



Fiscal Year 2019-2023

Long Range Facilities Plan and Capital Improvement Program

Greenville County Schools | March 2018

Greenville County Schools

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Mission: We collaborate with the home and community to provide educational experiences which prepare students for life-long learning and for ethical, productive participation in a democratic society and the global community.

Vision: To be an exemplary, continuously improving educational organization in which all students achieve their maximum potential through a rigorous, engaging curriculum and support systems that cultivate and promote their well-being.

Goal 3: Provide a School Environment Supportive of Learning

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Greenville County Schools
FY 2019 – 2023
Long Range Facilities Plan and
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OVERVIEW OF THE LONG RANGE FACILITIES PLAN AND CAPITAL IMPROVEMENT PROGRAM

Greenville County Schools Long Range Facilities Plan (LRFP) and Capital Improvement Program (CIP) has been developed in accordance with the requirements of South Carolina Department of Education Guidelines. The LRFP integrates the facilities planning program with the annual capital budgeting process and the District's educational programming strategies. The document contains five chapters as follows:

Chapter 1 summarizes the economic and demographic trends that affect educational facilities planning for Greenville County Schools (GCS). This chapter also highlights the fiscal considerations that are relevant to the development of the LRFP.

Chapter 2 describes the facilities planning components as they relate to the LRFP. Outlined in this chapter is the enrollment forecasting methodology, formulas for calculating capacities, and educational program considerations.

Chapter 3 highlights the relevant relationship between facilities management and academics. It ensures that capital projects included in the LRFP are consistent with academic and other initiatives implemented by Greenville County Schools.

Chapter 4 summarizes this year's proposed CIP by major goals. It describes facilities strategies and the recommendations for individual schools. This chapter also serves as an executive summary of the recommendations in the CIP.

Chapter 5 is organized by Planning Zones and provides enrollment projections and facilities information. Summary information is also provided for Special and Alternative Education Schools.

Summary of Capital Improvement Program

Project	FY 15- FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	15 Year Total
Recreation, Remodeling and Additions															
Excise Center Center	\$ 3,056,132	\$ 2,042,000													\$ 7,508,132
J.L. West Addition	14,934,570	800,000													15,734,570
Varsa Collins Addition	1,400,000	893,000													2,293,000
Rudolph Gordon Addition & Conversion to HS School	21,252,080	14,463,000	8,245,470												41,743,470
Reyer Woodside Balance Center	1,500,000	1,500,000													3,000,000
PMSC - Environmental Science Building		2,040,820	4,200,000	2,782,375											16,832,000
Great High - walkway gym		250,000	200,000												1,150,000
Covered Center - Pavade Improvements		500,000	500,000												1,000,000
Summit Drive Addition			160,750	4,700,000	2,849,250										8,309,000
Canham Addition						2,070,800	2,070,800								4,141,600
Park Street Addition							1,300,000	4,000,000	9,000,000	1,300,000					15,600,000
Ellen Woodside Addition											1,000,000	5,000,000	2,200,000		8,200,000
Stinsonville @ Morton												2,625,000	3,000,000		5,625,000
Woodside View Addition													3,300,000	5,000,000	8,300,000
Family Study		150,000													150,000
Concrete Panel Inspection			175,000					175,000							350,000
Total Recreation, Remodeling and Additions	41,822,708	31,456,620	11,706,270	7,492,275	2,869,250	2,070,800	2,820,800	4,170,800	9,000,000	9,300,000	1,000,000	7,825,000	8,700,000	5,000,000	122,103,594
New Schools															
Franklin Ave High School		1,000,000	10,043,200	20,026,400	20,013,600	2,049,600									\$1,192,800
Elementary School						2,360,270	18,600,000	18,200,000	3,800,000						44,260,270
OATE Innovation / Incubation Center			400,000	4,000,000	5,000,000	800,000									10,200,000
Site Acquisition	1,500,000														1,500,000
Total New Schools	1,500,000	1,000,000	10,443,200	24,026,400	25,013,600	5,409,600	18,600,000	18,200,000	3,800,000	0	0	0	0	0	121,562,800
Other Projects															
Mobile Facility Needs	2,780,000	1,313,000	1,313,000	1,313,000	1,313,000	1,313,000	1,313,000	1,313,000	1,404,000	1,474,000	1,547,000	1,620,000	1,700,000	1,791,000	20,894,000
Total Other Projects	2,780,000	1,313,000	1,404,000	1,474,000	1,547,000	1,620,000	1,700,000	1,791,000	20,894,000						
Capital Equipment Replacement Programs															
Technology Refresh / Professional Learning	8,000,000	3,400,000	3,400,000	3,201,400	3,002,000	3,002,000	2,716,000	2,521,000	5,000,000	3,754,000	3,000,000	2,074,000	2,487,000	2,007,000	90,982,400
Security Enhancements	2,000,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	9,600,000
MAERS Projected Replacement of Capital Equipment	20,000,000	10,000,000	11,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	200,100,000
Capital Goods - Bus Replacement, Maintenance and Custodial	3,838,000	700,000	1,007,000	1,247,000	1,597,000	208,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	22,790,000
Scheduled Classroom Furniture Replacement	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	10,400,000
Total Capital Equipment Replacement Programs	34,638,000	16,300,000	16,207,000	17,848,400	18,302,000	18,613,000	18,216,000	17,921,000	20,600,000	18,254,000	17,900,000	17,304,000	16,487,000	16,307,000	315,275,400
Total Capital Improvement Program	\$ 81,291,708	\$ 41,656,620	\$ 43,173,670	\$ 46,316,287	\$ 48,273,632	\$ 50,303,360	\$ 47,450,600	\$ 41,029,600	\$ 31,804,800	\$ 23,004,000	\$ 23,400,000	\$ 27,304,000	\$ 46,408,000	\$ 43,878,000	\$ 891,809,634

Chapter 1

Chapter 1

GREENVILLE COUNTY SCHOOLS PLANNING ENVIRONMENT

INTRODUCTION

This Long Range Facilities Plan (LRFP) and Capital Improvement Program (CIP) is an annually updated planning document. It includes data and analysis that provides the basis for decisions regarding when and where to build new capacity or renovate existing buildings. It provides for facility improvements to address adjustments to the programmatic needs that were not envisioned when the plan was developed. It shows how the District intends to systematically maintain the current infrastructure. It is a transparent, public document to share with parents, staff, and the District's public and private partners.

The initiatives that led to the first edition of the Long Range Facilities Plan and Capital Improvement Program in September 2006 are discussed in the following paragraphs.

In March 1993, Greenville County Schools (GCS) adopted a long range facilities plan to address both its growing student enrollment and aging infrastructure. Throughout the nineties, the District implemented the program and made appropriate revisions to the plan based on need, as funding was available. By 2000, roughly 1/3 of the program had been implemented.

Seeing the growing inequity between the older and newer schools and the growing demand for classroom seats, the District conceived a bold, creative plan for completing the remainder of the program. In 2001, the Greenville County School Board entered into an agreement with Building Equity Sooner for Tomorrow (BEST), a non-profit corporation, and Institutional Resources (INRE) to secure the needed funding and manage the construction program. Bonds issued to fund the BEST program will be retired by December 2028.

Under the BEST program 70 projects were completed. At the completion every school in GCS was new or renovated. The schools have state of the art technology and equipment. Additional capacity enabled the District to significantly reduce its portable classroom inventory, address growth, and provide for program expansions. This Long Range Facilities Plan continues to ensure that these new standards are applied as updates, additions, renovations and new schools are planned. In August 2014, a new school, Dr. Phinnize J. Fisher Middle opened with a STEAM curriculum. In October 2015, Dr. Phinnize J. Fisher Middle School was the recipient of the prestigious 2015 James D. MacConnell Award by the Association for Learning Environments (formerly CEFPI). The international award recognizes a comprehensive planning process that results in educational facilities that enhance the educational program, meet multiple goals and hold purpose and distinction within a community. Additions at J. L. Mann High Academy and Sara Collins Elementary were completed and put into use for 2017-18. Future Greenville County Schools' projects use a similar comprehensive planning process. This chapter describes the demographic, economic, and political environment that both supports and challenges the District as it plans for the future. The 2018-19 school year will provide the newest addition to the Greenville County Schools District with the opening of the K-8 program at Rudolph G. Gordon School through its expansion.

Demographic Context

With an estimated population of 498,766, Greenville County is the largest county in South Carolina. The 1990's brought the greatest population influx since the population boom after World War II. Since 2000 the County's population has increased by 117,000. This influx represents an annual growth rate of 1.5 – 2.0 percent. Based on the US Census, Greenville County's population increased by 6,903 from 2015 to 2016, representing a 1.4 percent increase.

Greenville County can be divided into roughly three regions; 1) northern county areas that have slow to moderate growth and dominated primarily by single-family, established communities such as Travelers Rest, Berea, and Blue Ridge, 2) central county area (City of Greenville) with neighborhoods undergoing redevelopment, new multi-family complexes along with infill residential construction, increasing west side of Greenville County population, and 3) southern county areas with growing communities particularly west of I-385. Previously, for planning purposes County planners had divided the County into 16 planning areas. Table 1-1 and Map 1-1 shows the actual and projected population by planning area through 2030. The County prepared these projections in the mid-2000's and is currently working on updating the projections.

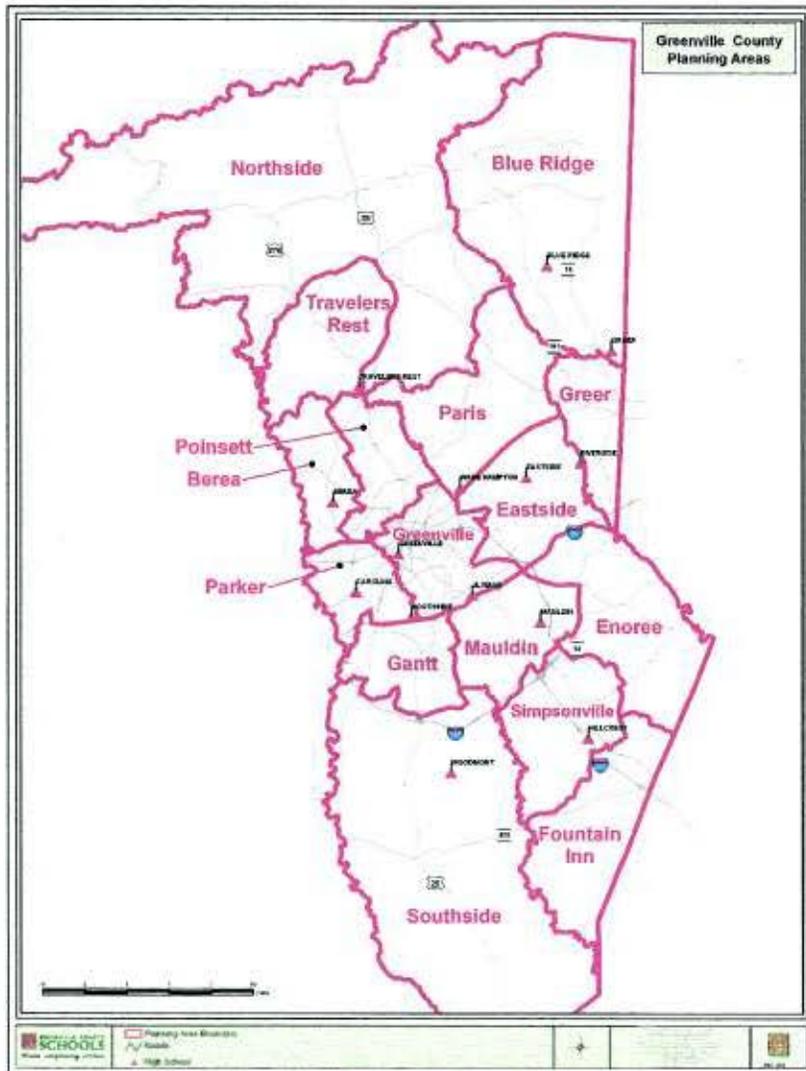
GPATS* Population Forecast

Table 1-1

Planning Area	1980 Pop	1990 Pop	2000 Pop	2010 Pop	2030 GPC Proj.
Berea	15,979	15,008	16,987	16,525	20,113
Blue Ridge	6,859	8,378	10,697	14,540	21,883
Eastside	35,078	46,796	53,924	61,574	63,770
Enoree	6,142	10,365	26,357	42,043	55,553
Fountain Inn	5,548	6,898	9,074	11,667	20,704
Gantt	13,220	13,357	14,562	14,119	15,905
Greenville	60,511	57,391	54,948	54,483	67,507
Greer	12,283	12,040	15,521	22,564	22,966
Mauldin	12,574	19,503	25,554	35,802	38,197
Northside	11,441	13,462	14,812	18,156	21,290
Paris	18,427	22,371	28,168	32,026	39,651
Parker	24,376	24,681	23,048	22,779	27,591
Poinsett	30,945	28,355	28,523	32,137	34,798
Simpsonville	13,224	17,014	26,244	36,561	49,649
Southside	14,090	17,191	21,493	26,111	31,987
Travelers Rest	7,246	7,357	9,704	10,138	12,260
Total	287,943	320,167	379,616	451,225	543,822

* Information obtained from the Greenville County Planning Department (2005) and U.S. Census Bureau, December 2011. Greenville County is in the process of updating long-term projections.

Map 1-1



Growth is currently countywide as opposed to previous trends limited to the southern part of the District. Higher density residential rezoning requests in the county as well as subdivision requests have continued over the last year. Growth in and around the City of Greenville remains at a very high level. Growth in population is also significant west of the city. GCS's boundaries incorporate the majority of Greenville County and portions of Laurens and Spartanburg Counties.

Greenville County is changing demographically and becoming increasingly diverse. The three county area of Greenville, Spartanburg, and Anderson has offered a strong economy and high quality of life. The nationwide economic downturn of the late 2000's resulted in a substantial rise in unemployment in the state, the Upstate and in Greenville County. Greenville County's unemployment climbed from an annual rate of 5.5% to 10% for 2009. As unemployment climbed, single-family home foreclosures increased, single-family building permits plummeted and state revenue declined, resulting in a significant impact on Greenville County Schools. However, the state and local economy has substantially recovered. In December 2017 Greenville County's unemployment had declined to 3.6%. This low unemployment would indicate a need for in-migration when significant job creation occurs. Also, wages are constrained locally and it is desirous for new job creation to bring higher paying jobs. Numerous small startup companies are bringing higher paying jobs to the area.

During the recession student-teacher ratios were increased, in-migration changed, family relocation trends changed, and student enrollment increases (excluding Charter Schools) were modest. The majority of the growth was from students entering at the lower grades, reflective of the high birth rate to county residents prior to the recession. The last few years has realized a significant change in the demographics of the in-migration population to Greenville County. The change has resulted in less in-migration of people in age groups with student age children and more in the 55+ age groups. The age group identified as Millennials are delaying marriage and having children, further modifying trend analysis components for student generation.

GCS is in a position to respond to the rebounding economy as it occurs. Population age of in-migration and out-migration is a component of determining student future growth patterns. Recent data reflecting changes in in-migration, school choices, and actual students served require monitoring to realize changing population trends and appropriate adjustments in GCS's facility plans.

The area is a premiere location for high performance automotive research and production for companies across the globe and an educational hub for South Carolina. Moderate housing costs and quality schools all contribute to attracting many families to the area in positive economic environments. Approximately 23% of the population is under 17 years old. Roughly, 15% of the overall 2016 county population attends Greenville County Schools. In recent years, yearly births have declined following national trends, resulting in lower early grade populations which are matriculating through the grades. Initiatives at the state and local level, if successful, will generate jobs and continue student population growth. Economic development strategies and quality of life initiatives will promote an improved local economy supporting continued growth in long-term projections. Charter School expansions either by new schools or increasing enrollments would curtail GCS growth.

Racially, the county's demographic composition is changing. The county's Hispanic population continues to increase. Although the public school population tends to follow a similar pattern, it is more diverse than the county as a whole. Table 1-2 shows a comparison of the county and school district changes.

Population by Race and Ethnicity

Table 1-2

Race / Ethnicity	General Population			Student Population		
	2000	2010	2017	2000	2010	2017
African American	18.30%	17.80%	18.11%	28.03%	23.32%	22.61%
Asian	1.40%	1.90%	2.21%	1.52%	2.11%	2.42%
Hispanic	2.60%	8.10%	8.95%	3.57%	11.66%	14.67%
White	77.50%	70.30%	68.74%	66.87%	59.37%	54.68%
Other	0.02%	1.90%	1.99%	0.01%	3.54%	5.62%

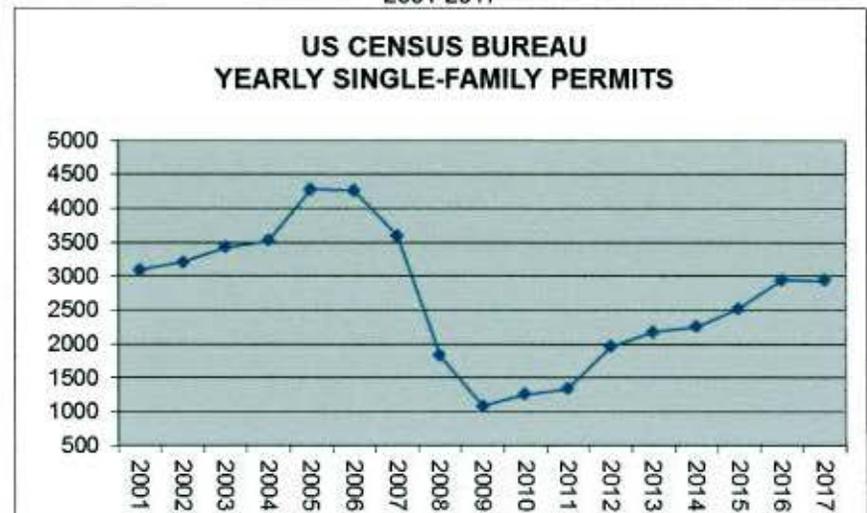
Housing Context

During the two years of 2005 and 2006, Greenville County issued over 4000 single-family building permits each year. This significantly declined during the economic downturn. Single-family building permits have risen steadily since 2009 with nearly 3,000 in 2016 and 2017 (see Table 1-3).

Table 1-3 shows the decline in single-family building permits during the economic downturn, and the ensuing years. Optimism of an improved economic condition with more job creation in the next 5 years results in a projection of continued student growth. An economic downturn could curtail student population growth.

Table 1-3

UNITED STATES CENSUS BUREAU YEARLY SINGLE-FAMILY PERMITS 2001-2017



Source: U.S. Census Bureau

The District regularly monitors and analyzes all new residential development for potential impact on the neighborhood schools. Recently lots are widespread, thus dispersing student growth. New subdivisions are coming on line and older neighborhoods are regenerating resulting in more students being served from these areas.

Growth in and around the City of Greenville has increased significantly as urban living has increased in popularity. The vibrant city atmosphere has contributed to its popularity and the in-migration of the 18-24 age group in recent years as well as the 25-34 age group, referred to as millennials. The two age groups delay having children. Various studies as well as reports from moving companies such as U-Haul and United Moving Lines which track inbound and outbound moves show South Carolina as an increasingly popular destination. United Van Lines listed South Carolina as the #7 inbound state for inbound moves in 2017 and relocated people from 41 states into Greenville County in 2017. U-Haul listed South Carolina as the #4 growth state for 2017. Arriving trucks accounted for 50.5% of all one-way U-Haul traffic in South Carolina.

Various reasons make SC a premier destination such as warmer climate, lower income taxes, lower housing prices but also technology has afforded employees to work from remote locations and not be tied to a brick and mortar office. Specific attention has been afforded to Greenville by various accolades including:

- *Men's Journal Magazine*, one of the "Best Places to Live 2016"
- *Thrillist*, May 6, 2016 – Greenville #13 of "The 25 Best Small US Cities to Spend the Weekend".
- *U.S. News & World Report*, August 30, 2016 – Greenville on list of "10 Underrated Cities for Art Lovers"
- *Wall Street Journal*, October 26, 2016 – Greenville #7 on list of 10 "Buzzy, Newly Accessible Destinations, From the Canadian Arctic to Chendgu, China" (Greenville was only site in America)
- *Money Magazine*, January 3, 2017 - Listed as 1 of 12 great places to go in 2017
- *New York Times*, January 4, 2017 - Number 12 on list of "52 Places to Go in 2017"
- *Today Show, Conde Nast Traveler*, March 21, 2017, Greenville on list of "5 Top Places in the US to Retire"

- *Cheapism*, April 24, 2017, Falls Park on list of "32 of the Best Urban Parks in America"
- *Wallethub*, May 17, 2017 – Greenville Area #21 on list of 80 "2017's Best Summer Vacation Spots"
- *Conde Nast Traveler*, October 17, 2017 - Greenville #3 on list of 15 "The Best Small Cities in the U.S."
- *Travel and Leisure Magazine*, October 20, 2017, Greenville #3 on list of 20 "These are America's Friendliest Cities"
- *Growella*, December 14, 2017, Greenville #9 on list of 100 "Best Cities for Millennials in the U.S."
- *SmartAsset*, December 8, 2017, Greenville Metro Area #2 on list of "25 Best Places to Work in Manufacturing – 2017 Edition"
- *Matador Network*, 2017, Greenville on list of "The 24 Coolest Towns in the USA – 2017"
- *TripAdvisor*, January 2018, Greenville #8 on the U.S. List of 10 Top Destinations on the Rise
- *Washington Post*, January 2018, Greenville #12 on list of "You're Going Where?"
- Numerous annual and frequent events such as Artisphere, Euphoria, Fall for Greenville, Greenville Scottish Games, Various Farmer's Markets, Holiday festivities/lights, sporting venues, performing arts with live music, Greenville Symphony Orchestra, numerous live theatre venues

Residential developments require close monitoring to gauge the timing and potential impact. When warranted, the District meets with developers and the local governments to discuss development phasing, timing, and marketing to better determine impact on the school system and to develop strategies to address such impact. Verdae on the eastern side of the City of Greenville will have over 700 single-family homes plus several multi-family complexes. Verdae has recently announced plans for another multi-family complex, and continues the development of single-family houses through various stages along with numerous commercial, office and related uses.

Map 1-2 shows the many subdivisions with over 50 single family lots in the District to be constructed. Close monitoring of this residential construction is ongoing. Additionally, numerous new multi-family complexes have been constructed and many are planned (Map 1-3). The majority are in or around the City of Greenville. The change in demographics of the in-migration population may be contributing to this change. A large increase of in-migration in the 18-24 and 25-34 age groups is represented in urban residential growth. Many announcements since 2014 show the trend continuing in the City of Greenville. Many Millennials, population born 1980 through mid-2000's, desire to live in urban settings. If local unemployment continues to decline or stabilize, the housing market will benefit in Greenville. However, trends also indicate increased "empty nesters" as purchasers of new homes. Greenville has been recognized by national outlets as a great place to retire. Recent in-migration shows an increase in the 55+ age group. New housing in some areas has not generated the student yields of previous years.

Table 1-4 shows in-migration rates of selected South Carolina counties based on information from the American Community Survey (ACS) and compiled by Planning and Demographics. This information depicts the number of people who have moved to the selected counties from either another state in the United States or another county within South Carolina. This data does not include residents who have moved here from abroad or new births. The breakdown of this data is vital to assist Planning and Demographics with the age ranges of the in-migration population to Greenville County and also how Greenville County's in-migration totals and age ranges compare to other similar selected counties in the state. As noted above, Greenville County has seen a rise in the in-migration of the 18-24 and 25-34 year old population in past years which, the planning staff also believes the entrepreneurial and technological job market taking shape in Greenville is strongly supported by Millennials who fall directly into this age category. Future in-migration into Greenville County will be dependent on many variables discussed in this chapter and will continue to be analyzed.

Table 1-4

Berkeley					Charleston					Spartanburg				
AGE	2007	2010	2015	2016	AGE	2007	2010	2015	2016	AGE	2007	2010	2015	2016
1 to 4	1724	1370	1191	1154	1 to 4	1292	1601	1644	1138	1 to 4	817	496	593	1576
5 to 17	2923	3289	2459	2839	5 to 17	3321	1793	3044	1657	5 to 17	2256	2204	2579	2678
18 to 24	3972	6438	4314	6406	18 to 24	7913	8257	6347	6273	18 to 24	3224	2546	3552	2975
25 to 34	4228	4062	4473	3982	25 to 34	4755	6849	8429	7282	25 to 34	3047	2178	3233	4423
35 to 54	2774	5251	4032	3421	35 to 54	4915	5560	5733	5173	35 to 54	4192	1029	3695	4423
55+	639	1907	2078	3151	55+	4017	1906	2748	3078	55+	1463	1363	1387	2186
TOTAL	16260	22317	18547	20913	TOTAL	26213	29066	27945	27781	TOTAL	14999	11816	15085	18306
2016 TOTAL POPULATION: 210,898					2016 TOTAL POPULATION: 396,484					2016 TOTAL POPULATION: 301,463				
Greenville														
AGE	2007	2010	2015	2016										
1 to 4	2342	2687	1673	872						Red = Less than other years				
5 to 17	3426	4059	3357	4290										
18 to 24	6373	5630	4784	5354						Blue = More than other years				
25 to 34	5592	6316	6023	7102										
35 to 54	8134	6518	6558	5797										
55+	3582	3832	4312	5081										
TOTAL	29449	29042	26683	29065										
2016 TOTAL POPULATION: 498,766														

The home foreclosures depicted in Table 1-5 have resulted in a large number of families being displaced affecting school enrollments and demographics. Some of these foreclosed houses have been purchased by homebuyers. Speculators have also purchased some of these houses. The decline in foreclosures reflects the strong local job market.

Greenville County

Single-Family Home Foreclosures

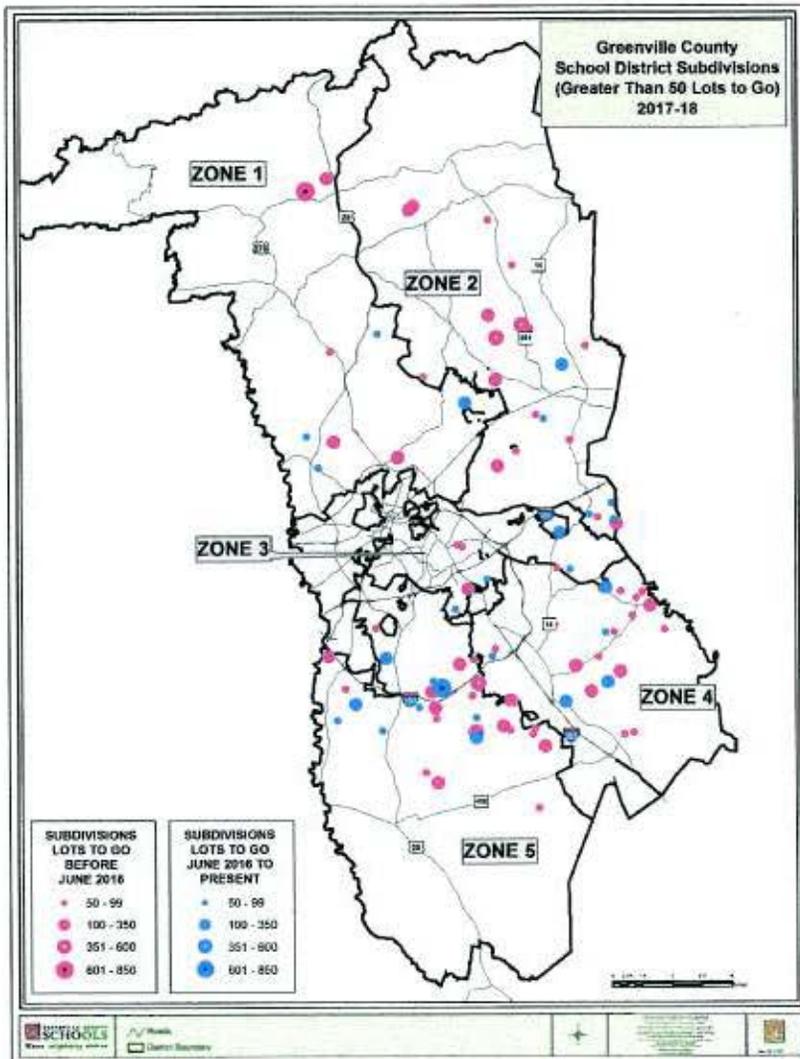
Table 1-5

2008	2,540
2009	4,912
2010	5,367
2011	3,777
2012	4,761
2013	3,865
2014	2,812
2015	2,615
2016	2,462
2017	1,929

Since 2014, residential housing sales have improved and in some areas of the county, home values are increasing. Additionally, national rental companies continue purchasing houses in the Greenville area targeting those people who move frequently with their jobs or people challenged in securing a mortgage down payment for a home.

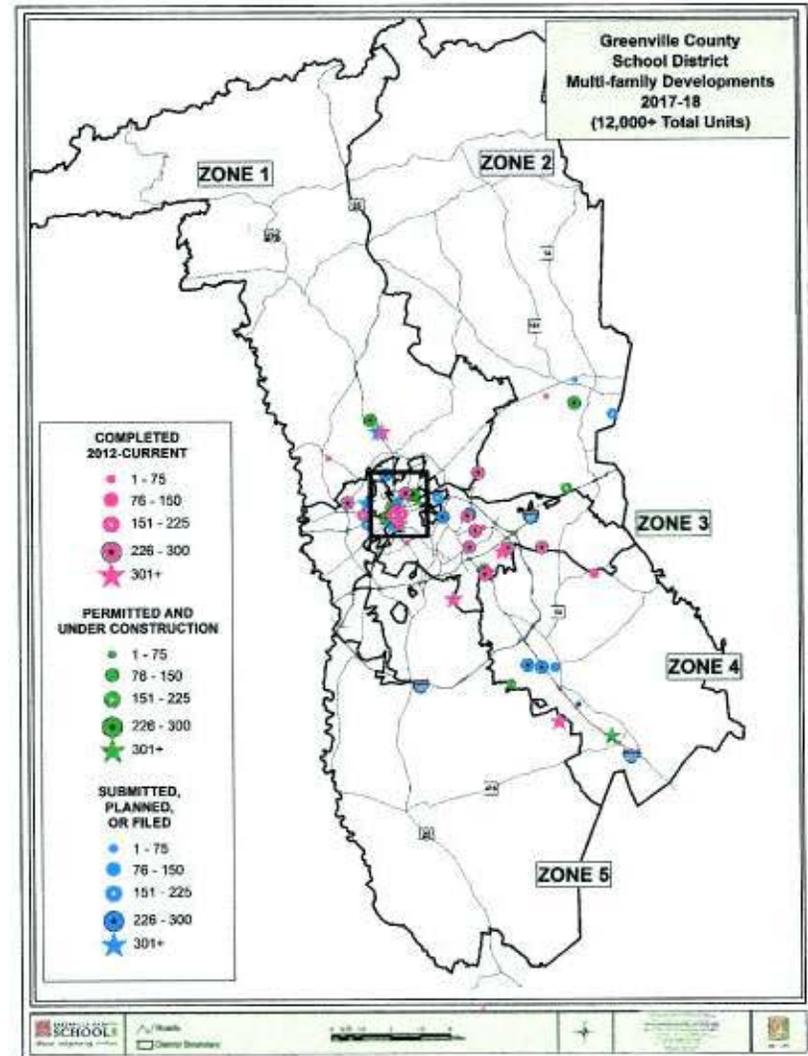
Map 1-2 shows planning zones with subdivisions that have 50 or more lots remaining to be developed.

Map 1-2



Map 1-3 shows multi-family developments submitted, planned or filed, permitted and under construction, or completed since 2012.

Map 1-3



ECONOMIC CONTEXT

Greenville County and the Upstate is a strong economic corridor. Companies such as BMW, Michelin, Lockheed Martin, Fluor, Scan Source, TD Bank and Kemet have settled here and many continue to expand. General Electric has a large presence here; however, there have been recent layoffs amid overall GE challenges.

Clemson University is expected to play a key role in the economic growth of the area over the next ten to twenty years. Clemson, in partnership with BMW, Michelin, IBM, Microsoft, and the Society for Automotive Engineers (SAE), is developing the Clemson University International Center for Automotive Research, also known as CU-ICAR. CU-ICAR is a 250-acre campus with 5 Technology Neighborhood developments planned. At this time, Neighborhood 1 has been developed and is comprised of: CU-ICAR AutoPark and Innovation Place, BMW Information Technology Research Center, Carroll A. Campbell, Jr. Graduate Engineering Center, Koyo JTEKT, and Center for Emerging Technologies (CET). The sixth and final building called One Research Drive located next to the BMW Information Technology Resource Center opened in October 2016. Development of this research park will have a profound impact on Greenville County for many years. At this time, 770 on site jobs have been created, 720 announced, along with almost 1,000 jobs in the immediate area attributed in part to CU-ICAR such as Hubbell Lighting and Bon Secours St. Francis Health System. The Greenville Technical College Center for Manufacturing Innovation (CMI) opened for classes at the Millennium Campus adjacent to CU-ICAR in the fall of 2016. This 100,000 sq. ft. facility is a collaboration between Clemson and Greenville Technical College, working closely with Greenville County Schools for workforce development. The CMI is projected to have a large impact on workforce development in the area and will assist students in obtaining well-paying jobs. The average salary of manufacturing workers with an Associate's Degree in Greenville County is \$63,936 per the CMI.

In November 2017, Greenville Technical College announced it is launching an Advanced Manufacturing Academy at CMI in partnership with Greenville County Schools. Financial support from Bosch Rexroth will allow Greenville County high school seniors to take a series of interesting classes and get a head start on college coursework. Students will earn college credit toward an advanced manufacturing associate degree while working with cutting-edge technologies. In February 2018, the Clemson University Vehicle Assembly Center

(VAC) opened in the CMI. The center will allow researchers, students, and manufacturers to work side by side developing and learning advanced manufacturing techniques. The 4,000 square foot center will have a full vehicle assembly line. The VAC is a collaboration of CU-ICAR, Greenville Technical College, BMW Manufacturing and Siemens.

Adjoining CU-ICAR is the Dr. Phinnize J. Fisher Middle School which opened in August 2014. Many of the businesses in CU-ICAR and the surrounding area collaborate with Fisher Middle offering mentoring and resources.

Clemson has located their MBA program and Professional Advancement/Continuing Education and Small Business Center in the new One Place Development in downtown Greenville. These and other offices will facilitate interaction with local firms and entrepreneurs. Several technology start-up companies have been formed due to the collaboration of businesses and mentors with the Clemson Program in the One Building.

In February 2016, USC Upstate announced plans to open a downtown Greenville location at 501 River Street and is waiting on approval for a program in Urban and Regional Studies which will act as a feeder program for nearby Clemson graduate programs. No classes are being held there at this time.

In addition, Greenville Technical College, Bob Jones University, Brown Mackie College, North Greenville University, Southern Wesleyan University, Strayer University, Webster University, and Furman University are all located within Greenville County. The University Center, a consortium of Anderson University, Clemson, Furman, Greenville Tech, South Carolina State, University of South Carolina, the University of South Carolina-Upstate and as of 2018 Converse College all have an extended campus in Greenville at the former McAlister Square Mall. Greenville County Schools operates an Early College Program on the University Center campus.

The Greenville Health System (GHS) is a member of the University Health System Consortium which allows the hospital to take part in leading edge research and protocols to share and gain knowledge with 97 of the nation's leading academic medical centers. The Greenville Health System and the University of South Carolina joined in opening a

School of Medicine on the hospital's main campus in August 2012. The School of Medicine helps offset the projected medical doctor shortage in coming years, as well as provide the resource for medical research. During 2013 the Greenville Health System was officially designated an academic health center bringing together Clemson, Furman and University of South Carolina for research in health care delivery.

Medical and research center growth has helped spawn additional growth in the health related sector. In January 2017 Clemson University and GHS announced the construction of a new nursing school to be located on GHS's Grove Road Campus next to the USC School of Medicine. The 4 story building is under construction with plans to open in the fall of 2018. This should significantly assist with the growing nursing shortage.

Clemson University has a bioengineering lab at the Greenville Health System University Medical Center's Patewood Campus. The site will allow research with the goal of increased patents and Upstate business startups in the health care industry.

The impact of the economic downturn on the Upstate has resulted in a change in population demographics. As the economy improves, careful analysis of the impact must be monitored. Downtown Greenville has experienced new construction of office and retail spaces along with residential construction setting the stage for empty nesters and Millennials to live there.

The Swamp Rabbit Trail has continued to grow in popularity and use by residents of the Upstate. This has provided numerous economic opportunities along the trail from Greenville to Travelers Rest. There are plans for an expansion along the Laurens Road Corridor, which is expected to increase and complement commercial and residential activity in the area. The trail has also drawn interest by various areas to connect to the trail such as in the Taylors, Greer and Mauldin areas. The trail serves as a spine which will have many spurs leading to parks, communities, shopping and other destinations. One example of the trail playing a significant role in proposed development is in Mauldin. The developer plans an urban village along I-385 with at least 1 million square feet of new apartments, offices, shopping, dining, lodging and entertainment. The site is bordered by I-385, Holland Road, Bridges Road, and a Greenville Health System distribution center. The Charter Communications building currently on site would be incorporated as well. The developer with the help of Mauldin intends to connect the

development to the Swamp Rabbit Trail via a pedestrian bridge over I-385. The developer intends to develop the entire village over a period of 18 months and will break ground once all elements are in place which will possibly be 2020.

With the opening of the SC Ports Authority Inland Port in October 2013 the Upstate area is attracting more business involved in importing and exporting goods based on statements by the SC Economic Developers Association. The Inland Port has greatly exceeded expectations. The State Ports Authority will invest \$5.3 million to upgrade the inland port. Plans have been submitted to the City of Greer in 2017 for various expansions/additions to the port. BMW and Michelin are major users of the port, as well as, various other companies. Though located in Spartanburg County a portion is within the boundaries of GCS. The Inland Port is projected to continue to impact all of the Upstate and Southeastern United States. A record 1.21 million containers came through the port authority's various terminals over the last year with 10 percent of those in the Inland Port.

The future of South Carolina has many bright spots. The opening of Boeing Aircraft Company's new Charleston plant in 2011 has had a ripple effect, generating economic activity across the state, as evidenced by the Toray plant, manufacturer of carbon fiber parts for the aerospace industry, under construction in Spartanburg County. The southeast is the fastest growing aerospace area in the country and SC is located in the middle of this. The aerospace industry is an important and growing sector in SC and the Upstate economy with more than 38% of the 400 aerospace companies in SC located in the Upstate. Greenville County is home to some large aerospace related firms such as General Electric, Michelin, Lockheed Martin, Honeywell Aerospace and Cytek Carbon Fibers. A recent study released in 2016 shows the annual economic impact of the state's aerospace industry has grown to \$19 billion, an increase of \$2 billion since last measured in 2014. The average aerospace job in SC pays \$70,000 annually. Continued expansions such as the F-16 proposed production line in Greenville by Lockheed Martin assure a continued stance in the industry by Greenville and the Upstate with more potential on the horizon.

Greenville County and the Upstate are also home to numerous large manufacturing companies. Bosch Rexroth's Fountain Inn Plant at Southchase Industrial Park is home to America's largest hydraulics production facility. It covers over 100 acres and employs over 700. After a major expansion in 2013 it was announced in 2016 an

investment of \$5 million over the next few years to expand the plant will take place. The facility celebrated being named *Assembly* magazine's plant of the year for 2016. The award recognizes the top manufacturing plant in the country. This is the first time a Bosch plant anywhere has received the award, and the first time a facility in the southeast has won. Similar to the aerospace industry, the automotive industry is also very important to SC and especially the Upstate with the presence of such a strong automotive cluster. BMW located in the area in the early 1990's and continues to expand and hire employees. BMW has attracted more than 300 companies including tire companies and various other support suppliers. BMW currently employs over 9,000 and recently announced they will add 1,000 jobs by 2021 and invest \$600 million in its Spartanburg plant to bring the workforce well over 10,000 people.

The automotive cluster in SC continues to grow with recent announcements across the state such as Volvo in Berkeley County and Mercedes Benz in Charleston County. These are major employers as proven by BMW in the Upstate. Announcements such as these are important not only for the immediate area and economy but for SC as a whole. The automotive clusters continue to grow which brings more jobs along with more money to the overall well-being of the state as well as more assurances that jobs will remain in place due to the cluster effect.

ZF Transmissions is housed in the Owings Industrial Park in Laurens County and has been the largest new employer in the area. A portion of the facility is in GCS's boundary. ZF currently employs approximately 2,500. Proterra located in Greenville County builds zero-emission buses. Greenville lost their headquarters in 2015 but the manufacturing of buses continues with approximately 200 employees and plans to hire 50 additional employees. In fact, Clemson Area Transit (CATbus) ordered 10 all-electric buses from Proterra in 2017 as well as the required infrastructure.

Spartanburg County has seen numerous announcements related to the automotive sector. While the exact locations of the new businesses are not in the GCS boundaries they are close enough for GCS to be affected due to the high quality education system provided by GCS.

Some of the announcements are the Michelin Distribution Center just 2 miles outside of Greenville County with 350 jobs and Magna International in Moore with 480 jobs.

There have been numerous announcements of new businesses or expansions of existing businesses in and around Greenville County over the last three years.

Some of those are:

Company	Jobs
Alfmeir Friedrichs & Rath LLC - Automotive Supply Manufacturing	50
Aloft Hotel - Hotel	65
Anyone Home, Inc. - Customer Service/Property Management	570
AVX - Electronic Component Manufacturing	102
Blue Eye Soft Corporation -Information Technology Solutions	120
BMW Manufacturing* - Auto Manufacturing	1000
bo parts GmbH - Tier one and two auto supplier	100
Bonafide Kayaks - Kayak Manufacturing	76
Caristrap International - Industrial Strapping Manufacturing	100
ChartSpan Medical Technologies, Inc. - Healthcare Data Company	300
Edward Jones - Financial	100
Embassy Suites Riverplace - Hotel/Restaurant/Bar	180
Home2 Suites by Hilton - Hotel	50
House of Raeford - Processing	100
JSI Store Fixtures - Supermarket Display Manufacturing	97
Lockheed Martin - Aerospace Manufacturing (F-16)	250
Magna International - Automotive Supply Manufacturing	480*
Metromont Corporation - Precast Concrete Materials Manufacturing	100
Meyer Tool, Inc. - Aerospace and Power Industry Machining	57
Michelin Distribution - Distribution	350*
Moore's Food Resources - All Natural Foods Provider	182

Company	Jobs
Morley - Customer Service Call Center	270
MP Husky - Cable Tray and Bus Manufacturing	50
NEXT Innovation, Main, Manufacturing - Software Design, Technical, Manufacturing, etc.	633**
PL Developments - Manufacturer of Health Care Products	450
Proper Polymers - Automotive Supply Manufacturing	87
Office of Disability and Adjudication and Review (Mauldin) - Federal Offices	50
Real Page - Real Estate Services Provider/Call Center	150
Response Packaging - Returnable Packaging Manufacturing	100
Softbox Systems - Temperature-Control Packaging Provider	70
Sun City Produce - Distribution	81
Total Quality Logistics - Logistics Provider	75
Tower International - Automotive Supply Manufacturing	140
Ushers Machine & Tool - Manufacturing of OEM for Gas Turbines	50
UST Logistical Systems - Third-Party Delivery Company	50
Utility Partners - Customer Care Center	426
Verizon Wireless - Customer Service and Telesales	260
* - Not in GCS Boundary	
** - Direct and Indirect jobs under NEXT umbrella	

Greenville County Schools added 130 positions in 2017-18. GCS remains one of the major employers in the area with approximately 10,000 employees.

Though some of the job creation announcements during the last few years will take several years to be fully realized, they are positive signs of economic growth for the area.

One of the key groups who help to attract new business and retain existing business is the Greenville Area Development Corporation (GADC). GCS works closely with GADC to continue to monitor job growth which affects the student population. Although the Upstate is a

significant manufacturing hub, a reliance on manufacturing poses a future economic risk and targeting additional industries will assist in diversifying the economy, which is projected to attract jobs appealing to a wide range of population ages. The GADC target industries are: advanced materials, automotive, aviation/aerospace, biosciences, data centers, distribution and logistics, headquarters/office/R&D. GADC touts the local skilled labor force and initiatives leading to educating perspective employees based on collaboration efforts of various educational entities as a method to attract employers to the area. Greenville County in collaboration with GADC has even amended some regulations in order to better accommodate some of the aforementioned businesses. In January 2018, GADC announced the creation of a new jobs website intended to connect talented job seekers with the companies GADC has assisted in expanding or relocating in Greenville County.

Some challenges the area faces concerning job creation/retention are wages and income which have become more competitive across the nation and state. SC wage growth is consistently below the national average. Greenville County has experienced an increase in leisure and hospitality jobs due to more consumer spending, tourism and retiree locations, however, these jobs typically do not pay high wages. In fact, the Greenville MSA has the lowest average hourly earnings in SC compared to Charleston and Columbia. Per VisitGreenvilleSC, there are over 5 million annual visitors to Greenville County. Visitors travel expenditures benefit area residents with \$264 million in wages and salaries and 10,300 jobs. Greenville also is the lowest in average weekly earnings when compared to Charleston, Columbia, and Spartanburg. Many of the measures, regulation amendments, initiatives, and target industries, if successful, mentioned in this plan will assist in the continuation of job creation/retention, and wage growth in Greenville County and the Upstate.

Some positive measures in place that help attract new businesses to the area are things that aren't as tangible such as air quality. Based on the new standards by the Environmental Protection Agency (EPA) the Upstate region is currently in compliance. This ensures that the Upstate

continues to maintain cleaner air for the health of all residents and it is important because manufacturers and needed transportation projects in the region will not be subject to additional regulations and costs. GCS helps with air quality by various schools participating in the Breathe Better (B2) program or the Anti-Idling Program.

Prospective businesses also like to see areas with site ready locations. Other areas in the state and across the nation have seen great success in attracting large industry/companies by having infrastructure, certified sites, or speculative buildings in place. Greenville County is now seeing the construction of some speculative buildings and similar developments to help attract new companies. One of two structures developed at the White Horse Industrial Center has been leased to Colgate-Palmolive as a distribution center. 78,000 sq. ft. of the second 234,000 sq. ft. warehouse building is the home of JSI Store Fixtures. 156,000 sq. ft. is currently available for lease. A new 331,850 sq. ft. speculative building has been completed at Augusta Grove Business Park and is currently being marketed. The park formerly known as the Matrix Technology Park is a 1,100 acre park on Augusta Road at the Southern Connector (I-185) with convenient access to I-85. It is already home to businesses such as KI Logistics, JTEKT, Magna Industries, and Sun City Produce. It was acquired by private investors in 2016 from Greenville County with the Greenville County Business Park Public Facilities Corporation remaining as a minority partner. There are some additional developments and potential opportunities in the spec building and build-to-suit arena such as the Park West Commerce Park located along I-185 near I-85. There are also plans to develop some other sites in the County such as near SouthChase Industrial Park and in the Mauldin area.

There are many other reasons for companies and people to move to the area but some of the accolades for the quality of life and other reasons as mentioned previously help garner more attention to Greenville. South Carolina ranks as the seventh-best business climate in the country according to the 2016 rankings by the magazine Site Selection. South Carolina has also been named 2017 state of the year by Business Facilities magazine. Greenville continues to grow in the

entrepreneurial, startup, technological and small business categories. Greenville is home to numerous venues for technology and innovation including the new NEXT Manufacturing Center and NEXT on Main, an extension of the NEXT Innovation Center. NEXT on Main which is an extension of the NEXT Innovation Center opened on the 3rd floor of the Bank of America Building at 101 N Main Street in 2015 with 20,000 sq. ft. of space all but two of the office suites are currently occupied. The NEXT Manufacturing Center at 400 Birnie Street contains 36,000 sq. ft. and Phase I opened in March 2016 with 3 tenants and now houses 5 tenants including Beringer Aero USA. Phase II currently houses 2 tenants and the remainder is under construction/renovation. The Manufacturing Center could serve as career training for GCS students. Companies under the NEXT umbrella created 633 jobs and employed more than 1,000 people in 2015 according to an in-house economic impact study. NEXT companies created 253 new full-time jobs through direct employment and adds an additional 380 jobs through indirect activity such as professional service, construction, and retail.

As technology related companies continue to start and locate here, an increase in higher paying jobs should result. Also, people identified as Millennials are attracted to vibrant downtowns and the type of jobs generated by places like the NEXT Innovation Center.

The Greenville-based programming school Iron Yard ceased operations in 2017. However, Carolina Code School is set to open in early 2018 and will offer full-time software development courses. The program will launch in partnership with Greenville Chamber of Commerce's NEXT program and courses will be held at the NEXT Innovation Center.

There are currently 19 qualified businesses registered with the Secretary of State under the High Growth Small Business Job Creation Act in Greenville County. Businesses are in information technology, software development, research and development and similar industries.

GCS works cooperatively with chamber members, government leaders, economic groups, local task forces, and the private sector to continue the recruitment of new industry and to create jobs.

As the economy improves, unemployment, housing, in-migration, and job creation will continue to impact Greenville County Schools. The yearly Long Range Facilities Plan allows a prompt response to changing economic and housing trends.

PLANNING CONTEXT

Greenville County is expected to begin working on a new Comprehensive Plan in the next year to be adopted in 2019. This plan helps guide the future development not only for Greenville County Council but also for the many public service providers within the county including Greenville County Schools.

Most of the municipalities within the county are in the process of working on a new comprehensive plan with Travelers Rest planning to adopt in 2018 and the other municipalities will look for adoption within the next 2 years. The municipalities and county have tried to coordinate the timing of their comprehensive plans as best as possible to assure consistent planning. Greenville County School's staff serve often on committees and sub-committees of these entities. This involvement has provided greater collaboration among all these organizations on future land use and infrastructure planning. The County's Comprehensive Plan includes Priority Investment Areas that are collaboratively targeted as growth and non-growth areas.

The Priority Investment Act of 2007 requires adjacent relevant jurisdictions to coordinate efforts in updating their local Comprehensive Plans. The intent is for the various service providers to develop plans for their respective infrastructures. An element of this act analyzes the likely federal, state, and local funds available for public infrastructure and facilities during the next ten years. The success of the project will improve growth planning for all service providers and result in a continued high quality of life in the county. The targeted Priority Investment Areas could result in changes in projected growth patterns resulting in adjustments needed in planning school facility locations or expansion of existing facilities.

Transportation plays a vital role in planning and the County adopted the most recent update to the Long Range Transportation Plan (LRTP) called Horizon 2040. The Metropolitan Planning Organization (MPO) known as Greenville-Pickens Area Transportation Study (GPATS) is responsible for reviewing the LRTP every 5 years and updating it every 10 years. Greenville County Schools serves on the GPATS Study Team and attends the policy committee meetings as well to stay apprised of various transportation issues.

Another important mode of transportation is public transit. Greenlink is Greenville's public transit system, operated by the City of Greenville, under contract to Greenville Transit Authority (GTA). They recently completed a Comprehensive Operations Analysis and are about to begin the five-year Transit Development Plan (TDP).

ENROLLMENT HISTORY AND IMPLICATIONS

The demographic and economic profile of Greenville County provides a basis for projecting school enrollments and future capacity demand. In addition to the impact of new housing, two historical factors impact projections – annual births and student survivorship ratios; however, recent development trends and changing population demographics are impacting growth along with movement into and out of the area.

Overall student growth for 2017-18 was about 1.0 percent, not including the GCS charter school. GCS's kindergarten (5K) through twelfth grade population growth was approximately 1.1 percent.

Births

During the 1990's births to Greenville County residents averaged 4,916 per year. Since 2010, the births to residents have averaged 6,159 per year. However, as Table 1-6 illustrates, due to in-migration and full-day kindergarten implemented in the late 1990's, the percentage of students enrolled five years later in Greenville County Schools increased from a 79% survivorship in 1990 to 93% in 2008-09, but declined to 87% in 2013-14, and was 91.7% this school year. These recent fluctuations are reflective of the long term impacts of the recession and changing lifestyles of age demographics in Greenville.

For the 2017-18 school year, Greenville County Schools is serving 5,568 kindergarten students, a decrease of 65 kindergarten students from 2016-17. Projections over the next few years show little growth in kindergarten each year. These classes are smaller than the last few years and will have a long-term impact on GCS's student population as these smaller grades move through to the twelfth grade. With the economic downturn, births have declined but levels are still higher than seen in the mid 2000's. The United States birthrate fell to a record low after the recent recession, however a slight increase in births has been recently realized, and the Greenville County birthrate has followed the national trend.

County Births Compared to Kindergarten Classes Table 1-6

Birth Year	Births	Kindergarten (+5 years)	Survivorship %
1997	4,979	4,367	88
1998	5,071	4,555	90
1999	5,325	4,809	90
2000	5,369	4,893	91
2001	5,487	5,047	92
2002	5,441	5,082	93
2003	5,400	5,033	93
2004	5,694	5,293	93
2005	5,850	5,388	92
2006	6,021	5,559	92
2007	6,485	5,846	90
2008	6,749	5,873	87
2009	6,523	5,925	91
2010	6,073	5,502	91
2011	6,090	5,633	93
2012	6,075	5,568	92
2013	6,028	5,515*	92
2014	6,150	5,643*	92
2015	6,318	5,780*	92
2016	6,157	5,692*	93
2017	6,339	5,715*	90

* Projected Greenville County Schools

Internal Growth Patterns

As new people have moved into the county, more children are born, and more students enroll in kindergarten, the overall enrollment in the school system begins to show 'internal' growth patterns. This growth is unrelated to the current conditions and is more of an 'echo' of prior growth years.

For example, Table 1-7 shows the impact incoming 1st grade versus outgoing 5th grade and vice versa. As GCS prepares future enrollment projections it is important to understand that enrollment at the elementary schools is projected to vary slightly while remaining fairly consistent in the coming years. As larger numbers of students continue to move through the lower grades and the students from the lower birth years enter school, a decline is anticipated and is reflected in 2021-22.

Table 1-7

	Outgoing 5 th	Incoming 1 st	Dif
2004	4954		
2005	4902	5326	372
2006	4922	5575	673
2007	5211	5553	631
2008	5381	5587	376
2009	5388	5433	52
2010	5569	5676	288
2011	5430	5773	204
2012	5413	5922	492
2013	5350	6194	781
2014	5501	6115	765
2015	5629	6192	691
2016	5860	5824	195
2017	6172	5938	78
2018	6265	5877	(295)
2019	6250	5839	(426)
2020	5981	5966	(284)
2021	6057	6100	119
2022	6092	6001	(56)

For the last few school years, GCS has experienced an increase in students in grades two through five from the previous school year's grades one through four. However, GCS's kindergarten enrollment for the last 3 years is significantly smaller than the previous years. As these students move through the grades it will impact each level. Projections based on births 5 years earlier showed that kindergarten enrollments are leveling for the next few years. This year's 5K class will graduate in 2030. Careful monitoring of the demographics of the county and GCS student population is ongoing to ensure appropriate response to demographic changes. This includes staffing allocations, space requirements and student boundary adjustments.

Greenville County School's student population is highly transient. The following statistics show the student movement.

- GCS Students November 2016 (5K-11th) – November 2017 living at a different address 8,227
- Number of students attending GCS November 2016 (5K-11th) – not in system in November 2017 6,391
- Number of students (1st – 12th) currently attending GCS not attending GCS in November 2016 5,895

GCS's transient student population further emphasizes the need to review student projections frequently. This year saw more students moving away from Greenville County Schools and less students move in to the district schools. This will have to be carefully monitored in the next few years as this could impact projections at all grade levels.

Millennials

Millennials, roughly defined as being born from 1980 to the mid 2000's, are anticipated to impact many demographic trends. Characteristics include, but are not limited to, delayed marriage, begin families later in life, many are very well educated, like to live in urban settings, delayed home ownership, may have high college debt, and grew up with technology.

The Council of Economic Advisors issued a report in October 2014 outlining the 15 Economic Facts about Millennials. Their characteristics will influence birth trends, school location needs, school programming, community transportation offerings, and so forth. This is the Baby Boomlet generation and is projected to be about 75% of the U.S. workforce by 2025. This group will impact projections and facility needs in the future.

Program Changes

Program changes are a fundamental component influencing future enrollment patterns. For example, these projections reflect expectations about increasing graduation rates but do not reflect increases to early childhood programs.

On a school-by-school basis, future enrollment patterns can be affected by student choices. They affect who is served, where, and how. Changes to the district choice program including magnet academies, career centers, or charter schools can all have a profound impact at an individual school.

This impact of program initiatives on facilities planning is discussed in Chapter 3.

FISCAL CONSIDERATIONS

Greenville County Schools, with the opening of A.J. Whittenberg, completed its aggressive school construction program to provide "equal" school facilities for all students and to accommodate a growing student population. The construction program addressed 70 schools or 80 percent of all schools in GCS at a cost of over one billion dollars. Schools not included in this plan were renovated or built in the years just prior to development of this construction program under the 1993 Facilities Plan. GCS is now moving forward with needed additions and new buildings as outlined in Chapter 4. The newest, Dr. Phinnize J. Fisher Middle School, opened in August, 2014. A 400 seat addition to J.L. Mann High Academy and a four room addition at Sara Collins Elementary were both occupied in 2017. Rudolph Gordon Elementary is being converted to a K-8 school with significant additional capacity. Rudolph Gordon will serve grades K-6 in 2018-19 and add a grade yearly through eighth.

The benefits to the District of the BEST building program were many. The Greenville County School District Board of Trustees adopted a conservative financing plan for BEST to build and modernize its schools, while minimizing the impact on taxpayers. The BEST bonds will all be retired by December 2028. The current debt service millage for GCS is 52.1 mills.

As the District moves forward to the next decade, funding for capital needs continues to be important. GCS will need to develop a funding strategy that will maintain a steady stream of funds to sustain its capital needs. These capital needs will be in the form of preventative maintenance, new capacity for growth, technology initiatives, program changes, renovations and small capital projects to address program needs such as pre-kindergarten expansion, special education, technology and the legislative requirements of the Education and Economic Development Act (EEDA).

CONCLUSION

Greenville County Schools cannot control many of the influences in its planning environment – the location and pace of new housing, the strength of the economy, and the growth in alternative educational choices. It has only minimal influence over the financial resources available to respond to enrollment growth, programmatic changes, and aging facilities. However, GCS is committed to maintaining clear planning goals, coordinating with county and city partners, and ensuring a transparent process for continued long-range facilities planning.

Chapter 2

Chapter 2

PLANNING PROCESS AND COMPONENTS

INTRODUCTION

The Long Range Facilities Plan is the foundation of an annual planning process that allows GCS to effectively address changing enrollment patterns, development and growth, changing population demographics, and sustains the facility requirements of high quality educational programs. The components of this process are outlined below.

Major Steps in the Annual Planning Process include:

- Developing / revising, as required, the 5 year enrollment projections on a school-by-school basis
- Updating school facilities and program information, as warranted
- Comparing enrollment projections to available capacity
- Developing / confirming capital and non-capital solutions to meet facility needs due to growth, class-size reduction and programs
- Assessing the fiscal environment
- Adjusting the Five-Year LRFP, as required
- Finalizing and adopting the Capital Budget for the next fiscal year

ENROLLMENT FORECASTING

The forecasting of school enrollment requires the analysis of multiple data sources including birthrates, the demographic make-up of neighborhoods, local and regional economics and housing trends, program and boundary changes and an empirical understanding of individual communities.

School population projections are most reliable when enrollment is projected for large geographic areas for one or two years in the future; for example, the district-wide projections for next year are expected to have a higher degree of certainty than the fifth year estimates. Conversely, accuracy diminishes as the geographic area becomes smaller and the forecast is for more distant points in the future, thereby requiring adjustments in the latter years of the LRFP.

The Greenville County School District annually prepares or updates enrollment forecasts following a study of local government planning areas and school level trends. A history of each school's grade-by-grade enrollment is compiled and analyzed. This history reveals patterns in the "aging" or progression (less out-migration factors) of students from one grade to the next. These patterns are extrapolated to develop a school's basic forecast. This approach, termed the Cohort-Survivorship Model, is the most widely applied forecasting method for schools.

Enrollment projections for GCS are prepared in the Fall using the actual "official count day" membership information. The Cohort-Survivorship method "ages" students ahead through the grade levels and calculates a ratio based on a five year history. This ratio is then applied to future years.

However, the data yielded by the basic survivorship model is only the foundation for the enrollment projections. The model data must then be compared to projected county population growth associated with new housing starts, relocations within the District, other school choice options availability, county in-migration rates and population movement out of the county. Population projection data derived from the county's planning areas is proportionately matched to school attendance zone data to provide an indication of future growth patterns. The most difficult segment of the K-12 population to predict

is each year's kindergarten class. In order to project the kindergarten population for each year of the LRFP, statistical profiles of residential birth data are drawn, then matched to anticipated growth patterns and applied to individual schools.

Recognizing the uncertainty that surrounds long-term forecasts and to a lesser extent, near horizon projections, the District needs to annually review the enrollment projections for adjustments. Demographic shifts are expected in high growth counties like Greenville. Individual parent decisions regarding education venues for their children, including GCS's extensive school choice program, as well as other choice venues, impacts GCS's student population. Annual changes in school programs can also generate near-term facility needs. Staff works closely with school principals, GCS's academic division, GCS's operational departments, and local government planners to encourage an ongoing exchange of information that fosters proactive planning rather than reactive problem solving.

CAPACITY ANALYSIS

The Greenville County School District uses program capacity to determine how many students a school can accommodate at any given time within the permanent structure. Program capacity is driven by how a school is actually utilized. It is a product of the number of classrooms at a school, instructional delivery methods and the average number of students assigned to each room type.

Teaching stations are roughly defined as being 800 square feet or more with a teacher and students regularly assigned to the space. No capacity is assigned to small instructional spaces, collaboration spaces and specialized classrooms such as art, music, labs, and resource rooms in the elementary schools, and resource rooms in the middle and high schools.

Standard Class Sizes for 2017-18

Table 2-1

Program	Baseline	Federal RCS	State RCS	Title 1 Average
Kindergarten	26			
Grade 1*	21.5	18	20	17.2
Primary (2 nd – 3 rd)	21.5			18.2
Intermediate (4 th -5 th)	25.5			19.3
6 th -8 th	21			14.54
9 th -12 th	22			
Special Education	12			

* Funding sources are combined to target an average of a 20:1 staffing ratio.

Budget shortfalls required the District to raise class sizes after 2008 but class sizes were decreased for the 2011-12 year.

For 2017-18, GCS's budget maintained staffing levels to 2008-09 levels but allocations methodology was to provide all schools additional resources to address individualized school needs including non-staff needs. The addition of flexible baseline allocations to all schools has assisted in this area. 2017-18 Program Capacities were adjusted to reflect GCS's staffing ratios prior to budget shortfalls.

Prior to the economic downturn, GCS made several important programmatic changes that had a significant impact on capacity. The economic downturn negated some of this impact.

Economic Impact on Program for 2009-10 through 2017-18

- For the 2009-10 and 2010-11 school years, due to state funding reductions, Greenville County Schools had to increase the student/teacher ratios. For 2011-12, GCS was able to decrease class size slightly. One result of increased/decreased student/teacher ratios is an increase or decrease in program capacity at some schools. GCS weathered the state revenue reductions well, due to the sound financial management practices in place.
- Greenville County Schools strives to maintain class sizes to meet student needs as well as provide resources to address specific school non-staffing needs.

- Flex Fund Allocation – each school is allocated a specific amount of money which may be used to support the educational program at the school as determined by the principal. The uses across the district vary from educational supplies and technology to increased teacher allocations. The use of this allocation could affect the available space at a school.

OTHER PROGRAM CONSIDERATIONS

Although the local school is still the main focus of the District, there are a variety of traditional and non-traditional alternative educational environments in the District. Currently, over 37,000 K-12 students participate in special, alternative and supplemental education programs offered by Greenville County Schools and private schools. As Table 2-2 shows, these programs vary from centers for the highly gifted to programs for technical careers for high school students. The number of students served, where they are housed, and integration with the regular programs are all choices driven by District policies and budgets. Planning for these programs is an essential element to long range planning for school buildings. Special programs affect school capacities, enrollment and building designs.

Other Programs

Table 2-2

Program Name	Number of Students	Percentage of Students
Alternative Education	700*	1%
Career Tech Centers	1,368	
Gifted Programs	13,186	17.5%
Homebound	502	
Home Education/Private School	10,638	N/A
Special Education	11,338	15.1%

* Yearly total

**An additional 9,512 students are enrolled in high school Advanced Placement/Honors/IB courses.

Choice Process

The Greenville County School District offers a limited school choice program to its students. Table 2-3 shows the 2017-18 number of choice students.

Table 2-3

Level	# Students Exercising Choice
Elementary	6,091
Middle	2,809
High	2,552
Total	11,452

There are two main choice options available to the students, as described below.

Eleven magnet schools are available on the elementary, middle and high school levels. These schools have a special curriculum emphasis and the application is graded on academic history, discipline history, attendance history, and specific student interest in the field of study.

The other choice option available is the Change in Assignment Choice Request. The process for Change in Assignment Choice changed for the 2014-15 school year. As Greenville County School District's choice grew, there were increasing concerns about the safety of the schools' students and those participating in the process under a first come, first served basis. Research was conducted for other options, and various others were considered. The new process was a collaboration of input received, taking safety and equity for all into consideration. The new process requires the parent to go to the school being requested within a limited time window and complete an application, which will be run through a lottery. Available space at each school is determined by the Planning and Demographics Department and choice slots are determined by grade.

There are 11,452 students (16%) exercising choice in GCS. Table 2-3 shows the breakdown, by level, of students attending a school other than their homebased through GCS's limited school choice and Magnet Academy Program. Sterling School opened in 2008-09 as a total choice school. In addition, the Charles Towne Center gifted program is a part of the Sterling School. A.J. Whittenberg Elementary School of Engineering has a compact community attendance area, initially the school offered "priority choice" to students in the largest and/or overcrowded schools and others based on space availability. Since 2012-13 choice to the school has followed the same guidelines as other non-magnet schools. The school was the first total engineering elementary school in South Carolina.

Dr. Phinnize J. Fisher Middle School opened in 2014-15 with a small attendance area and "priority choice" to relieve the largest and most crowded middle schools. For the 2016-17 school year Dr. Phinnize J. Fisher Middle School accommodated students in 6th through 8th grades. This school operates with a STEAM (Science, Technology, Engineering, Arts, and Math) educational philosophy and was specifically designed to encompass this educational program.

GCS is committed to expanding school choice options for parents and students. GCS can control, through restrictions, the number of students exercising school choice at schools in anticipation of growth and where capacities are taxed.

Charter Schools

Table 2-4 delineates Langston Charter schools' 2017-18 enrollment and the maximum enrollment for their approved charter.

Table 2-4

Charter School	Grades Served	2017-18 Enrollment	Maximum Enrollment
Langston Charter Middle	6 – 8	455	618
Total		455	618

Greenville County Schools has a multi-faceted relationship with charter schools sponsored by the District. Greenville County Schools handbook is in accordance with the South Carolina Charter Schools Act. Charter schools, as defined by South Carolina law, are a public, non-religious, non-homebased, non-profit corporation forming a school that operates within a public school district or the South Carolina Public Charter School District (SCPCSD), but is accountable to the school district which grants its charter for those chartered by a local school board.

Other charter schools are located in the physical boundaries of Greenville County Schools that are sponsored by the SCPCSD. Several of these are online schools. Those in Greenville County having a physical location are shown in table 2-5.

Table 2-5

SCPCSD Charter School	Grades Served	2017-18 Enrollment	Maximum Enrollment
Brashier Middle College*	9-12	435	440
Green Charter School	5K- 10	755	1,000
Greenville Technical Charter High School**	9-12	431	440
Greer Middle College Charter*	9-12	431	445
LEAD Academy***	5K – 8	388	396
Legacy Early College*	5K-12	1,362	1,430
Meyer Center*	4K-2	70	100
NEXT Charter High School	9-12	231	1,200
Quest Charter School	4K-5	185	240
Total		4,246	5,397

Notes:

*Brashier Middle College Charter, Legacy Early College, Greer Middle College Charter and Meyer Center moved from oversight by GCS to the SCPCSD for the 2017-18 school year.

**Greenville Tech Charter High moved from oversight by GCS to the SCPCSD for the 2016-17 school year.

***LEAD Academy moved from oversight by GCS to the SCPCSD for the 2014-15 school year.

Quest Charter School will add one grade per year through 8th.

LEAD Academy added 5K-4th grade (now serves 5K-8th) and relocated to Mauldin Road for the 2015-16 school year. LEAD added about 150 students in 2017-18 and the additional students did impact GCS's student population, and has a new building on site to accommodate approximately 400 students.

GREEN Charter School purchased 4 buildings on Century Drive to expand to add a secondary school. Seventh through tenth grades began attending Fall 2017 with plans to add 11th grade at the start of the school year in 2018 and 12th grade in 2019.

Additionally, though an online school, the SC Cyber Charter School has a physical location in Greenville County and offers small group assistance at the location on Pelham Road.

With the opening of the new NEXT Charter High School in Greenville County, GCS experienced a small impact on GCS's high school enrollment. If NEXT Charter grows to their maximum enrollment of 1,200 students, the impact on GCS's high school population will be significant.

East Link Academy (Chinese Immersion School) has been approved by the SCPCSD and plans to open for 2018-19 school year at Rutherford Road and Wade Hampton Boulevard. It will open with PK-4th grade (408 students) and add a grade yearly through 8th (maximum of 936 students). Initial success in attracting approximately 400 students could impact some elementary schools, particularly if concentrated from certain schools.

In May 2017 the South Carolina Department of Education received the Charter Institute at Erskine's registration to sponsor charter schools. This initiative enables Erskine to sponsor South Carolina charter schools and makes The Charter Institute at Erskine the only other charter school authorizer in the state outside of the SCPCSD

and local public school districts. In November 2017, the SCPCSD approved the transfer requests of five of its charter schools to the Charter Institute at Erskine. None of the approved transfers affect charter schools in the Greenville area. It is presumed that additional schools may transfer to Erskine and new schools are likely to start up with Erskine later as 29 requests from groups seeking to charter a school had filed letters of intent to Erskine as of January 18, 2018 (none from Greenville area).

CAPITAL AND NON-CAPITAL SOLUTIONS

With statistically valid enrollment projections and defensible school capacity definitions, GCS can begin to answer key facilities planning questions for the future.

- Where will new schools or additional seats be needed over the next five years?
- Which schools should be included in rezoning?
- How much growth can be accommodated before a school's core facilities becomes overloaded?
- How efficiently are we using classroom space?
- Are portables justified at a particular school?
- Where can we house new special and alternative programs?
- Can additional choice requests be approved for a specific school?

COMPREHENSIVE MAINTENANCE PROGRAM

Schools being built in Greenville County Schools today are expected to provide an appropriate learning environment for children through at least 2050. During that building life cycle, they must be expandable, contractible and adaptable. The District's current construction program takes this into account during the facilities planning process.

In the 2007-08 school year, a preventive and routine comprehensive maintenance program was started that addresses the needs of the physical plant including replacing carpet, roofs, HVAC equipment, etc. since almost all of GCS's schools have been built new, replaced or undergone a comprehensive modernization/renovation within the past 15 to 20 years.

Buildings and their major components have a limited life cycle that begins with the opening of a new school and culminates in a modernization or replacement. As building components reach the end of their useful life, they become operationally unreliable, often energy inefficient and require excessive maintenance time and money.

Greenville County Schools has developed a comprehensive maintenance plan that will provide for the maintenance of school buildings and component replacements through the support of the operating and capital budgets.

INFORMATION TECHNOLOGY

Greenville County Schools has made a commitment to technology over the last few years. In 2011, the Board of Trustees approved money to re-instate the Refresh Plan that was approved in 2004, but had been curtailed due to the economic downturn. During 2014, GCS Technology Committee studied the Refresh Program. Based on the committee recommendations, Refresh will now occur every 3 years at schools instead of five years. Technology is a vital part of the instruction and operation processes in Greenville County Schools.

CONCLUSION

The planning process is continuous, allowing for coordination with the local governments and communities, capital projects to add student capacity, modernization of existing facilities to provide an equitable school system, improvements to provide for safer environments and improved technology to better plan and communicate. The process is an essential balancing act to meet students' needs with available resource and financial capabilities. It is the process that steers the District responsibilities and accomplishments for the overall benefit of children.

Chapter 3

Chapter 3

FACILITIES SUPPORTING THE EDUCATIONAL MISSION

The relationship between facilities and student achievement has been highlighted in numerous studies for decades. The condition, lighting, noise and air quality, and general aesthetics have been linked to improved teacher recruitment and retention, reduction in absenteeism, better student behavior, and increased security. Given limited financial resources, it is important that funds be allocated to projects that align with the GCS's mission, goals and key strategies in the District's Strategic Plan.

Although the Long Range Facilities Plan will not have a direct relationship with all the recommendations in the Strategic Plan, this chapter is formatted to highlight key recommendations in the Educational Strategic Plan that may have facilities implications or, conversely, are impacted by demographic or facilities changes. For example, if the District successfully implements early detection programs for potential dropouts to increase the GCS graduation rates, this action will impact long range enrollment projections and ultimately space needs at the high schools.

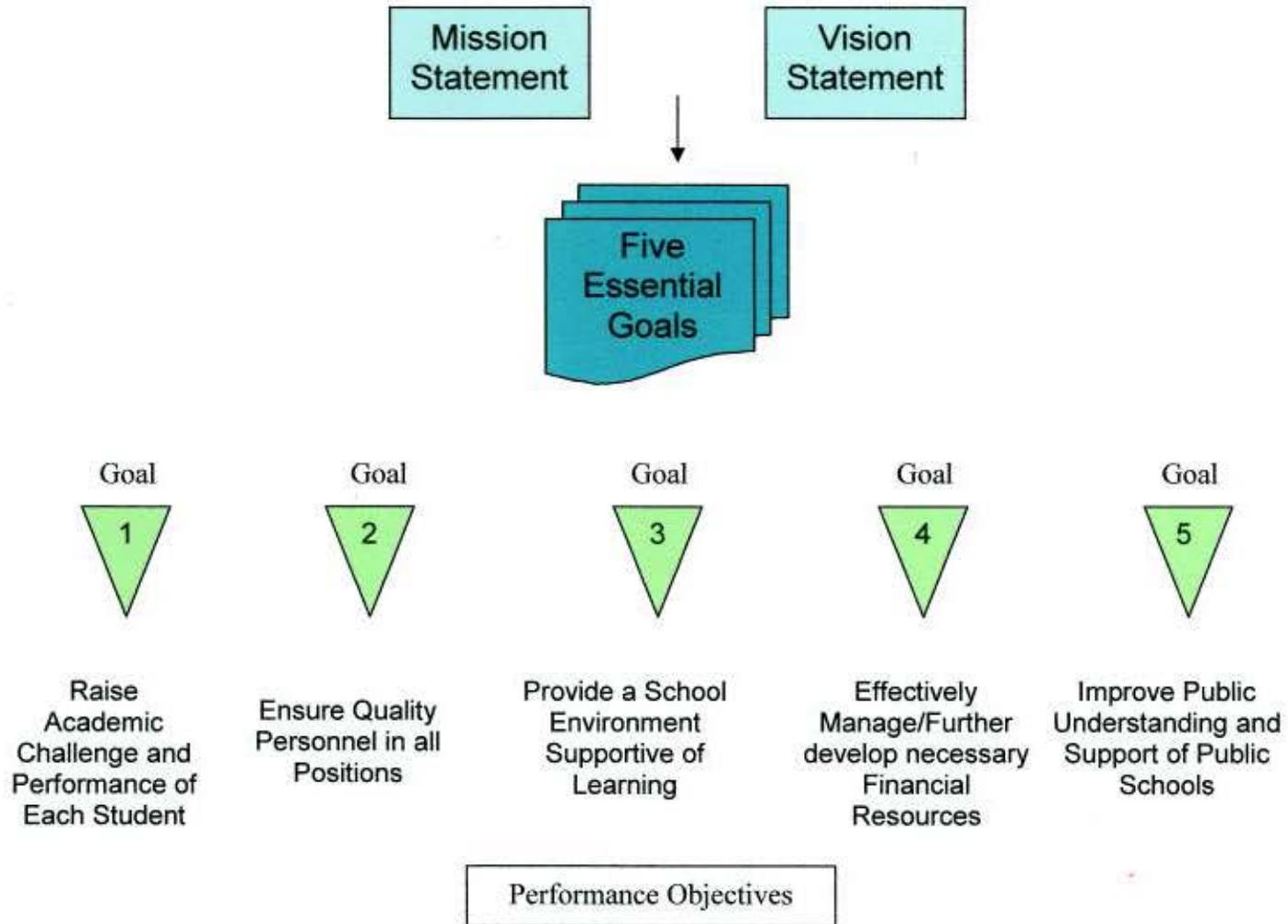
In the fall of 2012, the Greenville County School District, at the direction of the Superintendent Dr. Burke Royster, initiated the development of a strategic education plan for the five-year period 2013-18. The plan is patterned after the education plan originally developed in 1999 by a diverse group of District and community stakeholders, and reflects a comprehensive, focused, data-based planning process. The plan has been updated annually and completely revisited periodically over the past 18 years. The strategic education plan defines overall District direction, guides District and school priorities, and serves as the basis of all human, financial, and operational decisions. The District is currently undergoing a review and redevelopment of its Strategic Education Plan which expires at the end of the 2017-18 school year. The 2019 update to the LRFP-CIP will be adjusted to complement the latest Strategic Plan.

In addition to the comprehensive strategic plan as described above, the District has also implemented a specific framework to articulate the Superintendent's vision for academic direction. This framework, also known as Graduation Plus, emphasizes the academic rigor and relevance necessary at every instructional level to ensure career or college readiness for all students in Greenville County Schools.

The overarching challenge facing facilities planners is how to develop a plan and design schools that support dynamic programs, flexible instructional styles, and changing demographics.

Strategic Plan for 2013-2018

Table 3-1



G+ Accelerating Achievement



Academic Direction

“Relevance and Rigor”

Pre-K

Assurance of School Readiness for ALL children in Greenville County

Elem. (K-5)

Sound foundation in basic disciplines
Initial exposure to variety of careers
Connection between education and career choices

Middle (6-8)

Enhanced Academic Rigor
Exposure to College/Career Opportunities
Begin developing future direction in one of 16 career clusters
Expansion of high school offerings to students

High 9-12

College and Career Ready
As defined by Graduation Plus...
+ significant progress toward a college major and/or two year degree
+ completion of freshman level college courses
+ completion of post-secondary vocational and technical advanced certification
+ completion of a vocational/technical certificate

Goal 1: Raising Academic Challenge and Performance of Each Student
Objectives/Strategies with Facilities Implications

Objective: Increase the on time student graduation rate by 1% per year.

The first goal of the Strategic Educational Plan is to raise the academic challenge and performance of each student. The effect this has on the GCS facilities and planning is widespread. Classroom use and facility needs will be discussed throughout this chapter. Educational Programs have been put in place to increase standardized test scores on all levels from South Carolina State tests to SAT and ACT scores. Many reading and math programs are implemented to elevate math and reading levels in the elementary schools. The secondary schools present many opportunities that encourage and promote Advanced Placement classes, dual credit and career development classes. The addition of innovative academic programs and delivery models challenges the building capacities of all our facilities.

GCS will continue to be proactive in its efforts to provide facilities, both traditional and non-traditional programs, and the technological support which will provide our students with the skills necessary to be college and career ready. The efforts to provide exceptional school environments supportive of learning will increase student attendance and participation as well as aid in the acquisition and retention of quality personnel.

One of GCS's main academic objectives is to increase the on time student graduation rate by 1% each year. In 2017, 87.3% of GCS students graduated with a SC State Diploma within four years of entering high school for the first time. This is a sizeable increase from 86.8% in 2016. A 21% increase or 14.9 point increase since 2012. The goal each year is to increase upon the previous year's percentage. Although the strategies for achieving this objective include interventions that begin in the elementary schools, the greatest impact on enrollment will be felt in the high schools by decreasing student drop-out rates.

Strategy: Increase department support to schools in order to carry-out the comprehensive curriculum and instructional plan

Increasing department support, be it additional classroom teachers for middle and high schools, additional early childhood programs, Response to Intervention in the elementary schools, or new programs such as the Early College or Satellite Diploma Program often has an unanticipated impact on school capacity.

Prior to the economic downturn, GCS increased the number of teachers in middle schools to improve student performance and assure equity in programs among all middle schools. Currently, GCS is staffing middle schools at a 21:1 ratio.

The impact on facilities varies from school to school when staffing ratios are adjusted positively. Schools with enrollments below their facility capacity would be able to absorb the additional staff in available classrooms by using space originally planned for future growth.

School scheduling also impacts capacity availability. Some middle schools are staggering their class schedules so that all grades do not comeingle in the halls during a class change. These staggered schedules affect the ability to "float" teachers, thus increasing the need for classroom space.

Consideration of these initiatives needs to be included in the planning for future expansion of existing and new schools at all levels to ensure appropriate classroom space is available.

Strategy: Ensure that students who are English Speakers of Other Languages (ESOL) attain English proficiency and develop high levels of academic attainment in English and other subject areas.

The ESOL Program was implemented in GCS in the early 1970's to meet the diversified educational and cultural needs of a student population whose native language is not English. The program provides instruction in the four domains of the English language (reading, writing, listening and speaking). English Language Learners (ELLs) come from a variety of cultural, linguistic, socio-economic and academic backgrounds. Many students are children of parents who have moved to the United States. However, a growing number were born in the United States. The most common language of students receiving ESOL services in Greenville is Spanish.

Since 2003, GCS has seen a marked increase in the number of students receiving ESOL services. This may be attributed to both an increase in student enrollment from other countries as well as a change in the way the District is providing the supplemental services.

Enrollment in ESOL

Table 3-2

	Elementary	Middle	High	Total
2003	609	179	160	948
2004	1697	393	374	2464
2005	2384	560	439	3383
2006	3148	801	572	4521
2007	3393	839	633	4865
2008	3649	1140	863	5652
2009	3985	1351	1054	6390
2010	4131	1264	1092	6487
2011	4350	1329	1210	6889
2012	4611	1402	1209	7222
2013	4657	1513	1352	7522
2014	5076	1804	1630	8510
2015	5329	1925	1754	9008
2016	5008	2167	2018	9193
2017	5017	2374	2237	9678

An additional 256 students are served at Overbrook CDC, the Sterling School and Washington Center. Langston Charter School serves 33 ESOL students.

Prior to 2004, GCS operated three centers at an elementary, middle and high school. When those centers closed more than 600 students returned to their home schools. For the 2017-18 school year a total of 95 ESOL teachers were employed in our schools by allocation or Flex Fund money.

The current ESOL program operates using a variety of instructional models. In the elementary schools, ESOL teachers provide services through several different models including in-classroom support and resource rooms. At the middle and high school level, ELLs receive instruction in English one to three periods a day as needed. At the middle and high school level ESOL is a class period.

The impact on facilities has varied based on the instructional model. Where the program is large, classrooms must be dedicated to teachers to meet with small groups of students throughout the day. Class sizes are smaller than the average. However as the number of ELLs in the District has grown the class size has also grown. Overall, growth in the program has reduced available capacity at many schools.

As the District moves forward, the goal is to transition most ESOL programs to a blended model with a variety of instructional models so that ELLs can get the language support that they need. This blended model will consist of both pull-out programs as well as ESOL teachers going into the classroom (inclusion). The model of service will depend on the need of the student and where they are in the continuum of English language development. Some schools (or early childhood centers) may house family centers that provide bilingual orientation, resources and other support to new families. Nineteen schools have more than 20% percent of their students enrolled in ESOL programs possibly making these schools appropriate locations for additional resources.

Strategy: Design and Implement an Alternative High School Model.

The District is pursuing alternative high school dropout models to reach out to students who might otherwise drop out of high school before graduating.

- **Virtual School:** The Greenville County Virtual School and South Carolina Virtual School delivers instruction to students who wish to take a class online. The curriculum is delivered through an online environment and students must have access to a computer in order to complete these classes. Virtual School Courses are offered to students in grades 7-12. With permission from principal, Credit Recovery is offered to students enrolled in grades 9-12 who have failed a core, content-area course. These recovery courses are offered through the South Carolina Virtual Program and course offerings vary from year to year. Students interested in credit recovery talk with their guidance counselor. Nearly 2,000 GCS students per year participate in Credit Recovery.
- **Twilight School Program:** The primary mission of the Twilight School Program is to provide a unique learning opportunity with the support of the home school. The program provides a blended learning environment using Virtual on-line support in English, math and Science. A student must be at least 15 years old, be enrolled at least a half day at a high school or career center, and must have attended one year of high school.
- **Sullivan Center Alternative High School** is a short-term intervention program designed to successfully reintegrate students into the regular school setting. A maximum of 75 students may be served at a time with approximately 250-300 students served per year.
- **The Satellite Diploma Program**, housed at GCS's four Career Centers, was implemented in the 2013-2014 school year with the goal of improving the success of high school students short on credits to graduate in lieu of dropping out. Each of the 14 high schools is allocated a number of slots. Due to the success of the program, the program was expanded second semester of 2014-15. The program is a more individualized approach instead of the traditional setting.

- **Star Academy** began in the fall of 2007 as a dropout prevention program targeting overage middle school students. The original program was housed at two of GCS Career Centers. Starting the fall of 2017, the STAR program was moved to a school within a school program at the established middle schools. The goal is to complete 7th and 8th grade curriculum in one year so the student can move to high school with a stronger knowledge base and readiness to complete the course work for graduation.
- **Early College:** GCS started an Early College program in the 2012-13 school year. Similar programs across the nation have significantly improved the graduation rate of students participating in the program. The program is designed to increase the high school graduation rate as well as the college enrollment rate of students that are historically likely to drop out. The program is a partnership between GCS and three institutions of higher learning (Clemson University, Furman University and USC Upstate) through their co-location at the University Center of Greenville. Other local entities have pledged support for the program with financial support.

In 2017-18, Early College is serving sixth through eleventh grade students and will expand through 12th grade for 2018-19. Student selection targets middle school students assigned to attend Tanglewood and Lakeview Middle Schools within Carolina High Academy's attendance area and qualify using one of two dimensions in Math or Reading assessment. The student must either fall in the 20th to 40th percentile on the 5th grade Fall Measure of Academic Progress (MAP Testing), or achieve a performance level of 2 in the prior year's spring Palmetto Assessment of the State Standards (PASS Assessment).

The program is currently housed at the University Center Campus.

The impact on facilities may be two-fold. These programs are intended to retain students that might otherwise drop out of school, increasing overall enrollment.

Graduation Plus

Graduation Plus (G+) is the District's current academic vision, as outlined by the Superintendent. Graduation Plus includes a focus on academic relevance and rigor for all students, from pre-K to graduation, and beyond and emphasizes ALL students being college and/or career ready upon graduation from high school.

As we look ahead, Graduation Plus requires a renewed focus on specific goals for each student at each level. We believe it is imperative to ensure school readiness for all children in Greenville County, which will require expanding preschool opportunities throughout the District. At the elementary level, we plan to continue to focus on the development of a sound foundation in basic disciplines, while enhancing students' initial exposure to variety of careers. This includes making more explicit the connection between education and future career choices. In each middle school, we focus on enhanced academic rigor, including exposure to college/career opportunities. Additionally, during the Individualized Graduation Planning (IGP) process, students begin developing a personal pathway in one of 16 career clusters. As a specific goal of G+, the District plans to expand opportunities for middle school students to earn high school credit.

At the high school level, G + focuses on targeted and specific college and/or career readiness for all students, including the following:

- significant progress toward a college major and/or two year degree
- completion of freshman level college courses
- completion of post-secondary vocational and technical advanced certification
- completion of a vocational/technical certificate

As more of our high school students make progress on the above goals, the District plans to enhance and expand upon multiple initiatives to support deeper and accelerated college and career readiness experiences. Examples include Art of Architecture,

Accelerate Engineering, Visual Arts, and Advanced Manufacturing. These current programs, and future programs currently being designed, offer students apprenticeships, internships, or immersion experiences along with dual credit opportunities. Additionally, the District plans to develop more opportunities for students to earn career certifications or credentials prior to graduation.

In May 2005, the governor signed legislation which provides for the development of a high school curriculum organized around a career cluster system that must provide students with both strong academics and real-world problem solving skills.

The law directs school districts to:

Develop models and prototypes for individual graduation plans and curriculum frameworks to include, but not be limited, to the 16 nationally-recognized career clusters.

Each high school's curriculum has been organized around a minimum of three clusters of study and cluster majors.

The nationally recognized career clusters include

- (1) Agriculture, food, and natural resources;
- (2) Architecture and construction;
- (3) Arts, audio-video technology, and communications;
- (4) Business, management, and administration;
- (5) Education and training;
- (6) Finance;
- (7) Health science;
- (8) Hospitality and tourism;
- (9) Human services;
- (10) Information technology;
- (11) Law, public safety, and security;
- (12) Manufacturing;
- (13) Government and public administration;
- (14) Marketing, sales, and service;
- (15) Science, technology, engineering, and mathematics; and
- (16) Transportation, distribution, and logistics.

Career academies have emerged over the last decade as a key reform strategy of states, districts, and local schools to address the many challenges faced by large comprehensive high schools. It is estimated that nearly 2,500 (about 24%) of the nation's high schools have a career academy. Among the distinguishing features of career academies are:

- A school-within-a-school organizational structure.
- Curricula that combine academic and occupational courses based on a career theme.
- Partnerships with employers and the local community.

Although academies are appropriate for all high school students, they are often geared toward students who are not achieving their full academic potential, including those at risk of dropping out. In this, supporters and implementers of career academies generally believe that by offering academic and technical courses in a real-world context and smaller learning environment, students will experience improvement in their academic achievement, graduation rate, and transition to postsecondary education or work.

GCS began offering New Tech instruction at two high schools in the 2014-2015 school year. The New Tech design provides an instructional approach centered on project-based learning, a culture that empowers students and teachers, and integrated technology in the classroom. New Tech's hands-on, multi-year approach gives schools structure and support to ensure long-term success. Initially, the New Tech program was integrated at Carolina High Academy as a school-wide program and at JL Mann High Academy as a school-within-a-school model.

The impact on facilities will depend on the model being fully implemented. GCS currently offers a traditional career center model, where students opt to attend one of four stand-alone career centers for a partial day program while attending their home school for academic classes. Not all career clusters are represented at these centers, nor is there sufficient capacity in these programs for district-wide implementation.

As career academies are implemented at the home schools, there will be a need for renovations and equipment purchases to fully support the 'real-world' model. The specific needs will vary by school and cluster programs. This will become more concrete over the next few years.

Other options include more extensive use of the early college model, on-site partnerships with local businesses or establishing core classes at some career centers.

To date, the State has provided minimal funding for start-up and no capital funds.

Strategy: Design and implement a program to nurture the potential of students for high academic performance.

Currently, GCS provides gifted and talented services at home schools through the Challenge program. Challenge is both a 'pull-out' and 'plug-in' program designed to offer supplemental programming for students and classroom support for teachers.

In addition to the Challenge program, GCS also provides full-time gifted and talented services to students in grades 3 through 8.

The Sterling School opened in 2008 and houses the grade 3 through 8 Charles Townes Center serving gifted students. In addition, it offers a first choice option to 4K through grade 5 students who reside in nearby geocodes. Other students from throughout the District have the choice option to attend based on space availability.

The impact on facilities is increased flexibility at elementary schools where classroom space for the Challenge program has been limited. The selection of students to attend the Sterling School has a small impact on home schools.

Strategy: Develop and implement innovative, research-based instructional delivery models that meet the needs of all students.

Table 3-3 shows the pattern of growth in these programs in the last fifteen years.

Exceptional Student Education

Table 3-3

Year	# Other ESE*	# Gifted	Total Enrollment	% ESE	% Gifted
2000-01	9,764	6,635	58,907	16.5%	11.3%
2001-02	10,197	7,694	59,964	17%	12.8%
2002-03	10,363	7,968	60,883	17%	13.1%
2003-04	10,499	7,998	61,788	17%	12.9%
2004-05	10,995	8,129	62,756	17.5%	13.0%
2005-06	11,059	7,611	63,982	17.3%	11.9%
2006-07	10,797	7,913	65,801	16.4%	12.0%
2007-08	10,502	8,970	66,883	15.7%	13.4%
2008-09	10,432	8,310	69,227	15.1%	12.0%
2009-10	10,259	8,917	69,477	14.8%	12.8%
2010-11	10,106	8,924	69,942	14.4%	12.8%
2011-12	9,755	9,743	70,076	13.9%	13.9%
2012-13	9,894	9,573	71,249	13.8%	13.4%
2013-14	10,154	9,538	71,639	14.2%	13.3%
2014-15	10,566	10,427	72,712	14.5%	14.3%
2015-16	11,090	12,408	73,354	15.1%	16.9%
2016-17	11,484	12,390	74,342	15.4%	16.7%
2017-18	11,338	13,186	75,201	15.1%	17.5%

Source: Greenville County Schools * Child Count

GCS provides a full continuum of services for students with disabilities, including the following:

- General education with special education consultation
- General education with direct special education support (co-teaching/inclusion)
- General education with special education instruction in a separate classroom
- Special education services in a separate special education class (self-contained)
 - "self-contained" refers to the service minutes in special education, not the child, disability category, nor the teacher
- Special education services in a separate school setting
- Homebased instruction/hospital

The Individuals with Disabilities Education Act (IDEA) requires that students be educated in the least restrictive environment with their non-disabled peers to the fullest extent possible. In determining the educational placement of a child with a disability, including preschool child with a disability, Section 300.116 requires each public agency must ensure that the placement decision:

- Is made by a group of persons, including the parents, and other persons knowledgeable about the student, the meaning of the evaluation data, and the placement options; and
- Is determined at least annually; and
- Is based on the student's IEP; and
- Is as close as possible to the student's home

Preschool special education for children with disabilities begins at age three. There are 29 classrooms serving around 300 children. This population reflects relative growth trends yearly and continues to require appropriate classroom space. GCS is studying alternative delivery models to reduce the impact of this growth.

The majority of the students with severe and profound disabilities are served at The Washington Center. Hollis Elementary currently services one classroom for primary students with severe and profound disabilities. This classroom will be relocated to the Washington Center for the fall of 2018.

Greenville County Schools is in the second year of an initiative to add multi-categorical special education service options across the district. This allows students with disabilities to attend their home school, or a school as close as possible to their home, significantly reducing bus ride times.

South Carolina Section 59-39-100 was amended in May to include a uniform, Statewide Employability Credential for applicable students with disabilities. The purpose of the Employability Credential will be to provide equitable job-readiness opportunities for these students throughout the state, ensure the students have evidence of employability skills, and honor the work the students have accomplished in our public schools. The Special Education Department has supported each Greenville County High School in developing on-site school based businesses by purchasing equipment and supplies to include one embroidery machine and one heat press machine. This will allow each school to develop real world work experiences that encompass standards based instruction and enables students to transfer their work and academic skills to aide in seeking competitive employment.

The Special Education Department continues to focus on:

- Providing quality instruction to ALL students in the least restrictive environment. Research based reading curriculum has been purchased for K-12 and a research based preschool curriculum has been purchased
- Offering a continuum of services for students at all Greenville County Schools

- Improving outcomes for students with disabilities
- Creating multi-categorical service options across Greenville County Schools to ensure that student supports are considered first and foremost
- Continuing to offer training and support to teachers and administrators to build sound decisional capitol at all schools programs

The longstanding research on effective schools emphasizes the importance of school/community relationships. Additionally, students who are able to attend their neighborhood school are more likely to participate in extracurricular activities. GCS is committed to increasing the number of students who are able to have their IEPs fully implemented at their home-based school, when feasible, by providing specialized instruction and supports.

Greenville County Schools' facilities may be impacted in several ways:

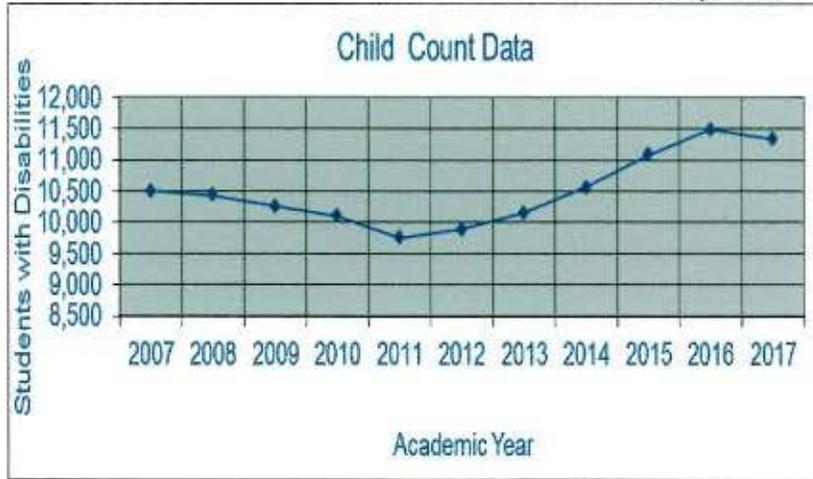
1. Implementing a continuum of special education services at each school may impact the utilization of current facilities.
2. Students with disabilities working towards a standard diploma may require more than 4 years to complete the needed requirements for a high school diploma.
3. Many schools may need renovations to accommodate for the disabilities of the students returning to their least restrictive environment.
4. High schools will require adequate space to fully support school based businesses.

Additional Factors Influencing Facilities

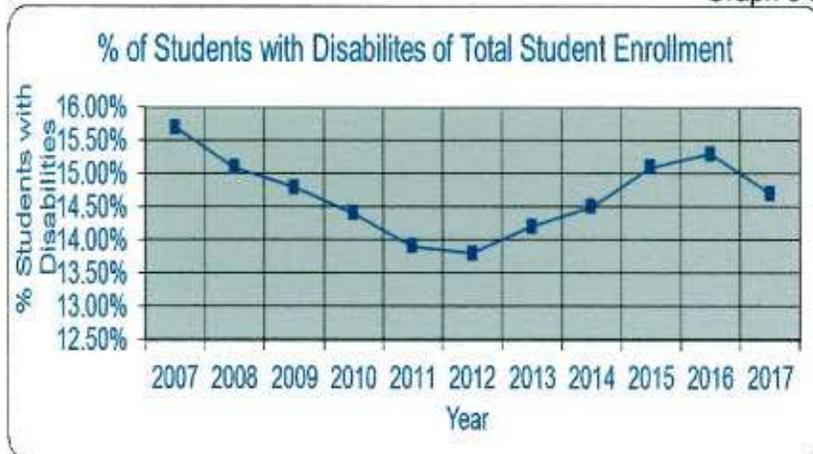
As the population of students identified under Individuals with Disabilities Education Act fluctuates, teacher allocations and classroom space is impacted. Below are two charts which represent the longitudinal fluctuation of students with disabilities in GCS. The current trend line makes facility planning for specialized environments difficult. The District goal is always a reduction in the number of students with disabilities as a percentage of total

enrollments. The initiative of developing a comprehensive Multi-Tiered System of Support (MTSS) is currently underway and being braided in with the goal of serving students with disabilities at their home school or as close to their homeschool as possible.

Graph 3-1



Graph 3-2



Although not listed as a specific strategy, early childhood education has been a key strategy for 'closing the gap' in the District for many years.

Most educators agree that small class size and early childhood education are 'high return' investments in student achievement. This is even more so for children who, due to family background, come to school less prepared than their peers. Students tend to perform better on tests, have higher retention rates, and fewer special education referrals when properly prepared to start school.

Currently GCS provides 43 school-based 4K classes, spread among 29 schools serving approximately 900 students. In addition to the school based programs, the District provides 4K classes through our six Child Development Centers to serve up to 850 additional students. Those facilities are the Dunbar CDC, Golden Strip CDC, Greenview CDC, Northwest Crescent CDC, Overbrook CDC, and the Riley CDC. Overall GCS can serve approximately 34% of the eligible four year olds as compared to the current kindergarten enrollment. Changes from the state allowing 23 students per class has provided for GCS to serve about 200 more 4K students.

GCS supports expanding the 4K program to all students to the extent funding and space allow. However, the facilities impact would be significant. If the District were to offer 'universal' 4K classes (all students regardless of eligibility), over 110 classrooms would be required based on 2017-18 kindergarten enrollment. This assumes approximately 75% participation. Moving forward, new or expanded elementary schools will have additional early childhood rooms constructed.

Early Childhood programs are part of GCS's goal for all students to be reading on grade level by the end of 2nd grade.

With sufficient funding for expansion of early childhood programs, GCS would still face a facilities challenge of not only enough classrooms but the right kind of classroom. The facilities plan will need to develop short and long term strategies to accommodate this program in appropriate early childhood classrooms as well as the regular 5K program.

**Goal 2: Teacher and Administrator Quality
Objectives/Strategies with Facilities Implications**

Strategy: Continue to reduce class size appropriate to assessed need for greater attention to the needs of individual students.

GCS had worked to reduce class size across all grades. Table 3-4 shows pupil/teacher ratios for regular classes at elementary, middle, and high schools in 2003-04, 2008-09 and the ratios for subsequent years. Budget constraints in the 2009-10 and 2010-11 school year caused GCS to increase class size. Beginning in the 2016-17 school year, all schools were provided flexible baseline allocations to use to enhance their instructional programs by either increasing instruction staff or purchasing items to enhance the instructional programs. The overall funding for this initiative brought GCS in close alignment with staffing ratios prior to the recession.

Table 3-4

	2003-04	2008-09	2010-11	2011-12	2017-18**
Elementary Schools					
Kindergarten (all classes have an aide)	25:1	25:1	27:1	26:1	26:1
Kindergarten – Education Plan	25:1 plus aide	25:1 plus aide			
1 st Grade – Regular*	23:1	21:1	22.5:1	21.5:1	21.5:1
1 st Grade – Federal Reduced Class Size*	18:1	18:1	18:1	18:1	18:1
1 st Grade – State Reduced Class Size*	15:1	15:1	20:1	20:1	20:1
2 nd – 3 rd Grade – Regular	23:1	21:1	22.5:1	21.5:1	21.5:1
2 nd Grade – Education Plan	20:1	20:1			
4 th – 5 th Grade – Regular	27.5:1	25:1	26.5:1	25.5:1	25.5:1
Middle Schools					
6 th – 8 th Grade – Regular	23.5:1	25:1 plus additional related arts teacher	22:1	21:1	21:1
Math/Reading Content Teacher		1.0	1.0	1.0	1.0
High Schools					
9 th – 12 th Grade – Regular	24.5:1	21:1	23:1	22:1	22:1
Math/Reading Content Teacher		1.0	1.0	1.0	1.0

* Funding sources are combined to target an average of a 20:1 staffing ratio in first grade.

**Some Schools used the flexible fund allocation for classroom teachers.

As the economy improves and the District's financial status improves, GCS may continue to reduce class size. There will be a facilities impact in terms of the number of additional classrooms needed should this occur.

As GCS continues to move forward to reduce class size consideration must be given to the impact on facilities. In turn, the strategies needed to address this impact must be reflected in the District's facilities plan. For this reason, program capacities are reflected at the 2008-09 allocation levels.

**Goal 3: Provide a School Environment Supportive of Learning
Objectives/Strategies with Facilities Implications**

Schools should be safe, clean, well maintained, inviting, and supplied with essential technology and materials to achieve learning goals. The BEST construction program and GCS LRFP is a very significant step toward ensuring that all Greenville County schools are among the highest quality school buildings in the country. While this is extremely important in providing effective and supportive school environments, it is equally important to look at a comprehensive plan for the long-term maintenance of the District's inventory of facilities.

Objective: Strengthen collaboration with parents and community to enhance the learning environment and improve access to educational resources.

Schools, communities, and families must work together to create a favorable environment in which children learn. There is a growing body of research that supports inclusive or 'community' schools. 'Community' schools form partnerships with other community resources, such as the local government, health care providers and private sector business, to provide a more comprehensive focus not only on academics but health and recreational services, family supports, and adult educational opportunities. The research says this leads to improved student learning, stronger families, and overall healthier communities.

Strategy: Provide services in Title One schools to support parenting skills, literacy, academic assistance and instructional technology.

Title One elementary schools and early childhood centers have parent activities in rooms at the schools. For most schools these rooms offer the foundation for a program that connects to the parents.

If these or similar programs are expanded at other schools, additional classrooms must be set-aside for classes and birth to age 3 programs.

The facilities impact would reduce capacity of these schools by one or two classrooms or up to 40 'seats'. GCS is also being proactive in the planning for expansion of the 4K program. As new elementary schools are being built and other additions are constructed on existing elementary schools extra 4K rooms are being constructed to prepare for the future of an inclusive 4K program.

Objective: Design and implement a preventive maintenance plan to ensure the continued operation of a high quality instructional program.

See Chapter 4 for a discussion on this objective.

Objective: Provide environments integrated with technology and opportunities for learning.

Strategy: Provide teachers and students with technology resources....in the classroom and beyond the classroom.

Strategy: Ensure that teachers, principals, and staff have access to the administrative tools to facilitate their job....

Greenville County Schools focuses on putting technology in the hands of students in order to provide a learning experience that is hands-on, relevant, and appropriate for a 21st Century Learning Environment.

Mobile laptop labs are just one of the technologies students have access to in all the District schools. Each school has up to 8 carts available for classroom checkout, depending on the size of the school. Laptop labs can be used for anything from independent study to group projects and classroom work. The mobile labs give teachers the flexibility of taking the students anywhere on or off school grounds in order to provide them with a rich and relevant learning environment. In addition, GCS embraces students using their personal devices, which allows students to bring their own devices from home and use them in the classroom.

Every classroom in GCS has an interactive whiteboard. The engaged learner is a successful learner. Students interact with the whiteboards on a daily basis and quickly become active learners instead of passive learners. Students in many schools also have access to student response systems. These systems, which work in connection with the interactive whiteboards, make students a part of the learning process and give teachers necessary feedback to customize learning for individual students as needed.

A variety of new and emerging technologies allows students to complete projects and problem based lessons. Through a structured process using video cameras, podcasting, and other technologies, students complete projects that incorporate real world skills such as interviewing, researching, writing, and public speaking. These technologies in the classroom foster creativity, team building, and 21st Century skills.

The development of personal technological devices used in instruction is expanding in Greenville County Schools on all the education levels of elementary, middle, and high schools. The funding for this program varies from school to school using grant money, technology money, and dedicated district funding.

Greenville County Schools is committed to ensuring that all teachers are technology proficient. In order to integrate technology into the classroom, teachers must understand technology integration as well as be able to perform the steps necessary to use the technology required. Teachers are required to be technology proficient as outlined in state proviso. Teachers can obtain technology proficiency by participating in one of four graduate level classes that focus on

technology integration. These courses are graduate level courses focusing on technology integration using tools readily accessible to teachers. Once teachers receive initial certification, they must continue to keep up with their certification by taking 30 hours of courses every five years. Teachers have the option as to what courses they take based on their experience level with technology. The goal of this initiative is that teachers will grow in their knowledge of technology integration in the classroom.

Instructional Technology with assistance from Systems Support and Administrative Computing hosts the Upstate Technology Conference each summer. This conference is provided for teachers and administration and focuses on classroom integration. Many of the workshops are conducted by current classroom teachers so that attendees can get a real world perspective on classroom integration. The two day conference offers over 200 sessions for teachers in different strands. Teachers can focus on the technology they want to improve in and focus on for the following year. This conference fosters collaboration among teachers from other schools and districts around the state to meet student's needs in the 21st Century.

Summer Academy is conducted by Greenville County Schools during the month of July. Similar to the technology conference, Summer Academy offers teachers the opportunity to participate in technology integration workshops using technology available to teachers at their schools.

For the first time, during the summer of 2013, the Upstate Technology Conference and Summer Academy was combined for a 3-week professional development experience known as Summer Institute. This was a very successful combination of the two conferences and has continued to be a success each year.

Throughout the year, teachers have access to workshops and professional development days using the Professional Development Registration System. Many schools host technology Tuesdays and Thursdays to foster technology integration. Teachers' workdays are often used for technology workshops and hands-on learning for teachers on various technology software and tools.

Strategy: Implement an obsolescence and upgrade plan to replace and recycle equipment.

Greenville County Schools has made a commitment to technology over the last few years. In 2011, the Board of Trustees approved money to re-instate the Refresh Plan that was approved in 2004, but had been curtailed due to the economic downturn. During 2014, GCS Technology Committee studied the Refresh Program. Based on the committee recommendations, Refresh will now occur every 3 years instead of five years. Funding initially remained at the same level but allocated differently. To protect the investment of the District, all teachers must undergo technology training in order to comply with the Teacher Technology proviso adopted by the state legislature.

Technology is a vital part of the instruction and operation processes in Greenville County Schools. Teachers in Greenville County are required to maintain and update websites in order to communicate effectively with parents in the digital age. The District webpage, Facebook page, Twitter account and other social media avenues are updated daily with content to inform parents about activities and events taking place in the District. The operations department relies on technology to accomplish a number of administrative tasks. Over the last few years, more and more paper processes have moved to an electronic process in order to increase efficiency and productivity. Greenville County is committed to staying on the leading edge of technology in order to provide our students skills necessary to compete in a global, technology-oriented society.

Objective: Design and Implement improved systems of planning for student projections and assignment.

Strategy: Complete the current Facilities Plan and prepare for future facilities needs.

See Chapter 4 for a discussion on these objectives.

Chapter 4

Chapter 4

STRATEGIES AND RECOMMENDATIONS

INTRODUCTION

This chapter provides a summary of the recommendations. The recommendations are grouped under the following facilities planning strategies:

Strategy 1: Build space for students and programs; plan the use of temporary space to meet peak enrollment periods; consider all solutions to capital needs, such as boundary or program changes.

Strategy 2: Respond to changing educational program needs with creativity and commitment.

Strategy 3: Provide funding for maintenance and system renovation on a schedule that ensures that buildings remain environmentally safe, secure and function efficiently.

Strategy 4: Implement the Instructional Technology Plan to give all students and staff members continuing access to contemporary educational technology.

Strategy 5: Provide for the ancillary facilities and equipment that are needed to support the educational program and transportation needs of a growing district.

Strategy 6: Develop a long-range facilities plan that is fiscally responsible.

These strategies and recommendations are the foundation of the Long Range Facilities Plan and represent a systematic, consistent process for addressing the long-range facilities needs of the entire District. The recommendations support Goal 3 of the Educational Strategic Plan by presenting a balanced plan to relieve crowded schools, to upgrade older facilities, to meet technological challenges and to efficiently care for the District's facility heritage. As an implementation document for the Strategic Plan, this plan focuses on instructional programs as the cornerstone of facility planning and design.

IMPLEMENTING THE STRATEGIES

Strategy 1: Build space for students and programs; plan the use of temporary space to meet peak enrollment periods; consider all solutions to capital needs, such as boundary or program changes.

To carry out this Strategy, the Plan incorporates the following actions:

- Construct new schools and additions to address future growth, expanding core spaces (media centers, dining areas, administration, support spaces, and assembly spaces) as needed.
- Plan for expandable, contractible, and adaptable buildings; consider modular construction to address immediate or small-scale needs.
- Flexibility to incorporate programmatic changes as future instructional priorities are determined.
- Consider non-capital options for addressing space needs such as boundary and/or program changes.
- Purchase sites necessary for projected new schools.

Enrollment Projections

Between 2012-13 and 2017-18, Greenville County Schools grew by about 3,900 students or an average of about 775 students per year. Additionally, the Greenville County area charter schools grew substantially during this time. As noted by Graph 4-1 2013 through 2017, our elementary population growth was steadily increasing. However, we have been in the midst of increasing population growth at the elementary level as large grades from earlier birth years matriculate through the grades. Recent births have declined from the high in 2008 but remain higher than the early 2000's. The elementary growth will be curtailed as the smaller kindergarten classes move through the grades and 2015-16 realized a 400+ drop in GCS's kindergarten students and a slight decrease this year of just over 60 students. The five year projection indicates the leveling of the growth at the same time projecting many job creations locally. Economic conditions, population mobility, new charter schools and parental choices could modify this projection.

Graph 4-2 reflects a significant projected increase in middle school student population, reflective of large elementary grades moving into the middle level.

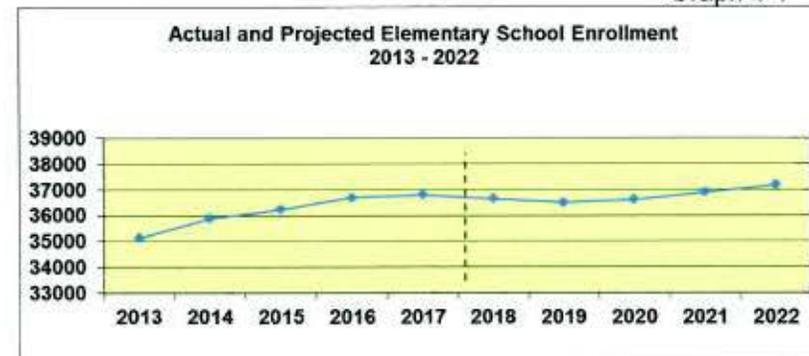
From 2004-05 through 2013-14 GCS experienced stagnant growth at the high school level. There has been growth the last four years in high school population. GCS initiatives targeting potential dropouts at the high school level are showing positive results. In looking at the middle and high school projections it is important to continue to monitor these trends anticipating economic growth rebounding to accurately plan for future needs. Parents relocating or choosing other choice options may impact enrollment. The primary elementary grades current lower population must be carefully monitored.

Graphs 4-1 to 4-3 show historic and projected enrollment by elementary, middle, and high school. Five year growth is projected to be as follows:

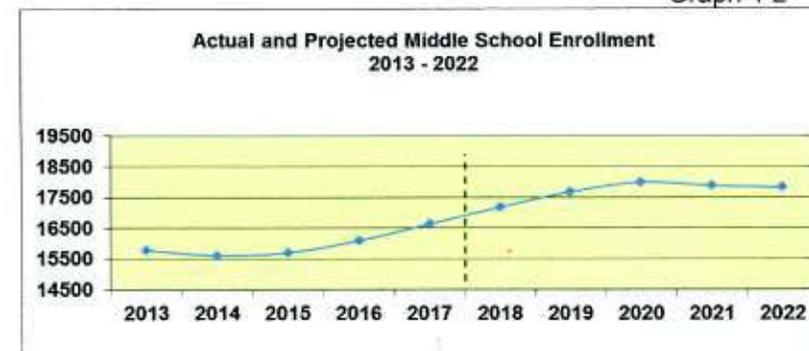
Growth 2017-2022	
Elementary	379
Middle	1,088
High	1,163

Enrollment increases have been dispersed throughout the District recently instead of concentrated areas before the economic downturn. (Projections by school and school planning areas are in Chapter 5.)

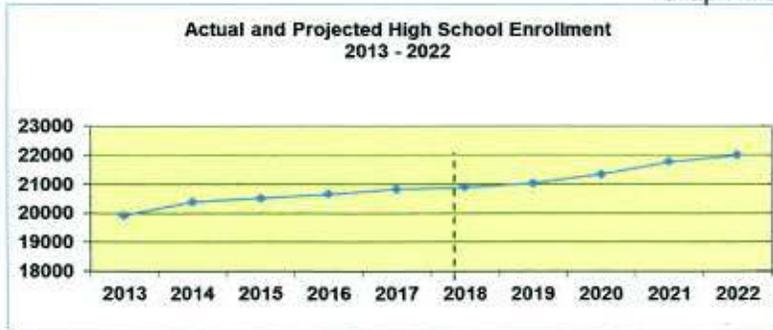
Graph 4-1



Graph 4-2



Graph 4-3



Five year enrollment projections are prepared using a modified cohort-survivorship model as described in Chapter 2. However, this model is less accurate for ten and twenty year projections.

GCS relies on population and housing projections by region as provided by the County planning staff from the mid 2000's for long range forecasts. The current ratio of K-12 public school children is applied to population projections by traffic analysis zones (TAZ) and then matched to the school planning areas.

Table 4-1 shows a long range forecast that indicates continued growth in the district (Source: Greenville County Planning staff 2/1/2006 and 2010 Census data). The County has updated the population projections for the GPATS portion. Greenville County is beginning their County Comprehensive Plan process. Countywide projections will be a component of the plan. GCS foresees changes when the County updates the projections as more growth has been occurring on the west side of the county and in the City of Greenville, as well as a general distribution of growth countywide. In-migration of millennials and empty nesters continue to impact GCS's overall student projections. These projections include portions of Spartanburg and Laurens counties because students in those areas are assigned to Greenville County Schools.

HIGH SCHOOL (BY TAZ)	15 th DAY 2016-17	15 th DAY 2017-18	2016 TO 2017 DIFFERENCE	POPULATION 2030*	ENROLL PROJ. 2030
BEREA	4468	4505	37	33164	4700
BLUE RIDGE	3690	3720	30	37840	3900
CAROLINA	3509	3601	92	22436	4043
EASTSIDE	3572	3592	20	30935	3945
GREENVILLE	4857	4945	88	35843	5490
GREER	5097	5102	5	34221	5407
HILLCREST	8368	8563	195	71145	9200
J L MANN	5822	5974	152	53787	7325
MAULDIN	7871	7939	68	50110	9550
RIVERSIDE	5288	5383	95	35422	6750
SOUTHSIDE	3939	3813	-126	25541	3850
TRAVELERS REST	4407	4327	-80	37720	4650
WADE HAMPTON	5230	5332	102	41967	5430
WOODMONT	6347	6438	91	54638	8560
TOTAL	72465	73234	769	564769	82800

Note: Grades 5K-12, reflects Homebased Assignments – no choice included

*Information is from the Greenville Co. Planning Dept. (2005). Greenville Co. is in process of updating long-term projections.

Space Available or Needed

GCS has sufficient capacity at all grade levels.

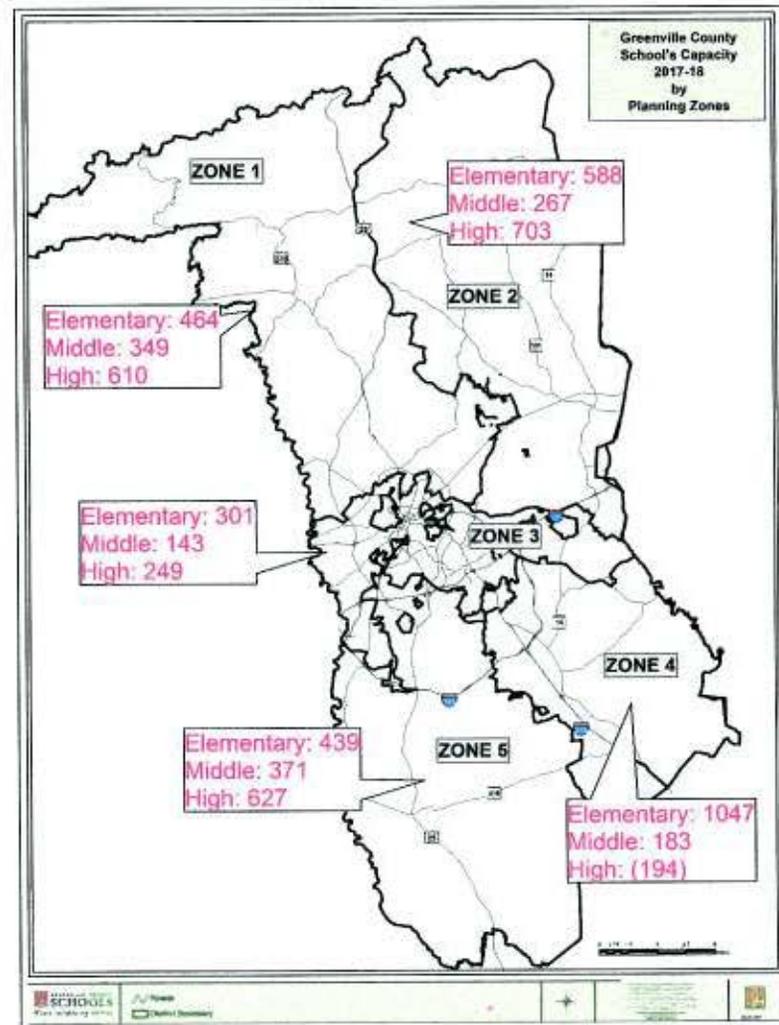
As illustrated on Map 4-1, elementary seats are currently available in 2017-18 in all zones. Several factors may impact the enrollment at specific schools.

- Expansion of the 4K program to offer classes to all students that are eligible would increase enrollment and decrease available capacity absorbing seats in all schools.
- Housing changes and efforts to redevelop in some areas of the City of Greenville and other municipalities may have a mixed effect on enrollment and demographics. The last several years have seen numerous new multifamily projects and significant residential infill within the City of Greenville. The Verdae Development at the eastern part of the City of Greenville will also have a substantial impact.
- Program changes that improve the attractiveness of the schools could increase choice enrollment where space is available.
- Additional choice options may assist parents in their school choices impacting capacity.

After taking into consideration the above mentioned factors and all planned projects through 2022, Maps 4-2 and 4-3 depicted later in this chapter show projected seats available by Planning Zone and by High School as well. Please note that GCS does not have true feeder patterns and the High School Map 4-3 is a general representation of seats available in those areas for elementary and middle schools.

Space Available or Needed in 2017

Map 4-1



Facilities Expansion Plans - Elementary Schools

Between 2017-18 and 2022-23 the Capital program includes the following projects:

Table 4-2

Project	Open/Completed
Rudolph Gordon Addition	2018
Summit Drive Addition	2020
Robert E. Cashion Addition	2021

New elementary schools or additions are projected to be needed beyond 2023 in the following areas:

Table 4-3

Project	Capacity added	Schools to be Relieved
Ellen Woodside Addition	196	Ellen Woodside
Mountain View Addition	200	Mountain View
Fork Shoals Addition	227	Fork Shoals
Simpsonville Addition	170	Simpsonville
New Elementary School	750	Mauldin, Pelham Road, Sara Collins, Buena Vista, Woodland
Total Capacity Added:	1,543	

Facilities Expansion Plans – Child Development Centers

Enrollment for 4K expansion is not reflected in the forecast. Over 110 additional classrooms would be needed for expansion to 75% of the current kindergarten. Appropriate elementary seats district-wide to handle the complete expansion are not available. For 2015-16, the state allowed an increase in 4K class size from 20 students to 23 students allowing GCS to serve more students in the same space. The District has several options to address providing additional 4K classes.

- Build modular 4K buildings (site permitting) where there is insufficient space
- Consolidate programs for over-utilized schools at early childhood centers
- Rely on private providers
- The preferred model, approved by the GCS School Board in 2012, will be the construction of additional early childhood classrooms whenever renovations, additions or new elementary schools are constructed.

Facilities Expansion Plans – Middle Schools

Between 2017-18 and 2022-23 the Capital program includes the following projects:

Table 4-4

Project	Open/Completed
Rudolph Gordon Addition/Conversion K-8	2018

The Dr. Phinnize Fisher Middle School opened in August, 2014. The school was built to relieve the shortage of middle school seats at GCS's five largest middle schools. Additionally, in 2018 a conversion of Rudolph Gordon Elementary to a K-8 school is planned to add 500 more middle school seats along with additional elementary seats.

New middle schools/additions are projected to be needed 2023 and beyond in the following areas:

Table 4-5

Project	Capacity added	Schools to be Relieved
New North Area MS	750	Northern Middle Schools
Ralph Chandler Addition	250	Ralph Chandler
Total Capacity Added:	1,000	

Facilities Plans - High Schools

Between 2017-18 and 2022-2023 the Long Range Facilities Plan and Capital Improvement Program includes the following projects:

Table 4-6

Project	Open/Completed
New Fountain Inn High School	2021

The long-term high school forecast reflects some of the current initiatives to reduce dropout rates and increase graduation rates.

New High schools/additions to be constructed 2023 and beyond:

Upon the completion of the New Fountain Inn High school there are no current plans for new schools or additions to high schools within the district.

Facilities Expansion Plans – Other Renovation/Additions

Between 2017-18 and 2022-23 the Capital program includes the following projects:

Table 4-7

Project
Roper Mountain Science Center – Harrison Hall of Natural Science
Roper Mountain Science Center – Environmental Science Building
Greer High Multi-purpose Activity/P.E. Lab
Career Technology Innovation/Incubation Center
High Schools- new weight rooms beginning in 2020
Lighting for 2 nd lit field – Berea, Blue Ridge, Eastside, Hillcrest, Mauldin, Southside and Woodmont High

Other renovation/additions are projected to be needed beyond 2023 in the following areas:

Table 4-8

Project
School Facility Study – Alexander Elementary, Welcome Elementary, Bryson Middle, Hughes Middle, Northwest Middle, CATE Programs, and Career Centers
Fountain Inn Elementary will be reviewed for possible conversion to K-8 School

Additions are projected to be needed 2023 and beyond. In summary, planned projects are:

Table 4-9

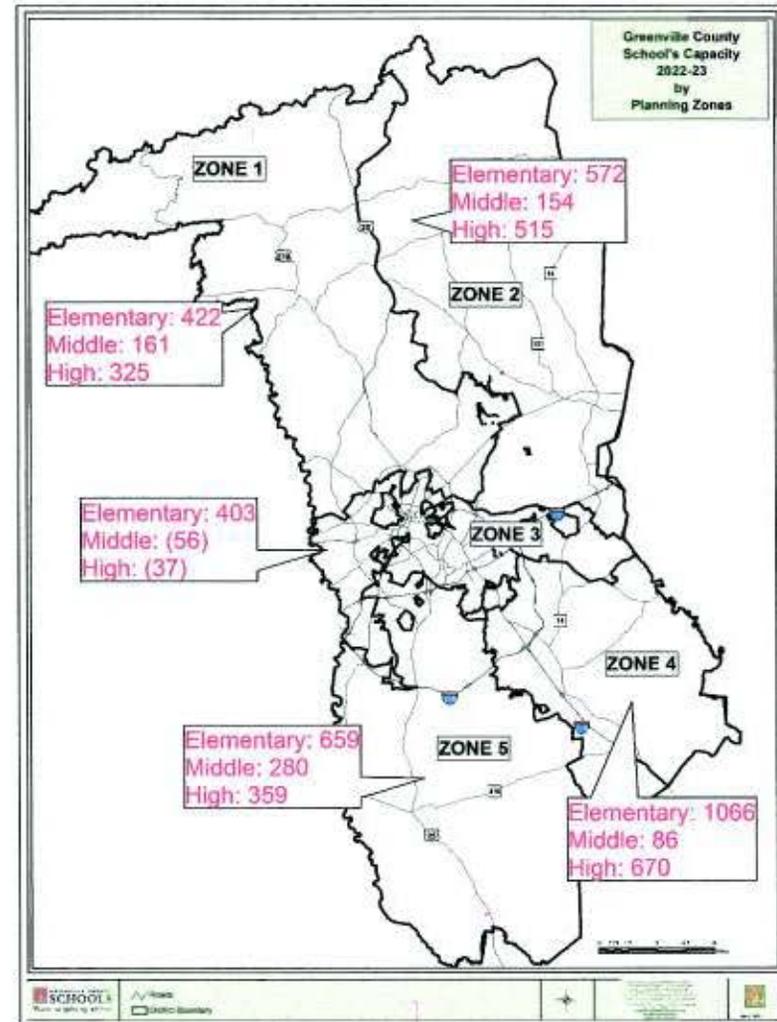
Planned 2017-2022		
Project	Capacity Added	Schools to be Relieved
Rudolph Gordon Addition and Conversion to K8 School	250 500	Rudolph Gordon Elem Bryson, Hillcrest, and Riverside Mid
Summit Drive Addition	250	Summit Drive / Overcrowded Schools
New Fountain Inn High School	1,000	Hillcrest and Mauldin
Robert E Cashion Addition	236	R.E. Cashion
Total Capacity Added:	2,236	

Table 4-10

Planned 2023 and Beyond		
Project	Capacity Added	Schools to be Relieved
Ellen Woodside Addition	196	Ellen Woodside
Fork Shoals Addition	227	Fork Shoals
Mountain View Addition	200	Mountain View
Ralph Chandler MS Addition	250	Ralph Chandler MS
Simpsonville @ Morton Addition	170	Simpsonville @ Morton
New North Area Middle School	750	Northern Middle Schools
New Elementary School (Old JL Mann Site)	750	Buena Vista, Mauldin, Pelham Road, Sara Collins, Woodland
Total Capacity Added:	2,543	

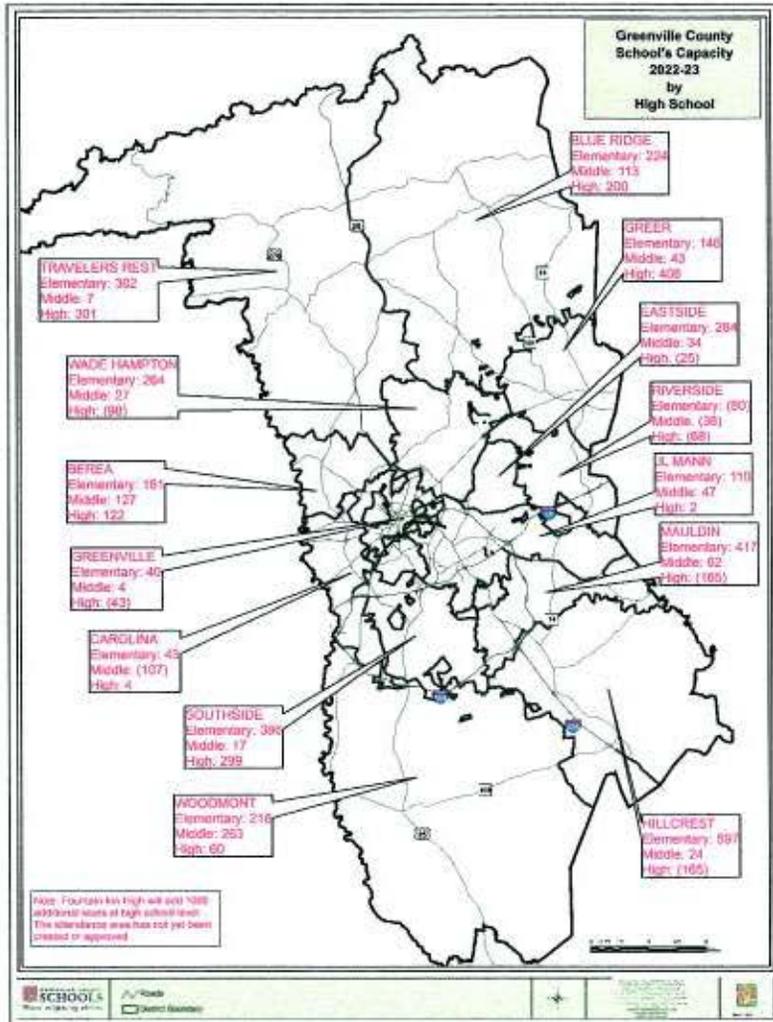
Map 4-2 with space available or needed in 2022 by Planning Zone. **Space available or needed in 2022 including planned projects (no student assignment changes reflected)**

Map 4-2



Map 4-3 with space available or needed in 2022 by High School.
**Space available or needed in 2022 including planned projects
 (no student assignment changes reflected)**

Map 4-3



Space Available or Needed through 2030* Table 4-11

	Cap. 2022	Enrollment 2022	Space Avail	Cap. 2030	Enrollment 2030	Space Avail
Elementary Schools	40,263	37,141	3,122	41,806	40,856	950
Middle Schools	18,422	17,797	625	19,422	18,717	705
High Schools	23,743	21,911	1,832	23,743	23,227	516

*Includes all staff plans through 2022 and beyond. (Reflects Greenville County population projections found on page 1-2. County is currently updating projections)

Strategy 2: Respond to changing educational program needs with creativity and commitment.

There continues to be both local and state initiated changes to the educational environment from expanding early childhood programs to reduced class sizes. Most of these changes are discussed in Chapter 3. This section will address three areas that fall outside of capacity needs – High School Career and Technology Clusters, State required space for 5K programs, and athletic program improvements.

As a part of GCS's Graduation Plus initiative, classes presently located at the Career Centers were relocated to high schools for the 2015-16 school year. Expansion of certifiable courses will occur at the career centers to improve workforce readiness and two year college program certification. Additions or renovations may be needed at the career centers. An addition at Enoree Career Center was completed this year. Operational funding for the programs will also be necessary. The additional space at the career centers can then be renovated to provide relief for the expanding programs.

1. An initiative impacting future facilities needs is the State Education and Economic Development Act (EEDA) mandate which requires majors in sixteen (16) career clusters in the high schools. At this time the District has four career centers — J. Harley Bonds, Donaldson, Golden Strip, and Enoree. They are modeled around the traditional vocational model that offers half day programs to students who take their academic classes at a regular high school. GCS is evaluating the career center programs for alignment with the EEDA requirements. There may be capital needs at these facilities and/or others as the District identifies an implementation plan for this legislative mandate and GCS's Graduation Plus initiative.

Many of the academic programs may require special equipment and minor renovations. Business academic partners are essential for successful programs and may bring funding as well as in-kind contributions to the schools. See Planning Zone 6 for facilities and program information on the centers. The district plans to construct the Career Technology Innovation/Incubation Center onsite at the Roper Mountain Science Center.

2. The State of South Carolina requires that all 5K, 4K and Preschool special education classes be held in a classroom of 1,100 square feet or greater. The State has recently granted GCS a waiver allowing the District to place 4K and 5K programs in classrooms of less than 1,100 square feet provided the number of students in the classroom is reflective of the smaller square footage and all State life safety requirements for preschool classroom space are met. Recently, the State Department of Education has provided further flexibility in this area.

GCS Planning staff annually monitors kindergarten space utilization to identify schools needing kindergarten space each year.

The increase in kindergarten enrollments peaked in the 2014-15 school year. To accommodate the classroom space needs at existing schools, the District is using a modular (manufactured) classroom that can be placed at school sites as needed for temporary population fluctuations.

3. The Sullivan Center houses the high school alternative program, Lifelong Learning, and several support services offices with a total of approximately 50 employees.

It was built in 1954 but has been renovated and upgraded to contemporary educational standards.

4. In 2000-01, GCS began offering an athletic program (after school competitive) at the middle school level. This program changed the physical space requirements for middle schools. Consideration of this change is being incorporated into the schools currently being constructed or modernized as space is available. Funding is approved for this area, as well as other athletic projects. In addition safety and space concerns have been identified relating to high school weight rooms, which is planned to be addressed.

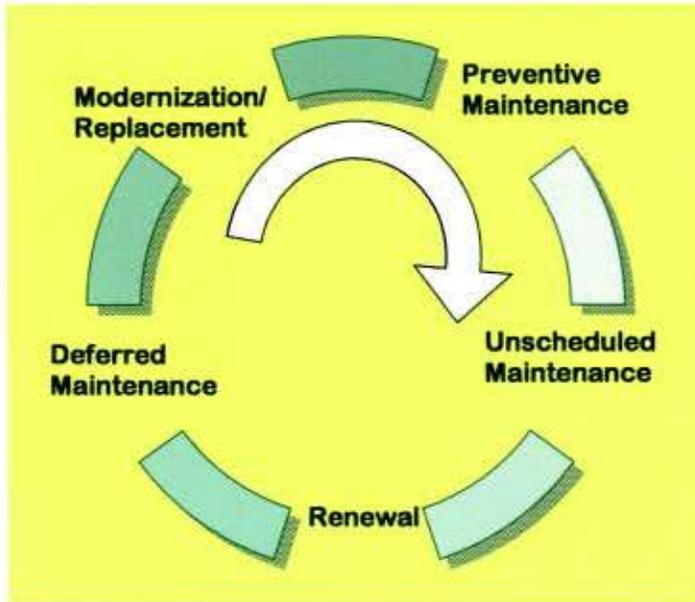
5. As instructional delivery continues to evolve and improve and GCS desires to have conducive learning environments, a study is being proposed to evaluate older district facilities.

The District will continue to maintain Title IX equity as new athletic programs are added.

Strategy 3: Provide funding for maintenance and system renovation on a schedule that ensures that buildings remain environmentally safe and secure and function efficiently.

Nearly every school in GCS is either new or newly renovated. The District has another 24 schools that were not included in the BEST construction program because of their age at the time the program began. Does this mean that 10 years from now, the District could be faced with major maintenance demands as all the buildings begin to age at the same time? To ensure that GCS is not faced with a large maintenance balloon payment in 2025, it has developed a balanced

comprehensive maintenance program that includes both proactive and reactive capacity for the next twenty years and identifies the funding needed annually.



Comprehensive Maintenance Plan

The following plan is based on 1) industry models for life cycle costs and 2) an evaluation of the current inventory to reflect unique maintenance requirements.

The "Life Cycle Cost" was developed utilizing Whitestone Research's MARS computer modeling program. The model is a collection of key information about a building, including size, replacement value, and a list of major architectural features or pieces of equipment that contribute to the overall working capability of a building. Prototype models were developed for an elementary school, middle school and high school. These models were then adapted for each school

considering square footage, numbers of floors, age, and other known factors. An inflation rate of approximately 1.3% has been assumed for each year through 2024. The model includes projected operating and capital costs for salary, materials, and equipment.

Preventive maintenance includes actions taken to maintain each piece of equipment as described by the manufacturers' recommendations. Examples are changing belts, lubricating equipment, or cleaning coils. A detailed breakdown by component showing the school, anticipated year, and estimated cost of the preventive maintenance item can be found as Attachment A of this Plan.

Unscheduled maintenance is action taken when a piece of equipment fails prior to its scheduled maintenance as listed on a work order. This work is usually for repairs or minor part replacements.

Replacements are actions taken to replace a failed or poorly performing piece of equipment because it is too costly to repair.

Deferred Maintenance are prior years maintenance items that are scheduled to be replaced but still have a useful life. Examples: carpet, painting, boilers, chillers.

Reports by school, school type, and/or component for the next ten years are used to plan the workload. Note that some of the funds identified on Table 4-12 are already included in the District's operating budget.

Comprehensive Maintenance Plan Components

Industry model for maintenance of basic components

Condition assessment to identify unique maintenance requirements



Plans prepared for Individual Schools



Summaries by school type (ES, MS, HS) and components (Roofing, site work, HVAC)

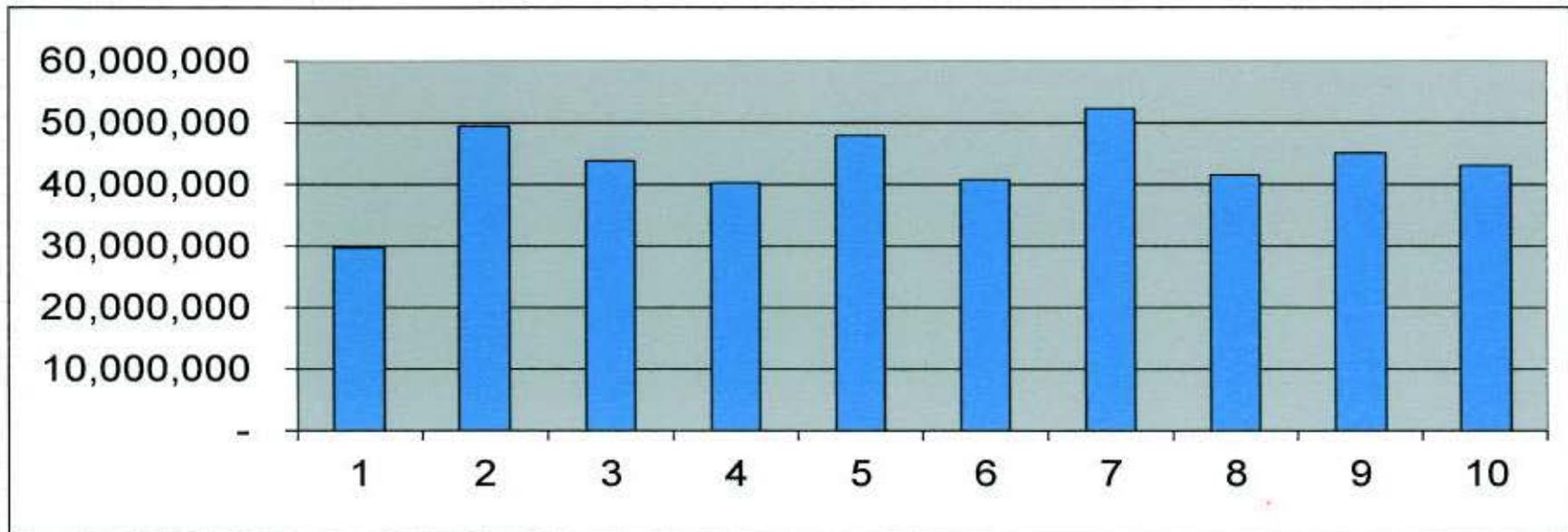


Annual funding needs for operations and materials

Table 4-12

Funding Summary

YearNum	Year	PM	Unsched	Repair	SubTotal	Replace	Total Cost
1	2018 - 2019	8,180,706	9,386,305	5,270,638	22,837,649	6,742,343	29,579,992
2	2019 - 2020	7,922,896	9,233,209	10,880,931	28,037,036	21,449,344	49,486,380
3	2020 - 2021	8,240,138	9,536,084	7,585,642	25,361,864	18,372,925	43,734,789
4	2021 - 2022	8,316,428	9,604,491	6,852,493	24,773,412	15,253,511	40,026,923
5	2022 - 2023	8,603,555	9,911,735	5,390,606	23,905,896	23,865,854	47,771,750
6	2023 - 2024	8,789,962	10,090,773	3,602,652	22,483,387	18,106,472	40,589,859
7	2024 - 2025	9,125,900	10,602,744	5,378,599	25,107,243	27,087,859	52,195,102
8	2025 - 2026	9,434,628	10,900,626	4,389,405	24,724,659	16,794,966	41,519,625
9	2026 - 2027	9,498,933	10,940,886	3,572,005	24,011,824	21,048,762	45,060,586
10	2027 - 2028	9,646,447	11,072,784	5,556,492	26,275,723	16,597,228	42,872,951



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Strategy 4: Implement the Instructional Technology Plan to give all students and staff members continuing access to contemporary educational technology.

The BEST program has provided the infrastructure in the schools that are part of the program, and met the most up-to-date design standards. These standards ensure that every school has a multi-use communication network within and outside of the school. This communication network enables students, educators and members of the community to take advantage of the many resources offered by a technologically advanced learning environment.

Over the next ten years updated infrastructure, equipment, software, and training will be necessary to ensure that students and teachers can benefit from advances in educational tools. The District's current accepted level of educational technology includes:

- Interactive white boards
- Smart Televisions
- Teacher Laptops
- Student Laptop Carts
- Document Cameras
- Personal Electronic Devices (BYOD)
- Interactive Voting Response Systems
- Promethean Boards

The appropriate classroom wiring and school-wide infrastructure (wire closets) will be upgraded as equipment and training is disseminated. As more schools move to one-on-one technology there will be requirements for upgrades in infrastructure, bandwidth, and devices. All schools have wireless capabilities.

Strategy 5: Provide for the ancillary facilities and equipment that are needed to support the educational program and transportation needs of a growing district.

This strategy addresses the District's need for up-to-date, efficient ancillary facilities and equipment that support the schools, students, and educational programs. While it is important that schools are safe, secure and functionally efficient to support student learning well into the future, it is equally important that ancillary facilities that provide support services to students and the educational program also meet these standards. The District's support services operate from numerous locations through Greenville County as shown in Table 4-13.

Table 4-13

Ancillary Facilities	Operations
J. Floyd Hall Central Office	District Administrative Operations
Distribution Center	Maintenance; Purchasing; Security; Custodial Supervision; Transportation; Human Resources-Hourly Employees; Facilities; Planning & Demographics; Distribution Services; Science Kit Center; Professional Resources Center; Law Enforcement
MT Anderson Support Center	Student Personnel Services; ETS; Information Assurance; Food & Nutrition; Video Production Services; Career Technology Services; Health Education Programs; Special Education Services; Psychological Services; ESOL Services
Harley Bonds Career Center	Internal Auditing
Donaldson Bus Center	Regional Transportation Services
Berea Satellite Bus Center	Regional Transportation Services
Golden Strip Satellite Bus Center	Regional Transportation Services
Taylor's Bus Center	Regional Transportation Services

Administrative services have been consolidated into three renovated locations - the J. Floyd Hall Central Office, the Distribution Center, and the M. T. Anderson Support Center.

Disposition of Excess Facilities

With the completion of the BEST program GCS has excess school buildings and ancillary facilities. The District will develop a process for the re-use or disposition of these facilities during the next few years.

The following facilities are being evaluated for future needs:

- Old Wade Hampton ES

The following facilities are currently leased:

- Old Golden Strip CDC (Old Bryson ES)
- Old Northwest Area Office
- Old Northwest CDC (Old Arrington ES)

Strategy 6: Develop a long-range facilities plan that is fiscally responsible.

This Long Range Facilities Plan and Capital Improvement Program addresses additional capacity needs. GCS will continue to identify a revenue stream to fund these projects.

This Plan also identifies longer term capacity needs into the future. The timing for these projects will be based on the pace of enrollment growth and the programmatic priorities of the Board. Anticipating these projects now will allow the District to plan for the needed funding in the future.

Chapter 5

Chapter 5

PLANNING ZONES

This chapter presents current and projected enrollment through 2022-23. The District's elementary, middle and high schools have been organized into five (5) geographic planning zones based on where a majority of the rising 5th grade students matriculate to middle school, and where a majority of the rising 8th grade students matriculate to high school.

The tables in the planning zones show the program capacity based on 2008-09 staffing ratios, current enrollment for 2017-18, and the projected enrollment for school years 2018-19 through 2022-23. The program capacity is recalculated each year to reflect each school's staffing allocation for that year. 2008-09 staffing ratios have been used because they more accurately represent GCS's goal for staffing ratios which were in place prior to loss of funding due to the economy. Staffing ratio impacts facility utilization. GCS made a significant improvement during the recent budget processes regarding staffing by providing flexible baseline allocations to each school.

The column labeled "seats" represents the capacity available or needed and may reflect future additions or the opening of new schools. The information contained in this section is a tool used by the District to effectively manage enrollment and capacity, and plan for future facilities timed with the projected need.

The following pages 5-2 and 5-3 show a listing of the schools by planning zone.

Chapter 5 Planning Zones

Planning Zone 1: Northwest

Elementary Schools

Armstrong
Berea
Duncan Chapel
Gateway
Heritage
Lake Forest
Paris
Slater-Marietta
Westcliffe

Middle Schools

Berea
Lakeview
League Academy
Northwest
Sevier

High Schools

Berea
Travelers Rest
Wade Hampton

Planning Zone 2: Northeast

Elementary Schools

Brook Glenn
Brushy Creek
Buena Vista
Chandler Creek
Crestview
Mitchell Road
Mountain View
Pelham Road
Skyland
Taylors
Tigerville
Woodland

Middle Schools

Blue Ridge
Greer
Northwood
Riverside

High Schools

Blue Ridge
Eastside
Greer
Riverside

Planning Zone 3: Central

Elementary Schools

A.J. Whittenberg
Alexander
Augusta Circle
Blythe Academy
Cherrydale
East North Street
Hollis Academy
Monaview
Sara Collins
Sterling School
Stone Academy
Summit Drive
Welcome

Middle Schools

Beck Academy
Dr. Phinnize J. Fisher
Greenville Academy
Sterling School
Tanglewood

High Schools

Carolina Academy
Greenville Sr. Academy
J.L. Mann Academy

Planning Zone 4: Southeast

Elementary Schools

Bells Crossing
Bethel
Bryson
Fountain Inn
Greenbrier
Mauldin
Monarch
Oakview
Plain
Simpsonville @
Morton Place

Middle Schools

Bryson
Hillcrest
Mauldin

High Schools

Hillcrest
Mauldin

Other Schools

Rudolph G. Gordon

Planning Zone 5: Southwest

Elementary Schools

Ellen Woodside
Fork Shoals
Greenview
Grove
Robert E. Cashion
Sue Cleveland
Thomas E Kerns

Middle Schools

Hughes Academy
Ralph Chandler
Woodmont

High Schools

Southside
Woodmont

Effects of Requested CIP and Non-CIP Actions on Availability of Seats

School	Capacity *	Current				Projected								Comments
		2017 / 2018		2018 / 2019		2019 / 2020		2020 / 2021		2021 / 2022		2022 / 2023		
		Enrollment	Seats	Enrollment	Seats									
Berea High	1346	1050	296	1069	277	1097	249	1182	164	1199	147	1224	122	
Travelers Rest High	1600	1192	408	1175	425	1192	408	1215	385	1251	349	1299	301	
Wade Hampton High	1659	1753	(94)	1753	(94)	1747	(88)	1754	(95)	1756	(97)	1757	(98)	
High Total	4605	3995	610	3997	608	4036	569	4151	454	4206	399	4280	325	
Berea Middle	866	737	129	761	105	790	76	809	57	779	87	765	101	
Lakeview Middle	771	606	165	659	112	723	48	733	38	746	25	745	26	
League Academy	834	822	12	823	11	832	2	829	5	822	12	818	16	
Northwest Middle	863	826	37	842	21	839	24	839	24	843	20	856	7	
Sevier Middle	755	749	6	752	3	750	5	753	2	749	6	744	11	
Middle Total	4089	3740	349	3837	252	3934	155	3963	126	3939	150	3928	161	
Armstrong Elementary	513	428	85	434	79	432	81	432	81	435	78	434	79	
Berea Elementary	534	459	75	462	72	451	83	439	95	455	79	457	77	
Duncan Chapel Elementary	752	658	94	659	93	649	103	656	96	674	78	669	83	
Gateway Elementary	816	749	67	755	61	759	57	755	61	749	67	749	67	
Heritage Elementary	764	710	54	692	72	704	60	699	65	710	54	709	55	
Lake Forest Elementary	810	844	(34)	821	(11)	822	(12)	823	(13)	831	(21)	841	(31)	
Paris Elementary	676	688	(12)	684	(8)	675	1	679	(3)	674	2	675	1	
Slater-Marietta Elementary	579	469	110	466	113	468	111	470	109	475	104	482	97	
Westcliffe Elementary	323	298	25	305	18	301	22	302	21	312	11	329	(6)	
Elementary Total	5767	5303	464	5278	489	5261	506	5255	512	5315	452	5345	422	
Planning Zone Total	14461	13038	1423	13112	1349	13231	1230	13369	1092	13460	1001	13553	908	

* Program capacity is based on 2008-09 staffing allocations.

Effects of Requested CIP and Non-CIP Actions on Availability of Seats

School	Capacity *	Current				Projected								Comments
		2017 / 2018		2018 / 2019		2019 / 2020		2020 / 2021		2021 / 2022		2022 / 2023		
		Enrollment	Seats											
Blue Ridge High	1336	1118	218	1066	270	1079	257	1075	261	1101	235	1136	200	
Eastside High	1460	1484	(24)	1487	(27)	1487	(27)	1483	(23)	1487	(27)	1485	(25)	
Greer High	1784	1208	576	1222	562	1233	551	1278	506	1341	443	1376	408	
Riverside High	1672	1739	(67)	1733	(61)	1736	(64)	1737	(65)	1739	(67)	1740	(68)	
High Total	6252	5549	703	5508	744	5535	717	5573	679	5668	584	5737	515	
Blue Ridge Middle	1040	904	136	969	71	979	61	988	52	944	96	927	113	
Greer Middle	1066	945	121	1000	66	1027	39	1032	34	1033	33	1023	43	
Northwood Middle	936	861	75	875	61	885	51	927	9	929	7	902	34	
Riverside Middle	1051	1116	(65)	1091	(40)	1101	(50)	1099	(48)	1084	(33)	1087	(36)	
Middle Total	4093	3826	267	3935	158	3992	101	4046	47	3990	103	3939	154	
Brook Glenn Elementary	545	445	100	443	102	449	96	448	97	443	102	453	92	
Brushy Creek Elementary	904	878	26	870	34	864	40	874	30	871	33	872	32	
Buena Vista Elementary	884	905	(21)	904	(20)	901	(17)	892	(8)	874	10	892	(8)	
Chandler Creek Elementary	990	966	24	942	48	937	53	942	48	940	50	957	33	
Crestview Elementary	800	709	91	701	99	685	115	678	122	675	125	687	113	
Mitchell Road Elementary	675	609	66	600	75	600	75	596	79	602	73	604	71	
Mountain View Elementary	900	856	44	844	56	839	61	842	58	851	49	859	41	
Pelham Road Elementary	787	764	23	762	25	767	20	773	14	774	13	775	12	
Skyland Elementary	808	783	25	767	41	768	40	776	32	779	29	781	27	
Taylor's Elementary	837	754	83	754	83	753	84	760	77	762	75	762	75	
Tigerville Elementary	425	279	146	276	149	272	153	258	167	267	158	269	156	
Woodland Elementary	1066	1085	(19)	1106	(40)	1087	(21)	1104	(38)	1131	(65)	1138	(72)	
Elementary Total	9621	9033	588	8969	652	8922	699	8943	678	8969	652	9049	572	
Planning Zone Total	19966	18408	1558	18412	1554	18449	1517	18562	1404	18627	1339	18725	1241	

* Program capacity is based on 2008-09 staffing allocations.

Effects of Requested CIP and Non-CIP Actions on Availability of Seats

School	Capacity *	Current				Projected								Comments
		2017 / 2018		2018 / 2019		2019 / 2020		2020 / 2021		2021 / 2022		2022 / 2023		
		Enrollment	Seats	Enrollment	Seats	Enrollment	Seats	Enrollment	Seats	Enrollment	Seats	Enrollment	Seats	
Carolina High Academy	900	753	147	761	139	791	109	825	75	875	25	896	4	
Greenville Sr. High Academy	1472	1459	13	1480	(8)	1488	(16)	1485	(13)	1520	(48)	1515	(43)	
J L Mann High Academy	2000	1911	89	1980	20	1991	9	1992	8	1993	7	1998	2	
High Total	4372	4123	249	4221	151	4270	102	4302	70	4388	(16)	4409	(37)	
Beck Academy	954	944	10	949	5	951	3	944	10	945	9	932	22	
Dr. Phinnize J. Fisher Middle	1040	1037	3	1038	2	1038	2	1039	1	1034	6	1039	1	
Greenville Academy	840	832	8	833	7	835	5	833	7	817	23	836	4	
Sterling Middle	270	205	65	218	52	240	30	249	21	244	26	246	24	
Tanglewood Middle	742	685	57	757	(15)	806	(64)	858	(116)	826	(84)	849	(107)	
Middle Total	3846	3703	143	3795	51	3870	(24)	3923	(77)	3866	(20)	3902	(56)	
A.J. Whittenberg Elem	600	565	35	562	38	566	34	565	35	563	37	565	35	
Alexander Elementary	395	405	(10)	447	(52)	458	(63)	464	(69)	474	(79)	476	(81)	
Augusta Circle Elementary	498	555	(57)	568	(70)	574	(76)	557	(59)	558	(60)	560	(62)	
Blythe Academy	1030	924	106	926	104	920	110	935	95	926	104	937	93	
Cherrydale Elem	634	661	(27)	672	(38)	667	(33)	663	(29)	672	(38)	678	(44)	
East North Street Academy	890	789	101	779	111	790	100	797	93	801	89	801	89	
Hollis Academy	774	685	89	698	172	699	171	691	179	699	171	706	164	
Monaview Elementary	611	597	14	581	30	570	41	597	14	599	12	600	11	
Sara Collins Elementary	902	868	34	876	26	880	22	888	14	888	14	892	10	
Sterling School	670	635	35	619	51	604	66	639	31	635	35	634	36	
Stone Academy	650	630	20	627	23	633	17	630	20	627	23	632	18	
Summit Drive Elementary	489	442	47	451	38	451	38	483	256	500	239	520	219	2020 Addition; Capacity 750
Welcome Elementary	636	722	(86)	702	(66)	683	(47)	689	(53)	716	(80)	721	(85)	
Elementary Total	8779	8478	301	8508	367	8495	380	8598	527	8658	467	8722	403	
Planning Zone Total	16997	16304	693	16524	569	16635	458	16823	520	16912	431	17033	310	

* Program capacity is based on 2008-09 staffing allocations.

Effects of Requested CIP and Non-CIP Actions on Availability of Seats

School	Capacity *	Current		Projected								Comments		
		2017 / 2018		2018 / 2019		2019 / 2020		2020 / 2021		2021 / 2022			2022 / 2023	
		Enrollment	Seats	Enrollment	Seats	Enrollment	Seats	Enrollment	Seats	Enrollment	Seats		Enrollment	Seats
Fountain Inn High School	0	0	0	0	0	0	0	0	0	0	1000	0	1000	2021 New, Capacity 1000
Hillcrest High	2140	2171	(31)	2187	(47)	2173	(33)	2214	(74)	2277	(137)	2305	(165)	
Mauldin High	2211	2374	(163)	2367	(156)	2384	(173)	2377	(166)	2371	(160)	2376	(165)	
High Total	4351	4545	(194)	4554	(203)	4557	(206)	4591	(240)	4648	703	4681	670	
Bryson Middle	995	970	25	968	27	956	39	964	31	979	16	971	24	2018 K8 Addition, Capacity 500
Hillcrest Middle	1057	955	102	992	65	1041	16	1048	9	1050	7	1042	15	
Mauldin Middle	1055	999	56	1015	40	1022	33	1002	53	1015	40	1008	47	
Rudolph G Gordon	0	0	0	168	332	332	168	500	0	500	0	500	0	
Middle Total	3107	2924	183	3143	464	3351	256	3514	93	3544	63	3521	86	
Bells Crossing Elem	1060	977	83	979	81	978	82	969	91	965	95	963	97	
Bethel Elementary	1030	957	73	953	77	932	98	940	90	959	71	965	65	
Bryson Elementary	986	923	63	898	88	903	83	904	82	909	77	923	63	
Fountain Inn Elementary	1025	731	294	719	306	712	313	713	312	728	297	729	296	
Greenbrier Elementary	995	786	209	775	220	765	230	763	232	754	241	771	224	
Mauldin Elem	1028	965	63	964	64	945	83	947	81	947	81	946	82	
Monarch Elem	1000	953	47	950	50	941	59	942	58	949	51	954	46	
Oakview Elementary	1058	1012	46	1030	28	1031	27	1006	52	1017	41	1006	52	
Plain Elementary	1019	936	83	936	83	936	83	928	91	928	91	930	89	
Rudolph G. Gordon Elem	920	870	50	915	85	972	28	974	26	983	17	990	10	2018 Addition; Capacity 1000
Simpsonville Elem @ Morton Place	846	810	36	796	50	798	48	790	56	795	51	804	42	
Elementary Total	10967	9920	1047	9915	1132	9913	1134	9876	1171	9934	1113	9981	1066	
Planning Zone Total	18425	17389	1036	17612	1393	17821	1184	17981	1024	18126	1879	18183	1822	

* Program capacity is based on 2008-09 staffing allocations.

Effects of Requested CIP and Non-CIP Actions on Availability of Seats

School	Capacity *	Current		Projected										Comments
		2017 / 2018		2018 / 2019		2019 / 2020		2020 / 2021		2021 / 2022		2022 / 2023		
		Enrollment	Seats											
Southside High	1163	731	432	757	406	762	401	800	363	851	312	864	299	
Woodmont High	2000	1805	195	1770	230	1798	202	1841	159	1919	81	1940	60	
High Total	3163	2536	627	2527	636	2560	603	2641	522	2770	393	2804	359	
Hughes Academy	1043	1019	24	1024	19	1031	12	1039	4	1024	19	1026	17	
Ralph Chandler Middle	760	739	21	736	24	748	12	742	18	730	30	734	26	
Woodmont Middle	984	658	326	681	303	721	263	736	248	757	227	747	237	
Middle Total	2787	2416	371	2441	346	2500	287	2517	270	2511	276	2507	280	
Ellen Woodside Elementary	838	681	157	684	154	683	155	689	149	728	110	739	99	
Fork Shoals Elementary	803	739	64	753	50	738	65	720	83	729	74	737	66	
Grove Elementary	700	691	9	641	59	617	83	615	85	641	59	655	45	
R.E. Cashion Elem	801	698	103	679	122	670	131	693	108	701	100	703	334	2022 Addition; Capacity 1037
Sue Cleveland Elementary	625	567	58	554	71	538	87	549	76	560	65	572	53	
Thomas E. Kerns Elem	700	652	48	633	67	630	70	637	63	629	71	638	62	
Elementary Total	4467	4028	439	3944	523	3876	591	3903	564	3988	479	4044	659	
Planning Zone Total	10417	8980	1437	8912	1505	8936	1481	9061	1356	9269	1148	9355	1298	

* Program capacity is based on 2008-09 staffing allocations.

Special Education Services

The District provides educational programs for students with disabilities. A continuum of services, provided by GCS ensures that programs are offered in the least restrictive environment. Where feasible, students are being served in their home school. They may receive services in the regular classroom, in special education classrooms in regular schools, or at satellite centers located at Sara Collins Elementary, Mitchell Road Elementary, East North Street Elementary, Beck Middle, and J.L. Mann High Schools where resource intensive services are available. Students with the most severe disabilities are served at Washington Center. West Greenville School serves students classified as emotionally disabled with severe behavior problems that preclude their participation on a regular school campus. West Greenville provides structured environment designed to meet individual student needs related to behavior, socialization and academics. This program is designed to assist students in a successful return to their homebased school. The school can accommodate up to 100 students in grades 6 – 12.

Most students with disabilities are served in regular classrooms for the majority of the school day in resource programs. Resource programs have the primary goal of promoting student success in general education classrooms. Participating in general education settings is preferable when possible which is consistent with federal mandates related to Least Restrictive Environment. Over the next few years the District will strive to reduce the number of students in self-contained classrooms by increasing the quality and quantity of special education services and in-classroom supports.

Table 5-1 shows the actual and projected enrollment for Washington Center.

Table 5-1

School Year	Washington Center
2010-11	136
2011-12	132
2012-13	134
2013-14	142
2014-15	144
2015-16	145
2016-17	135
2017-18	129
2018-19	132
2019-20	123
2020-21	132
2021-22	130
2022-23	134

GCS provides programs for gifted children at their home schools through the Challenge Program. Challenge is both a 'pull-out' and 'plug-in' program designed to offer supplemental programming for students and classroom support for teachers. The instructional delivery model is annually assessed and evaluated for its effectiveness in meeting the educational needs of students.

In addition to the Challenge program, GCS also provides full-time gifted and talented services to students in grades 3 through 8. This program is housed at its permanent location, the Sterling School. Staffing is provided at the middle school and high school, represented by advanced placement courses.

Alternative Programs

In addition to the traditional school setting, GCS offers a variety of alternative programs for middle and high school students. These programs offer non-institutional settings, smaller class sizes, interagency services, or special curriculum. They are typically targeted to students with disciplinary problems, truancy, drug offenses, behavior that may not merit expulsion or, in the case of STAR Academy target overaged middle school students to recover course credit to graduate. Beginning with the 2017-18 school year, STAR students are serviced at their homebase middle schools. Alternative programs offer these students the chance to stay on track academically in a highly structured environment where establishing and maintaining discipline is a priority. GCS began an Early College program in August 2012 at the University Center. The program is currently serving 6th through 11th graders. A grade will be added each year through twelfth grade. The program targets at risk students for college.

GCS began the Satellite Diploma Program in 2013-14 targeting high school students behind in credits. The program is housed at the four career center locations and allows self-pacing by the student.

Table 5-2 shows the alternative programs operated by GCS and their maximum enrollment.

Table 5-2

Program Location	Grade/Program	Max. Enrollment
Donaldson Career Center	6-8	45
J. Harley Bonds Career Center	6-8	45
West Greenville School	6-8 MSAP	48
	6-12 ED	40
	6-12 EMD	12
	45 Day Program	15
Sullivan Center	9-12	48
Twilight School	9-12	400
Early College	6-12	375
Satellite Diploma Program	9-12	400

Child Development Centers

In addition to the 4K programs in the elementary schools, GCS offers early childhood programs at 6 Child Development Centers (CDC).

They are Overbrook CDC, Riley CDC, Golden Strip CDC, Northwest Crescent CDC, Paul Lawrence Dunbar CDC, and Greenview CDC. These centers can accommodate up to 200 young children with the exception of Greenview which can accommodate more. In addition to the 4K programs, the CDC's also provide preschool special education. Funding for other supportive programs were eliminated during the economic downturn.

Table 5-3

Center Location	2017-18 4K and Preschool Special Ed
Golden Strip CDC	178
Greenview CDC	231
Northwest Crescent CDC	129
Overbrook CDC	87
Paul Lawrence Dunbar CDC	174
Riley CDC	134
Total	924

Career and Technology Education (CTE)

The Assistant Superintendent for Special Academic Programs coordinates and implements career/workforce education for students in grades 9-12. Focus is on developing programs and cutting edge curriculum that addresses the needs of students entering the job market after high school, or those continuing on to technical, community colleges, and universities.

Through its four centers – Donaldson, Enoree, Golden Strip, and J. Harley Bonds Career Centers - GCS provides career and technological education experiences that will provide students with employable skills, which would be available at all the facilities.

As a part of GCS Graduation Plus initiatives some programs were moved from career centers to high schools opening space at the career centers for more focused, certifiable offerings. The desire is to increase the number of students ready for the workforce or prepared for more advanced higher education at 4 year institutions and technical colleges.

The District plans to construct a Career Technology Innovation/Incubation Center at Roper Mountain Science Center to enhance high school students' education and exposure to the latest in career opportunities.

Table 5-4

Career Center	Half Day Capacity	2017 Enrollment		Programs
		AM	PM	
Donaldson	348	179	101	Automotive Technology; Barbering; Building Construction; Cosmetology; Culinary Arts; Digital Art; Fashion Design; Fire Fighter; Mechatronics; Nail Technology; Welding
Enoree	234	162	96	Automotive Technology; Auto Collision; Building Construction; Cosmetology; Culinary Arts; Fire Fighter; Graphics; Law Enforcement; Welding
Golden Strip	324	222	181	Automotive Technology; Auto Collision; Building Construction; Career Development; Cosmetology; Culinary Arts; Computer Science; Early Childhood; Fire Fighter; Fashion; HVAC; Law Enforcement; Logistics; Machine Tool; Nail Technology; Technology; Welding
J. Harley Bonds	478	232	195	Automotive Technology; Building Construction; Career Development; Cosmetology; Culinary Arts; Esthetics; Fire Fighter; Logistics; Machine Tool; Mechatronics; Web Design; Welding

Appendices

APPENDIX A

GLOSSARY OF TERMS

ACS: American Community Survey

BEST: Building Equity Sooner for Tomorrow, a non-profit corporation established by the School Board to provide financing for the 1993 Facilities Plan.

BOARD: A "Board", unless otherwise specified, means a school district school board.

CIP: Capital Improvement Plan

COMPREHENSIVE MAINTENANCE: The upkeep of educational and ancillary plants, including, but not limited to, roof or roofing replacement short of complete replacement of membrane or structure; repainting of interior or exterior surfaces; resurfacing of floors; repair or replacement of glass; repair of hardware, furniture, equipment, electrical fixtures, and plumbing fixtures; and repair or resurfacing of parking lots, roads, and walkways. "Maintenance and repair" shall not include renovation except for the replacement of equipment with new equipment or equal systems meeting current code requirements, provided that the replacement item neither places increased demand upon utility services or structural supports nor adversely affects the function of safety to life systems.

CO: Certificate of Occupancy

CORE CAPACITY: The media center, cafeteria, toilet facilities, and circulation space of an educational plant.

CU-ICAR: Clemson University International Center for Automotive Research

DESIGN CAPACITY: The standard used by GCS for building design. Standard design capacities used by GCS are:

Elementary..... 400 to 1,000 students
Middle..... 600 to 1,000 students
High.....1,000 to 2,000 students

EEDA: Education and Economic Development Act passed in May 2005 requires districts to develop a standards-based curriculum organized around a career cluster system. Career awareness activities are to be provided in the elementary grades, career exploration in the middle grades, and career guidance in high schools.

ESOL: English Speakers of Other Languages

FEASIBILITY STUDY: The examination and analysis of information related to projected educational facilities to determine whether they are reasonable and possible.

GADC: Greenville Area Development Corporation

GCPC: Greenville County Planning Commission

GCPD: Greenville County Planning Department

GCS: Greenville County Schools

GHS: Greenville Health System

GPATS: Greenville-Pickens Area Transportation Study

GTA: Greenville Transit Authority

IDEA: Individuals with Disabilities Education Act

INRE: Institutional Resources

LEP: Limited English Proficiency

LRTP: Long Range Transportation Plan

MARS: Maintenance and Repair Cost Forecast System

MEDIA CENTER: An area specifically designed or adapted as a place for study, reading, and the custody, circulation, and administration of a collection of books, manuscripts, and periodicals kept for use by the student body.

MPO: Metropolitan Planning Organization

NEW CONSTRUCTION: Any construction of a building or unit of a building in which the entire work is new or an entirely new addition connected to an existing building.

NO CHILD LEFT BEHIND: (NCLB): The No Child Left Behind Act was passed by Congress in January 2002. It requires public school systems to ensure that each student receives a meaningful, high-quality education. The standard for successful implementation of this law is the acceleration of academic achievement for all students and the elimination of achievement gaps among children.

OSF: Office of School Facilities serves as the Building Official for public school facilities in South Carolina. The office also is responsible for the administration of certain building fund programs and provides facility related technical and educational assistance to a broad group of customers, including school architects, engineers, contractors and subcontractors.

PROGRAM CAPACITY: The number of classrooms at a school and the average number of students assigned to each room. Program capacity is driven by how a school is actually utilized and is determined yearly.

REMODELING: The changing of existing facilities by rearrangement of spaces and their use and, as an example, includes, but is not limited to, the conversion of two classrooms to a science laboratory or the conversion of an open plan arrangement to a closed plan configuration.

RENOVATION: The rejuvenating or upgrading of existing facilities by installation or replacement of materials and equipment and includes, but is not limited to, interior or exterior reconditioning of facilities and spaces; air conditioning, heating, or ventilating equipment; fire alarm systems; emergency lighting; electrical systems; and complete roofing or roof replacement, including replacement of membrane or structure.

REQUIRED MODERNIZATIONS: A comprehensive upgrading of schools to 'like new' school standards. This requires a comprehensive evaluation of schools which are 35 years old or older for a determination of the need for rehabilitation, remodeling or replacement of the facility.

REVENUE SOURCES: Refers to the various methods that contribute to the funding to cover the revenue side of the financial statement to fund the expenses of the district. These funds come from State, Federal and local sources.

SITE: A space of ground occupied or to be occupied by an educational facility or program.

SITE DEVELOPMENT: Site development means work that must be performed on an unimproved site in order to make it usable for the desired purpose; or, work incidental to new construction or to make an addition usable.

SITE IMPROVEMENT: The work that must be performed on an existing site to improve its utilization, correct health and safety deficiencies, meet special program needs or provide additional service areas. Site improvement incident to construction is the work that must be performed on a site as an accompaniment to the construction of an addition to an education facility or for a modernization project.

SITE SIZE:

Minimum Acreage Requirements

Elementary: 10 acres plus 1 acre for each 100 students

Middle: 20 acres plus 1 acre for each 100 students

High: 30 acres plus 1 acre for each 100 students

The above acreages are used by the School District as a guideline. Each new site must be adequate in size, and approved by the State Office of School Facilities.

SCPCSD: South Carolina Public Charter School District.

SPACE: All areas of construction, e.g., buildings, rooms, storage facilities, stairwells, gymnasiums, covered walkways, and covered play areas.

STRATEGIC PLANNING: Is a process for creating an organization's preferred future. It is a long-range planning process for organizational renewal which provides a framework for improving programs, management functions, and evaluation of an organization's progress. Strategic planning helps organizations think and act strategically, develop effective strategies, clarify future directions, establish priorities, improve organizational performance, build teamwork and expertise, and deal effectively with a rapidly changing environment. The South Carolina Department of Education requires districts and schools to undergo a new strategic planning process every five years, with updates of the plan required annually.

STUDENT STATION: Square footage required per student for instructional program based on the particular course content to be offered. Instructional programs that are assigned student stations are:

Elementary

Kindergarten
Primary
Intermediate
ESE
Open Plan
Instruction

Secondary

General Classrooms
Science
Skills Lab
ROTC
Music
Art
P.E.
Vocational
ESE
Open Plan Instruction

Other Centers that offer instructional programs that are assigned student stations:

Combination schools (i.e. grades 7-12)
Alternative Education Centers
Special Education Centers
Career /Technical Schools
Adult Education Centers

TDP: Transit Development Plan

TEACHING STATION: The following are types and descriptions of standard teaching stations.

Classroom: An instructional space requiring no special design or equipment and used for housing general programs such as language arts, social studies, and mathematics.

Gymnasium: An instructional area designed or adapted specifically for physical education activities. Regular or special classrooms connected to, or contained in, gymnasiums are recorded individually as regular or special classrooms and not as part of the gymnasium.

Intermediate Classroom: A general classroom designed for students in grades 4 through 6.

Kindergarten Classroom: A special classroom designed or provided with special built-in equipment for use by a group or class organized to provide educational experiences for children preceding the first grade. Rooms must not be located above the first floor and must have self-contained restrooms. OSF facilities guidelines require kindergarten classrooms to be a minimum of 1,100 square feet.

Laboratory: An instructional area designed for and furnished with specialized equipment to serve the needs of a particular program of study. Included in this category are science laboratories, language laboratories, reading laboratories, and vocational/technology laboratories.

Multipurpose Room: An instructional area designed or adapted specifically for two or more of the combined functions that might normally be used for assemblies, physical education, lunch, music, clubs, audiovisual work, and library services. Separate gymnasiums and cafeteriums are not classified as multipurpose rooms.

Music Room: An instructional area designed or provided with special built-in equipment for learning activities involving choral and instrumental music.

Primary Classroom: A special classroom designed for children in grades 1 through 3. These classrooms have restrooms and hand washing facilities located within the classroom or in adjoining spaces that may be a part of two or more classrooms. Rooms for Grade 1 should not be located above the first floor.

Related Classroom: An instructional space designed or provided to support instruction that is primarily conducted in a vocational laboratory.

Resource Room: An instructional space used primarily to enhance and support, not supplant, instruction received in regular or special classrooms. Generally designed to accommodate fewer students than other classrooms.

Secondary Classroom: A general classroom designed for students in grades 7 through 12.

Special Education Classroom: A classroom designed to provide instruction for exceptional students according to specific needs.

VOCATIONAL CLASSROOM: An instructional area designed for, or provided with, special built-in equipment for vocational or trade learning activities, e.g. mechanics, machine tools, sheet metal work, wood working, electrical trades, radio, plumbing, masonry, aviation, printing /graphics, refrigeration, air conditioning, commercial food preparation, health services, cosmetology, and agriculture /horticulture.