School Facilities Needs Assessment and Attendance Zone Plan

Facility Condition Assessment

EXECUTIVE SUMMARY

April 13, 2021

SUFFOLK PUBLIC SCHOOLS

COOPERATIVE STRATEGIES
COMPLETE FINANCIAL & DEMOGRAPHIC PLANNING FOR EDUCATION

RRMM ARCHITECTS

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CITY of SUFFOLK, VIRGINIA

Suffolk Public Schools
Every Child a Star... Together We Help Them Shine!

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ACKNOWLEDGEMENTS

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Leroy Bennett, *Vice Mayor*
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Gerry L. Jones, *Director, Capital Programs & Buildings*
Robert P. Goumas, *Director, Planning & Community Development*
Charles Meek, *Assistant Director of Finance*
Kevin M. Wyne, *Planning Manager*

Suffolk Public Schools

Dr. John B. Gordon, III, *Division Superintendent*
Wendy Forsman, *Chief Financial Officer*
Terry Napier, *Director of Facilities and Planning*

Planning Team

Duane M. Harver, *President/CEO, RRMM Architects*
Jeff Harris, *Principal, RRMM Architects*
Mark W. Probst, *Principal, RRMM Architects*
David Sturtz, *Executive Director, Cooperative Strategies*
Matt Sachs, *Senior Associate, Cooperative Strategies*

Section 1

SUMMARY

Suffolk Public Schools

Every Child a Star... Together We Help Them Shine!

Overview

The City of Suffolk, located in southeastern Virginia, is the largest city in the state by land mass, as well as the 14th largest in the country. Spanning 430 square miles, Suffolk is home to almost 95,000 residents. Featuring scenic land brimming with woods, rivers, lakes, and rolling terrain, as well as home to some of the region's most prosperous companies, it should be no surprise that the city is ranked in the Top 100 of CNN Money's Best Small Cities to Live.

Suffolk boasts a rich history. Originally, the region was inhabited by indigenous Nansemond people. Suffolk was chartered in 1742 and renamed for Governor William Gooch's home of Suffolk County, England. The city experienced firsthand the American Revolution and the American Civil War, even being burned by the British during the Revolutionary War. In 1910, Suffolk was incorporated as a city. Today, Suffolk is known for being a major peanut processing center (it is the birthplace of Mr. Peanut, Planters Peanut's famous mascot), as well as a railroad and highway transportation hub. Suffolk's attractive waterfront location has significantly contributed to its growth, initially serving as the port on the head of navigation of the Nansemond River.

Supporting the schoolchildren of this thriving community, Suffolk Public Schools (SPS) serves nearly 14,000 students and employs close to 2,300 employees. With 11 elementary schools, five middle schools, three high schools, and two specialty centers, SPS is responsible for the operation and maintenance of a substantial number of facilities.

In 2019, RRMM Architects and its team of experienced consultants was commissioned to provide a Master Plan and division-wide facility assessment which included comprehensive site inspections to document the condition of eighteen (18) of the twenty-one (21) existing Suffolk Public Schools (SPS) and Maintenance Building. Based on the limited age of three schools, an assessment was not performed for Pioneer Elementary School (2014), Florence Bowser Elementary School (2018) and Colonel Fred Cherry Middle School (2018).

The scope of the commission included:

- High Level Master Planning
- Demographic and Student Yield Analyses
- Projected Enrollments
- Facility Building and Site Condition Assessments
- Conceptual Planning
- Cost Estimating
- Long-Term and Short-Term Planning Recommendations

To facilitate discussions on these topics, the City of Suffolk formed a steering committee made up of those individuals noted in the Acknowledgements section of this Executive Summary. Members of the City Administration, School Administration, RRMM Architects and Cooperative

Strategies were included, herein after referred to as "The Committee". While the Committee worked through details, public meetings were held to share results with the City Council, School Board and other stakeholders as the work progressed and to receive feedback prior to any final decisions.

Any solid plan for the future requires a thorough collection of the data necessary to inform good decision-making. Accordingly, we began our study with the School Divisions overarching goals and objectives as an underlying theme, answering these three critical questions:

1) Where is Suffolk Public Schools' student population projected to grow or decline?
2) What is the capacity of each school to accommodate growth and operational efficacy over the next 5 to 10 years?
3) Based on answers to the first two questions, what is the best plan to accommodate SPS's immediate and long-term needs?

To assist in answering the first question, we included the expertise of Cooperative Strategies, who has demography study expertise in addition to the many other areas of expertise provided in this study. A brief summary of the Cooperative Strategies (CS) Demographic Analysis can be found in Section 2.0. The general results of the study were that only a few of Suffolk's schools will experience growth in the next 5 to 10 years per the chart below. All other schools were projected to have either a moderate rate of growth/decline (+/- 25 students) or decline by greater than 25 students.

School	2019-20 Enrollment	Projected 5 Year Enrollment Growth	Projected 10 Year Enrollment Growth
Florence Bowser ES	821	284	298
Hillpoint ES	786	32	28
Pioneer ES	630	61	68
John Yeates MS	552	(18)	117
Kings Fork HS	1,518	79	36
Nansemond River HS	1,602	201	233

The answer to question two regarding the condition of each facility is more involved. An in-depth facility condition assessment of each of the eighteen schools (and Maintenance Building) included in the study was performed. The methodology and results of those assessments are summarized later in Section 3.0 of this Executive Summary and in greater detail in each individual school condition assessment. However, the general results are included in this Summary.

A rating system was developed for comparing the condition of all schools in the study (later described in detail as an "Facility Condition Index" or "FCI"). Schools with a Facility Condition Index of 25% or higher were deemed to be in the "Poor" category rating. The schools that were most clearly in the "Poor" category were:

- Elephant's Fork Elementary School (31.71%)
- Forest Glen Middle School (38.35%)

- John F. Kennedy Middle School (34.09%)
- John Yeates Middle School (38.02%)

Other schools that were above 25% but considered borderline "Poor" category were:

- Kilby Shores Elementary School (26.53%)
- Nansemond Parkway Elementary School (25.88%)

Given the limited projected enrollment increases, the majority of the needs were identified as either renovations (to address condition issues) or additions (to manage limited growth) or complete facility replacement recommendations based on "poor" ratings and extensive repair costs. The Virginia Department of Education recommends the replacement of schools when the cost of renovations for a school exceed 75% of the cost of new construction. This is the case for all schools being recommended for replacement.

The proposed options were broken down into High School, Middle School and Elementary School Options, with variations to consider within each category. All preliminary or estimated options costs noted are in Total Project Cost values, including hard construction costs plus contingencies and miscellaneous soft costs (professional services, surveys, furniture, equipment, technology, etc.). The following is a high-level overview of these options and the reasons they were proposed.

High School Options

Option A	This a no-cost option that simply rezones student populations between the high schools to balance the utilization or optimal usage of each school based on its capacity. Lakeland is underutilized at 70% of capacity and Nansemond River is overutilized at 107% of capacity.

Option B	This option avoids rezoning at the High School level by creating an **addition at Nansemond River HS,** where it not only has overutilization, but also the most anticipated growth. The proposed solution is to build an addition which would include 400 additional student seats, reducing overutilization from an anticipated 120% in 2024 to 95%. The addition would also include an auxiliary gym and a cafeteria expansion to manage the larger student population. This option was estimated to cost $14,970,000 in 2020 dollars.

Option C	This option is to **build a new 1,500 student high school on a new site** nearest the areas of growth, then **rebalance student populations at all high** schools across the division. With a price tag of approximately $124,731,294 in 2020 dollars, this option was not recommended. There had been the perception that a new high school would be needed to handle the growth, but the demographic analysis indicated otherwise, providing opportunities for funding in areas of heavier need.

Notes: The school division has plans to enhance its performing arts programs at Lakeland High School. Therefore, it appears that some combination of Options A and B above might be the best solution to resolving the underutilization at Lakeland and addressing the projected growth at Nansemond River. There was consensus along these lines within the Committee.

Middle School Options

Middle School options were subdivided into two categories (Options "A" and "B"). Options A.1, A.2 and A.3 were all complete replacement and rebuild options. The "B" options were also replace/rebuild except that two of the replacement middle schools (Forest Glen and John F. Kennedy) were to be consolidated. Since Forest Glen, John F. Kennedy and John Yeates Middle Schools were rated in the "poor" category and the cost to repair these 55-year-old schools exceeded 75% of the cost to replace them with new construction, it was recommended that all be replaced as funding was available to do so. (See detailed Facility Condition Assessments for more information on each school's assessment and deferred maintenance costs).

Option A.1	This option includes the rebuilding of a **new 600 student Forest Glen Middle School on its current site** at an estimated cost of $34,397,160 in 2020 dollars. The cost includes demolition of the existing school.

Option A.2	This option includes the rebuilding of **a new 600 student John F. Kennedy Middle School on its current site** at an estimated cost of $35,476,620 in 2020 dollars. The cost includes demolition of the existing school.

Option A.3 (Same as B.2)	This option includes the rebuilding of a **new 800 student John Yeates Middle School on its current site** at an estimated cost of $42,117,126 in 2020 dollars. The cost includes demolition of the existing school.

Option B.1	This option includes the **rebuilding of a new consolidated Forest Glen Middle School and John F. Kennedy Middle School into a new 1,200 seat middle school on either the Forest Glen site or a new site** at an estimated cost of $56,166,108.

Option B.2 (Same as A.3)	• This option includes the **rebuilding of a new 800 student John Yeates Middle School on its current site** at an estimated cost of $42,117,126 in 2020 dollars. The cost includes demolition of the existing school.

Notes: The middle school options were discussed at length without a final solution that was comfortable for all parties involved. That conclusion extends from the Committee to both the School Board and City Council. From the School Division's perspective, the "A" options were the only tenable solutions and pointed to challenges in the consolidation of FGMS/JFK (Option B.1) with student travel time on buses and adverse feedback from communities who would be opposed to such a consolidation. From the City representatives' perspective, the large reduction in cost from two separate schools at a total estimated cost of $69,873,780 versus the consolidated school estimated cost of $56,166,108 (a $13,707,672 savings) was an attractive option that should be given strong consideration. No resolution has been accomplished from the Committee, School Board or City Council.

Elementary School Options

Elementary school options were sub-divided into two distinct categories – Rezoning ("A" Options) and Non-rezoning ("B" Options). Options A.1 and A.2 are separate choices for resolving the major Elementary School problems, while Options A.3 and A.4 address needs, but are "add-ons" to one of the two major A.1 or A.2 options.

Rezoning Options ("A")

Option A.1	This option includes the **rebuilding and replacement of Kilby Shores in a new 1,000 student Elementary School**. The size would be sufficient to **rezone and include portions of Pioneer Elementary students as well as the majority of the students from Elephant's Fork Elementary.** This option comes with a price tag of approximately $38,306,700 in 2020 dollars and includes the demolition of the existing Kilby Shores Elementary School. Both Elephant's Fork and Kilby shores are 41 years old and have "Poor" FCI ratings. The rezoning adjustments would also place some of the students from Elephant's Fork to Hillpoint and Oakland. The challenges with this option include cost and transportation.

Option A.2	This option includes the **rebuilding and replacement of the 41-year-old Nansemond Parkway Elementary School in a new 800 student elementary** school at an approximate cost of $30,839,400 in 2020 dollars and includes the cost for demolition of the existing Nansemond Parkway school. NPES has a "Poor" FCI rating, though borderline. Also, included in this option would be the **rezoning of portions of the Bowser district to the new Nansemond Parkway** to address growth demands and overutilization at Bowser ES.

Option A.3	This option would complete the elementary solution when added to Options A.1 and A.2 by **adding 200 additional seats at Northern Shores Elementary School and adding a cafeteria expansion** to accommodate the larger school population there. Northern Shores is overutilized and has several modular classrooms on site which need to be replaced with permanent classrooms. The estimated cost of this option is $4,677,000 in 2020 dollars.

Option A.4	This option is essentially the same as Option A.3 except that it **would include a 400-seat addition** and cost approximately $8,997,000 in 2020 dollars.

Notes: Options A.1, A.2 and A.3 together add a combined new seat total of 549 and would reduce the overall elementary school utilization from 95% down to 89% and cost approximately $73,823,100 in 2020 dollars. Using Option A.4 instead of A.3, reduces the utilization down to 87% and increases the cost to approximately $78,143,100. The school division, however, is not in favor of rezoning.

Non-Rezoning Options ("B")

Option B.1	This option includes the **rebuilding and replacement of three schools - Elephant's Fork Elementary in a new 750 student school, and both Kilby Shores and Nansemond Parkway at 600 students each**. The combined total of these three schools would cost approximately $87,365,763 in 2020 dollars and includes the demolition of all three existing schools. Each of these schools is 41 years old and rated in "poor" condition. The greatest challenges with this option are likely the high cost and the lack of any operational savings.

Option B.2	This option includes the **construction of a 200-seat addition at both Florence Bowser Elementary School and Northern Shores Elementary School and includes cafeteria expansions at each school to accommodate the larger anticipated populations. It also includes a 100-seat expansion at Pioneer Elementary School**. These additions address projected overutilization at each school. The cost of this option is a total of approximately $10,362,000 in 2020 dollars.

Option B.3	This option is essentially the same as Option B.2 with **a larger 400 seat addition to Northern Shores instead of 200 seats**, resulting in an approximate combined cost of $14,682,000 in 2020 dollars.

Notes: Options B.1 and B.2 add a combined 804 new elementary school seats, reducing 2024 projected utilization for elementary schools from 95% to 86%. Including the larger 400 seat addition at Northern Shores in Option B.3 the utilization goes down to 84%. The approximate total cost of B.1 and B.2 is $97,727,763 and for B.1 and B.3 it is $102,047,763 in 2020 dollars.

Comparing the Rezoning Options ("A") and Non-Rezoning Options ("B"), the total cost of each using the smaller Northern Shores Addition of 200 additional seats:

Rezoning	$73,823,100	
Non-Rezoning	$97,727,763	
Difference	$23,904,663	(more for the Non-Rezoning)

Major differences in the options are that with the Rezoning option there are only two new replacement schools combined with the impacts of rezoning while the Non-Rezoning option provides three new replacement schools with no rezoning implications.

As noted for the Middle School Options, perspectives differ largely on the desire by the School Division to keep current school zones versus the City representatives' desire to find achievable funding demands. Each argument has its merit. The Committee was unable to agree on the direction but found consensus on the need to make the Northern Shores Addition a priority.

Deferred Maintenance Costs

In addition to projected needs for major capital improvement projects, this study addressed the current and projected needs of maintenance in terms of High Priority, Medium Priority and Low Priority. The total divisional estimated Deferred Maintenance Costs in 2020 dollars, (hard construction costs only), are as follows:

High Priority (0 - 3 years)	$90,536,011
Medium Priority (4 – 6 years)	$73,493,965
Low Priority (6 -10 years)	$60,957,876

Each school and each category are further defined later in this executive summary and broken down further by specific repairs and improvements in the individual school facility condition assessments. Deferred maintenance cost considerations are essential to school facility planning and budgeting. They also factor into the consideration of each option. Any replacement school can factor in the reduction of ongoing maintenance for the school being demolished.

Conclusion

While a consensus on project funding has not been reached for Capital Improvement Planning, this study has thoroughly identified the needs through detailed assessments and analyses providing a foundation for making decisions based on solid data. We are confident this collection of individual school condition assessments and options considerations will serve the City of Suffolk and Suffolk Public Schools for many years to come in its capital improvements and master planning initiatives.

Section 2

DEMOGRAPHIC ANALYSIS

Suffolk Public Schools
Every Child a Star... Together We Help Them Shine!

Methodology

The cohort survival methodology (sometimes referred to as the grade progression ratio method) is a widely used enrollment projection model that is used by many school divisions and state and federal agencies to project K-12 enrollment.

A cohort is a group of persons (in this case, students). The cohort survival enrollment projection methodology uses historic live birth data and historic student enrollment to "age" a known population or cohort throughout the school grades. For instance, a cohort begins when a group of kindergarteners enrolls in grade K and moves to first grade the following year, second grade the next year, and so on.

A "survival ratio" is developed to track how this group of students increased or decreased in number as they moved through the grade levels. By developing survival ratios for each grade transition (i.e. 2nd to 3rd grade) over a ten year period of time, patterns emerge. A projection ratio for each grade transition is developed based on analysis of the survival ratios. The projection ratios are used as a multiplier in determining future enrollment.

For example, if student enrollment has consistently increased from the 8th to the 9th grade over the past ten years, the survival ratio would be greater than 100% and could be multiplied by the current 8th grade enrollment to develop a projection for next year's 9th grade. This methodology can be carried through to develop ten years of projection figures. Because there is not a grade cohort to follow for students coming into kindergarten, resident live birth counts are used to develop a birth-to-kindergarten survival ratio. Babies born five years previous to the kindergarten class are compared in number, and a ratio can be developed to project future kindergarten enrollments.

The cohort survival method is useful in areas where population is stable (relatively flat, growing steadily, or declining steadily), and where there have been no significant fluctuations in enrollment, births, and housing patterns from year to year. The cohort survival methodology inherently considers the net effects of factors such as migration, housing, dropouts, transfers to and from charter schools, open enrollment, and deaths. This methodology does not assume changes in policies, program offerings, or future changes in housing and migration patterns.

Live Birth Data

Utilization of resident live birth data is recommended when projecting future kindergarten enrollments. This data provides a helpful overall trend. Large bubbles in birth counts, either up or down, can also be planned for or anticipated by the Division.

In addition, the live birth counts are used in determining a birth-to-kindergarten and birth-to-first grade survival ratio. This ratio identifies the percentage of children born in a representative area who attend kindergarten and first grade in the Division five and six years later. The survival ratios for birth-to-kindergarten, birth-to-first grade, as well as grades 1-12 can be found in the full Enrollment Projections Report by School of Attendance located in the Appendix.

Data is arranged by the residence of the mother. For example, if a mother lives in Suffolk, VA, but delivers her baby in Norfolk, VA, the birth is counted in Suffolk. Live birth counts are different from live birth rates. The live birth count is simply the actual number of live births. A birth rate is the number of births per 1,000 women in a specified population group. The table and graph include the resident live birth counts for ZIP codes 23432, 23433, 23434, 23435, 23436, 23437, 23438, and 23487. Upon analysis of the map on the following page and student data, only live birth counts for ZIP codes 23432, 23433, 23434, 23435, 23437, 23438, and 23487 were used in the development of the enrollment projections.

SUFFOLK PUBLIC SCHOOLS ZIP CODES

RESIDENT LIVE BIRTH COUNTS

Year	23432	23433	23434	23435	23436	23437	23438	23487
2003	11	9	670	325	6	34	15	75
2004	15	13	719	336	3	54	24	77
2005	8	6	732	358	9	39	21	70
2006	9	9	687	382	12	52	24	76
2007	10	13	725	344	12	50	18	71
2008	9	7	659	346	7	44	13	72
2009	15	13	725	343	15	33	19	65
2010	10	10	658	346	8	43	15	54
2011	15	13	647	347	14	44	16	57
2012	11	11	654	349	8	28	18	62
2013	9	4	618	371	7	48	19	55
2014	10	5	608	371	13	41	23	64
2015	18	7	673	396	9	44	15	79
2016	14	12	653	356	14	34	19	75
2017	11	9	642	405	8	44	19	56

Source: Virginia Department of Health

Historical Enrollment

As indicated in the table below, over the past ten years, student enrollment in the Suffolk Public Schools has decreased by 185 students. The varying shades of color in the table represent statistically significant cohort sizes. The darker blue represents smaller cohorts, while the darker red represents larger cohorts, comparatively.

Historical Enrollment - District-wide

Grade	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PK	513	506	499	501	475	445	493	503	501	513
K	1,148	1,063	1,087	1,064	1,040	1,050	1,050	1,044	933	1,007
1	1,120	1,143	1,097	1,113	1,076	1,083	1,061	1,096	1,061	989
2	1,122	1,117	1,127	1,148	1,117	1,068	1,102	1,061	1,091	1,049
3	1,059	1,124	1,117	1,127	1,151	1,194	1,108	1,107	1,112	1,092
4	1,057	1,067	1,138	1,133	1,131	1,127	1,155	1,127	1,073	1,071
5	1,052	1,048	1,045	1,109	1,090	1,088	1,111	1,127	1,086	1,078
6	1,075	1,061	1,060	1,036	1,154	1,082	1,054	1,123	1,124	1,111
7	1,094	1,082	1,066	1,043	1,006	1,129	1,058	1,019	1,127	1,122
8	1,043	1,066	1,034	1,082	1,018	987	1,095	1,079	1,038	1,121
9	1,291	1,242	1,208	1,228	1,283	1,253	1,182	1,304	1,287	1,208
10	1,158	1,089	1,177	1,139	1,170	1,240	1,123	1,035	1,110	1,148
11	911	967	868	848	835	840	906	919	876	1,006
12	864	845	898	905	819	797	786	815	846	807
K - 12 Total	13,994	13,914	13,922	13,975	13,890	13,938	13,791	13,856	13,764	13,809
Grand Total	14,507	14,420	14,421	14,476	14,365	14,383	14,284	14,359	14,265	14,322

Source: Virginia Department of Education

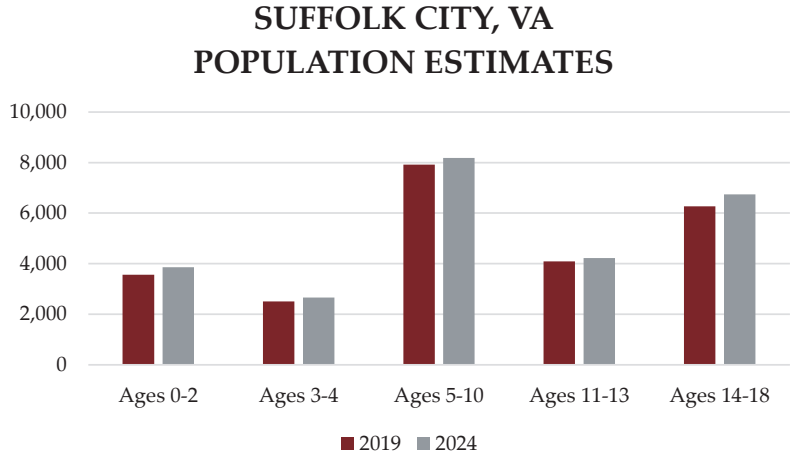
Historical Enrollment - District-wide

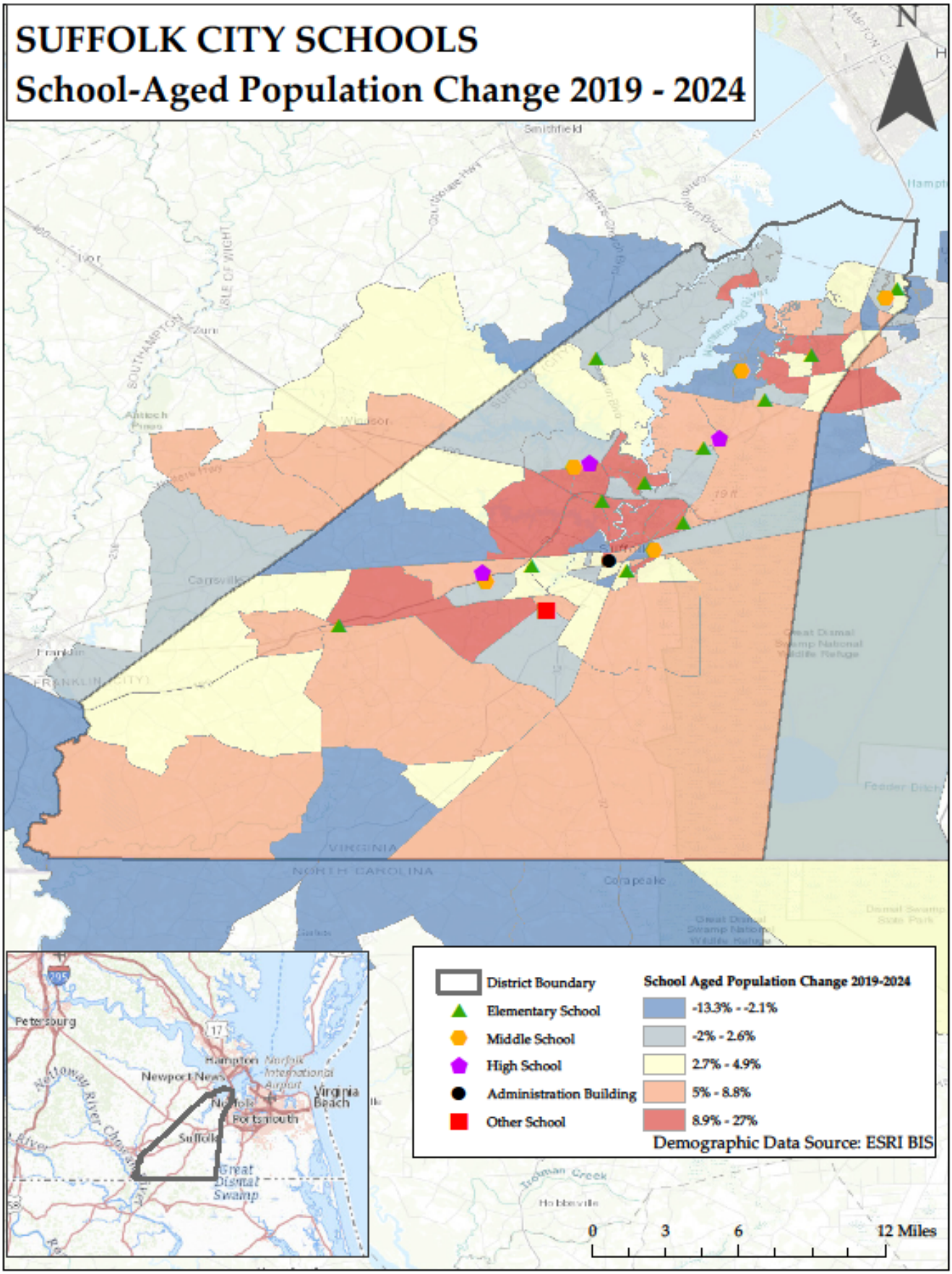
Grade	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PK	513	506	499	501	475	445	493	503	501	513
K - 5	6,558	6,562	6,611	6,694	6,605	6,610	6,587	6,562	6,356	6,286
6 - 8	3,212	3,209	3,160	3,161	3,178	3,198	3,207	3,221	3,289	3,354
9 - 12	4,224	4,143	4,151	4,120	4,107	4,130	3,997	4,073	4,119	4,169
K - 12 Total	13,994	13,914	13,922	13,975	13,890	13,938	13,791	13,856	13,764	13,809
Grand Total	14,507	14,420	14,421	14,476	14,365	14,383	14,284	14,359	14,265	14,322

Source: Virginia Department of Education

Population Growth

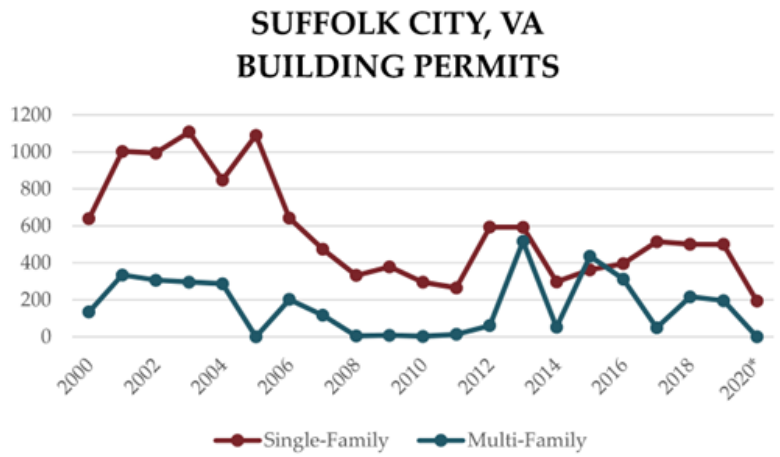
The map on the following page shows school-aged population change in the U.S. Census block groups within/around the Suffolk Public Schools boundary. Population changes are based on 2019 and 2024 estimates. A block group is defined by the U.S. Census Bureau as, "a statistical division of a census tract, generally defined to contain between 600 and 3,000 people and 240 and 1,200 housing units, and the smallest geographic unit for which the Census Bureau tabulates sample data."




SUFFOLK CITY SCHOOLS
School-Aged Population Change 2019 - 2024
N
District Boundary
Elementary School
Middle School
High School
Administration Building
Other School
School Aged Population Change 2019-2024
-13.3% - -2.1%
-2% - 2.6%
2.7% - 4.9%
5% - 8.8%
8.9% - 27%
Demographic Data Source: ESRI BIS
0
3
6
12 Miles
Petersburg
Newport News
Norfolk
Portsmouth
Virginia Beach
Suffolk
Great Dismal Swamp
NORTH CAROLINA
VIRGINIA

Housing Data

Housing development and building permits are tracked to determine their effect on student enrollment. The graph below illustrates the number of single- and multi-family building permits issued in Suffolk City, Virginia since 2000.



Projected Enrollment

Cooperative Strategies developed low, moderate, high, and recommended enrollment projections for the Suffolk Public Schools. The moderate enrollment projections are based on a selected average or weighted average of survival ratios (in this case, a 3-year weighted average, by school). The low and high enrollment projections are developed using statistical distributional theory, providing the Division with a more conservative (low) and more liberal (high) enrollment projection. The recommended enrollment projection is based on a detailed analysis of historical enrollment and resulting survival ratios over the past 10 years, by school. Significant shifts in survival ratio patterns are realized and accounted for in determining projection ratios independently for each grade level. The recommended enrollment projections illustrate the most likely direction of the Division based on more recent trends.

The range of enrollment projections from low (conservative) to high (liberal) are offered due to the limitations of the cohort survival method in factoring changes to policies, program offerings, and future changes in housing and migration patterns. For example, the low enrollment projection might be used if housing declines significantly more than anticipated; the high enrollment projection might be used if housing growth increases at a more rapid rate than seen in recent years.

It should be noted that the actual live birth counts are available through 2017 and project kindergarten enrollment through 2022-23. To project kindergarten through 2029-30, a simple average of the last 3 years of live birth counts was used.

Projected PK enrollment does not follow the cohort survival method but is based on the current 2019-20 enrollment of 513 PK students.

Based on the recommended projected enrollment, student enrollment in the Suffolk Public Schools is projected to increase from 14,322 in the 2019-20 school year to 14,995 students in the 2029-30 school year. The varying shades of color in the below table represent statistically significant cohort sizes. The darker blue represents smaller cohorts, while the darker red represents larger cohorts, comparatively.

Projected Enrollment - Recommended - District-wide

Grade	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
PK	513	513	513	513	513	513	513	513	513	513
K	1,096	1,041	1,068	1,070	1,070	1,070	1,070	1,070	1,070	1,070
1	1,048	1,142	1,084	1,115	1,115	1,115	1,115	1,115	1,115	1,115
2	984	1,044	1,137	1,080	1,111	1,108	1,108	1,108	1,108	1,108
3	1,085	1,024	1,086	1,183	1,123	1,151	1,151	1,151	1,151	1,151
4	1,060	1,047	992	1,053	1,146	1,086	1,119	1,118	1,118	1,118
5	1,068	1,058	1,049	995	1,062	1,156	1,095	1,126	1,128	1,128
6	1,102	1,094	1,081	1,073	1,018	1,090	1,186	1,123	1,156	1,155
7	1,110	1,101	1,095	1,080	1,072	1,019	1,093	1,188	1,126	1,158
8	1,120	1,106	1,098	1,092	1,076	1,071	1,018	1,090	1,186	1,123
9	1,304	1,301	1,285	1,278	1,269	1,249	1,246	1,183	1,263	1,373
10	1,078	1,170	1,161	1,152	1,143	1,137	1,117	1,114	1,058	1,133
11	1,015	953	1,035	1,027	1,020	1,012	1,007	990	984	935
12	936	943	886	962	954	947	939	935	920	915
K - 12 Total	14,006	14,024	14,057	14,160	14,179	14,211	14,264	14,311	14,383	14,482
Grand Total	14,519	14,537	14,570	14,673	14,692	14,724	14,777	14,824	14,896	14,995

Source: Coopenative Strategies

Projected Enrollment - Recommended - District-wide

Grade	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
PK	513	513	513	513	513	513	513	513	513	513
K - 5	6,341	6,356	6,416	6,496	6,627	6,686	6,658	6,688	6,690	6,690
6 - 8	3,332	3,301	3,274	3,245	3,166	3,180	3,297	3,401	3,468	3,436
9 - 12	4,333	4,367	4,367	4,419	4,386	4,345	4,309	4,222	4,225	4,356
K - 12 Total	14,006	14,024	14,057	14,160	14,179	14,211	14,264	14,311	14,383	14,482
Grand Total	14,519	14,537	14,570	14,673	14,692	14,724	14,777	14,824	14,896	14,995

Source: Coopenative Strategies

Based on the moderate projected enrollment, student enrollment in the Suffolk Public Schools is projected to increase from 14,322 in the 2019-20 school year to 14,525 students in the 2029-30 school year. The varying shades of color in the table (following page) represent statistically significant cohort sizes. The darker blue represents smaller cohorts, while the darker red represents larger cohorts, comparatively.

Projected Enrollment - Moderate - District-wide

Grade	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
PK	513	513	513	513	513	513	513	513	513	513
K	1,092	1,037	1,065	1,066	1,066	1,066	1,066	1,066	1,066	1,066
1	1,054	1,146	1,089	1,118	1,117	1,117	1,117	1,117	1,117	1,117
2	979	1,047	1,134	1,078	1,108	1,109	1,109	1,109	1,109	1,109
3	1,064	1,001	1,069	1,161	1,103	1,129	1,131	1,131	1,131	1,131
4	1,054	1,023	964	1,031	1,121	1,064	1,092	1,093	1,093	1,093
5	1,065	1,051	1,026	971	1,042	1,133	1,077	1,104	1,105	1,105
6	1,097	1,086	1,070	1,046	989	1,066	1,157	1,099	1,129	1,129
7	1,089	1,078	1,068	1,050	1,028	971	1,045	1,135	1,077	1,106
8	1,103	1,070	1,057	1,047	1,031	1,008	952	1,024	1,112	1,055
9	1,314	1,290	1,252	1,242	1,228	1,207	1,182	1,116	1,198	1,302
10	1,071	1,173	1,144	1,112	1,100	1,091	1,071	1,047	987	1,064
11	1,022	954	1,048	1,020	994	981	973	956	932	880
12	924	938	876	959	935	911	900	891	877	855
K - 12 Total	**13,928**	**13,894**	**13,862**	**13,901**	**13,862**	**13,853**	**13,872**	**13,888**	**13,933**	**14,012**
Grand Total	**14,441**	**14,407**	**14,375**	**14,414**	**14,375**	**14,366**	**14,385**	**14,401**	**14,446**	**14,525**

Source: Cooperative Strategies

Projected Enrollment - Moderate - District-wide

Grade	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
PK	513	513	513	513	513	513	513	513	513	513
K - 5	6,308	6,305	6,347	6,425	6,557	6,618	6,592	6,620	6,621	6,621
6 - 8	3,289	3,234	3,195	3,143	3,048	3,045	3,154	3,258	3,318	3,290
9 - 12	4,331	4,355	4,320	4,333	4,257	4,190	4,126	4,010	3,994	4,101
K - 12 Total	**13,928**	**13,894**	**13,862**	**13,901**	**13,862**	**13,853**	**13,872**	**13,888**	**13,933**	**14,012**
Grand Total	**14,441**	**14,407**	**14,375**	**14,414**	**14,375**	**14,366**	**14,385**	**14,401**	**14,446**	**14,525**

Source: Cooperative Strategies

Based on the low projected enrollment, student enrollment in the Suffolk Public Schools is projected to decrease from 14,322 in the 2019-20 school year to 12,841 students in the 2029-30 school year. The varying shades of color in the table below represent statistically significant cohort sizes. The darker blue represents smaller cohorts, while the darker red represents larger cohorts, comparatively.

Projected Enrollment - Low - District-wide

Grade	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
PK	513	513	513	513	513	513	513	513	513	513
K	1,066	1,012	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040
1	1,029	1,091	1,036	1,064	1,063	1,063	1,063	1,063	1,063	1,063
2	965	1,003	1,063	1,011	1,039	1,037	1,037	1,037	1,037	1,037
3	1,037	964	1,003	1,068	1,015	1,040	1,041	1,041	1,041	1,041
4	1,031	979	912	952	1,010	960	985	986	986	986
5	1,042	1,005	963	901	948	1,008	957	981	982	982
6	1,086	1,052	1,013	971	908	959	1,019	967	992	993
7	1,061	1,037	1,004	968	928	865	911	967	918	943
8	1,072	1,017	994	962	929	889	826	867	920	875
9	1,290	1,232	1,168	1,146	1,109	1,069	1,024	952	995	1,059
10	1,058	1,138	1,079	1,024	1,001	970	935	892	830	872
11	1,006	928	1,002	944	898	877	850	820	781	727
12	915	913	843	908	858	815	796	772	745	710
K - 12 Total	**13,658**	**13,371**	**13,120**	**12,959**	**12,746**	**12,592**	**12,484**	**12,385**	**12,330**	**12,328**
Grand Total	**14,171**	**13,884**	**13,633**	**13,472**	**13,259**	**13,105**	**12,997**	**12,898**	**12,843**	**12,841**

Source: Cooperative Strategies

Projected Enrollment - Low - District-wide

Grade	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
PK	513	513	513	513	513	513	513	513	513	513
K - 5	6,170	6,054	6,017	6,036	6,115	6,148	6,123	6,148	6,149	6,149
6 - 8	3,219	3,106	3,011	2,901	2,765	2,713	2,756	2,801	2,830	2,811
9 - 12	4,269	4,211	4,092	4,022	3,866	3,731	3,605	3,436	3,351	3,368
K - 12 Total	**13,658**	**13,371**	**13,120**	**12,959**	**12,746**	**12,592**	**12,484**	**12,385**	**12,330**	**12,328**
Grand Total	**14,171**	**13,884**	**13,633**	**13,472**	**13,259**	**13,105**	**12,997**	**12,898**	**12,843**	**12,841**

Source: Cooperative Strategies

Based on the high projected enrollment, student enrollment in the Suffolk Public Schools is projected to increase from 14,322 in the 2019-20 school year to 16,491 students in the 2029-30 school year. The varying shades of color in the table below represent statistically significant cohort sizes. The darker blue represents smaller cohorts, while the darker red represents larger cohorts, comparatively.

Projected Enrollment - High - District-wide

Grade	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
PK	513	513	513	513	513	513	513	513	513	513
K	1,119	1,063	1,089	1,091	1,091	1,091	1,091	1,091	1,091	1,091
1	1,084	1,205	1,144	1,174	1,173	1,173	1,173	1,173	1,173	1,173
2	994	1,091	1,214	1,151	1,182	1,180	1,180	1,180	1,180	1,180
3	1,088	1,038	1,136	1,264	1,198	1,230	1,231	1,231	1,231	1,231
4	1,075	1,069	1,019	1,118	1,243	1,178	1,211	1,211	1,211	1,211
5	1,089	1,096	1,095	1,047	1,149	1,278	1,212	1,244	1,244	1,244
6	1,109	1,123	1,129	1,126	1,077	1,186	1,318	1,249	1,284	1,283
7	1,120	1,119	1,132	1,136	1,135	1,086	1,198	1,329	1,262	1,297
8	1,134	1,130	1,130	1,143	1,145	1,147	1,098	1,210	1,344	1,275
9	1,337	1,349	1,345	1,346	1,362	1,364	1,367	1,308	1,441	1,600
10	1,083	1,206	1,211	1,213	1,211	1,228	1,229	1,226	1,173	1,298
11	1,039	981	1,094	1,097	1,100	1,099	1,113	1,114	1,111	1,064
12	935	964	910	1,013	1,018	1,020	1,019	1,031	1,032	1,031
K - 12 Total	**14,206**	**14,434**	**14,648**	**14,919**	**15,084**	**15,260**	**15,440**	**15,597**	**15,777**	**15,978**
Grand Total	**14,719**	**14,947**	**15,161**	**15,432**	**15,597**	**15,773**	**15,953**	**16,110**	**16,290**	**16,491**

Source: Cooperative Strategies

Projected Enrollment - High - District-wide

Grade	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
PK	513	513	513	513	513	513	513	513	513	513
K - 5	6,449	6,562	6,697	6,845	7,036	7,130	7,098	7,130	7,130	7,130
6 - 8	3,363	3,372	3,391	3,405	3,357	3,419	3,614	3,788	3,890	3,855
9 - 12	4,394	4,500	4,560	4,669	4,691	4,711	4,728	4,679	4,757	4,993
K - 12 Total	**14,206**	**14,434**	**14,648**	**14,919**	**15,084**	**15,260**	**15,440**	**15,597**	**15,777**	**15,978**
Grand Total	**14,719**	**14,947**	**15,161**	**15,432**	**15,597**	**15,773**	**15,953**	**16,110**	**16,290**	**16,491**

Source: Cooperative Strategie

Conclusion

As with any projection, the Suffolk Public Schools should pay close attention to live birth counts, enrollment in elementary schools, open enrollment, non-public enrollment, in/out migration patterns, and any housing growth. It is recommended that this document be reviewed on an annual basis to determine how more recent growth and enrollment trends will impact the enrollment projections.

Section 3

FACILITY CONDITION ASSESSMENTS

Suffolk Public Schools

Every Child a Star... Together We Help Them Shine!

SECTION 3 | FACILITY CONDITION ASSESSMENTS

Overview

RRMM Architects was engaged to conduct comprehensive site inspections to document within a Facility Condition Assessment (FCA) the present condition of eighteen (18) of the twenty-one (21) existing Suffolk Public Schools (SPS). Based on the limited age of three schools, an assessment was not performed for Pioneer Elementary School (2014), Florence Bowser Elementary School (2018) and Colonel Fred Cherry Middle School (2018). Each school FCA was developed to provide SPS a summary of current school and site deficiencies with a method to forecast future costs pertaining to potential upgrades, replacement, renovations and/or building additions.

RRMM Architects assembled two (2) highly experienced and coordinated teams of design professionals to investigate and produce a Facility Condition Assessment for each school. This study was built around the following primary components:

- ◊ Assessment of the condition of all building systems and site features.
- ◊ Assessment of each facility in comparison to modern standards for safety, security, energy conservation, accessibility and code compliance.
- ◊ Assessment of the educational functionality of each facility, meaning compliance with acceptable operational features and division educational delivery objectives.

It is important to note that our evaluations and recommendations offered within each FCA involve professional judgment, practical experience, and generally-accepted design industry practices. However, the consideration of renovating or maintaining buildings can be a complex and tedious undertaking. The various systems within a building are inter-connected, therefore, a decision or recommendation on one system can easily have a "ripple" effect on other systems.

Assessment Parameters (Limits of Each Study)

Each assessment is focused on a physical inspection of the existing building (interior and exterior) and site conditions to include the areas or building systems noted below;

- ◊ Exterior Site Conditions
- ◊ Exterior Building Envelope
- ◊ Interior Finishes
- ◊ ADA Accessibility Compliance
- ◊ Building Code and Safety/Security (OSHA) Concerns
- ◊ Roofing System
- ◊ Mechanical Systems
- ◊ Electrical Systems
- ◊ Plumbing Systems
- ◊ Structural Assessment
- ◊ Fire Suppression System Assessment
- ◊ Hazardous Materials Assessment
- ◊ Educational Functionality

- Classroom size
- Corridor widths and site lines
- Room usage and adjacency
- Space use functionality (i.e. location of administration)

Physical inspections were limited to analyzing the condition of building systems, components and/or elements that were visible. Destructive investigation was not a part of this assessment.

Format of Assessment(s)

Following an initial Overview and Executive Summary, each school assessment is divided into individual sections (i.e. civil, architectural, ADA, building code, etc.) that focus on the condition of specific building areas, systems or components. Each school assessment is divided into the following sections:

Introduction

The introduction (and executive summary) includes a brief description of the facility, its age and a brief summary of the primary concerns at the facility.

Civil Assessment (Site and Outdoor Facilities)

An overview of the existing site and outdoor facilities conditions to include site safety and security, athletic facilities, site ingress/egress and student delivery.

Architectural Assessment

This assessment reviews the physical condition of the exterior and interior of each school structure and evaluates the condition of building systems, materials and finishes.

ADA (Americans with Disabilities Act) Compliance

As part of this assessment, we conducted a limited visual observation for ADA compliance. It should be noted that the limited observations described herein do not comprise a full ADA Compliance Survey, but only a general comparison of the existing facility to the requirements of the 2010 ADA Standards for Accessible Design requirements for altered and new construction.

Building Code and Safety/Security (OSHA) Concerns

This assessment evaluates those items that are most deficient in comparison to modern building standards, that are considered reasonably achievable, and that have the most detrimental impact on health, safety or accessibility if not remedied. Building Code “compliance” is a subjective consideration since most existing facilities are “grandfathered” due to their compliance at the time of their original construction. This assessment also evaluates building conditions that create and/or potentially create safety/security concerns relative to OSHA regulations and standards.

Roof Systems Assessment

This assessment investigates the roof assemblies and their condition. This includes materials, performance, active leaks (if any) and remaining life.

Mechanical Systems Assessment

This assessment evaluates the types of heating, ventilating and cooling systems that are operating within the school. The study evaluates these components based on age and condition and describes shortcomings and/or recommendations compared to the current building code requirements.

Electrical Systems Assessment

This assessment evaluates the electrical service to the building and power distribution throughout, the interior and exterior lighting needs, energy conservation and the emergency power and fire alarm systems. This study also includes intercom and clock systems, surveillance systems and provides information on compliance with fire alarm code requirements.

Plumbing Systems Assessment

The plumbing evaluation focuses on the domestic water service and plumbing components distributed throughout the facility. This evaluation also includes domestic hot water equipment and sanitary systems.

Structural Assessment

This assessment provides a visual structural survey of the existing building structure based on the structural components and as-built drawings provided by SPS.

Fire Suppression System Assessment

An overview of the existing fire suppression (sprinkler) system conditions.

Hazardous Materials Assessment

A hazardous materials assessment was not completed as a part of this study. SPS provided a previously completed hazardous materials assessment for several schools to the design/evaluation team for review.

Educational Functionality Assessment

This assessment verifies and evaluates the existing use of spaces within each school in comparison to Virginia Department of Education space and capacity standards.

Deferred Maintenance Schedule(s)

Deferred Maintenance can be defined as unperformed maintenance, repairs and/or replacement of equipment or systems due to a lack of resources or a perceived low priority and deferral of the activity resulting in a progressive deterioration of the school condition or performance. A Deferred Maintenance Schedule was developed for each school forecasting building systems or components by individual section in need of repair or replacement over a ten (10) year period.

Based on their current condition, each building system or component identified for repair or replacement was placed into one of three categories.

Category 1	High Priority (0 – 3 Years)
Category 2	Medium Priority (4 – 6 Years)
Category 3	Low Priority (7 – 10 Years)

"Total Deferred Maintenance Costs" represents the total dollar value of deferred maintenance deficiencies identified as "High Priority" within the comprehensive facilities condition assessment completed for each school and its integral building systems and equipment. The "Total Deferred Maintenance Costs" for each school were utilized in the Facility Condition Index (FCI) calculation. The "Total Deferred Maintenance Costs" for each school are identified in Table 3.1.

Table 3.1: Deferred Maintenance Costs By School

SCHOOL NAME	DEFERRED MAINTENANCE COSTS			
	HIGH PRIORITY (0 - 3 YEARS)	MEDIUM PRIORITY (4 - 6 YEARS)	LOW PRIORITY (7 - 10 YEARS)	TOTALS
Elementary Schools				
Booker T. Washington	$3,767,801	$2,873,098	$2,464,346	$9,105,245
Creekside	$2,918,906	$1,858,347	$3,326,926	$8,104,179
Elephant's Fork	$4,957,676	$2,329,513	$1,009,336	$8,296,525
Hillpoint	$573,021	$3,792,732	$2,328,655	$6,694,408
Kilby Shores	$4,147,687	$2,174,934	$1,135,508	$7,458,129
Mack Benn Jr.	$4,661,709	$2,986,637	$2,004,219	$9,652,565
Nansemond Parkway	$4,046,526	$1,978,274	$2,730,826	$8,755,626
Northern Shores	$1,570,797	$5,903,258	$1,743,698	$9,217,753
Oakland	$2,695,650	$4,659,737	$2,199,245	$9,554,632
Middle Schools				
Forest Glen	$7,764,331	$2,647,027	$1,693,455	$12,104,813
John F Kennedy	$12,763,098	$3,889,128	$2,496,497	$19,148,723
John Yeates	$10,506,110	$5,319,383	$2,226,935	$18,052,428
Kings Fork	$1,993,137	$4,931,656	$10,130,076	$17,054,869
High Schools				
Kings Fork	$5,507,783	$6,461,373	$10,597,967	$22,567,123
Lakeland	$6,664,222	$9,494,077	$6,208,127	$22,366,426
Nansemond River	$8,677,131	$7,284,136	$5,198,527	$21,159,794
Specialty Schools				
Turlington Woods School	$1,859,590	$1,352,809	$833,911	$4,046,310
College & Career Academy @ Pruden	$5,460,836	$3,557,846	$2,629,622	$11,648,304
TOTAL DEFERRED MAINTENANCE COSTS (BY CATEGORY)	***$90,536,011***	***$73,493,965***	***$60,957,876***	***$224,987,852***

NOTE: Deferred maintenance costs shown above reflect only the estimated Hard Construction Costs. No associated Soft Costs (i.e. design costs, testing, inspections, etc.) in accordance with the work is included in the above figures.

Facility Condition Index(s)

A Facility Condition Index (FCI) is utilized to objectively measure and evaluate the current condition of a school in order to make one of two types of comparisons on the condition of that one school with:

- ◊ Other schools within the same school division; or
- ◊ Against the same school at another point in time in the past.

An FCI calculation provides an Owner with the means for comprehensively evaluating and defining the appropriate distribution of available funding to each school within a portfolio based on needs. The primary value of an FCI calculation for a school division, can be identified as:

- ◊ To assist in prioritizing resource allocation decisions amongst the schools in a school division, particularly with limited budgets that are not adequate to address the deferred maintenance in all the schools.
- ◊ To determine the annual reinvestment to prevent further accumulation of deferred maintenance.
- ◊ To assist in tracking continual deterioration of a school or school(s) despite efforts made to reduce the deferred maintenance items.
- ◊ A mechanism to monitor changing conditions over time.
- ◊ A means to demonstrate the level of effort, due diligence and responsible stewardship to various stakeholders.

The measure of the condition of a school (or schools) is typically organized into a five-tiered condition ranking scale, as follows:

Condition Ranking	FCI Rating	Condition Description
Excellent	0.0 – 5.0%	Only normal scheduled maintenance is required.
Good	5.1 – 10.0%	Minimal minor repairs needed; School functions as designed.
Fair	10.1 – 25.0%	Minor and major repairs needed; Some functional challenges.
Poor	25.01 – 50.0%	Major repairs needed; Regular operational and functional challenges; Does not meet all building codes.
Very Poor	>50.0%	Significant major repairs or replacement needed to restore function; Systems unsafe.

The FCI formula can be summarized as the ratio of Total Deferred Maintenance Costs divided into the Total Current School Replacement Cost for each school.

$$\textit{Facility Condition Index (FCI) Value} = \frac{\textit{Total Deferred Maintenance Costs}}{\textit{Total Current School Replacement Cost}}$$

Definitions:

Total Deferred Maintenance Costs represents the total dollar value of deferred maintenance deficiencies identified as "*High Priority*" within the comprehensive facilities condition assessment completed for the school and its integral building systems and equipment. Deferred Maintenance can be defined as unperformed maintenance, repairs and/or replacement of equipment or systems due to a lack of resources or a perceived low priority and deferral of the activity resulting in a progressive deterioration of the school condition or performance. The Total Deferred Maintenance Costs for each school are identified within the Deferred Maintenance Schedule (Section 4) of each report.

Total Current School Replacement Cost represents the total dollar value to replace the school with the cost of replacement defined as the requirement to duplicate the external building envelope and internal building systems and components along with site enhancements to provide the same level of functionality based upon current local construction costs (i.e. labor and material costs). The *Replacement* school is NOT and expanded or reduced version of the existing school, it is a replacement *in kind*. The Total Current School Replacement Cost is calculated by multiplying the current school size in square feet by the current cost per square foot for new building construction for schools of similar type and size based on figures obtained from the Virginia Department of Education (VDOE) for new construction.

It is important to note that the "Total Current School Replacement Cost" signifies a total replacement value of the existing school with a comparable modern school of the same size, with modern systems and components along with site enhancements providing the same level of functionality based upon current local construction costs (i.e. labor and material costs). The "*Replacement"* school is NOT and expanded or reduced version of the existing school, it is a replacement "*in kind"*.

Current School Replacement Costs and Facility Condition Index (FCI) Ratings for each school are provided within Table 3.2 and Table 3.3, respectively.

Table 3.2: Current Replacement Costs By School

SCHOOL NAME	SQUARE FEET	COST PSF (NEW REPLACEMENT)	TOTAL CURRENT REPLACEMENT VALUE
Elementary Schools			
Booker T. Washington	93,000	$ 265.93	$ 24,731,490
Creekside	97,000	$ 265.93	$ 25,795,210
Elephant's Fork	58,800	$ 265.93	$ 15,636,684
Hillpoint	97,000	$ 265.93	$ 25,795,210
Kilby Shores	58,800	$ 265.93	$ 15,636,684
Mack Benn Jr.	86,100	$ 265.93	$ 22,896,573
Nansemond Parkway	58,800	$ 265.93	$ 15,636,684
Northern Shores	72,800	$ 265.93	$ 19,359,704
Oakland	62,000	$ 265.93	$ 16,487,660
Middle Schools			
Forest Glen	77,000	$ 262.91	$ 20,244,070
John F Kennedy	142,400	$ 262.91	$ 37,438,384
John Yeates	105,100	$ 262.91	$ 27,631,841
Kings Fork	187,000	$ 262.91	$ 49,164,170
High Schools			
Kings Fork	275,300	$ 364.43	$ 100,327,579
Lakeland	222,400	$ 364.43	$ 81,049,232
Nansemond River	222,400	$ 364.43	$ 81,049,232
Specialty Schools			
Turlington Woods School	34,300	$ 265.93	$ 9,121,399
College & Career Academy @ Pruden	74,354	$ 364.43	$ 27,096,828
TOTALS / AVERAGES	***2,024,554***	***$ 287.15***	***$ 615,098,634***

NOTE: Current Replacement Value costs shown above reflect the cost to construct the square footage of the existing building in 2020 dollars. This does not represent the cost to design and create a new campus with modern standards and does not account for changes in square footage or site.

Table 3.3: Facility Condition Index (FCI) Ratings By School

SCHOOL NAME	FCI RATING (%)
Elementary Schools	
Booker T. Washington	15.23%
Creekside	11.32%
Elephant's Fork	31.71%
Hillpoint	2.22%
Kilby Shores	26.53%
Mack Benn Jr.	20.36%
Nansemond Parkway	25.88%
Northern Shores	8.11%
Oakland	16.35%
Middle Schools	
Forest Glen	38.35%
John F Kennedy	34.09%
John Yeates	38.02%
Kings Fork	4.05%
High Schools	
Kings Fork	5.49%
Lakeland	8.22%
Nansemond River	10.71%
Specialty Schools	
Turlington Woods School	20.39%
College & Career Academy @ Pruden	20.15%
TOTAL DEFERRED MAINTENANCE COSTS (BY CATEGORY)	***14.72%***

NOTE: Facility Condition Index is calculated by dividing the total "High Priority" Deferred Maintenance by the Current Replacement Cost for each school. Schools with FCI's over 25% considered to be in "Poor" condition unless there are mitigating circumstances.

Section 4

FACILITY OPTIONS RECOMMENDATIONS

Suffolk Public Schools

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SECTION 4 | FACILITY OPTIONS RECOMMENDATIONS

Strategic Considerations

Various data and criteria were utilized in the evaluation and development of the school facility options recommendations. Specific data and criteria evaluated for each school or facility were, as follow;

- Existing Program Capacity
- Projected Utilization
- Housing Data
- Historical & Projected Enrollment
- School Attendance Zones (or Boundaries)
- Bus Route Drive Times
- Accumulated Deferred Maintenance Costs
- Replacement Value
- Condition, Age and Design (Overall)
- Site Capacity & Constraints
- Historical Construction Costs

Many of the criteria noted above and utilized throughout the options development process are defined below under "Key Terms & Definitions".

Key Terms & Definitions

Terms defined below were utilized to develop and prioritize facility options.

Program Capacity	Number of students a school can reasonably accommodate based on its current program, as defined by Suffolk Public Schools.
2019 Actual Enrollment	Actual enrollment for each school in the 2019-20 school year.
2019 Utilization	2019-20 enrollment divided by capacity, or what % of a school facility is full. The target range for utilization is 80%-100%, with schools below 80% considered under-utilized and schools above 100% considered over-utilized.
2024 Projected Enrollment	The number of students projected to attend each school in the 2024-25 school year.
2024 Projected Utilization	2024-25 projected enrollment divided by capacity.

2029 Projected Enrollment	The number of students projected to attend each school in the 2029-30 school year.
2029 Projected Utilization	2029-30 projected enrollment divided by capacity.
Deferred Maintenance	Unperformed maintenance, repairs and/or replacement of equipment or systems due to a lack of resources or a perceived low priority and deferral of the activity resulting in a progressive deterioration of the school condition or performance.
Replacement Value	The cost to construct the square footage of the existing building in today's dollars. This is not the cost to design and create a new campus with modern standards, and does not account for changes in square footage or site.
Category 1 Deferred Maintenance Repairs	High priority (0-3 years) deferred maintenance costs.
Category 2 Projected Deferred Maintenance Repairs	Medium priority (4-6 years) deferred maintenance costs.
Category 3 Projected Deferred Maintenance Repairs	Low priority (7-10 years) deferred maintenance costs.
FCI (Facility Condition Index, based on Category 1 only)	The ratio of total Category 1 deferred maintenance costs divided into the Replacement Value of the school.
Cumulative Projected Index (based on Category 1-3 Total)	The ratio of total Category 1-3 deferred maintenance costs divided into the Replacement Value of the school.

In taking each of these criteria under detailed evaluation, the following high school, middle school and elementary school facility options recommendations were developed for further consideration.

Options Prioritization

Options recommendations were evaluated and prioritized on the significance and impact of the below criteria for each elementary, middle and high school facility option developed.

- Existing School Capacity versus Projected Enrollment
- Rezoning versus No-Rezoning of Boundaries
- Deferred Maintenance Costs versus School Replacement Values
- Estimated Total Project Costs versus Funding Capacity

High School Options

All three comprehensive high schools have been built within the last 30 years and are in good condition. Overall, high schools are utilized within the target range of 80% - 100%. Nansemond River HS was 107% utilized in 2019-20 and projected to reach 121% in the 2024-25 school year. Lakeland HS was 70% utilized in 2019-20 and is projected to decline to 66% in the 2024-25 school year.

Option #	Options	Cost	Description	Benefits	Challenges
A	**Rezone between high schools to balance utilization.**	-	High schools currently utilized at 90%, but Nansemond River HS is 107% and Lakeland is 70%. Rezoning would bring all high schools closer to the division average.	• No capital improvement for new construction	• Rezoning
B	**400 seat addition (incl. new Auxiliary Gym and Cafeteria Expansion) to Nansemond River HS to reduce over-utilization.**	**$14,970,000**	Utilization at Nansemond River HS is projected to reach 120% based on 2024-25 projected enrollment. Building a 400-seat addition will reduce facility utilization to 95%.	• No rezoning	• Cost • Lakeland HS remains under-utilized without rezoning
C	**New 1,500 seat high school on new site**	**$124,731,294**	Building a new HS and rezoning all existing high school boundaries would better balance all high schools across the division.		• Cost • Extensive rezoning

NOTES:

1. *Cost estimates are Total Project Costs, including Soft Costs. These estimates are shown in 2020 dollars and are not escalated.*
2. *Option B - 400 seat addition reduces 2024 projected utilization from 120% to 95% at Nansemond River HS, and total 2024 projected high school utilization from 95% to 87%.*
3. *Option C – New 1,500 seat high school reduces 2024 projected high school utilization from 95% to 72%.*

High School Options - Total Estimated Project Costs

Total Est. Project Costs with Rezoning	**$0**
Total Est. Project Costs with No Rezoning	**$14,970,000**
Total Est. Project Costs with New High School & Rezoning	**$124,731,294**

Middle School Options

Forest Glen, John F. Kennedy, and John Yeates middle schools are all 55 years old with poor FCI scores. Overall, middle schools are utilized within the target range of 80% - 100%, but Forest Glen is at 110% utilization and John Yeates is 70% utilized. Enrollment is projected to decline moderately by 2024-25, before slightly surpassing current levels by 2029-30.

Option #	Options	Cost	Description	Benefits	Challenges
A.1	**Rebuild Forest Glen MS on current site at 600 capacity**	**$34,397,160** incl. demo of FGMS	Current facilities are 55 years old and have poor FCI's. New facilities will address condition needs and provide for modernized learning opportunities.	• New facilities	• Cost • No reduction in operating costs
A.2	**Rebuild John F. Kennedy MS on current site at 600 capacity**	**$35,476,620** incl. demo of JFKMS			
A.3	**Rebuild John Yeates MS on current site at 800 capacity**	**$42,117,126** incl. demo of JYMS			
B.1	**Consolidate Forest Glen MS and John F. Kennedy MS into a new 1,200 seat MS (on Forest Glen site or a new site)**	**$56,166,108** incl. demo of FGMS	Both schools are 55 years old with poor FCI's. Forest Glen is significantly undersized with a 410 capacity. Students from both schools could be served in a new 1,200 seat middle school.	• New facilities • Reduced operating costs	• Cost • Transportation • Potential land acquisition
B.2	**Rebuild John Yeates MS on current site at 800 capacity**	**$42,117,126** incl. demo of JYMS	Current facility is 55 years old and has a poor FCI. New facility will address condition needs and provide for modernized learning opportunities.		

NOTES:

1. *Cost estimates are Total Project Costs, including Soft Costs. These estimates are shown in 2020 dollars and are not escalated.*
2. *Option A.1 & A.2 - Adds a combined 155 middle school seats and reduces 2024 projected middle school utilization from 83% to 80%.*
3. *Option B.1, B.2 & B.3 - Adds a combined 155 middle school seats and reduces 2024 projected middle school utilization from 83% to 80%.*

Middle School Options - Total Estimated Project Costs

Total Est. Project Costs with No Rezoning (A.1, A.2 & A.3)	**$111,990,546**
Total Est. Project Costs with Rezoning (B.1 & B.2)	**$98,283,234**

Elementary School Options

Overall, elementary schools are currently utilized within the target range of 80% - 100% and projected to remain within this range over the next 10 years. There are currently 4 schools above 100% utilization, and 6 schools projected to be above 100% by 2024-25. Elephant's Fork, Kilby Shores, and Nansemond Parkway are all 41 years old with poor FCI's.

Option #	Options	Cost	Description	Benefits	Challenges
A.1	**Rebuild Kilby Shores at 1,000 capacity. Rezone portions of Pioneer and majority of Elephant's Fork to new Kilby Shores. Repurpose Elephant's Fork**	**$38,306,700** incl. demo of KSES	Elephant's Fork and Kilby Shores are both 41 years old with poor FCI's. A rebuilt Kilby Shores at 1,000 capacity could accommodate the majority of Elephant's Fork students and some projected growth at Pioneer ES. Some EFES students would be rezoned to Hillpoint and Oakland.	• New facility • Reduced operating costs	• Cost • Transportation
A.2	**Rebuild Nansemond Parkway at 800 capacity. Rezone portion of Florence Bowser ES to new Nansemond Parkway ES to account for future growth**	**$30,839,400** incl. demo of NPES	Current facility is 41 years old and has a poor FCI. A new facility will address condition needs and provide for modernized learning opportunities. Will alleviate projected over-utilization at Florence Bowser.	• New facility	• Cost
A.3	**200 seat addition to Northern Shores ES (incl. Cafeteria Expansion)**	**$4,677,000**		• Reduces facility over-utilization	
A.4	**400 seat addition to Northern Shores ES (incl. Cafeteria Expansion)**	**$8,997,000**		• Reduces facility over-utilization	
B.1	**Rebuild Elephant's Fork at 750 capacity. Rebuild Kilby Shores and Nansemond Pkwy at 600 capacity each**	**$87,365,763** incl. demo of EFES, KSES and NPES	All three schools are 41 years old with poor FCI's. New facilities would address condition needs and provide for modernized learning opportunities.	• New facilities • No rezoning	• Cost • No operational cost savings
B.2	**200 seat addition to Florence Bowser and Northern Shores (incl. cafeteria expansion), 100 seat addition to Pioneer**	**$10,362,000**	Additions to elementary schools will address projected over-utilization	• Addresses projected over-utilization	• Cost
B.3	**200 seat addition to Florence Bowser, 400 seat addition to Northern Shores (incl. cafeteria expansion), 100 seat addition to Pioneer**	**$14,682,000**	Additions to elementary schools will address projected over-utilization	• Addresses projected over-utilization	• Cost

NOTES:

1. *Cost estimates are Total Project Costs, including Soft Costs. These estimates are shown in 2020 dollars and are not escalated.*
2. *Option A.1, A.2 & A.3 - Adds a combined 504 elementary school seats and reduces 2024 projected elementary school utilization from 95% to 89%.*
3. *Option A.1, A.2 & A.4 - Adds a combined 704 elementary school seats and reduces 2024 projected elementary school utilization from 95% to 87%.*
4. *Option B.1 & B.2 - Adds a combined 804 elementary school seats and reduces 2024 projected elementary school utilization from 95% to 86%.*
5. *Option B.1 & B.3 - Adds a combined 1,004 elementary school seats and reduces 2024 projected elementary school utilization from 95% to 84%.*

Elementary School Options - Total Estimated Project Costs

Total Est. Project Costs with Rezoning (A.1, A.2 & A.3)	**$73,823,100**
Total Est. Project Costs with Rezoning (A.1, A.2 & A.4)	**$78,143,100**
Total Est. Project Costs with No Rezoning (B.1 & B.2)	**$97,727,763**
Total Est. Project Costs with No Rezoning (B.1 & B.3)	**$102,047,763**

Section 5

SCHOOL CAPACITY AND COST METHODOLOGY (UDO RECOMMENDATIONS)

Suffolk Public Schools

Every Child a Star... Together We Help Them Shine!

SECTION 5 | SCHOOL CAPACITY & COST METHODOLOGY

School Capacity & Basis for Square Footage Per Student

The Virginia Department of Education determines the capacity of a school using one of three standard formulas (see Exhibits A, B and C, Virginia). Capacity is determined by either the Standards of Quality (SOQ) Maximum Capacity, which includes the maximum number of students per teaching station recommended by the Department of Education, or the Divisional Operating Capacity which is determined by a Division's School Board and is set as a Division's own unique standards for students per teaching station. Often the Divisional Operating Capacity teacher/pupil rations are lower than the SOQ Maximum to enhance learning or due to special program requirements.

As noted above, special program requirements can have an impact on both school size, due to unique spatial needs, and capacity. Some schools have large auditoriums where others have small or no auditoriums. Some schools have large gyms and auxiliary gyms where others may have non-competitive gyms with limited bleachers and no auxiliary gym. Some schools may have heavy Career and Technical Education offerings, where others rely on regional facilities for CTE courses. Additionally, some schools are designed with core spaces (i.e. cafeteria, kitchen, library, administration) that are large enough to support future classroom additions. The square foot per student in these schools will be high until the classroom additions have been built in some future date. The point of these comparisons is that schools vary in size due to many factors, which can affect the square foot per student.

Variations in School Size

Since a school's capacity can be determined through multiple methods and is affected by varying programs and building features, each school's capacity is uniquely determined. Accordingly, we recommend a general rule of thumb be applied to determine Level of Service requirements. This method simplifies formulas and creates a standardization that can be broadly applied. Our recommendation is to use a square foot per student criteria based on the three major school categories – Elementary School, Middle School and High School (see Exhibit D for Square Foot Per Student by School Type and Size/Capacity chart for additional detail). The basis for our recommendation is as follows:

> Elementary Schools – For our square foot per student estimates, we have used average square foot per student figures over the last 5 years in the State of Virginia as provided by the Virginia Department of Education (128 sf/student avg.). There is consistency in these levels leading to our recommendation to use **125 sf per student** at the Elementary School level for Level of Service standards for schools ranging in size from 750 to 1050 students. For elementary schools designed to a student capacity less than 750 students, use of **145 sf per student** is recommended resulting from a reduced efficiency factor. A key factor in rounding off low was Bowser Elementary School at 117 sf/student. However, Bowser was an exceptionally large elementary school at a 1,000-student capacity, driving

up the efficiency. Pioneer Elementary School, by comparison, was at 135 sf/student for a 628-student capacity.

Middle Schools - For our square foot per student estimates, we have used average square foot per student figures over the last 5 years in the State of Virginia as provided by the Virginia Department of Education (146 sf/student). There is consistency in these levels leading to our recommendation of **145 sf per student** at the Middle School level for Level of Service standards for schools ranging in size from 1050 to 1350 students. As we reduce the total student capacity, an increase in square footage per student should be factored resulting from the decreased efficiency. For middle schools designed to a student capacity between 750 and 1050 students, we recommend the use of **160 sf per student**. For middle schools designed to a student capacity less than 750 students, we recommend the use of **175 sf per student**.

High Schools – The Virginia Department of Education data was also used for consideration of square foot per student at the high school level. However, including all the public high schools built since 2012, the numbers vary widely from a low of 129 sf/student to a high of 199 sf/student. As noted in the commentary above, this school type varies greatly due to program offerings and specialty spaces. Our assumptions here are based on a new high school in Suffolk including typical offerings for CTE, Performing and Visual Arts, Collaborative Learning through extended academic space, full auditorium and gymnasium spaces inclusive of three teaching stations. Accordingly, we have recommended **150 sf per student** for High Schools with a student capacity exceeding 1,650 students as a reasonable estimation of size. For high schools designed to a student capacity between 1350 and 1650 students, use of **175 sf per student** is recommended resulting from a reduced efficiency factor. King's Fork High School was the last local school built in Suffolk at about 155 sf/student and completed in 2004.

School Construction Costs

School construction costs, and the advanced determination thereof, is not an exact science. However, through reasonable assumptions based on relevant data, approximate costs can be determined within reasonable ranges of accuracy for planning purposes. The estimated costs provided herein are based on actual public school construction cost data a provided by the Department of Education's website through this link: VDOE: School Construction Cost Data (virginia.gov)

It is important to note that construction costs included in the VDOE data are construction "hard costs" ("bricks and mortar") and do not include the Total Project Cost, which includes construction contingencies and miscellaneous "soft costs" such as professional services, surveys, soil borings, code-required special inspections, furniture, equipment and any other non-construction related costs. Construction contingencies are necessary to cover unforeseen additional costs such as poor soils, environmental discoveries, owner-requested changes and the like.

We have developed a formula for averaging school construction costs over a three-year cycle as a basis for determining approximate school costs in 2020 dollars. Separating each school type into the standard Elementary, Middle and High school levels, we averaged the last three years of reported construction bids for publicly bid schools. As a way to "weight" schools and give more credence to locally and regionally built schools, we multiplied the local schools (those built in the City of Suffolk) by a factor of 5. We weighted the regionally built schools (those built in the Hampton Roads area) by a factor of 3. All other schools outside of the Hampton Roads region were not weighted and given a factor of 1. We then averaged all the schools built in the last three years by category with the weighting factors applied and used the resulting cost for our recommendation.

Please note the following points about our cost estimates:

- To reach the full cost of a project, we used common rules of thumb for construction contingencies and soft costs. These are normally around 5% and 20% of the construction hard costs respectively.
- Exceptional land acquisition costs were not included.
- Operational costs (building energy and staffing expenses) were not included.
- Escalation beyond 2020 has not been included.
- Note also that there is and will be exceptional circumstances in which local or regional data is not available within the 3-year cycle due to no new schools being constructed. In those cases, we reach back up to 5 years for a local or regional school example and then escalate that school's cost at 5% per year to 2020. No local or regional school cost will be used if none have been constructed within the last 5 years.
- If school additions are considered, the same $/sf should be used for general planning purposes unless a detailed estimate is provided. Note however, that smaller school additions typically are higher cost per square foot than new buildings due to 1) economy of scale, 2) building connection requirements, and 3) occupied facility complications.

The Project Cost Table showing our construction cost calculation formula is included herein under Exhibit D. These costs are intended to be used for 2020-21 Capital Improvement Planning and should be periodically updated to include new school construction cost data and escalation factors as applicable to market conditions.

Cost Model Options

Various cost model option calculations are provided in Exhibit F providing estimated total project costs for new schools ranging in capacity from 550 to 1500 students to existing school additions ranging in capacity from 100 to 400 students to the demolition of existing school buildings on existing school sites to provide space for new school construction.

Exhibit A
Elementary School Capacity Worksheet

VIRGINIA ELEMENTARY SCHOOL CAPACITY WORKSHEET

Division:
School:
Site Size:

Plan Control No.:
School Project No.:

Permanent Spaces	No. of Teaching Stations	SOQ Maximum Capacity: Per Teaching Station	SOQ Maximum Capacity: Capacity	Division Operating Capacity: Per Teaching Station	Division Operating Capacity: Capacity
Pre-Kindergarten Classrooms:		x 18	0	x	0
Kindergarten Classrooms:		x 24	0	x	0
First - Third Grade Classrooms:		x 24	0	x	0
Fourth - Fifth Grade Classrooms:		x 25	0	x	0
Self-Contained Exceptional Children Classrooms:		x 8	0	x	0
Other (specify) _____		x	0	x	0
Non Capacity Spaces					
Art Classrooms:					
Music Classrooms:					
Resource (Pull-Out Program) Classrooms:					
Gym - Multipurpose Rooms:					
Science/Computer rooms:					
Other (Specify) _____					
TOTAL	0		Maximum Capacity: 0		Maximum Capacity: 0
			Additional Capacity		Additional Capacity
Relocatable Classrooms:		x 25	0	x	0

Exhibit B
Middle School Capacity Worksheet

VIRGINIA MIDDLE SCHOOL CAPACITY WORKSHEET

Division:
School:
Site Size:

Plan Control No.:
School Project No.:

Permanent Spaces	No. of Teaching Stations	SOQ Maximum Capacity: Per Teaching Station	SOQ Maximum Capacity: Capacity	Division Operating Capacity: Per Teaching Station	Division Operating Capacity: Capacity
Language Arts:		x 24	0	x	0
Homeroom Classrooms: (Social Studies, Math, or Science)		x 25	0	x	0
Self-Contained Exceptional Children Classrooms:		x 8	0	x	0
Other (specify) _____		x	0	x	0
Non Capacity Spaces					
Art Classrooms:					
Chorus/Band/Music Classrooms:					
Resource (Pull-Out Program) Classrooms:					
PE/Gym/Health/Multipurpose Rooms:					
Exploratory Career Classrooms/Labs:					
Computer Rooms:					
TOTAL	0		Maximum Capacity: 0		Maximum Capacity: 0
			Additional Capacity:		Additional Capacity:
Relocatable Classrooms:		x 25	0	x	0

Exhibit C
High School Capacity Worksheet

VIRGINIA HIGH SCHOOL CAPACITY WORKSHEET

Division:
School:
Site Size:

Plan Control No.:
School Project No.:

Permanent Spaces	No. of Teaching Stations	SOQ Maximum Capacity: Per Teaching Station	SOQ Maximum Capacity: Capacity	Division Operating Capacity: Per Teaching Station	Division Operating Capacity: Capacity
Academic Classrooms: (Foreign Language, Social Studies, Math, Science)		x 25	0	x	0
English Classrooms:		x 24	0	x	0
Arts Education Classrooms: (Visual Arts, Drama)		x 24	0	x	0
Business/Office Education Classrooms: (Typing/Keyboard, Computer App., Business, etc)		x 25	0	x	0
Music Classrooms: (Band, Chorus, Music)		x 30	0	x	0
Health Classrooms:		x 30	0	x	0
Main Gym: (Counts as 2 Teaching Stations)		x 30	0	x	0
Auxiliary Gym: (Counts as 1 Teaching Station)		x 25	0	x	0
Service/Marketing Classrooms/Labs: (Consumer/Health Occup., Teen Living, Marketing)		x 20	0	x	0
Vocational Education Lab: (Do not count associated classrooms)		x 20	0	x	0
Self-Contained Exceptional Student Classrooms:		x 8	0	x	0
Other (specify) _____		x	0	x	0

Non Capacity Spaces					
Resource (Pull-Out Programs) Classrooms:			Maximum Capacity: 0		
In-school Susp., Extra-Curric. Rooms:					
Weight, Wrestling Rooms:			Maximum Operating Capacity: 0		Operating Capacity: 0
Classrooms use with a Vocational Lab:					
TOTAL	0	x 90%			
Relocatable Classrooms:		x 25	Additional Capacity: 0	x	Additional Capacity: 0

Exhibit D
Square Foot Per Student by School Type and Size/Capacity

Square Foot Per Student by School Type and Size/Capacity					
School Type	**Range of School Sizes/Numbers of Students**				
	Up to 750	750 to 1,050	1,050 to 1,350	1,350 to 1,650	1,650 and abv.
Elementary School	145	125	Note 1	Note 1	Note 1
Middle School	175	160	145	Note 1	Note 1
High School	Note 1	Note 1	Note 1	175	150
Note 1: This school size not recommended by Suffolk Public Schools. Note 2: Variations in school type such as K-8 schools or alternative schools will be case by case based on grade levels included.					

Exhibit E
Project Cost Table

School	Year Bid (2018-2021)	Location in Virginia	Local Cost/SF*	Weight Factor	Regional Cost/SF*	Weight Factor	State Cost/*	Weight Factor	Weighted Average	Construction Contingency (5%)	Construction Hard Cost Total	Soft Costs (20% of Constr. $)	Total Project Cost Per Square Foot
Elementary Schools													
Loudoun ES - 29	2020	Loudoun Co.					$291.39						
Loudoun ES - 23	2020	Loudoun Co.					$301.93						
Reed Site ES	2019	Arlington Co.					$382.16						
New Colonial ES	2019	Chesterfield Co.					$284.59						
Matoacal ES	2019	Chesterfield Co.					$273.21						
Reams ES	2019	Chesterfield Co.					$266.67						
Crestwood ES	2019	Chesterfield Co.					$254.28						
Ettrick ES	2019	Chesterfield Co.					$256.12						
Greene ES	2019	Richmond					$311.44						
G. Mason ES	2019	Richmond					$347.19						
Northwest Co. ES	2019	Fairfax Co.					$256.31						
Harrowgate ES	2019	Chesterfield Co.					$236.42						
Thoroughgood ES	2018	Va Beach			$297.98								
Old Hundred	2018	Chesterfield Co.					$244.89						
12th ES	2018	Frederick Co.					$278.97						
ES 31	2018	Loudoun Co.					$383.62						
Parkway ES	2018	Prince William Co.					$271.37						
Fallon Park ES	2018	Roanoke City					$192.16						
Fleet ES	2018	Arlington Co.					$279.16						
Bowser ES	2016**	Suffolk	$220.29										
Average			**$220.29**	**5**	**$297.98**	**3**	**$283.99**	**1**	**$253.26**	**$12.66**	**$265.93**	**$50.65**	**$316.58**
Middle Schools													
River City MS	2019	Richmond					$312.87						
Aylor MS	2019	Frederick Co.					$273.64						
Manchester MS	2018	Chesterfield Co.					$287.58						
Potomac Shores MS	2018	Prince William Co.					$265.08						
Pulaski Co. MS	2018	Pulaski Co.					$247.16						
Princess Anne MS	2018	Va Beach			$251.48								
Fred Cherry MS	2016**	Suffolk	$244.37		$251.48								
Average			**$244.37**	**5**	**$251.48**	**3**	**$277.27**	**1**	**$250.40**	**$12.52**	**$262.91**	**$50.08**	**$312.99**
High Schools													
Tucker HS	2019	Henrico Co.					$349.69						
Highland Springs HS	2019	Henrico Co.					$370.80						
Washington & Lee HS	2019	Westmoreland Co.					$329.74						
Lightridge HS	2018	Loudoun Co.					$361.17						
13th HS	2018	Prince William Co.					$323.99						
Average				**5**		**3**	**$347.08**	**1**	**$347.08**	**$17.35**	**$364.43**	**$69.42**	**$433.85**
Alternative/Multi-Level Schools													
Mecklenburg 6-12 MS/HS	2019	Mecklenburg Co.	$0.00		$0.00		$355.98						
Wilson School 6-12	2018	Arlington Co.	$0.00		$0.00		$448.18						
School 3	2020		$0.00		$0.00								
Average			**$0.00**	**5**	**$0.00**	**3**	**$402.08**	**1**	**$44.68**	**$2.23**	**$46.91**	**$8.94**	**$55.84**

*Costs are for building and site costs but exclude construction contingencies and soft costs. **With 5% escalation per year to current.

Local - Within the City of Suffolk. If none in 3 year cycle, nearest year with escalation to be used. (See Bowser below) No school over 5 years old used.
Regional - Generally, Hampton Roads (Chesapeake, Va Beach, Norfolk, Newport News, Portsmouth, Hampton, Isle of Wight, Southampton
State - All areas outside of Local and Regional

Bowser = 181.23 x 1.05 x 1.05 x 1.05 x 1.05 = 220.29
Cherry = 201.05 x 1.05 x 1.05 x 1.05 x 1.05 = $244.37

Exhibit F
Cost Model Options

COST MODEL PROJECTS	CAPACITY	STUDENT (SF)	BUILDING / ADDITION (SF)	RENOVATION ALLOWANCE	CONSTRUCTION COST (PSF)	ESTIMATED TOTAL CONSTRUCTION COST	ESTIMATED TOTAL SOFT COSTS (20%)	ESTIMATED TOTAL PROJECT COSTS	COMMENTS
Elementary Schools									
Northern Shores ES Addition	100	65	6,500	$ 297,500	$ 225.00	$ 1,760,000	$ 352,000	$ 2,112,000	
Northern Shores ES Addition	200	80	16,000	$ 297,500	$ 225.00	$ 3,897,500	$ 779,500	$ 4,677,000	
Northern Shores ES Addition	400	80	32,000	$ 297,500	$ 225.00	$ 7,497,500	$ 1,499,500	$ 8,997,000	
Pioneer ES Addition	100	65	6,500	$ 175,000	$ 225.00	$ 1,637,500	$ 327,500	$ 1,965,000	
Florence Bowser ES Addition	200	65	13,000	$ 175,000	$ 225.00	$ 3,100,000	$ 620,000	$ 3,720,000	
New 550 Student Elementary School	550	145	79,750	$ -	$ 248.91	$ 19,850,573	$ 3,970,115	$ 23,820,687	
New 600 Student Elementary School	600	145	87,000	$ -	$ 248.91	$ 21,655,170	$ 4,331,034	$ 25,986,204	
New 750 Student Elementary School	750	145	108,750	$ -	$ 248.91	$ 27,068,963	$ 5,413,793	$ 32,482,755	
New 800 Student Elementary School	800	125	100,000	$ -	$ 248.91	$ 24,891,000	$ 4,978,200	$ 29,869,200	
New 1000 Student Elementary School	1,000	125	125,000	$ -	$ 248.91	$ 31,113,750	$ 6,222,750	$ 37,336,500	
Demolition of Kilby Shores ES			58,800	$ -	$ 15.00	$ 882,000	$ 88,200	$ 970,200	*Soft Costs (10% for Demolition)*
Demolition of Nansemond Parkway ES			58,800	$ -	$ 15.00	$ 882,000	$ 88,200	$ 970,200	*Soft Costs (10% for Demolition)*
Demolition of Elephant's Fork ES			58,800	$ -	$ 15.00	$ 882,000	$ 88,200	$ 970,200	*Soft Costs (10% for Demolition)*
Middle Schools									
New 600 Student Middle School	600	175	105,000	$ -	$ 262.91	$ 27,605,550	$ 5,521,110	$ 33,126,660	
New 700 Student Middle School	700	175	122,500	$ -	$ 262.91	$ 32,206,475	$ 6,441,295	$ 38,647,770	
New 800 Student Middle School	800	160	128,000	$ -	$ 262.91	$ 33,652,480	$ 6,730,496	$ 40,382,976	
New 1000 Student Middle School	1,000	160	160,000	$ -	$ 262.91	$ 42,065,600	$ 8,413,120	$ 50,478,720	
New 1200 Student K-8 Middle School	1,200	145	174,000	$ -	$ 262.91	$ 45,746,340	$ 9,149,268	$ 54,895,608	
Demolition of Forest Glen MS			77,000	$ -	$ 15.00	$ 1,155,000	$ 115,500	$ 1,270,500	*Soft Costs (10% for Demolition)*
Demolition of John F Kennedy MS			142,400	$ -	$ 15.00	$ 2,136,000	$ 213,600	$ 2,349,600	*Soft Costs (10% for Demolition)*
Demolition of John Yeates MS			105,100	$ -	$ 15.00	$ 1,576,500	$ 157,650	$ 1,734,150	*Soft Costs (10% for Demolition)*
High Schools									
Nansemond River HS Add./Aux Gym/Cafe.	400	80	41,000	$ 175,000	$ 300.00	$ 12,475,000	$ 2,495,000	$ 14,970,000	*Renov. Allow. reflects Est. Land*
New 1500 Student High School	1,500	175	271,500	$ 5,000,000	$ 364.43	$ 103,942,745	$ 20,788,549	$ 124,731,294	*Acquisition Costs*
Combined Schools									
New 800 Student Elementary School	800	125	100,000	$ -	$ 248.91	$ 24,891,000	$ 4,978,200	$ 29,869,200	
New 400 Student Middle School	400	175	70,000	$ -	$ 262.91	$ 18,403,700	$ 3,680,740	$ 22,084,440	
Combined K-8 School Total	1,200	133	170,000	$ -	$ -	$ 43,294,700	$ 8,658,940	$ 51,953,640	

NOTES:
1. These are preliminary numbers only and not detailed cost model estiamtes.
2. Preliminary construction costs reflect historical data accessible through Calendar Year 2020 and represent construction costs in 2020 dollars.
3. No escalation for future years has been applied and will vary dependent upon the economy.
4. Preliminary numbers do not reflect additional costs associated with LEED Certification.

Section 6

APPENDIX

Suffolk Public Schools
Every Child a Star... Together We Help Them Shine!

SECTION 6 | APPENDIX

Joint Task Force Meeting Presentation, February 5, 2020 *(Under Separate Cover)*

Cash Proffer Study Review Presentation, July 31, 2020 *(Under Separate Cover)*

Enrollment Projections Report By School of Attendance, August 4, 2020 *(Under Separate Cover)*

Joint City Council & School Board Presentation, February 3, 2021 *(Under Separate Cover)*

Community Development Presentation, February 25, 2021 *(Under Separate Cover)*

School Construction Discussion, April 13, 2021 *(Under Separate Cover)*

SUFFOLK PUBLIC SCHOOLS

COOPERATIVE STRATEGIES
COMPLETE FINANCIAL & DEMOGRAPHIC PLANNING FOR EDUCATION

RRMM ARCHITECTS

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CITY of SUFFOLK, VIRGINIA