



Long Range Planning Advisory Committee Recommendations

September 9, 2021

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Committee Overview

Purpose and Mission

Per School Board Policy, “The Long-Range Planning Advisory Committee (LRPAC) is formed to advise the Superintendent and School Board in the development of comprehensive, long-term plans for facilities needs in the most effective and efficient way and in support of the School Division’s Strategic Plan. As an advisory committee, the LRPAC makes recommendations for consideration to the Superintendent and School Board.

Issues that may be considered by the advisory committee shall include, but not be limited to:

- school program capacity;
- enrollment and projections;
- transportation and operating efficiencies related to facilities planning;
- Capital Improvement Program (CIP) prioritization;
- creative financing and construction strategies;
- scope of renovations;
- school closures and new schools;
- student accommodation planning (building additions/modular relocations/review of school boundaries); and
- the future of “learning spaces” as influenced by technology and other dynamic fields.”

Membership

The 2020-21 Long-Range Planning Advisory Committee (LRPAC) is comprised of citizens appointed by the School Board and Superintendent, and is supported by school staff as follows:

Citizens: Kate Bakich (Samuel Miller), Jon Bruneau (Jack Jouett), Bruce Dotson (Rio)
Gail Lovette (At-Large), DJ Stoeberl (White Hall), David Storm (Scottsville)
Superintendent Appointees: Kate Barrett, Megan Carper, Jason Handy,
Jerrod Smith

Staff: Maya Kumazawa, Director of Budget and Planning
Renee DeVall, Transportation Routing and Planning Manager
Christopher Harper, Senior Budget Analyst
Sheila Hoopmann, Capital Projects Manager
Joe Letteri, Director of Building Services
Rosalyn Schmitt, Chief Operating Officer

Meetings

The committee generally met on a monthly basis for the last 12 months:

- **2020:** September 9, October 14, November 11, December 9
- **2021:** January 13, February 10, March 10, March 24 (extra), April 14, May 12, June 9, August 11

Executive Summary

The Long-Range Planning Advisory Committee (LRPAC) has prepared a \$196 million needs-based CIP recommendation for the Superintendent's and School Board's consideration. The request addresses key themes of equity, safety, investment in existing facilities, as well as new investments needed to support the long-term capacity needs of our growing county. The price tag may seem large; however, it is built upon the accumulating capital needs of the school division over the past several years. The COVID-19 pandemic has not slowed the construction of new developments in Albemarle County¹ and ACPS must continue planning efforts to accommodate the student population growth.

In October 2020, the School Board endorsed the proposed work plan of the LRPAC. Six topics were identified and are presented in this report as follows:

- School capacity issues at each level
- Building renovation needs, including HVAC and ventilation
- Improving the environmental footprint of buildings
- Reimagining the future of learning spaces, including outdoor learning
- Examination of optimal utilization of individual and multi-school/use campuses
- Creative instructional solutions that may impact capacity

A copy of the letter outlining and explaining these topics is attached as **Appendix A**.

Subcommittees were formed to study each of these topics in depth and recommendations were discussed among the larger LRPAC meetings. If relevant, projects were then developed based on research, staff expertise, perspectives from the community, and most importantly the objective analysis of data.

The recommended projects were analyzed and prioritized using new criteria aligned with the newly adopted Strategic Plan Learning for All. Anticipating that funding will not meet the full needs identified by the advisory committee, the committee used the below criteria² to determine an initial ranking of projects.

- Safe and Secure Facilities
- Adequate Capacity
- Efficient Use of Resources
- Modern and Reliable Technology Infrastructure
- Outdoor Learning
- Equitable Distribution of Resources
- Sustainable Facilities
- Adaptable and Flexible Spaces

¹ Wrabel, Allison. "Pandemic doesn't slow housing construction in Albemarle." *dailyprogress.com, Daily Progress*, 28 February 2021, https://dailyprogress.com/news/local/govt-and-politics/pandemic-doesnt-slow-housing-construction-in-albemarle/article_7f329a9c-795b-11eb-a2fa-a3ad58717ff0.html. Accessed 3 September 2021.

² These criteria, developed by the LRPAC, are listed in priority order as identified by the *Long-Range Planning Survey*, a community survey administered in July/August 2021.

The recommendations in this report address current and anticipated needs in ACPS facilities and infrastructure, and thus represent a needs-based funding request. While there may be other projects that would benefit ACPS, these top priorities are practical and address well-documented needs.

Recommendation Summary

As Albemarle County is expected to grow by 44% over 30 years³, adequate capacity will continue to be a need for the School Division. This is supported by the 10-year enrollment projections and reinforced by both the recently completed development and student yield analysis and the 30-year population forecasts. For over 15 years, the school division has been in a practice of expanding existing facilities, and when necessary, deploying mobile classroom units in the interim. As these schools reach a point where expansion is no longer practical, the LRPAC recommends a strategy for land acquisition and the construction of new facilities. Recommended projects include the **construction of Center 2** as well as the inclusion of funding for **at least one new elementary school** and **land acquisition** for a future elementary school.

Balancing capacity needs versus making improvements to existing buildings was a discussion driver for LRPAC and the recommendations represent a balanced mix of both. LRPAC again recommends investment into **school renovations** at all levels to bring incremental updates division-wide.

In alignment with the Strategic Plan, ensuring that each student has access to high quality learning environments means that there should be reliable **elevator service** to ensure safety and access at all times. In addition, the importance of a healthy environment and having reliable technology infrastructure have risen as urgent and necessary investments, as highlighted by the COVID-19 pandemic. The LRPAC recommends a new investment into **indoor air quality systems** and again recommends the construction of a **data center**.

The LRPAC's work does not end with these recommendations as they continue to explore the most equitable ways to distribute resources and ensure that facilities meet high environmental sustainability standards and best practices for optimal learning spaces. As more clarity is gained for future enrollment projections and the long-term impact that COVID-19 may have, the committee is dedicated to the values of equity, creativity, and continuous improvement.

³ Charlottesville/Albemarle Metropolitan Planning Organization (MPO) 2015 to 2045 population forecasts as part of Long Range Transportation Plan.

Recommendation Summary Table

The following table lists the top priority capital improvement projects in order of rank and an estimated 5-year cost for each project.

Rank	CIP Projects Years 1-5	5-Year Total
1	High School Capacity (Center 2)	\$32,070,000
2	Mountain View Capacity	TBD
3	Elementary School in Northern Feeder Pattern	\$40,200,000
4	High School Renovations	\$36,000,000
5	Middle School Renovations	\$20,000,000
6	Elementary School Renovations	\$50,000,000
7	Elevator Additions	\$4,200,000
8	Data center	\$1,500,000
9	Indoor Air Quality	\$4,543,750
10	Elementary School Land Acquisition in the Western Feeder Pattern	\$7,500,000
11	Middle School Capacity Study	\$250,000
Total		\$196,263,750

<p style="text-align: center;">Capital Needs Assessment (Years 6-10)</p>	Western Feeder Pattern Elementary School
	CATEC Space
	Administration Space
	Lambs Lane Campus Study Recommendations
	Center 3
	WAHS/Henley/Brownsville Campus Study
	Athletic Facilities

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Introduction

Learning for All

In July 2021, the ACPS School Board adopted a 5-year strategic plan titled Learning for All. Within this strategic plan is a key goal of equitable distribution of resources, which is directly aligned with the work of the Long Range Planning Advisory Committee. The Strategic Plan includes the following:

Mission

Working together as a team, we will end the predictive value of race, class, gender, and special capacities for our children's success through high quality teaching and learning for all. We seek to build relationships with families and communities to ensure that every student succeeds. We will know every student.

Goal 3: Equitable, transformative resources

ACPS will attract, develop and retain the highest quality staff; develop sustainable and modern facilities, infrastructure and equipment; and distribute all resources in an equitable manner to transform learning experiences and opportunities.

In previous report recommendations, the LRPAC primarily focused on projects related to capacity and enrollment. In 2020, the ACPS School Board challenged the committee to be ambitious in the recommendations, with the goal of advancing ACPS in new ways. One topic that was considered throughout the year is equity in school facilities and other infrastructure.

In an equal system, all students and school communities are provided access to the same resources. In an equitable system, access to resources is provided based on individual student and school community needs. Currently in ACPS, funding for facilities improvements are not only funded through the capital improvement program, but there may be other sources of funding such as Parent Teacher Organizations (PTOs) or local donations. Due to minimal restrictions placed on this funding, one unintended consequence is that some schools with higher community resources may purchase additional equipment or improve their own facilities in ways that other schools do not.

Moving forward, LRPAC is exploring ways to elicit input from school and PTO leaders to identify where equity discrepancies exist between school communities. Additionally, LRPAC recommends that the School Board analyze the impact of private donations to capital improvements at each campus, along with facility and technology projects, and to adopt policies that ensure that equity goals are considered across all schools.

The recommendations in this report are specific to the CIP only and have been developed with a goal of equitable outcomes. In addition to data that provides information about student enrollment, LRPAC reviewed and discussed data regarding equity, with a particular focus on economically disadvantaged, racial, and gender data by school. The highest number of economically disadvantaged students are concentrated in the urban schools, and the practice for how resources are allocated or how redistricting decisions are made must be conducted in a transparent and equitable manner, with a sensitivity toward how certain actions may be perceived.

The location of future schools, centers, or academies should be considerate of students who may not have the same level of access with limited transportation options. Additionally, parity of facilities is another component of equity that was discussed by LRPAC. Ensuring that each student and each demographic group has access to high quality facilities and similar levels of maintenance services is important both within each school and across the Division.

Project Alignment

In 2019, ten projects were recommended by the LRPAC, and after thorough review and analysis, these projects continue to be prioritized by the LRPAC. In addition, some projects have been added mid-year and align with the work of the LRPAC.

LRPAC Projects approved and funded by the School Board:

- Crozet Elementary Addition and Improvements
- Western Albemarle High School Title IX Compliant Softball Field Restroom and ADA Improvements
- School Security Improvements
- Classroom Display Technology Phase I (School Technology Replacement Program)
- Mountain View Elementary Expansion and Site Improvements

Other Projects approved and funded by the School Board

- Mountain View Master Plan
- Lambs Lane Campus Study

LRPAC Projects that are unfunded and continue to be recommended by the LRPAC:

- High School Center 2
- High School Renovations (AHS/WAHS Renovations)
- Middle School Renovations (Learning Space Modernization)
- Elementary School Renovations
- Data Center
- Elevator Additions
- Middle School Facility Planning Study
- Land Acquisition

New Projects recommended by the LRPAC in 2021:

- Mountain View Capacity Project
- Elementary School in Northern Feeder Pattern
- Indoor Air Quality

Section 1: Enrollment and Capacity

The LRPAC reviewed student capacity by schools, levels, and feeder patterns from various sources described below:

Historical Neighborhood Analysis

Using actual school bus transportation data, staff compiled historical student enrollment information for each school district, organized by neighborhoods. For each year and each elementary school district, the number of students riding an ACPS school bus was recorded by their residential neighborhood. This analysis can be found in [Appendix B](#).

While this data is historical and does not provide information about future enrollment, it provides greater insight into possible cycles of student growth and stability of each elementary school – whether the growth is due to overall growth in a district or concentrated in one particular area, or whether after a number of years, the demography of a neighborhood changes. For example, looking at specific neighborhoods provides further information about whether or not to expect continued growth in the neighborhood, based on more planned construction of new homes or the completion of development projects. Over time neighborhoods may stabilize or even decline.

Due to the COVID-19 pandemic, data for the 2020-21 school year was significantly different as families may have chosen alternative schooling. The most recent year's data has been excluded from the analysis, and LRPAC modeled several "return to normal" growth scenarios as a way to correct for the extraordinary circumstances of COVID-19.

10-Year Enrollment Projections

Projections are developed using the cohort survival model which uses historical live birth data to project future kindergarten enrollment and historical ratios of students' progression from one grade level to the next. This is a very detailed methodology that results in projections by grade level and by school and provides a range of scenarios. In the past, LRPAC has primarily relied on this data source to conduct analyses and make recommendations. The projections can be found in [Appendix C](#).

Due to COVID-19 pandemic, student enrollment dropped during the 2020-21 school year. Near-term projections have been adjusted to account for the decreased student enrollment. In general, the LRPAC acknowledged that enrollment would gradually return to pre-pandemic projections in three to five years.

Development Dashboard + Student Yield Analysis

ACPS contracted with a consultant to study student demographics and develop a subdivision yield analysis for the Division. The purpose of the study was to determine the potential growth for planned housing developments and the impact it may have on the student population.

2019-20 student data was used to develop a student yield ratio, by dividing the number of students within a subdivision/complex by the number of housing units within the subdivision/complex. In order to determine the number of students that a new development may generate, an average of the student yields by housing type was calculated and applied to the number of units expected to develop.

The methodology used in this analysis varies from the methodology used in the ACPS enrollment projections. Student potential values seen in this report will inherently include students that are moving

within the Division and timing remains a significant uncertainty. However, while the methodologies differ, the general results of the student yield analysis reinforce the validity of the enrollment projections.

The student potential of the identified active and planned housing developments known at the time of the report, reaches 2,862 total K-12 students. It is important to note that the developments outlined in this report are in various stages of planning and construction, so any student influx from these developments will occur over time and not all at once. The student potential values assume that all units are completely constructed and occupied.

Summary data excerpts are included in [Appendix D](#), and the full report can be found on the ACPS LRPAC website.

30-Year Population Forecasts

The Charlottesville/Albemarle Metropolitan Planning Organization (MPO) uses forecasts of population as part of preparing the area's Long Range Transportation Plan. Using the Weldon Cooper Center's 2045 forecasts for Albemarle County's total population, the MPO worked with the County Department of Community Development to allocate shares of the County population to 140 traffic analysis zones based on zoning and other development and population predictors. The LRPAC overlaid and grouped these zones and their population forecasts with school districts to provide general insights into possible 30-year population and student growth expectations. This process was followed for all the schools except Scottsville because the MPO numbers are focused only on the more urban portions of the county. A summary of these forecasts is included in [Appendix E](#).

The population forecasts for these groupings were used to supplement 10-year projections and the development data. The LRPAC used these estimates to discuss "what might be" in the next 30 years (2015-2045) with regards to the general scale of population increases. The 30-year timeframe avoids peaks and valleys of unpredictable year to year housing build-out timing, which may be reflected in the more near-term data sources. Additionally, analyzing long-term data forecasts may point to site acquisition needs before land is fully developed or prices rise.

These forecasts were used to extend confidence about trends and patterns already visible and supplement LRPAC's planning activities. As with all projections and forecasts, it will be important to review and evaluate these numbers when they are next updated by the MPO.

Building Capacity

ACPS uses a program capacity model to determine capacity levels in school facilities. Program capacity is the student capacity of a school based on the current use of each learning space, or how many students the building can support, when the restrictions of the programs of study are applied.

Program capacity is estimated using three primary variables: number of classrooms, classroom multiplier, and a utilization factor. The classroom multiplier is the average of how many students should be in each classroom based on staffing levels and student demographics. The number is multiplied against the number of classrooms to determine capacity. The utilization factor is a percentage applied to the capacity figure at secondary schools to account for learning spaces that cannot be used 100% of the time (i.e. 7 out of 8 periods for middle and high schools).

The most current capacity figures are compared against the projected enrollment figures for each school to determine the current and projected capacity conflicts presented in the data analysis. The complete ten-year data and capacity calculations are included in [Appendix F](#).

Data Collection

Using the previously described methodology, data was gathered and synthesized by school and school feeder pattern. In addition to gathering data on projected enrollment and capacity, other factors such as the age of a school, recent renovations, and use of mobile units was included to provide a comprehensive view of the state of each school. The table below provides summary information about the data collection.

SCHOOL ^{1,2}	Year Built	Most Recent Addition ³	Mobile Class-rooms Used ⁴	Econ. Disadv. Index ⁵	Bldg Capcty	20/21 Enrollment	Capacity Conflicts			2045 Pop. Growth	2045 Pop. Growth %	Current Need	Long-Term Need	
							2021/22 (1-yr)	2025/26 (5-yr)	2030/31 (10-yr)					
Western Feeder Pattern Elementary	BROWNSVILLE	1966	2009	8	0.33	756	723	(114)	(202)	(196)	+7,945	+96%	x	
	CROZET	1990	2021	0	0.78	680	325	(14)	308	302				
	MERIWETHER LEWIS	1988	n/a	4	0.30	420	322	48	21	35	+1,243	+9%		
	MURRAY	1960	1964	1	0.21	260	231	3	(10)	(6)				
Northern Feeder Pattern Elementary	AGNOR-HURT	1992	2015	0	1.58	504	409	74	53	51	+9,319	+39%	x	
	GREER	1974	2012	0	2.17	566	431	90	85	104			x	
	WOODBROOK	1966	2018	0	1.79	584	525	43	46	69			x	
	HOLLYMEAD	1972	2005	3	0.36	328	325	70	40	55	+9,259	+75%	x	
	BAKER-BUTLER	2002	2018	6	0.77	596	629	(90)	(154)	(142)			x	x
	BROADUS WOOD	1936	1992	1	0.48	360	251	95	95	100	+2,141	+22%		
	STONY POINT	1934	1996	4	0.96	228	170	13	(5)	(3)				
Southern Feeder Pattern Elementary	MOUNTAIN VIEW	1990	2007 2016*	12	1.29	624	662	(80)	(167)	(183)	+3,817	+40%	x	x
	RED HILL	1973	2020 2016*	0	1.63	198	153	20	12	18	+247	+12%		
	SCOTTSVILLE	1981	2020 2018*	4	1.40	285	207	64	66	74	n/a	n/a		
	STONE ROBINSON	1961	1998	0	0.83	536	419	66	12	14	+4,970	+62%		x
Middle	BURLEY	1951	2002	0	1.29	717	601	102	73	73	+13,594	+54%		x
	HENLEY	1966	2019	8	0.41	999	871	93	10	(26)	+8,918	+39%		x
	JOUETT	1966	2016	0	1.72	717	674	8	(22)	40	+4,454	+22%		
	LAKESIDE	1994	n/a	0	0.59	653	575	66	31	30	+9,671	+70%		x
	WALTON	1974	n/a	0	1.24	499	338	165	150	167	+2,013	+31%		
High	ALBEMARLE	1953	2009	16	1.18	1,785	1,853	(81)	(276)	(472)	+19,199	+46%	x	x
	MONTICELLO	1998	2007	8	1.27	1,230	1,174	25	21	(36)	+10,746	+46%		x
	WESTERN ALBEMARLE	1977	2019	8	0.44	1,200	1,138	20	(85)	(321)	+8,918	+39%	x	x

¹Enrollment and capacity represent K-12 and do not include Pre-K programs.

²This chart does not include Community Lab School, which has 161 students enrolled in 202/21 and capacity of 240 students and Center 1 which has a capacity of 150 students.

³*Security Addition.

⁴An 8-classroom mobile unit at Mountain View Elementary is expected to be completed by the end of 2021. 8-classroom mobile units at Albemarle High School, Western Albemarle High School, and Henley Middle School are used for COVID-19 social distancing measures. The 8-classroom mobile unit at Monticello High School needed for COVID-19 social distancing measures, is expected to be completed by the end of 2021.

⁵% economically disadvantaged / % all students, 1.00 indicates percentages are equal. For example, a school has 10% of ACPS students but 20% of ACPS economically disadvantaged students, which would result in an index of 2.00.

⁶The Crozet Addition is underway and will be complete by August of 2022.

Analysis

The table below is an analysis of the data sources as described in this section. The information and recommendations are grouped by geographic clusters, in order to reflect the transitory nature of geographic school districts and pre-defined districts used for the long-term population forecasts.

SCHOOL		Historical	Enrollment Projections vs. Capacity	Student Yield (from Developments)	Population Forecasts	Capacity Recommendation
Western Feeder Pattern Elementary	BROWNSVILLE	▲ High neighborhood growth	● Low capacity conflicts	▲ High yield	▲ High population growth	Elementary School Site Acquisition
	CROZET					
	MERIWETHER LEWIS	● Stable neighborhoods	■ Moderate capacity conflicts	● Low yield	● Low population growth	None
	MURRAY					
Northern Feeder Pattern Elementary	AGNOR-HURT	■ Stabilizing neighborhoods	● Low capacity conflicts	▲ High yield	■ Medium population growth	Redistricting, New Elementary School
	GREER			● Low yield		
	WOODBROOK			■ Moderate yield		
	HOLLYMEAD	● Low capacity conflicts	▲ High yield	▲ High population growth		
	BAKER-BUTLER	▲ High capacity conflicts				
	BROADUS WOOD	● Stable neighborhoods	● Low capacity conflicts	● Low yield	● Low population growth	
	STONY POINT	● Stable neighborhoods	■ Moderate capacity conflicts	■ Moderate yield		None
Southern Feeder Pattern Elementary	MOUNTAIN VIEW	▲ High neighborhood growth	▲ High capacity conflicts	■ Moderate yield	■ Medium population growth	Recommendations from Study
	RED HILL	● Stable neighborhoods	● Low capacity conflicts	● Low yield	● Low population growth	None
	SCOTTSVILLE				NA	
	STONE ROBINSON	● Stable neighborhoods	● Low capacity conflicts	■ Moderate yield	▲ High population growth	None
Middle	BURLEY	■ Stabilizing neighborhoods	● Low capacity conflicts	■ Moderate yield	■ Medium population growth	Further Study
	HENLEY	▲ High neighborhood growth	■ Moderate capacity conflicts	■ Moderate yield	■ Medium population growth	
	JOUETT	▲ High neighborhood growth	■ Moderate capacity conflicts	● Low yield	● Low population growth	
	LAKESIDE	● Stable neighborhoods	● Low capacity conflicts	▲ High yield	▲ High population growth	
	WALTON	● Stable neighborhoods	● Low capacity conflicts	■ Moderate yield	● Low population growth	
High	ALBEMARLE	● Stable neighborhoods	▲ High capacity conflicts	■ Moderate yield	■ Medium population growth	High School Center Expansion
	MONTICELLO	■ Stabilizing neighborhoods	■ Moderate capacity conflicts			
	WESTERN ALBEMARLE	▲ High neighborhood growth	▲ High capacity conflicts			

Capacity Conclusions

This section summarizes the general observations by geographic cluster for schools where LRPAC has formed a capacity recommendation. In addition to a synthesis of the data, both current and long-term alternatives are provided where relevant. In some cases, further study is needed before a recommendation can be made.

Crozet Area Elementary Schools: Brownsville/Crozet

An expansion to Crozet Elementary is currently underway, with planned additional capacity of more than 300 seats. Students from Brownsville Elementary are planned to be redistricted when the expansion is constructed for the 2022-23 school year. While the Crozet Elementary expansion will provide ample capacity for both schools in the near-term, planned development in these districts have a student potential of 413 students. And, over the longer-term, the population is expected to grow by 96% or almost double from 2015 to 2045, which could yield over 1,000 new students.

A new elementary school in the western feeder pattern will likely prove necessary. As the availability of land is already limited in the highest density areas, it is recommended that land be acquired in the short-term.

Recommendation: Land Acquisition in the Western Feeder Pattern

29N Elementary Schools: Baker Butler/Hollymead

Baker-Butler enrollment has increased due to redistricting and growth. The Camelot, Briarwood, and North Pine neighborhoods continue to grow, primarily due to NGIC employee growth. The Hollymead district has had overall moderate growth, with primary growth in the Hollymead Subdivision as younger families move into the neighborhoods. What's more, major developments are planned including North Pointe, which may produce more than 300 units, and Brookhill, which may produce more than 800 units.

Baker-Butler currently is over capacity (by 74 seats during the 2019-20 school year) and the student population is projected to continue growing. The student yield analysis from new development shows the Baker-Butler and Hollymead districts as having the highest impact of 443 potential students. In addition, the expected long-term population growth is only second to Brownsville/Crozet, growing by 75% by 2045.

As new developments are approved, ACPS has acquired two potential elementary school sites through proffers. A site at Brookhill is located centrally in this area, and a new elementary school is recommended to be built to benefit Baker-Butler and adjacent school districts.

Recommendation: New elementary school in the Northern Feeder Pattern.

Urban Ring Elementary Schools: Agnor-Hurt/Greer/Woodbrook

These schools, located within the urban ring and in close proximity to one another have some of the Division's highest rates of economically disadvantaged students. Due to recent additions at all three schools, enrollment is projected to be under capacity. While the neighborhoods in these districts are generally stabilizing, there are certain areas with high levels of expected development. These districts' student yield analysis shows the potential for 293 students, and the population is expected to grow by 39% by 2045. While there is no specific recommendation at this time, these schools may be impacted by adjacent boundaries, such as redistricting due to the recommendation for constructing a new school further north.

Mountain View Elementary School

In 2019, the LRPAC recommended an expansion to Mountain View Elementary as a short-term capacity solution. This recommendation is funded in FY 22 and an 8-classroom mobile unit is planned for the interim period. The expansion and renovation project addresses the space needs for the current school population only and is being accompanied by a consultant study to develop a long-term solution for anticipated growth in the area.

Both the student yield and population growth analyses point to moderate growth, and are generally in line with ACPS enrollment projections. The planned addition would bring the K-5 capacity of the building from 624 to 738. The school is projected to exceed the new capacity by the 2023-24 school year. The current consultant study engages the community and stakeholders, and will consider capacity solutions for Mountain View, including further expansion, the construction of a new facility, redistricting, and grade level re-configurations. A final recommendation will be made to the Superintendent and School Board in the fall.

Recommendation: Mountain View Master Plan study recommendation (TBD).

Stone Robinson Elementary School

Historically, Stone Robinson Elementary has only grown at a moderate pace with stable neighborhood growth. However, in recent years, the number of new developments has increased and younger families have moved to the area. The potential student yield from developments in the pipeline is 92 potential students, and the long-term population forecast projects growth of 62%. Student enrollment projections reach near capacity over the next 10 years, so this is an area that needs to be closely monitored over the next few years, as recommendations may change.

Southern Elementary Schools: Red Hill and Scottsville

Recently completed CIP projects have addressed capacity concerns at these two schools, which have added a total of 150 new seats for the 2021-22 school year.

Remaining Elementary Schools

The remaining elementary schools (Meriwether Lewis, Murray, Broadus Wood, and Stony Point) have stable neighborhood populations and no near-term capacity constraints. Therefore, no capacity-related projects or actions are recommended at this time.

Middle Schools

The five comprehensive middle schools currently have combined adequate capacity, but Division projections show looming capacity issues at Henley and Jouett. The student yield potential from planned developments is 644 across all of the middle schools, and long-term population forecasts show a forecast of approximately 1,300 more students. With the complication of split feeder patterns and under enrollment at some schools, further study to determine feasible alternatives is needed. Potential alternatives may include the addition of a new middle school, addressing current grade level configurations, and redistricting.

Recommendation: Middle School Capacity Study

High Schools

The Division has embarked upon a “center” based strategy to address capacity issues at its three comprehensive high schools, in particular at Albemarle High School. This agile approach addresses both instructional and capacity needs in an efficient manner. Long-term county population growth is forecast to grow by 44% over the next thirty years. That could yield another 1,800 high school students, roughly the size of the current AHS.

The LRPAC recommends an expansion of the High School Center model. This solution is not only a solution capacity, but it also supports a new instructional model that looks toward the future of learning spaces. The funding for the construction of Center 2 is paused during the COVID-19 pandemic due to the economic and enrollment uncertainties. The LRPAC continues to prioritize Center 2 as a capacity solution. This recommendation should be considered by the School Board to ensure alignment with the instructional vision of ACPS.

Recommendation: High School Capacity (Center 2)

School Size

As the student population continues to grow in Albemarle County and recommendations are made to expand or construct new elementary schools, the question of appropriate school size has become increasingly important. ACPS K-5 elementary school capacities currently range from 144 to 756. EAB, an education research partner of ACPS, has found that comparatively few studies exist on the impacts of school size. However, despite the limitations, most relevant studies do agree that smaller schools benefit students. In particular, smaller elementary schools benefit students from economically disadvantaged backgrounds, students with disabilities, and students from historically underrepresented populations. Relevant studies were researched regarding school size as it relates to operational efficiency, student achievement, and special and disadvantaged populations.

Recommendation: Adopt a policy on school sizes at each level, including a capacity range to help guide the LRPAC in considering the efficacy of expanding and/or constructing school buildings and making future recommendations.

Boundary Changes

Per Board policy, the committee is tasked to make long-term recommendations for facilities needs in the most effective and efficient way. This may require redistricting to make use of existing capacity. The LRPAC recommendation is based on assumptions that future redistricting will impact the following schools/areas in the next 10 years:

- **Mountain View:** The results of the Mountain View capacity study may recommend redistricting students from Mountain View to another district or splitting the current district into two districts.
- **Northern Feeder Pattern:** Baker-Butler is currently over-enrolled and capacity conflicts are projected to worsen over time. On the other hand, there are some elementary schools in the Northern Feeder pattern with ample capacity. If a new elementary school is built, it is assumed that students from more than one district would be impacted.
- **Brownsville & Crozet Elementary:** With the expansion of Crozet Elementary and over-capacity status at Brownsville Elementary, students will be redistricted from the current Brownsville district to the Crozet district. The School Board has approved the scope of a redistricting study, and recommendations will be made in January 2022. New boundaries are planned to take effect for the 2022-23 school year.
- **Middle Schools:** A study is recommended that will consider the possibility of redistricting the middle schools.

Section 2: Renovations

ACPS defines building renovation projects as projects that add value to existing buildings through major improvements. Examples of improvements can include:

- Classroom modernization
- Daylighting
- Casework/cabinetry Upgrades
- Art and Music Classroom / Media Center Renovations
- Cafeteria/Kitchen Improvements
- Bathroom Renovations
- Hallway Improvements
- New Exterior and Interior Finishes
- Interior and Exterior Door Replacement
- Reconfiguration of spaces to improve function or efficiency
- Signage and Wayfinding Improvements
- Outdoor Learning Areas
- Technology Upgrades
- Environmental Upgrades

Other major maintenance work that extends the useful life of facilities is considered building maintenance, and funded through the Capital Improvement Program (CIP) as a recurring project. Maintenance projects improve, exchange or replace building components that are at or near the end of their useful life. Such components include roofs; electrical, mechanical, and plumbing equipment; pavement rehabilitation; and flooring replacement. These maintenance projects are not considered school renovations.

In a community survey administered summer 2021, respondents recommended that the following are important criteria to use for project prioritization and align directly with school renovation projects:

- Upgrading all athletic facilities and outdoor play spaces; foster good physical health
- Making sites accessible for local/community-based events
- More natural light in classrooms/easier access to outdoor spaces
- Spaces that foster good mental health habits, well-being, and collaboration
- Access for disabled students (student mobility, sensory processing, etc.)

The LRPAC analyzed relevant data collected by Building Services staff that included detailed facility information and a list of recent renovations for each school facility (**Appendix G**). Historically, renovations have occurred concurrently with capacity-related renovations. This naturally leads to somewhat unequal school facilities, and the LRPAC determined that renovations are needed at all levels to incorporate the values of equity, environmental sustainability, and the future of learning spaces.

In 2019, the LRPAC made recommendations for renovation projects at elementary schools, middle schools (formerly “Learning Space Modernization”) and high schools (Albemarle and Western Albemarle High Schools). These projects were ultimately not funded, and are recommended again with small modifications.

The recommended high schools include Albemarle and Western Albemarle high schools. The master planning for renovations at Albemarle and Western Albemarle high schools is underway. The master plan deliverables include program and physical assessments, conceptual designs, and construction cost development. Currently, the program and physical assessments are complete.

One focus for the LRPAC during the year will be to determine the most equitable and efficient way to prioritize elementary and middle schools for renovations. The committee will develop criteria and work with the school communities to determine specific projects and timing during the next fiscal year with a focus on equitable distribution of resources as discussed in the Introduction.

Recommendation: Elementary school renovations, Middle school renovations, High school renovations

Section 3: Environmental Sustainability

The LRPAC reviewed and analyzed current environmental sustainability practices in order to understand the need for any recommendations moving forward. The committee coordinated with the Departments of Building Services, Transportation, and Child Nutrition, as well as the ACPS Environmental Studies Academy and Albemarle County's Climate Protection Program.

The data that was reviewed can be found in **Appendix H** and includes:

- Heating Fuel Sources
- Energy Performance Contract – LED Lighting & High-Efficiency Plumbing Fixtures
 - Interior Lighting System Improvements
 - Exterior Lighting System Improvements
 - Lighting Controls
 - Domestic Water Conversion
- Solar Panel Installation & Power Purchase Agreement Data
- Energy Usage Trends and Site Energy Intensity
- Energy Star Certifications
- Wind Energy

The committee found that current practices and policies in ACPS meet and exceed environmental goals as drafted in the County's Climate Action Plan, which includes goals of reducing overall energy use and increasing on-site renewable energy production. While the Climate Action Plan is still in the early planning phases, there is an opportunity for ACPS to collaborate and work to move the County's progress forward.

Recommendation: Environmental data should be analyzed when developing recommendations for school renovation projects to ensure that replacements, renovations and new construction adhere to the climate goals of Albemarle County. ACPS should work closely with Albemarle County to continue developing, implementing, and monitoring the steps as outlined in the Climate Action Plan.

Section 4: Future of Learning Spaces

As directed by the School Board, the LRPAC considered the future of classroom spaces and what the most ideal schools look like.

A review of current research provided by EAB concludes that administrators can greatly improve a student's progress by moving that student from an ineffective learning environment to a highly effective learning environment and found that learning spaces account for 16 percent of student academic progress.⁴ Three main qualities of effective learning spaces were identified including naturalness (i.e. light, temperature, and air quality), individualness (i.e. ownership and flexibility of space), and stimulation (appropriate levels of complexity and color). Effective classrooms contain different learning zones that support different learning styles, encourage a variety of best-practice teaching methods, and increase student mobility.⁵

In addition, LRPAC members interviewed key instructional leaders at ACPS to further understand how facilities design can positively impact student learning for all student populations. The following categories were discussed as being priorities for the School Division.

- **Increasing STEAM Accessibility:** Classrooms should be equipped with modern technology, equipment, and storage spaces to provide opportunities for students for hands-on, collaborative, and project-based learning in the areas of science, technology, engineering, arts, and math. Often, these subjects can be interdisciplinary and can have creative applications and engagement with community partners.
- **Virtual learning spaces:** The relevance of virtual learning spaces and tele-communication has become readily apparent with the impacts of the COVID-19 pandemic. Virtual learning spaces are a key to keeping students engaged when physical proximity is not optimal. In addition, virtual learning environments provide greater equity for students who may not have the opportunities to experience certain travel or events when compared to other students who may have added experiences and education outside of the school setting.
- **Kitchens and gardens:** Classrooms and outdoor spaces that have kitchens and gardens provide not only healthy learning environments, but also offer creative and hands-on instruction at all grade levels and subjects.
- **Flexibility and adaptability:** A common theme for this topic area is not a specific learning space, but instead focuses on the flexibility and adaptability of the space itself. Classrooms should be designed in such a way to accommodate the needs of student populations over time. Furniture and room configurations should not be permanent and fixed, but rather be adaptable. As research continues to evolve and outcomes are evaluated, the School Division should not be hindered by facilities that cannot adapt alongside the changes that are required to optimize student success.

⁴ Barret, PS, Zhang, Y, Davies, F and Barrett, LC. (2015). *Clever classrooms: Summary report of the HEAD project*. University of Salford Manchester. Retrieved from <http://usir.salford.ac.uk/35221/>

⁵ Churchill, L., & Rios, O. (2019). *Student-Centered Classroom Design and Technology* (pp. 6-16). EAB. Retrieved from <https://eab.com/research/district-leadership/resource/student-centered-classroom-design-and-technology/>

- **Impact from COVID-19:** A key lesson learned from the COVID-19 pandemic is that school spaces must have the ability to shift swiftly to meet the requirements of social distancing and the ability to isolate groups, and have classroom infrastructure to support remote teaching and learning. While these measures are specific to the COVID-19 pandemic, it is important to be prepared for the next shift in instructional models that may occur. In addition, the importance of outdoor learning spaces, as well as having direct access to water in each classroom for hygiene purposes have become even more apparent.
- **Community engagement:** In moving forward with classroom designs, key stakeholders should be consulted including the community, educators, and students.

Recommendation: A detailed rubric and/or policy should be developed that can be used as a reference for new schools, classrooms, or renovations. While the Division currently adheres to a set defined technical standards, it should also adhere to a set of instructional standards to ensure that all students have access to consistent learning opportunities and spaces. The community should be involved in the development of these standards and include lessons that have been learned from the COVID-19 pandemic schooling efforts.

Section 5: Multi-School Campuses

This topic arose during breakout group discussions in September involving several School Board members and LRPAC members. Interest centered on the Lambs Lane campus (AHS/Jouett/Greer) with its variety of schools, school related facilities and other facilities serving the community. The LRPAC generalized this discussion and chose to focus not on a single campus but on the general issues of multi-school/multi-facility campuses, both in terms of on-going experience and an eye on future potential multi-school campuses.

Based on preliminary interviews with knowledgeable staff, a Planning Commission member, and discussions among the LRPAC members familiar with each campus, the following findings and recommendations are presented.

Two existing multi-school/multi-facility campuses should receive priority attention, which are AHS/Jouett/Greer and WAHS/Henley/Brownsville. To a lesser degree, the Hollymead/Lakeside campus should also be considered.

As a starting point, the LRPAC discussed potential benefits of having multi-school campuses, which include:

- shared use of space/facilities,
- land use opportunities of unused space,
- recreation facilities can serve as community centers/parks, and
- shared bus use could benefit middle and high school transportation logistics.

However, these potential benefits could be offset by challenges of congestion and traffic issues. Single access points are likely to exacerbate congestion issues and a high volume of student drivers may add to congestion, resulting in long wait times for drop-off/pick-up and on-site safety may become an issue for pedestrians and bikers. Limited connectivity may reduce the number of pedestrians and bikers and limit equitable access to school sites for those without cars.

When considering the possibility of future school campuses, caution should be taken and the following areas should be reviewed and analyzed.

- Develop a long-term plan for the entirety of the property, not just the site of one particular school or facility within a property.
- Evaluate off-site conditions where the proposed property might have spill-over consequences for abutting properties, neighbors, and roadways.
- Evaluate and compare alternative sites/properties for the proposed use(s).
- Evaluate and compare alternative uses of the site/property in question.
- Particular consideration should be given the following topics:
 - access and traffic capacity (single entrance points shared by multiple schools should be avoided)
 - visual impacts from neighboring properties and roadways

Recommendation: A consultant study has been initiated for the AHS/Lambs Lane campus, which is in direct alignment of the LRPAC's recommendation. The LRPAC also recommends a study of the WAHS/Henley/Brownsville campus as part of the CNA.

At the time of this report, Albemarle County is preparing to contract with a consultant to study a proffered site in the Brookhill subdivision. If the recommendations of this study include one or more school sites or multiple school related facilities, the discussion points in this section should be considered.

Project Criteria

*ACPS will develop modern and environmentally sustainable facilities, infrastructure and equipment.*⁶ High quality facilities and comprehensive infrastructure are fundamental to learning and teaching. The physical environment of school buildings and school grounds is a key factor in the overall health and safety of students, staff members, and visitors. Student achievement can be affected positively by the physical environment. ACPS will ensure that we meet the Division's goals by ensuring that our school facilities and resources reflect and are in support of the below criteria:

Safe and Secure Facilities

We will ensure that facilities are safe, healthy, and secure for students, staff, and the community.

Adequate Capacity

We will build, expand, or otherwise adapt facilities to meet projected changes in school enrollment.

Efficient Use of Resources

Recommendations will be made to ensure full utilization, maximize efficiencies, and apply economies of scale when practical and optimal. Projects will have clearly defined goals and outcome metrics to ensure accountability and provide a means for continuous improvement. We will invest in the maintenance of our existing facilities and resources to ensure maximum returns.

Modern and Reliable Technology Infrastructure

ACPS will maintain technology infrastructure within which an equitable distribution of resources provides support to every educational program and learning environment.

Outdoor Learning

We will ensure that outdoor recreation and learning spaces are available, accessible, and appealing.

Equitable Distribution of Resources

We will ensure an equitable application of capital improvements throughout ACPS. An equity lens will be utilized when identifying what projects to recommend. Projects should be evaluated based on students, staff, and community members, including special populations, who may benefit from added resources. Projects should also take into consideration equitable access by special populations.

Sustainable Facilities

We will model sustainable environmental practices in alignment with the County's Climate Action Plan.

Adaptable and Flexible Spaces

We will design spaces that are forward-thinking and conducive to a wide-range of learners and learning activities. Spaces will accommodate collaborative, hands-on learning, and be able to adapt to different learning purposes and users.

⁶ Learning for All Strategic Plan, Goal 3, Objective 2.

Project Criteria Summary

Project	Primary Criteria	
1. High School Capacity (Center 2)	Adequate Capacity, Adaptable and Flexible Learning Spaces	Equitable Distribution of Resources
2. Mountain View Study Recommendations	Adequate Capacity	
3. Elementary School in Northern Feeder Pattern	Adequate Capacity	
4. High School Renovations	Adaptable and Flexible Learning Spaces, Sustainable Facilities, Outdoor Learning	
5. Middle School Renovations		
6. Elementary School Renovations		
7. Elevator Additions	Safe and Secure Facilities	
8. Data Center	Modern and Reliable Technology Infrastructure	
9. Indoor Air Quality	Safe and Secure Facilities	
10. ES Land Acquisition in the Western Feeder Pattern	Adequate Capacity	
11. Middle School Capacity Study	Adequate Capacity	
Maintenance Programs	Efficient Use of Resources, Modern and Reliable Technology Infrastructure, Safe and Secure Facilities	
Lambs Lane Campus Study	Efficient Use of Resources	
Brookhill Study (Albemarle County)	Efficient Use of Resources	

Project Summaries

1. High School Capacity (Center 2)

PRIMARY CRITERIA: Adequate Capacity, Adaptable and Flexible Learning Spaces
ESTIMATED FUNDING REQUEST: \$32,070,000
ESTIMATED ANNUAL OPERATIONAL IMPACT: \$1,100,000

SCOPE

This is a placeholder scope for High School Center 2. This scope represents a 61,500 square foot facility with a 400 student per day capacity that is a resource for the entire Division. It is strategically geographically-located to provide access to interdisciplinary, project-based, specialized programming. It will also serve as an interface between the school, community and professional organizations that provide out-of-building authentic learning experiences such as internships, and other work and community-based opportunities. Transportation to High School Center 2 is provided by the Division from all three feeder patterns to ensure equity of opportunity to every student. It is a facility that is an extension of the modernization projects at each base high school in that it will house a variety of learning spaces and technical resources.

JUSTIFICATION

Student capacity issues at both Albemarle High School and Western Albemarle High School have necessitated the need for additional instructional space. With that in mind Albemarle County Public Schools (ACPS) completed a high school facilities planning study. Ultimately, ACPS studied our high schools as a 4,000-student high school system versus three distinct and separate comprehensive high schools recognizing that all students should have the opportunity to participate in any academic program offered in the county. Based on this, the recommendation at the conclusion of the process was to use a "center" model to alleviate capacity issues, and to modernize existing high school spaces. Center 2 would provide 400 additional seats to relieve capacity issues at the comprehensive high schools.

KEY CHANGES

Design and construction for this project was previously approved in 2019 by the School Board and Board of Supervisors, but was paused in 2020 as a result of financial uncertainties of the COVID-19 pandemic. The scope of the project has been updated to align with the Climate Action Plan, add excavation costs for rock on the site, and account for inflation.

2. Mountain View Study Recommendations

PRIMARY CRITERIA: Adequate Capacity

FUNDING REQUEST: TBD

The scope of this project remains to be determined, as a study is underway to recommend a long-term capacity solution for Mountain View Elementary School. An addition and renovation project at Mountain View was approved in the FY 22 CIP as a solution to address the current capacity conflict at the school.

Installation of an 8-classroom mobile unit is underway and ready for use by October 2021.

3. Elementary School in Northern Feeder Pattern

PRIMARY CRITERIA: Adequate Capacity

ESTIMATED FUNDING REQUEST: \$40,200,000

ESTIMATED ANNUAL OPERATIONAL IMPACTS: \$500,000

SCOPE	This project is to construct a new 500-student elementary school on a proffered site. It is assumed that the site will have city water and sewer available at the property line. The project shall incorporate LEED design principles, strategies and elements. The assumed building size is 72,500 square feet (500 students at 145 square feet per student).
JUSTIFICATION	<p>Baker-Butler currently is over capacity (by 74 seats during the 2019-20 school year) and the student population is projected to continue growing. The student yield analysis from new development shows the Baker-Butler/Hollymead districts as having the highest impact of 443 potential students. In addition, the expected long-term population growth is only second to Brownsville/Crozet, growing by 75% by 2045.</p> <p>A site for a new elementary school was proffered as a part of the approved rezoning for the Brookhill Development at the intersection of 29N and Polo Grounds Road. The location is optimal for growth along the 29N corridor and could serve students in current Northern Feeder Pattern elementary schools.</p>
KEY CHANGES	A new elementary school has been requested as part of the Capital Needs Assessment (10-year capital program) since 2017.

4. High School Renovations

PRIMARY CRITERIA: Adaptable and Flexible Learning Spaces, Sustainable Facilities, Outdoor Learning
ESTIMATED FUNDING REQUEST: \$36,000,000

SCOPE

This project will fund comprehensive updates on instructional and support spaces at Albemarle and Western Albemarle High Schools based on recommendations of a master plan study that is scheduled to be complete next year. It is anticipated that the renovations will be conducted in a phased manner.

JUSTIFICATION

In 2017, a High School Facility Planning Study was completed. The recommendations, which the School Board accepted, included the construction of High School Centers to meet capacity needs as well the modernization of the division's existing high schools. Due to the age and condition of the facilities, Albemarle and Western Albemarle were prioritized first. As a part of the study, a room by room assessment was conducted utilizing the Education Facilities Effectiveness Instrument (EFEI) to determine the educational adequacy of the space to contemporary instructional needs.

KEY CHANGES

This project was previously named Albemarle and Western Albemarle HS Renovations. This project was requested in 2019 and remains unfunded.

The master planning for renovations at Albemarle and Western Albemarle high schools is underway. The master plan deliverables include program and physical assessments, conceptual designs, and construction cost development.

5. Middle School Renovations

PRIMARY CRITERIA: Adaptable and Flexible Learning Spaces, Sustainable Facilities, Outdoor Learning
ESTIMATED FUNDING REQUEST: \$20,000,000

SCOPE

The purpose of this project is to fund renovations and improvements to instructional and non-instructional spaces at middle schools, which includes existing classrooms, libraries, and other elective and instructional support areas consistent with School Board goals and priorities. Modifications will include furniture and renovation work including updating finishes, casework, lighting, technology and power, and connections to adjacent spaces. The modifications directly support instructional needs and can be broken down in the following key areas:

- **Classroom Renovation:** Improve classroom spaces to update all finishes, casework & furniture. Improve transparency & connection to adjacent spaces, including the outdoors if feasible. Improve acoustics in classrooms.
 - **Media Center:** Renovate media centers to be flexible hubs of congregation, collaboration, & creation. This includes updating furniture, shelving, and accessory spaces where needed.
 - **Cafeteria:** Update cafeteria finishes, furniture & natural light. Repurpose space to be utilized the entire school day.
 - **Specialty Classroom:** Renovate existing spaces to create state-of-the-art science labs, music, art, CTE, fitness, home economics & other specialty rooms. Create dedicated maker spaces.
 - **Daylighting:** Add day lighting (windows, skylights and solatubes) to spaces with no or minimal natural light. Update blinds or shades in spaces with natural light to better control the light.
 - **Under-Utilized Space Transformation:** Renovate any under-utilized spaces into learning spaces, such as locker removal and conversion of storage rooms. Convert lockers to more useful storage.
 - **Outdoor Learning and Playground Spaces:** Update existing outdoor areas with signage and replace structures and pathways. Install new outdoor game and fitness equipment.
 - **ADA Improvements**
 - **Restroom Upgrades:** Renovate student and faculty restrooms to be consistent with the new Policy on the Treatment of Transgender and Gender-expansive Students. This includes new finishes, restroom configuration if required, lighting and fixtures.
-

5. Middle School Renovations (Cont'd)

JUSTIFICATION

Prior to this project, the capital program included minimal funding for the Division's current spaces beyond routine maintenance or a larger expansion project. Schools with stable or declining populations have not received major expansions and therefore have not received significant renovations. In response, this project is a concentrated effort on the needs of instructional spaces. The average age of the original portions of ACPS schools is close to 50 years. As the buildings age and the needs of students evolve, learning spaces must be maintained, updated and modernized.

KEY CHANGES

This project was previously named *Learning Space Modernization*. This project was requested in 2019 and remains unfunded.

6. Elementary School Renovations

PRIMARY CRITERIA: Adaptable and Flexible Learning Spaces, Sustainable Facilities, Outdoor Learning
ESTIMATED FUNDING REQUEST: \$50,000,000

SCOPE

The purpose of this request is to provide well-kept and updated facilities for all students in Albemarle County and to provide flexible spaces and furniture to learn, as well as have access to relevant technology. These projects represent placeholder projects for renovations at elementary schools due to the age of the facilities. Further study and evaluation is recommended to determine prioritized locations as well as exact scope.

Scope may include but not be limited to the following:

- **Classroom:** Reconfiguring classrooms to create learning labs and more flexible classrooms. Add electrical and sound absorbing folding partitions.
 - **Non-Classroom:** Areas such as lobbies where learning spaces can be created.
 - **Furniture replacement:** Flexible and mobile furniture and soft seating are included.
 - **Technology upgrades:** Technology required beyond the current projector and Promethean board replacement project.
 - **Daylighting Improvements:** Solatubes, windows, skylights.
 - **Casework/Cabinetry Upgrades:** Art rooms, classroom casework, replace lockers with more functional casework.
 - **Art and Music Classroom Renovations:** Flexible furniture, mobile storage, student display, music technology.
 - **Media Center Renovations:** Mobile shelves, soft seating, book display, flexible furniture where needed.
 - **Cafeteria Improvements:** Finishes, furniture and lighting appropriate for use as learning space all day.
 - **Restroom Renovations:** Renovate student and faculty restrooms to be consistent with the new Albemarle County Public Schools Policy on the Protection of Transgender and Gender-Expansive Students. This includes new finishes, restroom configuration if required, lighting and fixtures.
 - **Hallway Improvements:** Provide durable finishes that include student display areas and collaboration spaces.
 - **New Exterior and Interior Finishes**
 - **Interior and Exterior Door Replacement**
 - **Reconfiguration of spaces to improve function or efficiency**
 - **Painting**
 - **Signage and Wayfinding Improvements**
 - **Outdoor Learning and Play Areas:** Update existing outdoor areas with signage and replace structures and pathways. Install new outdoor playground equipment.
-

6. Elementary School Renovations (Cont'd)

SCOPE (Cont'd)

- Window shade replacement
- ADA improvements

The exact scope of work will be determined once sites are selected. Work will also align and consolidate planned major maintenance work (i.e. mechanical, electrical, plumbing upgrades or roof replacement).

JUSTIFICATION

While the Division consistently and adequately funds ongoing maintenance, buildings are due for more comprehensive renovations that will more efficiently and holistically bring aging buildings up to date. Renovations will assure all schools are safe, functional, and provide the facilities necessary to support current educational programs and operational needs regardless of the age or size of the building or population. Typically, only buildings that have received large expansions have received renovations to existing buildings. That means schools with stable or declining populations have not received significant renovations.

KEY CHANGES

This project was requested in 2019 and remains unfunded.

7. Elevator Additions

ESTIMATED FUNDING REQUEST: \$4,200,000

SCOPE

This project will fund additional elevators at Albemarle High School, Western Albemarle High School, Monticello High School, Burley Middle School, Mountain View Elementary School and Greer Elementary School.

JUSTIFICATION

Currently, each of these sites has only one elevator. The existing elevators are not up to modern standards, as EMTs could not fit a stretcher inside. Updated elevators would increase health and safety standards for all students and staff should an accident or medical issue occur, by allowing EMTs to get to the upper floors and back as quickly as possible.

In addition to the increased elevator quality, having multiple elevators in the building greatly improves quality of life and access to education for students. If the existing elevator has an issue or requires maintenance, then those who cannot use the stairs are left unable to reach the upper floors of the building. On occasion, classes have needed to switch rooms to accommodate someone with an ADA requirement because of an issue with the existing elevator.

Only having one elevator can also force the students and staff who must use it on lengthy and circuitous routes to navigate the building. Not all classrooms can be easily within the reach of one elevator, so students with already limited mobility may be forced to travel significantly longer distances to reach their classes. Having multiple elevators would give those students options in how they navigate their school, highly improving their quality of life.

KEY CHANGES

This project was requested in 2019 and remains unfunded.

8. Data Center

PRIMARY CRITERIA: Modern and Reliable Technology Infrastructure

ESTIMATED FUNDING REQUEST: \$1,500,000

SCOPE

This project would fund the construction of a secure, primary Data Center for Albemarle County Public Schools. The Data Center would be built according to modern data center standards for both operational sustainability and security. It will support the servers and network equipment essential to all areas of the School Division, including both operations and instruction.

Ideally, the structure would be free standing, with its location to be determined. However, locating the new structure in close proximity to the Albemarle High School campus would allow for the most efficient operations and potential cost savings due to the existing infrastructure, including access to a primary data fiber source.

The building would also include a small office space and restroom for staff working in the Data Center, and a storage room for tools and spare equipment. If constructed as a free-standing structure, a parking area would need to be included.

JUSTIFICATION

The current primary data center for the School Division is located in the lower level of the Building Services main office near Albemarle High School. This structure houses the majority of Albemarle County Public Schools' server equipment, yet it lacks many safety measures that would help to protect Albemarle County Public Schools' servers and data. It does not have fire suppression equipment or hardened construction, and has been subject to flooding in the past. Nor does it meet current standards for data security.

While the existing Data Center has a backup power supply in the form of a generator and redundant HVAC, the lack of fire suppression and the physical construction of the current Data Center leaves the majority of Albemarle County Public School's server equipment and data vulnerable to a substantial risk of loss.

KEY CHANGES

This project was requested in 2019 and remains unfunded.

9. Indoor Air Quality

PRIMARY CRITERIA: Safe and Secure Facilities

ESTIMATED FUNDING REQUEST: \$4,543,750

FUNDING REQUEST	FY 23	FY 24	FY 25	FY 26	FY 27	5-YEAR TOT
	\$1,157,500	\$1,063,750	\$970,000	\$1,082,500	\$270,000	\$4,543,750

ESTIMATED ANNUAL OPERATIONAL IMPACTS: The increased ventilation is expected to increase annual HVAC energy costs by \$80,000.

SCOPE

This project is to improve indoor air quality (IAQ) throughout the division beyond baseline design requirements. The IAQ Improvement project will focus on evaluating existing systems and systems currently in the CIP for replacement with the intention of meeting LEED's Enhanced Indoor Air Quality Strategies which includes the following strategies:

- Interior Cross-Contamination Prevention
- Filtration of Outdoor and Recirculated Air
- Increased Ventilation
- Additional Source Control and Monitoring

The first year of the funding request includes a detailed assessment phase and the implementation phase occurs in the first four years. This project will result in increased utility costs due to the conditioning of additional outside air.

JUSTIFICATION

The most important duty of the Building Services Department is to make Albemarle County's schools as safe as possible. COVID-19 has highlighted the importance of our school HVAC systems and the ability to deliver outside air at levels greater than the typical design levels. This project will take a holistic approach to improving building HVAC systems beyond baseline design criteria.

A Harvard study found that exposure to carbon dioxide (CO₂) and volatile organic compounds (VOCs) at levels in conventional buildings was associated with lower cognitive scores than those associated with levels found in a building with low levels of VOCs and high outdoor air ventilation rates. A Carnegie Mellon review of five separate studies found an average reduction of 38.5 percent in asthma in buildings with improved air quality.

KEY CHANGES

This is a new project.

10. Land Acquisition in Western Feeder Pattern

PRIMARY CRITERIA: Adequate Capacity

ESTIMATED FUNDING REQUEST: \$7,500,000

SCOPE	This project includes the acquisition of 20 acres of land in the Western Feeder Pattern, in proximity to densely populated areas.
JUSTIFICATION	<p>An expansion to Crozet Elementary is currently underway, with planned additional capacity of more than 300 seats. Students from Brownsville Elementary are planned to be redistricted when the expansion is constructed for the 2022-23 school year. While the Crozet Elementary expansion will provide ample capacity for both schools in the near-term. Planned development in these districts have a student potential of 413 students. And, over the longer-term, the population is expected to grow by 96% or almost double from 2015 to 2045, which could yield over 1,000 new students.</p> <p>A new elementary school in the western feeder pattern will likely prove necessary. As the availability of land is already limited in the highest density areas, it is recommended that land be acquired in the short-term.</p>
KEY CHANGES	This project was requested in the 2019 Capital Needs Assessment (10-year capital program).

11. Middle School Capacity Study

PRIMARY CRITERIA: Adequate Capacity

ESTIMATED FUNDING REQUEST: \$250,000

SCOPE

This project would provide funding for a comprehensive facility planning study to evaluate capacity-related needs and options for the division's comprehensive middle schools: Burley, Henley, Jouett, Lakeside, and Walton. The study will include robust stakeholder engagement and data analysis to study capacity needs, feeder patterns, boundaries, instructional space needs, and parity amongst schools.

The study will consider new facilities, additions and renovations, boundary changes, grade level configurations, unique educational programming, and other creative solutions to meet the various needs of the schools.

JUSTIFICATION

The five comprehensive middle schools currently have combined adequate capacity, but there are looming capacity issues at Henley and Jouett. With the complication of split feeder patterns and under enrollment at some schools, further study to determine feasible alternatives is needed. In addition to capacity, renovation needs also need to be evaluated for both educational adequacy and parity. Of varying ages and sizes, the facilities have differing needs that need to be articulated and planned for.

KEY CHANGES

This project was requested in 2019 and remains unfunded.

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APPENDIX A

To: Albemarle County School Board & Dr. Matt Haas, Superintendent
From: Long Range Planning Advisory Committee
Date: October 22, 2020
Re: LRPAC Direction for 2020-21 Year



Background

At the September 24, 2020 School Board Work Session, School Board members met with Long Range Planning Advisory Committee (LRPAC) members to set a direction for the focus areas for LRPAC's next recommendation, scheduled to be presented during the summer of 2021.

If the Board is in agreement with the draft focus areas below, the LRPAC will use this memorandum as a basis for regular discussion, research, and development of recommendations for the School Board and Superintendent that will help inform the County's Capital Improvement Program (CIP) beginning in FY 2022/23.

COVID Context

The challenge will be to address how planning and facilities may change due to the pandemic. Changes in fall enrollments are already apparent and shifts have occurred towards homeschooling and private schooling. Many CIP projects have been put on hold and overall local and state revenues will be limited. Are these changes permanent or temporary? When taking a fresh look at school facilities and planning in this new context there may be new opportunities, as well as new obstacles that will need to be considered.

Priority Tasks and Topics for 2021 LRPAC Report

- School capacity issues at each level
- Building renovation needs, including HVAC and ventilation
- Improving the environmental footprint of buildings
- Reimagining the future of learning spaces, including outdoor learning
- Examination of optimal utilization of individual and multi-school/use campuses
- Creative instructional solutions that may impact capacity (limited to issues within the scope of the LRPAC)

In addition, the LRPAC continues to prioritize issues of school security infrastructure. Unless directed otherwise, this may be added as a continuing area of focus in the report.

Equity Lens

All topics will be analyzed by the committee to ensure the equitable distribution of resources in support of ACPS' anti-racism policy to *establish and sustain an equitable community that achieves the School Division's equity mission to end the predictive value of race and ensure each individual student's and staff's success.*

APPENDIX B HISTORICAL NEIGHBORHOOD ANALYSIS

AGNOR-HURT

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
North of Rio/Woodburn/Berkmar	31	27	27	18	19	18	12	13	16	16
Townwood MHP/Triangle MHP	66	79	86	83	79	71	68	62	65	67
Four Seasons	70	78	96	95	97	94	107	99	99	94
Old Dominion	19	15	16	20	24	20	19	26	21	25
Woodlands/Earlsville/Squirrel/Townwood Sub	90	88	72	0	0	0	0	0	24	33
Minor Ridge	48	52	45	41	42	39	45	51	11	0
Branchland/Pine Haven	33	42	30	27	28	24	21	20	4	0
Huntington/Northfields	24	31	20	0	0	0	0	0	0	0
Belvedere	6	10	30	39	48	49	52	60	52	66
Dunlora	53	58	58	49	46	47	37	31	32	34
River Run	6	6	10	11	14	9	14	14	14	10
Towne Ln	15	20	15	17	16	20	18	18	21	15
Pen Park Ln	23	22	16	12	16	15	13	13	16	15
Treesdale/Stone Water	0	3	23	29	28	35	32	32	53	49
Stonehenge/Wildwood	22	32	36	36	36	43	34	36	40	32
	506	563	580	477	493	484	472	475	468	456

BAKER-BUTLER

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Chris Greene/Dickerson N	0	0	7	2	3	5	7	5	7	8
Forest Spring/Dickerson S	0	0	13	23	22	24	29	30	30	31
Airport Acres/Cedar Hill	0	0	13	15	18	12	21	24	22	18
Abington/Timberwood	0	0	32	43	57	52	43	45	40	47
Deerwood/Airport Rd	0	0	52	51	52	48	43	33	31	27
Gibert Station/Burnley Station	92	109	93	84	80	67	63	57	59	62
Camelot/Briarwood/North Pine	121	125	127	145	149	137	156	168	164	187
Rt 29 to Camelot/Proffit/Polo	106	104	98	101	102	103	94	99	118	135
Forest Lakes North	138	129	119	124	123	132	138	155	136	143
	457	467	554	588	606	580	594	616	607	658

BROADUS WOOD

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
North, Markwood Rd/Simmons Gap	91	72	64	59	51	52	54	52	54	56
Reas Ford Rd/Buck Mtn Rd	74	70	69	73	79	66	56	55	56	62
Advance Mills/Buffalo River	79	61	72	55	47	49	52	57	47	57
Earlsville Forest area	57	58	68	74	68	58	44	46	50	59
Woodlands/Earlsville Rd	0	0	0	51	55	47	43	41	38	27
	301	261	273	312	300	272	249	251	245	261

BROWNSVILLE

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Grayrock	64	66	68	66	68	65	62	51	55	44
Waylands Grant & Bargamin	45	43	53	53	49	49	47	47	56	52
S of Rt 250 Batesville	129	144	146	125	148	136	124	125	133	136
N of Rt 250 Newtown	63	78	74	69	63	60	57	60	68	69
Old Trails	89	119	144	141	165	202	214	225	221	234
Rt 240 between Crozet -Rt 250/Miller School Rd	12	16	16	16	14	13	13	21	25	35
Rt 250 E of Miller School	67	74	70	61	60	60	69	63	73	92
Western Ridge/Wickham Pond	109	128	127	125	139	147	144	153	167	185
	578	668	698	656	706	732	730	745	798	847

CROZET

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Grayrock	0	0	0	0	0	0	0	0	0	0
Waylands Grant & Bargamin	0	0	0	0	0	0	0	0	0	0
N. of 240 & N. of Railroad Ave	138	130	122	117	104	99	86	91	101	94
Lanetown Way & Orchard	49	40	42	37	45	53	58	55	53	57
Hill Top and Park	43	46	47	45	43	37	36	35	38	30
Sneads & Claudius	20	23	33	44	39	46	52	47	47	41
Westhall	25	24	36	43	44	45	44	52	66	70
Highlands	50	43	39	50	59	61	72	64	60	51
Browns Gap	0	0	0	0	0	0	0	0	0	0
	325	306	319	336	334	341	348	344	365	343

GREER

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Garth Rd	0	0	0	3	2	3	3	2	1	0
Barracks Rd W/S	61	69	74	80	75	119	112	120	147	137
Rt 250/ Colonnade	12	18	34	56	60	62	63	64	52	50
UVA Housing	32	33	28	35	32	27	25	15	16	3
Georgetown/ Hessian Hills	57	60	49	56	73	69	67	64	78	81
Georgetown to Westgate	35	32	36	36	33	41	66	65	79	59
Solomon/Berkshire	42	49	74	73	74	78	75	69	29	27
Georgetown GRN/ Lambs	25	27	36	25	28	24	24	28	31	33
North of Lambs Rd	16	11	11	40	41	37	43	50	27	21
Whitewood Rd	56	51	39	37	40	47	51	42	53	53
Landmark at Granite Park	76	64	53	73	76	61	87	67	17	3
Turtle Creek	33	34	43	45	37	38	34	37	41	54
	445	448	477	559	571	606	650	623	571	521

HOLLYMEAD

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Chris Greene/Dickerson N	5	6	0	0	0	0	0	0	0	0
Forest Spring/Dickerson S	19	14	0	0	0	0	0	0	0	0
Airport Acres/Cedar Hill	20	20	0	0	0	0	0	0	0	0
Abington/Timberwood	44	48	0	0	0	0	0	0	0	0
Deerwood/Airport Rd	45	46	0	0	0	0	0	0	0	0
Spring Ridge/Turnberry	54	50	55	63	61	55	55	64	59	52
Hollymead Subdivision	126	133	138	155	185	182	189	199	169	177
Forest Lakes South	206	204	200	196	195	172	172	157	163	158
Polo Grounds	18	19	28	24	22	20	23	25	21	19
	537	540	421	438	463	429	439	445	412	406

MERIWETHER LEWIS

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
N of Millington/Buck Mtn	46	50	44	35	36	45	36	40	46	46
East of Free Union/N of Garth	49	60	58	52	63	58	64	67	60	55
West of Free Union/Ridge Rd/N of Garth	19	18	16	16	22	31	41	32	31	33
Owensville to the West	140	146	151	156	155	153	164	155	135	142
Owensville to the East	160	164	155	150	144	140	139	126	121	116
	414	438	424	409	420	427	444	420	393	392

MOUNTAIN VIEW

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Old Lynchburg/Mosby Mtn	39	52	50	56	47	41	34	40	37	34
Redfield/Sunset/Villa	108	123	125	115	130	136	128	122	155	193
Willoughby	36	38	38	35	29	35	31	36	36	36
Rt 20 to E Market St	41	48	50	44	41	52	52	46	44	49
Southwood/Stage/Millmont	180	195	209	226	251	269	257	238	232	238
Millcreek N	50	43	41	37	42	46	48	49	52	55
Reynovia	32	35	24	22	22	22	26	36	32	45
Millcreek S	80	91	60	65	73	63	65	56	60	75
	566	625	597	600	635	664	641	623	648	725

MURRAY

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
N of I-64/Broad Axe to Dick Woods	105	103	107	102	114	108	111	120	112	117
S of I-64/Ragged Mtn-Rosemont-Rocks	53	43	45	49	46	45	39	50	53	50
E of Dick Woods- Ednam-Bellair	51	53	47	42	40	40	40	33	36	36
N of 250 -Flordon- Farmington	21	27	24	21	17	17	16	16	18	18
Buckingham Circle-Mimosa (UVA)	34	25	22	25	19	29	26	33	29	19
	264	251	245	239	236	239	232	252	248	240

RED HILL

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
E of Rt 29 from I-64 to Red Hill Rd (Dudley)	50	59	53	50	62	58	52	42	49	53
W of Rt 29 from I-64 to Taylors Gap Rd	12	12	10	7	6	7	4	6	6	7
W of Rt 29 from Taylors Gap Rd to County Line	40	40	31	33	34	27	30	34	35	29
E of Rt 29 from Red Hill Rd to Plank Rd	40	41	47	41	43	42	32	39	36	42
E of Rt 29 from Plank Rd to County Line	33	25	24	30	28	29	29	26	16	17
E of Secretarys Sand From Red Hill Rd to Rt 6	0	0	0	0	0	0	0	9	5	10
W of Secretarys Sand From Red Hill Rd to Rt 6	0	0	0	0	0	0	0	33	30	28
S of Rt 6 Schuyler	0	0	0	0	0	0	0	7	11	15
	175	177	165	161	173	163	147	196	188	201

SCOTTSVILLE

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Woodridge Area	71	72	69	66	76	67	71	70	69	55
Carters Mtn to Coles Rolling	22	22	20	21	21	26	24	24	25	21
Keene to Scottsville	35	42	36	33	29	27	22	30	27	25
Town of Scottsville	27	34	34	24	27	29	27	28	35	30
S of Rt 6 Warren/Hatton Ferry	32	31	35	26	29	29	31	33	30	37
Esmont	0	0	0	0	0	0	0	32	26	21
Chestnut Grove	0	0	0	0	0	0	0	33	29	29
Howardsville	0	0	0	0	0	0	0	6	7	6
	187	201	194	170	182	178	175	256	248	224

STONE ROBINSON

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Riverbend/Carriage Hill/Ashcroft	43	30	30	47	44	44	38	34	28	37
North of Rt 250/Cismont	101	99	111	104	89	86	88	94	82	90
Rivanna Village/Glenmore	108	91	75	62	71	63	73	74	84	98
Running Deer/Union Mills	53	53	52	49	49	38	38	32	28	29
Cascadia/Riverview	0	0	0	0	0	0	0	4	12	28
Pavillions	13	15	21	19	36	28	39	40	39	44
Milton Loop	39	38	35	39	40	36	41	46	35	44
South of Rt 53-Presidents/Martin King/Buck Island	111	103	98	96	87	90	82	85	77	96
	468	429	422	416	416	385	399	409	385	466

STONY POINT

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Avemore	6	9	8	6	9	8	12	13	15	13
Fontana	61	50	46	47	39	40	35	28	28	22
Wilton Farm	50	52	53	49	38	48	39	45	40	53
Hyland Creek	0	0	0	5	6	14	18	26	32	32
Key West	29	28	26	24	24	33	25	25	22	21
Rt 20 S of Proffit Rd	43	44	38	45	47	44	34	34	23	28
Rt 20 N of Proffit to Watts Passage	19	14	14	14	11	12	13	12	11	4
Watts Passage/Doc Xing/Gilbert Station	69	56	51	44	50	48	44	40	40	41
Rt 20 N of Watts Passage to Vineyards	29	30	31	28	21	15	10	19	22	16
	306	283	267	262	245	262	230	242	233	230

WOODBROOK

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Carrsbrook	7	13	9	12	13	14	12	11	19	13
Still Meadows	32	25	26	22	15	19	13	9	12	7
Woodbrook Sub	38	47	40	37	39	39	35	45	37	44
Mallside/Rio/Arden	93	97	87	99	78	90	101	108	115	117
Glenwood Station/Abbingdon	65	56	48	65	65	68	71	74	103	101
Old Brook/Westmoreland	56	61	61	55	62	61	52	45	48	50
Northfields/Huntington	0	0	0	18	22	23	23	22	22	18
Minor Ridge	0	0	0	0	0	0	0	0	45	52
Inglewood/N Berkshire	0	0	0	0	0	0	0	0	31	36
Landmark at Granite Park	0	0	0	0	0	0	0	0	60	92
Branchland/Pine Haven	0	0	0	0	0	0	0	0	12	15
	291	299	271	308	294	314	307	314	504	545

BURLEY

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Avemore	1	4	2	3	3	2	2	2	3	6
Fontana	13	22	23	24	24	17	26	21	27	25
Wilton Farm	16	16	15	19	10	15	23	22	23	25
Hyland Creek	0	0	0	2	1	5	8	8	9	11
Key West to Proffitt	29	27	30	31	38	29	35	29	37	30
Four Seasons	45	33	31	32	33	40	43	37	35	32
Old Dominion	4	6	4	3	6	12	10	5	5	6
Minor Ridge	19	19	27	21	16	14	16	17	8	5
Branchland/Pine Haven	10	12	14	8	11	12	12	12	7	3
Belvedere	7	6	9	8	13	13	13	14	18	23
Dunlora	18	19	24	29	29	31	27	30	31	32
River Run	6	10	5	5	5	6	3	5	9	9
Towne Ln	1	10	8	10	11	9	9	4	7	8
Pen Park Ln	4	8	6	9	8	11	7	7	5	5
Treesdale/Stone Water	0	1	9	13	12	14	11	14	13	17
Stonehenge/Wildwood	12	15	16	18	15	9	12	15	22	17
Riverbend/Carriage Hill/Ashcroft	23	21	11	16	16	16	16	13	18	24
North of Rt 250/Cismont	42	66	55	48	42	40	53	57	54	52
Rivanna Village/Glenmore	62	51	48	54	47	35	27	28	24	26
Running Deer/Union Mills	22	25	24	26	25	34	28	26	21	19
Cascadia/Riverview	0	0	0	0	0	0	0	0	3	10
Northfield/Huntington	20	11	15	0	0	0	0	0	0	0
North of Rio/Woodburn/Berkmar	2	8	11	5	6	7	8	6	4	4
Pavillions	4	5	9	8	8	10	8	11	16	16
Milton Loop	15	14	15	11	15	16	19	13	12	9
Redfield/Sunset/Villa	47	46	54	53	53	48	53	50	56	56
Willoughby	27	21	16	13	17	9	14	14	15	14
Southwood/Stage/Millmont	71	76	72	72	75	82	92	81	80	88
	520	552	553	541	539	536	575	541	562	572

HENLEY

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
N of I-64/Broad Axe to Dick Woods	61	54	40	44	50	67	56	51	49	49
S of I-64/Ragged Mtn-Rosemont-Rocks	21	20	24	22	22	24	22	24	21	26
E of Dick Woods- Ednam-Bellair	15	19	19	22	20	19	16	14	12	20
N of 250 -Flordon- Farmington	14	22	10	8	7	9	11	8	6	10
Buckingham Circle-Mimosa (UVA)	13	15	9	9	10	3	7	6	7	4
N of Millington/Buck Mtn	16	21	23	25	23	22	19	11	17	14
East of Free Union/N of Garth	32	29	29	25	13	20	22	28	28	25
West of Free Union/Ridge Rd/N of Garth	13	6	6	8	6	8	8	12	24	20
Owensville to the West	86	90	68	70	63	63	71	70	85	85
Owensville to the East	77	86	82	79	78	67	67	67	67	63
Grayrock	26	27	19	28	27	30	34	35	29	35
Waylands Grant & Bargamin	16	19	18	18	28	21	25	13	18	18
S of Rt 250 / Batesville	73	60	52	67	71	70	64	65	72	76
N of Rt 250 Newtown	42	31	32	25	32	28	36	41	43	38
Old Trails	42	52	65	83	80	86	99	121	131	121
Rt 240 between Crozet -Rt 250/Miller School Rd	11	11	7	6	8	6	11	11	14	15
Rt 250 E of Miller School	30	31	42	35	34	29	36	37	41	37
Western Ridge/Wickham	52	54	54	62	64	81	82	79	68	76
N. of 240 & N. of Railroad Ave	78	88	76	70	67	64	66	53	55	49
Lanetown Way & Orchard	28	25	26	30	28	24	16	18	20	27
Hill Top and Park	15	14	18	19	21	19	21	23	24	21
Sneads & Claudius	9	9	5	8	12	14	14	16	20	28
Westhall	6	9	16	25	25	26	23	31	24	27
Highlands	26	28	30	25	20	18	27	26	29	32
	802	820	770	813	809	818	853	860	904	916

JOUETT

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Townwood MHP/Triangle MHP	9	14	19	32	42	44	37	31	35	31
Woodlands/Earlsville	19	22	28	37	30	23	24	26	22	22
Squirrel/Townwood Sub	13	13	9	20	19	18	24	17	17	16
North, Markwood Rd/Simmons Gap	49	57	49	43	41	34	31	28	35	30
Reas Ford Rd/Buck Mtn Rd	44	41	38	42	47	50	40	37	40	43
Advance Mills/Bufalo River	31	37	36	42	29	29	33	27	27	23
Earlsville Forest area	34	26	22	22	22	25	32	34	31	31
Garth Rd	0	0	0	0	0	0	2	1	2	1
Barracks Rd W/S	35	37	45	37	28	29	39	35	39	48
Rt 250/ Colonnade	3	6	12	28	25	19	17	10	14	15
UVA Housing	13	16	13	16	9	7	3	5	5	1
Georgetown to Inglewood	23	35	33	30	27	31	30	28	30	26
Georgetown to Westgate	15	16	21	21	18	24	17	6	10	20
Solomon/Berkshire	23	22	26	25	22	21	21	26	31	26
Georgetown GRN/ Lambs	19	16	17	14	15	15	10	10	6	10
North of Lambs Rd	6	12	8	10	14	12	12	4	4	8
Whitewood Rd	25	21	22	19	19	22	20	25	17	23
Landmark at Granite Park	19	23	15	14	18	37	27	31	28	32
Turtle Creek	12	16	17	16	9	17	9	19	18	14
Carrsbrook	9	6	5	4	5	6	8	6	7	9
Still Meadows	18	23	20	17	17	15	15	11	11	11
Woodbrook Sub	20	12	17	22	19	16	18	18	20	17
Mallside/Rio/Arden	34	37	37	37	41	46	46	53	54	50
Glenwood Station/Abbington	24	31	30	22	24	25	22	34	30	39
Old Brook/Westmoreland	53	44	32	28	28	28	28	27	26	36
Northfields/Huntington	0	0	0	6	8	10	7	6	9	14
Minor Ridge	0	0	0	0	0	0	0	0	14	20
Branchland/Pine Haven	0	0	0	0	0	0	0	0	4	11
	550	583	571	604	576	603	572	555	586	627

LAKESIDE

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Chris Greene/Dickerson N	8	9	6	2	1	3	0	2	2	3
Forest Spring/Dickerson S	10	10	11	9	10	5	9	11	17	17
Airport Acres/Cedar Hill	8	9	7	5	7	13	13	12	8	6
Abington/Timberwood	15	16	20	23	23	22	20	18	26	18
Deerwood/Airport Rd	13	14	13	8	9	18	22	28	22	27
Spring Ridge	24	26	27	27	30	31	28	27	28	39
Hollymead Subdivision	79	63	70	72	67	65	65	77	74	76
Forest Lakes South	104	106	101	100	97	104	102	108	96	100
Polo Grounds	26	22	20	19	22	23	24	21	21	16
Gibert Station/Burnley Station	34	49	54	51	56	54	49	46	40	30
Camelot/Briarwood/North Pine	84	79	65	72	77	89	72	82	88	107
E of Rt 29 to Camelot down Proffit	38	43	41	47	45	43	40	35	35	39
Forest Lakes North	99	110	95	84	67	71	70	70	74	70
Rt 20 N of Proffit to Watts Passage	3	7	7	7	6	8	11	7	8	8
Watts Passage/Doc King/Gilbert Station	36	44	33	37	28	26	20	18	17	16
Rt 20 N of Watts Passage to Vineyards	13	14	14	17	12	13	13	15	10	7
	594	621	584	580	557	588	558	577	566	579

WALTON

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Old Lynchburg/Mosby	16	11	12	11	17	22	29	26	23	21
Rt 20 to E Market St	18	18	32	24	25	14	12	11	13	19
Millcreek N	19	18	19	16	12	7	11	23	28	23
Reynovia	22	17	15	12	10	13	15	12	12	7
Millcreek S	40	39	35	24	27	24	29	18	16	10
South of Rt 53-Presidents/Martin King/Buck Island	30	39	44	51	43	38	35	36	38	30
E of Rt 29 from I-64 to Red Hill Rd (Dudley)	26	29	23	20	20	18	17	24	28	24
W of Rt 29 from I-64 to Taylors Gap Rd	5	5	4	3	3	2	1	0	1	2
W of Rt 29 from Taylors Gap Rd to County Line	26	20	18	17	13	13	7	9	10	16
E of Rt 29 from Red Hill Rd to Plank Rd	17	14	18	17	15	20	15	14	15	10
E of Rt 29 from Plank Rd to County Line	10	16	16	14	8	7	13	17	17	17
E of Secretarys Sand From Red Hill Rd to Rt 6	5	5	8	5	2	2	4	6	3	2
W of Secretarys Sand From Red Hill Rd to Rt 6	27	31	24	23	18	18	24	26	19	17
S of Rt 6 Schuyler	8	6	7	5	9	6	6	5	6	7
Woodridge Area	27	32	31	26	29	28	29	34	34	36
Carters Mtn to Coles Rolling	7	8	10	12	13	9	11	12	11	14
Keene to Scottsville	16	13	12	14	17	14	13	11	16	11
Town of Scottsville	14	14	11	10	13	13	14	17	21	16
S of Rt 6 Warren/Hatton Ferry	24	12	17	13	15	15	13	10	11	18
Esmont	15	17	17	13	11	14	13	11	12	16
Chestnut Grove	25	25	20	22	25	29	18	20	12	1
Howardsville	3	3	2	2	2	1	2	1	1	1
	400	392	395	354	347	327	331	343	347	318

ALBEMARLE HIGH

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Four Seasons	38	47	43	35	42	38	46	46	47	46
Old Dominion	15	10	6	9	7	7	6	8	11	10
Minor Ridge	27	25	26	25	28	31	31	35	28	19
Branchland/Pine Haven	16	15	19	22	19	16	11	13	11	13
Belvedere	2	4	12	19	17	20	16	12	21	25
Dunlora	44	45	44	38	45	42	47	50	54	61
River Run	5	7	5	5	9	15	7	8	7	8
Towne Ln	6	7	6	11	12	11	15	14	11	11
Pen Park Ln	8	3	5	7	9	10	12	12	9	12
Treesdale/Stone Water	0	1	11	14	12	13	22	17	16	18
Stonehenge/Wildwood	20	16	19	24	25	26	14	14	15	10
Northfield/Huntington	14	17	10	18	18	19	23	21	19	15
North of Rio/Woodburn/Berkmar	17	22	11	2	6	8	10	14	9	5
Townwood MHP/Triangle MHP	11	10	10	14	18	30	41	49	48	52
Woodlands/Earlsville	35	27	31	43	44	58	48	48	42	34
Squirrel/Townwood Sub	28	29	17	17	22	23	22	26	23	27
North, Markwood Rd/Simmons Gap	51	55	58	58	69	71	58	60	51	52
Reas Ford Rd/Buck Mtn Rd	54	50	62	66	71	80	66	70	71	74
Advance Mills/Buffalo River	69	72	63	52	54	48	52	55	39	45
Earlsville Forest area	67	63	51	48	38	37	35	32	46	44
Garth Rd	2	1	1	0	0	1	1	1	2	3
Barracks Rd W/S	51	47	34	53	58	52	67	57	56	67
Rt 250/ Colonnade	7	8	18	34	28	25	26	21	20	21
UVA Housing	14	13	10	9	9	8	2	2	3	1
Georgetown to Inglewood	41	40	39	38	44	49	48	43	40	46
Georgetown to Westgate	37	23	23	24	29	26	28	22	19	23
Solomon/Berkshire	39	30	27	33	36	32	35	31	34	35
Georgetown GRN/ Lambs	28	22	31	29	21	26	23	26	27	15
North of Lambs Rd	8	9	14	17	16	20	13	19	19	14
Whitewood Rd	31	45	34	29	28	26	33	25	31	32
Landmark at Granite Park	30	29	30	37	44	37	33	42	37	46
Turtle Creek	27	21	23	22	22	19	20	25	27	23
Carrsbrook	11	12	14	12	12	10	10	11	7	4
Still Meadows	20	29	24	26	36	31	33	36	24	29
Woodbrook Sub	36	38	30	30	29	30	23	19	19	15
Mallside/Rio/Arden	41	37	35	45	55	57	51	53	72	80
Glenwood Station/Abbingtion	30	26	29	29	33	28	33	35	38	46
Old Brook/Westmoreland	70	78	82	77	66	48	42	38	38	39
Northfields/Huntington	13	17	10	18	18	19	23	21	19	15
Chris Greene/Dickerson N	11	8	9	10	8	6	4	0	0	0
Forest Spring/Dickerson S	15	10	12	11	22	20	18	19	12	16
Airport Acres/Cedar Hill	13	8	5	8	8	6	7	7	14	14
Abington/Timberwood	15	29	26	20	23	20	20	21	20	29
Deerwood/Airport Rd	20	24	22	26	26	22	25	23	27	29
Spring Ridge	32	38	37	38	36	35	37	34	33	32
Hollymead Subdivision	103	94	81	79	76	88	79	78	70	54
Forest Lakes South	137	134	132	123	131	131	131	129	135	127
Polo Grounds	31	30	37	39	37	30	31	31	30	35
Gibert Station/Burnley Station	62	58	60	63	59	63	58	57	62	64
Camelot/Briarwood/North Pine	86	93	100	109	106	111	121	116	118	120
E of Rt 29 to Camelot down Proffit	60	67	64	55	50	53	49	54	52	46
Forest Lakes North	134	123	128	131	129	120	120	121	110	103
Rt 20 N of Proffit to Watts Passage	12	11	13	10	9	14	9	10	8	4
Watts Passage/Doc Xing/Gilbert Station	37	34	40	45	50	47	43	37	28	28
Rt 20 N of Watts Passage to Vineyards	17	15	13	11	15	16	15	15	18	15
	1848	1826	1796	1867	1934	1929	1893	1883	1847	1851

MONTICELLO HIGH

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Avemore	4	4	6	4	6	5	3	3	4	6
Fontana	15	14	21	18	24	25	22	25	20	22
Wilton Farm	19	18	14	13	14	13	20	25	30	36
Hyland Creek	0	0	0	0	1	2	5	8	14	17
Key West to Proffitt	45	50	49	41	39	47	43	48	57	57
Riverbend/Carriage Hill/Ashcroft	46	43	46	34	37	29	25	32	16	24
North of Rt 250/Cismont	89	70	75	74	70	71	65	67	61	70
Rivanna Village/Glenmore	75	86	85	81	76	75	72	68	67	68
Running Deer/Union Mills	27	25	23	26	34	31	36	33	37	40
Cascadia/Riverview	0	0	0	0	0	0	0	2	8	14
Pavillions	7	8	9	17	23	23	20	20	14	13
Milton Loop	40	38	31	30	25	25	16	22	22	28
South of Rt 53-Presidents/Martin King/Buck Island	67	69	64	63	55	61	51	54	59	52
E of Rt 29 from I-64 to Red Hill Rd (Dudley)	28	32	39	38	36	39	32	28	32	32
W of Rt 29 from I-64 to Taylors Gap Rd	8	7	7	5	5	5	4	5	8	7
W of Rt 29 from Taylors Gap Rd to County Line	34	29	30	30	20	25	21	19	21	14
E of Rt 29 from Red Hill Rd to Plank Rd	36	32	24	25	26	30	26	23	25	26
E of Rt 29 from Plank Rd to County Line	19	20	11	11	19	21	19	15	12	16
E of Secretarys Sand From Red Hill Rd to Rt 6	4	4	4	5	6	6	7	6	7	5
W of Secretarys Sand From Red Hill Rd to Rt 6	32	38	30	39	39	35	32	26	35	35
S of Rt 6 Schuyler	11	14	14	17	15	14	14	11	9	10
Woodridge Area	57	47	39	40	42	49	51	45	48	43
Carters Mtn to Coles Rolling	15	17	21	12	11	15	16	16	15	21
Keene to Scottsville	20	24	19	19	17	16	31	28	33	24
Town of Scottsville	14	18	24	15	17	15	17	14	18	25
S of Rt 6 Warren/Hatton Ferry	23	27	31	31	25	19	17	17	19	16
Esmont	28	19	15	18	20	21	18	17	13	12
Chestnut Grove	33	35	28	30	32	34	35	28	25	23
Howardsville	8	6	7	5	2	4	5	5	5	3
Old Lynchburg/Mosby Mtn	20	19	14	18	14	17	21	26	35	44
Redfield/Sunset/Villa	65	62	78	66	75	87	84	82	77	82
Willoughby	25	28	26	33	27	23	20	16	19	22
Rt 20 to E Market St	31	29	34	29	38	39	34	28	24	15
Southwood/Stage/Millmont	85	88	81	73	94	104	109	100	92	111
Millcreek N	27	32	26	23	25	28	24	36	34	44
Reynovia	31	38	35	37	31	33	34	27	27	29
Millcreek S	39	44	40	54	53	44	35	25	20	18
	1127	1134	1100	1074	1093	1130	1084	1050	1062	1124

WESTERN ALBEMARLE HIGH

YEAR	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
N of I-64/Broad Axe to Dick Woods/Peacock	84	87	82	74	67	58	62	65	76	75
S of I-64/Ragged Mtn-Rosemont-Rocks	33	30	26	22	24	30	33	35	31	33
E of Dick Woods- Ednam-Bellair	30	28	33	32	27	24	15	23	24	21
N of 250 -Flordon- Farmington	11	13	17	19	19	14	13	16	14	13
Buckingham Circle-Mimosa (UVA)	13	17	11	3	3	5	5	7	5	4
N of Millington/Buck Mtn	31	32	26	20	19	19	20	21	24	25
East of Free Union/N of Garth	37	37	32	34	33	31	29	21	27	29
West of Free Union/Ridge Rd/N of Garth	12	19	17	16	14	9	17	15	13	17
Owensville to the West	121	99	99	105	100	92	83	76	70	77
Owensville to the East	85	83	86	83	95	108	91	104	91	90
Grayrock	25	31	32	31	39	32	35	37	38	45
Waylands Grant & Bargamin	16	18	15	19	22	22	21	27	23	26
S of Rt 250 / Batesville	129	120	117	97	88	85	83	93	90	103
N of Rt 250 Newtown	43	43	43	37	39	39	38	41	46	52
Old Trails	48	60	67	75	77	109	113	133	152	167
Rt 240 between Crozet -Rt 250/Miller School Rd	17	17	16	15	12	12	13	13	10	16
Rt 250 E of Miller School	43	52	53	48	50	59	52	47	54	53
Western Ridge/Wickham Pond	56	62	72	75	70	90	89	87	110	102
N. of 240 & N. of Railroad Ave	93	105	109	105	104	109	99	93	90	95
Lanetown Way & Orchard	54	52	39	44	47	45	41	39	30	23
Hill Top and Park	33	37	28	26	27	28	27	32	34	32
Sneads & Claudius	21	18	20	15	13	14	11	14	15	18
Westhall	10	10	14	17	22	26	27	32	34	37
Highlands	34	43	41	42	46	36	46	45	39	33
	1079	1113	1095	1054	1057	1096	1063	1116	1140	1186

APPENDIX C

Albemarle County Public Schools

K-12 Enrollment Projections

FY 2021/2022 to FY 2030/2031

	Actual Enrollments					One to Five Year Projections					Six to Ten Year Projections					10 year Incr.
	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022	2022/ 2023	2023/ 2024	2024/ 2025	2025/ 2026	2026/ 2027	2027/ 2028	2028/ 2029	2029/ 2030	2030/ 2031	
AGNOR HURT	488	480	446	440	409	430	450	463	464	451	458	451	452	450	453	10.8%
BAKER BUTLER	583	627	628	670	629	686	729	749	747	750	754	734	735	734	738	17.3%
BROADUS WOOD	247	267	260	270	251	265	276	269	261	265	263	258	258	259	260	3.6%
BROWNSVILLE	727	757	809	849	723	870	928	957	956	958	970	945	943	942	952	31.7%
CROZET	357	352	362	341	325	342	360	380	375	372	379	376	375	375	378	16.3%
GREER	622	627	538	481	431	476	482	474	484	481	471	459	459	459	462	7.2%
HOLLYMEAD	453	456	429	418	345	400	418	428	425	431	426	413	413	413	415	20.3%
MERIWEATHER LEWIS	448	431	404	403	322	372	382	397	395	399	392	383	383	383	385	19.6%
MOUNTAIN VIEW	626	617	637	721	662	704	738	775	792	791	811	801	802	799	807	21.9%
RED HILL	132	186	178	196	153	178	180	186	190	186	184	181	180	179	180	17.6%
SCOTTSVILLE	181	243	230	214	207	221	221	218	216	219	216	209	209	210	211	1.9%
STONE ROBINSON	390	416	400	472	419	470	494	522	519	524	532	519	520	518	522	24.6%
STONY POINT	235	245	229	232	170	215	221	225	233	233	235	231	231	230	231	35.9%
V. L. MURRAY	240	258	259	247	231	257	272	272	270	270	270	264	265	266	266	15.2%
WOODBROOK	313	328	489	529	525	541	558	563	551	538	530	514	514	514	515	-1.9%
YANCEY	118	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Elementary Total	6,160	6,290	6,298	6,483	5,802	6,427	6,708	6,878	6,878	6,867	6,891	6,738	6,739	6,731	6,775	16.8%
<i>Elementary Annual Increase</i>	12	130	8	185	(681)	625	281	170	0	(11)	24	(153)	1	(8)	44	
BURLEY	586	559	579	582	601	615	639	602	612	644	657	688	653	674	644	7.2%
HENLEY	855	861	897	915	871	906	910	899	940	989	1,032	1,077	1,077	1,088	1,024	17.6%
JOUETT	567	553	603	645	674	709	706	702	715	739	733	756	736	713	677	0.4%
LAKESIDE	569	598	585	593	575	587	588	575	597	622	637	669	665	663	623	8.3%
WALTON	334	346	355	341	338	334	344	343	347	349	344	360	353	351	332	-1.8%
COMMUNITY LAB SCHOOL	50	38	46	56	77	89	91	90	90	90	90	90	90	90	90	16.9%
Middle Total	2,961	2,955	3,065	3,132	3,136	3,240	3,278	3,211	3,301	3,433	3,493	3,640	3,574	3,579	3,390	8.1%
<i>Middle Annual Increase</i>	13	(6)	110	67	4	104	38	(67)	90	132	60	147	(66)	5	(189)	254
ALBEMARLE	1,950	1,949	1,878	1,907	1,853	1,866	1,892	2,009	2,064	2,061	2,098	2,073	2,138	2,189	2,257	21.8%
MONTICELLO	1,139	1,125	1,131	1,198	1,174	1,205	1,200	1,195	1,202	1,209	1,216	1,189	1,243	1,223	1,266	7.8%
WESTERN ALBEMARLE	1,080	1,135	1,153	1,202	1,138	1,180	1,204	1,236	1,294	1,285	1,286	1,332	1,374	1,414	1,521	33.7%
COMMUNITY LAB SCHOOL	110	99	88	85	84	102	114	117	120	120	120	120	120	120	120	42.9%
POST HIGH	10	24	23	25	21	26	31	36	41	41	50	50	50	50	50	138.1%
High Total	4,289	4,332	4,273	4,417	4,270	4,379	4,441	4,593	4,721	4,716	4,770	4,764	4,925	4,996	5,214	22.1%
<i>High Annual Increase</i>	13	43	(59)	144	(147)	109	62	152	128	(5)	54	(6)	161	71	218	944
Annual Increase	38	166	59	396	(824)	838	381	255	218	116	138	(12)	96	68	73	2,171
Total	13,411	13,577	13,636	14,032	13,208	14,046	14,427	14,682	14,900	15,016	15,154	15,142	15,238	15,306	15,379	16.4%

**APPENDIX D
DEVELOPING UNITS BY HOUSING TYPE**

Boundary	Apartment	Condo	Mobile	Single Family	Townhome	Unknown	TOTAL	% of Exist. Units	Impact to Boundary
AGNOR-HURT	751	330	0	364	385	0	1,830	56%	HIGH
BAKER-BUTLER	823	125	32	442	691	100	2,213	85%	HIGH
BROADUS WOOD	0	0	0	0	0	0	0	0%	LOW
BROWNSVILLE	483	355	0	986	290	0	2,114	88%	HIGH
CROZET	167	176	0	30	0	0	373	27%	MODERATE
GREER	22	0	0	70	47	0	139	5%	LOW
HOLLYMEAD	718	197	0	182	85	0	1,182	68%	HIGH
MERIWETHER LEWIS	0	0	0	0	0	0	0	0%	LOW
MOUNTAIN VIEW	881	276	0	336	347	0	1,840	45%	MODERATE
MURRAY	85	133	0	5	15	0	238	18%	LOW
RED HILL	0	0	0	0	0	0	0	0%	LOW
SCOTTSVILLE	0	0	0	0	0	0	0	0%	LOW
STONE-ROBINSON	922	81	0	638	237	0	1,878	62%	HIGH
STONY POINT	0	0	0	15	0	0	15	1%	LOW
WOODBROOK	784	0	0	6	49	0	839	22%	LOW
ELEMENTARY SUBTOTAL	5,636	1,673	32	3,074	2,146	100	12,661	41%	MODERATE
BURLEY	2,298	411	0	1,130	622	0	4,461	50%	HIGH
HENLEY	735	664	0	1,021	305	0	2,725	43%	MODERATE
JOUETT	806	0	0	76	96	0	978	12%	LOW
LAKESIDE	1,541	322	32	624	776	100	3,395	76%	HIGH
WALTON	256	276	0	223	347	0	1,102	34%	MODERATE
MIDDLE SUBTOTAL	5,636	1,673	32	3,074	2,146	100	12,661	41%	MODERATE
ALBEMARLE	3,098	652	32	1,064	1,257	100	6,203	40%	MODERATE
MONTICELLO	1,803	357	0	989	584	0	3,733	41%	MODERATE
WESTERN ALBEMARLE	735	664	0	1,021	305	0	2,725	43%	MODERATE
HIGH SUBTOTAL	5,636	1,673	32	3,074	2,146	100	12,661	41%	MODERATE

APPENDIX E LONG RANGE POPULATION FORECASTS

		LRTP: Population Analysis			Extrapolation: Pop. to Students	
Schools or Groups		Estimated 2015 Population	Estimated 2015-2045 Pop. Growth	% 30 yr pop increase	Current yield rate ¹	Possible added students
Western ES	Brownsville Crozet	8,234	7,945	96%	0.15	1,155
	Meriwether Lewis Murray	13,674	1243	9%	0.05	62
Northern ES	Agnor-Hurt Greer Woodbrook	23,814	9,319	39%	0.07	652
	Baker-Butler Hollymead	12,416	9,259	75%	0.09	833
	Broadus Wood Stony Point	9,675	2,141	22%	0.05	107
Southern ES	Mountain View	9,539	3,817	40%	0.07	267
	Red Hill	2,043	247	12%	0.10	25
	Scottsville ²	no data	no data	no data	no data	no data
	Stone Robinson	8,022	4,970	62%	0.05	249
Middle	Burley	25,054	13,594	54%	0.02	314
	Henley	22,728	8,918	39%	0.04	352
	Jouett	19844	4,454	22%	0.03	135
	Lakeside	13,843	9,671	70%	0.04	409
	Walton ³	6,439	2,013	31%	0.06	111
High	Albemarle	41,410	19,199	46%	0.05	881
	Monticello	23,357	10,746	46%	0.05	520
	Western	22,728	8,918	39%	0.05	452

1. Current yield rate = current enrollment/2015 population (current rate may change over next 30 years)
2. No data because Scottsville school lies outside MPO study area metropolitan boundary.
3. No data available for Scottsville portion of Walton Middle School, therefore only part is covered.

APPENDIX F
Capacity vs. Enrollment Projections

	K-12 Capacity ¹	Pre-K Class-rooms ²	19/20 Enrollment	20/21 Enrollment	PROJECTED ENROLLMENT (K-12 Students)																	PROJECTED CAPACITY CONFLICTS									
					2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31							
					430	450	463	464	451	458	451	452	450	453	74	54	41	40	53	46	53	52	54	51							
AGNOR-HURT	504	3	440	409	686	729	749	747	750	754	734	735	734	738	(90)	(133)	(153)	(154)	(158)	(138)	(139)	(139)	(138)	(138)	(142)						
BAKER-BUTLER	596	1	670	629	265	276	269	261	265	263	258	258	259	260	95	84	91	99	95	97	102	102	101	101	100	100					
BROADUS WOOD ³	360	2	270	251	870	928	957	956	958	970	945	943	942	952	(114)	(172)	(201)	(200)	(202)	(189)	(187)	(187)	(186)	(186)	(196)						
BROWNSVILLE ⁴	756	1	849	723	342	360	380	375	372	379	376	375	375	378	(14)	320	300	305	308	301	304	305	305	305	302	302					
CROZET ⁴	328	1	341	325	476	482	474	484	481	471	459	459	459	462	90	84	92	82	85	95	107	107	107	107	104						
GREER	566	3	481	431	400	418	428	425	430	426	413	413	413	415	70	52	42	45	40	44	44	57	57	57	55						
HOLLYMEAD	470	2	418	345	372	382	397	395	399	392	383	383	383	385	48	38	23	25	21	28	37	37	37	37	35						
MERIWETHER LEWIS	420	-	403	322	704	738	775	792	791	811	801	802	799	807	(80)	(114)	(151)	(168)	(167)	(187)	(177)	(178)	(175)	(183)	(183)						
MOUNTAIN VIEW	624	3	721	662	257	272	272	270	270	264	264	265	266	266	3	(12)	(12)	(10)	(10)	(4)	(4)	(5)	(6)	(6)	(6)						
MURRAY	260	1	247	231	178	180	186	190	186	184	181	180	179	180	20	18	12	8	12	14	17	18	19	18	18						
RED HILL	198	1	196	153	221	221	218	216	219	216	209	210	211	211	64	64	67	69	66	69	76	76	75	74	74						
SCOTTSMILLE	285	1	214	207	470	494	522	519	524	532	519	520	518	522	66	42	14	17	12	4	17	16	18	18	14						
STONE ROBINSON ⁵	536	3	472	419	215	221	225	233	233	235	231	231	230	231	13	8	3	(5)	(5)	(7)	(3)	(3)	(2)	(3)	(3)						
STONY POINT	228	1	232	170	541	558	563	551	538	530	514	514	514	515	43	26	21	33	46	54	70	70	70	70	69						
WOODBROOK	584	3	529	525	6427	6708	6878	6878	6891	6738	6739	6731	6775	6775	288	359	189	189	200	176	329	328	336	336	292						
Subtotal	6,715	26	6,483	5,802	615	639	602	612	644	657	688	653	674	644	102	78	115	105	73	60	29	64	43	73	73						
BURLEY	717		582	601	906	910	899	940	989	1,032	1,077	1,077	1,088	1,024	93	89	100	59	10	(34)	(79)	(79)	(90)	(90)	(26)						
HENLEY	999		915	871	706	702	715	739	733	756	736	713	677	8	11	15	2	(22)	(16)	(39)	(19)	4	40	40							
JOUETT	717		645	674	587	588	575	597	622	637	669	665	663	623	66	65	78	56	31	16	(16)	(12)	(10)	30	30						
SUTHERLAND	653		593	575	334	344	343	347	349	344	360	353	351	332	165	155	156	152	150	155	139	146	148	167	167						
WALTON	499		341	338	3,151	3,187	3,121	3,211	3,343	3,403	3,550	3,484	3,489	3,300	433	397	463	373	241	181	34	100	95	284	284						
Subtotal	3,584		3,076	3,059	1,866	1,892	2,009	2,064	2,061	2,098	2,073	2,138	2,189	2,257	(81)	(107)	(224)	(279)	(276)	(313)	(288)	(353)	(404)	(472)	(472)						
ALBEMARLE	1,785		1,932	1,853	1,205	1,200	1,195	1,202	1,209	1,216	1,189	1,243	1,223	1,266	25	30	35	28	21	14	41	(13)	7	(36)	(36)						
MONTICELLO	1,230		1,198	1,174	1,180	1,204	1,236	1,294	1,285	1,286	1,332	1,374	1,414	1,521	20	(4)	(96)	(94)	(85)	(86)	(132)	(174)	(214)	(321)	(321)						
W. ALBEMARLE	1,200		1,202	1,138	4,251	4,296	4,440	4,560	4,555	4,600	4,594	4,755	4,826	5,044	150	150	150	150	150	150	150	150	150	150	150						
CENTER 1 ⁵	150		141	161	191	205	207	210	210	210	210	210	210	210	114	69	(75)	(195)	(190)	(235)	(229)	(390)	(461)	(679)	(679)						
Subtotal	4,365		4,332	4,165	26	31	36	41	41	50	50	50	50	50	(2)	(7)	(12)	(17)	(17)	(26)	(26)	(26)	(26)	(26)	(26)						
CHARTER SCHOOL	240		141	161	14,046	14,427	14,682	14,900	15,016	15,154	15,142	15,238	15,306	15,379	882	853	598	380	264	126	138	42	26	26	26						
POST HIGH ⁶	24		14,032	13,208	14,928	15,280	14,427	14,682	14,900	15,016	15,142	15,238	15,306	15,379	882	853	598	380	264	126	138	42	26	26	26						
TOTAL	14,928	15,280	14,032	13,208	14,046	14,427	14,682	14,900	15,016	15,154	15,142	15,238	15,306	15,379	882	853	598	380	264	126	138	42	26	26	26						

¹ Building Capacity for K-12 students only. Does not include capacity for art, music, Pre-K, and auxiliary space, which vary by school. Two capacities indicate construction is planned and funded. Subtotals and totals do not include planned construction.

² Number of classrooms currently used for a Pre-K program (Bright Stars, Head Start, Title 1, or Early Childhood Special Education). Building capacity is reduced to indicate this use.

³ These schools currently host SPED Pre-K programs, but the students who attend these are programs are for the majority out of district. They are located at these schools due to availability of space. Stone Robinson has 3 classes and Broadus Wood has 2 classes.

⁴ An addition to Crozet is planned and funded, providing additional capacity in the 2022/23 school year. It is anticipated that students will be redistricted from Brownsville to Crozet after the addition onto Crozet is complete.

⁵ High school enrollment figures are not adjusted for students attending Centers, which adds capacity for high school students.

⁶ Beginning in FY 2020/21, Post High is shown separately. Previously, Post High enrollment and capacity was shown as part of Albemarle High School. Program capacity is 24-26 seats (16-18 at Post High Building, 8 in classroom, located on Burley Middle School campus).

Appendix F

CAPACITY CALCULATIONS

	Agnor-Hurt	Baker-Butler	Broadus Wood	Brownsville
Room Total	37	38	23	42
Art	(1.0)	(1.5)	(1.0)	(1.5)
Music	(1.0)	(1.5)	(1.0)	(1.5)
Pre-K	(3.0)	(1.0)	(2.0)	(1.0)
Auxiliary Deficit	(4.0)	(3.0)	(1.0)	(2.0)
	<u>Qty</u> <u>Multiplier</u> <u>Total</u>	<u>Qty</u> <u>Multiplier</u> <u>Total</u>	<u>Qty</u> <u>Multiplier</u> <u>Total</u>	<u>Qty</u> <u>Multiplier</u> <u>Total</u>
SPED (SCC)	0 x 8 = 0	2 x 8 = 16	0 x 8 = 0	0 x 8 = 0
K-5	28 x 18 = 504	29 x 20 = 580	18 x 20 = 360	36 x 21 = 756
BUILDING CAPACITY	504	596	360	756

	Crozet	Greer	Hollymead	Meriwether Lewis
Room Total	22	41	29	24
Art	(1.0)	(1.0)	(1.0)	(1.0)
Music	(1.0)	(1.0)	(1.0)	(1.0)
Pre-K	(1.0)	(3.0)	(2.0)	0.0
Auxiliary Deficit	(2.0)	(4.0)	(2.0)	(2.0)
	<u>Qty</u> <u>Multiplier</u> <u>Total</u>	<u>Qty</u> <u>Multiplier</u> <u>Total</u>	<u>Qty</u> <u>Multiplier</u> <u>Total</u>	<u>Qty</u> <u>Multiplier</u> <u>Total</u>
SPED (SCC)	1 x 8 = 8	1 x 8 = 8	1 x 8 = 8	0 x 8 = 0
Pre-K				
K-5	16 x 20 = 320	31 x 18 = 558	22 x 21 = 462	20 x 21 = 420
BUILDING CAPACITY	328	566	470	420

	Mountain View	Murray	Red Hill	Scottsville
Room Total	45	19	15	18
Art	(1.5)	(1.0)	(1.0)	(1.0)
Music	(1.5)	(1.0)	(1.0)	(1.0)
Pre-K	(3.0)	(1.0)	(1.0)	(1.0)
Auxiliary Deficit	(5.0)	(3.0)	(1.0)	0.0
	<u>Qty</u> <u>Multiplier</u> <u>Total</u>	<u>Qty</u> <u>Multiplier</u> <u>Total</u>	<u>Qty</u> <u>Multiplier</u> <u>Total</u>	<u>Qty</u> <u>Multiplier</u> <u>Total</u>
SPED (SCC)	2 x 8 = 16	1 x 8 = 8	0 x 8 = 0	0 x 8 = 0
Pre-K				
K-5	32 x 19 = 608	12 x 21 = 252	11 x 18 = 198	15 x 19 = 285
BUILDING CAPACITY	624	260	198	285

	Stone Robinson	Stony Point	Woodbrook
Room Total	33	18	44
Art	(1.0)	(1.0)	(1.5)
Music	(1.0)	(1.0)	(1.5)
Pre-K	(3.0)	(1.0)	(3.0)
Auxiliary Deficit	0.0	(3.0)	(5.0)
	<u>Qty</u> <u>Multiplier</u> <u>Total</u>	<u>Qty</u> <u>Multiplier</u> <u>Total</u>	<u>Qty</u> <u>Multiplier</u> <u>Total</u>
SPED (SCC)	2 x 8 = 16	0 x 8 = 0	1 x 8 = 8
Pre-K			
K-5	26 x 20 = 520	12 x 19 = 228	32 x 18 = 576
BUILDING CAPACITY	536	228	584

	Burley	Henley	Jouett
Room Total	45	55	47
SPED Resource	(2.0)	(3.0)	(2.0)
Gifted	(1.0)	(1.0)	(1.0)
A-Base	0.0	0.0	(1.0)
B-Base	0.0	0.0	(1.0)
Teacher Planning	(3.0)	(3.0)	(3.0)
Health	(1.0)	(1.0)	(1.0)
	<u>Qty</u> <u>Multiplier</u> <u>Total</u>	<u>Qty</u> <u>Multiplier</u> <u>Total</u>	<u>Qty</u> <u>Multiplier</u> <u>Total</u>
SPED (SCC)	1 x 8 = 8	1 x 8 = 8	1 x 8 = 8
Gym	1 x 90 = 90	1 x 90 = 90	1 x 90 = 90
Auxiliary Gym	0 x 30 = 0	1 x 30 = 30	0 x 30 = 0
Academic	36 x 20 = 720	44 x 23 = 1012	36 x 20 = 720
Utilization Factor	0.875	0.875	0.875
BUILDING CAPACITY	717	999	717

	Lakeside	Walton
Room Total	41	33
SPED Resource	(2.0)	(1.0)
Gifted	(1.0)	(1.0)
A-Base	(1.0)	(1.0)
B-Base	(1.0)	(1.0)
Teacher Planning	(3.0)	(3.0)
Health	(1.0)	(1.0)
	<u>Qty</u> <u>Multiplier</u> <u>Total</u>	<u>Qty</u> <u>Multiplier</u> <u>Total</u>
SPED (SCC)	2 x 8 = 16	0 x 8 = 0
Gym	1 x 90 = 90	1 x 90 = 90
Auxiliary Gym	0 x 30 = 0	0 x 30 = 0
Academic	29 x 22 = 638	24 x 20 = 480
Utilization Factor	0.875	0.875
BUILDING CAPACITY	653	499

	Albemarle	Monticello	Western
Room Total	99	66	65
SPED Resource	(1.0)	(1.0)	(1.0)
Gifted	(1.0)	(1.0)	(1.0)
A-Base	(1.0)	(1.0)	(1.0)
B-Base	(1.0)	(1.0)	(1.0)
Teacher Planning	(3.0)	0.0	(3.0)
Health	(1.0)	(1.0)	(1.0)
	<u>Qty</u> <u>Multiplier</u> <u>Total</u>	<u>Qty</u> <u>Multiplier</u> <u>Total</u>	<u>Qty</u> <u>Multiplier</u> <u>Total</u>
SPED (SCC)	3 x 8 = 24	1 x 8 = 8	1 x 8 = 8
Gym	1 x 90 = 90	1 x 90 = 90	1 x 90 = 90
Auxiliary Gym	1 x 30 = 30	1 x 30 = 30	1 x 30 = 30
Academic	86 x 22 = 1892	58 x 22 = 1276	54 x 23 = 1242
Utilization Factor	0.875	0.875	0.875
BUILDING CAPACITY	1785	1230	1200

	Community Lab
Room Total	20
Flex	(3.0)
	<u>Qty</u> <u>Multiplier</u> <u>Total</u>
SPED (SCC)	0 x 8 = 0
Gym	0 x 90 = 0
Auxiliary Gym	1 x 30 = 30
Academic (Small)	4 x 7 = 28
Academic (Regular)	12 x 18 = 216
Utilization Factor	0.875
BUILDING CAPACITY	240

APPENDIX G

FACILITIES DETAIL

Agnor-Hurt Elementary

Built in 1992, one story
80,956 square feet
19.5 acre site

2015: Addition of 11,200 sf, to include a new security entrance, media center renovation and new bus drop off area; all original HVAC replaced
2016: Roof replacement on original building

Baker-Butler Elementary

Built in 2002, one story
91,576 square feet
55.0 acre site

2015: Solar photovoltaic array installed on roof
2016: Playground upgrade; media center learning space modernization
2018: Security addition & new front office; converted original office into classroom space
2020: Installed 6 classroom modular unit

Broadus Wood Elementary

Built in 1936
49,852 square feet
11.7 acre site

1906: One-story building with three rooms and 10-stall stable on grounds
1910: Second level was added, including an assembly hall and one classroom
1914: Two-story building added with one extra classroom and lab; stable enlarged to 25 stalls
1920: Addition of three classrooms and restroom facilities connected to main structure through enclosed breezeway
1921: Broadus Wood and wife Emma donate almost two acres for bigger playing fields, new playground, and arbor
1934: School building burned down; two temporary buildings called the "Barracks" were built and remained in use until the early 1960s
1936: School was rebuilt and opened as Broadus Wood
1960: Cafeteria, clinic, and primary classroom added
1965: Primary classroom wing and library added
1985: Major renovations completed with new library, six new classrooms, and gym
1992: Addition
1994: To accommodate growing enrollment, the cafeteria, library, administration offices, and three learning cottages were enlarged and renovated. An eight-classroom wing was added with a special education classroom and a new playground.
1999: New computer lab added with 25 computers
2004: Pond habitat installed in largest courtyard
2014: Media center upgrade, including furniture and electronics; front entrance upgrade and playground installation
2015: Front playground replacement; gym floor replacement
2016: Hvac chiller replacement
2017: Partial casework replacement; partial roof replacement
2019: Partial casework replacement
2021: HVAC replacement, well upgrades

Brownsville Elementary

Built in 1966

90,550 square feet

19.5 acre site adjacent to Henley middle school

Additions: 1997, 2003, 2009

2012: Chiller replacement and media center renovation

2013: Flooring replacements

2014: New playground installation

2015: Solar photovoltaic array installed on roof

2017: Switchgear replacement; partial roof replacement

2018: Installed 2 classroom modular unit

2019: Installed 6 classroom modular unit

2020: Kitchen hood and dish room upgrades

2021: Boiler replacement

Crozet Elementary

Built in 1990

54,142 square feet

21.2 acre site

1894: Public school started in 1-room building and operated only 5 months out of the year

1899: Students were moved to a 3-room schoolhouse (including a room for grades 9-12) on a half-acre between two churches

1907: First official 2-story building opened with 4 classrooms and an auditorium

1907-08: Crozet's auditorium was turned into high school classrooms

1919: A laboratory was installed in remaining auditorium space

1923: Classroom addition for grades 7-8

1924: Crozet moved to a newly constructed 10-room schoolhouse with a student capacity of 395

1934: Addition increased student capacity to 495

1961: Completed renovation, refinished floors, and installed new classrooms

1989-90: New building was constructed by Smithy & Boynton architectural firm

1996: Addition of a six-room wing, which opened in 1997

2009: Hanging of the old Crozet school bell (the fifth grade class of 2008 raised money to refurbish the school bell from the old Crozet school, which was hung in a ceremony at the beginning of the 2009-10 school year.)

2010: New parent drop-off and pick-up zone with new side atrium entrance; new playground equipment, soccer fields, and baseball fields were added

2014: QuickStart tennis court installation; media center upgrade, including furniture and electronics; front entrance upgrade

2015: HVAC replacement – boilers and chiller

2016: Media center learning space modernization

2018: Roof top unit replacement

2020: Designed new addition

Greer Elementary

Built in 1974

99,258 square feet

15.0 acre site adjacent to Albemarle High, Jouett Middle, and Ivy Creek/Prep

1987: The original open classrooms were made into self-contained classrooms by adding walls so that each grade level learning community became five separate classrooms with completion of the project in 1993.

2006: New bus-and-parent loop installed in front of school

2007: Lower-level classroom renovations completed, adding doors and windows to all classrooms
2009: New gym facility; upper-level renovations included a new front reception office space and conference rooms, as well as a new entrance into the school; doors and additional windows for all upstairs classrooms
2011: New prek-5 playground
2012: One-story classroom wing addition, minor renovations to the existing building, and site improvements including an outdoor classroom.
2012-13 school year: 13,383 square foot addition opened, including six primary classrooms and an art studio.
2015: Solar photovoltaic array installed on roof.
2016: Removed cafeteria stage and reconfiguration into 4 resource rooms
2018: Sewer pumping station upgrades
2019: Restroom upgrades
2021: Restroom renovation, media center renovation

Hollymead Elementary

Built in 1972

66,437 square feet

20.1 acre site adjacent to Lakeside Middle School

1990: New library completed
2002: Renovation and update of heating and cooling systems
2005: Addition of a state-of-the-art gym, including a rock-climbing wall with a painting of the state of Virginia
2013: Design 2015 renovation work; playground renovations
2014: HVAC boiler replacement
2016: HVAC chiller and exhaust fan replacement
2018: Kitchen air conditioning and new hood
2019: Playground upgrades
2021: Electrical panel upgrades

Meriwether Lewis Elementary

Built in 1988

56,450 square feet

17.7 acre site

1922: The school was originally located on several acres of land in the ivy district donated by the Hopkinson family
1988: Moved to current location in ivy
2008: Installed dedicated outdoor air units
2009: Replaced existing air handlers, boilers and chiller
2013: Design 2015 renovation work
2014: Front entrance upgrade
2015: Gym floor replacement
2016: Kitchen AC replacement; playground upgrade; replace clock systems; media center learning space modernization
2017: Ada updates; restroom upgrades
2019: ADA improvements; PTO installed sail shades

Mountain View Elementary

Built in 1990

92,307 square feet

16.1 acre site

Additions in 1997 and 2008

2013: Roof replacement (phase I)
2014: Roof replacement (phase II); parking lot expansion; HVAC boiler replacement; replaced swings on playground
2016: New security vestibule, administrative area and nurse's station; replace clock systems; kitchen ac replacement
2017: Restroom updates-cafeteria restrooms
2018: Interior renovations-original office renovation and
2019: HVAC upgrades-replaced RTUs on original classrooms
2020: Signage upgrades for new name; installed 2 classroom modular unit
2021: 8 Classroom modular unit will be installed by the end of 2021

Murray Elementary

Built in 1960
42,057 square feet
20.9 acre site

1964: Four-classroom addition allowed the school to house grades 1-5
1988: Murray closed and its students were moved to Meriwether Lewis
1990: Murray reopened with grades 1-5
2013: Design 2015 renovation work
2014: Front entrance upgrade
2015: Media center upgrades to include new circulation desk, carpet and painting; and hvac replacement
2016: HVAC replacement-1991 addition; partial roof replacement; media center upgrades
2017: HVAC replacements-cafeteria and original building
2018: Partial roof replacement; generator installation
2019: Kitchen air conditioning replacement; partial casework replacement; installed an outdoor freezer

Red Hill Elementary

Built in 1973
30,435 square feet
10.9 acre site

1905: The school had 2 levels: 3 rooms on the first and a small auditorium on the second
1922: Brick building replacement opened after school burned down in January 1920
1934: New classrooms, library, and science department added
1950: Cafeteria and auditorium added
1973: The 'pod' section of the current school was completed to accommodate 150 students
1982: Current building constructed with gym, 8 classrooms, library, cafeteria, audio-visual storage room, and faculty lounge
2002: Track installed on lower field, which was named "Walker Field" in 2007 in honor of two former teachers, the mother-daughter team of sue and pam walker
2008-09: Outdoor performance area constructed through combined efforts of the parent-teacher organization (PTO) and community; chiller replacement
2013: New interior signs, cubbies, and teacher storage in rooms 1-8
2014: Track asphalt overlay; added county water and abandoned the well
2015: Classroom and media center modernization project to be completed August, 2016 and playground replacement; gym floor replacement
2016: Modernization project and addition: added 30,520 sf, with security entrance and hvac replacement.
2018: Partial roof replacement; pod roof replacement
2019: Designed new gym addition
2020: Gym addition and interior renovations; wastewater upgrades
2021: Restroom renovation

Scottsville Elementary

Built in 1974
32,954 square feet
15.0 acre site

1876: Scottsville school was moved to a brick building, later called the council building, on the corner of Main Street and Route 20.
1906: A new school was built on schoolhouse hill overlooking the horseshoe bend of the James River and began as a large gray building with bell tower.
1925: A new brick building constructed at the corner of page and main opened with a kitchen, stage and library; primary classes were taught at a cottage on Byrd Street.
1974: The new school was built in the shape of a pod after hurricane Agnes, which flooded the old school in 1972. Included was a classroom wing to accommodate primary students.
1981: The Scottsville pod was renovated and expanded with 10 classrooms, administrative offices, gym, media center, and cafeteria.
2005: Scottsville finished enlarging its library.
2008: New well installed
2012: Kitchen ac installation
2013: Structural repairs; emergency generator
2014: Hvac replacement (not including pod area)
2015: Partial casework replacement in 6 classrooms; gym floor replacement
2016: Media center learning space modernization; casework replacement
2017: School security and parking improvements; clock upgrade
2018: Installed 4 modular classroom unit; partial roof replacement
2019: Designed new classroom and gym addition
2020: Gym addition and interior renovations

Stone-Robinson Elementary

Built in 1961
71,100 square feet
11.3 acre site

1971: Addition to the back of the school completed
1988: Renovations were made with a gymnasium and classroom addition
1997: Installed soccer field
1998: Addition
1999: Kindergarten and first grade classroom wing added
2010: Installed baseball field
2011: Added parking and drop-off upgrades
2013: HVAC replacement (phase I)
2014: Roof replacement (partial); HVAC upgrade; front entrance upgrade
2015: Kitchen ac replacement and new walk-in freezer and cooler; gym floor replacement
2016: Front office modernization; media center learning space modernization
2018: PTO supported playground upgrade

Stony Point Elementary

Built in 1934
38,500 square feet
11.6 acre site

1908: Three-room building with an auditorium and a wood stove for heat
1936: Construction finished on brick building in same space as the old
Early 1960s: Addition of kitchen, cafeteria, and new grade 1 classroom
1972: Gym addition
1989: Chiller and HVAC installation
1996: Classroom addition

2004: New outside air units
2009: Gym air conditioning
2011: Added parking and drop-off upgrades
2014: Front entrance upgrade
2015: Partial roof replacement
2016: Front office lighting upgrade; media center learning space modernization
2017: Generator installed
2018: Chiller replacement; well upgrade
2019: Kitchen HVAC upgrade
2020: New well and treatment system

Woodbrook Elementary

Built in 1966
82,966 square feet
12.0 acre site

1992: Boiler and chiller replacements
1997: Additions
2007: Replace unit ventilators and added outside air
2013: Design 2015 renovation work; exterior door replacement
2014: Front entrance upgrade; serving line improvements, including addition of a second serving line; gym floor replacement
2016: Media center learning space modernization
2018/2019: Learning space modernization, gym and classroom addition and renovation, playground improvements; switchgear replacement, furniture upgrade; bus loop improvements and added parking
2020: Partial roof replacement

Burley Middle

Built in 1951
123,626 square feet (including the Annex, which houses other departments)
15.3 acre site

1987: Installation of new air conditioning unit, energy-efficient windows, and elevator; administrative, guidance, and annex areas remodeled
1991: HVAC upgrades, a refurbished gym and auditorium, and exterior door, windows and lock replacements
2002: Addition of a media center with broadcasting studio, courtyard, and functional skills classroom
2003: Partial roof replacement
2011: Addition of an outdoor track oval
2013: Fridge/freezer replacement; miscellaneous exterior repairs
2014: Boiler replacement; front entrance upgrade
2016: Media center and science lab upgrades
2017: Restroom updates; partial roof replacement; chiller replacement
2018: Burley annex storefront; air handler replacement
2019: Learning space modernization-science labs
2020: Electrical panel upgrades
2021: Elevator upgrades, kitchen air conditioning upgrades

Henley Middle

Built in 1966
120,419 square feet
30.0 acre site adjacent to Brownsville Elementary School

1999: Updated facilities with 10 new classrooms and replaced grade 6 trailers, a resource room, 2 bathrooms, and 2 work rooms, increasing student capacity to 900
2006: Addition of 16 classrooms eliminated the need for trailers; an added hallway in the gym connecting to the bus loop in the back increased bus safety. Storage space was added for the band, chorus, and administrative rooms; renovations were completed in the library, main office, guidance and life skills area; a new HVAC system was installed; and all outside bricks were replaced.
2007: Locker room and home economics space renovation
2012: Chiller replacement
2013: Locker refurbishment; design 2015 renovation work
2014: Front entrance upgrade
2015: Gym addition (completion March, 2016)
2017: Science lab renovation and Security Addition
2018: Roof replacement; switchgear replacement; school security entrance addition, learning space modernization; phone box at ballfield
2020: Generator; electrical panel upgrades
2021: Roof replacement on the additions
2021: 8 classroom modular unit installed

Jouett Middle

Built in 1966

94,929 square feet

20.0 acre site adjacent to Albemarle High, Greer Elementary, and Ivy Creek/Prep

1999: Classroom addition and library renovation
2003: The school added 11 regular classrooms, two science classrooms, a special needs classroom and office, a work room, and a student restroom. Major renovations to the library and adjacent areas were made, including the main office and home-economics areas.
2006: Jouett received an HVAC renovation
2007: Jouett received a locker room renovation
2012: Media center renovation
2013: Chiller replacement; kitchen ac installation; tennis court reconstruction; masonry repairs
2016: Security entrance addition
2017: Science lab modernization; switchgear replacement
2018: Partial roof replacement; sewer pumping station upgrade
2020: Walk-in cooler and freezer upgrade, learning space modernization – CTE space, switchgear replacement
2021: Generator upgrade

Lakeside Middle

Built in 1994, one story

94,440 square feet

21.0 acre site adjacent to Hollymead Elementary School

2014: Front entrance upgrade; CTE space renovation
2015: Solar photovoltaic array installed on roof.
2016: Hvac boiler and hot water heater replacement
2017: Tennis court refurbishment
2018: Chiller replacement; learning space modernization-learning lab

Walton Middle

Built in 1974

98,340 square feet

50.0 acre site

2012: Media center renovation

2014: Front entrance upgrade
2017: Science lab learning space modernization
2018: Replace clock systems; HVAC upgrades
2019: Switchgear replacement
2020: Chiller replacement-offices; partial roof replacement, installed 40 solar tubes in interior classrooms
2021: Kitchen upgrades

Albemarle High

Built in 1953

350,103 square feet (including 2009 MESA addition of 12,800 square feet)
40.0 acre site adjacent to Greer Elementary and Jouett Middle Schools, and the Ivy Creek/Prep facility

1970: Foreign language wing
1972: Art and band room addition
2009: MESA Addition
2010: Turf field installation
2011: Track replacement
2012: Auditorium light replacement
2013: Roof replacement (main gym and athletic wing); design 2015 renovation work
2014: Media center upgrade, including furniture and electronics
2015: Classroom modernization with led lighting, locker renovation in foreign language wing, HVAC replacements, and solar photovoltaic array installed on roof
2016: Partial HVAC replacement and modernization of 19 classrooms; installation of modular classroom pod (8400 sf); window & ext. Panel replacement; casework refurbishment/locker removal
2017: Window shade and blind replacement; band room asbestos abatement and door refurbishment; partial roof replacement; HVAC replacement, learning space modernization-cafeteria wing 2nd floor
2018: Elevator #1 modernization; learning space modernization-science classrooms; exterior panel replacement
2019: HVAC upgrades; partial roof replacement; exterior panel replacement; learning space modernization-science classroom 246; restroom upgrades
2020: Boiler, chiller and controls replacement-main boiler room, field house and 1992 addition; exterior panel replacement; partial roof replacement waste water pump replacement
2021: Elevator upgrades
2021: 8 classroom modular unit installed

Monticello High

built in 1998, two stories

249,195 square feet

70.0 acre site

2003: Addition of an academic wing containing 14 classrooms
2005: Locker room renovation
2006: Addition of an athletic wing with an auxiliary gym, wrestling room, and weight-lifting room
2007: Addition of 850-seat auditorium
2009: Turf field installation
2012: Parent drop-off and parking lot improvements; health and medical science academy renovation
2014: Track replacement; front entrance upgrade
2015: Career technical education (CTE) space, media center upgrades to include new shelving and carpet, solar photovoltaic array installed on roof; replacement of flooring on forum stage
2016: Team 20 learning space modernization
2017: Chiller replacement

2018: Replaced original boilers
2018: Stage and stadium lighting replacement
2019: Stormwater improvements; boiler replacement; home economics kitchen upgrades
2021: Baseball stadium lighting replacement
2021: 8 classroom modular unit will be installed by the end of 2021

Western Albemarle High

Built in 1977
199,904 square feet
75.0 acre site

1997: \$2.7 million renovation: main office and guidance areas were renovated and expanded to include additional offices and three conference rooms; library was modified to include more stacks, larger storage space, and new work areas; four new classrooms and two science labs were added; auxiliary gym was added
1998: \$232,175 renovation was made to the industrial arts department to include more computer technology
2001: Concession stand was added to the baseball field
2005: Albemarle County Schools and the Warrior Xclub joined to build a fitness center including a modern weight room and workout area
2007: HVAC system was replaced in the a-wing along with a boiler that serves the entire building; air-conditioning was added and lighting updated in the gym area
2011: New turf field installed
2012: Auditorium light replacement; cafeteria and auditorium HVAC replacement; track and tennis court reconstruction
2013: HVAC replacement (C & D wings, band room); emergency generator
2014: Environmental Studies Academy science room renovation
2015: Installation of new entry vestibule and minor office renovations; media center modernization, HVAC replacement in b-wing and locker rooms; and environmental studies academy greenhouse and classroom
2016: Kitchen upgrade with child nutrition equipment replacement and HVAC replacement; casework refurbishment/locker removal; math classrooms modernization; acoustical panel installation in the band and choir rooms
2018: Maintenance shed; Environmental Studies addition and classroom renovation; clay glazing ventilation system upgrade; kitchen modernization
2019: Cell tower installation; elevator modernization, chiller replacement, Science Addition
2020: CTE space renovation
2021: 8 classroom mobile unit installed

Community Lab School (formerly Murray High School)

Built in 1959
30,915 square feet
7.1 acre site

1990: Murray High School moved to the Rose Hill site.
1992: Renovation and remodeling were conducted with a roof replacement.
1995: Gymnasium addition
2005: Renovations begun in 2003 transformed the facility into a more modern, efficiently operating building for high school students. The scope of work included general remodeling with a new heating/cooling system, replacement of all windows, including the resource center, and site work.
2013: Enterprise Center/ARC renovation
2014: Locker and casework replacement (rooms 10, 14, 15, 16, 17)
2015: Charter School relocated to Murray High school; renovation of stage area to accommodate serving line to accommodate student lunches and offices.
2017: Boiler replacement

2018: School security and front office renovation
2019: Renting two modular classrooms to Virginia Institute for Autism
2021: Generator upgrade

Ivy Creek/Center for Learning and Growth

Built in 1998

24,253 square feet

40.0 acre site adjacent to Greer Elementary and Jouett Middle Schools

2017: Renovation-center for learning and growth
2019: Playground and boiler upgrade
2021: Clock and PA System updates

Center I

Lease began in May 2018 at Seminole place

42,274 square feet includes student area, 2 professional development meeting spaces and department of technology and child nutrition staff offices

Building Services

Built in 1952

9,778 square feet

1980: Bus shop turned over building to building services
1994: Renovation-office space
2018: Renovation-conference room, kitchen and project management room
2019: Upgraded HVAC system and removed steam boiler

Vehicle Maintenance Facility

Built in 1980

18,824 square feet

1995: Office renovation
2010: Bay and bus wash addition
2020: HVAC replacement: Rivanna Water and Sewer Authority filled in and restored lagoon area

Notes:

1. *Minor projects such as flooring and painting are not included in this list.*
2. *Installed LED interior and exterior lighting in 2018-2019 through the energy performance contract.*
3. *Schools not on well systems received high efficiency plumbing fixtures.*

APPENDIX H

ENVIRONMENTAL PRACTICES

The following information was compiled at the request of the environmental subcommittee of the LRPAC.

1. Energy Performance Contract – LED Lighting & High-Efficiency Plumbing Fixtures

ACPS contracted with Ameresco to replace aging energy infrastructure and to improve the efficiency of these systems at numerous facilities. An Energy Services Agreement between ACPS and Ameresco was executed on September 21, 2017. Construction began the fall of 2017 and final project acceptance was achieved on June 13, 2019. The Year One guarantee period spanned from July 1, 2019 through June 30, 2020. The Measurement and Verification Report for Year Two performance found that projected annual utility savings of \$734,014 were realized.

The project included the following Energy Conservation Measures (ECMs):

- ECM 1: Interior Lighting System Improvements
LED lighting retrofit kits installed in all building areas. Project did not include Red Hill Elementary and Woodbrook Elementary, as they had recent construction upgrades that included LED lighting.
- ECM 2: Exterior Lighting System Improvements
Exterior pole and wall pack fixtures were replaced with LED fixtures.
- ECM 3: Lighting Controls
Occupancy sensors installed in classrooms, conference rooms, labs, lounges, offices and storage areas as appropriate.
- ECM 4: Domestic Water Conversion
Upgraded toilets, urinals and faucet aerators with new, lower flow counterparts. Ameresco installed 1.28 gallons per flush (gpf) HET fixtures and manual piston flush valves to replace the existing 3.5 gpf and 1.6 gpf china and diaphragm valves. High flow urinals, ranging in flow from 0.5 gpf to 1.5 gpf were replaced with new pint china and piston flush valves. The retrofits reduced the water consumption to 0.125 gpf. Water conservation projects were not completed at schools that are on ACPS-operated well systems (Broadus Wood, Murray Elementary, Scottsville Elementary, Stony Point Elementary, and Walton Middle).

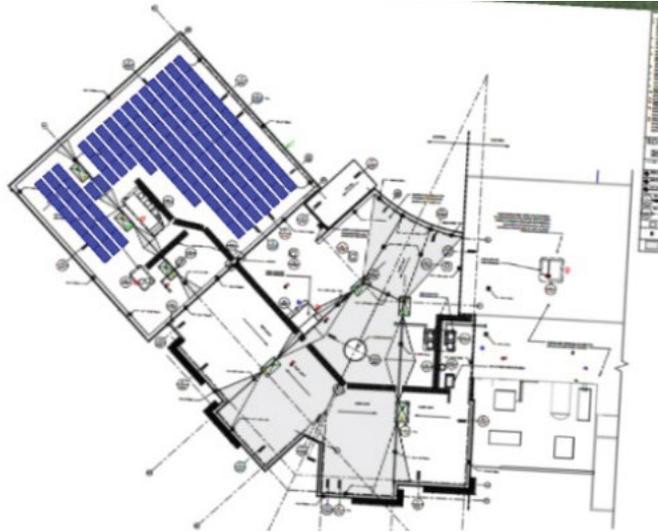
2. Solar Panel Installation & Power Purchase Agreement Data

ACPS collectively has over 1 megawatt (MW) of solar photovoltaic (PV) systems installed at seven schools (Albemarle HS, Baker-Butler ES, Brownsville ES, Greer ES, Henley MS, Monticello HS, and Lakeside MS). Henley's installation was funded through an ARRA grant through the Department of Mines, Minerals and Energy. The remainder of the installations were completed through a Power Purchase Agreement (PPA). A PPA does not require a capital investment, but ACPS is committed to pay a contracted rate for the electricity produced by each system for a period of 20 years in our current agreement. Pricing for electricity through the PPA has been slightly below the amount charged by Dominion.

A video and PPA project overview are available at the following link:

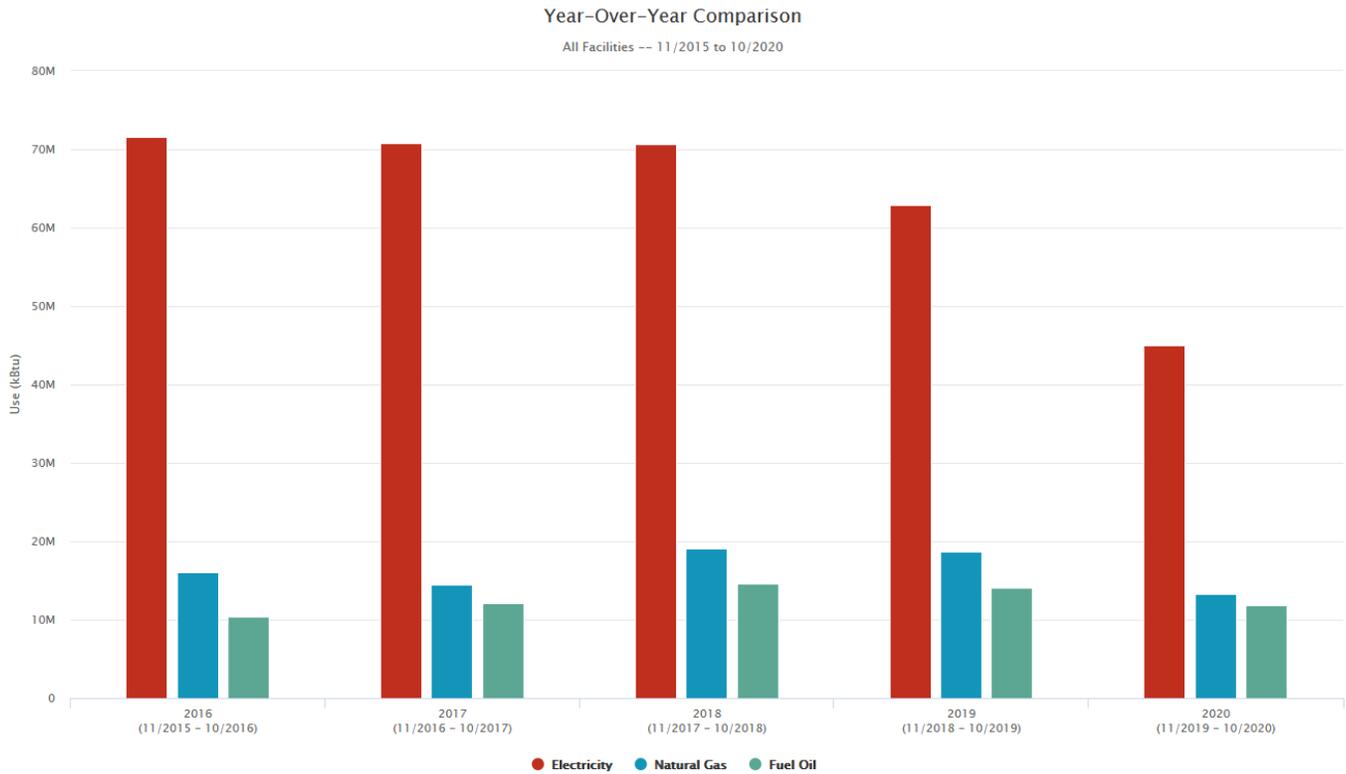
<https://securefutures.solar/projects/schools/albemarle-county-public-schools/>

An alternative to a PPA is to purchase the solar PV systems as a capital expense. ACPS is currently working on procurement of ACPS-owned PV systems for Scottsville Elementary and Red Hill Elementary.



3. Energy Usage Trends and Site Energy Intensity

The following chart shows the collective energy usage trends for ACPS facilities.



4. Energy Star Certifications

The following chart shows the ACPS facilities that are eligible ENERGY STAR buildings. An ENERGY STAR building indicates that it performs better than at least 75 percent of similar buildings nationwide.



5. Wind Energy

ACPS has a wind turbine installed at Henley Middle School. The Renewable Energy Resource Center includes a 42-kilowatt solar photovoltaic array, (6) solar thermal panels to provide hot water to the school, and a Skystream 3.7 wind turbine. The wind turbine is a demonstration system. Zoning height restrictions make a taller (more productive) wind turbine installation difficult.



The following reference document was compiled and designed by Cooperative Strategies for Albemarle County Public Schools. We have included a copy of the report for your convenience.