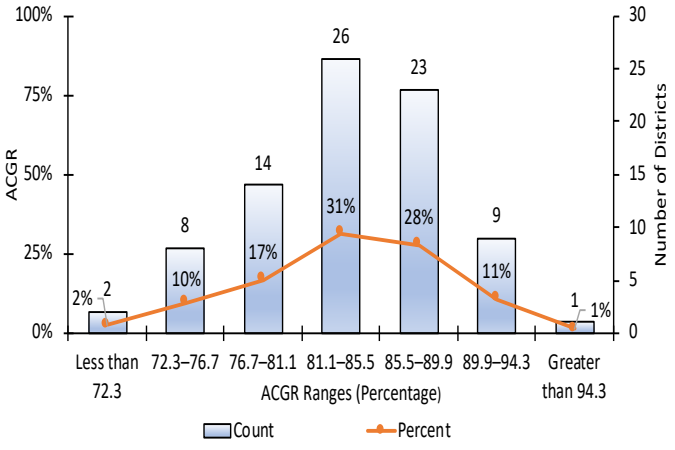


Figure 1.1.2 Adjusted cohort graduation rate with rates grouped in ranges—82 school districts, plus the state.

*Other: American Indian, Asian, Hawaiian or Other Pacific Islander, Two or More Races, and missing.

Section II

Percentage Distribution of Enrollment by District and Racial Ethnicity

It must be demonstrated . . .

2.1 Percentage Distribution of Enrollment by District and Racial Ethnicity

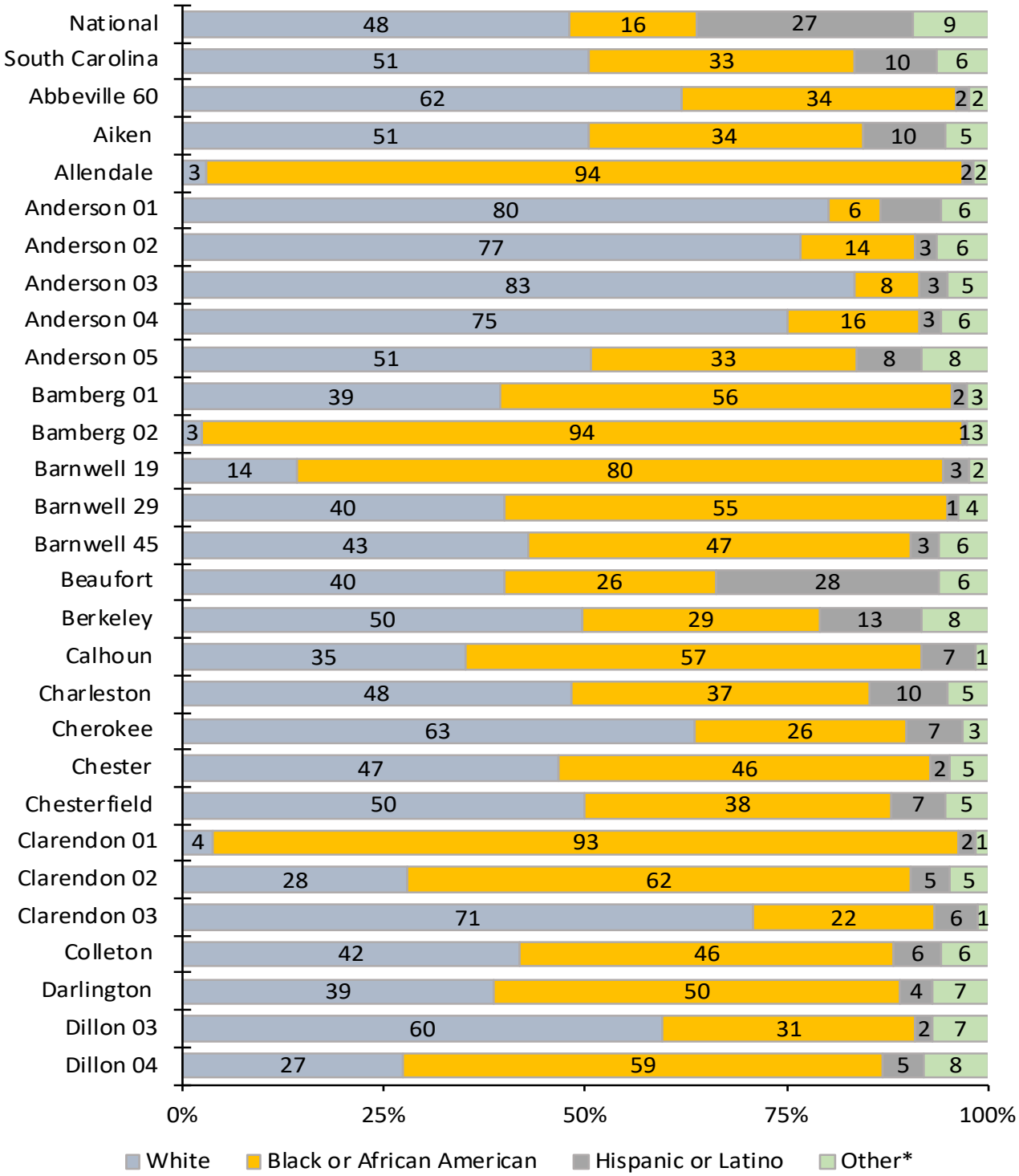


Figure 2.1.1 Enrollment: Percentage student enrollment distribution by district and racial ethnicity.**

Source: South Carolina Department of Education

*Other: American Indian, Asian, Hawaiian or Other Pacific Islander, Two or More Races, and missing.
**See Table 3.1.1, starting on page 16 for actual enrollment—headcount per district.

2.1 Percentage Distribution of Enrollment by District and Racial Ethnicity, cont.

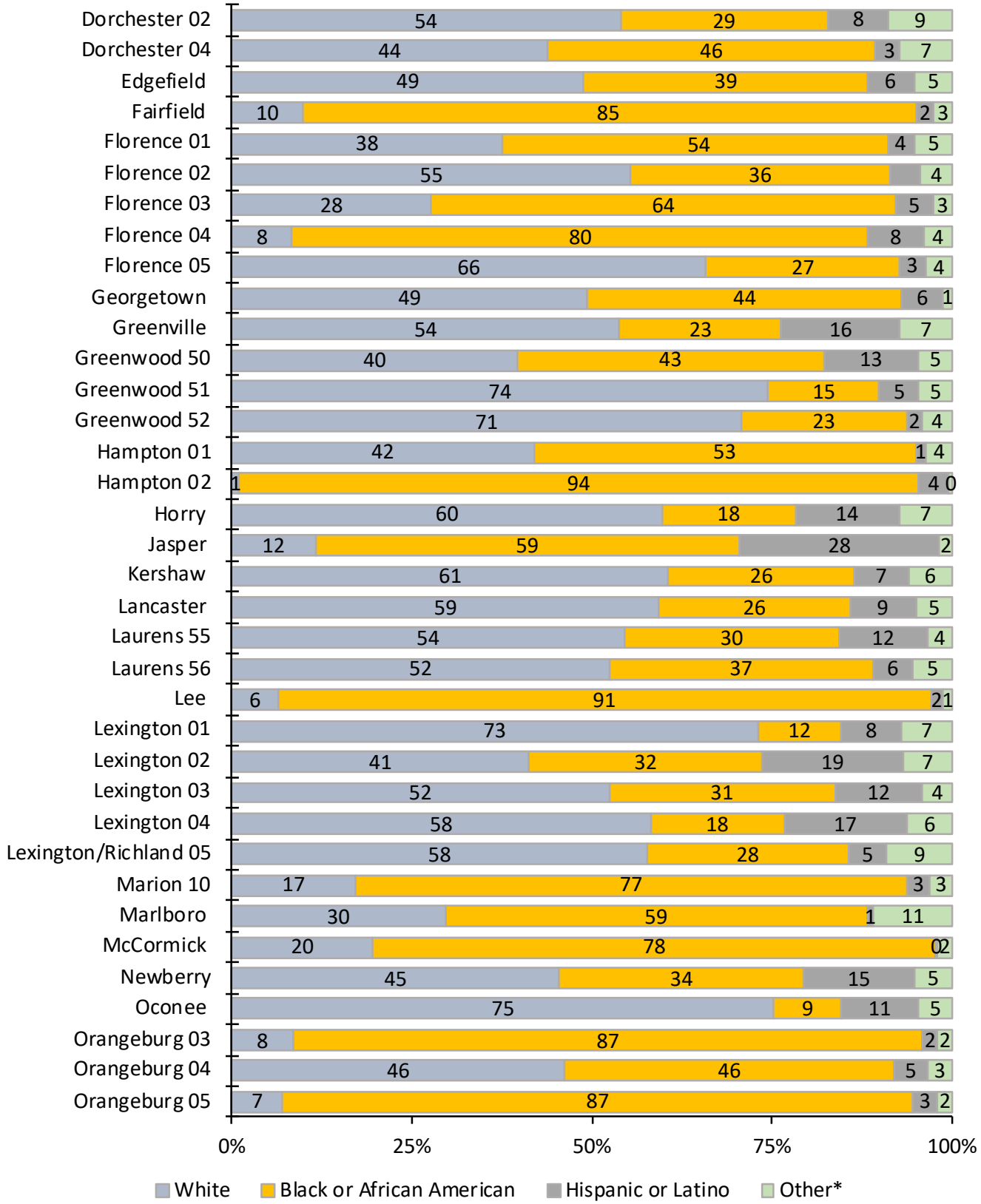


Figure 2.1.1 Enrollment: Percentage student enrollment distribution by district and racial ethnicity, cont.**

Source: South Carolina Department of Education

*Other: American Indian, Asian, Hawaiian or Other Pacific Islander, Two or More Races, and missing.

**See Table 3.1.1, starting on page 16 for actual enrollment—headcount per district.

2.1 Percentage Distribution of Enrollment by District and Racial Ethnicity, cont.

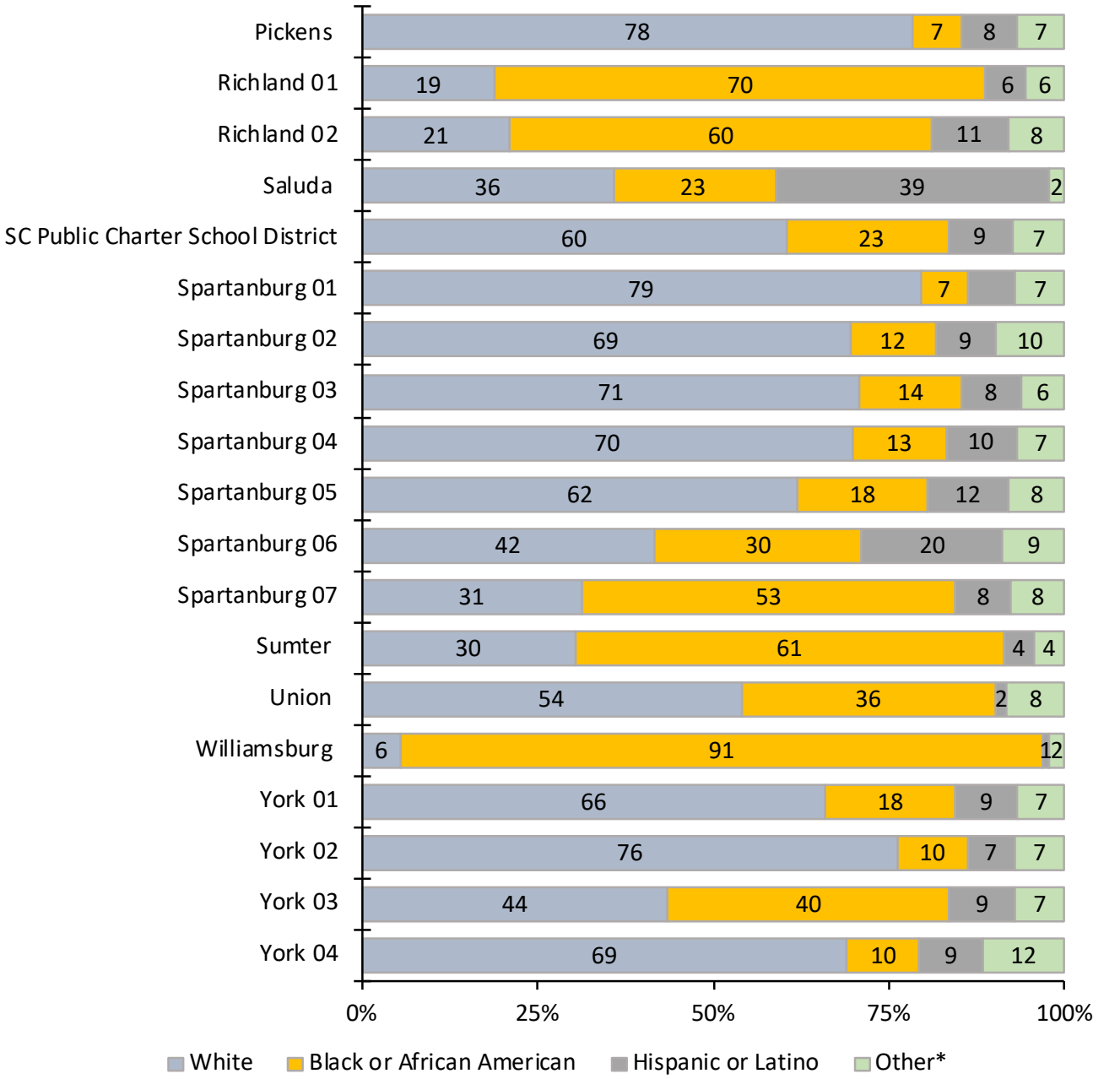


Figure 2.1.1 Enrollment: Percentage student enrollment distribution by district and racial ethnicity, cont.**

Source: South Carolina Department of Education

*Other: American Indian, Asian, Hawaiian or Other Pacific Islander, Two or More Races, and missing.
**See Table 3.1.1, starting on page 16 for actual enrollment—headcount per district.

Section III

Tabular Analysis: Adjusted Cohort Graduation Rate by School District, Rank, Percentile Rank, and Racial Ethnicity

It must be demonstrated . . .

3.1 ACGR Over Four Years by District

Table 3.1.1 Number of cohorts and the ACGR spanning four years (2015–2018)

District Name	District Headcount	Number of Cohorts	Adjusted Cohort Graduation Rate			
Alphabetical	Enrollment	2018	2015	2016	2017	2018
National	50.7 Million	3.3 Million	83.2	84.1	84	*
South Carolina	771,501**	47,365***	80.3	82.6	84.6	81.0
Abbeville 60	3,028	182	85.4	83.9	87.8	83.9
Aiken	24,119	1,418	85.2	88.6	90.0	88.9
Allendale	1,120	75	84.3	78.7	83.5	74.3
Anderson 01	10,203	688	92.0	93.1	91.9	90.2
Anderson 02	3,778	247	89.5	86.7	89.3	84.3
Anderson 03	2,617	148	89.3	9.3	89.2	91.9
Anderson 04	2,842	198	87.9	87.9	86.1	85.0
Anderson 05	13,202	719	77.6	80.9	83.4	82.6
Bamberg 01	1,317	90	81.4	83.7	88.6	76.9
Bamberg 02	678	36	77.3	85.2	69.1	83.7
Barnwell 19	600	36	81.8	85.1	90.4	85.7
Barnwell 29	840	64	98.5	93.8	88.3	91.4
Barnwell 45	2,189	141	72.9	79.8	83.7	80.1
Beaufort	22,328	1,349	78.7	83.4	84.1	86.1
Berkeley	36,191	2,059	83.8	81.7	83.5	83.5
Calhoun	1,693	109	92.0	91.9	90.1	89.3
Charleston	49,755	2,247	83.8	82.9	84.2	83.5
Cherokee	8,754	576	80.1	79.9	84.1	82.5
Chester	5,165	301	81.6	81.7	85.8	83.8
Chesterfield	6,965	530	87.8	89.3	90.2	82.9
Clarendon 01	747	41	93.9	81.6	82.4	77.4
Clarendon 02	2,893	167	78.6	79.1	79.0	79.9
Clarendon 03	1,305	84	87.2	80.0	91.4	88.4
Colleton	5,541	373	80.3	85.2	86.5	85.0
Darlington	9,968	604	92.3	94.5	88.0	87.5
Dillon 03	1,622	117	82.2	87.5	83.5	88.0
Dillon 04	4,120	243	90.1	87.7	89.2	86.2
Dorchester 02	26,239	1,671	85.9	87.8	86.0	88.7
Dorchester 04	2,286	160	81.6	85.8	87.4	89.9
Edgefield	3,375	173	80.9	82.8	84.8	85.6
Fairfield	2,634	194	90.7	89.9	91.0	85.8

Source: South Carolina Department of Education and the National Center for Education Statistics

*National ACGR not available at time of publication.
**The total count is based on the eighty-two school districts examined in this report. The number is higher when the Governor's Schools and other special schools are included.
***The total number of graduating cohorts is based on 82 school districts.

3.1 ACGR Over Four Years by District, cont.

Table 3.1.1 Number of cohorts and the ACGR spanning four years (2015–2018), cont.

District Name	District Headcount	Number of Cohorts	Adjusted Cohort Graduation Rate			
Alphabetical	Enrollment	2018	2015	2016	2017	2018
Florence 01	16,148	1,005	81.6	84.4	84.5	82.1
Florence 02	1,157	69	80.2	71.3	87.8	75.0
Florence 03	3,408	167	78.3	76.3	86.5	74.6
Florence 04	668	46	69.5	59.4	89.1	85.2
Florence 05	1,233	90	87.4	87.2	87.6	89.1
Georgetown	9,325	674	88.9	90.2	90.3	86.2
Greenville	76,176	4,582	84.2	86.8	87.3	83.6
Greenwood 50	8,889	555	82.1	81.9	83.7	82.1
Greenwood 51	951	61	74.1	77.3	81.0	79.2
Greenwood 52	1,566	119	86.6	82.9	83.1	90.8
Hampton 01	2,209	159	86.4	80.2	85.9	84.9
Hampton 02	697	51	85.7	77.3	84.4	87.9
Horry	45,106	2,716	81.5	81.1	80.4	82.4
Jasper	2,561	125	75.0	80.4	73.6	71.8
Kershaw	10,769	661	84.1	83.1	84.6	86.1
Lancaster	13,507	813	82.8	81.3	83.0	83.3
Laurens 55	5,762	323	79.0	84.5	81.1	79.6
Laurens 56	3,096	161	81.6	79.6	80.9	78.2
Lee	1,822	162	87.7	91.3	84.7	91.2
Lexington 01	26,786	1,609	88.9	88.6	90.2	89.5
Lexington 02	8,968	501	83.5	87.9	87.4	77.7
Lexington 03	2,083	117	83.9	89.7	89.8	83.0
Lexington 04	3,512	182	77.3	75.0	72.0	75.8
Lexington/Richland 05	17,432	1,256	90.0	90.3	90.3	90.6
Marion 10	4,369	243	86.5	81.1	85.6	75.5
Marlboro	3,964	275	86.5	81.1	85.6	75.5
McCormick	696	48	75.9	86.2	80.9	90.6
Newberry	6,004	409	81.4	84.3	84.0	88.1
Oconee	10,615	641	81.5	84.1	85.0	84.1
Orangeburg 03	2,629	129	76.1	78.5	82.0	75.4
Orangeburg 04	3,554	213	78.4	77.9	79.8	80.7
Orangeburg 05	6,363	356	80.4	80.2	79.4	84.6
Pickens	16,259	1,096	82.5	83.4	84.0	84.4

Source: South Carolina Department of Education

3.1 ACGR Over Four Years by District, cont.

Table 3.1.1 Number of cohorts and the ACGR spanning four years (2015–2018), cont.

District Name	District Headcount	Number of Cohorts	Adjusted Cohort Graduation Rate			
Alphabetical	**Enrollment**	**2018**	**2015**	**2016**	**2017**	**2018**
Richland 01	23,782	1,160	76.3	77.6	78.9	78.1
Richland 02	28,411	1,776	86.4	88.5	89.6	87.2
Saluda	2,371	126	81.8	81.9	73.4	77.3
SC Public Charter School District*	20,313	1,921	48.9	51.0	60.0	63.5
Spartanburg 01	5,200	347	89.0	91.1	93.9	90.6
Spartanburg 02	10,254	674	87.8	85.4	89.0	86.7
Spartanburg 03	2,873	190	84.3	82.1	78.4	84.1
Spartanburg 04	2,900	179	82.5	89.4	80.0	82.9
Spartanburg 05	8,796	537	87.2	85.7	87.2	86.9
Spartanburg 06	11,467	804	88.1	89.7	88.6	88.7
Spartanburg 07	7,423	415	83.4	85.7	88.6	86.3
Sumter	16,587	1,061	84.5	83.1	84.1	80.7
Union	3,964	228	73.9	73.0	75.6	76.0
Williamsburg	3,589	279	83.2	85.1	83.8	80.6
York 01	5,246	364	91.2	90.2	90.4	85.0
York 02	8,037	521	90.0	90.1	90.7	91.1
York 03	17,776	1,171	85.3	82.9	84.5	83.2
York 04	16,114	958	92.0	94.0	94.1	94.4

Source: South Carolina Department of Education

*The South Carolina Public Charter School District is a school district based in Columbia, South Carolina that currently includes thirty-two public charter schools across the state of South Carolina. The district has over 20,313 of which about half learn Online in a virtual learning environment. The district had 1,921 graduating cohorts in 2018.

3.2 ACGR Relative to Rank, Percentile Rank, and Racial Ethnicity by District

Table 3.2.1 ACGR relative to rank, percentile rank, and racial ethnicity by district.

District Name	Headcount	ACGR, Rank, and Percentile Rank			ACGR by Racial Ethnicity			
Alphabetical	Cohorts	ACGR	Rank	Percentile Rank	White	Black or African American	Hispanic or Latino	Other
National (2017)	**3.3 Million**	**84.0**	**44**	**48**	**88.6**	**77.8**	**80.0**	**81.5**
South Carolina	**47,365***	**81.0**	**60**	**28**	**83.6**	**82.8 ****	**80.5**	**82.7**
Abbeville 60	182	83.9	44	48	86.3	79.3	91.2	--
Aiken	1,418	88.9	15	83	91.8	84.1	--	--
Allendale	75	74.3	81	2	--	73.2	80.4	100.0
Anderson 01	688	90.2	10	89	91.1	85.9	--	--
Anderson 02	247	84.3	41	51	86.6	79.0		94.1
Anderson 03	148	91.9	2	99	94.0	85.0	--	--
Anderson 04	198	85.0	35	56	84.5	88.6	87.5	--
Anderson 05	719	82.6	55	34	85.0	77.9	--	--
Bamberg 01	90	76.9	73	12	82.5	75.3	--	88.2
Bamberg 02	36	83.7	46	45	--	83.3	--	--
Barnwell 19	36	85.7	32	62	--	88.2	--	--
Barnwell 29	64	91.4	3	98	92.6	89.7	--	--
Barnwell 45	141	80.1	64	23	82.9	77.9	81.9	91.4
Beaufort	1,349	86.1	29	65	89.4	83.5	76.2	--
Berkeley	2,059	83.5	48	41	85.0	83.2	--	90.0
Calhoun	109	89.3	13	85	84.0	90.0	74.7	87.0
Charleston	2,247	83.5	48	41	90.5	75.7	90.9	--
Cherokee	576	82.5	56	33	80.2	85.9	--	88.2
Chester	301	83.8	45	46	84.1	84.0	83.9	100.0
Chesterfield	530	82.9	53	35	84.3	80.5	--	--
Clarendon 01	41	77.4	71	15		82.0	--	--
Clarendon 02	167	79.9	65	22	73.1	82.9	--	--
Clarendon 03	84	88.4	18	79	90.0	84.2	84.6	--
Colleton	373	85.0	35	56	82.0	88.5	90.0	--
Darlington	604	87.5	22	74	91.4	84.0	--	--
Dillon 03	117	88.0	20	77	92.1	77.5	78.6	--
Dillon 04	243	86.2	27	67	84.4	88.3	88.2	--
Dorchester 02	1,671	88.7	16	80	90.3	85.5	--	70.0
Dorchester 04	160	89.9	11	88	85.1	92.2	90.9	97.4
Edgefield	173	85.6	33	61	82.1	87.4	--	--
Fairfield	194	85.8	31	63	75.9	87.2	--	--

Source: South Carolina Department of Education and the National Center for Education Statistics

*The total count is based on the eighty-two school districts examined in this report. The number is higher when the Governor's Schools and other special schools are included.
**The ACGR is based on the ACGRs of 82 of 85 school districts.

3.2 ACGR Relative to Rank, Percentile Rank, and Racial Ethnicity by District, cont.

Table 3.2.1 ACGR relative to rank, percentile rank, and racial ethnicity by district, cont.

District Name	Headcount	ACGR, Rank, and Percentile Rank*			ACGR by Racial Ethnicity			
Alphabetical Order	Cohorts	ACGR	Rank	Percentile Rank	White	Black or African American	Hispanic or Latino	Other
Florence 01	1,005	82.1	58	29	83.1	80.3	86.8	95.2
Florence 02	69	75.0	79	5	73.5	78.1	--	--
Florence 03	167	74.6	80	4	77.6	74.6	60.0	--
Florence 04	46	85.2	34	60	--	91.3	--	--
Florence 05	90	89.1	14	84	89.2	87.9	--	--
Georgetown	674	86.2	27	67	86.3	85.7	86.7	86.7
Greenville	4,582	83.6	47	44	86.9	76.6	81.8	72.5
Greenwood 50	555	82.1	58	29	84.7	80.6	79.0	70.0
Greenwood 51	61	79.2	67	20	75.8	90.9	--	--
Greenwood 52	119	90.8	6	94	83.6	80.8	--	--
Hampton 01	159	84.9	38	55	83.6	80.8	--	--
Hampton 02	51	87.9	21	76	83.6	80.8	--	--
Horry	2,716	82.4	57	32	85.1	75.3	80.5	83.3
Jasper	125	71.8	82	1	50.0	73.2	73.5	--
Kershaw	661	86.1	29	65	88.3	80.6	91.7	--
Lancaster	813	83.3	50	40	85.0	82.9	70.2	91.7
Laurens 55	323	79.6	66	21	78.7	80.7	80.0	--
Laurens 56	161	78.2	68	18	81.4	72.8	80.0	--
Lee	162	91.2	4	96	100	90.5	--	--
Lexington 01	1,609	89.5	12	87	90.5	81.6	90.9	93.3
Lexington 02	501	77.7	70	16	79.9	77.8	66.7	91.7
Lexington 03	117	83.0	52	38	86.7	83.1	66.7	--
Lexington 04	182	75.8	75	10	75.0	80.4	68.2	--
Lexington/Richland 05	1,256	90.6	7	90	92.4	87.5	87.7	87.6
Marion 10	243	75.5	76	7	70.8	77.0	72.7	--
Marlboro	275	75.5	76	7	78.0	83.4	--	68.2
McCormick	48	90.6	7	90		91.1	--	--
Newberry	409	88.1	19	78	90.0	83.7	94.2	--
Oconee	641	84.1	42	49	84.2	83.0	82.8	90.9
Orangeburg 03	129	75.4	78	6	68.8	76.2	--	--
Orangeburg 04	213	80.7	61	26	82.2	78.2	--	--
Orangeburg 05	356	84.6	39	54	85.4	84.5	--	--
Pickens	1,096	84.4	40	52	84.2	86.9	86.2	77.6

Source: South Carolina Department of Education

*An ACGR of 84.2 percent which equates to about the 50th percentile rank. Therefore, an ACGR below 84.2 percent is in the bottom 50th percentile and an ACGR above 84.2 percent is in the top 50th percentile.

3.2 ACGR Relative to Rank, Percentile Rank, and Racial Ethnicity by District, cont.

Table 3.2.1 ACGR relative to rank, percentile rank, and racial ethnicity by district, cont.

District Name	Headcount	Graduation Rates and Rankings*			Racial Ethnicity			
Alphabetical Order	Cohorts	ACGR	Rank	Percentile Rank	White	Black or African American	Hispanic or Latino	Other
Richland 01	1,160	78.1	69	17	89.0	74.8	81.0	95.8
Richland 02	1,776	87.2	23	73	92.3	86.2	79.1	94.1
Saluda	126	77.3	72	13	80.0	80.0	69.8	--
SC Public Charter School District**	1,921	63.5	83	1	62.4	68.4	64.7	64.5
Spartanburg 01	347	90.6	7	90	91.1	86.8	85.0	--
Spartanburg 02	674	86.7	25	71	86.8	86.6	87.3	88.2
Spartanburg 03	190	84.1	42	49	85.2	83.8	80.0	--
Spartanburg 04	179	82.9	53	35	81.6	86.2	92.3	--
Spartanburg 05	537	86.9	24	72	85.7	89.9	91.1	85.0
Spartanburg 06	804	88.7	16	80	89.5	88.9	85.0	93.9
Spartanburg 07	415	86.3	26	70	89.9	84.6	78.1	95.5
Sumter	1,061	80.7	61	26	80.7	80.5	80.0	100.0
Union	228	76.0	74	11	70.0	85.1	--	--
Williamsburg	279	80.6	63	24	52.9	81.9	--	--
York 01	364	85.0	35	56	52.9	81.9	--	--
York 02	521	91.1	5	95	91.2	88.5	91.3	90.0
York 03	1,171	83.2	51	39	84.5	82.1	79.4	85.0
York 04	958	94.4	1	99	95.3	87.9	97.4	95.0

Source: South Carolina Department of Education

*An ACGR of 84.2 percent which equates to about the 50th percentile rank. Therefore, an ACGR below 84.2 percent is in the bottom 50th percentile and an ACGR above 84.2 percent is in the top 50th percentile.

*The South Carolina Public Charter School District is a school district based in Columbia, South Carolina that currently includes thirty-two public charter schools across the state of South Carolina. The district has over 20,313 of which about half learn Online in a virtual learning environment. The district had 1,921 graduating cohorts in 2018.

3.3 ACGR Relative to Rank, Percentile Rank, and Racial Ethnicity by District

Table 3.3.1 ACGR relative to number of cohorts, rank, percentile rank, and racial ethnicity by district—White and African American cohorts.*

District Name	Headcount	White Cohorts			African American Cohorts		
Alphabetical	Cohorts	ACGR	Rank	Percentile Rank	ACGR	Rank	Percentile Rank
National (2017)	3.3 Million	88.6	16	81	77.8	70	17
South Carolina	47,365	83.6	47	45	82.8**	47	45
Abbeville 60	182	86.3	29	63	79.3	64	25
Aiken	1,418	91.8	8	91	84.1	34	61
Allendale	75	--	--	--	73.2	81	4
Anderson 01	688	91.1	11	86	85.9	25	70
Anderson 02	247	86.6	28	65	79.0	65	24
Anderson 03	148	94.0	3	97	85.0	30	65
Anderson 04	198	84.5	40	49	88.6	10	89
Anderson 05	719	85.0	36	53	77.9	68	19
Bamberg 01	90	82.5	54	32	75.3	77	8
Bamberg 02	36	--	--	--	83.3	41	52
Barnwell 19	36	--	--	--	88.2	14	85
Barnwell 29	64	92.6	4	96	89.7	8	92
Barnwell 45	141	82.9	53	33	77.9	68	19
Beaufort	1,349	89.4	20	76	83.5	39	55
Berkeley	2,059	85.0	36	53	83.2	42	51
Calhoun	109	84.0	47	41	90.0	6	94
Charleston	2,247	90.5	13	83	75.7	76	11
Cherokee	576	80.2	61	23	85.9	25	70
Chester	301	84.1	46	42	84.0	35	58
Chesterfield	530	84.3	43	46	80.5	59	30
Clarendon 01	41	--	--	--	82.0	49	43
Clarendon 02	167	73.1	71	10	82.9	45	46
Clarendon 03	84	90.0	16	79	84.2	33	62
Colleton	373	82.0	57	28	88.5	11	87
Darlington	604	91.4	9	90	84.0	35	58
Dillon 03	117	92.1	7	92	77.5	72	15
Dillon 04	243	84.4	42	47	88.3	13	86
Dorchester 02	1,671	90.3	15	82	85.5	28	68
Dorchester 04	160	85.1	34	56	92.2	1	99
Edgefield	173	82.1	56	29	87.4	18	80
Fairfield	194	75.9	67	15	87.2	19	79

Source: South Carolina Department of Education and the National Center for Education Statistics

. *The data in this table provides comparative analysis among districts on each district's number of cohorts, ACGR, rank, and percentile rank relative to racial ethnicity.

**In 2017, South Carolina African American cohorts outperformed African American cohorts national in ACGR attainment by about 6.3 percent.

3.3 ACGR Relative to Rank, Percentile Rank, and Racial Ethnicity by District, cont.

Table 3.3.1 ACGR relative to number of cohorts, rank, percentile rank, and racial ethnicity by district—White and African American cohorts, cont.*

District Name	Headcount	White Students			African American Students		
Alphabetical Order	Number Cohorts	ACGR	Rank	Percentile Rank	ACGR	Rank	Percentile Rank
Florence 01	1,005	83.1	52	35	80.3	62	27
Florence 02	69	73.5	70	12	78.1	67	21
Florence 03	167	77.6	66	17	74.6	80	6
Florence 04	46	--	--	--	91.3	2	99
Florence 05	90	89.2	21	74	87.9	15	82
Georgetown	674	86.3	29	63	85.7	27	69
Greenville	4,582	86.9	25	69	76.6	74	13
Greenwood 50	555	84.7	39	51	80.6	57	32
Greenwood 51	61	75.8	68	14	90.9	4	96
Greenwood 52	119	83.6	48	36	80.8	53	36
Hampton 01	159	83.6	48	36	80.8	53	36
Hampton 02	51	83.6	48	36	80.8	53	36
Horry	2,716	85.1	34	56	75.3	77	8
Jasper	125	50.0	78	1	73.2	81	4
Kershaw	661	88.3	24	71	80.6	57	32
Lancaster	813	85.0	36	53	82.9	45	46
Laurens 55	323	78.7	64	19	80.7	56	35
Laurens 56	161	81.4	59	26	72.8	83	2
Lee	162	100	1	100	90.5	5	95
Lexington 01	1,609	90.5	13	83	81.6	52	39
Lexington 02	501	79.9	63	21	77.8	70	17
Lexington 03	117	86.7	27	67	83.1	43	50
Lexington 04	182	75.0	69	13	80.4	61	29
Lexington/Richland 05	1,256	92.4	5	95	87.5	17	81
Marion 10	243	70.8	72	9	77.0	73	14
Marlboro	275	78.0	65	18	83.4	40	54
McCormick	48	--	--	--	91.1	3	98
Newberry	409	90.0	16	79	83.7	38	56
Oconee	641	84.2	44	44	83.0	44	49
Orangeburg 03	129	68.8	74	6	76.2	75	12
Orangeburg 04	213	82.2	55	31	78.2	66	23
Orangeburg 05	356	85.4	32	60	84.5	32	63
Pickens	1,096	84.2	44	44	86.9	20	77

Source: South Carolina Department of Education

*The data in this table provides comparative analysis among districts on each district's number of cohorts, ACGR, rank, and percentile rank relative to racial ethnicity.

3.3 ACGR Relative to Rank, Percentile Rank, and Racial Ethnicity by District, cont.

Table 3.3.1 ACGR relative to number of cohorts, rank, percentile rank, and racial ethnicity by district—White and African American cohorts, cont.*

District Name	Headcount	White Students			African American Students		
Alphabetical Order	Number of Cohorts	ACGR	Rank	Percentile Ranking	ACGR	Rank	Percentile Rank
Richland 01	1,160	89.0	22	73	74.8	79	7
Richland 02	1,776	92.3	6	94	86.2	23	73
Saluda	126	80.0	62	22	80.0	63	26
SC Public Charter School District**	1,921	62.4	75	5	68.4	84	1
Spartanburg 01	347	91.1	11	86	86.8	21	76
Spartanburg 02	674	86.8	26	68	86.6	22	75
Spartanburg 03	190	85.2	33	59	83.8	37	57
Spartanburg 04	179	81.6	58	27	86.2	23	73
Spartanburg 05	537	85.7	31	62	89.9	7	93
Spartanburg 06	804	89.5	19	77	88.9	9	90
Spartanburg 07	415	89.9	18	78	84.6	31	64
Sumter	1,061	80.7	60	24	80.5	59	30
Union	228	70.0	73	8	85.1	29	67
Williamsburg	279	52.9	76	3	81.9	50	40
York 01	364	52.9	76	3	81.9	50	40
York 02	521	91.2	10	88	88.5	11	87
York 03	1,171	84.5	40	49	82.1	48	44
York 04	958	95.3	2	99	87.9	15	82

Source: South Carolina Department of Education

. *The data in this table provides comparative analysis among districts on each district's number of cohorts, ACGR, rank, and percentile rank relative to racial ethnicity.

**The South Carolina Public Charter School District is a school district based in Columbia, South Carolina that currently includes thirty-two public charter schools across the state of South Carolina. The district has over 20,313 of which about half learn Online in a virtual learning environment. The district had 1,921 graduating cohorts in 2018.

3.3 ACGR Relative to Rank, Percentile Rank, and Racial Ethnicity by District

Table 3.3.2 ACGR relative to number of cohorts, rank, percentile rank, and racial ethnicity by district—Hispanic or Latino and Other cohorts.*

District Name	Headcount	Hispanic or Latino Students			Other Students		
Alphabetical	Number of Cohorts	ACGR	Rank	Percentile Rank	ACGR	Rank	Percentile Rank
National (2017)	**3.3 Million**	**80.0**	**30**	**34**	**81.5**	**60**	**34**
South Carolina	**47,365**	**80.5**	**27**	**46**	**82.7**	**55**	**35**
Abbeville 60	182	91.2	6	90	--	--	--
Aiken	1,418	--	--	--	--	1	94
Allendale	75	80.4	29	44	100	--	--
Anderson 01	688	--	--	--	--	9	74
Anderson 02	247	--	--	--	94.1	--	--
Anderson 03	148	--	--	--	--	--	--
Anderson 04	198	87.5	14	74	--	--	--
Anderson 05	719	--	--	--	--	19	43
Bamberg 01	90	--	--	--	88.2	--	--
Bamberg 02	36	--	--	--	--	--	--
Barnwell 19	36	--	--	--	--	--	--
Barnwell 29	64	--	--	--	--	15	60
Barnwell 45	141	81.9	24	54	91.4	--	--
Beaufort	1,349	76.2	40	22	--	17	51
Berkeley	2,059	--	--	--	90	23	37
Calhoun	109	74.7	41	20	87	--	--
Charleston	2,247	90.9	8	82	--	19	43
Cherokee	576	--	--	--	88.2	1	94
Chester	301	83.9	22	58	100	--	--
Chesterfield	530	--	--	--	--	--	--
Clarendon 01	41	--	--	--	--	--	--
Clarendon 02	167	--	--	--	--	--	--
Clarendon 03	84	84.6	21	60	--	--	--
Colleton	373	90.0	11	80	--	--	--
Darlington	604	--	--	--	--	--	--
Dillon 03	117	78.6	38	26	--	--	--
Dillon 04	243	88.2	12	78	--	30	14
Dorchester 02	1,671	--	--	--	70	4	91
Dorchester 04	160	90.9	8	82	97.4	--	--
Edgefield	173	--	--	--	--	--	--
Fairfield	194	86.8	16	70	--	--	--

Source: South Carolina Department of Education

. *The data in this table provides comparative analysis among districts on each district's number of cohorts, ACGR, rank, and percentile rank relative to race/ethnicity.

3.3 ACGR Relative to Rank, Percentile Rank, and Racial Ethnicity by District, cont.

Table 3.3.2 ACGR relative to number of cohorts, rank, percentile rank, and racial ethnicity by district—Hispanic or Latino and Other cohorts, cont.*

District Name	Headcount	Hispanic or Latino			Other		
Alphabetical Order	Number of Cohorts	ACGR	Rank	Percentile Rank	ACGR	Rank	Percentile Rank
Florence 01	1,005	60.0	--	--	95.2	7	83
Florence 02	69	--	50	2	--	--	--
Florence 03	167	--	--	--	--	--	--
Florence 04	46	86.7	--	--	--	--	--
Florence 05	90	81.8	17	68	--	--	--
Georgetown	674	79.0	25	52	86.7	24	34
Greenville	4,582	--	37	28	72.5	29	20
Greenwood 50	555	--	--	--	70.0	30	14
Greenwood 51	61	--	--	--	--	--	--
Greenwood 52	119	--	--	--	--	--	--
Hampton 01	159	80.5	--	--	--	--	--
Hampton 02	51	73.5	27	46	--	--	--
Horry	2,716	91.7	42	18	83.3	27	26
Jasper	125	70.2	4	94	--	--	--
Kershaw	661	80.0	44	14	--	--	--
Lancaster	813	80.0	30	34	91.7	13	63
Laurens 55	323	--	30	34	--	--	--
Laurens 56	161	90.9	--	--	--	--	--
Lee	162	66.7	8	82	--	--	--
Lexington 01	1,609	66.7	47	6	93.3	12	69
Lexington 02	501	68.2	47	6	91.7	13	63
Lexington 03	117	87.7	46	10	--	--	--
Lexington 04	182	72.7	13	76	--	--	--
Lexington/Richland 05	1,256	--	43	16	87.6	22	40
Marion 10	243	--	--	--	--	--	--
Marlboro	275	94.2	--	--	68.2	32	11
McCormick	48	82.8	2	98	--	--	--
Newberry	409	--	23	56	--	--	--
Oconee	641	--	--	--	90.9	16	57
Orangeburg 03	129	--	--	--	--	--	--
Orangeburg 04	213	--	--	--	--	--	--
Orangeburg 05	356	86.2	18	66	--	--	--
Pickens	1,096	81	26	50	77.6	28	23

Source: South Carolina Department of Education

. *The data in this table provides comparative analysis among districts on each district's number of cohorts, ACGR, rank, and percentile rank relative to racial ethnicity.

3.3 ACGR Relative to Rank, Percentile Rank, and Racial Ethnicity by District, cont.

Table 3.3.2 ACGR relative to number, rank, percentile rank, and racial ethnicity by district—Hispanic or Latino and Other cohorts, cont.*

District Name	Headcount	Hispanic or Latino			Other		
Alphabetical	Number of Cohorts	ACGR	Rank	Percentile Ranking	ACGR	Rank	Percentile Rank
Richland 01	1,160	79.1	36	30	95.8	5	89
Richland 02	1,776	69.8	45	12	94.1	9	74
Saluda	126	64.7	49	4	--	--	--
SC Public Charter School District**	1,921	85	19	62	64.5	33	9
Spartanburg 01	347	87.3	15	72	--	--	--
Spartanburg 02	674	80	30	34	88.2	19	43
Spartanburg 03	190	92.3	3	96	--	--	--
Spartanburg 04	179	91.1	7	88	--	--	--
Spartanburg 05	537	85	19	62	85	25	29
Spartanburg 06	804	78.1	39	24	93.9	11	71
Spartanburg 07	415	80	30	34	95.5	6	86
Sumter	1,061	--	--	--	100	1	94
Union	228	--	--	--	--	--	--
Williamsburg	279	--	--	--	--	--	--
York 01	364	91.3	5	92	--	--	--
York 02	521	79.4	35	32	90	17	51
York 03	1,171	97.4	1	100	85	25	29
York 04	958	--	--	--	95	8	80

Source: South Carolina Department of Education

. *The data in this table provides comparative analysis among districts on each district's number of cohorts, ACGR, rank, and percentile rank relative to racial ethnicity.

**The South Carolina Public Charter School District is a school district based in Columbia, South Carolina that currently includes thirty-two public charter schools across the state of South Carolina. The district has over 20,313 of which about half learn Online in a virtual learning environment. The district had 1,921 graduating cohorts in 2018.

Section IV

Graphical Analysis: Adjusted Cohort Graduation Rate by District, Rank, Percentile Rank, and Racial Ethnicity

It must be demonstrated . . .

4.1 Number of Cohorts Earning a Regular High School Diploma by District in Descending Order

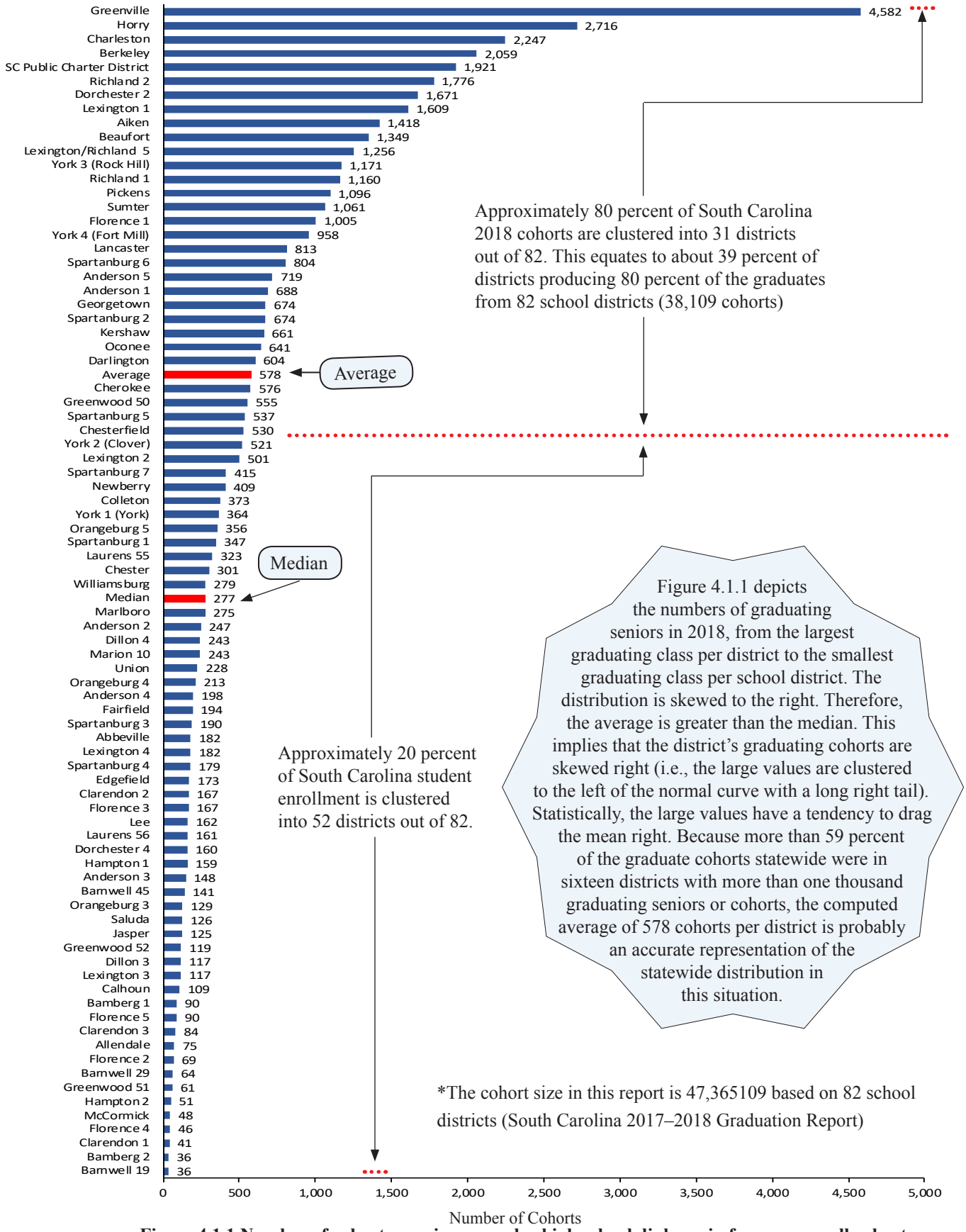


Figure 4.1.1 Number of cohorts earning a regular high school diploma in four years—all cohorts.

Source: South Carolina Department of Education

4.2 Adjusted Cohort Graduation Rate in Descending Order by School District—All Cohorts

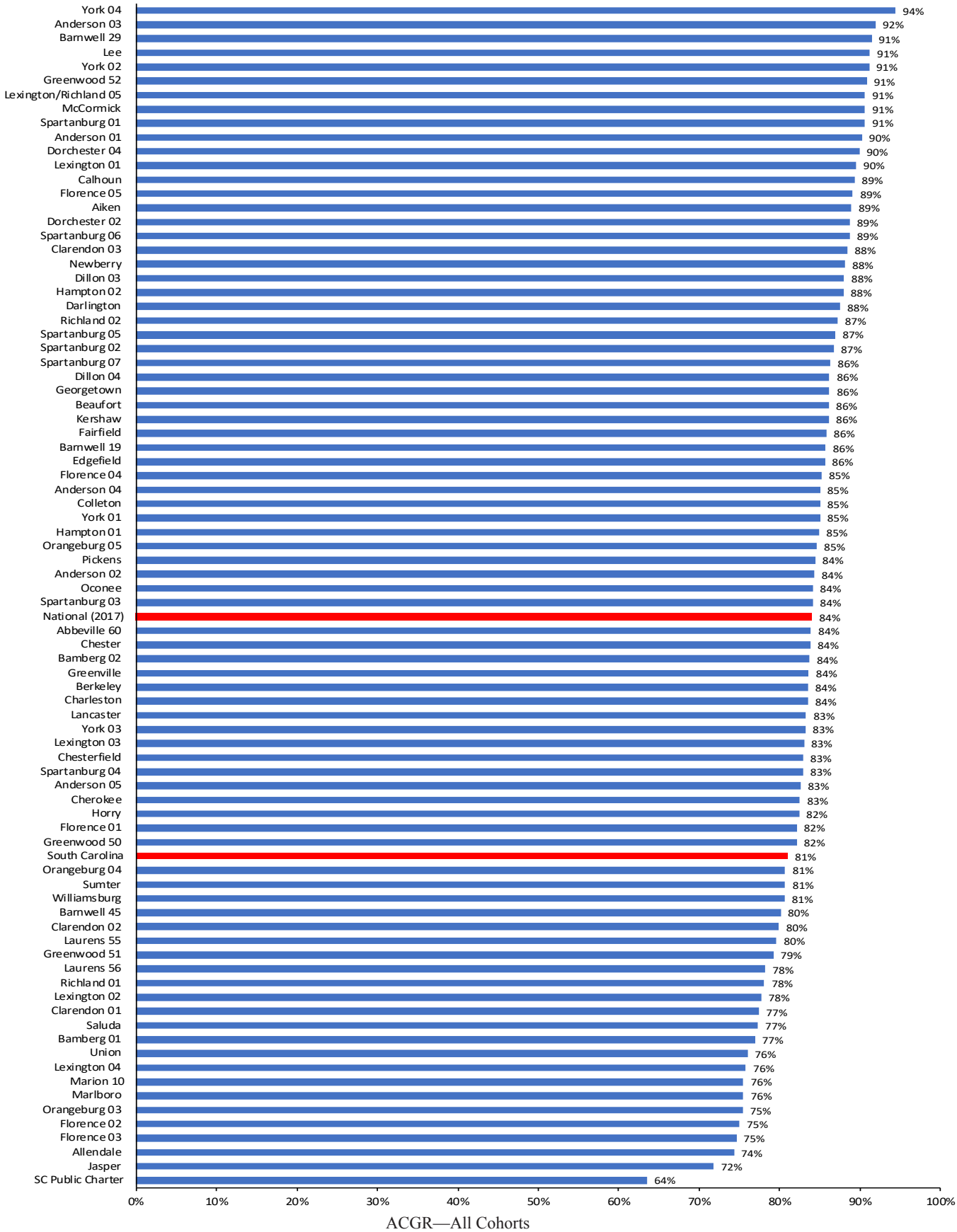


Figure 4.2.1 Descending order of ACGR by school—all cohorts.
Source: South Carolina Department of Education

4.3 Rank of Adjusted Cohort Graduation Rate by School District—All Cohorts

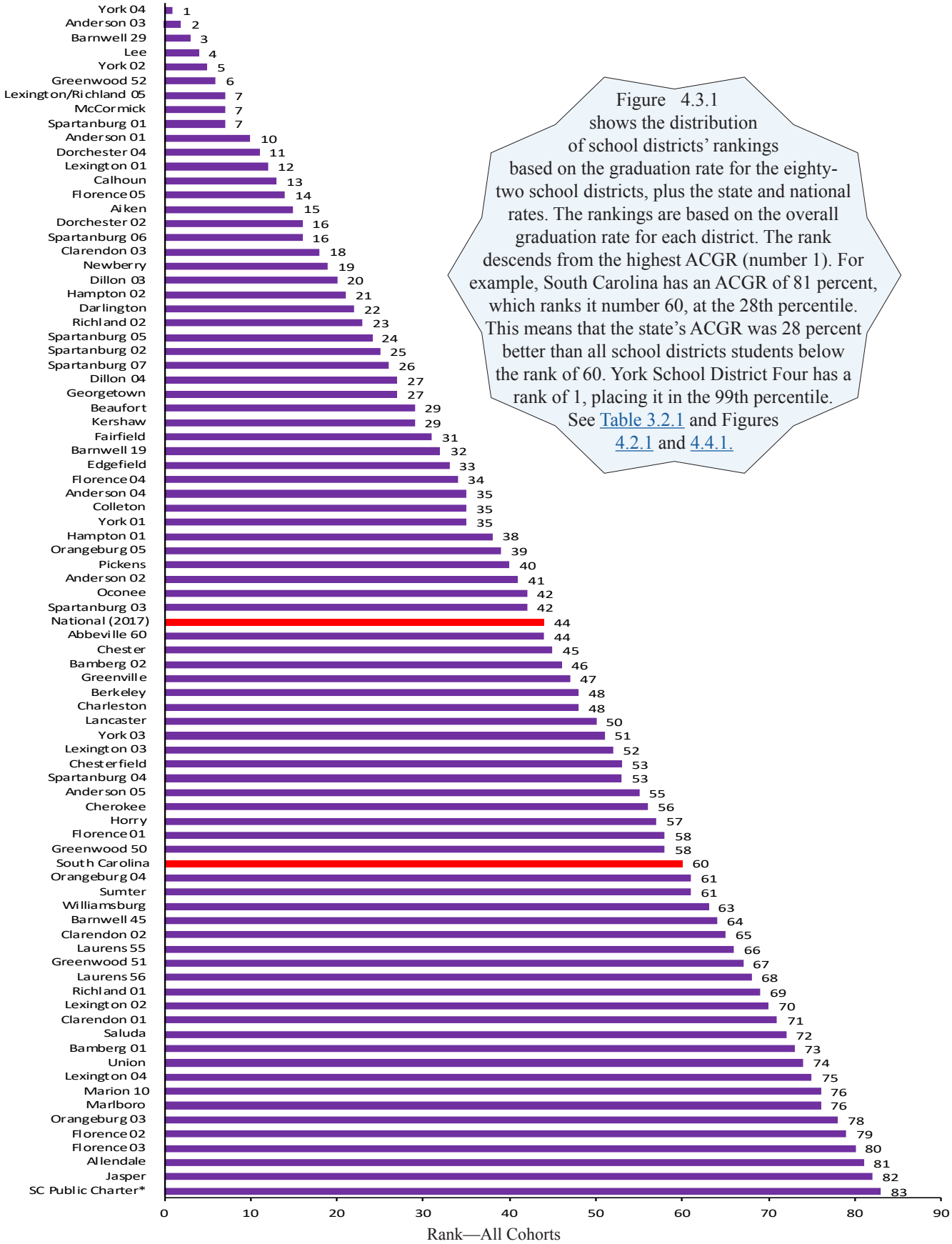


Figure 4.3.1 shows the distribution of school districts' rankings based on the graduation rate for the eighty-two school districts, plus the state and national rates. The rankings are based on the overall graduation rate for each district. The rank descends from the highest ACGR (number 1). For example, South Carolina has an ACGR of 81 percent, which ranks it number 60, at the 28th percentile. This means that the state's ACGR was 28 percent better than all school districts students below the rank of 60. York School District Four has a rank of 1, placing it in the 99th percentile. See Table 3.2.1 and Figures 4.2.1 and 4.4.1.

Figure 4.3.1 Descending graduation rates' rank by school district—all cohorts.
Source: South Carolina Department of Education

4.4 Percentile Ranking of Adjusted Cohort Graduation Rate by School District—All Cohorts

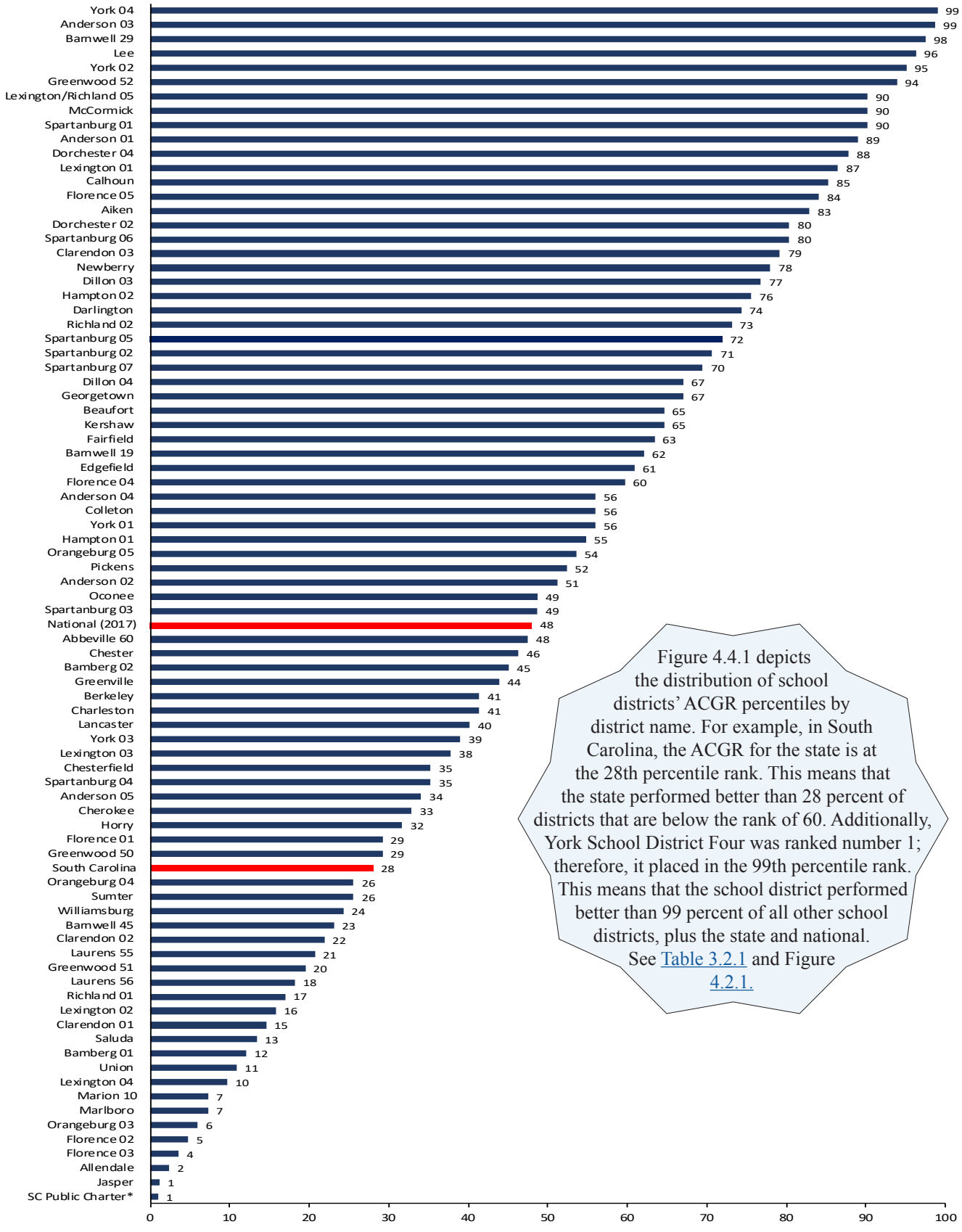


Figure 4.4.1 depicts the distribution of school districts' ACGR percentiles by district name. For example, in South Carolina, the ACGR for the state is at the 28th percentile rank. This means that the state performed better than 28 percent of districts that are below the rank of 60. Additionally, York School District Four was ranked number 1; therefore, it placed in the 99th percentile rank. This means that the school district performed better than 99 percent of all other school districts, plus the state and national. See Table 3.2.1 and Figure 4.2.1.

Figure 4.4.1 Percentile rank of ACGR by school district—all cohorts.

Source: South Carolina Department of Education

4.5 Adjusted Cohort Graduation Rate by School District—White Cohorts*

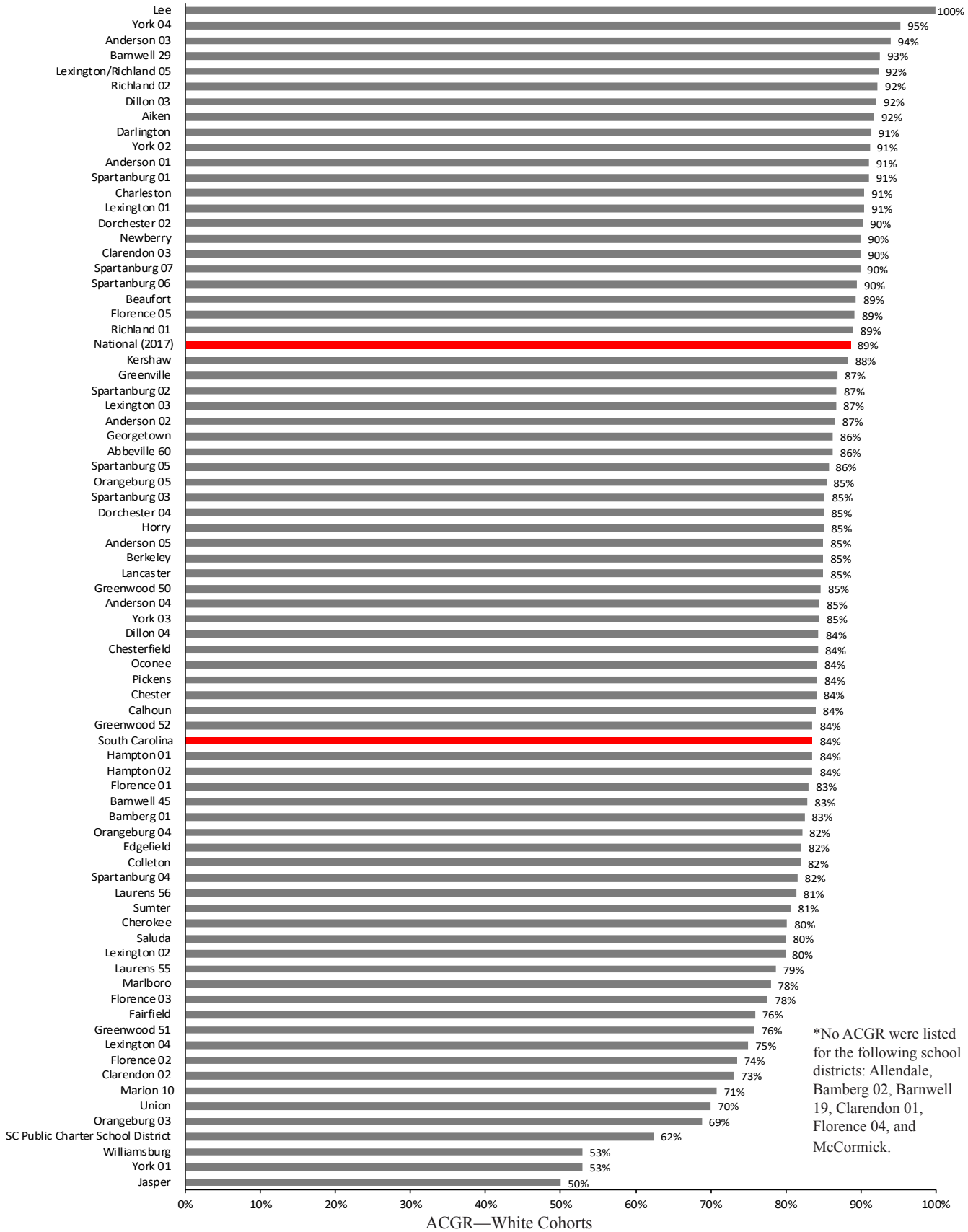


Figure 4.5.1 ACGR by school district—white cohorts.

Source: South Carolina Department of Education

4.6 Rank of Adjusted Cohort Graduation Rate by School District—White Cohorts

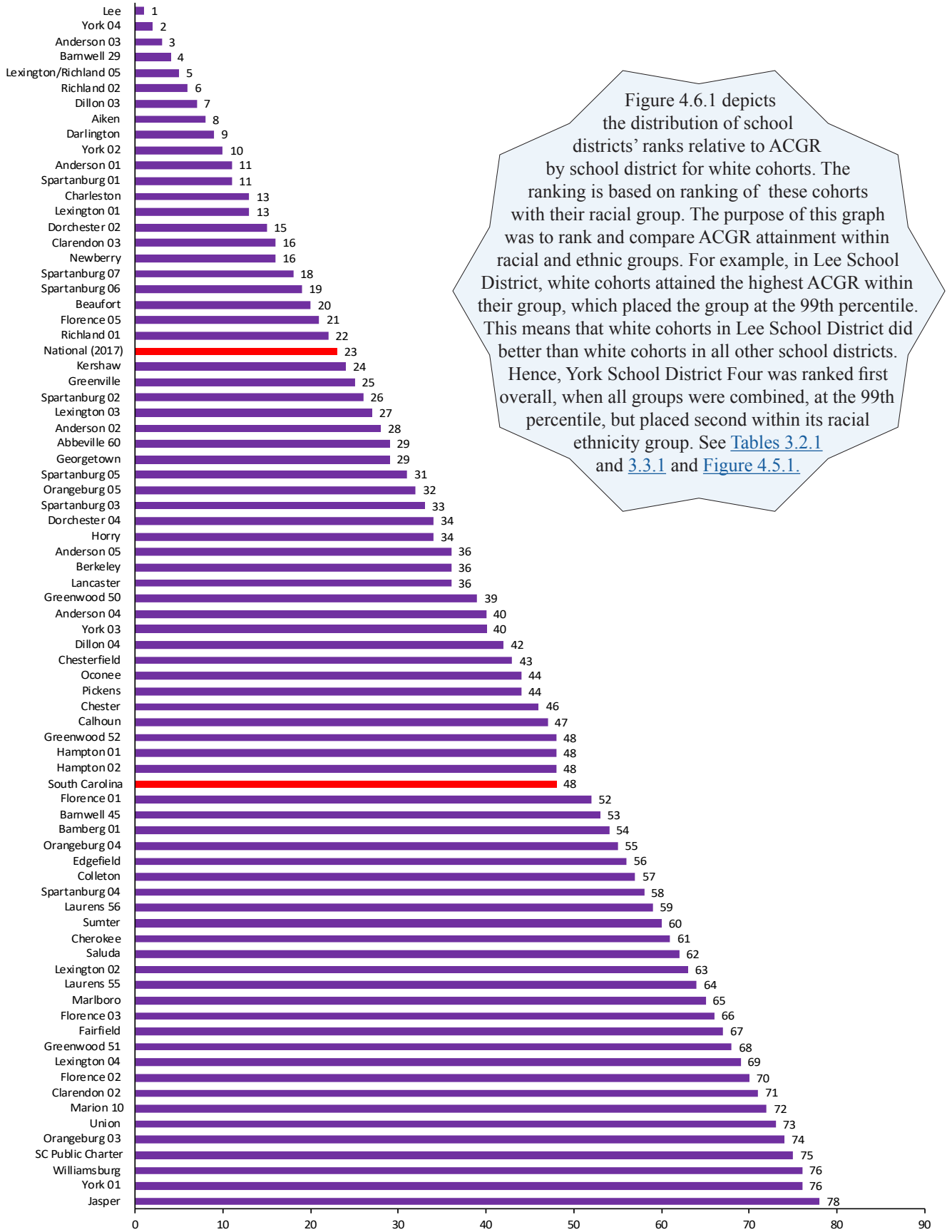
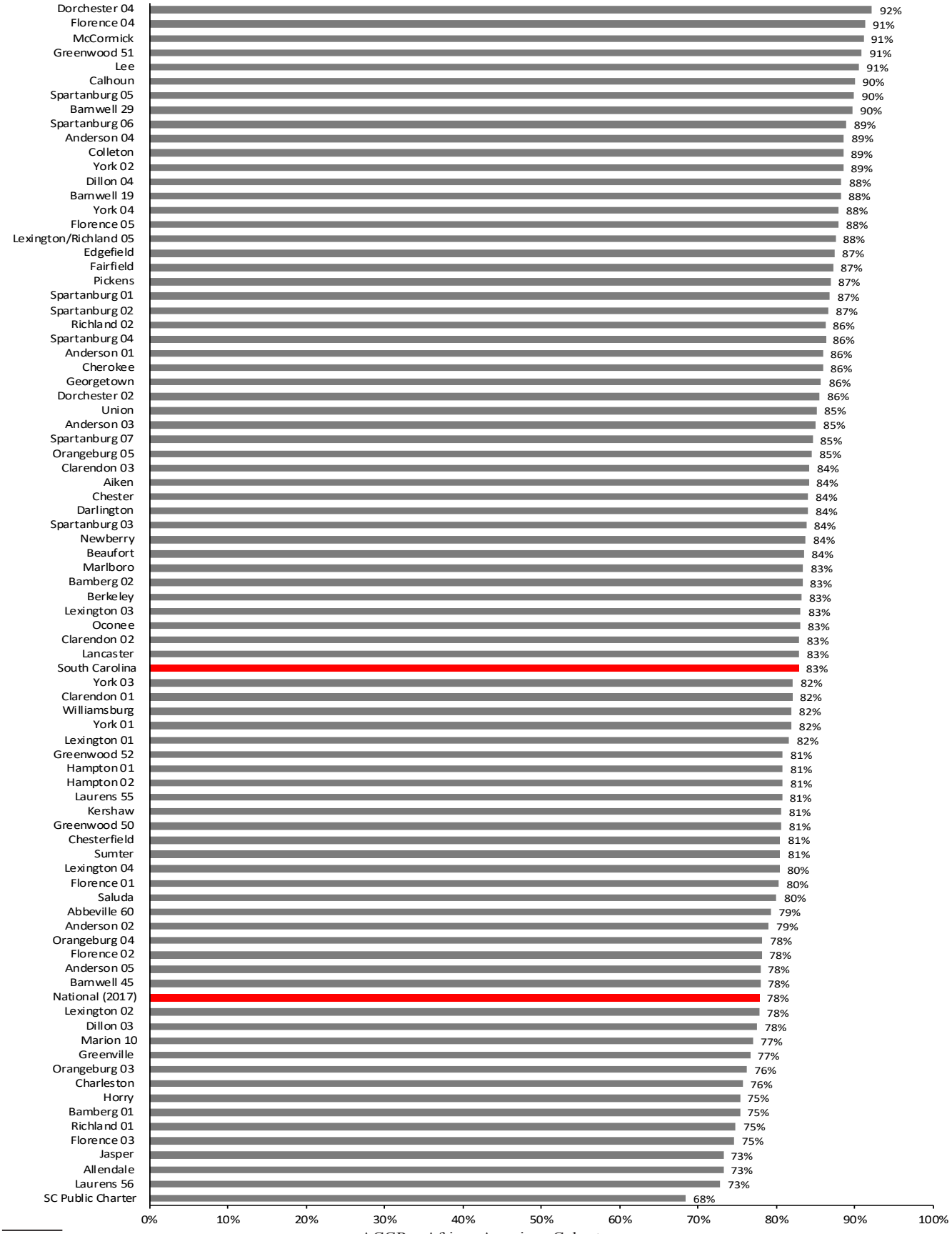


Figure 4.6.1 depicts the distribution of school districts' ranks relative to ACGR by school district for white cohorts. The ranking is based on ranking of these cohorts with their racial group. The purpose of this graph was to rank and compare ACGR attainment within racial and ethnic groups. For example, in Lee School District, white cohorts attained the highest ACGR within their group, which placed the group at the 99th percentile. This means that white cohorts in Lee School District did better than white cohorts in all other school districts. Hence, York School District Four was ranked first overall, when all groups were combined, at the 99th percentile, but placed second within its racial ethnicity group. See Tables 3.2.1 and 3.3.1 and Figure 4.5.1.

Figure 4.6.1 Rank by school district relative to ACGR—white cohorts.
Source: South Carolina Department of Education

4.7 Adjusted Cohort Graduation Rate by School District—African American Cohorts*



*ACGRs for 82 school districts

Figure 4.7.1 ACGR by school district—African American cohorts.

Source: South Carolina Department of Education

4.8 Ranking of Adjusted Cohort Graduation Rate by School District—African American Cohorts

Figure 4.8.1 depicts the distribution of school districts' ranks relative to ACGR by school district for African American cohorts. The ranking is based on ranking of these cohorts within their racial and ethnic groups. The purpose of this graph is to show the distribution of the ranks assigned to each school district's ACGR attainment within their racial and ethnic groups. For example, in Dorchester School District Four, African American cohorts attained the highest ACGR within their group, which placed the group at rank number 1, which equates to the 99th percentile. This means that African American cohorts in Dorchester School District Four performed better than African American cohorts in all other school districts. Hence, Dorchester School District Four ranked 11th overall, when all groups were combined, at the 88th percentile. See Tables 3.2.1 and 3.3.1 and Figure 4.7.1.

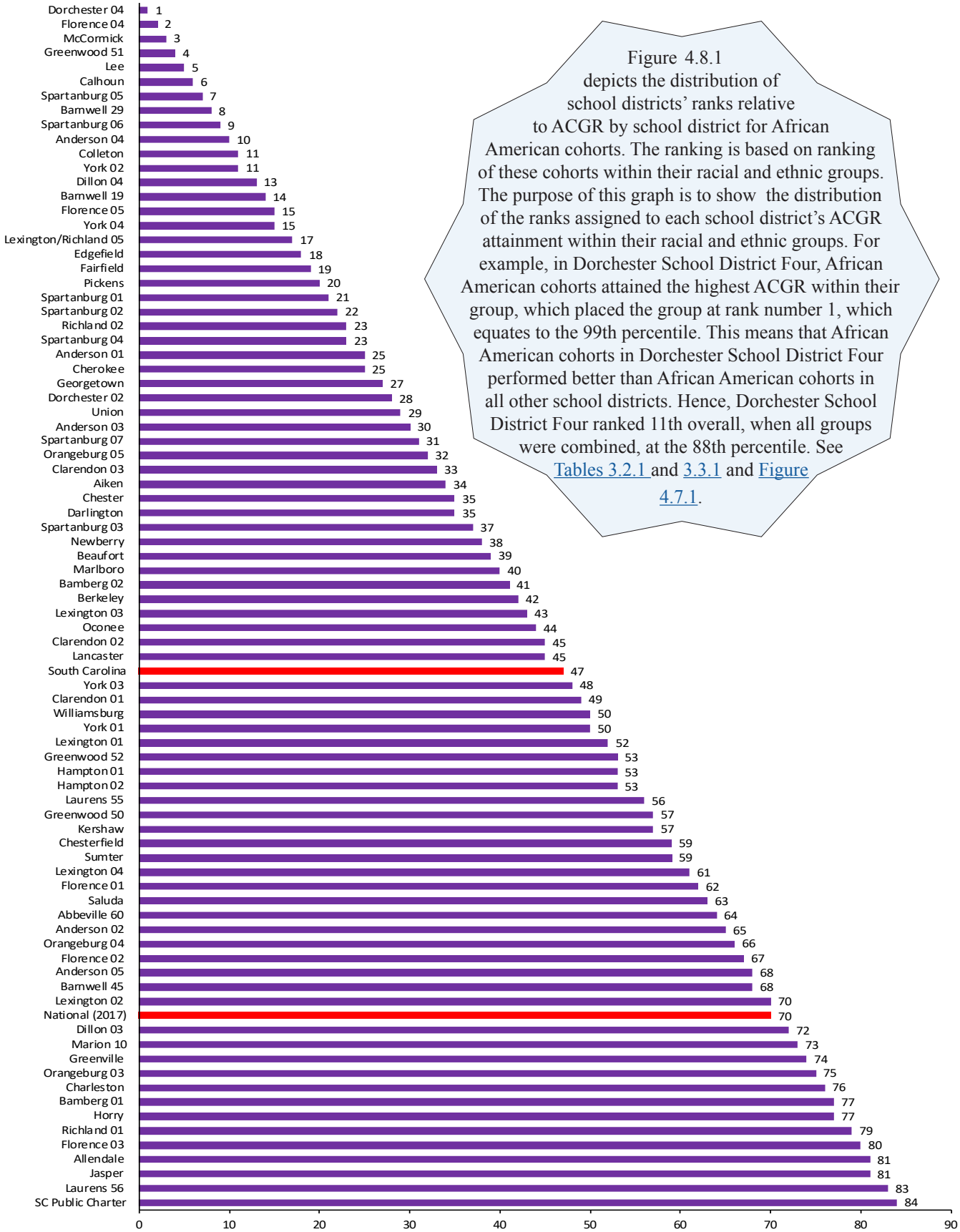


Figure 4.8.1 Rank by school district—African American cohorts.
Source: South Carolina Department of Education

4.9 Adjusted Cohort Graduation Rate by School District—Hispanic or Latino Cohorts*

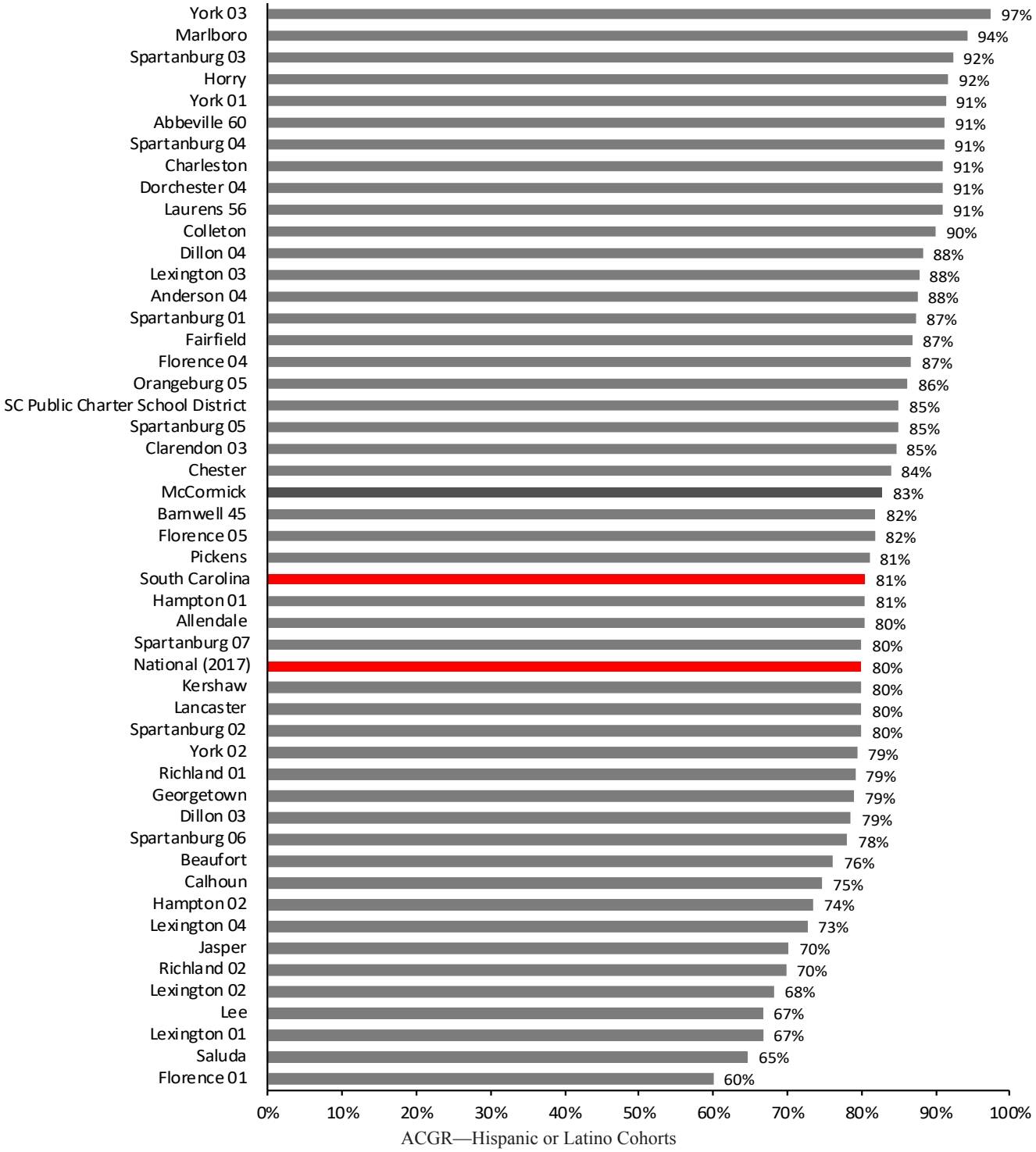


Figure 4.9.1 Rank of ACGR by school district—Hispanic or Latino cohorts.

Source: South Carolina Department of Education

*No Hispanic or Latino ACGRs were listed for these 34 school districts: Aiken, Anderson 01, Anderson 02, Anderson 03, Anderson 05, Bamberg 01, Bamberg 02, Barnwell 19, Barnwell 29, Berkeley, Cherokee, Chesterfield, Clarendon 01, Clarendon 02, Darlington, Dorchester 02, Edgefield, Florence 02, Florence 03, Greenville, Greenwood 50 Greenwood 51, Greenwood 52, Laurens 55, Lexington/ Richland 05, Marion 10, Newberry, Oconee, Orangeburg 03, Orangeburg 04, Sumter, Union, Williamsburg, and York 04.

4.10 Ranking of Adjusted Cohort Graduation Rate by School District—Hispanic or Latino Cohorts*

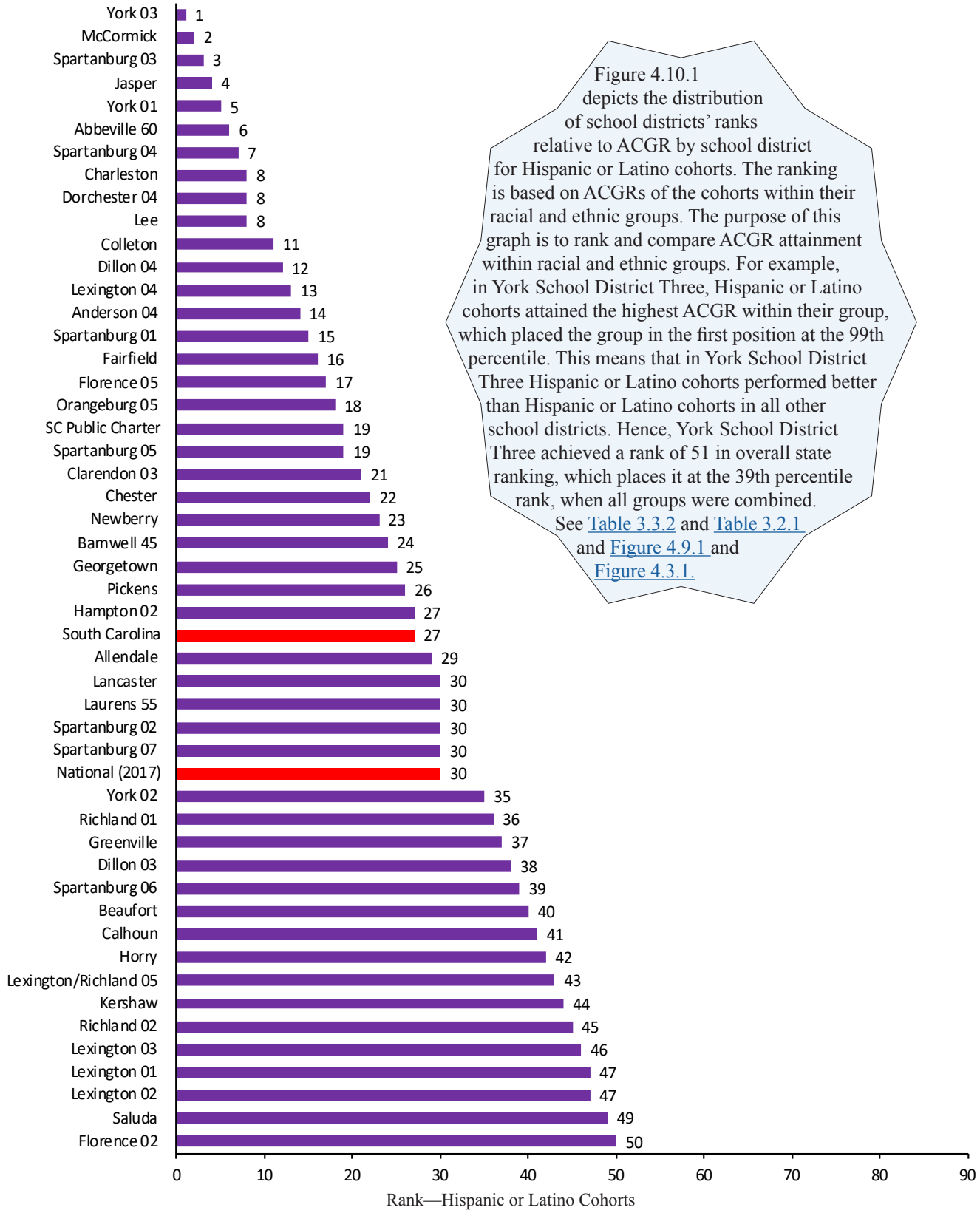


Figure 4.10.1 depicts the distribution of school districts' ranks relative to ACGR by school district for Hispanic or Latino cohorts. The ranking is based on ACGRs of the cohorts within their racial and ethnic groups. The purpose of this graph is to rank and compare ACGR attainment within racial and ethnic groups. For example, in York School District Three, Hispanic or Latino cohorts attained the highest ACGR within their group, which placed the group in the first position at the 99th percentile. This means that in York School District Three Hispanic or Latino cohorts performed better than Hispanic or Latino cohorts in all other school districts. Hence, York School District Three achieved a rank of 51 in overall state ranking, which places it at the 39th percentile rank, when all groups were combined. See Table 3.3.2 and Table 3.2.1 and Figure 4.9.1 and Figure 4.3.1.

Figure 4.10.1 Rank by school district—Hispanic or Latino cohorts.

Source: South Carolina Department of Education

4.11 Adjusted Cohort Graduation Rate by School District—Other Cohorts*

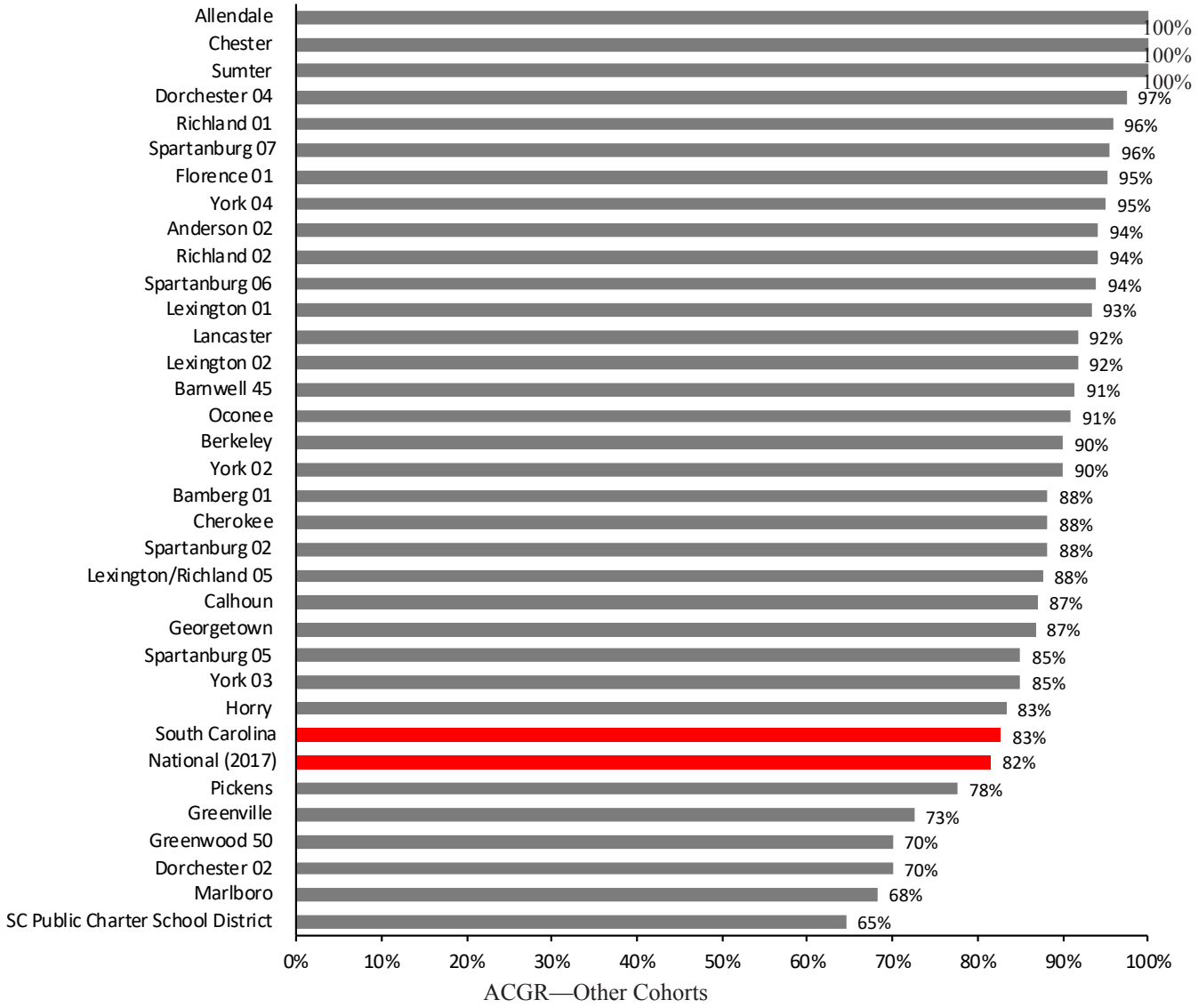


Figure 4.11.1 ACGR by school district—Other Cohorts.

Source: South Carolina Department of Education

*Other—No ACGR listed for the following 49 school districts: Abbeville 60, Aiken, Anderson 01, Anderson 03, Anderson 04, Anderson 05, Bamberg 02, Barnwell 19, Barnwell 29, Beaufort, Charleston Chesterfield, Clarendon 01, Clarendon 02, Clarendon 03, Colleton, Darlington, Dillon 03, Dillon 04, Edgefield, Fairfield, Florence 02, Florence 03, Florence 04, Florence 05, Greenwood 51, Greenwood 52, Hampton 01, Hampton 02, Jasper Kershaw, Laurens 55, Laurens 56, Lee Lexington 03, Lexington 04, Marion 10, McCormick, Newberry, Orangeburg 03, Orangeburg 04, Orangeburg 05, Saluda, Spartanburg 01, Spartanburg 03, Spartanburg 04, Union, Williamsburg, and York 01.

4.12 Ranking of Adjusted Cohort Graduation Rate by School District—Other Cohorts*

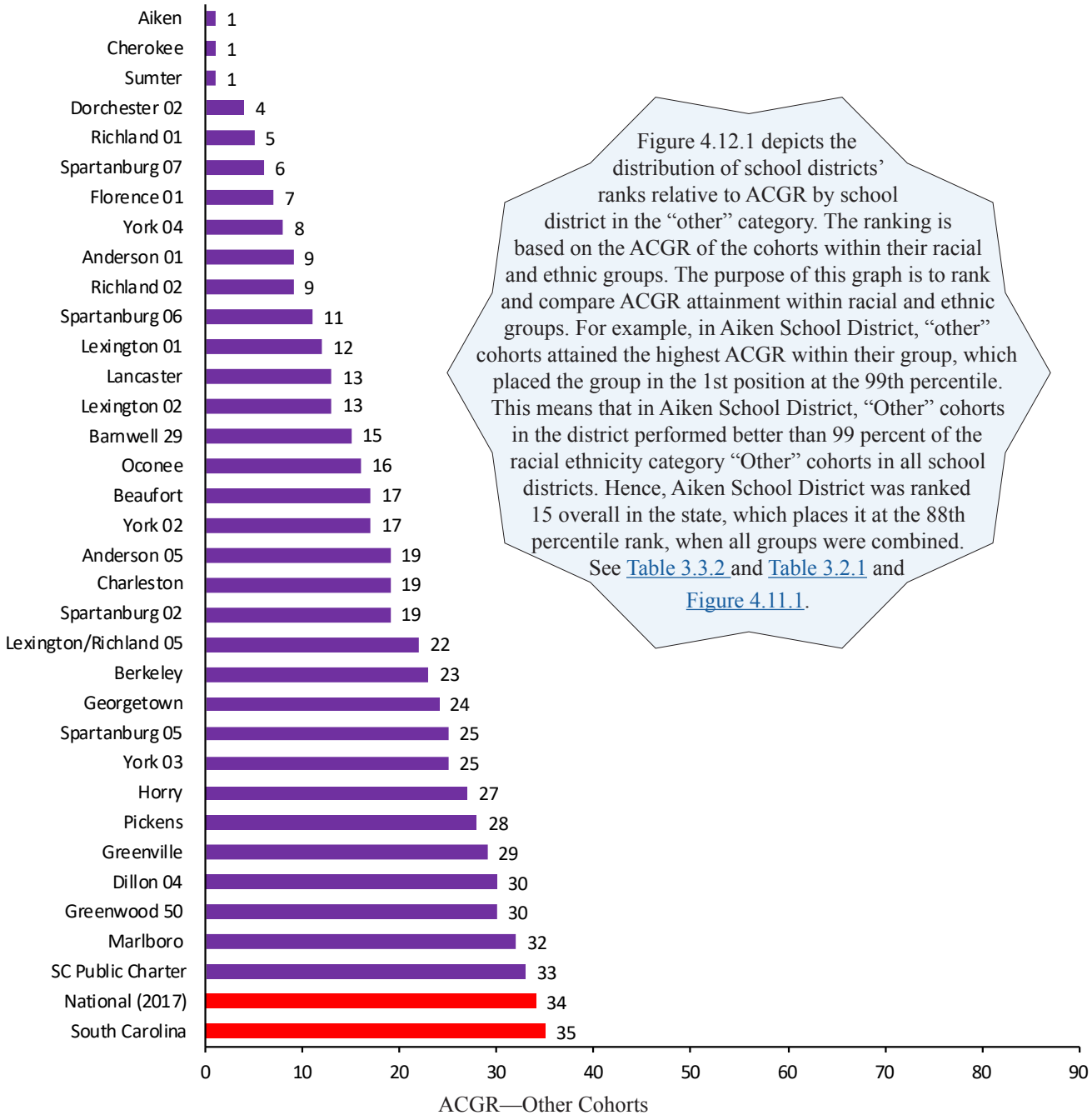


Figure 4.12.1 depicts the distribution of school districts' ranks relative to ACGR by school district in the "other" category. The ranking is based on the ACGR of the cohorts within their racial and ethnic groups. The purpose of this graph is to rank and compare ACGR attainment within racial and ethnic groups. For example, in Aiken School District, "other" cohorts attained the highest ACGR within their group, which placed the group in the 1st position at the 99th percentile. This means that in Aiken School District, "Other" cohorts in the district performed better than 99 percent of the racial ethnicity category "Other" cohorts in all school districts. Hence, Aiken School District was ranked 15 overall in the state, which places it at the 88th percentile rank, when all groups were combined. See Table 3.3.2 and Table 3.2.1 and Figure 4.11.1.

Figure 4.12.1 Rank of ACGR by school district—Other Cohorts.

Source: South Carolina Department of Education

Section V

The Effect of Cohort Size, Assessment Tests, and Overall School Ratings on ACGR

It must be demonstrated . . .

5.1 The Effect of Cohort Size, Assessment Tests, and Overall School Rating on ACGR

The author used regression analysis to analyze the effects of cohort size, overall rating of each high school, and performance on high school assessment tests such as math, English, the ACT, and the SAT on ACGR attainment. What is regression analysis? A simplified definition is that regression analysis is a statistical process that describes how an independent set of variables (x) is numerically related to a set of dependent variables (y). Consequently, the regression model was used as part of the analysis in this paper because of its ability to measure the effect that an input (size, school rating, and performance) has on an output, such as the ACGR. Hence, size, rating, and performance are the inputs, and ACGR is the output.

The regression analysis line generally shows or does not show a proportional relationship between two entities. The blue dots in the graphs represent the observed values, and the orange line depicts the prediction based on the observed data. This means that if the input (x-axis) has no effect on the output (y-axis) nothing changes and the ACGR trajectory will remain, on average, about the same. This is an excellent model for this purpose, as in this situation, because every school and district strives to improve its ACGR. This section applied inferential statistics to analyze samples and predict future trends, as was done with the regression analysis model in this paper. For example, the graphs on the following pages are the visual results of the statistical analysis. Because this is not a statistical paper per se—in the sense that it is designed for consumption by the general public—the details are beyond the scope of this paper. Rather, general statements along with the graphics are discussed here.

Here is an interpretation of the graphics: If the blue dots (scatterplot) show a horizontal, flat-looking pattern and the best fit line shows also a flattened horizontal run, this observation, along with the statistical details, imply that the input (x-axis) has no effect on the output (y-axis). However, the blue dots (scatterplot) might appear to be horizontally flat or tilt upward or downward (which indicates a reaction by the ACGR to one of the inputs). The only way to be certain is from the numerical results. For example, a flattened scatterplot and fitted line through the blue dots would imply that the input has no effect on the ACGR (output). However, the final decision is based on the data readout results, which would confirm whether the effects show a correlation, a relationship, or statistical significance or insignificance. For this paper, the most powerful piece of analysis included is the p-value. A p-value greater than 0.05 (p-value > 0.05) or less than 0.05 (p-value < 0.05) will confirm statistical insignificance or significance, respectively. For example (as seen in **Figure 5.2.2**), as the overall rating percentage increases (x-axis) and the ACGR remains flat (y-axis), the pattern of the scatterplot (blue dots) and the orange line remain horizontal. This implies that the overall ratings (sample of 232 high schools) in South Carolina public schools had no effect on the ACGR. Hence, there is not a correlation or relationship between the input (overall rating) and the output (ACGR) because the of p-value > 0.05. *The actual p-value is 0.7326 vs. 0.05.*

The overall rating is an important parameter, but it had no effect on ACGR. The overall rating (South Carolina Department of Education) is based on a 100-point scale, per state law. Overall ratings for schools are determined based on South Carolina's performance on the National Assessment of Educational Progress (NAEP) in 2015. The percentage of schools in each rating category mirrors the performances of students in NAEP performance categories in 2015. For purpose of this paper, only the high-school rating scale is included. The scales for elementary and middle schools, which vary, are not included.

5.1 The Effect of Cohort Size, Assessment Tests, and Overall School Rating on ACGR, cont.

The graph in Figure 5.1.1 depicts the distribution of overall ratings by category in percentage and quantity of schools contained in the statewide distribution. The ratings were compiled by South Carolina Department of Education in 2018 for all of its schools, including elementary and middle schools. The distribution is also shown in tabular format in Table 5.1.1 (shown below). Although the graph is not necessarily a direct component of the adjusted cohort graduation rate (ACGR), the author felt that because of its importance on educating children, a distribution of the ratings for the 232 high schools (Figure 5.1.1) should be shared with parents, students, and the general public.

The graph in Figure 5.2.2 shows the overall ratings from the 232 public high schools using regression analysis to determine the effect, if any, on ACGR.

The bad news is that almost 30 percent or 68 of the 232 schools were rated below average or unsatisfactory. The conclusion is that the categories of overall ratings had no effect on ACGR. This is significant because almost all high schools in the state were included in the test. As previously stated in the executive summary, the findings suggest that ACGR might not be a good measure of quality.

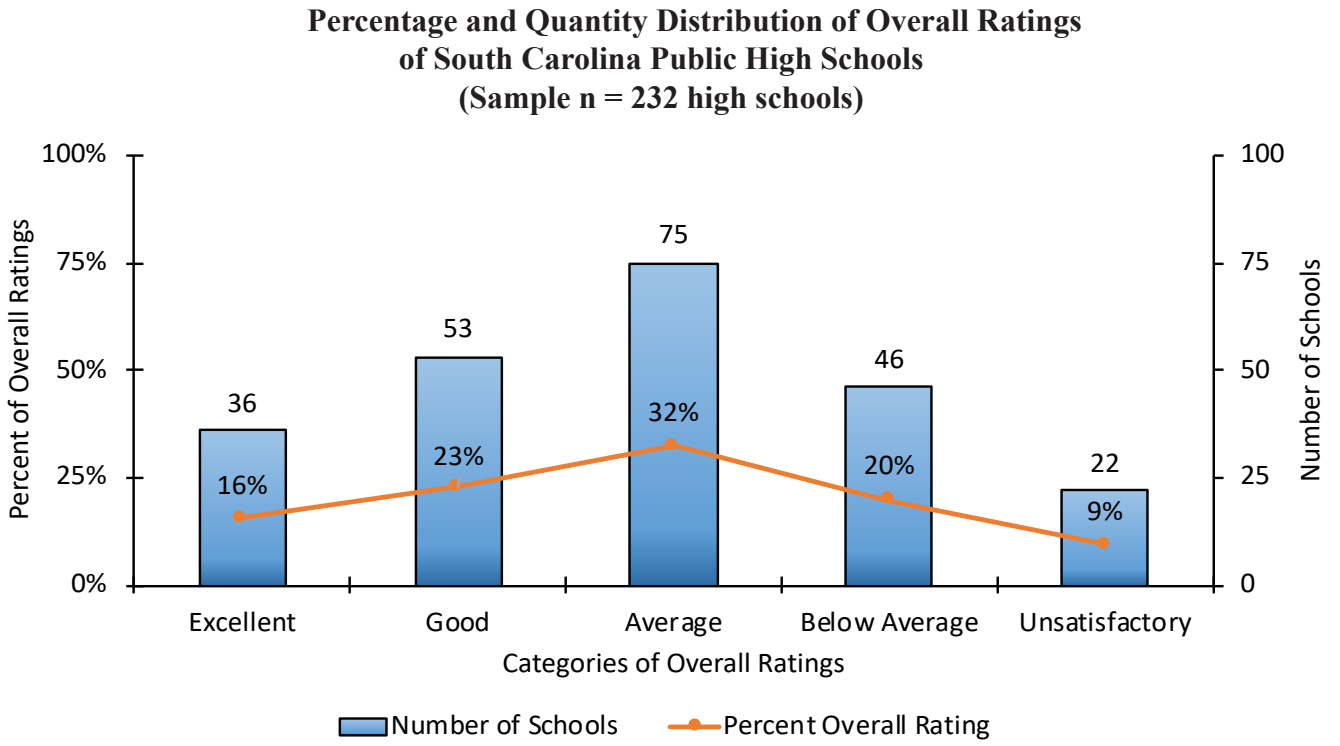


Figure 5.1.1 Percentage and quantity distribution of overall school ratings of public high schools

Table 5.1.1 Intervals of scores for assigning rating categories for Sc public schools

Overall Rating	Percentage of Overall Rating High Schools
Excellent	67–100
Good	60–66
Average	51–59
Below Average	40–50
Unsatisfactory	0–39

Source: South Carolina Department of Education

5.2 The Effect of Cohort Size and Overall Rating on ACGR by School

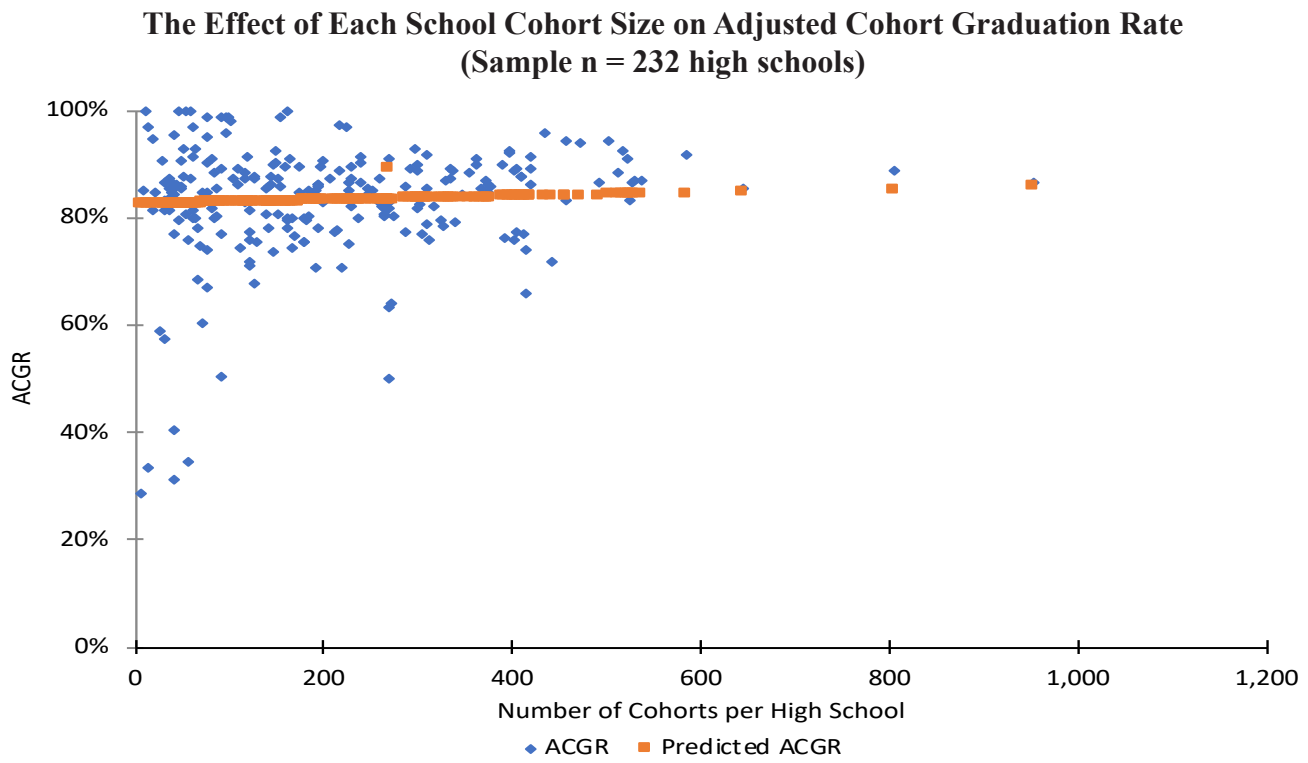


Figure 5.2.1 The effect of cohort size on the ACGR. There is no relationship between cohort size per school and the ACGR. The scatterplot of blue dots and the orange line remains essentially flat, with no slope. Therefore, the effect of cohort size on the ACGR is statistically insignificant (P-value > 0.05).

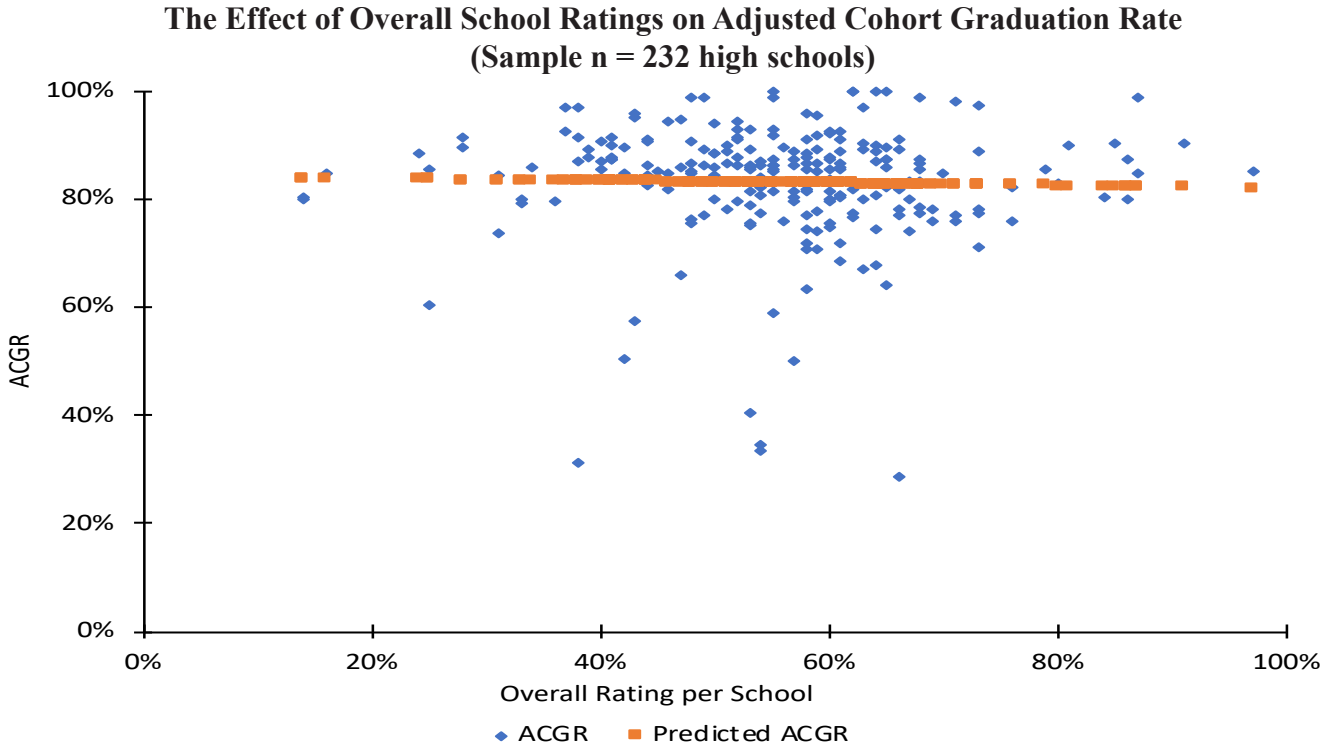


Figure 5.2.2 The effect of overall rating per high school on the ACGR. There is no relationship between overall ratings of high schools in South Carolina and the ACGR. The scatterplot of blue dots and the orange line remains essentially flat, with no slope. Therefore, the effect the overall rating has on the ACGR is statistically insignificant (P-value > 0.05).

Source: South Carolina Department of Education

5.3 EOCEP: Effect of Performance in Algebra 1 and English 1 on ACGR by School

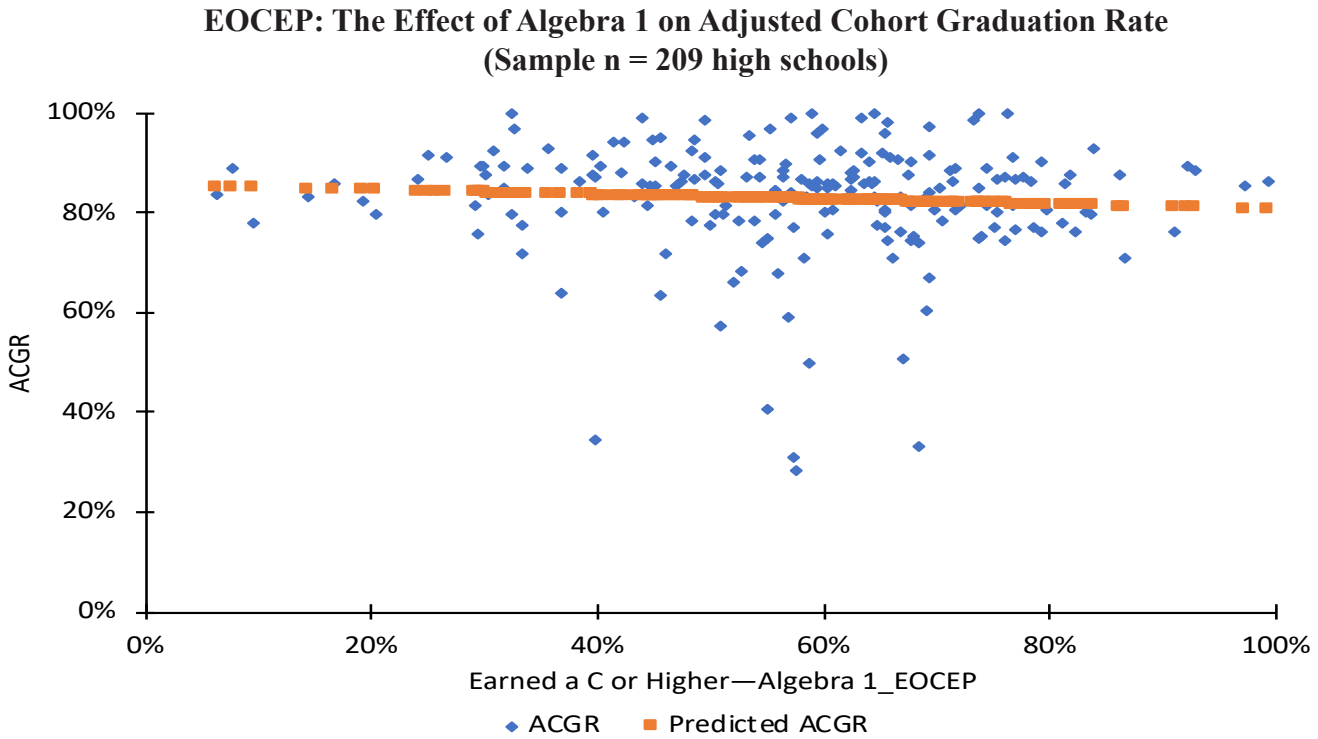


Figure 5.3.1 EOCEP —The effect of Algebra 1 performance on ACGR. There is no relationship between a school's performance on Algebra 1 and its effect on the ACGR. Although the ACGR decreased slightly as performance increased, the decrease is statistically insignificant (P-value > 0.05).

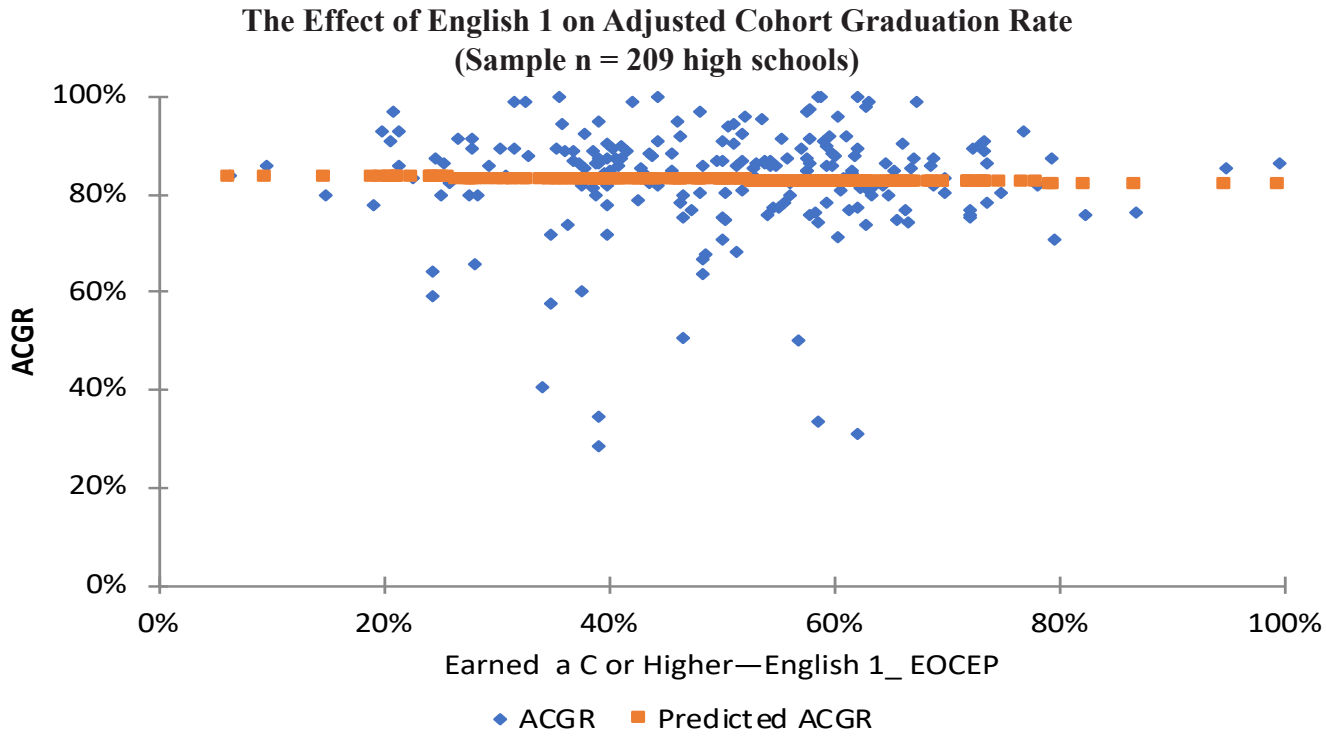


Figure 5.3.2 EOCEP—The effect of English 1 performance on ACGR. There is no relationship between a school's performance on English 1 and its effect on the ACGR. Although the ACGR decreased slightly as performance increased, the decrease is statistically insignificant (P-value > 0.05).

Source: South Carolina Department of Education

5.4 The Effect of ACT and SAT Composite Scores on the ACGR by School

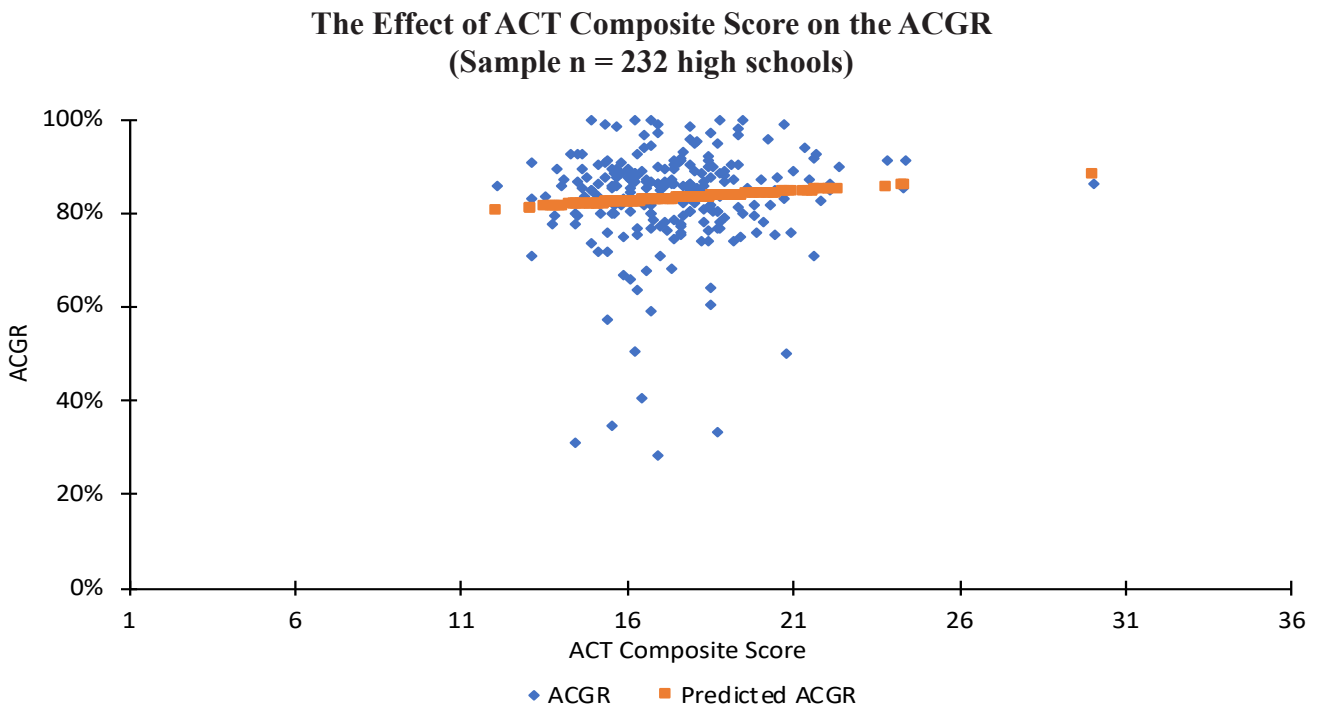


Figure 5.4.1 ACT—The effect of the ACT scores on the ACGR. There is no relationship between a school's ACT composite score and its effect on the ACGR. Although the ACGR may have increased slightly as the ACT composite scores increased, the increase is statistically insignificant (P-value > 0.05).

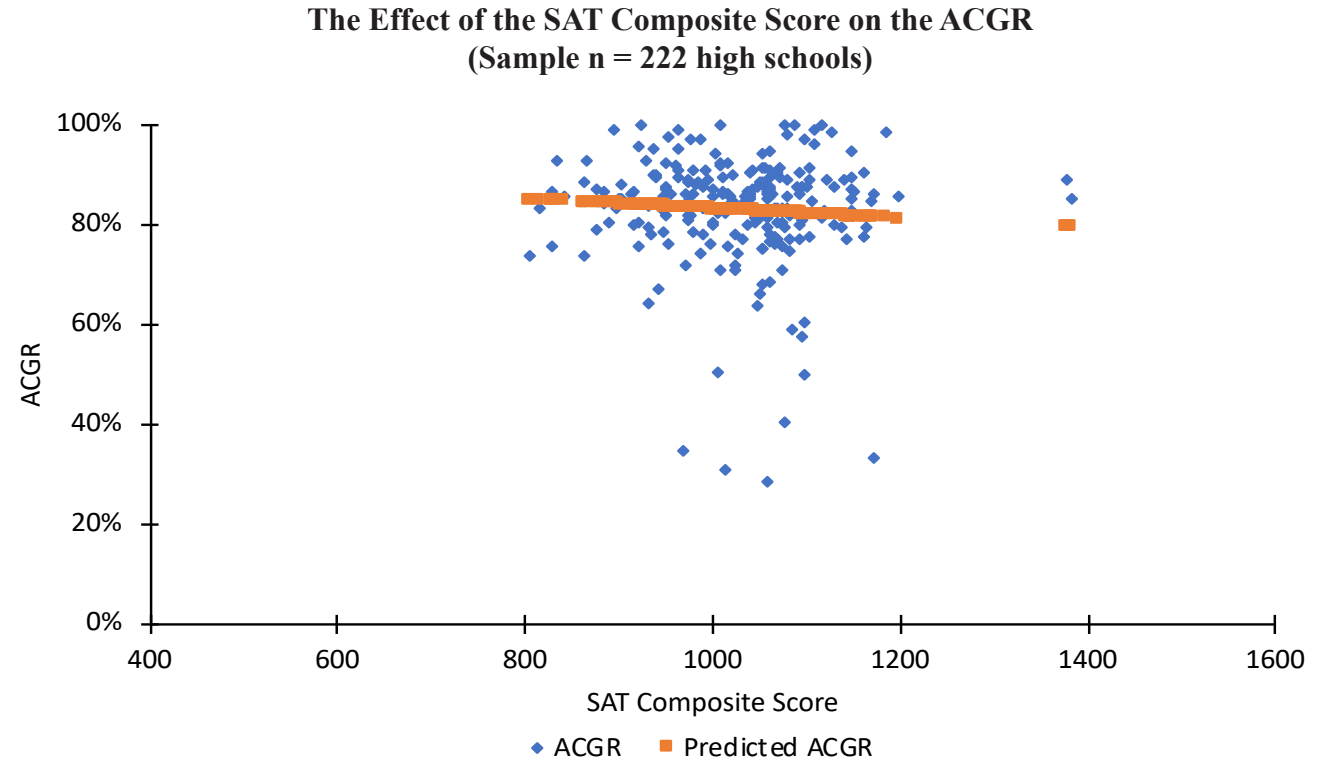


Figure 5.4.2 SAT—The effect of the SAT scores on the ACGR. There is no relationship between a school's SAT composite score and its effect on the ACGR. Although the ACGR may have decreased slightly as the SAT composite scores increased, the decrease is statistically insignificant (P-value > 0.05).

Source: South Carolina Department of Education

Section VI

Summary

It must be demonstrated . . .

Summary

This report provided parents, students, educators, political leaders, the general public, and others with a comparative analysis on the South Carolina public schools adjusted cohort graduation rate (ACGR) for each public school district in South Carolina. To that end, this report included the attainment of ACGRs for eighty-two school districts, plus the state and national ACGR comparison to districts for eighty-two school districts in South Carolina.

Aside from simply publishing ACGR data points, the report included the rankings and the percentile rankings of eighty-two school districts, plus the state and national ACGRs. The report also shared comparative analysis on ACGR, rank, and percentile rank on the school districts within racial ethnicity groups. This allowed the various groups to compare their groups with the same racial or ethnic groups in other districts. For example, a Hispanic or Latino cohort in Horry County Schools can compare itself with the Hispanic or Latino group in the Greenville County School District.

Although the report showed that the 2017–2018 ACGR results primarily reflect only the 2018 cohorts, and some districts may have seen an increase or decrease in their ACGRs year to year, the overall differences in most situations were within the margin of error. Therefore, the performance and pattern shown among school districts were statistically consistent year after year. For example, the data showed that ACGRs fluctuated from 2015 to 2018, but these variations were statistically insignificant. Consequently, there was no improvement in ACGR over the four years.

The report also provided an analysis of how assessment testing and the overall ratings of individual schools might have a positive effect on ACGR. Because of large variations in ACGRs within a school district, instead of using the average ACGR from each district, an analysis of individual schools across the eighty-two school districts was performed to ensure the statistical results were accurate. Consequently, the author analyzed more than 210 public high schools in South Carolina to determine whether any of the following affected ACGRs: cohort size, English 1, Algebra 1, the ACT, the SAT, and overall high school rating. After analyzing for the effect on the ACGR, the author concluded that these parameters had no effect on ACGR outcomes. This means that poor or good performances and overall school ratings did not affect school ACGRs.

In reviewing the ACGRs in eighty-two school districts in South Carolina, one can conclude that the ACGR in South Carolina is not necessarily a good measure of how well prepared young people are for work or college. As a matter of fact, experts have stated that even as cohorts are graduating at higher rates, student performance on the NAEP, a test of reading and mathematics achievement, is unchanged or slipping (National Center for Education Statistics, 2017).

The three most notable statistics in this report are the following: (1) South Carolina Public Charter School District attained the lowest ACGR (64 percent) among school districts, (2) school districts' performance or overall rating did not have any effect on their ACGR, and (3) white students who always outperformed African American students academically by wide margins, in this situation, indicated no statistical difference in ACGR between the two groups. ■

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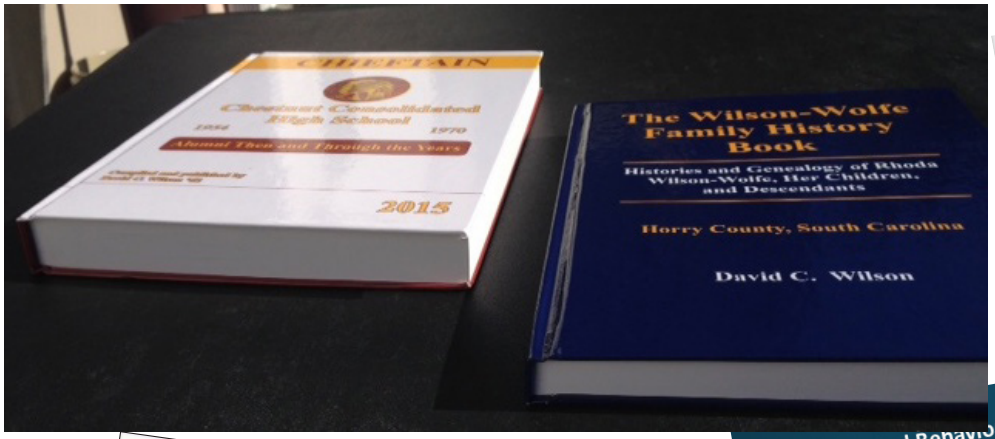

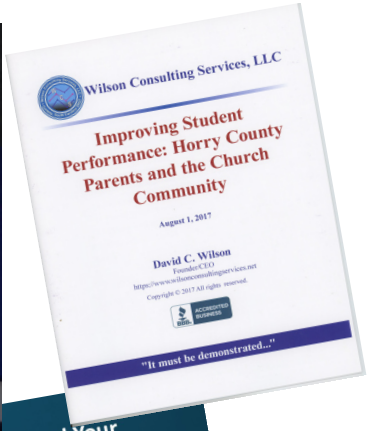

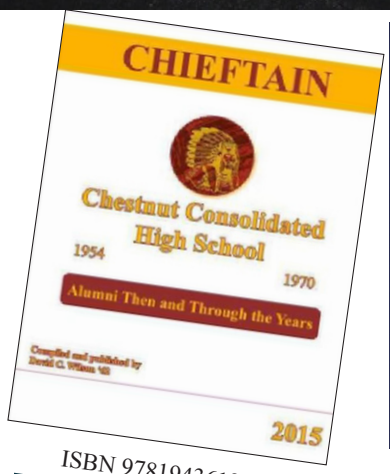

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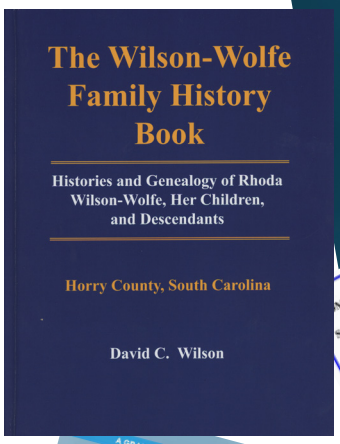
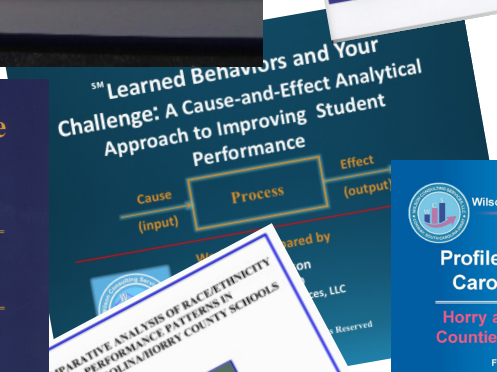
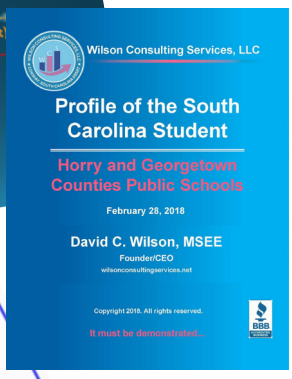
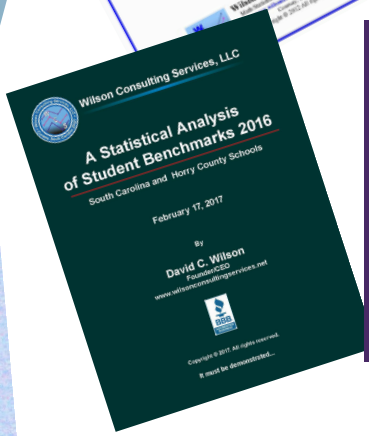
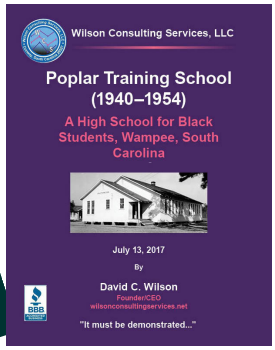
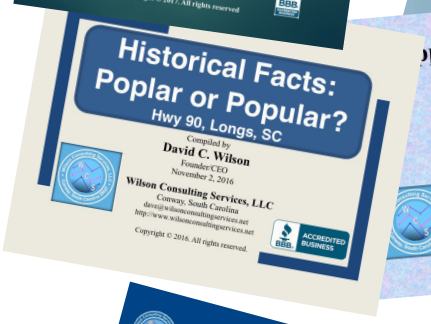


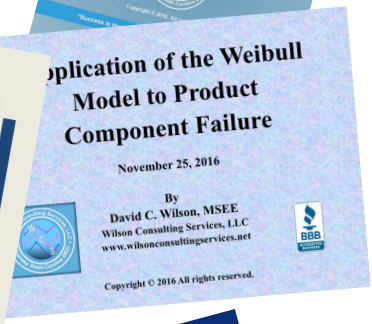


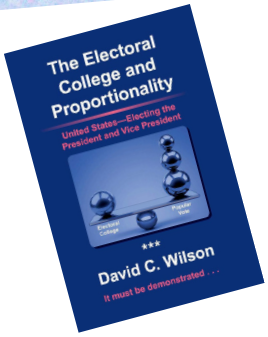


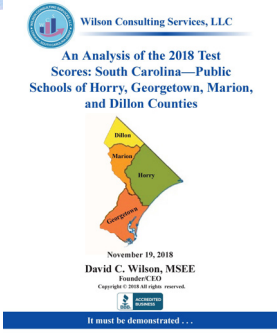










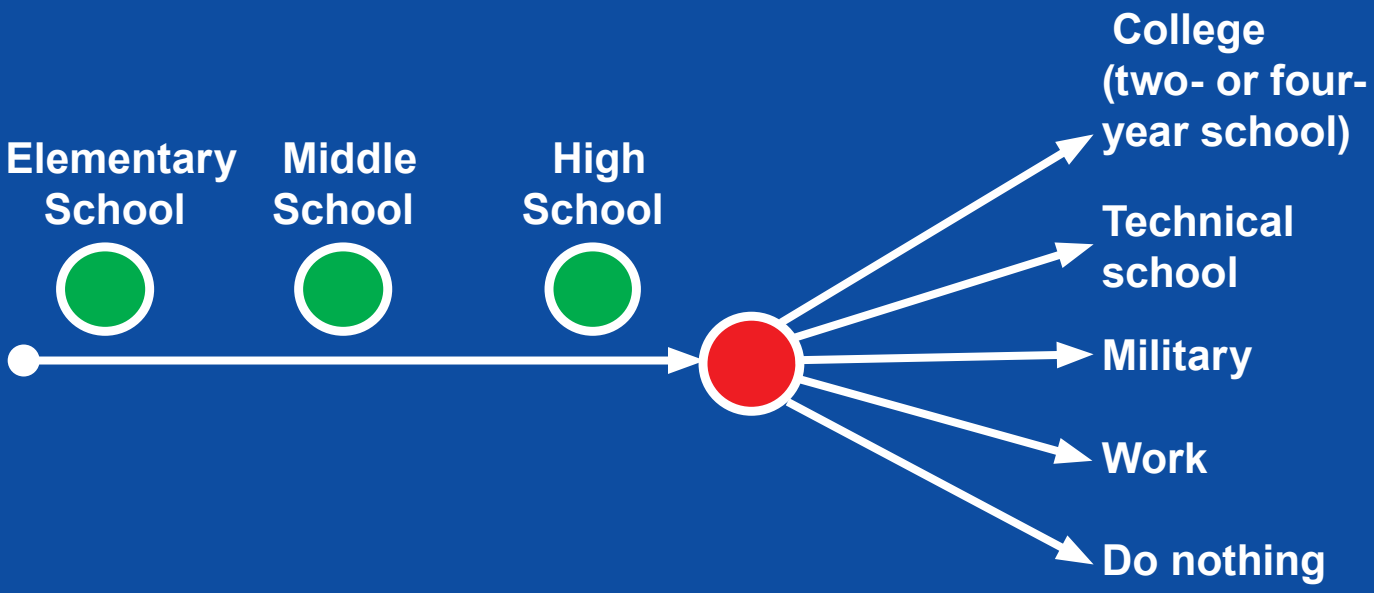


Setting High Expectations and Striving for Excellence

What does it mean?

Setting high expectations and striving for excellence will be a natural outcome of your new self. From now on, what will distinguish you from others will be the drive, determination, and excellence that you will start to bring into your life. Set the bar a little higher and push yourself a little further. Work within yourself, your school, your college, your community, and beyond. The principle is the same for making an excellent pair of scissors as it is for making an iPad: Never let second best be good enough. Believe in yourself and what you want to achieve. Make sure the person who postpones starting his or her career until tomorrow is not you. You deserve more, so never settle for less.

Which choice will you make?



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