

**CARROLL COUNTY PUBLIC SCHOOLS
REDISTRICTING AND SCHOOL CLOSURE COMMITTEE:
REPORT TO THE BOARD OF EDUCATION**
September 5, 2018

EXECUTIVE SUMMARY

I. THE REDISTRICTING AND SCHOOL CLOSURE COMMITTEE

OVERVIEW

The Board of Education of Carroll County formed the Redistricting and School Closure Committee (RSCC) in March 2018 to continue its efforts to identify efficiencies and improvements in the area of facility management. A number of conditions prompted this undertaking: declines in the Carroll County Public School (CCPS) student enrollments since 2005; an aging building plant, requiring increasing resources to maintain schools in functional order; programmatic challenges, particularly in Career and Technology Education, in the special programs, and likely in prekindergarten in the near future; and an economic situation that, while stable, does not forecast the types of business investments that will generate significant increases in property taxes or other revenues.

There are, however, promising signs of change. Overall enrollments stabilized in the 2017-2018 school year, and kindergarten enrollments are projected to increase between 2019 and 2027. The infrastructure is well maintained, all of the schools are functional, and none jeopardizes the safety of its occupants. Systemwide, facility utilization is currently at a reasonable level of 87% of capacity, with no school currently above 102% or below 70%.

The main concern is therefore financial. State funding has declined with enrollment, and internal and external restrictions constrain the revenues available from real property and other sources. Previous planning efforts pointed toward school closures to achieve economies and efficiencies: in 2013, MGT of America recommended consolidation of two schools, and in 2015 the work of the Boundary Adjustment Committee (BAC) led to the closing of three schools, with savings estimated at \$5 million per year. With continuing pressure on the operating budget, it is reasonable that the Board of Education would look to two large areas of fixed costs, facilities and transportation, for potential additional savings.

The RSCC, however, found that its purpose was unavoidably broader: to consider the full spectrum of facility options in order to support the fundamental mission of the school system, the education of students. From this perspective, it has developed five Planning Options, four addressing the long-deferred condition of the school facilities and one involving redistricting, without closure of a school facility.

BASIC FINDINGS

Through deliberations, research, and community input, the RSCC came to three fundamental findings:

1. *East Middle School*

The condition of Westminster East Middle School is an unavoidable driver of all planning concerns in Carroll County. This facility, with a Facility Condition Index (FCI) of 78.71%, has the highest priority in the jurisdiction for capital renewal. Major deficiencies include HVAC and other building systems well past their useful life, inappropriate instructional spaces, a lack of accessibility for the disabled, and the absence of vertical conveyance systems such as elevators and lifts. A decision must be made about the facility within the next few years: it must be upgraded and renovated to a substantial extent, it must be replaced, or it must be abandoned as an educational facility.

Although eliminating the school from the inventory might appear to be a logical response under these circumstances, the RSCC found after examining four options for closing East Middle School and using available capacity in other schools that all are likely to have detrimental impacts on the educational program, on existing communities, or on student ride times. There is also considerable uncertainty as

to whether these options would actually result in financial savings for the Board of Education, since transportation costs would probably increase. The Committee considered instead three alternative capital solutions for East Middle School; all involve some substantial level of capital outlay, recognized as an inescapable cost of ownership in the absence of other alternatives.

2. Redistricting and School Closure.

The Committee found that there is no compelling argument at this time to undertake comprehensive redistricting on a countywide basis or to close a school facility. The RSCC asked the question, *What will be achieved by redistricting or closing a school?* This simple question helped to orient the Committee's complex discussions on the merits and demerits of redistricting and school closure.

- *Redistricting.* There are at present no extreme inequities in the utilization or the physical condition of the CCPS facilities that suggest that comprehensive redistricting is needed. There are educational and administrative consequences to the under- or over-utilization of some schools, but it is not apparent that comprehensive redistricting would resolve these issues, as opposed to spot boundary changes under the Board's current annual review process. The single largest factor that might lead to operational savings through redistricting would be improved transportation efficiencies. However, without examining a number of alternative redistricting options, it cannot be said whether the costs of transportation would decrease, increase, or remain the same.

Given the potential detriments of redistricting, the charge of the Board of Education that "comprehensive redistricting should only be undertaken if in conjunction [with] a comprehensive solution that includes school closure, grade reconfiguration, or any other options that reduces operational cost by increasing efficiencies", and the uncertainty of the financial outcomes, the RSCC declined to commit CCPS staff to the lengthy, time-consuming effort that would be required to analyze a large number of possible redistricting alternatives (at a time of year when staff were also preparing for the opening of school). The RSCC does, however, indicate in Planning Option 4 that future redistricting without school closure should be considered by the Board if circumstances change, or if the Board clearly establishes the goals to be achieved by redistricting: balancing of utilizations, strengthening of educational offerings in high schools, reduction of ride times, or other factors to be determined.

- *School Closure.* There are wide disparities in the age and physical condition of school facilities in Carroll County, but at present no school is assessed as being harmful or dangerous to its occupants. Closure would have positive impacts on the operating expenses of the school system through the reduction of utilities and maintenance, but the detriments would also be significant: disruption to educational careers, to communities, and to feeder patterns, and probable increases in ride distances and times for many students (and therefore in transportation costs).

Most important, uncertainty about future enrollments suggests the need for the school system to retain the flexibility to respond to a variety of new space capacity as well as educational demands. In combination with the absence of any obvious candidate school, it was this assessment that led the RSCC to exclude school closures from among the Planning Options that are presented for consideration by the Board of Education.

Capital Investment.

There is a need for a substantially increased capital investment in CCPS facilities. The average annual capital outlay for the decade of FY 2010 to FY 2019 was \$13.2 million. However, an annual outlay of approximately \$44.4 million is needed to maintain the current condition of the facilities, as measured by the FCI. To improve the overall FCI by 10% over ten years will require an annual outlay of approximately \$55 million. The capital budget is thus 30% of the outlay required to keep the CCPS facilities in their current working order, and 25% of the outlay needed to improve them. These figures do not capture deficiencies in the educational setting that are apparent in the older school facilities. If this deficiency in funding continues, the Board of Education can expect that facilities will operate

inefficiently, there will continue to be misalignments between educational programs and the facilities that are intended to support them, aging building systems may occasionally fail, and a number of facilities will not meet the standards of accessibility that are expected of today's facilities.

II. BACKGROUND FACTORS

CARROLL COUNTY, MARYLAND

Due to its location and a combination of transportation and land use factors, it is unlikely that Carroll County will experience the population or economic growth of neighboring Baltimore, Howard, and Frederick Counties. The county has a limited number of large employers, so that 55% or more of workers commute outside the county on a daily basis. Without an infusion of new commercial investors, the tax base is likely to remain restricted.

The population in general is aging. While the proportion of children and younger adults who contribute to the school system is projected to remain stable at about 52% of the total population, the proportion of residents older than 64, likely including numbers of retirees, will increase from 15.7% of the total population in 2015 to 26% of the total population in 2040. The total population of this oldest cohort will increase by a very noticeable 86%. This change could have important political consequences for the financial support that Carroll County Public Schools can expect to receive in the longer-term future.

CARROLL COUNTY PUBLIC SCHOOLS

Enrollments, Current and Projected

Carroll County Public Schools is the 10th largest school system in Maryland. From a high figure of 28,914 students in 2007, public school enrollment decreased to 25,256 in 2016. However, the enrollments may have stabilized in 2017, and live birth information from 2013 through 2016 encourages the view that modest growth will occur in the kindergarten enrollment, with long term effects on the elementary, middle, and then high school enrollments.

School Capacity and Utilization

The school system has ample capacity to house a projected growth in student enrollment. Facility utilization has improved with the closure of three schools, and the overall trend is toward fewer schools with high utilization, a larger number of schools with low utilization, as well as a larger number of schools that fall within the Board of Education utilization parameter (item g) on page iv; see also Table 2). However, the practice of including special program students within the headcount of the general student population may skew facility usage calculations incorrectly toward underutilization; in part, this derives from policies of the State of Maryland that do not fully recognize the spatial requirements of special education programs or the impact inclusion programs have on the utilization of regular classroom space. Thus the view that there is and will be adequate capacity should be continually measured against the actual usage of spaces in each school, particularly those that house both regular and special programs.

While some high school electives may not be offered in every school due to the small size of the student body, there is no school in the system that is incapable of delivering an adequate educational program because of over-crowding or underutilization. There are marked differences in utilization between different regions in the county. The southern tier and the northeast corner of the county have a number of moderately over-utilized schools, while the northwest corner shows underutilization in all of its schools. Projections to 2022 indicate that these trends are likely to continue. There are worrisome indications for the future: by 2022, Freedom Elementary School is projected to be at 112% of capacity, a decidedly over-crowded situation; meanwhile, Francis Scott Key and South Carroll High Schools, currently at 73% and 78% utilization respectively, are projected to be at 69% and 65% utilization. These discrepancies among school utilizations can be addressed through the current annual process without recourse to a countywide comprehensive redistricting effort.

III. BOARD OF EDUCATION GOALS, PARAMETERS, AND CONSIDERATIONS

The Board of Education established a number of Goals, Parameters, and Considerations to guide the work of the RSCC. Among the Parameters that most immediately guided the RSCC in selecting the Planning Options were:

- c) Improve or maintain the overall Facility Condition Index (FCI);
- d) Maintain the integrity of CCPS academic programs;
- e) Preserve the availability of regional special programs for students;
- g) Adhere to the following aggregate and level facility utilizations;
 - 1) System-wide - 87%-95%
 - 2) Elementary and Middle - 87% - 95%
 - 3) High - 80% - 95%
- h) Reject from consideration closure of any isolated schools that serve as a community hub. For example those schools without another school (elementary, middle or high) within a 5.0 mile radius

The RSCC found that Parameter h) regarding isolated community schools did not have application to its research, because all but two elementary schools in Carroll County have at least one other school within a 5 mile radius. The Committee agreed that the impacts from closing a high school would likely be so widespread and disruptive that no further consideration should be given to such a closure at this time. The Committee also agreed, in support of Board of Education parameter e), to exclude from consideration any elementary school that housed a regional special program.

The Boundaries and School Closures Subcommittee found that it would be possible to achieve the Board's systemwide utilization parameter if up to two elementary schools were closed. The Board parameter would not be met if a middle school were closed, and the results for the high schools were inconclusive. The algorithm developed by the Subcommittee pointed toward Sandymount Elementary as the school most favorable for closure. However, preliminary studies on the home-to-school distances that would result showed that there were likely to be very significant increases in transportation routing and ride times for the Sandymount students (Maps 2a and 2b). Based on these findings, the Subcommittee concluded that, given that there are not currently any compelling reasons to close a school, no recommendation for closure would be presented to the Board.

IV. THE PLANNING PROCESS

The RSCC was charged by the Board of Education with developing a facility utilization plan that would be consistent with sound educational practice, consider the impact of facilities on educational programs, operate within budget requirements, and align with County Government's long-term strategic plan. While honoring these goals, the RSCC understood the term "facilities utilization plan" in the broad sense, i.e., a plan to show how Carroll County Public Schools could make best use of its facilities. The mission statement adopted by the Committee reflects this understanding:

The mission of the Redistricting and School Closure Committee is to recommend options that are consistent with a stable facility management process that supports instructional excellence, high quality, modern and equitable school facilities, operational efficiencies, and the flexibility to respond to changes in student enrollments and demographics without loss of educational quality.

The Committee adopted a careful, deliberative planning methodology intended to promote objectivity in its decision-making. The Committee followed six steps to arrive at the five Planning Options that it presents in this report:

1. **Information Gathering:** Informational sessions were held in March and April to provide the RSCC members with background information on Carroll County Public Schools, including

student enrollments, school utilization, the educational programs, the middle school model, capital planning and school design, and the costs of ownership; and on Carroll County, including its demographic and development trends, its fiscal situation, and its economic development prospects (Section IV.1).

2. **Research:** Two subcommittees were formed, one to examine educational models and grade configuration, the other to study school boundaries and closures. The subcommittees conducted research in May and June; their findings are summarized in Section IV.2. Among important findings are:
 - Educational Models and Grade Configuration Subcommittee:
 - Unambiguous academic advantages are not associated with any specific model of grade configuration, but that certain grade configuration models do carry detriments, particularly the isolation of 8th graders (for example in an academy within a larger high school, as in Planning Option 8, Appendix 4).
 - A number of special programs that were toured by the Subcommittee require facility modifications, suggesting the need for a systemwide assessment of all educational programs in relation to the spaces they occupy.
 - School Boundaries and Closures Subcommittee: Using a rigorous, data-driven algorithm, the Subcommittee found that there are currently no schools in Carroll County that present a compelling case for closure based on facility condition, utilization, or operating expenditures.
3. **Community Outreach:** Two listening sessions were hosted at area high schools in April and May to explain the planning process to the community and to provide the community with an opportunity to voice its concerns; other outreach methods were also used to solicit community input (Section IV.3).
4. **Planning Objectives:** The Committee developed seven weighted planning objectives that emerged from its research and discussions, and in June through August it examined how each of these supported the Goals, Parameters, and Concerns of the Board of Education. The weightings were based on the relation of the Planning Objective to the fundamental mission of the Board of Education, the education of children. The seven Planning Objectives are outlined below and described in detail in Section IV.4.
5. **Planning Options:** Concurrently, the Committee developed an initial list of eleven Planning Options, with discussion of the benefits and detriments of each, their implementation requirements and schedule, and their impact on the seven Planning Objectives. The eleven Options are summarized in Section IV.5.
6. **Evaluation and Prioritization of Planning Options:** In August, the Committee used the weighted Planning Objectives to filter the preliminary list of Planning Options, followed by more detailed examination of the five Planning Options that are presented to the Board of Education in this report (Section IV.6). The Planning Options are summarized below.

Planning Objectives

1. **Functional setting for educational programs** (systemwide): Whether the size, configuration, location and interior fittings of instructional spaces support the specific educational programs they house.
Weighting: 3
2. **Condition of school buildings** (systemwide): The need to maintain or improve the condition of the building plant.
Weighting: 3
3. **Operating expenses** (systemwide): The overall cost of operating the school system.

Weighting: 3

4. **Existing communities:** Impacts on the cohesion of existing communities.

Weighting: 2

5. **Feeder patterns:** Simplification and clarification of school feeder patterns.

Weighting: 1

6. **Economic development:** Attracting new businesses, workforce development, and improving real estate values.

Weighting: 1

7. **Ride times:** The average ride time of students between home and school

Weighting: 2

V. PLANNING OPTIONS

Identification and Prioritization of Planning Options

The RSCC discussed eleven separate Planning Options; seven of these concerned the future of Westminster East Middle School. The Committee then used the following methodology to evaluate the eleven Planning Options:

- The RSCC and support staff were divided into seven teams consisting of two members each.
- Each team was assigned one of the Planning Objectives, and the team then analyzed the impact of each Planning Option on their Planning Objective using a trinary approach:
 - If the impact was positive, the Option received the entire positive weighting;
 - If the impact was negative, the Option received the entire negative weighting;
 - If the impact was neutral or unknown, the Option received a zero.
- The teams reported their conclusions to the entire Committee. Extensive Committee discussion led to modification of some of the scores.
- The weights for each Planning Option were then summed to establish total scores.

As a result of this process, the eleven preliminary Planning Options were reduced to five, and a prioritization order was established. The RSCC eliminated the four options that would redistrict the East Middle School students to other schools (Appendix 4, Options 7, 8, 9 and 10). These options were seen as having a negative impact on educational programs, on existing communities, on feeder patterns, on economic development, and on student ride times. The two Options involving school closings, Options 6 and 11, were eliminated for the arguments against school closures that are outlined elsewhere in this Executive Summary and in the Report.

This process resulted in the five Planning Options that are presented for consideration by the Board of Education. Each of these Options is described in detail in Section V of the report.

Option 1 - East Middle School: A new K-8 Replacement facility to replace William Winchester Elementary School and East Middle School.

Assumptions: The final product will be a state-of-the-art facility, on the same site or on a nearby site. The middle school portion of the K-8 school will continue to receive students from five elementary schools in addition to William Winchester ES.

Option 2 – East Middle School: Full Modernization, consisting of replacement or complete renovation to achieve all educational specification and building performance requirements.

Assumptions: The final product will be a state-of-the-art facility, on the same site or on a nearby site.

Option 3 – East Middle School: Retain Existing School Facility with Limited Improvements:

Targeted improvements to improve the educational setting and building performance.

Assumptions: Decisions about which improvements to undertake will be based on factors such as educational needs, cost and available budget, age of building systems and anticipated remaining running life, life safety and ADA considerations, impact on students (and especially on students with special needs) during construction, and community preferences. Expansion of the building should not be necessary (but should not be ruled out pending investigation of programs and building conditions).

Option 4 – Comprehensive redistricting without school closure.

Assumptions: Redistricting must be warranted by clear gains in factors to be defined by the Board of Education, including balancing school utilizations, improving feeder patterns, improving educational opportunities, improving budgetary efficiencies, improving ride times, and/or other factors.

Option 5 – Accept existing facility configuration, with improvements to individual programmatic spaces (special programs, Gifted and Talented, etc.)

Assumptions: Examines only facility conditions related to current educational programs; facility improvements will generally take place within the existing building footprint.

Budgetary Implications: Operational Costs and Capital Estimates

In Parameter i) of the guidance that was provided to the RSCC on March 7, 2018, the Board of Education asked the RSCC to consider “multiple options that may include both major or minor variations. All options shall include a comprehensive cost-benefit analysis.” Because many of the operating expenditures involved in the Planning Options cannot be known without a further understanding of the educational and logistic parameters, the RSCC was not able to provide professional level cost-benefit analyses that would comprehensively include all capital and operating expenses.

As an example, the highest priority Option, the K-8 replacement facility for East Middle School, may involve several alternative administrative structures that would need to be considered: a true K-8 with a single principal and support staff, an elementary/middle combination with two principals and support staff, and other variants. The same questions would apply to specific positions such as the school health officer and the instructors in some of the academic programs. In the absence of an educational specification, the RSCC could not responsibly arrive at estimates of operating costs that could be relied on by the Board of Education.

Similar uncertainties follow on other areas of operations, for example transportation costs associated with the location of the site in Options 1 and 2, the estimated utility costs associated with various scope choices in Option 3, the multiple redistricting variants implicit in Option 4, and the large range of scope decisions that will be involved in Option 5. Consequently, no operational budget figures are provided for the Planning Options.

In contrast to the uncertainties surrounding the operating budget, the costs of capital projects can be estimated with a relative degree of confidence, once the assumptions about facility size are stated and the many variables that can affect future costs – construction cost escalation, delays, unforeseen conditions, the condition of the market at bid day, etc. – are thoroughly understood. Capital costs are provided for Options 1 and 2; a range of costs is provided for Option 3; and for Option 5, no costs are provided since the scope of work will depend on the annual budget that is provided for this item within the overall capital budget.

A major item that is often overlooked in estimating capital costs is the impact of phasing the work in occupied buildings, which can increase the cost of renovation by as much as 25%. Also, because construction cost escalation is a compounding factor, the anticipated date of project bid is important. For the four Options that involve capital projects, it has been assumed that the construction schedules will overlap with the construction on the Carroll County Career and Technology Center (CCCTC), now

in design. If concurrent construction is not feasible due to fiscal constraints, the schedules would need to be adjusted, with a corresponding adjustment of the costs.

VI. ADDITIONAL CONSIDERATIONS

Although the primary focus of the RSCC was on facilities, inevitably a number of corollary issues were touched on throughout the planning process. These include:

Regional and Specialized Educational Programs

The Committee believes that the regional programs should be reviewed to examine trends in enrollment as well as new requirements that may emerge from the State Board of Education or from the Kirwan Commission. This review could have implications for the staffing and other resources that are applied to these programs, and for the space in which they are housed. Planning Option 5 assumes that the existing programs are sufficiently staffed and that most capital projects will be carried out within the footprint of the existing buildings. This Planning Option could, however, become the platform for a more far-reaching investigation of the future needs of the school system in early childhood instruction, special education, alternative education, Gifted and Talented, Career and Technology Education, magnet programs and other areas of specialized education. The Committee also noted that further research should be undertaken to determine the potential application of distance/online learning to the needs of unique student populations.

Enrollments and High School Elective Offerings

The under-enrollment of high schools, although it does not impair the delivery of the basic educational program, does restrict in some cases the number of elective courses that can be offered or the number of sections that can be provided for these programs. These restrictions can affect students' educational opportunities. Redistricting can be used to increase student enrollments at under-enrolled schools, assuming enough students can be re-assigned to make a significant difference without harming other high school attendance areas or creating illogical transportation patterns. However, other methods can also be explored to better balance enrollments, including magnet programs with districtwide attendance at schools with low utilization, or a school choice program that allows students under certain circumstances to choose the high school that offers the curriculum in which they are interested. Both of these methods have been used with success in other Maryland school systems.

VII. CONCLUSION

Recognizing that there is a pressing need to find efficiencies within the school system to address budget shortfalls, the Redistricting and School Closure Committee nevertheless found that neither comprehensive redistricting nor closure of a school are warranted at this time. The compelling rationales for undertaking these actions do not currently exist, and the operational savings that might be realized are uncertain. There are significant potential detriments to these actions, including their impact on student educational careers, on communities, on student ride times, and not least, the loss of flexibility at a time when there are promising signs that the student enrollment of Carroll County Public Schools may increase and facility capacity will be needed in the future. Consequently, only Planning Option 4 is specifically concerned with redistricting, and then only if the Board of Education clearly specifies the goals that are to be achieved by the redistricting effort.

Instead, the Committee determined that the most important facility needs of the school system lie in upgrading facilities to contemporary standards of building performance and educational suitability. Three of the five Planning Options are focused on East Middle School, and the final Option addresses a systemwide approach to incremental facility improvement. Each of these carry significant costs; they represent ambitious building programs, but the Committee believes that such outlays belong among the inescapable responsibilities that attend on public ownership of facilities.

It is hoped that the process that the RSCC has used to identify the five Planning Options presented in this report, and the information provided for each of the Options, will guide the Board of Education in its crucial decisions on the educational facilities of Carroll County Public Schools.