

Final Report of the School System Viability

Committee Signal Mountain, Tennessee

September 27, 2017

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- Exhibit A: Projected Year 1 budget
- Exhibit B: Projected budgets for Year 5 and Year 10
- Exhibit C: BEP calculation
- Exhibit D: Compilation of results of quality survey

Final Report of the School System Viability Committee

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EXECUTIVE SUMMARY

In January 2017 the Signal Mountain Town Council created a seven-member School System Viability Committee (SSVC) to investigate and report on the feasibility of creating an independent municipal school district consisting of the three public schools in the Town of Signal Mountain, which would be separate from the Hamilton County school district. The committee spent the next eight months gathering and evaluating information from a wide variety of sources. This report presents the results of that investigation.

The SSVC concludes that a separate school district would be viable, provided that certain obstacles identified in this report can be overcome. The school district would be financially able to provide the educational services currently provided by the Hamilton County Department of Education. Substantial savings can be realized by downsizing to the administrative structure of a municipal school district with 2,400 students and three buildings, compared to the administrative structure of the much larger county school system. The projected budget for the independent municipal school district would thereby have available an annual surplus of revenue over expenses of approximately \$1.9 million to devote to enhancements to the quality of education in the Signal Mountain schools. If the current contributions from the Mountain Education Fund and parent supply fees are covered by the recurring budget, we project that there would still be approximately \$1.25 million in surplus funds available for enhancements in quality. Many possible enhancements are discussed in this report.

The SSVC finds no evidence that the withdrawal of the three Signal Mountain schools and the creation of an independent municipal school district would result in harm to the remaining schools in the Hamilton County system, nor would it adversely affect the education of students in those schools. To quote the HCDE Chief Financial Officer, Christie Jordan, "The economic viability of Hamilton County schools will not be impacted" by the creation of a Signal Mountain municipal school district.

The current enrollment in the three Signal Mountain schools reflects the ethnic and socioeconomic diversity of the community served by these schools, but it is less diverse than the current enrollment in the Hamilton County school district or the state of Tennessee. All members of the SSVC agree that the quality of education is enhanced by an environment that includes ethnic and socioeconomic diversity in the classroom. An independent school district could address this challenge by redefining enrollment policies, or by expanding opportunities for out-of-district enrollment, or by creating a magnet school to attract students from out of district, perhaps by redirecting some of the

savings from administrative downsizing that would be possible with a smaller school district.

Teachers and staff presently employed in the Signal Mountain schools would be able to remain in their positions, and teachers would retain their present tenure status and seniority status, in transferring to employment with the municipal school district. In accordance with state law, teachers would be compensated at no less than they were previously paid, including pension and certain other fringe benefits. Furthermore, state law requires that teachers cannot be harmed in the process of the creation of a municipal school district, with regard to salary, sick leave, pension and other benefits. Our projected budget includes provisions for a retention bonus for teachers, as well as funding to provide for comparable health insurance and other benefits.

The SSVC has identified three principal obstacles to the establishment of a municipal school district. First is the question of ownership or control of the three school buildings. The Hamilton County Department of Education has asserted, through its attorney, that it intends to retain ownership of these buildings and, should a separate school district be established, HCDE would “repurpose” the buildings and not permit them to be used by the new district. There are strong arguments and legal precedents to the contrary position, that ownership of the buildings would transfer to the district in which the students reside. This issue will have to be resolved through negotiation or litigation, and was beyond the scope of this committee’s charter.

Second is the question of how to include residents of Walden and the unincorporated area of Hamilton County on Signal Mountain (UHC) in the vote to approve the creation of a separate school district and, should that vote be in the affirmative, to participate in the governance and in the financial support of the municipal school district. There are several possible avenues to permitting all county residents on Signal Mountain to vote on the establishment of a school district, to elect members to the school board, and to make collective decisions regarding the funding of the school district. The SSVC believes that in order for a municipal school district to be viable, a successful transition must include participation of the residents of Walden and UHC. This issue must also be resolved before moving ahead with a public referendum.

Third is the question of how the financial contribution required of the municipality will be met. State law requires that the municipality in which the school district is located must contribute a specified amount in support of the schools. Residents of the Town of Signal Mountain should be made aware of the financial implications of a new municipal school district before being asked to vote on its approval. Also, since students from Walden and the unincorporated area of Hamilton County would attend the schools, the issue of whether, and how, to equitably assess the residents of areas from outside the Town of Signal Mountain must be addressed. This report discusses several possible approaches to resolving this question.

Introduction

In 2016 a group of citizens residing on Signal Mountain formed an ad hoc committee to investigate the possibility of withdrawing from the Hamilton County, Tennessee, school district and creating an independent municipal school district comprised of the three public schools in the Town of Signal Mountain: Nolan and Thrasher Elementary Schools and Signal Mountain Middle/High School. The ad hoc group gathered information and presented a report to the Signal Mountain Town Council in December of 2016, urging the Council to consider taking such action.

Following that presentation, the Town Council voted to form an advisory committee to answer the question of whether it would be viable to pursue separation from the Hamilton County school district. The Council then solicited applications from residents of Signal Mountain, Walden and the unincorporated area of Hamilton County on Signal Mountain (UHC) to serve on a School System Viability Committee (SSVC). On February 13, 2017 the Council selected the following seven applicants representing various backgrounds and residential areas of the Signal Mountain community:

- John Friedl, Ph.D., J.D., Professor Emeritus and former Provost and Vice Chancellor for Academic Affairs of the University of Tennessee at Chattanooga
- Tom McCullough, Ed.D., retired school administrator, former Principal of Signal Mountain Middle/High School
- Thomas Peterson, M.D., M.B.A., retired physician and Vice Mayor of the Town of Walden
- Charles Spencer, M.S., M.B.A., M A Ed, economist, former part-time teacher, parent of child who graduated from Signal Mountain schools, contract manager to TVA
- Susan Speraw, Ph.D., R.N., retired Research Professor, University of Tennessee at Knoxville
- Amy Wakim, P.E., M.S.E., M.B.A., engineer, independent consultant, parent of three children in Signal Mountain schools
- Melissa Wood, M.A., former teacher, parent of three children in Signal Mountain schools

Dr. Friedl was subsequently elected Chair of the Committee, Dr. McCullough was elected Vice Chair, and Ms. Wood was elected Secretary. Council Member Amy Speak was appointed by the Town Council to serve as its liaison with the SSVC.

The Committee was established for the purpose of answering questions and finding the facts and figures necessary for the Town of Signal Mountain to decide whether or not to go forward with forming its own independent municipal school district. Council Member Speek explained to the Committee that it was not the intention of the Town Council to seek a recommendation from the SSVc as to the merits of taking such action, but only to engage in fact-finding regarding whether or not it was feasible to undertake such action. The bylaws adopted by the SSVc specifically limit the scope of the SSVc's mission:

“This Committee was created by the Signal Mountain Town Council for the purpose of evaluating the viability of establishing, funding, operating and maintaining a municipal school system and reporting associated findings to the Town Council. At some point the Committee may be asked to give an opinion or recommendation, but the present goals are to fully evaluate the prospect, identify and evaluate any and all questions that must be answered, and compile the factual information and data to provide those answers. During this process, obstacles to establishing such a school system will be identified. The Committee must endeavor to not only identify obstacles but to also identify the means by which those obstacles are overcome.”

Early in 2017 a submission form was created on the Town web site and questions and comments were solicited from the public. These questions and comments formed the initial direction for the SSVc investigation. Additional questions were raised for consideration by members of the SSVc, by members of the ad hoc group that proposed the separate school district, and by members of the Town Council. Over the first five months of its operation the SSVc received and responded to more than 150 questions and comments for its consideration.

In order to address the issues before it in an efficient manner, the SSVc created five subcommittees to work on each of the five subject areas represented in the questions and comments: budget and finance, quality in education, buildings, demographics and enrollment, and legal issues. In addition to its regularly scheduled meetings on the first and third Wednesday evening of each month, the SSVc subcommittees met on an irregular schedule to gather and analyze data on each of these topics. All meetings were open to the public and were conducted in compliance with state law regarding public meetings.

Members of the SSVc also made a field trip to Shelby County, Tennessee to meet with school and government officials in five communities that had recently established municipal school districts in a fashion similar to that contemplated for Signal Mountain.

The following report represents the conclusion of a majority of the SSVc after conducting an exhaustive review of the data it was able to gather. In all, we estimate that the collective effort of the seven committee members exceeded 1,000 hours, including meetings, research and analysis of data. To the extent that any member of the

Committee disagreed with the contents of this report, he or she was invited to submit a minority report expressing his or her position. Mr. Spencer has chosen to submit such a dissenting report, which is included following the conclusion to this report, beginning on page 42. A response to Mr. Spencer's dissent follows, beginning on page 44.

Our ultimate goal, indeed our only goal, is to provide the Town Council with the detailed and complete information it requested so that the Council Members can make an informed decision as to whether to recommend that the question be placed on the ballot for a vote by the residents of Signal Mountain. Should that decision be in the affirmative, we hope that the information in this report will be of value to the voters in their deliberation as well.

Quality

One of the questions posed to the SSVC on the Town web site was “What exactly are Signal Mountain schools not getting from HCDE [Hamilton County Department of Education] that they would be getting from a separate school district?” The threshold question considered by the SSVC was whether the creation of a separate municipal school district would lead to improvement in the quality of education delivered to students attending the Signal Mountain public schools. If there was not evidence that quality would be enhanced, then the question of the feasibility of taking such action would be moot.

It is not a simple task to determine how one measures the quality of education. Quantitative measures such as scores on standardized tests, reading at grade level, graduation rates and college attendance are frequently used as proxies for quality. The literature in professional education periodicals generally concludes that smaller school districts are associated with improvements in each of these measures, but that does not completely resolve the question of whether a reduction in size of the district causes the improvement, or whether there are extraneous factors that lead only to an association between district size and quality.

Survey of parents, teachers, and community members

As part of our effort to identify areas in which the quality of education in Signal Mountain schools could be improved, the SSVC subcommittee on quality, led by UTK Research Professor Dr. Susan Speraw and including educators Dr. Tom McCullough and Ms. Melissa Wood, created a survey to offer the community a means of indicating their appraisal of the strengths and weaknesses of education as it currently exists on Signal Mountain, and to solicit suggestions for improvement from parents, teachers and concerned citizens. The survey instrument was independently developed by the quality subcommittee and consisted of fourteen questions, twelve of which singled out various elements of the educational experience commonly associated with quality, and it included both a rating component (on a 5-point scale from excellent to poor/unacceptable) and a space for comments and suggestions for improvement. The thirteenth item was an open-ended question in which respondents were invited to add any other comments or suggestions not covered in the previous items. The only identifying information requested came in the last, fourteenth, item (which was optional) in which the respondent was asked to indicate whether he or she was a parent, teacher, administrator, or concerned citizen not fitting into the other categories. Although the survey was not formally pilot tested, during its development it was shared with several teachers; their input regarding wording and inclusion of various elements helped to shape the final instrument. The final survey was made available to the community via Survey Monkey, with data collected between July 14 and August 25, 2017. Responses were anonymous.

We received 738 responses to our survey. Of those respondents who identified their status, 488 indicated that they were parents of a child currently enrolled in Signal

Mountain schools, 74 said they were teachers in Signal Mountain schools, and 156 identified themselves as concerned citizens or “other.” No respondent indicated that he or she was a school administrator. Several respondents made comments indicating that they fit into multiple categories, being both a parent of a child enrolled in Signal Mountain schools as well as a teacher in the schools.

The full results of the survey will be posted on the Signal Mountain town web site. In a few cases, where respondents gave descriptions of their children or referenced specific teachers or administrators by name in their comments, names and other identifying information have been redacted to preserve the privacy of the families, teachers or administrators in the schools.

In general, respondents rated Signal Mountain schools highly. Over 90 percent rated the overall quality of education as good or excellent. But they also noted areas where improvement could be achieved. The following table summarizes ratings obtained on various elements of quality as measured by the survey.

Item	Quality Measured	Very Poor/ Unacceptable (1)	Less than adequate (2)	Adequate (3)	Good (4)	Excellent (5)	Average rating	Number of Open- ended Comments
1	Overall quality	0%	1.3%	6%	29.7%	62.3%	4.5	187
2	School Leadership	1.5%	4%	12.6%	35%	41%	4.1	141
3	Teachers/Teaching	<1%	3.2%	7%	35.3%	52%	4.3	149
4	Educational supports	1%	7.2%	11.4%	38.5%	46%	4.3	130
5	Facilities	<1%	3%	11%	34%	49%	4.5	136
6	Curriculum	<1%	5%	11%	36%	44%	4.2	157
7	Educ. Enrichment opportunities	<1%	7%	12%	31%	44%	4.1	134
8	Services to children with IEP	4%	10%	15%	33%	38.7%	3.9	144
9	Policies re: school day	4%	11%	22%	33%	25%	3.6	200
10	Communication betw. school/home	3%	8%	15%	33%	33%	3.9	129
11	Cooperation betw. teachers/parents	1%	4%	13%	34%	40%	4.1	103
12	Professional development for teachers/staff	1%	14%	15%	33%	37%	3.9	36

Table 1: Summary of ratings on attributes of quality in education. Individual item totals may not equal 100%. Respondents were given the option to endorse “Not applicable” or “Don’t know,” neither of which carried a numeric value; Totals for N/A or Don’t know are not shown here.

Several common themes emerged from our review of the survey comments and suggestions. References were made to a recent report in which students at Signal Mountain schools failed to meet state standards, with two of the three schools receiving the lowest score on state ratings, as well as to multiple national rankings which rate Tennessee’s overall quality of education as being in the bottom quarter when compared to other states. A number of respondents singled out the middle/high school for what they felt was poor performance on multiple quality indicators.

Respondents expressed concerns over technology issues. Several stated that technology was not current, both in the classroom and in other areas of the school. It was suggested that staff need ready access to IT support, and that wi-fi strength was an issue, particularly at SMMHS.

Guidance counseling drew the attention of a number of respondents, several of whom mentioned that not enough attention was given to the college advisory process.

Regarding the physical facilities, a number of respondents offered suggestions for improvement. STEM labs, libraries and arts rooms all would benefit from additional space, and it was stated that the robotics group currently meets in what was described as a storage closet. Inadequate space for band practice was singled out by many respondents. Athletic facilities also came in for criticism with regard to football locker rooms and general maintenance. Respondents also complained about the maintenance and janitorial service in the school buildings, with cleanliness noted as an issue.

Complaints were also registered with regard to supply fees charged to parents. One respondent stated that “the supply fee is a tax on families.” Another observed that if the supply fee was lifted, then more families would be able to afford child participation in extracurricular activities, thus promoting an increase in school spirit.

Concerns about curriculum offerings prompted comments by many respondents. Suggestions ranged from providing more fine arts offerings, additional AP classes and foreign language classes (particularly in the elementary curriculum), to offering classes that teach “life skills” such as home economics, auto repair, woodworking, photography, and personal financial management. Other suggestions included offering more meaningful field trips and enrichment activities outside the classroom. The International Baccalaureate (IB) program generated many comments. While many respondents praised the strength and vision of the curriculum, others complained that the focus on IB disadvantaged students who opted out of IB, or who are not high academic achievers. Finally, many respondents gave high praise and acknowledgment to the Mountain Education Fund for its impact on the strength of the curriculum. Specific contributions of MEF are discussed elsewhere in this report.

A number of parents commented on the quality of services provided to special needs students under Individualized Education Plans. While many praised the services their children received, many others called for more services, greater access to specialists, and increased numbers of classroom aides and assistants.

With regard to teaching and leadership, many respondents offered suggestions. Some respondents addressed the lack of diversity among faculty and staff. Others stressed that improved and standardized communication between home and school, with particular attention to rapid email communication and keeping school websites current, would enhance family involvement and allow parents to be proactive in addressing academic problems. Others identified consistency and stability in local

school leadership as a factor both in promoting faculty morale and maximizing the educational experience.

The issue drawing the greatest number of comments was the starting time at SMMHS (currently 7:25 AM). Well over 100 respondents complained about the early starting time. Some cited research showing that a later start time fits best with adolescent biorhythms and leads to better educational performance. Others noted the safety concern for children waiting at bus stops in the dark of the early morning. Respondents also suggested altering the school calendar to start later in the year and extend later into the month of June.

With regard to professional development for teachers and staff, while some teachers praised the quality and accessibility of professional development, others felt that local control could lead to more individualized opportunities that would be of greater benefit. Concern was expressed that because of its size, HCDE had to offer fewer customized development options that did not always fit the needs and desires of Signal Mountain teachers. Respondents made specific suggestions for types of professional development that would enhance their effectiveness in the classroom.

Finally, there were two special categories of unsolicited comment that responders included in the survey. These statements were not directly related to any question actually posed. First were responders' opinions about whether the Town of Signal Mountain should form an independent municipal school district. There was no item on the survey that specifically asked for this information, but some individuals chose to articulate their thoughts on the subject nonetheless. Most often they included comments such as "Don't separate from HCDE," or "I fully support an independent district," in the last, open-ended question seeking final comments or suggestions. But responders also inserted their opinions throughout the survey, even in random items (such as those about communication, cooperation, or facilities) that were not remotely related to the notion of a split from HCDE.

Second, scattered throughout the responders' comments were references to presumed "motivations" prompting the Town Council to explore the feasibility of separation from HCDE. These included suppositions that the Town was seeking to improve the win/loss record of the high school football team, or lure town children away from private schools in the area, as well as misinformation, including the rumor that in the event of a split from HCDE, teachers would no longer receive benefits, or that the desire for an independent district was related to lack of support for teachers, or that children living in Walden or unincorporated areas would be excluded from the proposed new district and bused off the mountain to go to school.

These two particular categories of response give a window to one major characteristic of those who chose to complete the survey: for a wide variety of reasons, a large percentage of responders opposed the split. Of concern, however, is that a good number of those who are opposed hold a negative view based on misinformation. If the

Town ultimately decides to move forward, it will be critical to address the misinformation which has been disseminated among the public.

The results of the survey conducted by the SSVc provide a number of suggestions for areas in which quality enhancements to education in the Signal Mountain schools can be achieved. But this begs the question of whether these enhancements could be achieved without the creation of a separate municipal school district. To answer this question, it is necessary to examine the finances of the school system as it exists under the current operation by HCDE and to compare it to what could be changed in an independent municipal school district.

In the next part of this report, we offer a detailed analysis of the projected budget for an independent municipal school district, compared to the current budget under HCDE. Applying the budget savings realized in our analysis (described below in the section on budget and finance), the SSVc was able to address a number of the suggestions for improvement enumerated in the foregoing discussion of our survey responses. While the decision as to how to allocate funds is ultimately one to be made by the school board in consultation with the superintendent and principals, we believe it is helpful to point out these possible uses (with approximate annual cost for each):

- Increase guidance counselor positions from part-time to full-time at Nolan and Thrasher (\$43,300)
- Increase building maintenance allowance to \$1.47 per square foot to bring up to industry standard and reduce or eliminate deferred maintenance (currently ranging from \$.23 to \$.87 per square foot) (\$461,500)
- Field maintenance for athletics (\$75,000)
- Extracurricular transportation to local events (\$50,000)
- Buses added to allow for later start time at SMMHS (currently 7:25 AM) (\$147,600)
- Fine arts funding for instructor stipends and supplies (\$100,000)
- Increase professional development allocation for teachers (\$50,000)
- Increase capital outlay to \$0.70 per square foot (a pro rata share of HCDE capital outlay indicates a current rate of less than \$.02 per square foot for Signal Mountain schools) (\$283,700)

We have calculated that the total cost of these items would be approximately \$1.2 million, which is within the range of the projected budget surplus for a municipal school district.

Other issues related to quality improvement in Signal Mountain schools were also considered by the SSVc, and are discussed below.

The issue of diversity

Public comments, not only in Hamilton County but also in other areas of Tennessee and in media coverage of community school district separation in other

states, have depicted the creation of independent municipal school districts as a move by wealthy white suburbs to pull away from city and county school systems with large minority populations for reasons related to ethnicity and socioeconomic status.

During the course of the committee's work, an article was published in the *Wall Street Journal* with the provocative headline "New Districts Reignite School Segregation Debate," which could be interpreted as suggesting that a motivating factor in Signal Mountain's consideration of separation from HCDE was based on a desire to reduce the proportion of non-white students in Signal Mountain schools. The members of the SSVc reject this characterization.

Four of the seven members are career educators and one was a part-time teacher at SMMHS. All seven agree that the quality of education is enhanced by an environment that includes ethnic and socioeconomic diversity in the classroom.

According to recent enrollment data, minority students were 6.4 percent of the total student population in Signal Mountain schools. This figure is low compared to Hamilton County as a whole, which reported minority enrollment of 44.1 percent. Students classified as economically disadvantaged constituted 5.7 percent of the total student population in Signal Mountain schools, compared to 35.7 percent reported for Hamilton County as a whole.

What these numbers don't tell is that as it currently exists, the Hamilton County Department of Education establishes school attendance zones and the Signal Mountain schools have no flexibility with which to increase the diversity of their student body.

If an independent school system were to be established, the school board could develop a policy for non-resident enrollment to encourage students from other communities in Hamilton County to attend the Signal Mountain schools. The school board for an independent school district could address this challenge by redefining enrollment policies to expand out-of-district enrollment. Alternatively, a magnet school could be created as part of one or more of the existing schools in Signal Mountain to attract students from outside the district.

Even if no such policy were enacted, the diversity of the Signal Mountain schools would continue to reflect the demographic makeup of the three communities that comprise Signal Mountain – the schools would not become "whiter" or more middle class than they are at present.

Therefore, the argument that creation of a separate school district would be driven by "white flight" is not only erroneous, it is disingenuous. The current racial makeup of the Signal Mountain schools is viewed by many residents of Signal Mountain as a disadvantage and a negative factor in the quality of education in the Signal Mountain schools, but it is a problem over which they have no control, due to policies established by the Hamilton County Department of Education. Local control of Signal Mountain schools could be the path toward remedying this problem.

Contributions from Mountain Education Fund and Parent Supply Fees

In our discussions with community members and parents of students in the Signal Mountain schools, they pointed to the value of the contributions made through supply fees paid by parents, and the contributions made by the Mountain Education Fund. These funds go toward services and materials not paid for by HCDE, but deemed important to the quality of education in the Signal Mountain schools. This includes the following list, based on contributions by MEF in the 2015-16 school year totaling \$343,991

- Reading intervention teachers at Nolan and Thrasher
- Math intervention teacher at Nolan
- Art teachers at Nolan and Thrasher
- Technology teachers at Nolan and Thrasher
- Braindance teacher at Thrasher
- Cafeteria monitors at Nolan and Thrasher
- Learning center teacher/tutor at SMMHS
- College advisor position made full time at SMMHS
- Ipads, promethean boards, Chrome book carts, computers, 3-D printers
- STEM classroom supplies, science printers and other technology needs
- Professional development enhancements for teachers
- Substitute teacher pay to allow professional development attendance
- Class supplies, art supplies, PE supplies,
- Media center supplies, music supplies, reading lab materials
- Robotic support and supplies
- Theater support
- ACT testing for all 9th and 10th graders
- Youth In Government/Model UN support
- IB need-based scholarships and support
- Teacher appreciation awards
- In-house field trips
- Support for school activities and clubs
- Senior recognition awards
- Grounds beautification
- Rising 6th grade activities
- Copier leasing
- Paper supplies
- Other school and classroom materials and expenses not covered by HCDE

Parents of students in Signal Mountain schools are assessed a fee for educational supplies when they enroll their children each fall. For SMMHS this fee is approximately \$200 per student; for Nolan and Thrasher it is \$65 per student. The fees cover basic classroom supplies such as paper, pencils, ink cartridges, art supplies, physical education supplies (balls, ropes, mats, etc.), music, and many other such items which are not covered by HCDE funding.

Together, the MEF contributions and supply fees add approximately \$650,000 to the operating budget of the three Signal Mountain schools. The SSVVC projects that the budget for a separate school district could cover the cost of these enhancements, thereby relieving parents of the need to pay for supply fees, and enabling the MEF to fund additional quality enhancements desired by teachers, administrators and parents.

It should be noted that in recent years, the contributions from MEF to the Signal Mountain schools have declined, despite their best efforts at fundraising. As the excitement over construction of a new middle/high school in Signal Mountain has grown more to a commonplace acceptance, the enthusiasm of local donors to MEF may have waned, leading to an overall reduction in charitable contributions to the schools. There is no guarantee that the current level of MEF funding will be maintained, let alone increased in future years. The ability to move the current items listed above onto the permanent operating budget of a local school district therefore assures their continuation, and contributions from MEF can then be applied to additional enhancements to the quality of education in the local schools.

The advantages of local control

It is widely claimed that small school districts are at an advantage because they are able to exercise local control to tailor the education of their students to local needs, whereas large districts tend to reflect a “one size fits all” management approach. Our investigation confirmed this claim.

In our meetings with school superintendents from five municipal school districts in Shelby County, Tennessee, we were told of numerous instances in which decisions by local school boards and school administrators led to better results than would have been possible (and might not have been permitted) when those districts were part of the larger Shelby County School System.

In Arlington, the superintendent said that they were able to change the curriculum in a way that led to improved test scores, and that teachers felt that professional development opportunities were improved under the new, smaller municipal school system. In Collierville they have worked with local business leaders to develop curricula that respond to the needs of those businesses. None of these changes would have been possible, we were told, under the prior Shelby County system policies.

Prior to our visit to Shelby County, we sent a list of questions to the superintendents with whom we were going to meet. One question we asked was the following: “How has the education of your children improved since separation? Cite specific examples where possible.” The superintendent of the Germantown Municipal School System responded as follows:

- Addition of Strings Program at Riverdale, Farmington and Dogwood Schools
- Partnership with Parks and Rec for REACH program at all three elementary schools

- Added STEM programs to Riverdale and Houston High
- Increased paraprofessional staffing
- Added a nurse to every school
- Increased clerical staffing at Houston High
- Added interventionist at Houston High and Riverdale
- Increased technology support in schools from 10:1 ratio to 2:1
- Added Leadership Academy to Houston High School
- Honors Academy extended to the middle school level
- Transition to a 1:1 technology program at Houston High, Houston Middle, and Riverdale Elementary
- Added professional quality television studio at Houston High
- Converted to a student created website at Houston Middle School
- Upgrading windows at Farmington Elementary School
- Moved to online registration for all schools
- Built reserve funds of approximately \$10 million
- Improved exterior lighting and added sidewalk additions at Houston High
- Expanded car line sidewalks at Riverdale Elementary School
- Re-keyed all school exterior doors
- Improved wi-fi infrastructure at all schools
- Built a \$12 million, 64,000 sq. ft. expansion on Riverside Elementary School, removing 23 portables
- New roof and HVAC at Dogwood Elementary and Houston High School
- Painting at Farmington Elementary School
- Added ACT period at Houston High School

These reports of changes made after the separation of the six municipal school districts from the Shelby County system are evidence that local control over budgeting and decision-making can have a strong effect on the quality of the educational experience of students attending those schools. Prior to the separation, the expression of local needs had to filter up the chain of command to the central administrative officers in the 150,000 student system. One superintendent told us that in his prior position as deputy superintendent of the Shelby County system, he often had to watch the evening news report on television to find out what had happened that day in the schools under his command. Now, he is able to visit all eleven schools in his district and meet in person with the principals in a single day.

We also heard anecdotal evidence of the same problem in the Hamilton County school system. Dr. Tom McCullough, a member of the SSVC, served for three years as Principal of SMMHS. He recounted two occasions during the process of interviewing and selecting candidates for vacant teaching positions. Rather than allowing the local Principal to choose teachers to fill all vacancies and to “build” a faculty best suited for the school, teachers from elsewhere within the system who were deemed “excess capacity” in their prior location were assigned to the school. In other words, the system’s needs prevailed over the school’s needs.

To cite but one more example of the benefit of local control and decision-making, Dr. McCullough told us of an experience that would strike a familiar note with every Signal Mountain resident. One day during the winter it began to snow on the mountain, but precipitation in the valley began as rain. Concerned about the possibility of dangerous road conditions, Dr. McCullough called HCDE central office and asked permission to close the school early so that the students could leave and get home safely before the roads became dangerous. HCDE officials told him to wait until they had made a further investigation. After some time without a response, and with the weather on the mountain growing worse, Dr. McCullough made the decision on his own to close school early for the safety of his students. Although all schools were eventually closed early, he was reprimanded the following day by his superior in the HCDE office for acting without authorization.

Financial Considerations

Methodology

What would be the financial cost of creating and maintaining an independent municipal school district separate from the Hamilton County Department of Education? To address this question, the SSVC formed a budget and finance subcommittee to collect and analyze financial data and to develop a projected budget for a separate school district. Under the able leadership of SSVC committee member Amy Wakim, the subcommittee tapped several sources to compile the necessary information.

Revenues for a school district in Tennessee are derived from several different sources. Funds from the state flow to the school district under a complex formula known as the Basic Education Program, or BEP. The formula begins with a per-student contribution, to which are added adjustments for various categories of students, such as students who fall within the scope of the state definition of special needs students. The state calculates the BEP formula using the Average Daily Membership, or ADM, for each school within the district. ADM is a measure of the number of children enrolled to attend school in the district throughout the year, which may be periodically reconciled as students enter and leave the district or school during the year. For the 2016-17 school year, the ADM for the three Signal Mountain schools was 2,430.

Funds from Hamilton County flow to the school district under a different formula. The main factor in determining county funding is the number of students attending public schools in the district, but calculated in a slightly different way from the BEP calculation. The county student census uses the Average Daily Attendance, or ADA, which is based on the number of children actually in attendance each day (as opposed to the number enrolled), typically averaged on a bimonthly or quarterly basis. For the 2016-17 school year, the ADA for the three Signal Mountain schools was 2,330. This number is smaller than the ADM for those schools, because the ADA measures actual attendance rather than enrollment.

The funding from Hamilton County to a Signal Mountain municipal school district would not involve a new process. Taxpayers would still pay county taxes in support of the schools, but the proportion of the tax revenues applicable to students attending Signal Mountain schools would be paid by the County to the Signal Mountain school board, instead of being paid to HCDE.

Together, the state and county funds derived from tax revenues form the basis of the general purpose school fund, and are the main source of operating expenses for a school district. Additional funds received by the school district account for a relatively small portion of the overall budget. For a municipal district, these additional general purpose revenue sources include the municipal contribution required by state law and charges for services, discussed below. For a Signal Mountain municipal school district, the state and county funds would account for more than 95% of the general purpose operating budget.

The financial feasibility study conducted by the SSVC focused on the general purpose school fund budget. Other funds have a pass-through revenue and expense structure, since the money that comes in for these programs pays for the expenses generated by them and each category has an independent budget framework. These include: federal projects funds, allocated to specific federal programs; food services funds passed through from the state and federal governments plus lunch fees to pay for the expenses of operating a food service program; and self-funded project funds from private donations allocated to specific privately funded programs. These are separate pass-through budgets that are not included in the scope of this report. See the introduction to the budget in Exhibit A for clarification.

In developing a prospective budget for the first year of operation of a separate school district, the committee relied upon information available from the HCDE budget, and where available, more specific data from each of the three Signal Mountain schools. Where individual school data were not available, expenses were estimated by allocating the HCDE expenses on a pro-rata basis using the ratio of Signal Mountain ADA to the HCDE ADA numbers. This ratio was calculated as follows: HCDE ADA for the 2016-17 school year was determined to be 40,550, and the sum of the ADAs for the three Signal Mountain schools was 2,330, yielding a ratio of 5.75%.

In creating a budget for the initial year of operation of a school system, we begin with an estimate of revenues and expenses. On the revenue side, the large majority of the funds received is based on the number of students enrolled in the schools. While we cannot know with certainty what that number will be, we can predict with confidence that it will not differ significantly from the current enrollment in the three Signal Mountain schools. If a new district unexpectedly resulted in a decline in enrollment of mountain residents, a school board could enact an open enrollment policy allowing non-residents to fill available space in the schools.

In projecting expenses, our proposed budget includes two separate categories: those expenses that are directly proportional to the number of students enrolled, and those that are relatively fixed, i.e., not likely to vary greatly from the estimated costs, regardless of enrollment. For example, proportional expenses would include such items as the number of teachers and the cost of textbooks. Fixed expenses would include such items as salaries of central administration employees, the cost of utilities, insurance premiums, etc.

Before finalizing the Year 1 budget, the committee applied several tests to verify its accuracy. Each line of the budget was examined and verified as to the source of the information contained in that line. For many items on the expense side, we relied upon information provided by HCDE. In some cases we consulted with experts in the appropriate field, who supplemented or confirmed our figures based upon their experience. On the revenue side of the budget, we relied upon the State Board of Education 2016-17 BEP Blue Book to calculate the expected state revenue. For county revenues, we used the HCDE fiscal year 2017 budget request, the Chattanooga 2.0

presentation by former Superintendent Rick Smith, the 2016-17 HCDE actual budget data, and the revised financial reports for previous years showing actual expenditures.

In the course of developing the first year budget, we submitted our calculation of the BEP formula revenue projection to Dr. Candice McQueen, Commissioner of the Tennessee Department of Education, for review by her office. Dr. McQueen responded, citing a review by the executive director of finance, Maryanne Durski, who wrote: "The methodology that Signal Mountain used is very accurate. It appears that they are using the BEP calculator found on the Comptroller's Office of Research and Education Accountability website. I did not find any issues with their calculations. . . I am very impressed with their estimate - this is not an easy process."

Also in the course of developing the first year budget, when we had produced a draft of the entire budget, we submitted that document to Dr. McQueen for further review by her office. They made several suggestions for minor changes, which were incorporated into our revised version. Dr. McQueen's finance officer commented as follows: "This is a very thorough document, and indicates to me a sound financial foundation for the proposed district."

Finally, before concluding our analysis of the budget we submitted it to Hamilton County Department of Education for review by its chief financial officer, Christie Jordan. Ms. Jordan made several suggestions for additional expenses, which were added to our budget projection. All issues raised by Ms. Jordan at the budget review with HCDE were addressed.

Summary

The projected budget for the first year of operation of a separate Signal Mountain school district is presented in the detailed spread sheet attached as Exhibit A to this report. The level of detail in the calculation of the projected Year 1 budget can be daunting to those readers who are not familiar with the budgeting process and the methodology used by HCDE and other school districts across Tennessee to create their operating budget. The SSVC took its obligation very seriously and endeavored to provide the maximum amount of detail, because we recognized that the accuracy of this aspect of our investigation was essential to the determination of the viability of a separate school district. Each line of the budget was examined independently by the SSVC's Budget and Finance Subcommittee, both as to the source of information and the calculation applied to determine the figure.

At the outset, it may be helpful to provide a somewhat less detailed summary of our findings with regard to the financing of a separate school district. For those readers wishing to drill down deeper into the analysis, the subsequent explanation and Exhibit A will guide them through that process.

The first two pages of Exhibit A explain the methodology used to create the projected budget. Included in this explanation is a discussion of how two different budgets were created: the first showing only those expenses currently funded by HCDE; the second showing additional expenses currently funded by the Mountain Education Fund donations and parent supply fees. In other words, the projected Year 1 budget indicates that not only could a municipal school district provide all that HCDE currently provides, plus all that MEF and parent supply fees pay for, but there would be surplus funds available for further enhancements, at the discretion of the school board.

The next introductory page in Exhibit A presents a chart showing the items presently included in Signal Mountain schools but not paid for by HCDE; these items are all available thanks to contributions from the Mountain Education Fund and supply fees paid by parents.

Pages A-4-6 present an overview of the budget in the form of pie charts. Page A-4 shows revenues from four sources: state and county funds, the municipal contribution from the Town of Signal Mountain, and fees charged to non-residents. (For a detailed discussion of these fees and possible alternatives to charging fees for non-residents, see pages 22-23 below.)

Page A-5 shows expenses equivalent to what is currently provided by HCDE. Page A-6 shows expenses including those currently provided by HCDE and adding to that the items currently funded by the contributions of the Mountain Education Fund and by parent supply fees.

Page A-7 in the introduction to Exhibit A presents a suggested organizational chart for the central office administration of a municipal school district.

The detailed budget begins on page A-8 of Exhibit A. This shows the calculation of the Signal Mountain schools ADM and ADA, the basis for determining state and county revenues.

Revenues for a school district are largely based upon student enrollment and attendance. For this reason, we can project with some degree of comfort what the revenues for Year 1 of a separate Signal Mountain school district would be. Assuming enrollment remains relatively stable, the contributions from Hamilton County and the State of Tennessee would amount to approximately \$20 million. Additional support from the Town of Signal Mountain, non-resident fees and tuition from out-of-county students would add approximately \$750,000 more. The total revenue for Year 1 is estimated at approximately \$20.7 million, as indicated on page A-9.

Where the Year 1 budget differs from the current funding under HCDE is mainly on the expense side of the ledger. The 2016-2017 general purpose budget for the Hamilton County Department of Education is approximately \$363 million, which includes \$42,662,806 (11.75%) in salaries and fringe benefits allocated to the central administrative office, i.e., non-school specific salaries and benefits. Since the Signal

Mountain schools represent 5.75% of the total HCDE attendance figure, this means that 5.75% of the HCDE central office/non-school specific salary expense, or \$2,453,111, is attributable to the three Signal Mountain Schools. However, the central office/non-school specific salary expenses for the Year 1 budget reflect the positions shown in the organizational chart on page A-7 and are summarized on page A-25 in Exhibit A. The total central office/non-school specific salary and benefits expenses for year 1 amount to approximately \$1 million.

In creating a proposed budget for Year 1, the SSVC carefully analyzed the need for central office administration costs. We relied heavily upon the experience of one of our Committee members, Dr. Tom McCullough, who had previously served as the superintendent of two school systems in Georgia similar in size to what a Signal Mountain municipal school district would be, where he was responsible for preparing annual budgets for board approval. He also previously served for 11 years as a high school principal, the last three years of his career before retirement as Principal of Signal Mountain Middle/High School.

In addition to Dr. McCullough's experience in the leadership of small school districts, we discussed the proposed organizational structure with officials at HCDE, and based on their suggestions we added a senior administrative position and several support positions to our budget. We also compared our projections to the actual budgets of other small school districts in Tennessee, specifically Lenoir City, Elizabethton, and Millington. In so doing, we were able to conclude with confidence that substantial savings could be achieved by redirecting funds from central administration to other areas of the budget that would create opportunities for quality improvement in the educational experience of the students in the Signal Mountain schools.

By way of illustration, in a school district with 78 school buildings, the coordination of upkeep and maintenance of all of the buildings could conceivably require the efforts of a full-time supervisor, while the similar task for three school buildings could be folded into the workload of another administrative officer. Similarly, in a school district with more than 43,000 students, the coordination of bus service could conceivably require the efforts of a full-time scheduler, while the similar task for three schools and 2400 students could be made part of the workload of another administrative officer. Additional examples led us to conclude that while the administrative staffing level in the central office of HCDE could be justified, there were substantial savings possible through economies of scale for a smaller school district. Those savings could then be applied to other areas of the budget that could lead to improvements in the educational experience of the students.

The result is that our projection for the first year's budget for a separate school district allows for the redirection of funds to cover all of the enhancements currently supported by the MEF contributions and the supply fees paid by parents. These enhancements are enumerated in the section above on Quality. We were also able to identify additional opportunities for improvement which could be funded in the Year 1

budget and in subsequent years, as determined by the school board, and suggestions for those items are included in the Quality section of this report as well.

Year 1 Projected Budget

The following discussion will explain in greater detail what is included in this budget and how it was compiled. Notes at the bottom of the pages and to the right in many of the lines indicate sources of information and methods of calculation.

Page A-8 shows the calculation of ADM and ADA numbers for the three Signal Mountain schools, as well as for the Hamilton County school system as a whole. The ratios are also calculated showing the percentage of HCDE ADM and ADA figures attributable to the three Signal Mountain schools. These figures form the basis for the determination of projected revenues from the State of Tennessee and Hamilton County.

Page A-9 shows the projected revenues in summary fashion from four sources: the State of Tennessee (BEP calculation); Hamilton County; municipal contribution (discussed below); and charges for services (also discussed below). The next chart shows in summary fashion the projected expenditures, with two different columns: on the left is the list of expenditures excluding funds received from two sources: the Mountain Education Fund (MEF), which in the 2015-16 school year donated \$343,991 to the Signal Mountain schools; and school supply fees collected from parents of students enrolled in the Signal Mountain schools, which was estimated to be approximately \$300,000. This column is designated as "Year 1 Est. HC Equiv." (Estimated HCDE Equivalent expenses only). This column indicates unallocated funds (in the line called "Unspecified Budget Surplus/Flexibility") of \$1,893,835.

The right side column includes items currently funded by MEF contributions and parent supply fees. This column is designated as "Year 1 Est. w/ MEF and Supply." It shows that if the expenses currently paid for by MEF and parent supply fees are included in the expenditures covered by state and county revenues, the general education supply fees charged to parents could be canceled and the MEF contributions could be applied in future years toward other educational enhancements, as determined by the school board, teachers, administrators and parents.

The purpose of including the MEF and supply fee figures in the projected Year 1 budget is to illustrate that our budget calculation indicates that a separate school district would be able to fund all of the standard costs covered by HCDE contributions, plus the enhancements provided by MEF and parent supply fees, while generating a surplus that could be used for further improvements, as determined by the school board. The Unspecified Budget Surplus/Flexibility in this column is \$1,249,844.

The next chart on page A-9 shows an estimate of the one time only start-up expenses that would be required in the formation of a separate school district. State law requires that a school district must maintain a "rainy day fund" of 3% of its operating

budget. It is also proposed that retention bonuses be paid to teachers currently employed in the Signal Mountain schools. Other costs contribute to a total of \$1,116,799 for projected start-up costs. In Year 1 of the operation of a separate school district, the projected budget surplus would be used to cover these start-up expenses. Thereafter, any surplus could be directed toward other uses.

Pages A-10 and A-11 show the detail in the projected Year 1 revenue. County taxes are calculated using the ratio of ADA in the Signal Mountain schools and also include \$65,000 representing the cost of salary and benefits for a School Resource Officer (SRO) provided by the Hamilton County Sheriff's Department.

Municipal taxes shown in the next chart represent the contribution of the Town of Signal Mountain. State law requires that a municipality must contribute to the operation of its municipal school district, with a specified amount equal to \$0.15 per \$100 of assessed property value within the municipality. For the Town of Signal Mountain, that amount equals \$438,434 based on the 2017 assessments.

It is important to point out, however, that the municipal contribution is not required to be in the form of cash, and does not require that a specific school tax be implemented. Accordingly, the chart includes the value of a school resource officer (SRO) (\$65,000) previously provided by the Town of Signal Mountain to the schools, which can be counted toward the required municipal contribution. Other in-kind contributions by the Town may also be counted. While ultimately it would be up to the Town Council to determine how to fulfill this obligation, some possible contributions could include the assignment of employees of the Town to perform maintenance work, the sharing of an information technology officer's workload whose salary and benefits are paid by the Town, and the fair market value of space owned by the Town and made available for use by the schools.

The next chart shows projected revenues in the category of charges for services. Two items are included here: a non-resident fee of \$250, which could be charged for students who reside within Hamilton County but outside the boundaries of the Town of Signal Mountain; and tuition charged for students who do not reside within Hamilton County. Whether to assess such fees, and in what amount, would ultimately be a decision for the school board to make – we include them in our budget as a realistic estimate of revenues to be expected in Year 1.

The in-county non-resident fee is a recognition of the fact that the Town of Signal Mountain would be required to contribute approximately \$438,000 to the operation of the schools in a municipal school district (based upon 2017 property assessments), while this obligation would not apply to Walden or the unincorporated area of Hamilton County (UHC) on Signal Mountain. The per-pupil cost attributable to the residents of the Town of Signal Mountain is approximately \$307, and while it is not directly paid by the parents of each student, it is indirectly a cost to those parents and to the residents of the Town. If a similar contribution is not made by Walden and UHC, an inequity results in that the Town of Signal Mountain would be subsidizing the cost of education for

students residing in Walden and UHC. This inequity can be eliminated by assessing a non-resident fee, or by other means discussed below.

If an inter-local agreement were to be entered into between Signal Mountain, Walden and the Hamilton County Commission, on behalf of the residents of UHC, the non-resident fee could be eliminated and in its place, a municipal contribution on behalf of Walden and UHC could be made. In a different scenario, if a multi-jurisdictional school district could be created that included the Town of Signal Mountain, the Town of Walden, and UHC, then the required financial contribution would apply to the entire district, and the equity adjustment of a non-resident fee would be inappropriate. This issue will be discussed in greater detail in the section on legal issues below.

As for the tuition revenue from residents outside Hamilton County, that is a fee that is currently in place and would in all likelihood be continued. The purpose of the tuition is to replace the county portion of the per-student revenue, since county support only follows the student when the student attends a school within the county. That is, while Sequatchie County provides funds to Sequatchie County Schools for students who live within that county, it does not provide funds to Hamilton County Schools for students who live in Sequatchie but attend school in Hamilton. This would be true for residents on Signal Mountain who live in Sequatchie County and attend Signal Mountain schools. In the 2016-17 school year there were 40 such students enrolled in Signal Mountain schools.

Pages A-12 through A-23 show the detail for the projected expenses for Year 1 of the operation of a separate school district. The separate charts are organized so as to follow the budgeting process used by HCDE and other school districts across Tennessee, which enables a direct comparison between the current HCDE funding for Signal Mountain schools and the projected funding in a separate school district.

The first chart on page A-12 shows expenditures for the Regular Instruction Program. Again, as with the summary chart on page A-9, there are two separate calculations: the first includes the cost of funding only those items currently provided and funded by HCDE; the second adds to that list the items also funded by MEF contributions and supply fees. The bulk of the expense for regular instruction is devoted to teacher salary and fringe benefits, with lesser amounts for such items as instructional supplies and materials, textbooks, and equipment. The total estimated expense for the HCDE funded items is \$10,890,316, and for the enhanced budget that includes MEF and supply fees as part of the regular operating budget that figure increases to \$11,127,670. The notes to the right of each line and at the bottom explain the basis for the calculations.

The charts on page A-13 show the same calculation methodology applied to special education and the career and technical education program. Page A-14 continues with planning, student services and health services. Page A-15 shows other student support and support services for regular instruction. Page A-16 shows support services for special education and career and technical instruction. Page A-17 covers,

under the heading of “Board of Education Services,” the estimated cost of liability insurance and trustee commissions. The latter figure is a charge imposed by the Hamilton County Trustee for the service of collecting and disbursing tax revenues, and is equal to 2 percent of the amount of assessed property tax and 1 percent of all other revenue.

Page A-18 shows the cost of the Office of the Superintendent. The majority of this cost is in salary and fringe benefits.

Page A-19 shows the cost of the Office of the Principal for the three Signal Mountain schools. Again, the majority of the cost is in the form of salary and fringe benefits.

Page A-20 shows the cost of fiscal services required by the school district. This consists primarily of a Chief Financial Officer and support staff, including salary and fringe benefits. Also on pages A-20 and A-21 are charts for Human Resources and Plant Operations and Maintenance.

Page A-22 shows the estimated cost of the operation of school buses for the three Signal Mountain schools. This figure is derived from the response from HCDE and the estimates provided by an independent contractor familiar with the Signal Mountain schools (not the private contractor, Durham School Services, which provides bus service to many of the Hamilton County schools). The cost also includes bus service for special education students, including the driver and an assistant on each bus. Page A-22 also includes a chart showing the cost of technology required for the schools.

Finally, page A-23 shows a cost for what is termed “regular capital outlay,” which is the term used in the HCDE budget to describe capital expenditures for buildings that extend beyond regular maintenance. This is a pro-rata portion of the HCDE allocation to this expense for the entire Hamilton County School District. Page A-23 also shows the cost of two SRO positions, one currently funded by Hamilton County and the other by the Town of Signal Mountain.

Projected Budgets for Year 5 and Year 10

After completing the task of creating a projected budget for Year 1 of a separate school district, the SSVC determined that it was also our task to consider how that budget might change in future years, and how any future changes could affect the overall viability of a separate school district. We were concerned that even if the first year of operations appeared to be able to generate a budget surplus, it was necessary for us to determine whether a balanced budget could be maintained over time. Our projected budgets for Years 5 and 10 are presented as Exhibit B in this report.

To address this issue, we created a subcommittee to gather and analyze data regarding the demographic trends of the communities that together comprise Signal

Mountain and form the basis for its school-aged population. This demographic subcommittee relied on several sources of information in building its population projections for Signal Mountain, using as its target population estimates for five and ten years after the establishment of a separate school district. Taking this as our baseline, the budget subcommittee then created budget projections for those five- and ten-year windows, using several alternative hypotheses for estimating the school population, as explained in detail below.

Although our methodology is quite complex, the underlying premise can be stated in simple terms: What happens to the budget as a result of population growth or shrinkage, and what will be the effect of inflation? Because school funding is largely a function of the size of the student body, we need to know how various possible changes in the school-age population will affect the revenue side of the budget. And because expenses will be expected to increase over time, we need a reliable basis for estimating the rate of increase, to determine whether the budget will remain in balance.

As explained on page B-1 of Exhibit B, in projecting future budget data, we began with historical Hamilton County enrollment and line item revenue and expense trends for the seven year period between 2010 and 2017, using data from Hamilton County Comprehensive Annual Budget Reports (CABR). Average annual increases for the total amounts and per student amounts were calculated to estimate how these variables have changed over the past. Demographic trends and projections were also considered in this analysis by using research and growth projections from the University of Tennessee Knoxville Haslam College of Business, as well as data from the U.S. Census for Signal Mountain, Walden, and the unincorporated areas of Hamilton County located on Signal Mountain.

From this research, five growth models for the Town of Signal Mountain and the surrounding areas were developed:

- 1) Signal Mountain grows at the same rate as Hamilton County, based on the UTK College of Business growth projections data;
- 2) Signal Mountain grows at a faster rate than Hamilton County, based on five-year straight-line growth projections;
- 3) Signal Mountain grows at a slower rate than Hamilton County, based on ten-year straight-line growth projections;
- 4) Signal Mountain population remains constant while Hamilton County grows at the rate based on the UTK College of Business growth projections data;
- 5) Signal Mountain population declines at a rate equivalent to the past five years while Hamilton County grows at the rate based on the UTK College of Business growth projections data.

For expenses, each Year 1 expense item was broken down into a per-student amount. Then an annual increase was applied to this per-student amount and multiplied by either the 5- or 10-year time period to obtain an estimated per-student expense figure for the five-year and ten-year budget projection. Then the projected student population based on the five growth scenarios described above was multiplied by the per student amount for the five- and ten-year periods to determine a total expense for each item over time.

Annual increases for revenue were determined by looking at historical trends in each of the revenue categories. Two scenarios were considered for the annual increase that was applied to the expense items:

- 1) annual increase at the same rate as past Hamilton County spending, but not less than 1 percent per year;
- 2) annual increase at the rate of 2.5% per year, assumed as the projected annual rate of inflation.

Next, historical Hamilton County capital spending from bond funds and capital expenditures was reviewed from the same 7-year period. During this time, capital fund expenditures did not show any measurable growth; therefore, they were assumed to remain constant for future projections, so as not to overstate revenues. Furthermore, the average annualized capital and bond expenditures with no measurable growth were assumed for predicting future pro-rata capital allocation estimates for a Signal Mountain school district, to determine what a capital account might look like after five and ten years.

To determine the estimated total capital fund accumulations over the five and ten year periods, the estimated capital account was added to the accumulated budgeted capital outlay to determine the estimated total capital available. Next, the accumulated surplus was determined for each of the scenarios and added to the total capital to determine the total potential capital available for education expenses after the five and ten-year periods.

The future 5- and 10-year budget projections are set forth in Exhibit B. The result is a complex set of tables which can be described as a matrix with twenty cells. For each of the five growth models described above, there are four projections: two showing revenues and expenses increasing at the same rate as past Hamilton County spending, but not less than 1%; two others showing revenues and expenses increasing at the assumed rate of inflation (2.5%). Each scenario describes 5- and 10-year projections for (1) the equivalent Hamilton County spending for Signal Mountain schools; and (2) the Hamilton County spending plus MEF and parent supply fee spending.

The summary charts on pages B-2 and B-3 of Exhibit B provide detailed results of the calculations for each of these twenty alternative outcomes. The first chart (labeled "Scenario 1: 37377 growing at the same rate as HC") shows what may be considered

the most optimistic projection, where the population of Signal Mountain grows at the same rate as the population of Hamilton County. This would result in the same ratio of funding from county taxes, and a relatively stable growth in both revenues and expenses. The accumulated surplus and total capital over ten years, assuming expenses increased at the rate of inflation and no significant capital outlay during that period, would be in excess of \$31 million if the budget included paying the cost of items currently covered by MEF and supply fees; it would be more than \$40 million if expenses increased by the historical rate of Hamilton County spending (which has been less than 2.5%). If the budget surplus is not included in the projection, the estimated total capital after 5 and 10 years is \$7.4 million and \$14.8 million, respectively, conservatively assuming that capital outlay funding does not increase over time.

The fifth chart, on page B-2 (labeled “Scenario 5: SM School enrollment Decreases while HC Population grows at rate predicted by UTK, College of Business”) presents what may be considered the least optimistic projection, where the enrollment in Signal Mountain schools declines and the population of Hamilton County increases. This would result in a reduced ratio of funding from county taxes and from the state. In this model, the accumulated surplus and total capital over ten years, assuming expenses increased at the rate of inflation and no significant capital outlay during that period, would be in excess of \$30 million if the budget included paying the cost of items currently covered by MEF and supply fees; it would be more than \$38 million if expenses increased by the historical rate of Hamilton County spending. If the budget surplus is not included in the capital projection, the estimated capital after 5 and 10 years is still \$7.4 million and \$14.8 million, respectively.

The chart at the top of page B-4 shows the revenue projection for Scenario 1, with Signal Mountain growing at the same rate as Hamilton County. After ten years, Signal Mountain schools would have 2,643 students enrolled, with an average daily attendance of 2,534 students, resulting in the same 5.75% ratio to the attendance ADA in Hamilton County schools. County tax revenues are projected to increase by an average of 2.5% per year, matching historical trends. Municipal contribution from the Town of Signal Mountain is projected to increase by an average of 6.1% per year, which is greater than the 2.5% figure for Hamilton County. This is because while increases in assessed value of property in the county do not result in a proportional increase in tax revenues (due to the statutory requirement that the tax rate must be adjusted downward when the tax assessment is adjusted upward, so that the net tax obligation resulting remains the same), this downward adjustment does not apply to the municipality’s required contribution to its school system. In other words, under current law the Town of Signal Mountain would remain obligated to contribute an amount equal to \$0.15 per \$100 of assessed property value within the Town. Historically, the quadrennial reassessment of property values in Signal Mountain has resulted in an average annual increase in that valuation of 6.1%.

Revenues from non-resident fees are assumed to increase at the same rate as the Signal Mountain contribution (6.1%). Revenues from state funds are projected at the historical rate of increase.

Projected expenditures are detailed in the charts at the bottom of page B-4 and on page B-5. They show the categories of expenditures, the per-student expenditure for each category, and the projected increases at the historic rate for Hamilton County spending and at the assumed 2.5% rate of inflation.

Skipping to pages B-12 and B-13 of Exhibit B, the charts show the same calculations of revenue and expense for Scenario 5, where Signal Mountain student enrollment decreases while Hamilton County population grows at the rate predicted by the UTK College of Business study. After 10 years, the ratio of Signal Mountain ADA to Hamilton County ADA falls to 4.76% and the Signal Mountain schools would have a student enrollment of 2,187 and an average daily attendance of 2,097. The detail for projected revenues and expenses continues to indicate that a balanced budget can be sustained.

The charts on pages B-14 and B-15 show how the estimated figures for enrollment, revenues and expenditures were calculated using actual numbers for 2010, 2012 and 2014, projected figures for 2016, and budgeted figures for 2018.

The chart on page B-16 shows the historical data for capital funding from bonds and from capital expenditure contributions by the Hamilton County Commission to the HCDE budget . These data are compiled over an 18-year period, from 2000 through 2017. This chart forms the basis for the summary projections of accumulated surplus described earlier in this section.

Conclusion

The foregoing analysis is an unbiased attempt to project what a hypothetical Signal Mountain school district budget would be for Year 1. As it currently stands, this budget has been reviewed and vetted by officials at the state and county level, and it represents the product of hundreds of hours of collective detailed analysis of budget line items. The SSVC has worked diligently to provide the Signal Mountain community with its best estimate of what the financial future would be for a new Signal Mountain school district. Furthermore, while the committee has strived to be accurate and conservative when researching expense estimates, it should be noted that there is adequate budget surplus/flexibility to allow for variations in any particular line item for Year 1 expenses, should they occur, as deemed necessary by the school board.

The conclusion we draw from the detailed calculation of several different possible scenarios with respect to future revenues and expenditures in a separate Signal Mountain school district is that the budget should remain viable over a ten-year period, with a substantial likelihood for accumulation of capital for future capital needs for the district. Of course, the final authority on any budget for the school district will rest with the school board. Unanticipated demands may arise that we were not able to foresee and did not include in our projections. And the standard investment disclaimer applies here as well: past performance is not a guarantee of future performance. Nonetheless,

we believe that we have applied appropriate and reliable sources of data to the best of our ability, and that the resulting projections are the best estimate we can achieve at this time.

Finally, we note that current news and political commentary regarding school funding in Hamilton County have created a dynamic environment during the time this report was being developed. For example, the Hamilton County Commission recently voted on a tax increase to fund an additional \$100 million for Hamilton County schools. The Hamilton County Board of Education will soon vote to determine how those funds will be allocated, which could potentially affect county revenue distributed to a Signal Mountain school district.

If all the funds are used for new capital bond issues prior to the formation of a Signal Mountain school district, the new municipal district would not see any change in operating revenue or capital allocations. However, if a portion of the \$100 million is used for general operating revenue by HCDE, then the Signal Mountain Year 1 revenue would increase by 5.65% of that revenue increase. For example, if \$24 million were allocated to the HCDE general operating budget as requested earlier this year, the Signal Mountain school district budget revenue and surplus/flexibility would increase by an additional 5.65%, or \$1.36 million. Therefore the total revenue would be \$22 million and the unspecified budget surplus/flexibility would be \$3.25 million. It should also be noted that subsequent capital allocations after a municipal district is formed would result in a capital allocation to the municipal district as a percent of ADA like other county revenue, in accordance with Tennessee law.

Buildings

In its investigation of the viability of establishing and operating a separate school district, the SSVC looked at the condition and capacity of the three public school buildings located in the Town of Signal Mountain.

Thrasher Elementary School contains 57,281 square feet of space and has a reported capacity of 585 students. Nolan Elementary school contains 96,450 square feet and has a reported capacity of 788 students. Signal Mountain Middle/High School contains 262,250 square feet and has a reported capacity of 1,250 students.

In 2017, Thrasher had 578 students enrolled, or 98.8% of reported capacity; Nolan had 644 students enrolled, or 81.7% of reported capacity; and SMMHS had 1,220 students enrolled, or 97.6% of reported capacity.

The near-capacity enrollments at Thrasher and SMMHS pose a concern. For Thrasher, the concern is reduced by the availability of space for additional students at Nolan, with an adjustment in zoning for the two schools possible to shift students from one school to the other. It should be pointed out that this concern exists regardless of whether a new school district is created – HCDE will face this problem if applications for enrollment at Thrasher increase in the immediate future.

The issue for SMMHS is somewhat different, as there is no other school building on Signal Mountain available to which students can be shifted. However, several factors uncovered in the SSVC's research suggest the concern may not be as serious as appears on first sight. In the years following construction of the school, enrollment was high, exceeding reported capacity. According to the State of Tennessee Department of Education, SMMHS enrolled 1312 students in 2012-13, 1311 students in 2013-14 and 1281 students in 2014-15, in all years exceeding the reported capacity of 1,250. The latter figure is a guideline, but not a rigid requirement.

A second factor is that the reported capacity is calculated based on the assignment of classrooms to specific categories and the designation of optimum maximum student occupancy for each category. For example, science labs have smaller capacities than classrooms. However, a redesignation of one type of room, or a shared usage, can alter the overall capacity without additional square footage. This was apparently the solution reached in the early years of SMMHS when enrollment exceeded 1,250.

A third factor is that when SMMHS was built, provision was made for expansion by connecting the two academic wings of the school.

SSVC also investigated the current condition of the three schools and the projected need for capital improvements. We met with Gary Waters, the former Assistant Superintendent of Auxiliary Services for HCDE, who served as our expert consultant on the issue of building conditions and maintenance. Mr. Waters estimated

that there should be no capital needs for Nolan and SMMHS over the next ten years. Mechanical systems should last 25-35 years. Thrasher will need a new HVAC system in the future, estimated to cost up to \$2 million. The HVAC systems at all three schools will require new software to enable local control, at a cost of up to \$60,000. HCDE reported that Thrasher had approximately \$2.24 million in deferred maintenance, and Nolan and SMMHS had no deferred maintenance at this time. These figures are all taken into account in the long-term budget projections presented in this report, and do not appear to be an obstacle to the viability of creating and operating a separate school district.

In the projected budgets for Years 1, 5 and 10, additional funding has been designated for maintenance and capital reserves, over and above what is currently provided by HCDE. This is in recognition of the fact that a smaller school district must assure viability by providing for unforeseen needs for capital outlays to preserve the quality of the buildings and the equipment needed for educational purposes.

Miscellaneous Issues

Teachers and staff transition

State law requires that when a municipal school district is created, teachers who transition from the former county district to the new municipal district must be compensated at no less than they were previously paid, including pension, sick leave and certain other fringe benefits. Teacher seniority remains in place for those teachers who are hired into the new school district, and tenure status is automatically transferred. Our projected budget includes provisions for a retention bonus for teachers, as well as funding to provide for comparable health insurance and other benefits.

In order to ensure that there would be adequate funding so that employee health insurance would not be diminished, the SSVC used several resources to research this important benefit. The Memphis municipalities budgeted the cost of their health insurance benefits at approximately \$7,500 per employee. Other small districts across Tennessee were also used for reference and comparison to ensure the SSVC's budgeted amount was in line with or higher than districts of similar size. HCDE currently budgets health benefits at \$9,500 per employee for a high end benefits package. The SSVC budgeted \$10,590 per employee, which was more than \$1,000 per employee higher than HCDE or any other district used for comparison, in an effort to account for a high end benefits package for a smaller employee base. Furthermore, there is adequate surplus/flexibility in the budget to allow for further unexpected variations in this expense.

In the case of the six municipal school districts in Shelby County, the transition of teachers and other employees was handled through the issuance of letters of intent by the newly formed school districts, offering employment to all employees in the schools within the new district. This approach allowed for a virtually seamless transition, with very little turnover.

Theoretically it is possible for a new school board to require reapplication for all employees before being hired into the new school district. However, as was pointed out by the superintendents in Shelby County, this approach would make no sense, and was strongly discouraged by the attorney representing the Memphis municipalities, as it would undermine stability and confidence in the new school board and administration. While the SSVC cannot guarantee what a school board would decide to do in this situation, it seems highly improbable that employees would not be offered the opportunity to remain in their current positions in the schools where they worked before the separate school district was created.

A provision for retention bonuses has been included in the projected Year 1 budget developed by the SSVC, under the category of startup costs. It is anticipated that a bonus will provide an incentive to keep teachers in the same schools, which in turn will be advantageous in having as little turnover as possible in a time of transition.

[Note: in a previous progress report, we stated that teachers would be required to apply to retain their positions and tenure. This statement was in error, and was based upon an erroneous statement in the report prepared by Southern Educational Strategies for the City of Bartlett. All that was required in each of the six Shelby County municipal school districts was a letter of intent.]

International Baccalaureate Program

Our analysis of the viability of a new school district assumed the continuation of the IB program at SMMHS, and the cost of that program is included in the projected budgets for Years 1, 5 and 10. SMMHS is already certified as an IB program school, and recertification is not required. The budget includes funding for annual fees to maintain the program, as well as professional development for IB staff.

Busing

School buses transport students living on Signal Mountain to the three Signal Mountain public schools, and this service is provided as part of the HCDE operating budget, with no additional charge to those students' families. This service includes students living in Walden and the unincorporated area of Hamilton County on Signal Mountain, as well as those within the Town of Signal Mountain. The bus service on Signal Mountain is currently provided by independent contractors.

The SSVC budget subcommittee worked with an independent contractor to develop an estimate of the cost of continuing this same service, and also to estimate the cost of expanding the service to include additional buses. Although the projected budget for Year 1 does not show the cost of adding two buses to the current allotment funded by HCDE, we have calculated that cost, plus the cost of adding bus service for extracurricular activities, at \$197,600. This would enable a change in the starting time of SMMHS from the current 7:25 AM to a later time. At present, the early starting time is required because the HCDE budget for buses requires that some buses run more than one route in a school day, which in turn means that those buses cannot serve two schools at the same time.

There is substantial research reported in professional journals indicating that a later starting time contributes to better school performance, as indicated by a policy favored by the American Academy of Pediatrics. (See the article "California Today: Should the School Day Start Later?" *New York Times*, August 2, 2017.)

Buses and bus assistants for students with special needs are budgeted in the transportation expense in Exhibit A, and this cost is included in the projections for Years 1, 5 and 10 operating budgets.

HCDE magnet school attendance

In 2017, 57 students from the Town of Signal Mountain and 14 from Walden and UHC attended HCDE magnet schools. The current HCDE policy on magnet schools states that eligibility for enrollment is “a viable choice for all students who reside in Hamilton County.” Some parents of children enrolled in magnet schools have expressed concern that if a separate school district were to be created, HCDE could change its enrollment policy with regard to students residing in that district.

It is possible that if a separate Signal Mountain school district were to be created, HCDE could change its magnet school attendance policy to exclude out-of-district residents from Signal Mountain. In fact, the attorney representing HCDE stated in a public meeting that his client may choose to reduce the priority status for enrolling Signal Mountain students, even though Signal Mountain residents will continue to pay Hamilton County taxes supporting these schools; however, that would require a policy change by the HCDE Board of Education, and could be subject to a subsequent legal challenge. It should also be pointed out that in so doing, not only would HCDE be taking an action that would directly harm those students currently attending magnet schools, it would also result in the loss of approximately \$550,000 in revenues that those students would generate for HCDE by their attendance at HCDE schools. It should also be noted that families whose children attend magnet schools will continue to pay county taxes that go to the support of those schools. Nonetheless, this issue remains a concern for those parents, and if possible, a resolution should be sought.

In Shelby County, students from municipal districts are still eligible to attend the Optional Schools in Shelby County, which are similar to the Hamilton County magnet school programs.

Special Education

Special education programs are required by state and federal law, and additional funding is provided from federal grants and from the state through enhanced BEP contributions for students in the various categories of “special needs” students. Funding for students who require special busing is also included in the budget, as well as nursing staff, physical therapists, occupational therapists, supplies, contracts with private agencies, and special instructional settings following Individualized Education Plans for students who qualify. The SSVC analysis does not foresee any change in current policy, procedures, or quality as far as special education is concerned. We recognize that Signal Mountain schools are highly regarded for their treatment of special needs students, and our projected budget provides sufficient funding so that current services will be continued or improved.

Potential Obstacles for a Municipal School District

Budget

In creating the SSVC, the Signal Mountain Town Council assigned the task of identifying obstacles to establishing a separate school system and also identifying the means by which those obstacles could be overcome. In several instances in the foregoing discussion we have been able to do this. We have developed a projection for the budget for a school district that would be balanced and that would generate a sufficient surplus to pay for additional enhancements to education. While the SSVC has no authority to implement any budget plan, our task is to identify a means to overcome the potential obstacle of insufficient financial resources to allow a school district to remain viable.

Buildings

In looking at the condition and capacity of the three school buildings in Signal Mountain, the SSVC examined the cost of maintenance, the capital needs, and the capacity of those buildings. We recognized two potential obstacles: the need for major capital improvements over the long term that would exceed the district's ability to provide funding, and growth of the student population that exceeds the physical capacity of the buildings. We have concluded from the information available to us that the budget will include sufficient funds to create a capital reserve to support the required improvements. And from our projections for population growth based on census data and other relevant sources we have concluded that the two elementary schools have sufficient unused capacity to meet the demand for an increase in elementary school enrollment, and that the middle/high school can be expanded to meet the demand for increased enrollment as well.

Declining enrollment

Another obstacle we recognized is the possibility that enrollment will decline, and with it the revenue attributable to the loss in student population. Although we consider this unlikely, we must recognize that it is nonetheless a possibility, particularly in light of the fact that student population in Signal Mountain schools has declined by approximately 5 percent over the five year period from 2012-2017. Again, the SSVC has no authority to act in response to such an event. However, we recognize that a school board has the authority to revise its enrollment policy to attract students from a broader population base, and in the event that enrollment declined, the school board would be empowered to take remedial action.

Participation and representation of Walden and UHC

Because an independent municipal school district has the authority to set its own enrollment policy, students who reside in Walden and the unincorporated area of Hamilton County on the mountain could be guaranteed enrollment in a Signal Mountain

school district based on board policy. This policy would be independent and would not need prior approval from Hamilton County to allow students from outside the Town of Signal Mountain to attend the municipal schools.

However, one of the most important issues we have addressed, and one of the greatest concerns expressed by members of the community in their communications with the SSVc, is how the residents of Walden and the unincorporated area of Hamilton County (UHC) on Signal Mountain will participate in the creation and governance of a separate school district. These concerns include at least the following: 1) will residents of Walden and UHC have the right to participate in a vote on a referendum to create a separate school district; 2) will they have the right to be represented on the school board of a new school district; 3) how will their participation in the funding of a school district be determined; 4) will their children be guaranteed enrollment in the Signal Mountain schools.

The SSVc does not have the authority to offer definitive answers to these questions. We have identified four possible solutions to this problem:

1) an inter-local agreement could be entered into between the Town of Signal Mountain, the Town of Walden, and Hamilton County on behalf of the residents of UHC. The terms of the agreement could address these questions regarding participation in the governance and financing of the school district. Although the attorney for HCDE stated that HCDE would not enter into an inter-local agreement, this decision would ultimately be up to the Hamilton County Commission.

2) a multi-jurisdictional school district could be created that includes Signal Mountain, Walden and UHC. This alternative would require a change in state law, which currently restricts a municipal school district to a single jurisdiction.

3) specific language could be included in a referendum voted on by the residents of the Town of Signal Mountain that would include the terms of participation of residents of Walden and UHC in the governance of the district and the right to enroll their children in the Signal Mountain schools. However, the voters of the Town of Signal Mountain could not obligate Walden and UHC residents regarding the financing of the school district.

4) a Signal Mountain school board could enter into a formal agreement with the Walden Board of Aldermen and the Hamilton County Commission (on behalf of the residents of UHC) to create a "board of joint control," which would operate as a school board for the Signal Mountain school district. Under such an arrangement, the Walden Board of Aldermen and the Hamilton County Commission would appoint members to serve on the school board. (We note, however, that this alternative is predicated upon the prior creation of a municipal school district and election of a school board, and does not address the question of how residents of Walden and UHC would participate in the initial decision regarding the municipal school district.)

Before action proceeds, these questions will need to be resolved so that residents of Signal Mountain, Walden and UHC will be able to understand the full impact of a decision to form a separate school district.

Control of school property

There is an additional obstacle for which we have no solution to recommend, namely the question of how the school district will exercise control over the school property. The SSVc has conducted only a limited review of this issue. When it was first announced that the Town of Signal Mountain was considering looking into the possibility of establishing a separate school district, the attorney representing HCDE wrote to the attorney who represents the Town of Signal Mountain in an email stating: "If the County Board [of Education] no longer needed these schools because the students residing within the town limits were going to their own district, then the board could sell these properties or reallocate them as it saw fit," thereby implying that if a municipal school district should be created, HCDE would refuse to cede the use of the three school buildings to the new district. Obviously, without those buildings a new school district would not be able to function.

The SSVc was specifically directed by the Town Council not to address this issue. Nevertheless, we note that there is case law in Tennessee on the topic suggesting that a school district does not own school property, but rather it holds school property in trust for the people served by the schools. Under this theory, control of the property would transfer to the new school district. However, the ultimate resolution of this issue is beyond the authority of the SSVc. We simply note that this remains an obstacle that must be resolved before moving forward.

When the Town of Bartlett in Shelby County acted to create a separate school district, it was faced with a similar concern. In Bartlett, the dispute over the buildings and their contents was resolved through negotiation and the Shelby County school system granted title to the property in a quitclaim deed for \$10, including not only the land and buildings but the contents therein. A similar process occurred in each of the other five Memphis suburbs that formed their own municipal school district. In one municipality, Germantown, the new district was granted title to only five of the eight schools, and Shelby County retained three; however, this was because in those three schools a majority of the students did not live within the boundaries of the city of Germantown and the county system needed the buildings to be able to provide for those students so that they did not have to transfer to schools outside the district.

As part of the resolution of the litigation over the separation of the six municipal school districts in Shelby County, the municipalities agreed to pay for the unfunded liability for health insurance coverage for retirees who had worked in the schools within those districts. However, there is no comparable unfunded liability in the Hamilton County school system.

Town of Signal Mountain financial contribution

As noted in the discussion of the budget and finance for a new school district, state law requires that a municipality must contribute financially to the operation of a municipal school district. Specifically, the law requires the value of the contribution to be at least \$0.15 per \$100 of assessed property value within the municipality. For the Town of Signal Mountain in 2017 this amounted to approximately \$438,000.

The SSVC has been able to identify several possible ways in which the Town's obligation could be addressed in part by the use of in-kind contributions. The cost of the salary and benefits for a school resource officer is approximately \$65,000. If paid by the Town of Signal Mountain, this would count toward the required Town contribution. Another possible in-kind contribution could be the sharing of an information technology specialist to serve both the Town and the school district. A third possibility is the use of office space owned by the Town for administrative or other purposes required by the school district. The fair market rental value of this space could count toward the Town's contribution. Another possible contribution by the Town could be the sharing of maintenance personnel whose salaries and benefits are paid by the Town.

It is an open question as to whether the creation of a separate municipal school district would require an increase in taxes for Signal Mountain residents. State law does not require that the municipality approve a school tax, but rather it requires only that the municipality make a contribution to the operation of the school district in an amount calculated with reference to the assessed taxable property within the municipality. However, it should be noted that in each of the six municipalities in Shelby County the residents voted for a tax increase in some form to support the local school district. An alternative that the Town Council might consider is an increase in the sales tax on taxable transactions within the Town of Signal Mountain. This alternative was chosen by at least one of the municipalities in Shelby County as a way of raising the additional funds necessary to comply with the state mandated municipal contribution. Current state law permits local sales tax at a rate of up to 2.75 percent. Signal Mountain presently taxes transactions at 2.25 percent, allowing for the possibility of adding a $\frac{1}{4}$ or $\frac{1}{2}$ cent increase. If this were to be approved by the voters, the additional revenue generated, based on data from 2015 and 2016, would be \$82,487 for a $\frac{1}{4}$ cent increase and \$164,974 for a $\frac{1}{2}$ cent increase.

While emphasizing that any decision on a tax increase must be proposed by the Town Council and approved by a vote of the residents of the Town, we can offer an example of how a tax increase might affect Signal Mountain residents. Property tax on real property is based on the assessed value, which is supposed to equal 25 percent of the fair market value of the property (although in reality it is usually less than 25 percent). By way of example, a home valued at \$400,000 would be assessed at \$100,000 for tax purposes. If the state requirement of a municipal contribution equal to \$0.15 per \$100 of assessed taxable property value were to be approved by the voters, this would add \$150 to the tax applicable to that property.

It is beyond the scope of our authority to recommend specific actions to meet this obligation, nor have we investigated the ramifications of this requirement to the Town's operating budget. However, it is appropriate for the SSVC to include this issue in our identification of potential obstacles to the viability of a separate school district.

Effect of withdrawal on Hamilton County schools

Critics of the proposal to establish a separate independent municipal school district on Signal Mountain have argued that withdrawing from HCDE would cause harm to students in the county schools. Reports in local newspapers and on television interviews have claimed that the funding of the municipal school district would directly cause a reduction in funding to struggling schools in the county system.

One local resident submitted the following question to the SSVC: "Our withdrawal from the Hamilton County Schools will de-fund some services at struggling schools. How can we morally, ethically, humanely explain and defend this decision?"

The underlying premise of this question is contrary to what we were told by school administrators in our visit to Shelby County, including the former Chair of the Shelby County School Board. It is true that if a separate school district is created, the state and county funds attributable to those students will go to the new school district. But there are several factors to keep in mind.

First, all of the costs associated with educating those students will also be transferred to the new school district: teacher salaries and benefits, books, buses, building maintenance, etc. In Memphis, we were told that the per pupil revenue in the Shelby County school district actually increased following the separation of six municipal school districts, because federal funds that go to students in low-income families or who are deemed "at risk" under federal standards were disproportionately paid to Memphis city schools, as opposed to schools in the six municipalities.

So the issue is not taking money away from struggling schools, but rather how HCDE will reallocate its budget if it has fewer dollars and fewer students, but on average slightly more dollars per student. The assumption that a Signal Mountain school district will de-fund services at struggling schools assumes that HCDE will not be able to figure out how to improve efficiency with 2,400 fewer students, 3 fewer buildings to maintain, more than 100 fewer teachers to pay, etc. If the HCDE system receives the same per-pupil revenue for the students in the five schools that are currently the subject of a possible takeover by the State Department of Education, how will that result in services for those schools being cut?

HCDE has an annual budget of approximately \$363 million and a little over 43,000 students, which works out to about \$8,430 per student. A Signal Mountain school district would have 2,430 students and would receive about \$19.9 million from state and county funds that currently go to HCDE on behalf of those students, which works out to about \$8,190 per student. There is a deficiency of about \$240 per student.

Although our projected budget indicates that this deficiency would be made up by contributions from the Town of Signal Mountain and other sources of revenue, this does not translate into reduced funding for services at the five schools involved in a partnership with the state Department of Education, or at any other schools in the Hamilton County system. In fact, when asked at a public meeting on September 7, 2017, about the financial consequence of the withdrawal of the three Signal Mountain schools, HCDE's Chief Financial Officer Christie Jordan stated: "The economic viability of Hamilton County schools will not be impacted."

During the course of our investigation, a news article with a misleading headline was identified in an education publication: "Memphis suburbs are receiving federal money for more poor students than they have. Here's why." [*Chalkbeat* June 29, 2017] Upon closer examination, the situation is quite different than suggested by the headline. Federal funding to Shelby County for low-income students is calculated by the federal government based on the poverty rate in Shelby County compared to the poverty rate nationally. As the article indicates, even though the poverty rate in one district might remain the same, if the national rate increases that district will receive a smaller proportion of the available funding. "[T]he share of those students living within the boundaries of Shelby County Schools has dropped, from 0.51 percent to 0.42 percent."

The article also points out that federal law allows the state to withhold more Title I money from school districts and to redistribute that money for school improvement efforts. Again, to quote the article: "Since most of the state's lowest-performing schools are in Memphis, the district can expect to get a good chunk of that back."

Members of the SSVC are not unmindful of the concerns about a possible adverse effect on students in the Hamilton County schools should a municipal school district be established on Signal Mountain. However, despite the claims in the media, we have uncovered no evidence that such action would cause a decline in the quality of education for those students. We have reached out to some of the individuals who have made this argument, but have not received any evidence to substantiate this claim. Nor has HCDE or the Tennessee Department of Education suggested that there would be any causal link between establishing a municipal school district and a reduction in services to students in the remaining Hamilton County schools.

Conclusion

In February 2017 the Signal Mountain Town Council appointed a seven member School System Viability Committee (SSVC) to investigate and report on the feasibility of creating a separate school district comprised of the three public schools in the Town of Signal Mountain: Nolan and Thrasher Elementary Schools and Signal Mountain Middle/High School. Over the following eight months the SSVC engaged in exhaustive research, gathering and analyzing information about school finance, quality enhancements to education, school buildings, demographic trends and legal issues related to the establishment of a separate school district.

The SSVC identified areas in which educational quality could be improved; it developed a balanced prospective budget for years 1, 5 and 10; and it identified several possible paths to enable the collaborative participation of residents of the different communities that together reside on Signal Mountain.

Based on its research, a majority of the SSVC have concluded that it would be a viable option for the Signal Mountain community to separate from the Hamilton County Department of Education and create an independent municipal school district, provided that two obstacles identified in this report can be overcome, specifically: the transfer of control of the school property to the municipal school district; and the participation of residents of Walden and UHC in the decision-making process, the governance, and the sharing of the funding obligation for the new district. Additionally, the means for providing the required municipal contribution to the funding of the district must be resolved.

The scope of the SSVC's authority was specifically limited to reporting on the feasibility of creating a viable separate school district, and does not include offering a recommendation as to whether such action should be undertaken. The conclusions presented in this report are not intended to be, and should not be taken as, a recommendation for or against creating a separate school district. Rather, we offer this report as a road map for how to proceed, should the Town Council and the voters decide to do so.

Approved by: John Friedl
 Tom McCullough
 Thomas Peterson
 Susan Speraw
 Amy Wakim
 Melissa Wood

Voting Against Approval: Charles Spencer

Dissenting Report by Mr. Charles Spencer

Included without endorsement by the Committee

[Note: this dissenting report is reproduced exactly as presented to the Committee by Mr. Spencer.]

Addendum: Augmented Information

Our budget of a proposed Signal Mountain School District is exceedingly detailed, comprehensive, and thorough. In addition, the budget has been vetted by extremely knowledgeable individuals. Given the assumptions that are a part of its basis it is a very accurate point analysis of what a Signal Mountain School district might look like. This budget would not have been possible without the administration of Amy Wakim. She has done a wonderful job of putting together this budget that forms the underlying basis for our report.

This addendum does not take issue with the budget document per se only several of the underlying assumptions and the financial risk that is associated with the assumptions that can lead to a variety of outcomes. The rationale for this is simply to provide additional areas for our Town Council to consider.

As is stated in the body of our report there are several items that cause the budget as stated to be exceedingly risky. These are:

1. Issue of potential dual school districts on Signal Mountain
2. Issue of the use of the three school buildings on Signal Mountain
3. Issue of potential liability from lawsuits & the cost of outside counsel

The potential impact of these three issues dwarf other issues. They do not necessarily preclude the establishment of a new school district, they just increase the financial risk of the fiscal operations of a school district.

Financial Risk as it pertains to Economic/Financial Analysis

Risk inherently has no right or wrong answer. Risk can lead to answers that are both better and worse than would be expected otherwise. How risky a state of nature is or an item is in a situation depends upon the individual. Risk is effected by independence and interdependences of variables. Variables that are dependent upon one another can have a higher risk since they will tend to move together as opposed to completely independent variables. Normally risk on the variables involved in an analysis would be debated in a team atmosphere and various analysis would be performed until a consensus is arrived at. Using a monte Carlo simulation program a range of answers can be arrived instead of a single answer that results from not using the concepts of risk. This allows for an expected value and answers that occur between standard deviations. For instance running a simulation on the budget data that assumes a variation of a negative 5% to 10% results in an expected budget deficit of \$300,000 instead of a projected budget surplus of \$1.2 million. Corresponding, assuming positive variations would naturally yield projected budget surpluses higher than \$1.2 million

Areas that I think have the possibility of contributing to the risk of the budget numbers as stated are:

1. Beginning our analysis with a study that has already arrived at a conclusion as opposed to a "clean slate". This has the potential of adding unintentional bias into an analysis
2. Dependence on one individual for the functionality of the study as opposed to a team approach to transactional input of data and the manipulation of data. Individuals can make

unintentional mistakes that can be caught by other team members if a team is working with data bases & programs together.

3. Not seeking out the assistance of professionals that could possibly had some value add to the study. Consultants were willing to brief our committee at no cost and provide an overview of what they believe they could have added to our analysis and at what cost.

4. Not doing a program audit. A program audit could have validated or discovered errors that may exist. Estimates of an audit could have been obtained and the audit performed or not performed based on the cost and the committee's recommendation

5. Variable interdependency risk. This is the risk of variables moving together as opposed to being independent of each other.

6. A potential Signal Mountain school district would have a budget over twice the size of the Town of Signal Mountain. There is a risk associated with having sufficient resources if unintended problems arise within a new school district.

7. Risk associated with relatively small school districts. By their very nature small school districts do not have the variable fiscal resources to cover unintended costs that large school districts have.

8. Risk associated with the possibility of two school districts on Signal Mountain competing for the same students. This issue is referred to in the main body. This could have an effect on the student population of a new Signal Mountain school district which could have an effect on the anticipated revenue. It is possible that under this scenario open enrollment could ensure that sufficient students are enrolled.

9. Risk associated with the three Signal Mountain school buildings. As is referenced in the main body this issue would hopefully be resolved prior to any decision making on a new school district. The financial consequences could be considerable.

10. Risk associated with law suits. Based on our committee's visit with the Shelby County municipalities, there exists some risk of lawsuits being filed and financial consequences ensuing as a result of these lawsuits.

11. Risk associated with projected revenue from students from Walden and unincorporated Hamilton County. This represents a fee to students presently attending Signal Mountain schools that they do not currently have to pay. As is noted in the main body of the report this is a decision that a new school board would have to make.

12. Risk associated with a Town of Signal Mountain required payment to the school system being "in kind services" instead of funds. This presents a potential dilemma for a new school board of not having the full use of resources from the Town of Signal Mountain but having to chose from in kind resources that the town makes available to a new school district. This could result in a misallocation of resources.

Value added education:

As is stated in the body of our work, determining a value add to education is very difficult. This is a particular area that we could have spent additional time and resources on to attempt to indicate exactly what and how we were defining improvements and importantly what that would cost. The cost of these improvements would be independent of our projected budget but would have been an attempt to put a range of numbers to improvements in education on Signal Mountain.

A new Signal Mountain school district that potentially would incorporate MEF contributions and school supply fees is not an improvement to education in our schools. This would simply be a transfer payment from the parents of school children and donors to MEF to a school system. Parents and donors would benefit but resources to schools would stay exactly the same.

**Response of Committee Members John Friedl, Tom McCullough, Thomas Peterson, Susan Speraw, Amy Wakim, and Melissa Wood
To the Dissent of Mr. Charles Spencer**

Mr. Spencer has respectfully served the community and fulfilled his duties as a member of the SSVC by being present at regularly called SSVC meetings and many of the budget subcommittee meetings. Throughout the process, he has brought a different perspective and viewpoint to the table which challenges other members to think about and articulate what information is being presented and why it is relevant. His willingness to serve the Signal Mountain community is commendable, and his time, attendance and input were notably appreciated.

During the process of finalizing and approving the final report, each committee member was afforded the opportunity to write an opposing view or opinion regarding the process or the conclusions of the committee's work. Mr. Spencer voted against approval of the foregoing report of the School System Viability Committee, and has written a dissenting report highlighting his views regarding the committee's research process and potential financial risk. The following statement is a response to his dissent by the committee members whose names appear above. While each member's views and opinions should be respectfully noted, the SSVC has been charged with a mission of neutrality and fact-finding based on research and data, rather than interjecting personal opinions into this process.

The dissent begins by stating that there are three items "that cause the budget as stated to be exceedingly risky." First is the question of operating dual school districts on Signal Mountain. However, it is clearly stated in the committee's report that before any action is taken with regard to the establishment of an independent municipal school district, the issue of control of the three school buildings must be resolved. If the buildings would "follow the students" and transfer would be made to the new municipal school district, as occurred in Shelby County, there would be virtually no possibility of a dual school system operating in the Town of Signal Mountain.

Second, the dissent identifies as a risk the "issue of the use of the three school buildings on Signal Mountain." The committee addressed this issue in its report, and it is clearly stated that without the resolution of this issue, a new school district could not be considered a viable option. The committee has fully addressed this question and it poses no risk because this issue must be resolved before further action is taken. As far as any financial implications may be concerned, again, this issue would be resolved before a new school system is created, so it would have no budgetary impact.

Third, the dissent raises the "issue of potential liability from lawsuits and the cost of outside counsel." It is not clear whether the dissent is referring to lawsuits related to the establishment of a new school district (such as a possible suit contesting the right to control the use of the three school buildings), or whether the dissent is referring to the possibility of litigation in general. If the former, any litigation involving the establishment of an independent municipal school district must be resolved before the district is

established, and therefore it would have no impact on the budget of the school district itself. If, on the other hand, the dissent is referring to the general threat of litigation, it should be noted that there is always the possibility of litigation. If we always make choices in fear of being sued, and forgo opportunities for improvement in the process, then we become prisoners to our fears.

The dissent states that these issues “do not necessarily preclude the establishment of a new school district, they just increase the financial risk of the fiscal operations of a school district.” However, these issues would be resolved before any decision was made to establish a new school district, and therefore would not pose a risk or impact the annual operating budget since it would be settled prior to starting a new school system.

Next, the dissent states that “Normally risk on the variables involved in an analysis would be debated in a team atmosphere and various analysis (sic) would be performed until a consensus is arrived at.” However, the SSVc did just that in its budget subcommittee meetings, where all of the variables in the budget were discussed in excruciating detail. The committee relied on facts, and on data gathered during the research process. Where ranges of data were available, the committee selected the most conservative values. Therefore, the variables were thoroughly discussed in a team atmosphere and selected based on documented research and data.

The dissent states that “using a Monte Carlo (sic) simulation program a range of answers can be arrived (sic) instead of a single answer that results from not using the concepts of risk.” Mr. Spencer first suggested using a risk analysis program such as a Monte Carlo simulation in May. He advocated for hiring an outside consulting firm to conduct this analysis, but was told by Council Member Amy Speek that the Town Council did not wish to spend taxpayer funds to conduct the work that this committee was assigned to do. Ms. Speek noted that Mr. Spencer stated on his application to join the committee that he was a financial analyst. Although the topic of a risk analysis was allocated time for discussion, presentation, and review by the committee by being included on the agenda multiple times, it was subsequently pulled from the discussion each time due to lack of adequate preparation by Mr. Spencer for committee review. Therefore, the committee did not have the opportunity to discuss or validate the assumptions and conclusions of the risk analysis recommended by Mr. Spencer.

The dissent continues: “For instance running a simulation on the budget data that assumes a variation of a negative 5% to 10% results in an expected budget deficit of \$300,000 instead of a projected budget surplus of \$1.2 million. Corresponding, assuming positive variations would naturally yield projected budget surpluses higher than \$1.2 million.” However, the selected variations of negative 5% to 10% defies the facts regarding historical data and trends for revenue and expense changes from year to year, as researched and reported in the budget projections section of the report.

When sharing information regarding the methodology and results of the risk analysis Mr. Spencer was proposing to use on the committee’s budget, he explained “with this

analysis there is no right or wrong answer, only a range of answers. The range and expected value is driven by how confident you are in the point estimates and how you feel they might be influenced. With seven members on our committee, if each of us did this analysis I would expect to see seven different answers.” [email dated August 21, 2017] Therefore, the proposed risk analysis was subjective in nature based on individual thoughts and opinions regarding different variables, rather than being driven by facts, documented data, and research.

The budget developed by the SSVc was based on facts and research, not hypothetical values or opinions of committee members. As previously stated, the line items in the budget were individually vetted and based on specific data from HCDE, from other school districts, and from historical data reports from Hamilton County. The budget was reviewed by the Tennessee Department of Education and by the Chief Financial Officer of HCDE, their comments and additions were incorporated into the budget document, and both praised the methodology used to arrive at the budget conclusions.

The committee’s budget document also includes a research-based risk analysis using documented historical data variations and trends. The 5- and 10-year budget projections include five different potential outcomes by viewing possible ranges of income and expenses, inflationary effects, and population growth projections. In each case, the ranges were derived from historical data rather than individual views or opinions. A range of negative 5% to 10% was not considered in the committee’s report because it was too far outside the range of variation based on historical data trends for revenue and expense variables to be rational or realistic.

The dissent next states that the budget developed by the SSVc is risky because “Dependence on one individual for the functionality of the study as opposed to a team approach to transactional input of date (sic) and the manipulation of data. Individuals can make unintentional mistakes that can be caught by other team members if a team is working with data bases and programs together.” As previously mentioned, the development of the budget document was the result of a team effort through countless hours of research and meetings by the budget subcommittee to ensure each line item was verified and validated.

The dissent then states that the committee did not “seek out the assistance of professionals that could possibly had (sic) some value add to the study.” But as Ms. Speek pointed out earlier, Mr. Spencer was selected to participate on the committee because he listed his experience as a professional financial analyst on his committee application. Likewise, the dissent states the budget is flawed because the committee did not do a program audit, i.e., the committee did not engage a professional accounting firm to conduct an audit. However, an audit of the budget was conducted by the Chief Financial Officer of the Tennessee Department of Education, who showered praise upon the committee’s efforts and the results of the budget analysis. That office is responsible for certifying the financial viability of any new independent municipal school district before it can begin operation.

The dissent states that “By their very nature small school districts do not have the variable fiscal resources to cover unintended costs that large school districts have.” However, the committee has not seen or reviewed any research or data presented to verify or validate this statement.

In addition to mentioning the risks associated with dual school districts and control of the buildings (which we have addressed above), the dissent notes the risk associated with projected revenue from students from Walden and unincorporated Hamilton County. However, the committee’s report directly addresses this issue, by concluding that the resolution of this issue is a prerequisite to proceeding with the establishment of a municipal school district.

The dissent also cites as a “risk” the possible application of in-kind contributions by the Town of Signal Mountain in partial satisfaction of its financial obligation to the municipal school district. This is a political issue rather than a financial one, and debating political issues was outside the scope of the committee’s charge.

The dissent then turns to “value added education,” and states the committee should have spent more time and resources on attempting to indicate exactly what and how we were defining improvements and what they would cost. However, the committee’s report includes a lengthy section on possible enhancements that could be made if the financial resources were available. As to whether the committee adequately identified what exactly should be done to improve education in our schools, the committee had several lengthy discussions during committee meetings about the limitations of its role as a fact-finding group. Therefore, while the committee was able to suggest possible enhancements and to identify their cost, it was not the committee’s charge to recommend how a future school board should allocate its unspecified budgetary resources. The dissent seems to be suggesting that it should be up to the SSVc to define improvements and specify their cost, by stating: “The cost of these improvements would be independent of our projected budget but would have been an attempt to put a range of numbers to improvements in education on Signal Mountain.” However, a list of ten possible improvements along with their estimated cost were identified on page 10 of the report.

Lastly, the dissent states that “A new Signal Mountain school district that potentially would incorporate MEF [Mountain Education Fund] contributions and school supply fees is not an improvement to education in our schools. This would simply be a transfer payment from the parents of school children and donors to MEF to a school system. Parents and donors would benefit but resources to schools would stay exactly the same.”

Over the past several years, contributions to MEF have declined. There is no guarantee that in the future MEF will be able to continue to fund the enhancements to education in the Signal Mountain schools that it has provided in the past. Many of the items identified and paid for by MEF include basics that are essential to providing quality education for the Signal Mountain schools. These basic necessities include numerous teaching

positions, supplies, professional development training for our teachers, a full-time college counselor, reading and math interventionists, and much more. The prospect of moving those costs to a permanent budget can hardly be described as “no improvement to education in our schools.”

Furthermore, if MEF-funded enhancements were built into the permanent school budget, future MEF contributions would be available to add other enhancements and to support additional educational excellence initiatives. Therefore, resources to schools would not “stay exactly the same” since funds generated by community support could be used for educational initiatives above what is currently provided and is not currently available to the students of Signal Mountain.

The preceding comments are presented as a response to the dissent, based on the research and work of the committee over the past eight months. While each member’s views and opinions should be respectfully noted, the SSVc has been charged with a mission of neutrality and fact-finding based on research and data rather than personal views and opinions.