III

III. Inventory and Evaluation of School Facilities

As of May 2019, FCPS operates and maintains 66 school buildings. These buildings constitute approximately seven million square feet and occupy almost 1,500 acres. FCPS pursues both new construction and devotes increasing resources to maintaining and renovating existing buildings. In the past 25 years, the school system completed construction of 23 new school buildings and 21 renovations/additions. FCPS operates 47 buildings that are, in whole or part, 25 or more years old.

The official enrollment capacity of a school is defined in the Public School Construction Program's "Administrative Procedures Guide" (APG) and approved by the Maryland Department of Planning based on the number of various types of classrooms for the elementary, middle, and high school levels, and is called State Rated Capacity or SRC. A description of the calculation is given for each level in the sections below. The SRC is defined as "the number of students that the IAC or its designee determines that an individual school has the physical capacity to enroll and can be reasonably accommodated in a facility." Portable classrooms are not included in the calculation of SRC. The SRC is intended to be used to determine utilization and is not intended to be used to determine class sizes.

Whenever an addition is completed or a school renovated or use of an existing school changes due to programmatic changes, the SRC for a school is recalculated and approved by the Maryland Department of Planning. Periodically, FCPS completes a system wide review of the SRC for each school. In the fall of 2018 FCPS completed an evaluation of space usage and recalculation of the SRCs for all elementary, middle, and high schools. These new capacities were approved by the Maryland Department of Planning in May 2019 and have been utilized throughout this plan.

ELEMENTARY SCHOOLS

FCPS operates 40 primary and elementary schools (including the Monocacy Valley Montessori, Carroll Creek Montessori and Frederick Classical charter schools). The SRC for these schools varies in size from 114 to 735 students. FCPS provides a full day of elementary education to students from kindergarten through grade 5. Pre-kindergarten (pre-K) or special education pre-K will be offered at 23 elementary schools for the 2019-20 school year. See Appendix M for a list of school facilities and grades served.

The Thurmont and Middletown communities have paired schools consisting of a primary school (pre-K through grade 2) and an elementary school (grades 3-5). New Midway/Woodsboro is housed in two buildings.

In addition to "core" facility space (office, media center, gymnasium/ cafeteria), each school also contains support spaces such as art and music rooms and a special education resource room. Schools may also have space devoted to special programs, such as pre-kindergarten, special education self-contained classrooms, advanced academics classrooms, enrichment labs, English Learners program and math and reading intervention.

Student support spaces are not included in the SRC calculation for elementary schools. The formula for calculating the SRC of an elementary school is the total of the following:

Pre-kindergarten

Kindergarten

Grades 1-5

Special Education

20 x number of classrooms

22 x number of classrooms

33 x number of classrooms

10 x number of classrooms

For the 2018-19 school year, the systemwide elementary school SRC totaled 20,396 seats and the new SRC for the 2019-2020 school year will be 18,869. The system-wide projected percent of SRC at the elementary level for 2019-20 is 103%. This indicates that FCPS has not yet reached the BOE's goal that schools will operate at 90% capacity at each level, system-wide. With the opening of the Urbana Elementary School (ES) replacement in 2020, the system wide utilization at the elementary level is expected to fall to 100% in 2020 but rise to 107% by the end of the 10 year period without the additional elementary seats proposed in this plan that have not yet been funded.

Individual elementary school utilization varies. In general, schools that are over capacity are located in or around Frederick City and in the fast-growing areas of Brunswick, the I-70 corridor and Urbana. As of September 2018 enrollment with the revised 2018 SRCs, 21 elementary schools were at or over 100% capacity, 10 were between 90 and 100%, and nine were below 90%. Based on steady birth rates over the past several years, FCPS

Figure 3A: Elementary School Percent of

LEW

SRES

EES

WOES

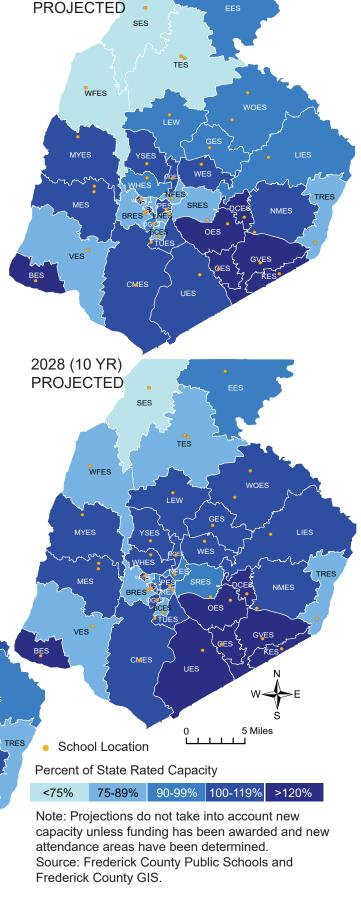
NMES

State Rated Capacity Over Time

2018

ACTUAL

MES



2023 (5 YR)

VES GVES CES RES

YSES

WHES

Ш

projects that enrollment at many schools will remain flat or decrease through 2023, although schools in high growth areas will continue to increase in enrollment. By 2028, enrollments will exceed 2018 levels for most schools as birth rates are expected to rise.

In fall 2019 as part of the Linganore Oakdale Urbana (LOU) Redistricting Study, the BOE will approve new attendance boundaries for the new Sugarloaf ES that will go into effect when the Urbana ES replacement opens in 2020, and new attendance boundaries for Blue Heron ES that will go into effect when the school opens in 2021. Adjustments will also be made to surrounding existing attendance areas. Enrollments at some schools will shift significantly when the LOU Redistricting decision is implemented. However, as of May 2019 the boundaries have not been finalized. See maps in Figure 3A for geographic locations and projected growth over time and see Table 4A for 10 year enrollment projection numbers using existing attendance boundaries.

In many locations, FCPS has responded to overcrowding by installing portable classrooms. At the elementary school level, FCPS will use 126 portable classrooms at 19 locations during the 2019-20 school year.

MIDDLE SCHOOLS

Middle school (grades 6, 7, and 8) is designed for students in transition between childhood and adolescence. Middle school programs seek to expand course offerings by providing specialized facilities for fine arts, technology education, science, and physical education.

FCPS operates 16 middle schools including Monocacy Valley Montessori, Carroll Creek Montessori and the Frederick Classical charter schools. These schools vary in size from an SRC of 732 to 1,105 with the exception of the charter schools which may have capacities as low as 90.

Each middle school attendance area generally contains two to three elementary schools. Several larger middle schools serve five elementary schools. Three middle schools are located on the same campus as high schools which permits some shared use of facilities.

The formula for calculating the SRC at the middle school level uses a factor of 85% to account for teacher planning time:

Typical classrooms 0.85 x 25 x number of classrooms

Gym 0.85 x 25 x number of teaching stations

Special education 10 x number of classrooms

For the 2018-19 school year, the system-wide middle school SRC totaled 11,529 seats. After recalculation the SRC for the 2019-20 school year is slightly larger at 12,298. The system-wide projected percent of SRC at the middle level for 2019-20 is 83%, which indicates that FCPS is operating within the BOE's goal of 90% SRC system-wide for the middle school level.

Although system-wide enrollments are acceptable, the capacity at individual schools varies. As of September 2018 using revised 2018 SRCs, one middle school was at or over 100% capacity, six schools were between 90 and 100%, and nine were below 90% capacity. For the 2019-20 school year, there will be nine portable classrooms in use at two middle schools. FCPS projects that enrollment will increase slightly at most middle schools over the next five years, particularly in the Frederick City area and the southeastern part of the county. Over the next 10 years, middle school enrollments are expected to increase by over 600 students. See map in Figure 3B for geographic locations and projected growth over time.

While the system-wide SRC meets the BOE's goal of 90% SRC, some areas of the county are

experiencing higher levels of growth. In the fall of 2018, the County Executive made a commitment to advance the funding schedule for an addition of about 298 seats at Oakdale Middle School (MS) to help alleviate need for capacity on the east side of the county.

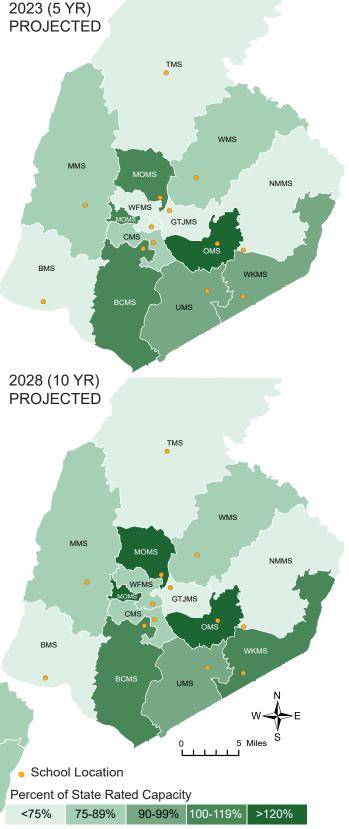


Figure 3B: Middle School Percent of State Rated Capacity Over Time

TMS

2018

ACTUAL

MMS MOMS NMMS

WFMS GTJMS

OMS

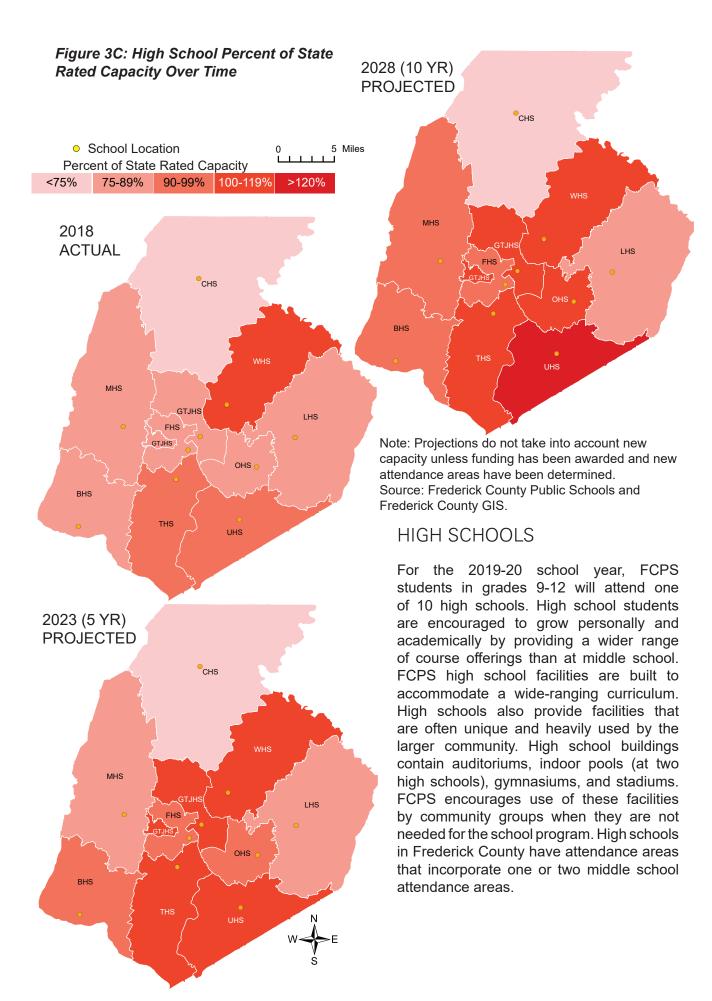
OMS

BMS

WKMS

Note: Projections do not take into account new capacity unless funding has been awarded and new attendance areas have been determined.

Source: Frederick County Public Schools and Frederick County GIS.





The formula for calculating the SRC at the high school level uses a factor of 85% to account for teacher planning time:

Typical classrooms 0.85 x 25 x number of classrooms

Gym 0.85 x 25 x number of teaching stations

Special education 10 x number of classrooms

Career Tech 0.85 x 20 x number of classrooms

High schools vary in size from an SRC of 886 at Brunswick High School (HS) to 2001 at Governor Thomas Johnson HS. For the 2018-19 school year, the system-wide high school SRC totaled 14,720 seats. The SRC for the 2019-20 school year after recalculating will be slightly less at 14,629. The system-wide projected percent of SRC at the high school level for 2019-20 is 92%, which indicates that FCPS is operating slightly above the BOE's goal of 90% SRC system-wide at the high school level.

As of September 2018 using the revised 2018 SRCs, Walkersville HS was over 100% capacity. Two other high schools were between 90 and 100%, and seven schools were less than 90%. Fourteen portable classrooms will be located at three high schools for the 2019-20 school year. By 2023, FCPS expects enrollments to increase at most high schools. Most high schools will have slower growth between 2023 and 2028. It is anticipated that by 2023, system wide high school enrollments will be at 97% of SRC and at 101% of SRC by the end of the 10 year period. See map in Figure 3C for geographic locations and projected growth over time.

CHARTER SCHOOLS

Frederick County Public Schools has approved three public charter schools. Any student in the county may apply to enroll, with new students selected via lottery when interest exceeds program capacities. Students attending these schools are public school students taught by FCPS teachers. The capacity of each school is determined by a contract.

Carroll Creek Montessori School is located in leased space on Corporate Court in the Ballenger Creek area. The school is projected to have an enrollment of 295 students in grades K through 8 in the 2019-20 school year. This school offers an instructional program centered on the Montessori method. Classes are taught in English and Spanish.

Frederick Classical Charter School is located in leased space on Spires Way in Frederick City. The school offers a curriculum that emphasizes traditional content taught using research based curricula to grades K through 8. The school is projected to have an enrollment of 380 students in the 2019-20 school year.

Monocacy Valley Montessori School is located in Frederick City in leased space that was formerly a church. This school offers an instructional program centered on the Montessori Method for grades pre-K through 8. The school is projected to have an enrollment of 283 students in the 2019-20 school year.

OTHER FREDERICK COUNTY PUBLIC SCHOOL FACILITIES

Heather Ridge School is a 30,000 square foot alternative middle/high school educational facility for students who require a highly structured setting. The school offers appropriate curriculum in the context of individualized behavior-management programs, family counseling, and other services. Additional information regarding this school can be found in Appendix T. Enrollment in September 2018 was 57 students. For the 2019-20 school year, there will be four portable classrooms.

Rock Creek is a 55,214 square foot facility that provides individualized special education programs for students from 3-21 years of age. An appropriate curriculum is offered in self-contained classrooms, as well as related services in such areas as adaptive physical education, physical therapy, swimming, pre-vocational training and occupational therapy. Additional information regarding this program can be found in Appendix U. Enrollment in September 2018 was 72 students. A feasibility study for this facility was completed in August 2016 recommending the replacement of this facility at another location. Design for the replacement school to be located on the Walkersville MS campus is underway.

Career and Technology Center (CTC) is an 86,681 square foot facility located on the Frederick Community College campus. Students in grades 10-12 may enroll. At the CTC, introductory training is offered in various professions such as criminal justice, computer-aided design, bio-medical technology, culinary arts, cosmetology, tv/multimedia producation and computer networking. Some courses provide college credit through agreements with Frederick Community College or certifications. Additional information regarding this program can be found in Appendix V. There will be three portable classrooms in use at CTC in 2019-20.

Earth and Space Science Lab (ESSL) is an 11,750 square foot facility on the Lincoln ES campus. A new building to house this facility was constructed in 2009. This facility includes two classrooms, a planetarium, tanks housing live organisms, and a variety of resources for hands on instruction in meteorology, astronomy, oceanography, and geology for students in grades 1-5.

Lincoln "A" building is a 20,334 square foot building located on Madison Street in Frederick housing the Success program and Child Find. The Success program is a transition education program for students ages 18-21 who have an IEP and are pursuing a Maryland School Certificate of Completion. Child Find provides a continuum of special education and related services to children ages 3-5 with disabilities. The Boys and Girls Club of Frederick County leases a portion of the building and occupies the building when school is not in session.

ADMINISTRATIVE FACILITIES

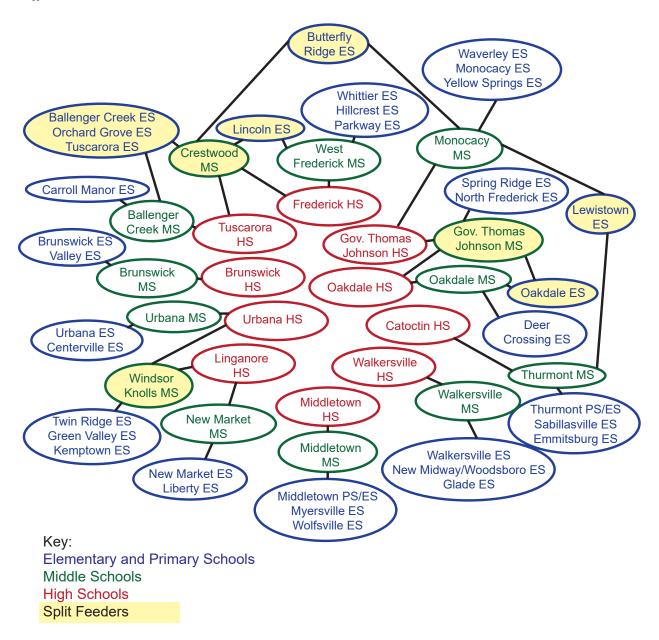
Administrative facilities are housed in two locations. The FCPS central office is located at 191 South East Street in downtown Frederick City and houses most central office staff. Technology support services, food services, maintenance/operations and transportation are located at a two-building complex on Hayward Road and Thomas Johnson Drive, on the north side of Frederick City. Also included on this campus are a warehouse, bus storage and vehicle maintenance facilities. FCPS also maintains a Staff Development Center on Frederick Street in Walkersville.

FCPS completed a feasibility study in September 2017 for the Transportation Department's facilities. The study recommended replacement of the existing facility and eventual construction of a satellite facility totaling 48,500 square feet and parking space needs of 10.6 acres.

ATTENDANCE AREA BOUNDARIES AND FEEDER PATTERNS

FCPS is organized into 10 feeder patterns around each high school as shown in <u>Figure 3D</u> below. In general, 2-3 elementary schools (shown in blue) feed to each middle school (shown in green) and 1-2 middle schools feed to each high school (shown in red). A map depicting the relationships between elementary and high school attendance areas can be found in <u>Appendix BB</u>.

Figure 3D: 2019-2020 Feeder Patterns



Redistricting occurs when attendance boundaries are established for a newly constructed school or to balance enrollments between adjoining schools. While allowable under the BOE's redistricting policy, FCPS has tried to reduce the number of split feeders where one elementary fed to two middle schools or one middle school fed to two high schools; however, sometimes split feeders are necessary to balance student populations.

SCHOOL REDISTRICTING PLANNING

The BOE has established policies and procedures that govern changes to attendance areas for schools across the system. Ideally, redistricting should be undertaken as infrequently as possible while still addressing other school system needs such as reducing overcrowding. BOE Policy 200.2 lists factors that the BOE considers when establishing new attendance area boundaries. FCPS policies and procedures for redistricting can be found in <u>Appendix P</u>.

Since 1994, FCPS has conducted 16 major redistricting studies in almost every section of the county. Most of these redistricting projects were associated with the opening of new schools. Others, however, were conducted to balance enrollments between adjoining school districts.

A redistricting study to establish attendance area boundaries for the new Butterfly Ridge ES took place during the 2016-2017 school year. The new boundaries went into effect when the school opened in August 2018. The boundaries of eight elementary schools, four middle schools, and two high schools were changed. Full results of the redistricting study can be found on the FCPS website.

In January 2019, FCPS began a redistricting study for the Linganore, Oakdale, and Urbana areas to establish new attendance boundaries for Sugarloaf ES and Blue Heron ES, an elementary school in the Hamptons West neighborhood of Lake Linganore, and to balance enrollments at neighboring schools. The elementary school attendance areas in the study are: Centerville, Deer Crossing, Green Valley, Kemptown, Liberty, New Market, Oakdale, Twin Ridge, Urbana and the portion of Spring Ridge attendance area east of the Monocacy River. The secondary school attendance areas included in the study are: New Market, Oakdale, Urbana and Windsor Knolls middle schools as well as the Governor Thomas Johnson MS attendance area east of the Monocacy River, and the Linganore, Oakdale and Urbana high school attendance areas. The study is expected to take 10-12 months, with the Board of Education adopting attendance boundaries in the fall of 2019. The new attendance boundaries will go into effect with the start of the 2020-2021 school year but may be phased in over several years. Urbana ES students and staff will continue to be temporarily housed in the Sugarloaf building during the 2019-20 school year while the old building is demolished and rebuilt.

Redistricting studies will continue to occur primarily in connection with the opening of new schools. For the next 10 years, redistricting will be needed most frequently at the elementary level. Within the 10 year plan outlined in this document, three new elementary schools are anticipated by this plan to open along with four elementary school additions, a middle school addition, and a high school addition. During these redistricting studies, all school levels will be included to balance enrollments between schools and to evaluate feeder schools. A list of potential redistricting studies associated with the opening of new schools is shown in <u>Table 3A</u> below.

Other potential redistricting studies that the BOE may consider are associated with areas where adjoining schools have unbalanced enrollments based on current or projected enrollment growth and school overcrowding. Candidate projects will be recommended on an annual basis.

Table 3A: Redistricting Studies Anticipated in 10 Year Plan

New School	Study Initiates	School Opening
New Sugarloaf ES and New Blue Heron ES	2019	2020 and 2021
Waverley ES replacement	2020	2022
Liberty ES modernization and addition	2021	2023
Valley ES modernization and addition	2024	2026
New northern Frederick City area ES	2024	2026

RESOURCES

School Facility Sites

City and county officials identify property for school sites through the residential development approval process. Both county and city zoning regulations can compel, under certain circumstances, dedication of land for future school construction. Of the 26 new schools completed since 1990, 14 were constructed on dedicated sites. This saved taxpayers millions of dollars in land acquisition costs. In the future, new schools are also expected to be located on dedicated sites.

FCPS continues to work with both the county and municipalities to secure additional school sites for future construction. Appendix K contains a list of potential future school sites. Seven sites are planned to be dedicated through approved rezonings, annexed properties, or preliminary plan approvals, while the BOE already owns seven sites for future schools. Finally, in addition to these sites, the city and county comprehensive plans indicate the general locations of additional school sites necessary to serve future residential areas. These are located throughout the county and may be dedicated in the future or purchased by the BOE.

Funding

Funding for major new school construction, additions, and renovations is programmed through the capital budget of the county and state. At the state level, the governor establishes a total funding pool available for major school construction projects. Local jurisdictions, such as Frederick County, then compete for these funds through an application process.

The process involves a review by the State Public School Construction Program staff and the Interagency Commission on School Construction. Capital budget requests are due in October. Final capital budget decisions are made in May. The level of state funding available to FCPS each year has varied considerably from a low of about \$9.7 million in FY2005 to a high of \$24.7 million in FY2002. Over the past seven years, state funding has averaged approximately \$19 million each year.

Frederick County Government also provides funding for major new school construction projects. Each year, the County Executive prepares a 6-year program of construction for all county agencies and several independent entities, including FCPS. Once the County Executive releases a proposed capital budget in April, the County Council reviews and approves a final capital budget following a public hearing in May or June. FCPS has been fortunate in the past that the County elected officials have been willing to forward fund the entire state's share of the school construction project so that the project can move forward while the state funds their share of the project over several fiscal years.

In addition to the capital projects funded through state and county capital budgets, FCPS administers projects funded through two other state funding programs. These programs utilize special funding set aside by the state for a particular purpose:

- Aging School Program: The Maryland General Assembly approved this grant program in 1997. Under this program, funds are made available for a wide variety of building repair or improvement projects. From FY98 to FY19, nearly \$4.5 million for 77 projects has been approved for Frederick County. Another \$182,622 in ASP funding was allocated to Frederick County for FY20.
- School Safety Grant Program: The School Safety Grant Program (SSGP) was created in 2018 through the enactment of HB 1783 which provides grants to fund school security improvements. Education Article §5-317, Annotated Code of Maryland requires the Governor



III

to provide an annual allocation of \$10 million for the program beginning in fiscal year 2019. In FY19, \$854,000 was allocated to Frederick County with six projects approved to date totaling \$468,000.

Finally, developers may also contribute to new funding for school construction. To meet the requirements of the County's APFO, a developer has the option to fund the improvements needed to meet the county's APFO standards or to wait until the improvement is funded by the county and/or the state. Some previously approved developments have the option to pay a school construction fee to move forward after failing the APFO schools test, as discussed in Chapter II. School construction fees were allocated to pay, in part, for the addition to Urbana MS. In 2005, the developer of the Linton property agreed to fund the addition to Tuscarora HS in order to meet the county's school adequacy standards. BOE policy 202.7 offers guidelines for considering similar projects in the future.

SUMMARY OF FACILITY RESOURCES

System-wide, existing elementary school facilities are operating over the BOE's goal of 90% SRC. However, FCPS continues to address overcrowding at the elementary level, reducing the number of elementary schools at or over 100% of SRC. A redistricting study is underway to establish new attendance areas for Sugarloaf ES and Blue Heron ES which will go into effect in 2020 and 2021. At the individual school level, there are also several schools at the secondary level that are at or over capacity. New school construction, school additions, and redistricting studies at strategic locations will be necessary to respond to future enrollment growth. At the same time, as the physical plant of the system continues to age, FCPS will need to budget funds for renovation or major repairs to respond to the needs of individual schools.

