7. Recommended 10-Year Capital Improvement Plan

RECOMMENDED PROJECTS

This EFMP proposes a scheduled program of new capacity and modernization projects which can be found in Table 7A below. Figure 7A shows the timeline for major projects and the impact on capacity over the 10-year planning horizon. The sections that follow summarize the projects by school level and by feeder area.

To address the backlog of aging buildings, five buildings older than 60 years are included in the 10-year plan for capital improvements: Brunswick ES, Liberty ES, Thurmont ES, Middletown MS and Walkersville MS. Three buildings older than 50 years will also be addressed: Green Valley ES, Valley ES and Brunswick HS (not listed in Table 7A as the opening date is beyond the 10-year plan). Four limited renovation projects are timed to renew buildings approximately 30 years of age: Ballenger Creek ES, Monocacy ES, Spring Ridge ES and Twin Ridge ES. Waverley ES replacement will open in the fall of 2022 and is taking the place of the existing 53-year-old building (not shown in Table 7A below).

Table 7A: Summary of New Capacity and Modernization Projects, 2023-2031

Name	*Project Type*	*Proposed Opening Date*	*Status*	*Added Capacity*
ELEMENTARY SCHOOLS				
Brunswick ES Replacement	Replacement/Addition	August-2023	Under Construction	218
Thurmont ES	Limited Renovation	August-2023	Under Construction	115
Monocacy ES	Limited Renovation	August-2024	In Design	0
Green Valley ES	Replacement/Addition	August-2025	Future Project	224
Valley ES	Replacement/Addition	August-2025	Future Project	246
Ballenger Creek ES	Limited Renovation	August-2025	Future Project	0
Spring Ridge ES	Limited Renovation	August-2025	Future Project	0
Eastern Frederick area ES	New School	August-2026	Future Project	725
Twin Ridge ES	Limited Renovation	August-2026	Future Project	0
Middletown ES*	Modernization	August-TBD	Future Project	0
Northern Frederick area ES	New School	August-2027	Future Project	725
Liberty ES	Replacement/Addition	August-2028	Future Project	434
Frederick area ES	New School	August-2031	Future Project	725
			Total Additional Capacity	**3412**
MIDDLE SCHOOLS				
Crestwood MS	Addition	August-2024	In Design	318
Walkersville MS	Modernization	August-2028	Future Project	0
Middletown MS*	Modernization	August-TBD	Future Project	-152
			Total Additional Capacity	**166**
HIGH SCHOOLS				
Middletown HS*	Modernization	August-TBD	Future Project	272
			Total Additional Capacity	**272**

*Middletown Campus Feasibility study will determine priority order and timing of opening of MES, MMS and MHS

Figure 7A: Proposed Timeline for Major Projects and Impacts on Capacity, Fiscal Years 2023-2032

CONSTRUCTION SCHEDULE

School Year	2022-2023*	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030	2030-2031	2031-2032
Fiscal Year	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Waverley ES Replacement	Open									
Brunswick ES Replacement		Open								
Green Valley ES Replacement				Open						
Valley ES Replacement		Potential Redistricting		Open						
Liberty ES Replacement					Potential Redistricting		Open			
Middletown Campus - Building 1	Middletown Campus Feasibility Study					Open				
Middletown Campus - Building 2							Open			
Middletown Campus - Building 3									Open	
Yellow Springs ES Modernization										
New Elementary School Placeholder (north or east Frederick area)	Land Acquisition		Potential Redistricting		Open					
New Elementary School Placeholder (north or east Frederick area)				Redistricting		Open				
Walkersville MS Modernization							Open			
New Elementary School Placeholder (east or south Frederick area)							Redistricting		Open	
Brunswick HS Replacement										
New High School Placeholder										
Crestwood MS Addition			Open							
New Bus Depot			Open							
Thurmont ES Limited Renovation		Open								
Monocacy ES Limited Renovation			Open							
Ballenger Creek ES Limited Renovation				Open						
Spring Ridge ES Limited Renovation				Open						
Twin Ridge ES Limited Renovation					Open					
Limited Renovations (Locations TBD)						At least one building opening per year				

	Planning	Design	Construction
Elementary			
Middle			
High			
Other			
Level TBD			

SYSTEMWIDE STATISTICS

Elementary										
Projected Enrollment	20,994	21,281	21,693	21,867	22,154	22,166	22,287	22,517	22,561	22,679
Total State Rated Capacity (includes new capacity)	21,378	21,711	21,711	22,181	22,906	23,631	24,065	24,065	24,790	24,790
New Capacity		333	0	470	725	725	434	0	725	
Projected Percent SRC (includes new capacity)	98%	98%	100%	99%	97%	94%	93%	94%	91%	91%
Middle										
Projected Enrollment	10,463	10,545	10,669	10,903	11,154	11,583	11,712	11,714	11,648	11,730
Total State Rated Capacity (includes new capacity)	12,915	12,915	13,233	13,233	13,233	13,233	13,081	13,081	13,081	13,081
New Capacity	0	0	318	0	0	0	-152	0	0	
Projected Percent SRC (includes new capacity)	81%	82%	81%	82%	84%	88%	90%	90%	89%	90%
High										
Projected Enrollment	14,445	14,832	15,076	14,935	15,044	15,231	15,611	15,848	16,410	16,664
Total State Rated Capacity (includes new capacity)	14,941	14,941	14,941	14,941	14,941	14,941	14,941	14,941	15,213	15,213
New Capacity	0	0	0	0	0	0	0	0	272	
Projected Percent SRC (includes new capacity)	97%	99%	101%	100%	101%	102%	104%	106%	108%	110%

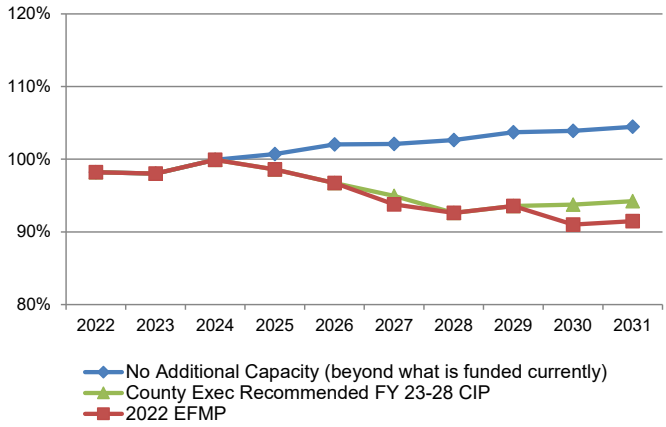
* Includes funding for projects anticipated in 2023 County Executive's recommended CIP.

Elementary Schools

The bulk of the major capital projects planned are at the elementary level. FCPS is presenting a 10-year plan that provides an additional 3,412 seats which includes three new elementary schools, four replacements with additional capacity, and one limited renovation with additional capacity. Four other limited renovation projects are not expected to increase capacity but will revitalize the educational environment and address our aging school needs. The four replacement projects are Brunswick (FCI 31%), Green Valley (FCI 52%), Valley (FCI 52%) and Liberty (FCI 82%).

FCPS is using several innovative strategies to address facility needs at the elementary level. After considering the logistical and schedule challenges associated with the Thurmont ES limited renovation, staff decided that a modified Design-Build delivery method (see Chapter 6) would be the most appropriate approach for this project. Likewise, FCPS is testing a Construction Manager at Risk (CMaR) delivery for the Brunswick ES project to help mitigate risks associated with cost and logistics of working next to an occupied school. The IAC has reviewed and approved the delivery methods for both projects. Finally, FCPS will consider consolidation of small, underutilized elementary schools to improve efficiencies and allow broader access to educational programs.

Figure 7B: Systemwide Percentage of SRC for Elementary Schools



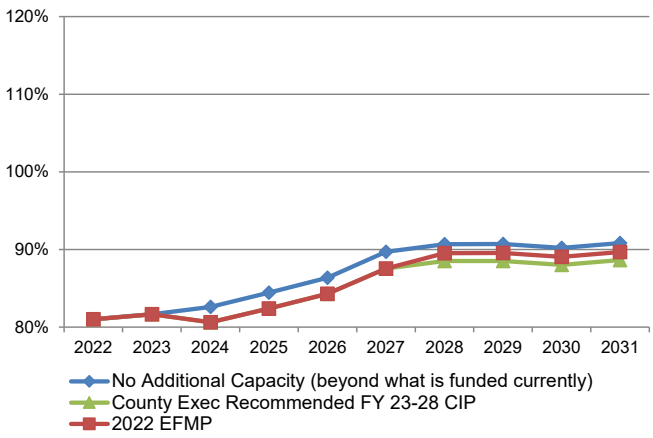
Elementary school enrollments are projected to increase by approximately 2,260 students between September 2021 and September 2031. To reduce overcrowding and attain our goal of 90% SRC by the end of the 10-year period, FCPS would need approximately 3,820 more elementary seats. With the additional 3,412 seats included in the EFMP, we expect to be within 91% of capacity system-wide at the elementary level by the fall of 2030 as shown in Figure 7B. If FCPS constructed no new capacity projects in the next 10 years, the system-wide SRC at the elementary level would reach 100% by 2024 and be at 105% by 2031. With projects constructed in accordance with the County Executive's recommended County FY23-28 Capital Improvement Plan (CIP), FCPS would be at 94% of SRC at the elementary level at the end of the 10-year period.

Middle Schools

Three middle schools have proposed improvements within the 10-year plan. An addition is planned to alleviate overcrowding at Crestwood MS and neighboring attendance areas due to growth in and around Frederick City. Modernizations are planned for Middletown MS (FCI 56%) and Walkersville MS (FCI 51%), two schools in critical need of attention.

Approximately 1,340 additional middle school students are projected between 2021 and 2031. The 10-year enrollment projections indicate that FCPS can maintain approximately 90% of SRC system-wide with no new capacity projects over the next 10 years, as shown in Figure 7C. However, localized growth and capacity issues at middle schools in Frederick City warrants an addition at Crestwood MS.

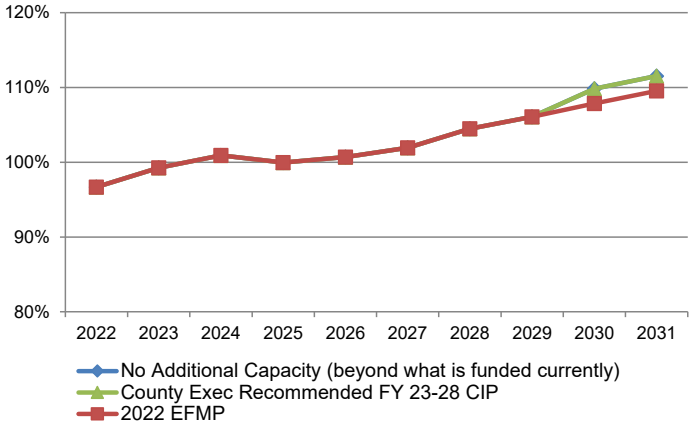
Figure 7C: Systemwide Percentage of SRC for Middle Schools



High Schools

High school enrollment is expected to increase by approximately 2,650 students between 2021 and 2031. The system wide percent SRC at the high school level is currently 94% with three high schools over capacity. High school enrollment is expected to continue to grow reaching 101% of state rated capacity in 2026 with five high schools over capacity, and 112% SRC in 2031 with seven schools over capacity (see Figure 7D).

Figure 7D: Systemwide Percentage of SRC for High Schools



Due to concentrated enrollment growth in the eastern part of the county, FCPS will need to plan for a new high school in this part of the County over the next 10 years. Enrollment projections for this 10-year period indicates that enrollments at Walkersville, Linganore, Oakdale and Urbana high schools together will exceed their capacity by more than 2,200 seats. Over the next year, Capital Programs staff will evaluate the area of the County best suited for this next high school. A replacement of Middletown HS at a larger capacity will add 293 high school seats. Finally, the Brunswick HS replacement project is expected to begin design by the end of the 10-year period but is not anticipated to add additional seats within the 10 years.

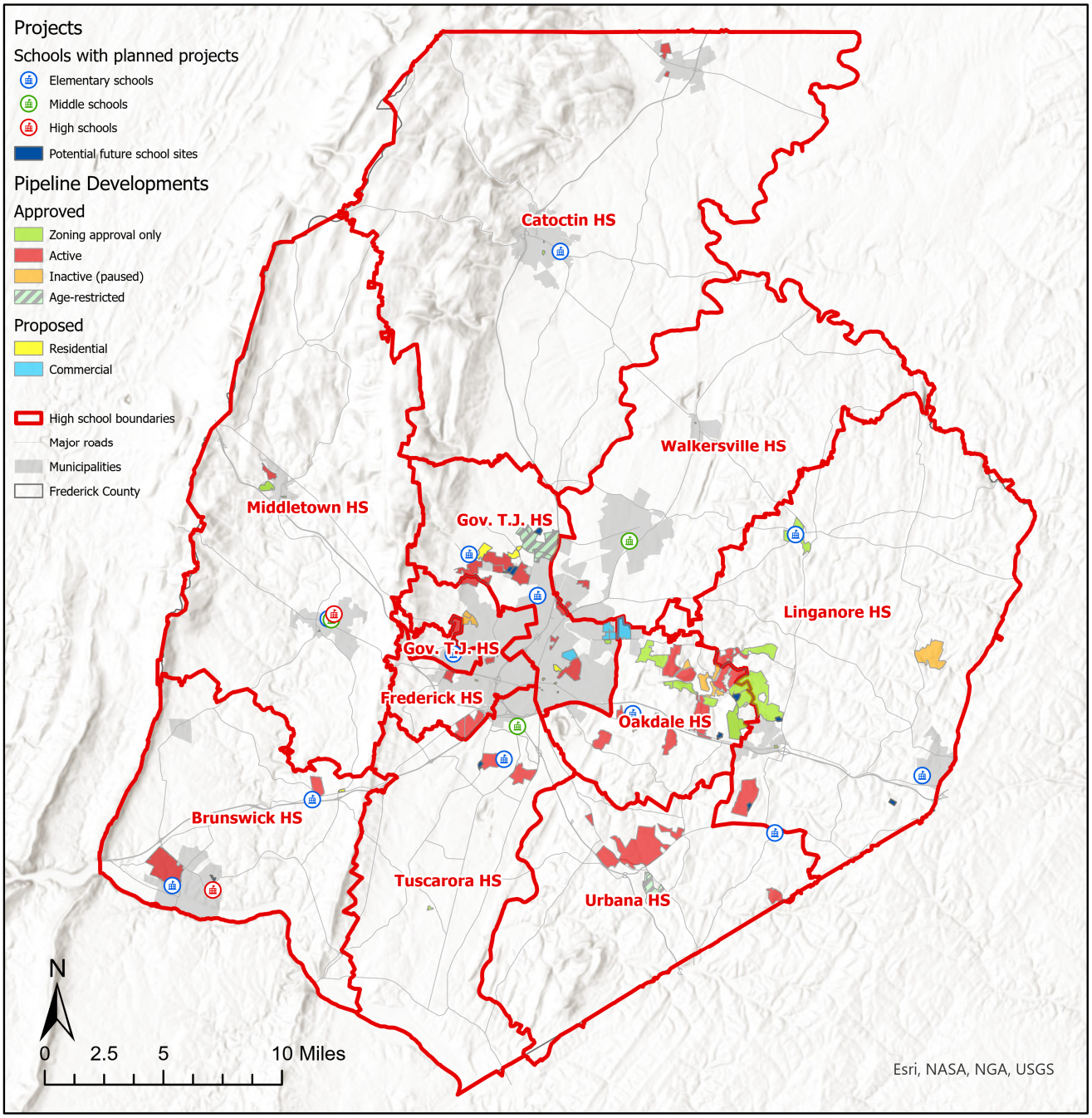
FCPS will continue to evaluate high school enrollments as new housing developments are approved. FCPS will also study utilization of high schools evaluating the actual full-time enrollment given the increasing number of students taking advantage of dual enrollment at Frederick Community College, internships and part-time employment as well as other off-campus programs. Consideration will be given to establishing an equated enrollment at the high school level that more accurately reflects the utilization of the building. Modernization projects will also be evaluated to determine if additional capacity should be included as part of the scope of work.

PROPOSED PROJECTS BY FEEDERS

Individual major capital projects are detailed below by high school feeder area. For attendance areas split between two high school feeders, descriptions have been limited to the feeder in which the building resides to avoid repetition. A prioritized list of projects for the proposed FY24 Capital Budget is included in Appendix A.

FCPS has created an interactive map illustrating the proposed projects as well as information on approved housing units and potential student generation. All data was provided by Frederick County Public Schools and Frederick County Government GIS. See Figure 7E below.

Figure 7E: Interactive Projects Map
Visit the interactive map.



Brunswick Feeder

The Brunswick Feeder area is located in the southwestern corner of Frederick County and includes the communities of Brunswick, Rosemont, Point of Rocks, Jefferson, and Burkittsville. Some residential growth is expected in this area due to the buildout of the Brunswick Crossing subdivision in Brunswick and the Woodbourne Manor subdivision in Jefferson.

Table 7B: Brunswick Feeder Summary

School	9/30/2021 Actual Percent SRC	9/30/2022 Projected Percent SRC	9/30/2031 Projected Percent SRC	Attendance Area Trend	Capital Projects Planned
Brunswick ES	140%	137%	107% (with additional seats from new school)	Growing enrollment	Replacement currently under construction to open fall 2023
Valley ES	103%	107%	123%	Growth for first five years, stable in the out-years	Replacement of building on site at 745 student capacity planned to open in fall 2025
Brunswick MS	64%	70%	73%	Slow growth	
Brunswick HS	91%	92%	104%	Growing enrollment	Design of replacement expected to begin towards end of 10-year plan

Catoctin Feeder

The northern portion of Frederick County feeds into Catoctin HS and includes the communities of Lewistown, Sabillasville, Thurmont and Emmitsburg. Minimal residential growth is anticipated in this area.

Table 7C: Catoctin Feeder Summary

School	9/30/2021 Actual Percent SRC	9/30/2022 Projected Percent SRC	9/30/2031 Projected Percent SRC	Attendance Area Trend	Capital Projects Planned
Emmitsburg ES	92%	92%	93%	Stable enrollment	
Lewistown ES	76%	76%	84%	Stable enrollment	
Thurmont ES	79%	73%	68%	Declining enrollment through 2027 followed by stable enrollment	First phase of limited renovation during summer 2022, second phase to be completed in summer 2023
Thurmont PS	61%	59%	60%	Stable enrollment	
Thurmont MS	61%	60%	48%	Declining enrollment	
Catoctin HS	71%	75%	59%	Enrollment growth for first half of 10-year period followed by declining enrollment	

Frederick Feeder

The Frederick Feeder encompasses most of the western half of Frederick City. Several residential developments have been approved on the west side of Frederick City that will impact this feeder pattern.

Table 7D: Frederick Feeder Summary

School	9/30/2021 Actual Percent SRC	9/30/2022 Projected Percent SRC	9/30/2031 Projected Percent SRC	Attendance Area Trend	Capital Projects Planned
Butterfly Ridge ES	88%	70%	76%	Drop in enrollment in 2022 reflects redistricting, stable enrollment over 10-year period	
Hillcrest ES	137%	117%	124%	Drop in enrollment in 2022 reflects redistricting, stable enrollment with slight growth over next ten years	
Parkway ES	111%	118%	126%	Stable enrollment anticipated until end of 10-year period	
Whittier ES	114%	117%	120%	Fairly stable enrollment indicated at this time but likely to increase with new residential construction	Capacity issues may be relieved with new north Frederick City area elementary school
West Frederick MS	81%	71%	82%	Drop in enrollment in 2022 reflects redistricting, followed by stable enrollments with growth at end of 10-year period	
Frederick HS	104%	111%	118%	Fairly stable enrollment over 10 years.	

Governor Thomas Johnson Feeder

The north and east side of Frederick City as well as a small area on the west side of the City along West Patrick Street are part of the Governor Thomas Johnson Feeder area. Residential developments on the northern, eastern and western ends of town will contribute additional growth in this feeder.

Table 7E: Governor Thomas Johnson Feeder Summary

School	9/30/2021 Actual Percent SRC	9/30/2022 Projected Percent SRC	9/30/2031 Projected Percent SRC	Attendance Area Trend	Capital Projects Planned
Monocacy ES	99%	103%	101%	Stable enrollment	Limited renovation planned to open in fall 2024
North Frederick ES	80%	82%	94%	Growing enrollment	
Waverley ES	145%	87%	101%	2022 capacity reflects new larger school, anticipate fairly stable enrollment with increase at the end of the 10-year period	Replacement under construction, opening fall 2022 with attendance area adjustments
Yellow Springs ES	124%	134%	139%	Growing enrollment	Feasibility Study in progress; capacity issues may be relieved with new north Frederick City area elementary school
Governor Thomas Johnson MS	70%	66%	69%	Stable enrollment with anticipated growth in out years due to recently approved residential development	
Monocacy MS	104%	100%	110%	Growing enrollment	Capacity relief may be provided with addition at Crestwood through adjustments to attendance area
Governor Thomas Johnson HS	87%	91%	109%	Growing enrollment	
Future eastern Frederick area ES					Evaluation of potential sites underway for a future school planned to open in fall 2026 or 2027
Future northern Frederick area ES					Future school planned to open in fall 2026 or 2027 on a site dedicated by the Tuscarora Creek development

Linganore Feeder

The eastern side of Frederick County, along the I-70 corridor and including the communities of Libertytown, Green Valley/Monrovia, Mount Airy and New Market are part of the Linganore feeder pattern. Some residential growth is expected in this feeder area, primarily within the Town of New Market and Libertytown and the Landsdale development in Monrovia. An elementary site was dedicated as a condition of approval for the Landsdale development.

Table 7F: Linganore Feeder Summary

School	9/30/2021 Actual Percent SRC	9/30/2022 Projected Percent SRC	9/30/2031 Projected Percent SRC	Attendance Area Trend	Capital Projects Planned
Liberty ES	89%	88%	107%	Moderate enrollment growth	Replacement planned to open fall 2028
New Market ES	92%	92%	101%	Moderate enrollment growth	
Twin Ridge ES	94%	96%	93%	Growth for first few years followed by decline	Limited renovation planned to open fall 2026
New Market MS	86%	88%	104%	Stable enrollment with moderate growth at end of 10-year period	
Linganore HS	92%	98%	136%	Significant enrollment growth over ten years	
Future eastern Frederick County area high school					Anticipated to relieve capacity issues at Linganore HS planned to begin design at end of 10-year period

Middletown Feeder

The Middletown Feeder area encompasses the central western side of Frederick County, including the communities of Wolfsville, Myersville and Middletown. Some residential growth is expected for this area, primarily in and around Middletown.

Table 7G: Middletown Feeder Summary

School	9/30/2021 Actual Percent SRC	9/30/2022 Projected Percent SRC	9/30/2031 Projected Percent SRC	Attendance Area Trend	Capital Projects Planned
Middletown ES	91%	85%	87%	Stable enrollment over 10 years	Feasibility study in progress for Middletown campus (MES, MMS and MHS) to determine scope and timing of projects
Middletown PS	100%	97%	107%	Stable enrollment with moderate growth at end of 10 years	
Myersville ES	89%	89%	99%	Moderate enrollment growth	
Wolfsville ES	70%	69%	74%	Stable enrollment	
Middletown MS	77%	76%	70%	Stable enrollment	Feasibility study in progress for Middletown campus (MES, MMS and MHS) to determine scope and timing of projects
Middletown HS	83%	83%	80%	Stable enrollment for the first few years, decline at end of 10-year period	Feasibility study in progress for Middletown campus (MES, MMS and MHS) to determine scope and timing of projects

Oakdale Feeder

The Oakdale Feeder is centered on the Linganore community and also includes the Spring Ridge/ Bartonsville and Holly Hills communities. This area is growing quickly with many large residential developments approved, including the Eaglehead/Linganore PUD which is estimated to contribute an additional 1,200 students by the time the development is completed in 25 years. All of the schools in this feeder were constructed in the last 25 years.

Table 7H: Oakdale Feeder Summary

School	9/30/2021 Actual Percent SRC	9/30/2022 Projected Percent SRC	9/30/2031 Projected Percent SRC	Attendance Area Trend	Capital Projects Planned
Blue Heron ES	91%	100%	111%	Growing enrollment,	
Deer Crossing ES	82%	77%	92%	Declining enrollment at the beginning of the 10-year period followed by moderate growth	
Oakdale ES	131%	148%	173%	Rapidly growing enrollment stabilizing in the middle of the 10-year period	
Spring Ridge ES	87%	87%	93%	Moderate enrollment growth	Limited renovation planned to open fall 2025
Oakdale MS	82%	87%	131%	Rapidly growing enrollment	
Oakdale HS	97%	102%	169%	Rapidly growing enrollment	
Future east Frederick City area elementary school					Evaluation of potential sites underway for a future school planned to open in fall 2026 or 2027
Future elementary school (east or south Frederick area)					Additional elementary capacity planned to open in fall 2030 with location to be determined on the east or south of Frederick City
Future eastern Frederick County area high school					Anticipated to relieve capacity issues at Oakdale HS planned to begin design at end of 10-year period

Tuscarora Feeder

The growth areas to the south of Frederick City in Ballenger Creek, Buckeystown, Adamstown, and Carroll Manor are part of the Tuscarora Feeder pattern. Residential growth is expected in several mid-size developments including the Linton development and Ballenger Run where an elementary school site has been dedicated.

Table 7I: Tuscarora Feeder Summary

School	9/30/2021 Actual Percent SRC	9/30/2022 Projected Percent SRC	9/30/2031 Projected Percent SRC	Attendance Area Trend	Capital Projects Planned
Ballenger Creek ES	99%	106%	126%	Growing enrollment	Limited renovation planned to open fall 2025
Carroll Manor ES	89%	85%	89%	Stable enrollment	
Lincoln ES	94%	95%	106%	Stable enrollment with moderate growth at end of ten years	
Orchard Grove ES	108%	107%	117%	Moderate enrollment growth	
Tuscarora ES	118%	121%	126%	Moderate enrollment growth	
Ballenger Creek MS	92%	93%	96%	Stable enrollment	
Crestwood MS	76%	83%	91%	Growing enrollment, stable at end of 10-year period	Addition of 318 seats planned to open in fall 2024
Tuscarora HS	96%	98%	108%	Growing enrollment	
Future elementary school (east or south Frederick County area)					Additional elementary capacity planned to open in fall 2030 with location to be determined east or south of Frederick City

Urbana Feeder

The Urbana Feeder is located on the southeastern side of Frederick County along the I-270 corridor, including the Urbana and Monrovia growth areas. Centerville ES, Sugarloaf ES, Urbana MS, and Urbana HS were all built since 1990 and the Urbana ES replacement opened in 2020. Significant growth occurred in this feeder, particularly from the Urbana PUD and Urbana Northern MXD development.

Table 7J: Urbana Feeder Summary

School	9/30/2021 Actual Percent SRC	9/30/2022 Projected Percent SRC	9/30/2031 Projected Percent SRC	Attendance Area Trend	Capital Projects Planned
Centerville ES	71%	69%	71%	Stable enrollment	
Green Valley ES	137%	157%	191%	Rapidly growing enrollment	Replacement building on future school site in Landsdale development planned to open fall 2025 adding 224 seats
Kemptown ES	96%	93%	104%	Growing enrollment	
Sugarloaf ES	97%	107%	103%	Moderate Growth for beginning of 10- year period followed by moderate decline for the remainder	
Urbana ES	84%	82%	89%	Stable enrollment	
Urbana MS	101%	106%	115%	Growing enrollment, stable at end of 10-year period	
Windsor Knolls MS	74%	75%	112%	Growing enrollment	
Urbana HS	101%	100%	123%	Growing enrollment	
Future eastern Frederick County area high school					Anticipated to relieve capacity issues at Urbana HS planned to begin design at end of 10-year period

Walkersville Feeder

The Walkersville Feeder is located northeast of Frederick City centered on the communities of Walkersville, Woodsboro, Dearbought and Worman's Mill. Continued residential growth is expected within this feeder in the near future.

Table 7K: Walkersville Feeder Summary

School	9/30/2021 Actual Percent SRC	9/30/2022 Projected Percent SRC	9/30/2031 Projected Percent SRC	Attendance Area Trend	Capital Projects Planned
Glade ES	93%	89%	93%	Stable enrollment	
New Midway/ Woodsboro ES	95%	91%	90%	Stable enrollment	
Walkersville ES	99%	101%	106%	Moderate enrollment growth	
Walkersville MS	76%	77%	72%	Stable enrollment	Modernization planned to open fall 2028
Walkersville HS	117%	116%	115%	Stable enrollment	
Future eastern Frederick County area high school					Anticipated to relieve capacity issues at Walkersville HS planned to begin design at end of 10-year period

Special Schools

Other school programs such as the charter schools, alternative education, career and technical education and special education programs serve the entire county population. Overall growth in the county will impact all of these programs. An evaluation of the Career Tech Center is warranted given the age and condition of the building (FCI 29%) as well as program limitations because of limited space. Staff will evaluate the need for a feasibility study to be included in future plans.

Other Facilities: New Bus Depot

The FCPS Transportation Department operates out of the Hayward Road Annex at 7446 Hayward Road, located on the north side of Frederick City. All management, routing, dispatch, training, and payroll operations take place at this facility. Maintenance for roughly 450 buses and 210 fleet vehicles primarily takes place at the Hayward Road Annex in a 5-bay, 5,500 sq. ft. shop. The Hayward Road Annex accommodates less than a third of the refueling and parking needs; other buses refuel at Linganore High School, County fueling stations, or at gas stations using a fueling credit card and are parked in 26 locations around the county or at the homes of their drivers.

FCPS must respond to the logistical challenge of providing transportation to students from all corners of the county. FCPS is responsible for transporting approximately 30,000 students every day using close to 450 school buses to provide this service. The Hayward Road Annex does not meet the current and future needs of the transportation department. Expansion of the annex on its current property is not feasible because of the site constraints and associated costs. Additionally, the annex does not provide enough long-term parking and maintenance repair opportunities to meet the needs of our growing county. As more growth occurs on the south and east side of the County, and more buses are in service there, staff at the current location are experiencing difficulty responding to bus maintenance needs timely and

efficiently. More recently, it has become increasingly problematic to access the needed fuel and service with the amount of deadhead miles increasing in support of these activities. The bus depot project seeks ways to optimize the Transportation Department's operations to conserve physical and financial resources, while simultaneously improving the health and safety of FCPS staff.