



Carroll County Public Schools
Facility Utilization Study
FINAL REPORT

December 11, 2013

CARROLL COUNTY PUBLIC SCHOOLS

FINAL FACILITY UTILIZATION STUDY

DECEMBER 11, 2013

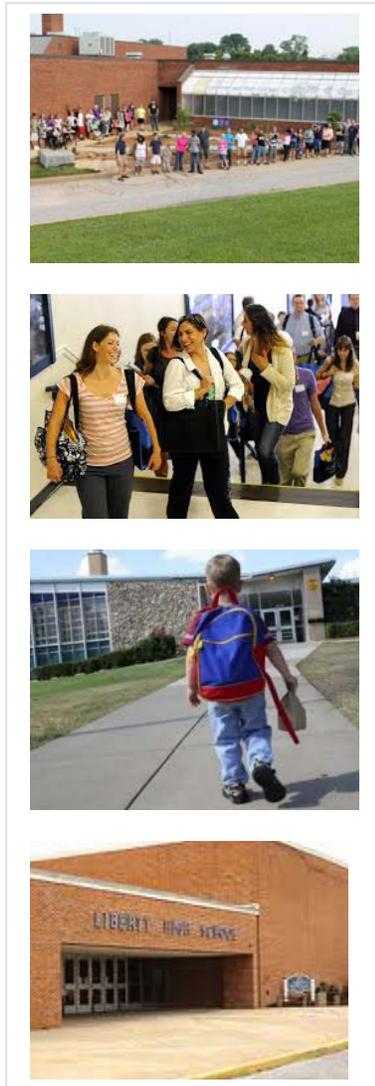


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I.0 PROJECT GOALS & METHODOLOGY

STUDY BACKGROUND AND GOALS

In the summer of 2012 Carroll County Public Schools (CCPS) determined a need to conduct a Comprehensive Facility Utilization Study to identify, justify and recommend actions for the most effective and efficient use of capital resources while containing expenses. The intended result of the study was to maximize opportunities for student achievement by delivering the best instructional program possible within the available financial resources. The initial research phase of the study was completed in-house by Carroll County Public Schools staff.

The stated project overview and purpose as defined by the Superintendent's Joint Leadership Team was:

"Carroll County Public Schools is conducting a facility utilization study to identify, justify and recommend actions for the most effective and efficient use of capital resources while containing expenses. The intended result of this study is to maximize opportunities for student achievement by delivering the best instructional program possible within the available financial resources."

The goals of the Comprehensive Facility Utilization Study were:

- ◆ Complete detailed analysis of available functional space in all facilities.
- ◆ Examine and recommend student programs that maximize services and/or efficiencies and increase opportunities for student success.
- ◆ Examine and recommend non-student programs that serve CCPS student needs or common community interests.
- ◆ Examine the fiscal and operational impacts for all recommendations.
- ◆ Make recommendations for student program alignment and/or expansion, opportunities for non-student program actions, and facility utilization and/or consolidation.
- ◆ Define the processes and procedures necessary to implement all recommendations.

STUDY METHODOLOGY

In May of 2013, CCPS contracted with MGT of America, Inc. (MGT) to conduct the Comprehensive Facility Utilization Study. The project was initiated in July of 2013, at which time MGT presented a project work plan and schedule. The final work plan and schedule are presented here.

FACILITY UTILIZATION STUDY WORK PLAN

Task 1.0 – Project Initiation

The project initiation meeting will establish lines of communication for the study and verify that the work plan and schedule will meet the goals of the study as established by CCPS.

Task 2.0 – Review and Incorporate Existing Data

Existing data will be reviewed by the consulting team, including educational programs, demographic data, capacity and utilization analyses, attendance zones, public input, and all other relevant data.

Task 3.0 – Analysis of School and Community Demographics

The consulting team will conduct an analysis of the demographic factors that will affect the utilization of the school facilities. Enrollment projections will be developed using the consulting team methodologies.

Task 4.0 – Analysis of Capacity and Utilization/Site Visits.

Each district school will be visited to verify the district’s room inventory and the current use patterns of the spaces.

Task 5.0 – Educational Review and Programmatic Priorities

The consulting team will review existing literature on the educational programs and interview district staff to develop an understanding of the educational programs and their impact on facility utilization.

Task 6.0 – Public Involvement and Community Collaboration

To develop an understanding of community priorities for facility utilization, the consulting team will interview key community leaders, conduct four community input sessions (charrettes), and host an on-line survey.

Task 7.0 – Develop Standards for Ranking Needs

Based on the analyses conducted in previous tasks, the consulting team will develop standards for ranking the needs and priorities for making facility utilization recommendations.

Task 8.0 – Financial Analysis

Using financial data from the district, the consulting team will develop the fiscal impacts of the facility utilization recommendations.

Task 9.0 – Preparation & Presentation of Final Comprehensive Facility Utilization Study

The final report will contain the analyses and recommendations developed for the study, and will present proposed implementation plans for the recommendations. The final report will be presented to the Board in a public presentation.

FACILITY UTILIZATION SCHEDULE

EXHIBIT 1-1
FACILITY UTILIZATION SCHEDULE

TASK	JULY				AUG				SEPT				OCT				NOV				DEC			
	1	2	3	4	1	1	2	3	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PROJECT INITIATION		■																						
REVIEW & INCORPORATE EXISTING DATA			■	■	■	■	■	■																
ANALYSIS OF SCHOOL & COMMUNITY DEMOGRAPHICS			■	■	■	■	■	■																
ANALYSIS OF CAPACITY & UTILIZATION / SITE VISITS			■	■	■	■	■	■	■	■	■	■												
EDUCATIONAL REVIEW & PROGRAMMATIC PRIORITIES			■	■	■	■	■	■																
PUBLIC INVOLVEMENT & COMMUNITY COLLABORATION										■	■	■	■	■	■	■	■	■	■					
DEVELOP STANDARDS FOR RANKING NEEDS											■	■												
FINANCIAL ANALYSIS													■	■	■	■								
PREPARATION & PRESENTATION OF FINAL COMPREHENSIVE FACILITY UTILIZATION STUDY																		■	■	■	■	■		

2.0 CURRENT SITUATION

This section will review the current status of the elements affecting facility utilization in CCPS. The elements include:

- ◆ Instructional programs
- ◆ Non-instructional programs
- ◆ School grade configuration, size, capacity and utilization
- ◆ Attendance zones
- ◆ Enrollment projections

The data presented here were gathered through interviews with district staff and a review of district documents. A key document is the district's *Educational Facilities Master Plan 2013-2022 – Building the Future, Carroll County Public Schools*, dated June 13, 2013, which contains much of the data presented here and in greater detail. The reader is encouraged to review this document.

INSTRUCTIONAL PROGRAMS

The 2013-2022 Educational Facilities Master Plan has an extensive discussion of CCPS's philosophy of education including core values, core beliefs, goals, and a complete description of the educational programs. For the purposes of this study, key elements are presented below.

GOALS

CCPS lists five goals for the instructional program; two have a direct impact on facilities planning.

- ◆ **Goal II – Optimize Resources**

Carroll County Public Schools will make maximum, effective, and efficient use of fiscal, human, and facility resources, which align and support student achievement.

- ◆ **Goal III – Provide a Safe and Orderly Environment**

All schools will provide a safe and orderly environment for all students and staff.

PROGRAM DESCRIPTIONS

The elementary school program is described as a “developmental program” that begins in kindergarten and continues through grade 5. Students are grouped and regrouped according to achievement level based on regular assessments. In addition to the classroom teacher, special instructors are provided for art, music, media, physical education, health, reading, English for Speakers of Other Languages, gifted education, and special needs. Programs and instructors beyond the general classrooms have a significant impact on the need for additional spaces in a school.

The middle school program is described as a “transitional program between elementary and high school.” Students receive instruction from a team of four or five teachers, each specializing in a subject area: English-Language Arts, math, science, and social studies. Additional programs and instructors are provided for the arts, special needs, health, languages, entry-level career classes, and advanced classes. The “team” approach impacts the scheduling of classes and room utilization since the entire team is in specialized classrooms at the same time, leaving their general classrooms vacant and only utilized for teacher planning during that period.

The high school program is a comprehensive program that meets the Maryland High School Diploma graduation requirements and, in addition, offers opportunities for students to supplement the basic core of courses. All students must meet university entrance requirements and/or successfully finish a state-approved career completer program. Programs for students with special needs and/or alternative learning styles are also provided. In addition to the career courses available at each site, CCPS offers a career and technology program at a separate location from the high schools.

The high schools operate on a four-block schedule. This allows students an extended learning in each class and also allows students at the junior and senior levels to leave their home campus and travel to the Career and Technology Center for advanced coursework. Varying demand for courses beyond the basic core and the logistics of aligning courses, instructors, and classrooms, affect the utilization of the schools.

As mentioned above, CCPS offers the following alternative and supplemental education services. A description of each service is provided in the Facilities Master Plan. These programs have varying space requirements, which differ in type, size, and frequency, and they all affect space utilization.

- ◆ Crossroads Middle School
- ◆ Flexible Student Support
- ◆ The Gateway School
- ◆ Positive Response to Issues of Discipline with Elementary Students (PRIDE)
- ◆ Prekindergarten
- ◆ Title I
- ◆ English for Speakers of Other Languages (ESOL)
- ◆ Gifted and Talented Program
- ◆ Judy Center Partnership

NON-INSTRUCTIONAL PROGRAMS

Non-instructional programs, or support programs, provided the services that are logistically necessary to operate a school. The two programs that have the greatest impact on facility utilization are transportation and food service.

CCPS provides bus transportation to most of its students. The basic task of student transportation, transporting students to their local community school, is complicated by several factors including;

- ◆ Changing attendance zones to balance enrollments,
- ◆ Changing attendance zone to accommodate new or closed schools,
- ◆ District-wide programs that are located in one site,
- ◆ Specialized programs for students with special, unique, or alternative needs, and
- ◆ Schools with different start and end times.

The food service program provides nutritional foods to the students during the day. The logistics of feeding students is complicated by the relationship of the number of students and the capacity of the

kitchen for preparing the meals, and the size of cafeteria for serving the meals. Many schools need to have several lunch periods, which affect the scheduling of other activities. Schools that are over-capacity, not only have more students than expected, based on the number of classrooms, but also have more students than the food service facilities were designed for.

Many of the schools in CCPS also house a food pantry or food bank to support the needs of students and families in that area. This is an important service that takes up space in the schools.

SCHOOL GRADE CONFIGURATION, SIZE, CAPACITY AND UTILIZATION

CCPS schools are configured in a typical grade configuration of:

Elementary Schools	Pre-K – 5
Middle Schools	6-8
High Schools	9-12

The exception to this configuration is Parr’s Ridge ES which is for students Pre-K – 2 and Mount Airy ES which houses students in grades 3-5.

The district plan recommends the following optimum school sizes:

Elementary Schools	600 students
Middle Schools	750 students
High Schools	1,200 students

The current school enrollments are shown on the following exhibit for capacity and utilization. As the exhibit shows, schools range in size from approximately 270 to 1500 students (based on September 2013 enrollment count).

CCPS measures the capacity of its schools using the Maryland Department of Education formula. Since the use of this formula by the state is intended to help establish eligibility for state funding for capital improvements for all districts in the state, the formula is “one size fits all” and does not accurately account for the affect that educational programs have on the utilization of school facilities.

Basically, the state formula counts the number of classrooms in a school and multiplies the total by a given number of students per classroom. At the elementary level, only general classrooms (including K and Pre-K) and special education classrooms are counted; music, art, health, etc. rooms are not counted. At the secondary level (including middle school in the state formula), all general classrooms, specialized classrooms, and special education rooms are counted. The number of students per classroom varies from 10 to 25 depending on the type and grade level of the class.

CCPS has modified the state formula for middle schools to reflect the actual program delivery and this modification has been accepted by the state. It is called the “Functional Capacity.” The following exhibit shows the CCPS capacity and current utilization of the district’s schools. The utilization is color-coded per the legend preceding the exhibit.

EXHIBIT 2-1
CCPS SCHOOLS
CAPACITY AND UTILIZATION
SEPTEMBER 2013 ENROLLMENTS

UTILIZATION	CATEGORY
<i>Elementary Schools</i>	
>105%	Inadequate
101% to 105%	Approaching Inadequate
85% to 100.9%	Adequate
75% to 84.9%	Approaching Inefficient
<75%	Inefficient

SCHOOL	STATE RATED CAPACITY (SRC)	FUNCTIONAL CAPACITY	SEPTEMBER 2013 ENROLLMENT	2013 SRC UTILIZATION	2013 FUNCTIONAL UTILIZATION
<i>Elementary Schools</i>					
Carrolltowne	598		534	89%	
Charles Carroll	320		270	84%	
Cranberry Station	570		488	86%	
Ebb Valley	591		501	85%	
Eldersburg	570		489	86%	
Elmer Wolfe	548		395	72%	
Freedom	525		491	94%	
Friendship Valley	527		512	97%	
Hampstead	576		350	61%	
Linton Springs	731		627	86%	
Manchester	727		574	79%	
Mechanicsville	616		546	89%	
Mt. Airy	598		495	83%	
Parr's Ridge	610		451	74%	
Piney Ridge	571		610	107%	
Robert Moton	608		398	65%	
Runnymede	654		515	79%	
Sandymount	527		448	85%	
Spring Garden	593		534	90%	
Taneytown	570		439	77%	
Westminster	593		510	86%	
Wm. Winchester	591		639	108%	
Winfield	722		549	76%	
ES TOTALS	13,536	-	11,365	84%	-

EXHIBIT 2-1 (CONTINUED)
CCPS SCHOOLS
CAPACITY AND UTILIZATION
SEPTEMBER 2013 ENROLLMENTS

UTILIZATION	CATEGORY
Secondary Schools	
>110%	Inadequate
101% to 110%	Approaching Inadequate
85% to 100.9%	Adequate
75% to 84.9%	Approaching Inefficient
<75%	Inefficient

SCHOOL	STATE RATED CAPACITY (SRC)	FUNCTIONAL CAPACITY	SEPTEMBER 2013 ENROLLMENT	2013 SRC UTILIZATION	2013 FUNCTIONAL UTILIZATION
Middle Schools					
Mt. Airy	870	770	660	76%	86%
New Windsor	540	430	377	70%	88%
North Carroll	870	770	618	71%	80%
Northwest	870	770	522	60%	68%
Oklahoma Road	891	845	825	93%	98%
Shiloh	891	845	670	75%	79%
Sykesville	828	745	785	95%	105%
Westminster East	848	790	706	83%	89%
Westminster West	1,146	1,045	940	82%	90%
MS TOTALS	7,754	7,010	6,103	79%	87%
High Schools					
Century	1,297		1,128	87%	
Francis Scott Key	1,254		999	80%	
Liberty	1,138		1,061	93%	
Manchester Valley	1,297		761	59%	
North Carroll	1,159		751	65%	
South Carroll	1,339		1,091	81%	
Westminster	1,838		1,580	86%	
Winters Mill	1,297		1,102	85%	
HS TOTALS	10,619		-	8,473	
DISTRICT TOTAL	31,909	-	25,941	81%	-

SOURCE: MGT OF AMERICA, INC. 2013.

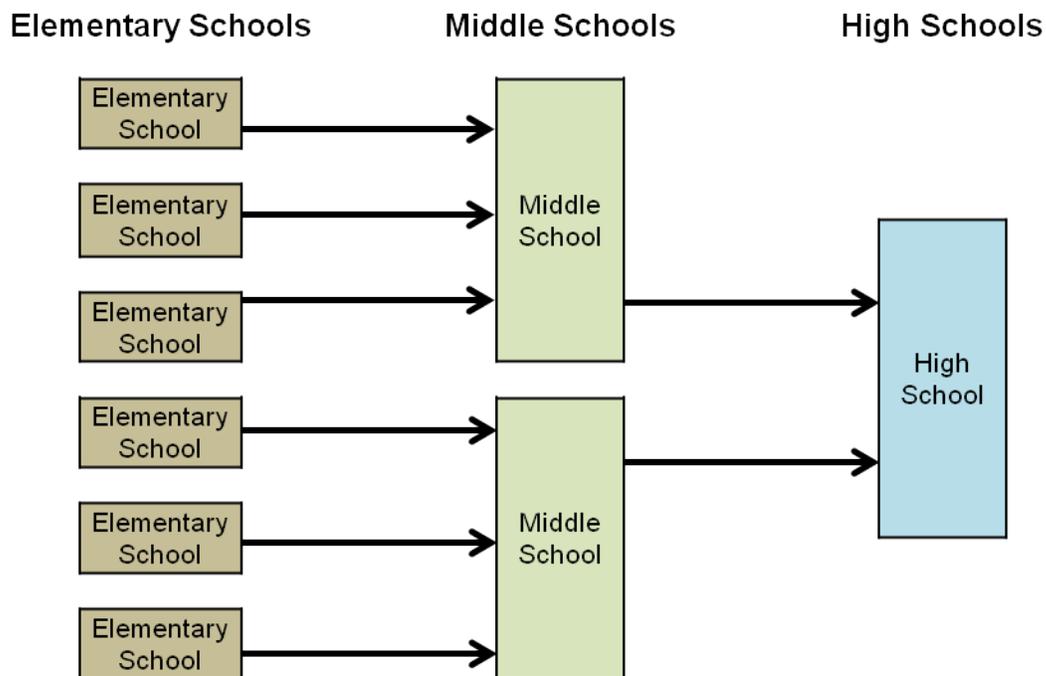
ATTENDANCE ZONES

CCPS's attendance zones are typically the geographical areas surrounding the individual schools which include the appropriate number of students for the schools' capacities. Attendance zones are redrawn as necessary to reflect changes in student populations and the addition of new schools. The Master Plan contains maps of the most recent attendance zones.

"Feeder patterns", or the way in which the elementary school students flow into the middle schools and middle school students flow into high schools, are determined by the attendance zones. Typically, feeder patterns are structured so that all the students in one elementary school will graduate into one middle school, and so on for each level. Feeder patterns structured this way accomplish two goals. They keep groups of students together throughout their educational career, thereby reinforcing relationships and a sense of community. In addition, they allow parents the ability to know, in advance, which schools their children will be attending.

This type of feeder pattern is represented by the diagram below.

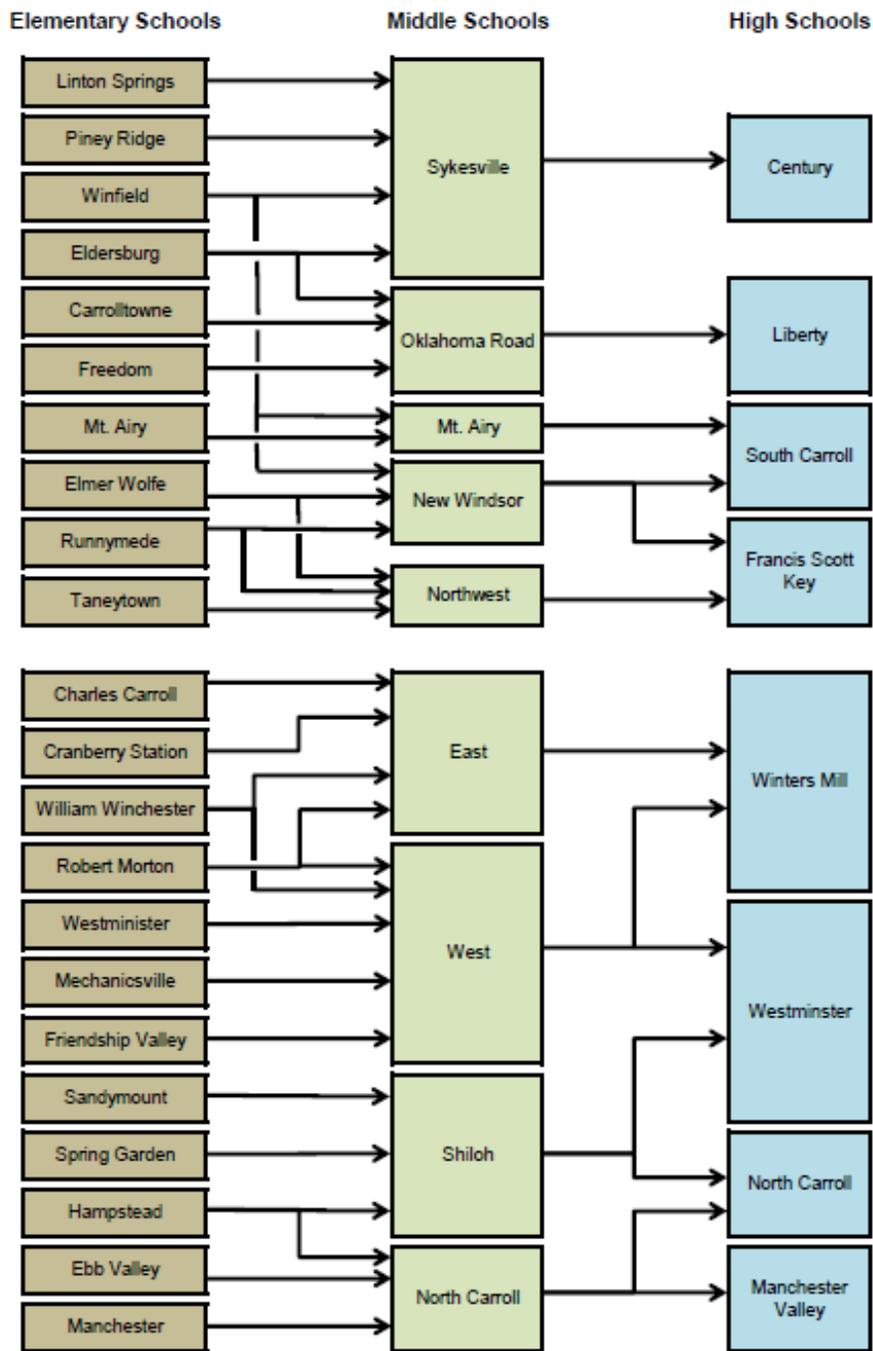
EXHIBIT 2-2
TYPICAL FEEDER PATTERN



SOURCE: MGT OF AMERICA, INC., 2013.

Over time, CCPS has had to adjust attendance zones and its feeder patterns. Adjusting attendance zones is a commonly used tool for aligning the enrollments and capacities of schools. Currently, there are schools which have students graduating to two or more different middle and/or high schools. This situation was identified as an area of concern for district parents in the community input sessions and the on-line survey. Listed below are the feeder patterns based on the attendance zones.

EXHIBIT 2-3
CCPS FEEDER PATTERNS



SOURCE: CARROLL COUNTY PUBLIC SCHOOLS, 2013.

ENROLLMENT PROJECTIONS

CCPS develops ten-year enrollment projections on an annual basis using a cohort survival method. This is a widely used methodology among school districts. The most recent enrollment projections for the district are published in the report, *Carroll County Public Schools, Enrollment Projections, 2013-14 to 2022-23*. (The district is currently working on this year's enrollment projections.)

The following exhibit compares the 2012-13 projections by the district and the state of Maryland Department of Planning with the actual enrollments. Overall, the state's projections were higher than the actual enrollment by 136 students or 0.5%, and CCPS's projections were higher by 74 students or 0.3%. The district's level of accuracy in its enrollment projections is commendable.

EXHIBIT 2-4
CCPS AND MARYLAND DOE
ENROLLMENT PROJECTIONS
2012-13

GRADE	2012-13 ACTUAL ENROLLMENTS	2013 CCPS PROJECTIONS	2013 STATE PROJECTIONS
K-5	11,342	11,461	11,550
6-8	6,045	6,075	6,070
9-12	8,755	8,700	8,850
TOTAL	26,142	26,236	26,470

SOURCE: CARROLL COUNTY PUBLIC SCHOOLS AND MARYLAND DEPARTMENT OF EDUCATION.

Note: Projections do not include PreK since the state does not project PreK students.

The district's long term projections estimate a slightly declining enrollment until the 2019-20 school year, and then a slightly increasing enrollment for the last three years of the projection horizon. The exhibit below shows the district-wide projections. Schools-by-school projections are included in the district's report and won't be repeated here.

EXHIBIT 2-5
CCPS SCHOOLS
ENROLLMENT PROJECTIONS
2013-14 TO 2022-23

YEAR	PREK TOTAL	K-5 TOTAL	6-8 TOTAL	9-12 TOTAL	PREK-12 TOTAL	PERCENT CHANGE
2013-14	388	11,175	6,189	8,546	26,298	-1.46%
2014-15	388	10,922	6,141	8,522	25,974	-1.23%
2015-16	388	10,629	6,176	8,461	25,655	-1.23%
2016-17	388	10,390	6,052	8,469	25,300	-1.38%
2017-18	388	10,291	5,982	8,537	25,143	-0.62%
2018-19	388	10,296	5,786	8,499	24,970	-0.69%
2019-20	388	10,373	5,736	8,464	24,961	-0.04%
2020-21	388	10,710	5,601	8,263	24,962	0.00%
2021-22	388	11,186	5,436	8,128	25,138	0.71%
2022-23	388	11,778	5,227	8,016	25,409	1.08%

SOURCE: CARROLL COUNTY PUBLIC SCHOOLS, 2013.

FACILITY CONDITION ASSESSMENTS

In 2005, CCPS contracted with a consulting firm to have building condition assessments of all the school facilities in the system. In 2008, CCPS staff conducted educational suitability assessments (functional assessments) of all the school facilities built after 1980 with the exception of the Career and Technology Center. (See Long-Range Master Plan for discussion of the reason the CTC was not assessed.) The educational suitability assessments were updated in 2011 after several improvement projects were completed.

The following exhibit shows the building condition and educational suitability scores of the facilities that were assessed.

EXHIBIT 2-6
CCPS SCHOOLS
FACILITY ASSESSMENT SCORES

School	Physical Assessment Score Max. 1000	Functional Assessment Score Max. 1000	Total Score Max. 2000
Charles Carroll	880	462	1342
William Winchester	890	524	1414
Westminster East	900	579	1479
Westminster West	901	578	1479
Westminster HS	919	654	1573
Robert Moton	955	634	1589
Westminster ES	881	735	1616
South Carroll	892	725	1617
Eldersburg	959	699	1658
Northwest	955	723	1678
Carrolltowne	958	747	1705
North Carroll HS	975	739	1714
Freedom	917	810	1727

SOURCE: CARROLL COUNTY PUBLIC SCHOOLS, 2013.

3.0 ENROLLMENT PROJECTIONS

MGT developed enrollment projections for the 2017-18 and 2022-23 planning periods using a cohort survival model. Over the next ten years, enrollment is expected to decrease slightly across the district. The specific impact of future student enrollment on school building utilization is outlined in Section 4.0 of this report.

HISTORICAL DATA

An analysis of both quantitative and qualitative data forms the basis for MGT's enrollment projections. Quantitative data comes from the district, the city, the county, and the U.S. Census Bureau ("Census"). Quantitative data provides the basic understanding of trends "by the numbers." Qualitative data is gathered from conversations with district officials familiar with enrollment trends, city planners, and personnel from the city, and provides the "why" behind the numbers. Both forms of data are critical to the preparation of enrollment projections for the district's ten-year facility master plan.

POPULATION TRENDS

A 2012 detailed review of local demographics can be found in the *Education Facilities Master Plan 2012-2021* Section 2, Community Analysis, Carroll County Public Schools. Section 2 Key Points:

- ◆ Limited water supply in the local area is a major factor behind the decrease in new home construction.
- ◆ New home construction is also slowing down due to housing crash and lack of demand for new housing.
- ◆ Net migration has gone from a positive growth number to a net loss in the last few years.
- ◆ Maryland Department of Planning projects the County's population to grow another 11 % by 2020.
- ◆ Median age of the population is increasing.

HISTORICAL ENROLLMENT

The core body of data used to develop an enrollment projection is historical enrollment. Total K-12 enrollment in Carroll County Public Schools was 28,458 students in 2003-04. Since then, enrollment has decreased to 26,142 in 2012-13. *Exhibits 3- 7* and *3-8* detail the enrollment history of K-12 students.

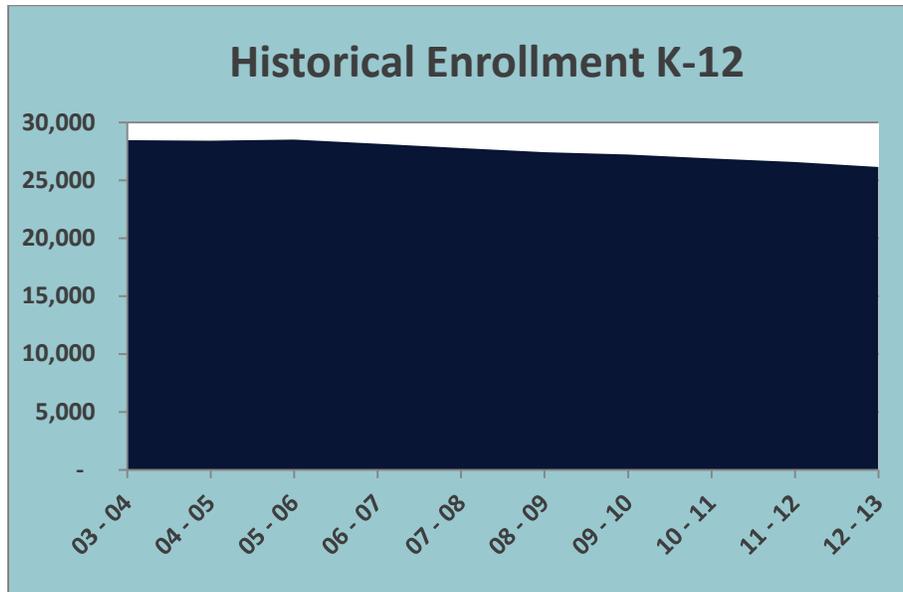
EXHIBIT 3-7
 CARROLL COUNTY PUBLIC SCHOOLS
 ENROLLMENT HISTORY*
 2003-2012

	03-04	04 - 05	05 - 06	06 - 07	07 - 08	08 - 09	09 - 10	10 - 11	11 - 12	12 - 13
K	1,930	1,755	1,881	1,853	1,949	1,887	1,884	1,849	1,779	1,742
1	1,924	2,014	1,858	1,967	1,889	1,971	1,924	1,947	1,870	1,789
2	2,000	1,937	2,010	1,851	1,961	1,890	1,967	1,914	1,940	1,850
3	2,077	2,038	1,971	2,025	1,862	1,970	1,957	2,016	1,938	1,945
4	2,157	2,096	2,088	1,972	2,033	1,884	1,993	1,957	2,049	1,966
5	2,239	2,197	2,118	2,078	1,994	2,051	1,930	1,995	1,967	2,050
6	2,276	2,255	2,248	2,128	2,123	2,008	2,095	1,956	2,050	1,985
7	2,383	2,314	2,293	2,244	2,131	2,152	2,042	2,114	1,965	2,082
8	2,351	2,402	2,347	2,315	2,252	2,175	2,178	2,055	2,132	1,978
9	2,604	2,553	2,600	2,507	2,479	2,429	2,336	2,298	2,242	2,294
10	2,342	2,433	2,457	2,493	2,385	2,347	2,328	2,248	2,202	2,149
11	2,162	2,321	2,412	2,396	2,452	2,350	2,361	2,350	2,200	2,191
12	2,013	2,096	2,227	2,320	2,267	2,305	2,225	2,179	2,237	2,121
K-5	1,930	1,755	1,881	1,853	1,949	1,887	1,884	1,849	1,779	1,742
6-8	1,924	2,014	1,858	1,967	1,889	1,971	1,924	1,947	1,870	1,789
9-12	2,000	1,937	2,010	1,851	1,961	1,890	1,967	1,914	1,940	1,850
Total	28,458	28,411	28,510	28,149	27,777	27,419	27,220	26,878	26,571	26,142

*EXCLUDES PK, GATEWAY, CROSSROADS, PRIDE, CARROLL SPRINGS, POST SECONDARY AND FSS STUDENTS.

SOURCE: CARROLL COUNTY PUBLIC SCHOOLS, 2013.

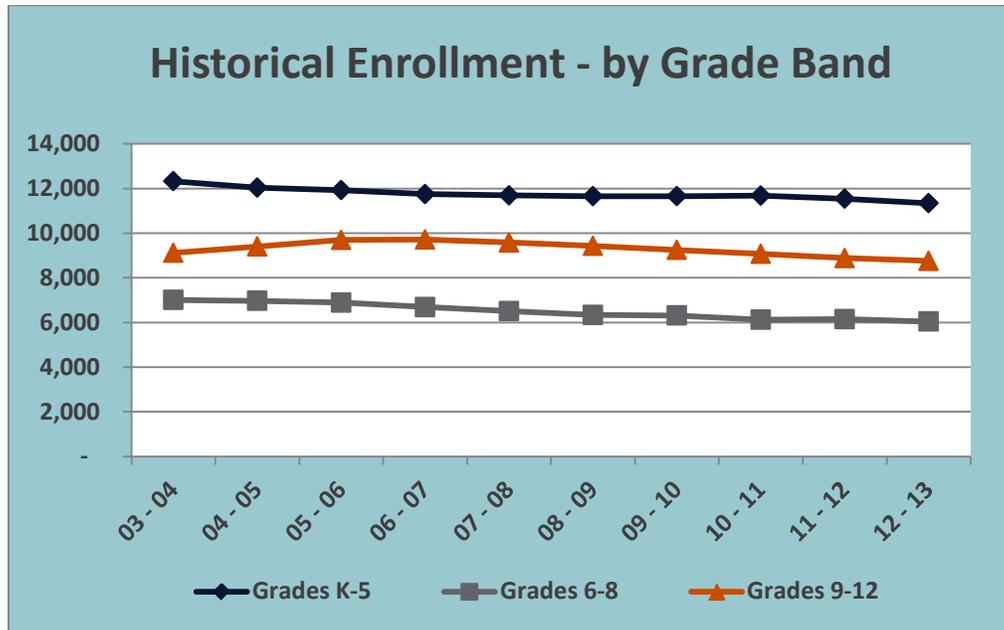
EXHIBIT 3-8
 CARROLL COUNTY PUBLIC SCHOOLS
 HISTORICAL ENROLLMENT
 2003-2012



SOURCE: MGT OF AMERICA, INC., 2013.

An examination of historical enrollment at the grade-band level reveals that the 8.1 percent decrease in overall enrollment over the last ten years has been led by a decrease in enrollment at the 6-8 grade band, which decreased 14 percent. The K-5 grade band decreased in enrollment by 8 percent, and the 9-12 grade band decreased as well, with a four percent decline in enrollment. *Exhibit 3-9* illustrates the historical enrollment for each grade band.

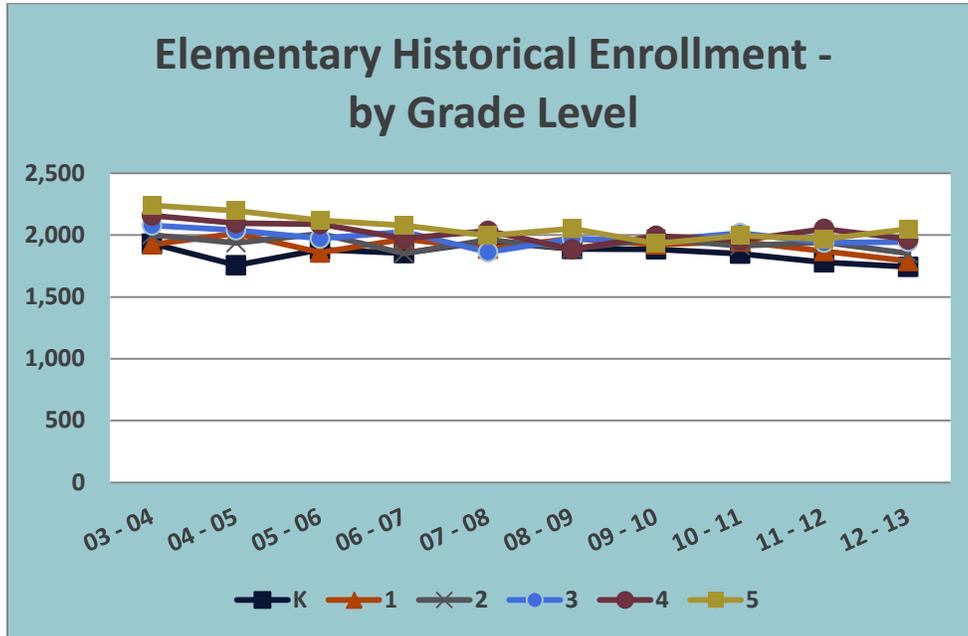
EXHIBIT 3-9
 CARROLL COUNTY PUBLIC SCHOOLS
 HISTORICAL ENROLLMENT
 (BY GRADE BAND)



SOURCE: MGT OF AMERICA, INC., 2013.

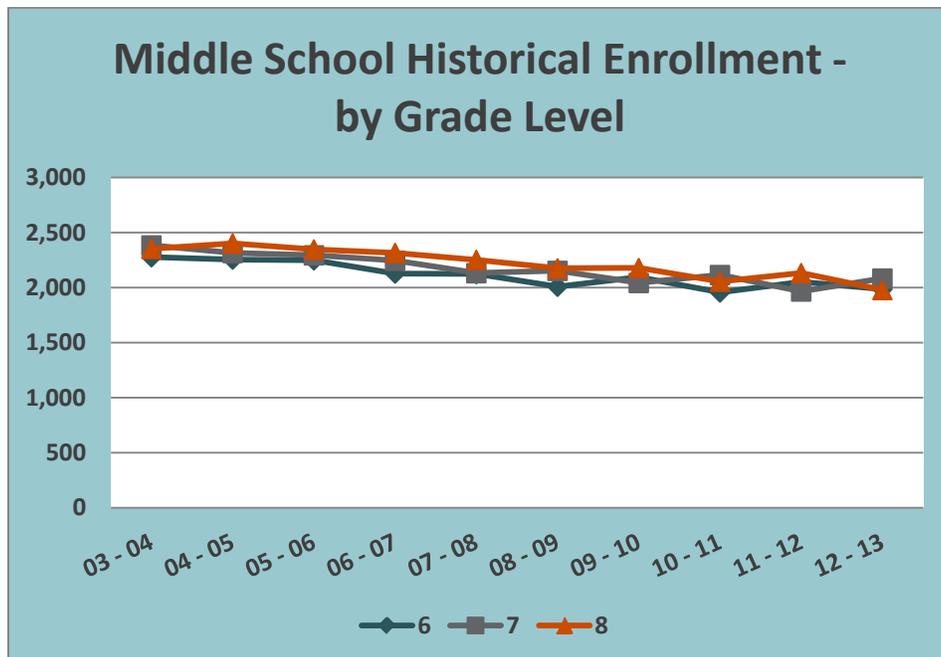
A closer look at historical enrollment at individual grade levels does not reveal any clear trends. Elementary grade-level enrollment data have all historically trended downward with no individual grade having an evidently stronger influence than another grade. Likewise, the middle and high school grade-level enrollment data do not indicate any particular grade influencing the overall trend in historical enrollment. The following *Exhibits 3-10, 3-11, and 3-12* illustrate the historical enrollment for each grade level.

EXHIBIT 3-10
 CARROLL COUNTY PUBLIC SCHOOLS
 HISTORICAL ELEMENTARY SCHOOL ENROLLMENT
 (BY GRADE LEVEL)



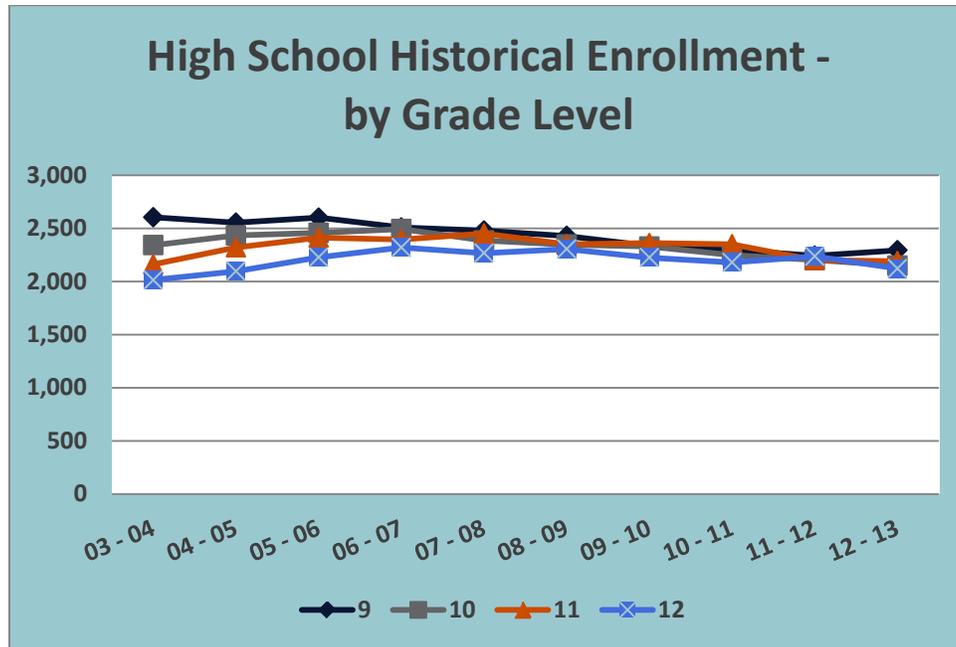
SOURCE: MGT OF AMERICA, INC., 2013.

EXHIBIT 3-11
 CARROLL COUNTY PUBLIC SCHOOLS
 HISTORICAL JUNIOR HIGH SCHOOL ENROLLMENT
 (BY GRADE LEVEL)



SOURCE: MGT OF AMERICA, INC., 2013.

EXHIBIT 3-12
 CARROLL COUNTY PUBLIC SCHOOLS
 HISTORICAL HIGH SCHOOL ENROLLMENT
 (BY GRADE LEVEL)



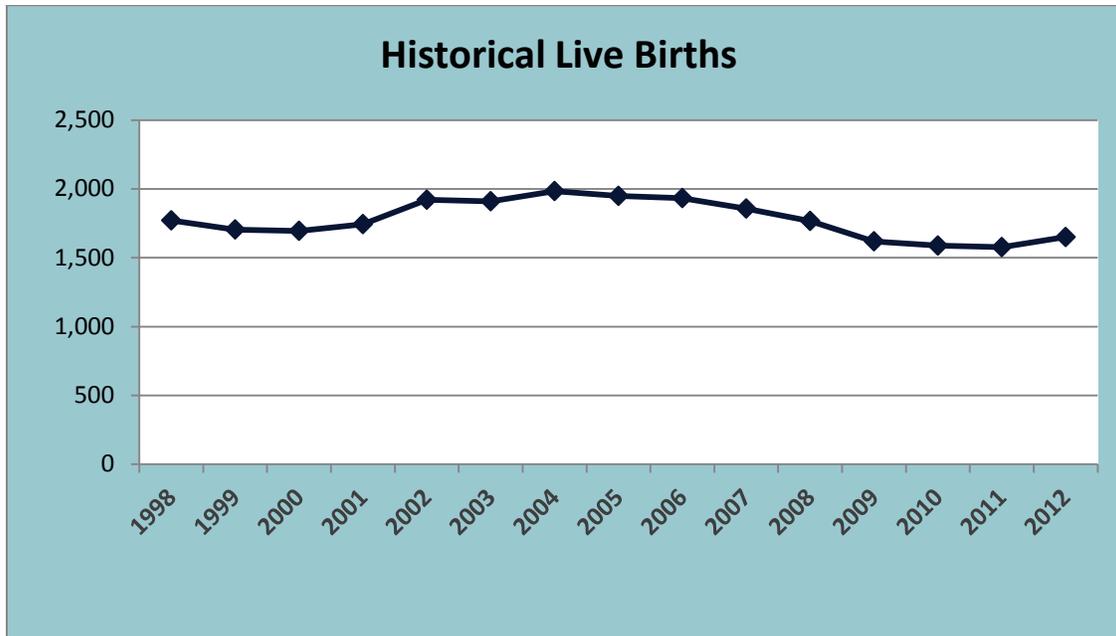
SOURCE: MGT OF AMERICA, INC., 2013.

The trends observed in the historical enrollment data will form a key component of the enrollment projections prepared as a part of this project.

LIVE BIRTHS AND KINDERGARTEN ENROLLMENT

A second key component to analyzing potential future enrollment is to examine live-birth trends in the county and the live-births-to-kindergarten capture rate. A steady or increasing birth rate in the county could lead to additional students in the district, which would also push future enrollment higher. In Carroll County, live births have been declining since 2004. However, the number of live births in Carroll County has been fluctuating between a low of 1,984 in 2011 to a high of 1,984 in 2004. *Exhibit 3-13* shows the trend of historical live births for the county.

EXHIBIT 3-13
 CARROLL COUNTY PUBLIC SCHOOLS
 HISTORICAL LIVE BIRTHS
 1998-2012



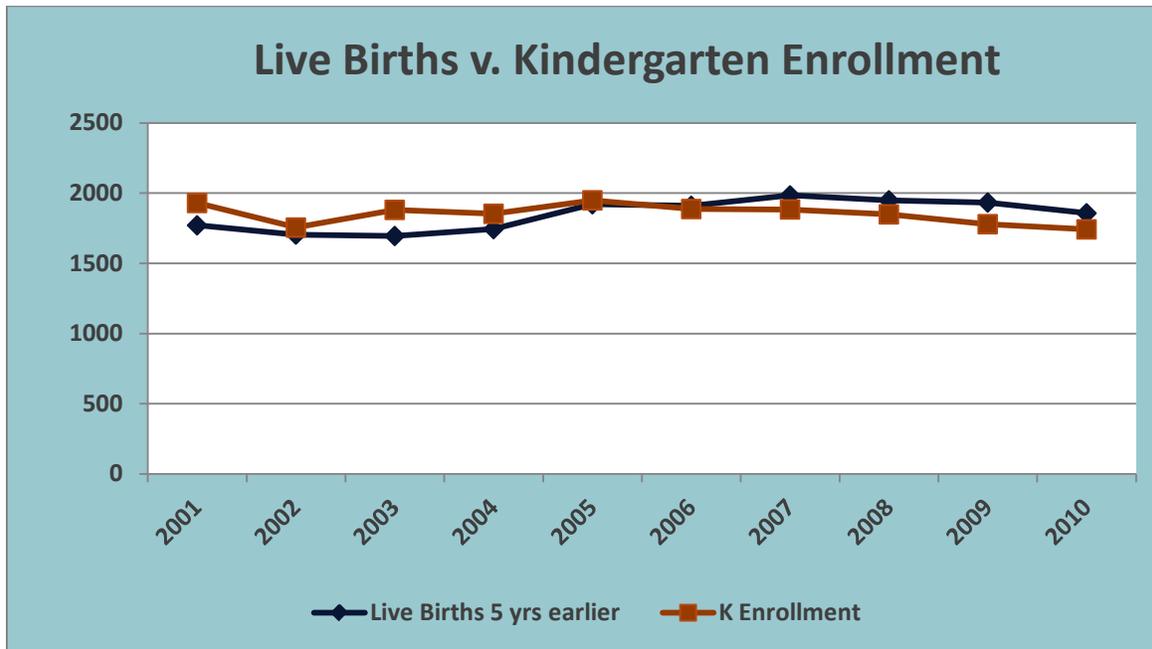
SOURCE: CARROLL COUNTY PUBLIC SCHOOLS, 2013.

Note: The 2012 live birth number is a district projection.

Note: Beginning with school year 2007, 12 months of births are eligible for kindergarten (Sept. – Dec. 2001 and Jan. – Aug. 2002). All subsequent years have a September to the following August time frame for Kindergarten eligibility.

When examining the ratio of live-births-to-kindergarten enrollment, live-birth data is collected for the past fifteen years and kindergarten enrollment for the past ten years. For example, a child born in 1990 would enroll in kindergarten at the age of five, in 1995. Therefore, in this analysis, we are looking at how many children are enrolled in kindergarten as compared to the number of children born in the county five years prior to a particular school year. *Exhibit 3-14* compares the district’s historical kindergarten enrollment to the live birth data.

EXHIBIT 3-14
 CARROLL COUNTY PUBLIC SCHOOLS
 HISTORICAL KINDERGARTEN ENROLLMENT AND HISTORICAL LIVE BIRTH DATA



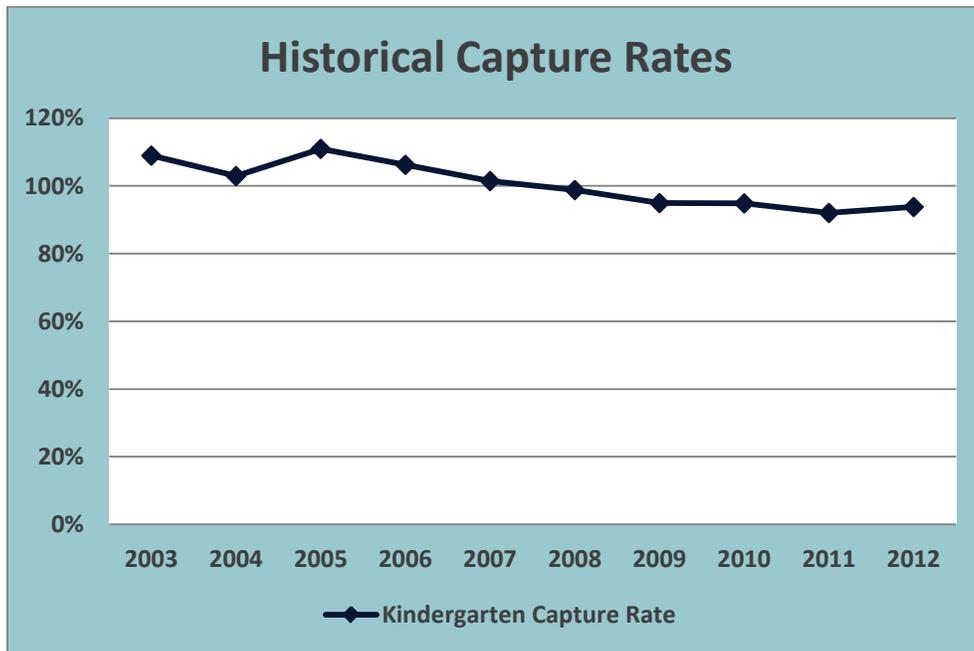
SOURCE: MGT OF AMERICA, INC., 2013.

Two statistics are critical to understanding the relationship between live births and kindergarten enrollment in the district: the correlation coefficient and the capture rate.

The correlation coefficient calculates the relationship between two series of data. A correlation coefficient of 1 indicates a strong relationship; a correlation coefficient of 0 indicates a weak relationship. For CCPS, the correlation coefficient for kindergarten enrollment to live births is 0.136 which indicates a weak relationship and therefore the live birth rate may not be a good indicator of future kindergarten enrollment. Although the correlation coefficient indicates a weak relationship, MGT used live births to project kindergarten enrollment in order to minimize variability in our cohort model when compared to the cohort model used by CCPS.

The capture rate measures the percentage of live births that resulted in kindergarten enrollment five years later. Over the last ten years, the district's capture rate has averaged 100.52 percent, however, the capture rate has been decreasing in recent years as *Exhibit 3-15* illustrates. This declining capture rate indicates that young families may be moving out of the district.

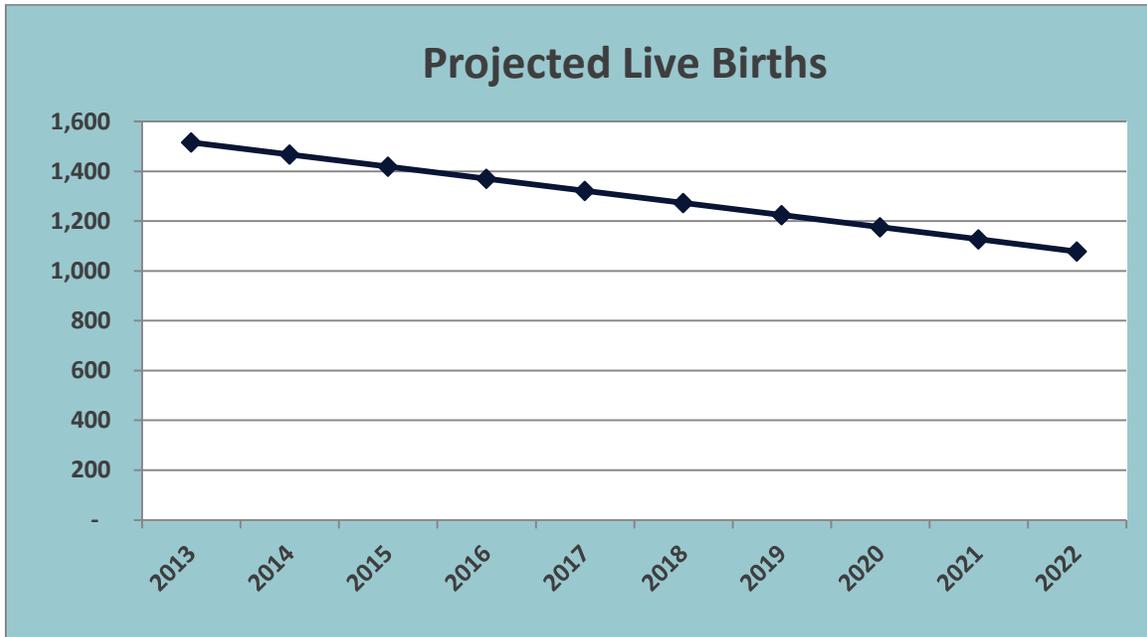
EXHIBIT 3-15
CARROLL COUNTY PUBLIC SCHOOLS
HISTORICAL CAPTURE RATES



SOURCE: MGT OF AMERICA, INC., 2013.

Exhibit 3-16 illustrates the projected live births for the district. Live births are projected using a linear regression model based on historical live births in the county. Given the weak correlation of historical live births to historical kindergarten enrollment as shown in Exhibit 3-15, future kindergarten enrollment may not necessarily follow a similar trend.

EXHIBIT 3-16
 CARROLL COUNTY PUBLIC SCHOOLS
 PROJECTED LIVE BIRTHS



SOURCE: MGT OF AMERICA, INC., 2013.

CONCLUSIONS AND OBSERVATIONS ABOUT HISTORICAL DATA

Based on the analysis of data presented in this section, we have concluded the following regarding the historical enrollment and birth data of Carroll County Public Schools:

1. Live births may not be useful in projecting kindergarten enrollment.
2. The population is getting older, which will lead to fewer students.
3. Younger families have been migrating out of the area in recent years.
4. Census data shows an 11% increase in population from 2000 to 2010.
5. Over the last 10 years K-12 enrollment has declined by 8% overall.



ENROLLMENT PROJECTION METHODOLOGY

Enrollment projections are merely an *estimate* of future activity based on the historical data and information provided. As demonstrated by the district enrollment history over the past ten years, there can be constant variation in growth. These numbers can be highly accurate, but it must be remembered that the numbers are still a projection or estimate. During the implementation of any of the recommendations provided, it is critical that the district reassess these numbers on a regular basis and adjust plans accordingly.

To identify trends and prepare for adequate spaces, teaching staff and materials and supplies, educational leaders use several methods of projecting enrollment. Among the most commonly used models are *Average Percentage Annual Increase*, *Cohort Survival*, *Linear Regression*, and *Student-per-Housing Unit* models.

The Cohort Survival Model is perhaps the best-known predictive tool for developing enrollment projections. The Cohort Survival Model uses historical enrollment numbers, but takes into account student-mobility patterns and the effects of the natality rates in prior years. However, the Cohort Survival Model loses its predictive capabilities in communities that experience, or are expecting to experience, more rapid growth or rapid decline.

A rule of thumb when forecasting enrollment is that the models should use as many years of historical data as there are years in the projection period. In other words, if the model is projecting enrollment for five years from now, then five years of historical data is used. If the model is projecting enrollment for ten years from now, then ten years of historical data is used.

COHORT SURVIVAL MODEL

This model calculates the growth or decline in a grade level over a period of ten years based on the ratio of students who attend each of the previous years, or the “survival rate”. This ratio is then applied to the incoming class to calculate the trends in that class as it “moves” or graduates through the school system. For example, if history shows that between the first and second grades, the classes for the last ten years have grown by an average of 3.5 percent, then the size of incoming classes for the next ten years is calculated by multiplying them by 103.5 percent. If the history shows a declining trend, the multiplying factor would be 100 percent minus the declining trend number.

The determination of future kindergarten enrollment estimates is critical, especially for projections exceeding more than five years. There are two methods of projecting kindergarten enrollment. The first method is based on the correlation between historical birth rates (natality rates) and historical kindergarten enrollment. The second method uses a linear regression line based on the historical kindergarten enrollment data. MGT used live births to project kindergarten enrollment in order to minimize variability in our cohort model when compared to the cohort model used by CCPS.

ENROLLMENT PROJECTIONS

MGT has utilized the methodology described above to forecast enrollment for the district for the 2017-18 and 2022-23 planning periods. *Exhibit 3-20* identifies the projected enrollment for each grade level. *Exhibit 3-21* illustrates projected enrollment for the entire district.

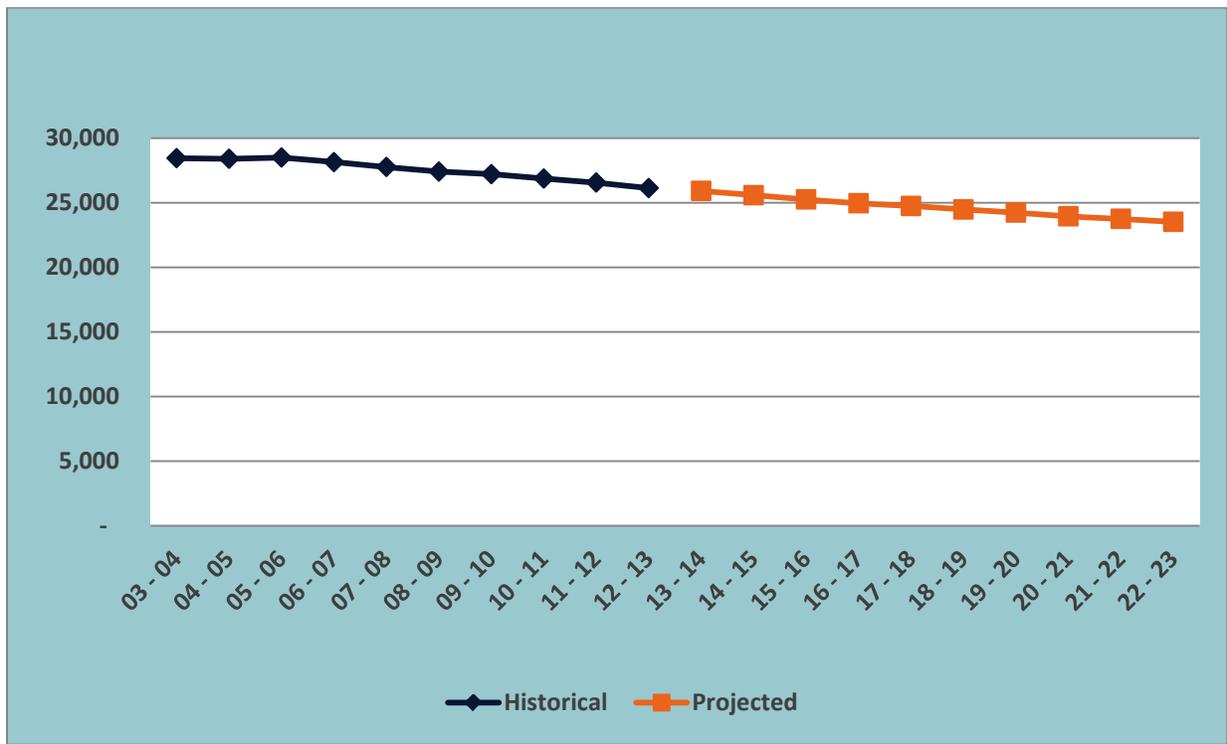
EXHIBIT 3-20
CARROLL COUNTY PUBLIC SCHOOLS
MGT PROJECTED ENROLLMENT*

	17 - 18	22 - 23
K	1,691	1,653
1	1,636	1,715
2	1,646	1,725
3	1,700	1,757
4	1,868	1,786
5	1,806	1,748
6	1,849	1,714
7	1,956	1,744
8	2,062	1,792
9	2,197	2,082
10	2,194	1,955
11	2,085	1,927
12	2,064	1,930
K-5	10,348	10,384
6-8	5,867	5,250
9-12	8,540	7,893
Total	24,755	23,528

*EXCLUDES PK, GATEWAY, CROSSROADS, PRIDE, CARROLL SPRINGS, POST SECONDARY AND FSS STUDENTS.

SOURCE: MGT OF AMERICA, INC., 2013.

EXHIBIT 3-21
 CARROLL COUNTY PUBLIC SCHOOLS
 HISTORICAL AND PROJECTED ENROLLMENT – K-12



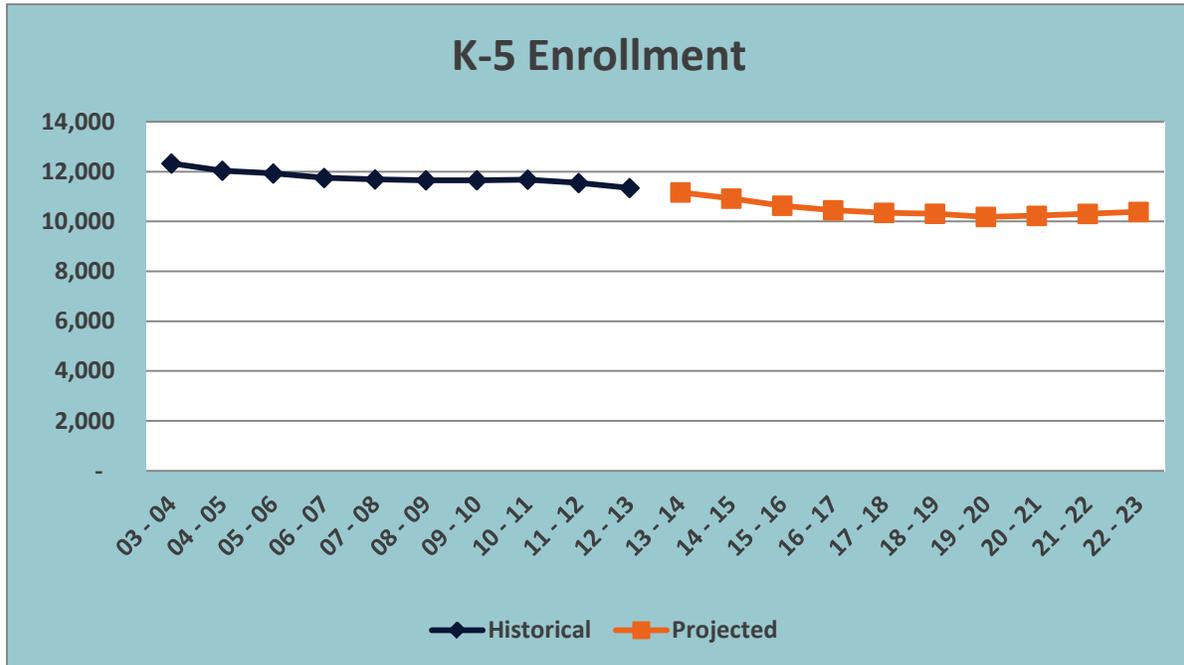
SOURCE: MGT OF AMERICA, INC., 2013.

As the foregoing *Exhibit 3-21* shows, enrollment across the district is expected to decrease consistently into the foreseeable future. This is a reasonable projection given the following:

- ◆ Historical enrollments have been declining at all grade bands
- ◆ Live births are projected to decrease.
- ◆ Live birth to kindergarten capture rate has been decreasing since 2005
- ◆ Few new houses are being constructed due to a limited supply of water in the county
- ◆ The population median age is increasing
- ◆ Younger families are migrating out of the county

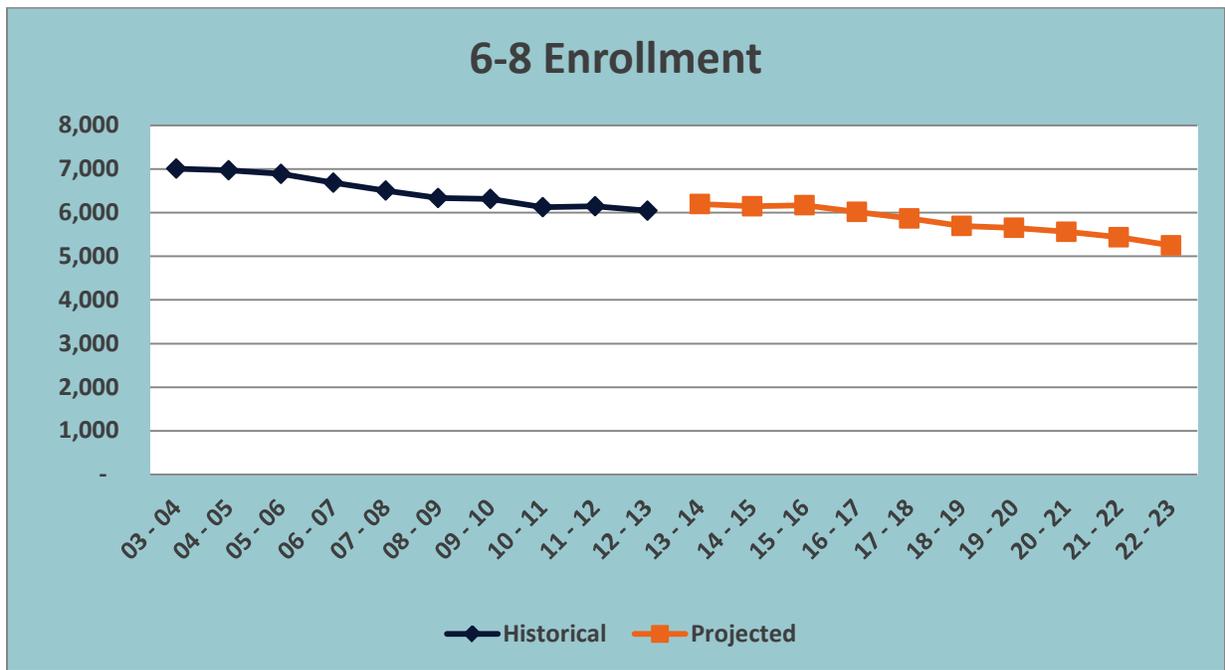
The district is strongly encouraged to revisit these projections on an annual basis and update them to reflect current trends and data. The following Exhibits 3-22 through 3-24 illustrate the historical and projected enrollment at each grade band.

EXHIBIT 3-22
 CARROLL COUNTY PUBLIC SCHOOLS
 HISTORICAL AND PROJECTED ENROLLMENT – K-5



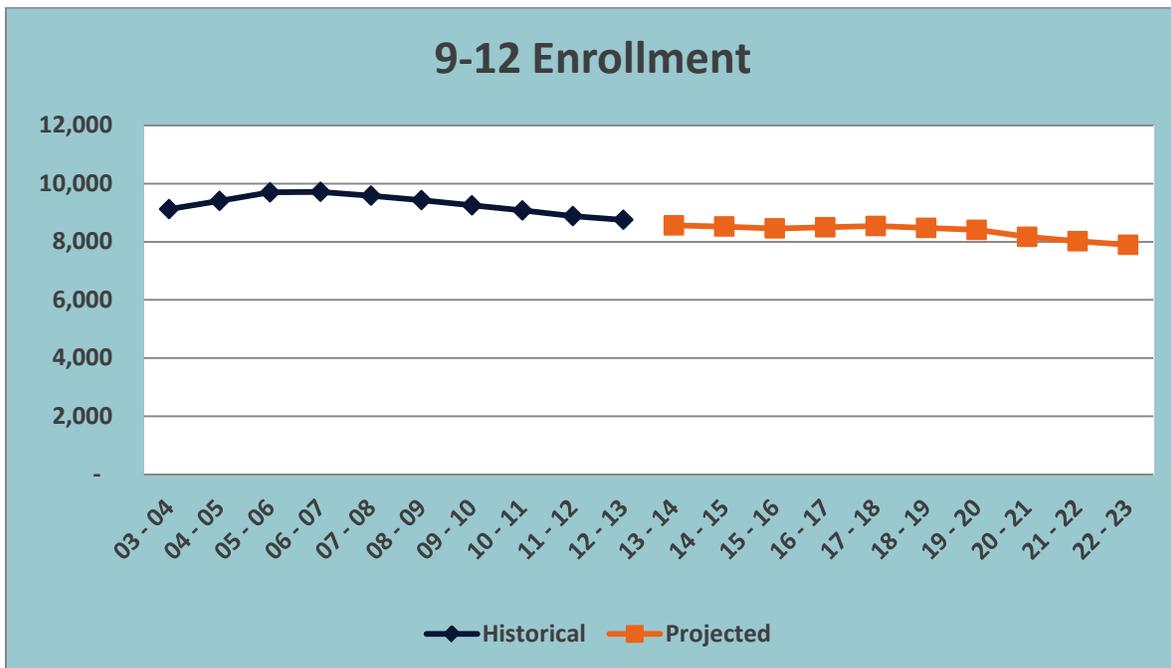
SOURCE: MGT OF AMERICA, INC., 2013.

EXHIBIT 3-23
 CARROLL COUNTY PUBLIC SCHOOLS
 HISTORICAL AND PROJECTED ENROLLMENT – 6-8



SOURCE: MGT OF AMERICA, INC., 2013.

EXHIBIT 3-24
 CARROLL COUNTY PUBLIC SCHOOLS
 HISTORICAL AND PROJECTED ENROLLMENT – 9-12



SOURCE: MGT OF AMERICA, INC., 2013.

In the next section of the report, we will utilize these enrollment projections to measure the future utilization rates in Carroll County schools and determine whether there will be excess space or a need for additional space.

4.0 CAPACITY & UTILIZATION

This section will review the capacity and utilization of the CCPS schools. The consulting team independently calculated the capacity and utilization of each school. This process included the following steps:

- ◆ Visit each school and verify room type counts and usage
- ◆ Calculate capacity
- ◆ Compare capacity with current and projected enrollments to obtain current and projected utilization

SITE VISITS

MGT consultants visited each school and toured the facility with the principal, verifying the district's room inventory and the current usage of each room. The results of this exercise generally validated the district's room inventory. In some cases, rooms were not being used as originally intended, and depending on the original intended use, and the current use, the room type was changed or updated on MGT's inventory.

Two common examples of changes to the room inventory at the elementary level include:

- ◆ In some cases, general classrooms were being used for special education programs. In this example, the room was counted as a special education room which would have a lower capacity.
- ◆ The elementary schools were typically not designed to have a health classroom. In some cases, general classrooms have been converted to health classrooms and these were counted as such. Since health classrooms are not counted for capacity, this situation would lower the original capacity.

CAPACITY CALCULATION

In similar studies with school districts across the nation, MGT has witnessed a variety of ways that school districts calculate capacity. Many, if not most, methodologies are tied to capital funding from the state and therefore mirror the state's formula. While this is logical, state formulas tend to be designed to allocate and prioritize the funding of scarce capital improvement dollars, need to be a "one size fits all" approach, and often do not reflect the facility needs of delivering educational programs. Many state formulas are dated and do not reflect changes in the facility implications of today's educational programs.

As stated earlier in Section 2.0, CCPS uses the State of Maryland DOE method of calculating capacity with a modification at the middle school level. MGT's capacity model is quite similar, but differs in the "scheduling factor" that is applied to the gross capacity. While the state's model uses an 85% scheduling factor at the secondary level for all districts, MGT applies a scheduling factor that fits the specific conditions of the school district. In the case of CCPS, MGT utilized the following scheduling factors:

- ◆ 95% at the elementary level
- ◆ 95% at the middle school level

- ♦ 75% at the high school level

The CCPS functional model for middle schools also differs from the state model in the room types that are counted for capacity. The functional model does not include special use rooms such as music, art, PE, etc. while the state model does. The MGT model excludes these rooms as well.

CURRENT AND PROJECTED UTILIZATION

The utilization is calculated by dividing the enrollment by the capacity. Projected utilizations use projected enrollments in the calculation. CCPS uses its own enrollment projections to calculate utilization. MGT has used enrollment projections developed using a cohort survival approach to determine the utilization figures. See Section 3.0 for a discussion of these enrollment projections.

CAPACITIES COMPARED

The following exhibit shows the capacity for each school using the SRC, Functional, and MGT approaches. As the exhibit shows, the MGT approach results in capacities from 10% to 20% lower due to the updated room usage and the allocation of special room uses.

EXHIBIT 4-1
CCPS SCHOOLS
SRC, FUNCTIONAL AND MGT CAPACITIES

SCHOOL	*SRC CAPACITY	FUNCTIONAL CAPACITY	**MGT CAPACITY
Carrolltowne	598		496
Charles Carroll	320		282
Cranberry Station	570		520
Ebb Valley	591		542
Eldersburg	570		521
Elmer Wolfe	548		390
Freedom	525		474
Friendship Valley	527		501
Hampstead	576		483
Linton Springs	731		651
Manchester	727		607
Mechanicsville	616		521
Mt. Airy	598		503
Parr's Ridge	610		474
Piney Ridge	571		498
Robert Moton	608		525
Runnymede	654		561
Sandymount	527		456
Spring Garden	593		573
Taneytown	570		455
Westminster	593		542
Wm. Winchester	591		542

EXHIBIT 4-1 (CONTINUED)
CCPS SCHOOLS
SRC, FUNCTIONAL AND MGT CAPACITIES

SCHOOL	*SRC CAPACITY	FUNCTIONAL CAPACITY	**MGT CAPACITY
Winfield	722		664
ES TOTALS	13,536	-	11,778
Mt. Airy	870	770	722
New Windsor	540	430	394
North Carroll	870	770	698
Northwest	870	770	589
Oklahoma Road	891	845	722
Shiloh	891	845	651
Sykesville	828	745	698
Westminster East	848	790	751
Westminster West	1,146	1,045	945
MS TOTALS	7,754	7,010	6,170
Century	1,297		1,189
Francis Scott Key	1,254		1,121
Liberty	1,138		975
Manchester Valley	1,297		1,163
North Carroll	1,159		1,046
South Carroll	1,339		1,189
Westminster	1,838		1,635
Winters Mill	1,297		1,185
HS TOTALS	10,619	-	9,503
DISTRICT TOTAL	31,909		27,451

*INCLUDES PREK

**EXCLUDES PREK

SOURCE: MGT OF AMERICA, INC., 2013.

UTILIZATION COMPARED

The following exhibits show the utilization of each school for the current conditions, and for five and ten years in the future using the capacities shown in the previous exhibit and the CCPS and MGT enrollment projections. The utilization is color coded per the key preceding the exhibits.

EXHIBIT 4-2
CCPS ELEMENTARY SCHOOLS
CURRENT AND PROJECTED UTILIZATION

UTILIZATION	CATEGORY
<i>Elementary Schools</i>	
>105%	Inadequate
101% to 105%	Approaching Inadequate
85% to 100.9%	Adequate
75% to 84.9%	Approaching Inefficient
<75%	Inefficient

SCHOOL	*SRC CAPACITY	2013 SRC UTILIZATION	2017-18 SRC UTILIZATION	2022-23 SRC UTILIZATION	**MGT CAPACITY	2013 MGT UTILIZATION	2017-18 MGT PROJECTED UTILIZATION	2022-23 MGT PROJECTED UTILIZATION
Carrolltowne	598	89%	77%	92%	496	108%	95%	89%
Charles Carroll	320	84%	85%	97%	282	96%	96%	86%
Cranberry Station	570	86%	73%	82%	520	94%	85%	83%
Ebb Valley	591	85%	79%	89%	542	93%	84%	80%
Eldersburg	570	86%	76%	87%	521	94%	88%	88%
Elmer Wolfe	548	72%	61%	71%	390	101%	90%	89%
Freedom	525	94%	93%	105%	474	104%	99%	101%
Friendship Valley	527	97%	86%	99%	501	102%	86%	84%
Hampstead	576	61%	54%	64%	483	73%	77%	78%
Linton Springs	731	86%	81%	91%	651	96%	92%	90%
Manchester	727	79%	77%	86%	607	95%	97%	94%
Mechanicsville	616	89%	77%	93%	521	105%	90%	97%
Mt. Airy	598	83%	72%	77%	503	98%	86%	88%
Parr's Ridge	610	74%	67%	86%	474	95%	86%	89%
Piney Ridge	571	107%	95%	108%	498	123%	114%	111%
Robert Moton	608	65%	58%	68%	525	76%	65%	71%
Runnymede	654	79%	78%	85%	561	92%	89%	89%
Sandymount	527	85%	78%	87%	456	98%	90%	90%
Spring Garden	593	90%	78%	88%	573	93%	80%	82%
Taneytown	570	77%	72%	79%	455	96%	92%	87%
Westminster	593	86%	80%	93%	542	94%	87%	90%

EXHIBIT 4-2 (CONTINUED)
CCPS ELEMENTARY SCHOOLS
CURRENT AND PROJECTED UTILIZATION

UTILIZATION	CATEGORY
<i>Elementary Schools</i>	
>105%	Inadequate
101% to 105%	Approaching Inadequate
85% to 100.9%	Adequate
75% to 84.9%	Approaching Inefficient
<75%	Inefficient

SCHOOL	*SRC CAPACITY	2013 SRC UTILIZATION	2017-18 SRC UTILIZATION	2022-23 SRC UTILIZATION	**MGT CAPACITY	2013 MGT UTILIZATION	2017-18 MGT PROJECTED UTILIZATION	2022-23 MGT PROJECTED UTILIZATION
Wm. Winchester	591	108%	90%	105%	542	118%	87%	92%
Winfield	722	76%	66%	78%	664	83%	75%	81%
ES TOTALS	13,536	84%	76%	87 %	11,778	96%	88%	88%
DISTRICT TOTAL	31,909	81%	77.6%	78%	27,451	94 %	90 %	86%

*INCLUDES PREK

** EXCLUDES PREK

SOURCE: MGT OF AMERICA, INC., 2013.

EXHIBIT 4-3
CCPS MIDDLE SCHOOLS
CURRENT UTILIZATION

UTILIZATION	CATEGORY
Secondary Schools	
>110%	Inadequate
101% to 110%	Approaching Inadequate
85% to 100.9%	Adequate
75% to 84.9%	Approaching Inefficient
<75%	Inefficient

SCHOOL	*SRC CAPACITY	2013 SRC UTILIZATION	2013 FUNCTIONAL UTILIZATION	2017-18 SRC UTILIZATION	2017-18 FUNCTIONAL UTILIZATION	2022-23 SRC UTILIZATION	2022-23 FUNCTIONAL UTILIZATION
Mt. Airy	870	76%	86%	79%	79%	60%	67%
New Windsor	540	70%	88%	81%	81%	57%	71%
North Carroll	870	71%	80%	82%	82%	66%	74%
Northwest	870	60%	68%	65%	65%	51%	58%
Oklahoma Road	891	93%	98%	88%	88%	71%	75%
Shiloh	891	75%	79%	74%	74%	62%	65%
Sykesville	828	95%	105%	101%	101%	83%	92%
Westminster East	848	83%	89%	92%	92%	75%	80%
Westminster West	1,146	82%	90%	95%	95%	76%	84%
MS TOTALS	7,754	79%	87%	85%	85%	67%	75%
DISTRICT TOTAL	31,909	81.3%		78%		78.4%	

*INCLUDES PREK
SOURCE: MGT OF AMERICA, INC., 2013.

EXHIBIT 4-3 (CONTINUED)
CCPS MIDDLE SCHOOLS
PROJECTED UTILIZATION

UTILIZATION	CATEGORY
<i>Secondary Schools</i>	
>110%	Inadequate
101% to 110%	Approaching Inadequate
85% to 100.9%	Adequate
75% to 84.9%	Approaching Inefficient
<75%	Inefficient

SCHOOL	**MGT CAPACITY	2013 MGT UTILIZATION	2017-18 MGT PROJECTED UTILIZATION	2022-23 MGT PROJECTED UTILIZATION
Mt. Airy	722	91%	84%	72%
New Windsor	394	96%	87%	80%
North Carroll	698	89%	87%	99%
Northwest	589	89%	84%	74%
Oklahoma Road	722	114%	103%	87%
Shiloh	651	103%	97%	78%
Sykesville	698	112%	107%	100%
Westminster East	751	94%	92%	82%
Westminster West	945	99%	105%	88%
MS TOTALS	6,170	99%	95%	85%
DISTRICT TOTAL	27,451	94%	90%	86%

**EXCLUDES PREK

SOURCE: MGT OF AMERICA, INC., 2013.

EXHIBIT 4-4
CCPS HIGH SCHOOLS
CURRENT AND PROJECTED UTILIZATION

UTILIZATION	CATEGORY
<i>Secondary Schools</i>	
>110%	Inadequate
101% to 110%	Approaching Inadequate
85% to 100.9%	Adequate
75% to 84.9%	Approaching Inefficient
<75%	Inefficient

SCHOOL	*SRC CAPACITY	2013 SRC UTILIZATION	2017-18 SRC UTILIZATION	2022-23 SRC UTILIZATION	**MGT CAPACITY	2013 MGT UTILIZATION	2017-18 MGT PROJECTED UTILIZATION	2022-23 MGT PROJECTED UTILIZATION
Century	1,297	87%	88%	82%	1,189	95%	97%	89%
Francis Scott Key	1,254	80%	75%	74%	1,121	89%	86%	82%
Liberty	1,138	93%	98%	84%	975	109%	115%	98%
Manchester Valley	1,297	59%	59%	61%	1,163	65%	69%	71%
North Carroll	1,159	65%	64%	61%	1,046	72%	67%	64%
South Carroll	1,339	81%	86%	76%	1,189	92%	97%	82%
Westminster	1,838	86%	81%	76%	1,635	97%	92%	86%
Winters Mill	1,297	85%	92%	89%	1,185	93%	96%	91%
HS TOTALS	10,619	80%	80%	75%	9,503	89%	90%	83%
DISTRICT TOTAL	31,909	81%	78%	78%	27,451	94%	90%	86%

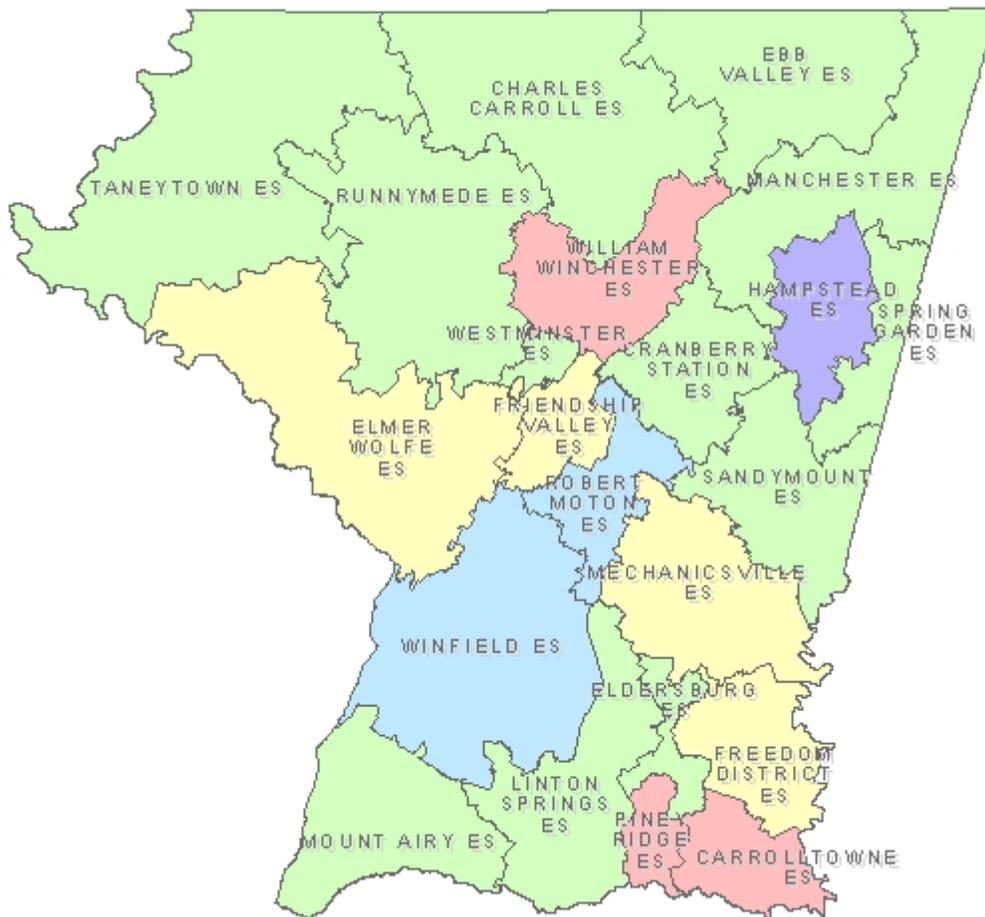
*INCLUDES PREK

**EXCLUDES PREK

SOURCE: MGT OF AMERICA, INC., 2013.

EXHIBIT 4-5
 CARROLL COUNTY PUBLIC SCHOOLS
 2013 MGT UTILIZATION BY ATTENDANCE ZONE

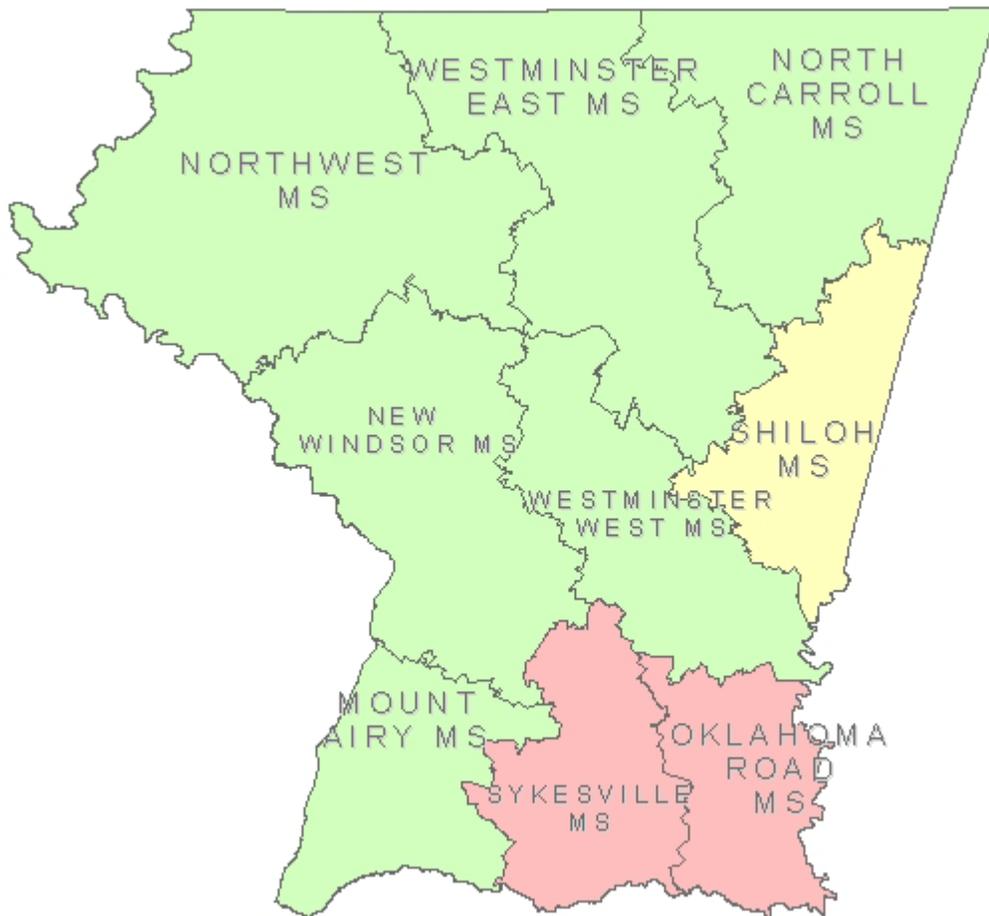
ELEMENTARY SCHOOLS	
CUT POINTS	
>105%	Red
101% to 105%	Yellow
85% to 100.9%	Light Green
75% to 84.9%	Light Blue
<75%	Purple



SOURCE: MGT OF AMERICA, INC., 2013.

EXHIBIT 4-6
 CARROLL COUNTY PUBLIC SCHOOLS
 2013 MGT UTILIZATION BY ATTENDANCE ZONE

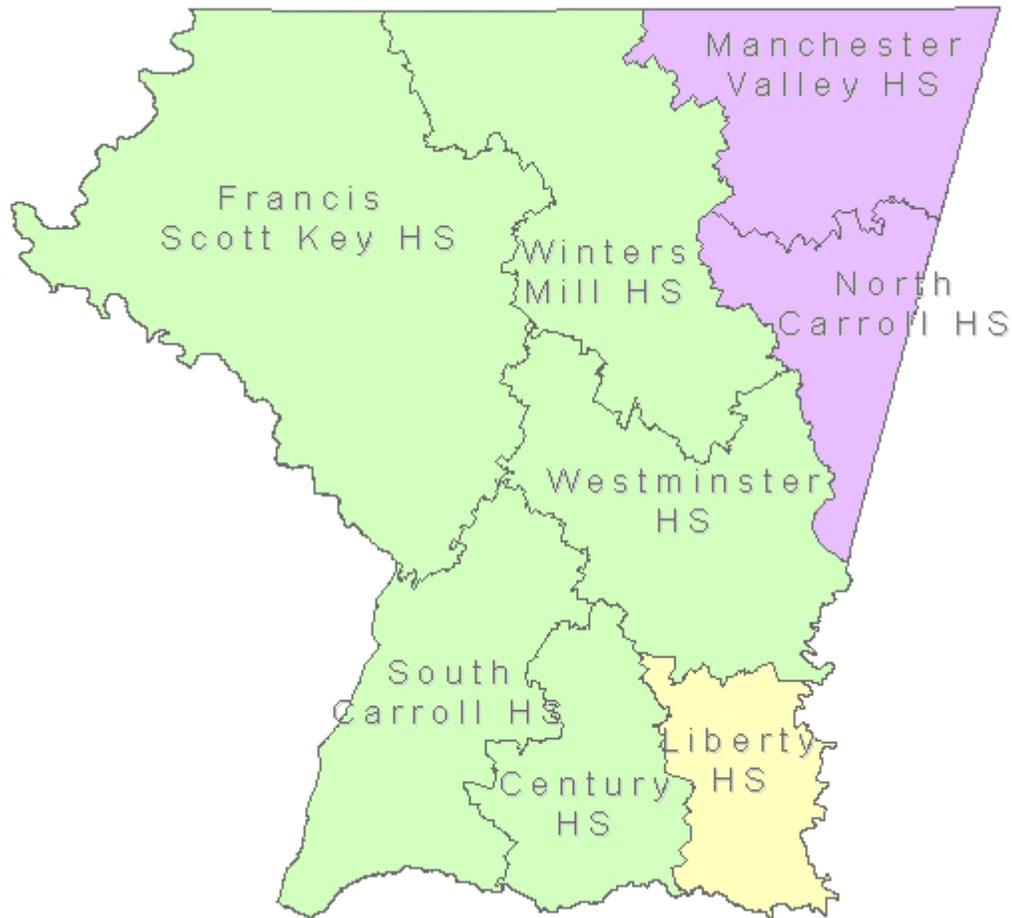
MIDDLE SCHOOLS	
CUT POINTS	
>110%	Red
101% to 110%	Yellow
85% to 100.9%	Green
75% to 84.9%	Light Blue
<75%	Purple



SOURCE: MGT OF AMERICA, INC., 2013.

EXHIBIT 4-7
 CARROLL COUNTY PUBLIC SCHOOLS
 2013 MGT UTILIZATION BY ATTENDANCE ZONE

HIGH SCHOOLS	
CUT POINTS	
>110%	Red
101% to 110%	Yellow
85% to 100.9%	Green
75% to 84.9%	Light Blue
<75%	Purple



SOURCE: MGT OF AMERICA, INC., 2013.

5.0 COMMUNITY INPUT

BACKGROUND

This section provides a summary of the findings from interviews and the community public meetings held in Carroll County. The purpose of these activities was to gather background information from staff and community members to become better informed regarding Carroll County School District in terms of its programs, facilities, capacity and utilization of the facilities, and other facility-related issues.

MGT staff conducted interviews and facilitated community meeting. In all, there were approximately 100 hours of interviews conducted during the course of this study. There were four community meetings held in geographic regions of the district. Nearly 100 people attended these community “charrettes.”

Internal and External Interviews

MGT staff held interviews with Carroll County School District’s School Board as well as central office administrators. MGT also interviewed key community members, including various county officials.

Community Public Meetings

Parents and community members were invited to attend one of four presentations about the study and then participate in an electronic survey and small group discussion. The survey instrument used during the public meetings was also available online. The scope of the project did not include conducting a scientific poll based on an identified set of respondents. Rather, MGT invited wide-spread public input through information in the press and from the district, and encouraged all interested community members to respond. More than 1,000 individuals responded to the online survey or participated in the public meetings.

INTERNAL AND EXTERNAL INTERVIEWS

The interviews with internal staff and external officials were based on a guiding set of questions, but also allowed individual interests, issues, or ideas to surface and be explored. We identified the following common themes from the internal and external interviews.

CHALLENGES

- ◆ Budget issues generated by the decreasing enrollment in the district.
- ◆ Varied size of schools and/or school utilization across the district with relative crowding in the southeast and relative space in the northeast.
- ◆ Feeder patterns from elementary to middle to high school that are confusing and impact student relationships.
- ◆ The need for more space in the Career and Technology Center.
- ◆ Concerns about having equitable programs and access across the district.
- ◆ Age and condition of some of the buildings, including ADA access issues at some schools.

- ◆ Lack of proper program spaces for career and technology education especially, but also for performing arts, JROTC, science, and the Gifted/Talented program.
- ◆ An interest in exploring shared space with some community programs, including the library and the community college.

Some respondents identified specific facility issues or challenges. The discussions included the following issues:

- ◆ Efficiency and Effectiveness - Operating the right number of buildings while maintaining high educational standards.
- ◆ Lack of preventative maintenance programs or “odd decisions” about maintenance – e.g., putting a new roof on Mt. Airy Middle School and then tearing it down shortly thereafter.
- ◆ Use of portables.
- ◆ Safety and security issues at the schools.

Respondents were invited to identify the most important outcomes from the MGT study. Comments and recommendations included the need for the following:

- ◆ Data to help the public understand the current situation and future problems.
- ◆ Clear processes for decision-making. If there isn’t a problem now, but data suggest the likelihood of a problem in the future, respondents wanted to know how decisions should be made. What criteria, processes, or approaches should be in place?
- ◆ Long-range planning with the county office. Creating only single-year projections is not perceived as adequate for the future.
- ◆ Closure and final decisions. Many people said they wanted to put issues or problems behind them, rather than feel like they could/would come up annually.
- ◆ Maintaining the excellent programs currently in place.
- ◆ Increasing the technical opportunities at the Career and Technology Center.

COMMUNITY PUBLIC MEETINGS – LARGE- AND SMALL-GROUP DATA

In October 2013, MGT staff conducted community input sessions (charrettes) in four different locations. The sessions were held at area high schools and all community members were invited to attend. *Exhibit 5-1* presents the dates, locations, and number of respondents for each of the four public meetings. The public input was significantly enhanced by the on-line survey that accompanied the public meetings. There were 989 total responses, but it should be noted that the number of respondents (N) varies based on the question, as some individuals chose to not answer or respond to certain questions.

EXHIBIT 5-1
CARROLL COUNTY SCHOOL DISTRICT
COMMUNITY PUBLIC INPUT SCHEDULE

Date	Location	Number of Participants
October 15, 2013	North Carroll High School	16
October 16, 2013	Francis Scott Key High School	5
October 22, 2013	Century High School	37
October 23, 2013	Westminster High School	38
Available 10/15 – 10/30	Online Survey	893
TOTAL		989

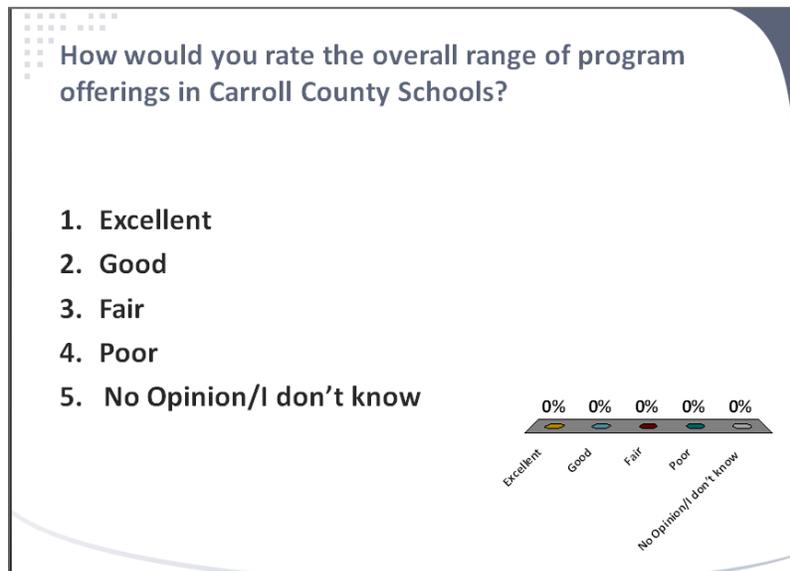
SOURCE: MGT OF AMERICA, INC., 2013.

The public sessions included three activities. The first was an informational presentation about the project planning process. The second activity was an audience participation session where participants could “vote” on issues, using electronic clickers. These enabled the participants to record their individual answers to the survey, which was projected on a screen as a PowerPoint presentation. Questions started with demographics, whether respondents were parents or employees and region of the county served by their high school. The questions included various issues that were pertinent to the district, including issues dealing with appropriate size of schools, number of schools being operated, and solutions to perceived problems. (See **Appendix A** for the complete survey.) The results from each question were posted instantaneously on the screen as a bar graph which allowed the participants to view how the group as a whole had responded to each question. The large group survey was designed to be a “conversation starter” for a more in-depth conversation during the small groups.

The data from the large group sessions and the online survey should not be considered a scientific poll. No attempt was made to ensure representation by relevant groups or respondents. Data is based on the individuals who chose to attend or to respond online. The individual answers from this survey were anonymous, with the posted results reflecting the group’s views. The data gathered at the community meetings is understood to be a characterization of the sentiment of those present and not a representative sampling of the Carroll community.

Exhibit5-2 is an example of the survey questions and the graphical response from the participants.

EXHIBIT 5-2
CARROLL COUNTY SCHOOL DISTRICT
SAMPLE SURVEY DATA GRAPHIC RESPONSE



SOURCE: MGT OF AMERICA, INC., 2013.

The third activity was a facilitated small group discussion of the issues identified in the large group session. These discussions were facilitated by staff from the school district and MGT. The role of each facilitator was to moderate the discussion, listen to the comments, and record the views of the group.

The onsite community participation numbers in Carroll County were disappointing, but many more citizens participated in the online data collection activity

COMMUNITY INPUT

Exhibit 5-3 shows the questions asked during the public sessions. Topics included outlining the strengths and weaknesses of the district’s educational programs; commenting on the physical condition of the buildings; and getting a sense of whether the school district was operating the correct number of schools.

EXHIBIT 5-3
CARROLL COUNTY SCHOOL DISTRICT
QUESTIONS FROM THE LARGE GROUP SURVEY

Questions	
1.	Are you a parent or a guardian of a student in CCPS?
2.	Are you an employee of CCPS?
3.	Area of residence in CCPS?
4.	How do you rate the quality of education students receive?
5.	How do you rate the range of program offerings?
6.	Does CCPS operate the right number of schools?
7.	Are CCPS elementary schools the right size?
8.	Are CCPS middle schools the right size?
9.	Are CCPS high schools the right size?
10.	Would you support closing a school to reduce costs while maintaining or improving program offerings?
11.	Would you support closing a school in your community to reduce costs while maintaining or improving program offerings?
12.	Would you support redistricting to create better efficiencies?
13.	Would you support changing current grade structures to create better efficiencies?
14.	Would you support efforts to utilize school facilities for multiple public use?

EXHIBIT 5-3 (CONTINUED)
 CARROLL COUNTY SCHOOL DISTRICT
 QUESTIONS FROM THE LARGE GROUP SURVEY

Questions	
15.	Which area would have the greatest influence on improving school efficiency?
16.	What is the most important factor to consider in making school efficiency decisions?

SOURCE: MGT OF AMERICA, INC. 2013.

Exhibits 5-4 to 5-19 provide more detail about the responses to questions from the public meetings and the online survey. Both the percentages and comments from the small group discussions are included.

The demographics of those community stakeholders who attended and answered the online survey questions are described below. As shown, sixty-seven percent (67%) of the participants were parents or guardians. Sixty-one percent (61%) of the participants were not employees of CCPS, and there was representation from all areas of the county with the numbers of respondents reflective of the overall population in the different regions. The largest groups were from central Carroll County (33.3%) and from the south (35.6%). Some 7% of the respondents were not residents of Carroll County.

EXHIBIT 5-4
 CARROLL COUNTY SCHOOL DISTRICT
 CHARRETTE AND SURVEY RESPONSES

1.) Are you the parent/guardian of a student in Carroll County Public Schools? (multiple choice)

	Responses	
Yes	666	67.27%
No	324	32.73%
Totals	990	100%

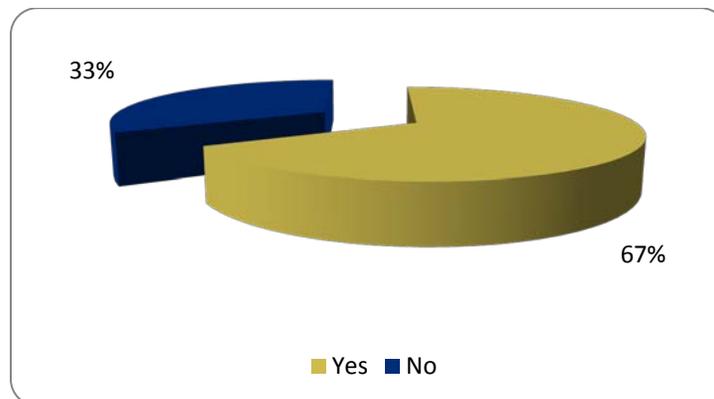


EXHIBIT 5-5
 CARROLL COUNTY SCHOOL DISTRICT
 CHARRETTE AND SURVEY RESPONSES

2.) Are you an employee of the Carroll County Public Schools?
 (multiple choice)

	Responses	
Yes	388	39%
No	597	61%
Totals	985	100%

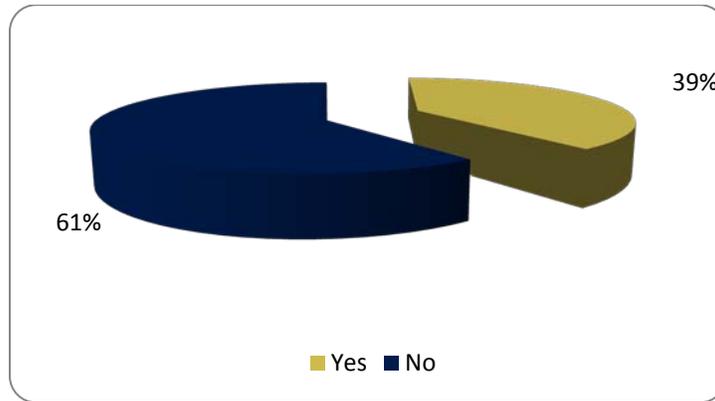
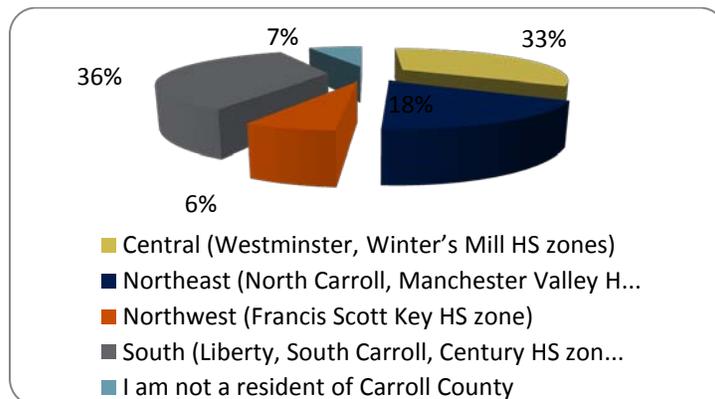


EXHIBIT 5-6
 CARROLL COUNTY SCHOOL DISTRICT
 CHARRETTE AND SURVEY RESPONSES

3.) The area of Carroll County that I reside in is: (multiple choice)

	Responses	
Central (Westminster, Winter's Mill HS zones)	329	33.33%
Northeast (North Carroll, Manchester Valley HS zones)	175	17.73%
Northwest (Francis Scott Key HS zone)	61	6.18%
South (Liberty, South Carroll, Century HS zones)	352	35.66%
I am not a resident of Carroll County	70	7.09%
Totals	987	100%

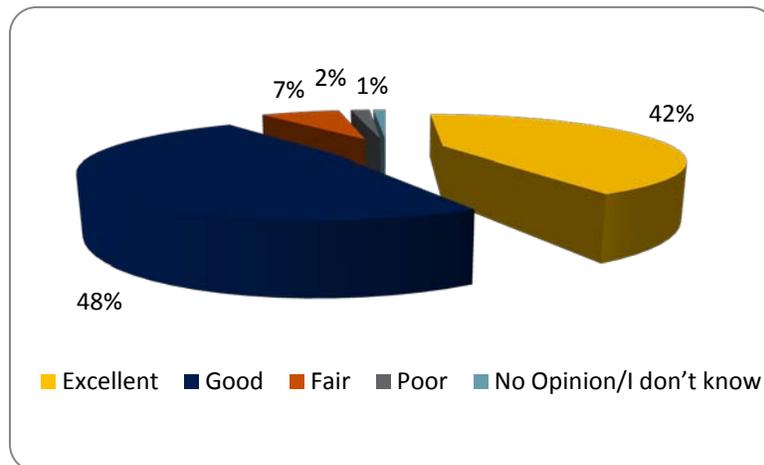


The following questions asked participants to respond using a scaled value. The data includes the percent of respondents, the graphical response, and sample comments from the small group discussions.

EXHIBIT 5-7
CARROLL COUNTY SCHOOL DISTRICT
CHARRETTE AND SURVEY RESPONSES

4.) How would you rate the quality of education students receive in Carroll County? (multiple choice)

	Responses	
Excellent	412	42.08%
Good	468	47.80%
Fair	71	7.25%
Poor	17	1.74%
No Opinion/I don't know	11	1.12%
Totals	979	100%



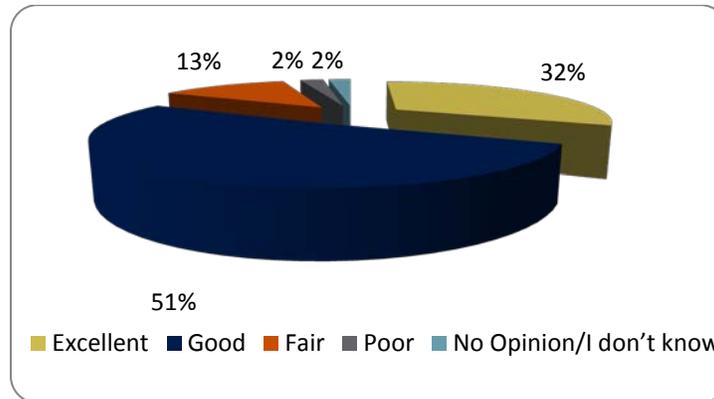
When asked to rate the quality of education students receive in CCPS, respondents were generally positive and cited the following:

- ◆ *“There is differentiated instruction for kids who need different support.”*
- ◆ *“You hear from the faculty, as needed.”*
- ◆ *“The staff is very dedicated, despite cuts in funding.”*
- ◆ *“There are lots of choices for kids.”*
- ◆ *“The class sizes are appropriate, especially at the elementary schools, and everyone knows everyone.”*

EXHIBIT 5-8
 CARROLL COUNTY SCHOOL DISTRICT
 CHARRETTE AND SURVEY RESPONSES

5.) How would you rate the overall range of program offerings in Carroll County Schools? (multiple choice)

	Responses	
Excellent	310	32%
Good	505	51%
Fair	124	13%
Poor	23	2%
No Opinion/I don't know	22	2%
Totals	984	100%



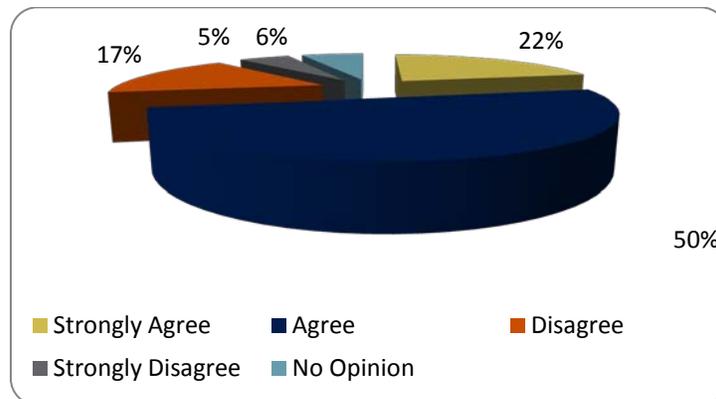
When asked to rate the overall range of program offerings in CCPS, eighty-three percent (83%) of respondents were generally positive, but 15% were negative. The respondents cited the following:

- ◆ *“There is a need for more environmental programs.”*
- ◆ *“The HS have great choices.”*
- ◆ *“There is a need for more choices at middle school.”*
- ◆ *“The CTC has to turn kids away because there’s not enough space for them.”*
- ◆ *“CCPS program for gifted needs funding.”*

EXHIBIT 5-9
CARROLL COUNTY SCHOOL DISTRICT
CHARRETTE AND SURVEY RESPONSES

**6.) Carroll County operates the right number of schools.
(multiple choice)**

	Responses	
Strongly Agree	211	21.66%
Agree	490	50.31%
Disagree	161	16.53%
Strongly Disagree	50	5.13%
No Opinion	62	6.37%
Totals	974	100%



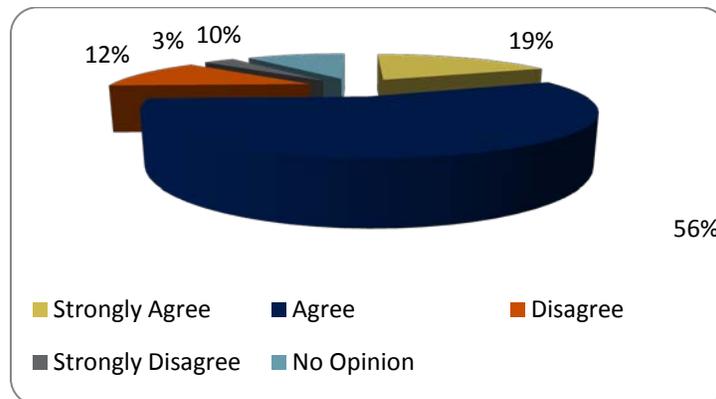
When asked to evaluate whether CCPS operates the right number of schools, seventy-two percent (72%) of respondents Agreed or Strongly Agreed, but 22% Disagreed or Strongly Disagreed. The respondents cited the following:

- ◆ *“I have been looking at this for years and I said ‘Yes’, but the issue here is geographic. Do we want 5-year olds on a bus for an hour?”*
- ◆ *“I can’t answer that question without data.”*
- ◆ *“Over-crowded classes are tough on needy kids. We have enough, but **balance** is the concern.”*
- ◆ *“Mostly agree that there is the right number of schools. Travel time is good.”*

EXHIBIT 5-10
CARROLL COUNTY SCHOOL DISTRICT
CHARRETTE AND SURVEY RESPONSES

7.) Carroll County Elementary Schools are the appropriate size. (multiple choice)

	Responses	
Strongly Agree	183	18.85%
Agree	539	55.51%
Disagree	117	12.05%
Strongly Disagree	31	3.19%
No Opinion	101	10.40%
Totals	971	100%



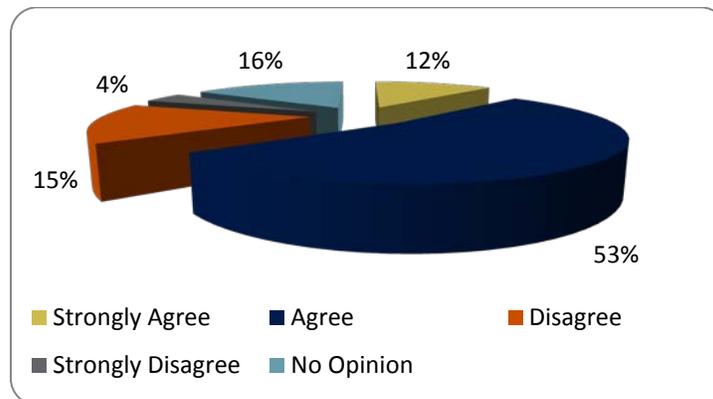
When asked to evaluate whether CCPS elementary schools are the right size, seventy-five percent (75%) of respondents Agreed or Strongly Agreed, but 15% Disagreed or Strongly Disagreed. The respondents cited the following:

- ◆ *“Smaller class sizes would be the preference – at any level.”*
- ◆ *“My school is good.”*
- ◆ *“My school should be smaller.”*
- ◆ *“I like the Mt. Airy situation with K-2 and 3-5.”*
- ◆ *“Some buildings are old and weren’t designed for kindergarten.”*

EXHIBIT 5-11
 CARROLL COUNTY SCHOOL DISTRICT
 CHARRETTE AND SURVEY RESPONSES

**8.) Carroll County Middle Schools are the appropriate size.
 (multiple choice)**

	Responses	
Strongly Agree	119	12.26%
Agree	513	52.83%
Disagree	149	15.35%
Strongly Disagree	38	3.91%
No Opinion	152	15.65%
Totals	971	100%



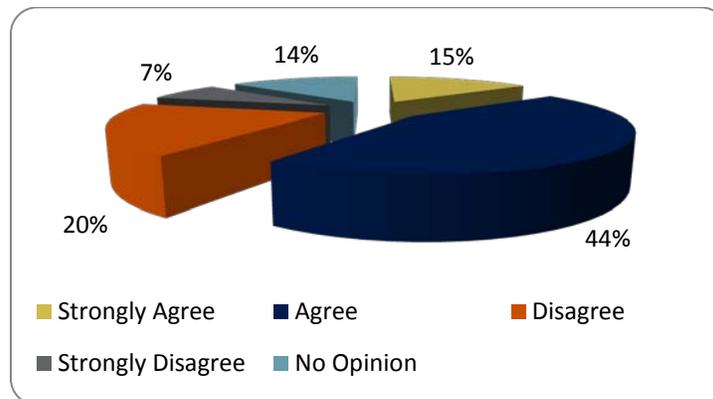
When asked to evaluate whether CCPS middle schools are the right size, seventy-five percent (75%) of respondents Agreed or Strongly Agreed, but 19% Disagreed or Strongly Disagreed. The respondents cited the following:

- ◆ *“Some schools seem crowded.”*
- ◆ *“Some schools are too large.”*
- ◆ *“Smaller class size is preferred.”*

EXHIBIT 5-12
 CARROLL COUNTY SCHOOL DISTRICT
 CHARRETTE AND SURVEY RESPONSES

**9.) Carroll County High Schools are the appropriate size.
 (multiple choice)**

	Responses	
Strongly Agree	146	15.05%
Agree	428	44.12%
Disagree	192	19.79%
Strongly Disagree	71	7.32%
No Opinion	133	13.71%
Totals	970	100%

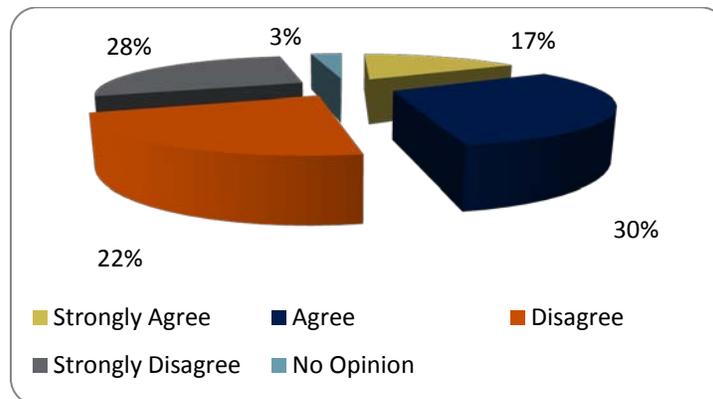


When asked to evaluate whether CCPS high schools are the right size, seventy-five percent (75%) of respondents Agreed or Strongly Agreed, but 19% Disagreed or Strongly Disagreed. The respondents cited the following:

- ◆ *“My school was right, but some were too large.”*
- ◆ *“I would like to see HS smaller than 1000.”*
- ◆ *“Smaller class size is preferred.”*
- ◆ *“Size is important. The emphasis seems to be on elementary and middle schools.”*

EXHIBIT 5-13
CARROLL COUNTY SCHOOL DISTRICT
CHARRETTE AND SURVEY RESPONSES

10.) I would support closing a school if it reduced costs while maintaining or improving program offerings. (multiple choice)	Responses	
Strongly Agree	161	16.60%
Agree	296	30.52%
Disagree	214	22.06%
Strongly Disagree	267	27.53%
No Opinion	32	3.30%
Totals	970	100%



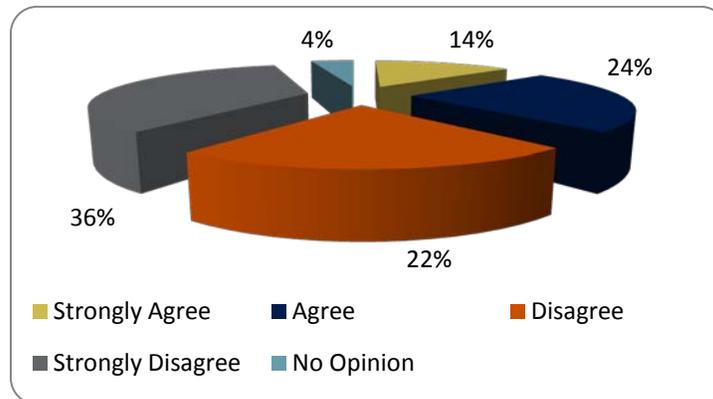
When asked to evaluate whether they would support closing a school if it reduced costs while maintaining or improving program offerings, there was a mixed response. Forty-seven percent (47%) of respondents Agreed or Strongly Agreed, but more than 49% Disagreed or Strongly Disagreed. The respondents cited the following:

- ◆ *“What will happen when you try to reopen a closed school? What are the costs of maintaining a closed school? That’s a problem.”*
- ◆ *“Closing a school impacts a community.”*
- ◆ *“No one school is under-populated enough to close.”*
- ◆ *“Program is important. I’d be willing to move students if the school has a well-thought-out, quality program.”*
- ◆ *“Community is important. Most towns have a high school and that helps create community.”*
- ◆ *“Why would you close a good building that doesn’t need renovations?”*
- ◆ *“Putting buses on the road for a long time is not a good idea.”*

EXHIBIT 5-14
CARROLL COUNTY SCHOOL DISTRICT
CHARRETTE AND SURVEY RESPONSES

11.) I would support closing a school in my community if it reduced costs while maintaining or improving program offerings. (multiple choice)

	Responses	
Strongly Agree	138	14.10%
Agree	239	24.41%
Disagree	210	21.45%
Strongly Disagree	349	35.65%
No Opinion	43	4.39%
Totals	979	100%



When asked whether they would support closing a school in their community if it reduced costs while maintaining or improving program offerings, only thirty-eight percent (38%) of respondents Agreed or Strongly Agreed, compared to more than double that number that agreed that closing schools – somewhere other than their neighborhood – was a good idea. Fifty-eight percent (58%) Disagreed or Strongly Disagreed with any plan to close schools in their community. The respondents cited the following:

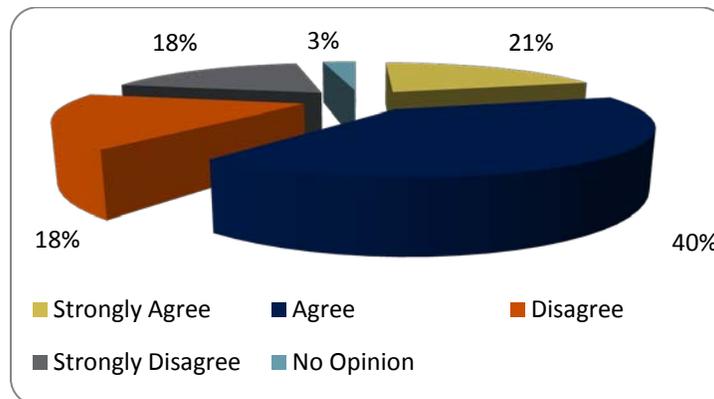
- ◆ “Close schools and then re-open? How often are we going to flip-flop?”
- ◆ “Closing schools is a ‘Band-Aid’ fix, but not a permanent solution. We should fix the problem for the longer term.”
- ◆ “West schools are OK, but older schools might need to be closed.”
- ◆ “Closings would hurt drive times/travel times for kids.”
- ◆ “Sports could be hurt and extra-curricular activities.”
- ◆ “Closing is crazy. Classes would be too big.”

If closing schools was not seen as a viable solution, we asked participants whether there were other ways to address efficiencies. Questions 12-14 asked respondents to think about solutions, other than closing schools, that might address efficiencies.

EXHIBIT 5-15
 CARROLL COUNTY SCHOOL DISTRICT
 CHARRETTE AND SURVEY RESPONSES

12.) I would support redistricting students to create better efficiencies. (multiple choice)

	Responses	
Strongly Agree	201	20.66%
Agree	386	39.67%
Disagree	177	18.19%
Strongly Disagree	179	18.40%
No Opinion	30	3.08%
Totals	973	100%



When asked whether redistricting would create better efficiencies, nearly sixty-one percent (60.33%) of respondents Agreed or Strongly Agreed, but more than one third (36.59%) Disagreed or Strongly Disagreed. Redistricting was defined as moving students from one attendance zone to another to better balance or utilize the school spaces. The respondents cited the following:

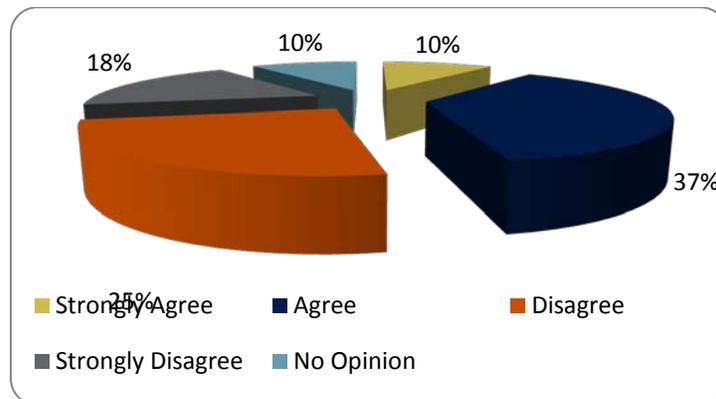
- ♦ *"It makes sense, but it is rarely done."*
- ♦ *"Feeder patterns are not clear/clean, especially in the north."*
- ♦ *"Feeder schools have been good and consistent."*
- ♦ *"Cleaner feeder-patterns if you redistrict."*
- ♦ *"Redistricting takes a long time – which schools, where to go, etc. – and by then everything could be fine."*
- ♦ *"Please think outside the box – Not close, redistrict."*

An alternative to redistricting to create efficiencies might be to **change grade structures**. The current grade configuration in CCPS is typically PK/K-5, 6-8, and 9-12. In the Mt. Airy area, there is a pair of elementary schools to house PK-5, but all other areas have PK/K-5 in one school. Changing the grade configuration could mean creating various structures across the county, based on space availability in each area; one school might be PK-7, another might be Grades 5-8, etc. These grade configurations are sometimes viewed as more efficient, but may negatively impact program offerings or feeder patterns. The comments from CCPS participants were typically not supportive of making grade structure changes.

EXHIBIT 5-16
CARROLL COUNTY SCHOOL DISTRICT
CHARRETTE AND SURVEY RESPONSES

13.) I would support changing current grade structures to create better efficiencies. (multiple choice)

	Responses	
Strongly Agree	101	10.38%
Agree	356	36.59%
Disagree	240	24.67%
Strongly Disagree	179	18.40%
No Opinion	97	9.97%
Totals	973	100%



When asked whether changing current grade structures would create better efficiencies, only forty-seven percent (46.97%) of respondents Agreed or Strongly Agreed, but nearly as many (43.07%) Disagreed or Strongly Disagreed. Changing grade structures was defined as adjusting which grades attended which schools to better balance or utilize the school spaces. The respondents cited the following:

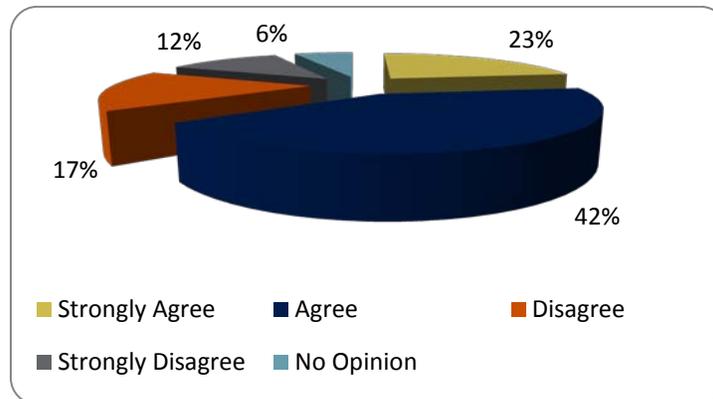
- ♦ *"I like having less angst about changing schools and only having grades 1-6 in one school and 7-12 in another."*
- ♦ *"In Canada, they use PK-8 and have older kids helping younger ones."*
- ♦ *"I would have issue if it's anything other than K-6, 7-9, and 10-12."*
- ♦ *"What's the difference between a middle school and a junior high school?"*
- ♦ *"I don't want younger kids with older ones."*
- ♦ *"The curriculum might change with a change in grade structure."*
- ♦ *"The size of the community is important when considering grade structure."*
- ♦ *"Changing the current grade structure is the less of two evils. It's better than closing a school."*

An additional idea for addressing efficiencies was to utilize public school space for **other public programs**, including community college classrooms or offices, public library space, or other county service spaces.

EXHIBIT 5-17
CARROLL COUNTY SCHOOL DISTRICT
CHARRETTE AND SURVEY RESPONSES

14.) I would support efforts to utilize school facilities for multiple public use (e.g. Library, Higher Education, County services, etc.) (multiple choice)

	Responses	
Strongly Agree	220	22.63%
Agree	413	42.49%
Disagree	161	16.56%
Strongly Disagree	116	11.93%
No Opinion	62	6.38%
Totals	972	100%



When asked whether allowing multiple public usage would create better efficiencies, nearly two-thirds (65.12%) of respondents Agreed or Strongly Agreed. Although only 28% Disagreed or Strongly Disagreed, the reasons for their concern became evident during the small group discussion and may have changed the mind of some who had originally supported the idea.

The respondents cited the following:

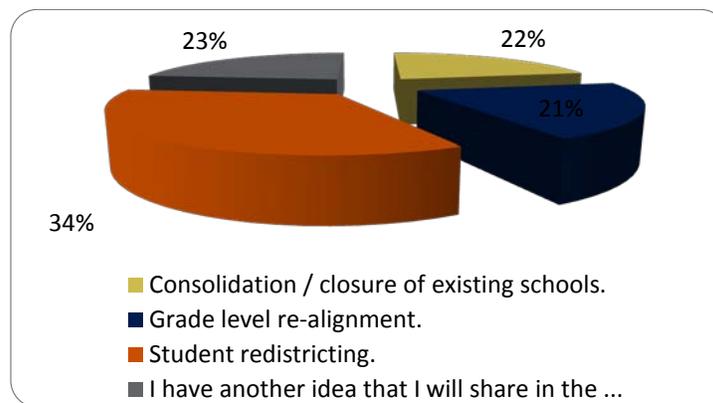
- ◆ *“I’d be worried about security. If it’s a public space, could anyone come into the school?”*
- ◆ *“All of us disagree because safety is a concern. It is impossible to maintain separation and it would create more of a financial burden because of the added security issues.”*
- ◆ *“Put programs into schools that are under-capacity and make sense.”*

The last two questions forced participants to make choices between the options presented or suggest an alternative as a means to influencing school efficiency or making decisions. Each question identified several options.

EXHIBIT 5-18
CARROLL COUNTY SCHOOL DISTRICT
CHARRETTE AND SURVEY RESPONSES

15.) Which of the following would have the greatest influence on improving school efficiency? (multiple choice)

	Responses	
Consolidation / closure of existing schools.	202	21.91%
Grade level re-alignment.	191	20.72%
Student redistricting.	315	34.16%
I have another idea that I will share in the ...	214	23.21%
Totals	922	100%



When forced to choose, between school closure, grade-level realignment, and redistricting (boundary changes), the respondents were clearly split with the largest group (34.16%) in favor of student redistricting over school closure (21.91%) and grade level realignment (20.72%). These data make clear that there is no clear, single solution but that many in the district would be most comfortable with redistricting students, rather than closing schools or changing the grade level structures at schools.

The respondents cited the following:

- ◆ *“Redistrict, as needed, but not often – every 10 years, maybe.”*
- ◆ *“Over-crowding is mainly in the south. That needs to be addressed.”*

Several respondents indicated that they had “Another idea that to share in the small group.” Two groups/individuals submitted alternative proposals in writing. MGT read and reviewed the documents and then turned them over to the district for their use. Comments regarding this question included the following:

These are the other responses:

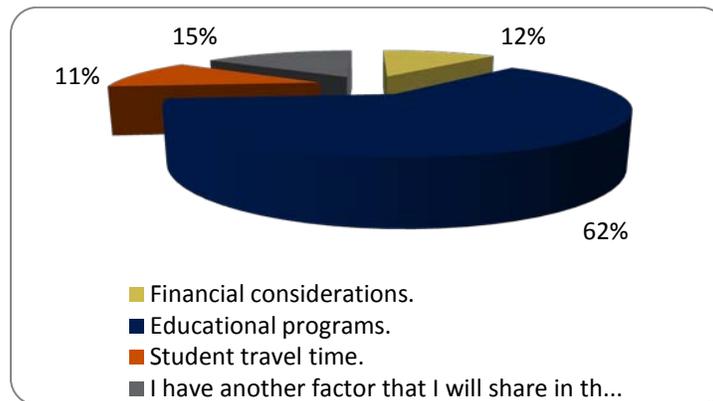
- ◆ *“Elect better politicians.”*
- ◆ *“I want to know how much money it would take from taxpayers to improve the budget. I would be willing to put more money into the tax structure.”*
- ◆ *“Look at what other counties and states have done in similar situations”*

- ◆ *“Create magnet schools.”*
- ◆ *“Review the Nutritional Proposal we submitted.”*
- ◆ *“Review the benefits of small schools proposal we submitted.”*

The final question asked respondents to identify the most important factor in making decisions about school efficiencies. Like the earlier question, this one forced a choice and offered an opportunity for describing a creative solution.

EXHIBIT 5-19
CARROLL COUNTY SCHOOL DISTRICT
CHARRETTE AND SURVEY RESPONSES

16.) In my opinion the most important factor to consider in making school efficiency decisions is: (multiple choice)	Responses	
Financial considerations.	113	12%
Educational programs.	599	62%
Student travel time.	110	11%
I have another factor that I will share in th...	148	15%
Totals	970	100%



When forced to choose the most important factor to consider in making school efficiency decisions, a majority of the respondents (62%) were in support of considering educational programs with only 12% in favor of considering financial considerations, and only 11% in favor of considering student travel time. In addition, there were 15% of the participants who had another issue that they shared in the small group discussion.

During the discussion, respondents cited the following:

- ◆ *“The education the kids get should be more aligned with the real world.”*
- ◆ *“Would there be any support for a voluntary school tax?”*
- ◆ *“Do not impact the educational program. That’s important.”*
- ◆ *“Clean up the feeder patterns.”*
- ◆ *“Music and art will be on the chopping block if financial issues are not considered.”*

- ◆ *“Travel time will affect family life and sports.”*
- ◆ *“Keeping community together is most important in school efficiency.”*

Several respondents had indicated that they had “Another idea that to share in the small group.” Two groups/individuals submitted alternative proposals in writing that were referenced in the last question. They have been reviewed and provided to the district for consideration.

The community input described in this section included data from individual interviews with district and county staff and stakeholder input from both community input sessions and an online survey. It is important to remember that none of the data described here are based on a statistical poll and the data here are not assumed or assured to be representative within a statistical percentage.

These data have been compiled from district and county officials and from interested stakeholders and are intended to provide insight and direction, but they are not based on a scientific poll or a vote from a representation or a majority of the population.

MAJOR THEMES

The following ideas and issues are presented based on the stakeholder and community input sessions. We have organized them based on issues, rather than any hierarchy or priority.

- ◆ **Feeder Patterns** are a problem and could/should be improved: Nearly all elementary schools and most middle schools exist within “mixed feeder patterns.” This means that a student from one elementary or middle school is not guaranteed to move to the next level along with his/her classmates. This is not an instructional problem, since the CCPS seems to have similar course offerings across the district,, but it has been identified as an issue by parents and staff.
- ◆ **Equitable and Accessible Facilities** are a problem, especially in places where the facilities are not ADA accessible. Having spaces that do not accommodate all people is a problem and several CCPS schools have accessibility problems. In addition to having access issues, some CCPS schools do not have the same quality facilities to support programs. The differences typically like not in general classrooms, but in specialty areas including arts, science/STEM, career and technology areas, and special education.
- ◆ **Safety is an issue.** Many interviewees cited safety concerns as either questions or issues. They didn’t want to have “prison-fencing,” but did want to know that their students were safe in the schools.
- ◆ **Community usage.** Many people thought it would be a good idea to combine district and other community groups, but there was concern about the details, safety and security being the largest item.
- ◆ **Process/procedures.** Several people indicated that they believed that “trouble was coming” – declining enrollment, land use regulations, etc. – and suggested that it would be helpful to have policies or procedures in place to describe how those situations would be handled in the future. The state regulations regarding school closure were cited as an example of clear procedures for handling situations.

A corollary to this issue is the concern expressed by many that Carroll County Public Schools may need to adhere to clear processes for decision-making so that problems do not persist over time. MGT has worked with groups that are dealing with “chronic pain” and/or “acute pain.” Chronic pain is typically described as difficulties based on issues or problems that persist over

time and are not dealt with for a variety of reasons. Acute pain is typically described as a severe impact from making a decision. It should be noted that acute pain typically dissipates rapidly following the decision and implementation. Many organizations find chronic pain to be more disabling than acute pain.

For Carroll County, it may be helpful to identify “triggers” that would prompt processes or policies that define how situations will be reviewed, explained, handled, etc. For example, if school sizes exceed X, then Y happens; or if school expenditures exceed P, then Q happens. These “triggers” would enable the district to create an approach and methodology to shape future decisions. Having such policies and procedures in place would reduce the likelihood that the system would be dealing with “chronic pain.” Most organizations find that “acute pain,” although never easy, is preferable, especially when it is explained and planned for in advance.

- ◆ **County connections.** Carroll County –like all school districts in Maryland – is in a unique position relative to their national peers. They are under the significant fiscal jurisdiction of the elected county commissioners. This relationship requires shared understanding of legal roles and responsibilities. The elected county commissioners set the school district budget, but not the program priorities; the elected school board sets the program priorities, but has to request the budget.

In Carroll County, there are several issues that would benefit from joint commissioner/school district review and agreement, including the following:

- **Long-range planning.** It would be beneficial for the district and county staff to meet annually to review and discuss enrollments and plans into the future – 5 and 10 and 15-years out. This joint, long-range planning has not occurred.
 - **Impact fees.** The county may want to consider collecting impact fees that could affect district funding.
 - **Rural issues.** The district has several rural schools and has built several new schools in rural areas, attempting to bridge two communities. Rural construction requires new infrastructure and these efforts should be part of a discussion with the county.
- ◆ **Ongoing district maintenance for facilities.** Carroll County has school facilities that are in need of scheduled maintenance. When such maintenance does not occur, there is increased likelihood that emergency repairs are needed. The district needs to create a budget for regular maintenance/replacement that is part of the annual budget with the county.

6.0 RECOMMENDATIONS

CONCLUSIONS

The following conclusions are derived from our analysis of the data presented in the preceding sections and will guide the formulation of the recommendations.

- ◆ The overall facility utilization is good. As the exhibit below shows, district-wide facility utilization rates vary from 83.1% to 98.9%.

EXHIBIT 6-1
CARROLL COUNTY PUBLIC SCHOOLS
DISTRICT-WIDE UTILIZATION RATES

GRADE BAND	CURRENT UTILIZATION	PROJECTED 2017-18 UTILIZATION	PROJECTED 2022-23 UTILIZATION
Elementary, K-5	96.5%	87.9%	88.2%
Middle, 6-8	98.9%	95.1%	85.1%
High, 9-12	89.2%	89.9%	83.1%
DISTRICT TOTAL	94.5%	90.2%	85.7%

SOURCE: MGT OF AMERICA, INC., 2013.

- ◆ Individual schools at each grade band fall below and above reasonable utilization levels. The following exhibit lists the schools that are significantly over or under-utilized.

EXHIBIT 6-2
CARROLL COUNTY PUBLIC SCHOOLS
CURRENT AND PROJECTED UTILIZATION

SCHOOL	**MGT CAPACITY	2013 MGT UTILIZATION	2017-18 MGT PROJECTED UTILIZATION	2022-23 MGT PROJECTED UTILIZATION
Carrolltowne	496	108%	95%	89%
Hampstead	483	73%	77%	78%
Piney Ridge	498	123%	114%	111%
Robert Moton	525	76%	65%	71%
Wm. Winchester	542	118%	87%	92%
ES TOTALS	11,778	96%	88%	88%

EXHIBIT 6-2 (CONTINUED)
 CARROLL COUNTY PUBLIC SCHOOLS
 CURRENT AND PROJECTED UTILIZATION

SCHOOL	**MGT CAPACITY	2013 MGT UTILIZATION	2017-18 MGT PROJECTED UTILIZATION	2022-23 MGT PROJECTED UTILIZATION
Mt. Airy	722	91%	84%	72%
Northwest	589	89%	84%	74%
Oklahoma Road	722	114%	103%	87%
Sykesville	698	112%	107%	100%
MS TOTALS	6,170	99%	95%	85%
Liberty	975	109%	115%	98%
Manchester Valley	1,163	65%	69%	71%
North Carroll	1,046	72%	67%	64%
HS TOTALS	9,503	89%	90%	83%
DISTRICT TOTAL	27,451	94%	90%	86%

**EXCLUDES PK

SOURCE: MGT OF AMERICA, INC., 2013.

- ◆ Individual schools have significant physical condition and functional (educational suitability) issues. The following exhibit identifies the four schools with combined assessment scores below 1500 which signifies a high priority need.

EXHIBIT 6-3
 CARROLL COUNTY PUBLIC SCHOOLS
 HIGH PRIORITY NEED SCHOOLS, BASED ON ASSESSMENT

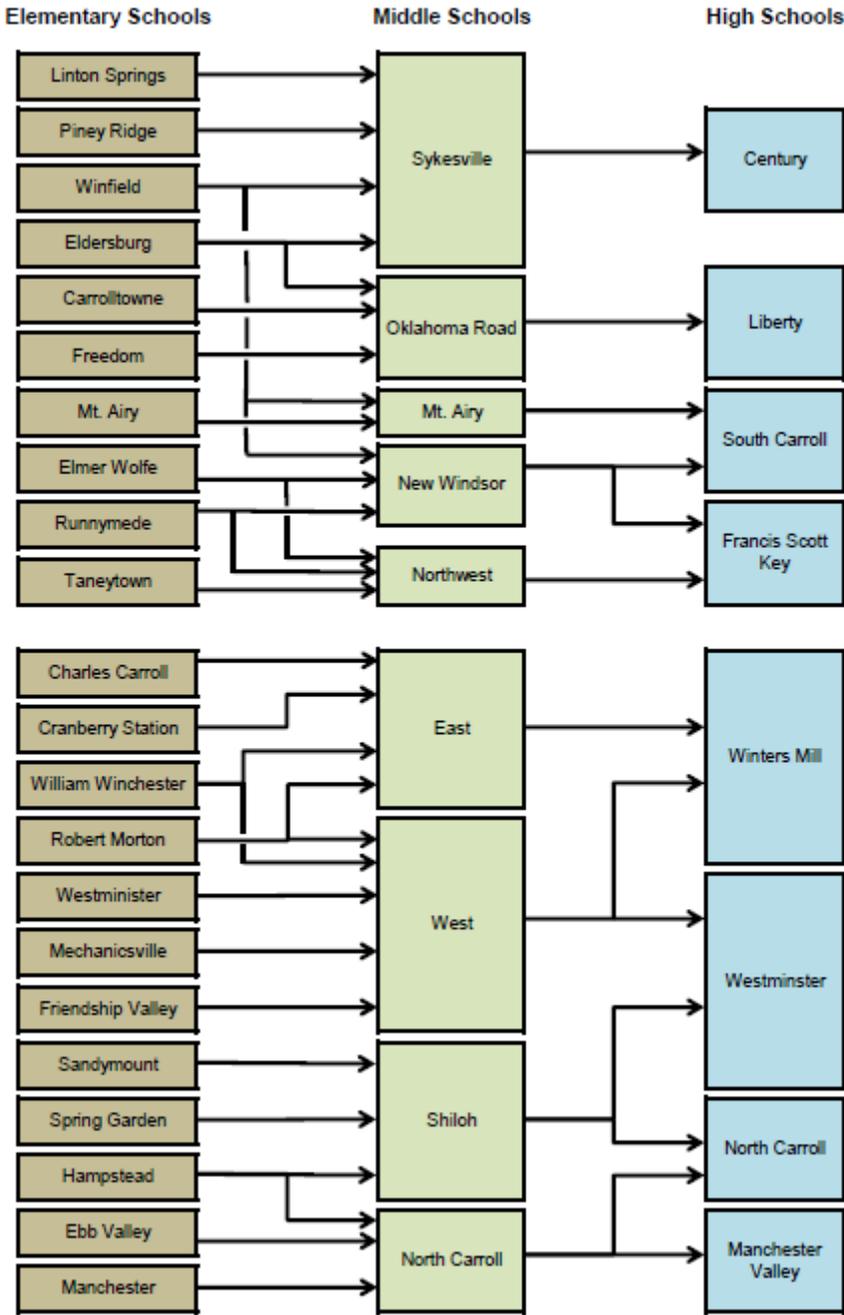
SCHOOL	PHYSICAL ASSESSMENT SCORE MAX. 1000	FUNCTIONAL ASSESSMENT SCORE MAX. 1000	TOTAL SCORE MAX. 2000
Charles Carroll ES	880	462	1342
William Winchester ES	890	524	1414
Westminster East MS	900	579	1479
Westminster West MS	901	578	1479

SOURCE: MGT OF AMERICA, INC., 2013.

- ♦ School size varies significantly throughout the district. When measured by the current capacity, schools vary in size as follows;
 - Elementary schools vary from 282 to 664
 - Middle schools vary from 394 to 945
 - High schools vary from 975 to 1,635

- ♦ The current feeder patterns are not consistent and create concern and frustration among parents. Some elementary schools feed into two or three different middle schools, while some middle schools feed into two different high schools. The following chart demonstrates the inconsistency of the feeder patterns. Frustration over the inconsistency of the feeder patterns was a common concern voiced in the community input process.

EXHIBIT 6-4
CARROLL COUNTY PUBLIC SCHOOLS
FEEDER PATTERN DIAGRAM



SOURCE: CARROLL COUNTY PUBLIC SCHOOLS, 2013.

PRIORITIZATION

To assist in the prioritization process, “cut points” have been established using utilization rates and facility assessment scores. The following exhibit identifies these cut points.

EXHIBIT 6-5
CARROLL COUNTY PUBLIC SCHOOLS
CUT POINTS

PRIORITY	UTILIZATION RATES	FACILITY ASSESSMENT SCORES
First Priority	>110% <75%	<1400
Second Priority	>100% <85%	<1500

SOURCE: MGT OF AMERICA, INC., 2013.

UTILIZATION ISSUES

Using the “cut points” established above, five schools have first priority utilization issues.

EXHIBIT 6-6
CARROLL COUNTY PUBLIC SCHOOLS
HIGH PRIORITY SCHOOLS, BASED ON UTILIZATION

SCHOOL	2017-18 PROJECTED UTILIZATION RATE
<i>First Priority</i>	
Manchester Valley HS	68.7%
North Carroll HS	67.2%
Liberty HS	115.1%
Piney Ridge ES	114.1%
Robert Moton ES	64.8%

SOURCE: MGT OF AMERICA, INC., 2013.

MANCHESTER VALLEY AND NORTH CARROLL HIGH SCHOOLS

Both of these high schools in the northeast section of the district are underutilized. The options for addressing the underutilization are:

- ♦ **Close a high school.** Given the projected five year utilization rates of these two schools (67%), the closure of one of the high schools would result in the remaining school being overcrowded. In addition, this action is counter to the data which shows that the district’s projected 5-year overall high school utilization rate is 89.9%, indicating that the district does not have excess space at this level.

- ◆ **Leave as is.** While the utilization rates of these two high schools are in the “inefficient” range, the district could decide to continue using the excess space for specialty programs. This approach would be the least disruptive and have a positive effect on programs.
- ◆ **Redistrict.** Redrawing the attendance zones for these two high schools would increase their enrollments and provide an opportunity to align their attendance zones with the attendance zones of the feeder middle schools. North Carroll High School’s attendance zone would be aligned with Shiloh Middle School’s zone, and Manchester Valley High School’s zone would be aligned with North Carroll Middle School’s attendance zone.

LIBERTY HIGH SCHOOL

Liberty High School is currently over-utilized and is projected to be over-utilized in the mid-term or five year horizon. However, in the long term, or ten year horizon, its utilization drops to 98%. The options include:

- ◆ **Leave as is.** The facility will need relocatables in the mid-term, but should return to a “good” level of utilization in the long term.
- ◆ **Redistrict.** Redrawing the attendance zone for the high school would be difficult since all of the adjoining zones have utilization rates in the upper 90%.

PINEY RIDGE ELEMENTARY SCHOOL

Piney Ridge Elementary School is over-utilized and is projected to be over-utilized for the mid and long term. The options include:

- ◆ **Leave as is.** The facility would remain over-utilized to an “inadequate” level for the next ten years.
- ◆ **Redistrict.** Adjusting the attendance zone of Piney Ridge Elementary would require adjustments to the attendance zones of Eldersburg and Freedom elementary schools. This would also present an opportunity to simplify some of the feeder patterns.

ROBERT MOTON ELEMENTARY SCHOOL

Robert Moton Elementary School is projected to be under-utilized in the mid-term but less so in the long term. The options include:

- ◆ **Leave as is.** The facility would remain under-utilized to an “inefficient” level for the next ten years.
- ◆ **Redistrict.** The attendance zone for Robert Moton could be adjusted with the zone for Mechanicsville Elementary School which is currently over-utilized. However, Mechanicsville’s utilization rate is projected to drop.

FACILITY CONDITION ISSUES

Using the “cut points” established above, one school has a first priority condition issue. Charles Carroll Elementary School had a total score of 1342 signifying significant physical condition and functionality issues.

CHARLES CARROLL ELEMENTARY SCHOOL

The building housing Charles Carroll Elementary School has significant maintenance and suitability needs. The options for remediating the deficiencies include;

- ◆ **Renovation.** Remediating the building’s maintenance needs would be more doable than making it a fully functioning elementary school. The building’s configuration which has resulted from multiple renovations, and the fact that it is multi-story, create significant challenges in creating a fully functional and educationally suitable elementary school.
- **New School.** While a new school would resolve all physical and functional issues, the district must address the issues of the school’s small size. The location of a new school should address the local community’s stated need for a school in their area.



RECOMMENDATIONS

RECOMMENDATION #1

Align the North Carroll High School attendance zone with the current Shiloh Middle School attendance zone.

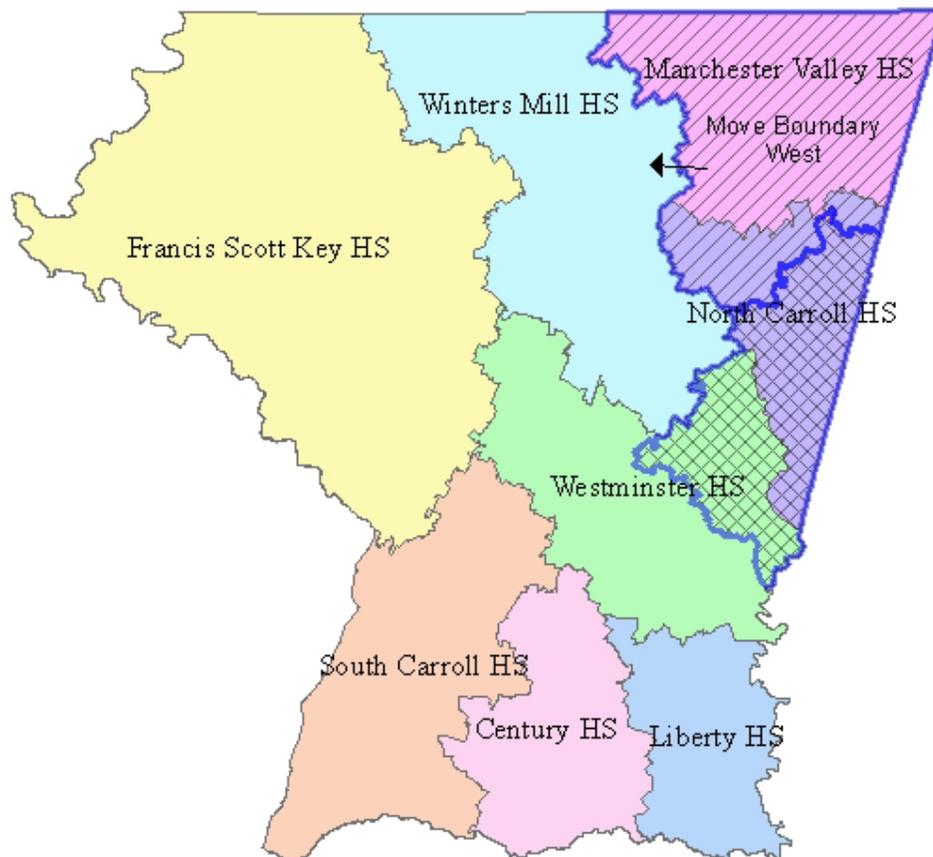
This will result in an increased utilization at North Carroll with a corresponding reduced enrollment at Westminster High School. The alignment of the attendance zones will also improve the clarity of the feeder pattern.

RECOMMENDATION #2

Align the Manchester Valley High School attendance zone with the North Carroll Middle School attendance zone. In addition, expand the Manchester Valley / North Carroll MS zone into the current Winters Mill/East Middle/William Winchester/Charles Carroll zones to increase Manchester Valley High School feeder pattern enrollments and decrease Winters Mill High School feeder pattern enrollments.

The following exhibits show the changes to attendance zones in Recommendation #1 and #2, and the resulting five-year projected utilization rates for the affected schools.

EXHIBIT 6-7
CARROLL COUNTY PUBLIC SCHOOLS
RESULTING HS ATTENDANCE ZONE



SOURCE: MGT OF AMERICA, INC., 2013.

EXHIBIT 6-8
CARROLL COUNTY PUBLIC SCHOOLS
RESULTING ENROLLMENT/UTILIZATION

SCHOOL	2017-18 ENROLLMENT	2017 -18 UTILIZATION
Manchester Valley HS	963	83%
North Carroll HS	859	82%
Westminster HS	1,325	81%
Winters Mill HS	1,049	89%
Shiloh MS	629	97%
North Carroll MS	646	93%
East MS	654	87%
West MS	992	105%

SOURCE: MGT OF AMERICA, INC., 2013.

RECOMMENDATION #3

Replace Charles Carroll and William Winchester Elementary Schools with a new facility located between the two existing facilities.

This recommendation will address the facility condition and functionality issues at both schools, while also eliminating one small school. The combined school will be smaller than the sum of the two schools due to attendance zone adjustments in Recommendation #2. The new school should be located in between the existing school sites so that both communities will maintain a school in their area.

RECOMMENDATION #4

Adjust the attendance zones among Eldersburg, Freedom, and Piney Ridge Elementary Schools to reduce enrollment at Piney Ridge.

This recommendation will lower the utilization rate at Piney Ridge and can also improve the attendance zone feeder patterns.

RECOMMENDATION #5

Begin planning for a new Westminster East Middle School to be co-located with the new Charles Carroll/William Winchester Elementary School and for the modernization of Westminster West Middle School.

This recommendation will address the facility condition and functionality issues at both middle schools. While the completion of these facilities should be considered a second priority, the planning, to include site acquisition, educational specifications, school size, etc. should begin immediately.

Co-locating the new middle school at the site of the new elementary school would create a complex that could be expanded to include other public entities such as the library and community college.

SUPPORTING RECOMMENDATIONS

The following recommendations are intended to support the implementation of the general recommendations and to enhance the educational program.

SUPPORTING RECOMMENDATION #1

Monitor utilization rates annually and adjust attendance boundaries as necessary to maintain adequate utilization of facilities.

Many of the issues with facility utilization and feeder patterns are a result of the district not adjusting attendance zones on a regular basis, especially in light of changes to demographic patterns. While changes to attendance zones should not be taken lightly, many school districts monitor and adjust attendance zones on a regular basis with the support of the community.

SUPPORTING RECOMMENDATION # 2

Coordinate attendance boundary adjustments to improve feeder patterns.

The confusing feeder patterns were a common concern during the community input sessions. The district should have an on-going process to address this issue.

SUPPORTING RECOMMENDATION #3

Reduce the number of relocatables in accordance with the “Relocatable Utilization Plan 2012”.

The district’s plan, which is detailed and implemented in phases, is well thought-out, and should be implemented.

SUPPORTING RECOMMENDATION #4

Determine the future delivery model of the Career and Technology programs as to whether the programs will be delivered from one central site or from multiple sites. Plan for modernization of the Career and Technology Center/Facilities sites.

The demand for and popularity of this important program were common themes heard throughout the community. Specific facility needs of the program should be assessed and addressed.

FISCAL IMPACTS

The section will discuss the projected fiscal impacts of the recommendations put forth above. All calculations have used current costs as supplied by CCPS. Final fiscal impacts are reported in “today’s” dollars and could be inflated based on the actual implementation year once a specific timeline for implementation has been established by the district.

ATTENDANCE BOUNDARY CHANGES

Recommendations proposing a change in attendance boundaries will not have a “bottom line” fiscal impact on staffing or operating costs, since the district will be educating the same number of students. However, the adjustment of attendance zones could affect student transportation costs.

The effect on student transportation costs will be determined by the change in costs associated with developing new or modified bus routes to deliver students to their new school. These costs will very likely not change significantly on a total district basis, since changes in some routes will be offset by changes in other routes. To determine the final impact of the recommendations on transportation costs, the Director of Transportation Services will need to do a detailed bus route study.

SCHOOL CONSOLIDATION

Recommendation #3 proposes replacing the Charles Carroll and William Winchester Elementary Schools with one new school. Due to an adjustment in attendance zones accomplished in Recommendation #2, the new school would be smaller than the two existing schools combined. The recommended capacity of the new facility is 750 students

The cost of operating one new school would amount to a cost savings for the district over the continued operation of the two existing schools. Using existing and projected costs, the cost savings would amount to approximately \$700,000 per year.

EXHIBIT 6-9
CARROLL COUNTY PUBLIC SCHOOLS
ANNUAL OPERATING COST SAVINGS

SCHOOL	ANNUAL OPERATING COST*
Charles Carroll ES	\$957,783
William Winchester ES	\$1,035,353
TOTAL	\$1,993,136
New Elementary School	\$1,284,550
DIFFERENCE	\$708,586

*INCLUDES CORE STAFFING, UTILITIES, MAINTENANCE, AND OPERATIONS.

SOURCE: MGT OF AMERICA, INC., 2013.



Appendix A

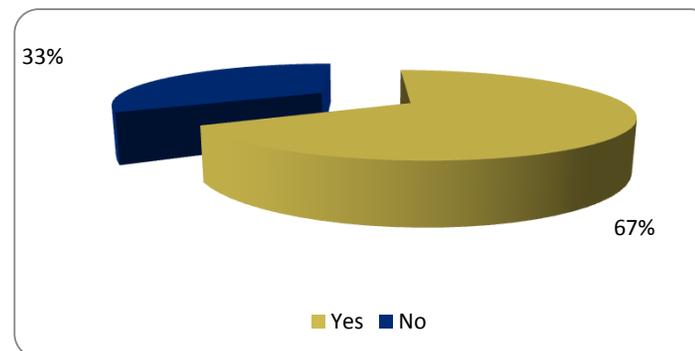
All Charrettes & Survey Results

Session Name: CCPS All public input data

Created: 11/05/13

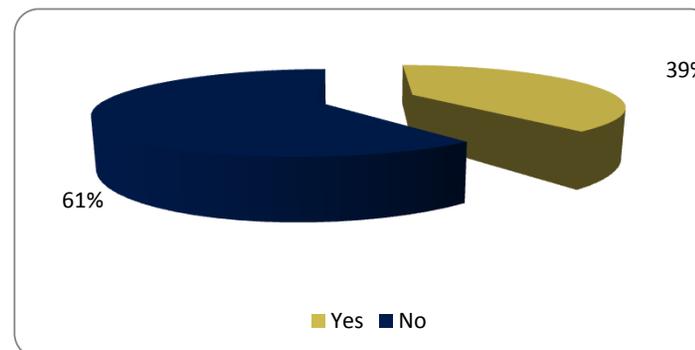
1.) Are you the parent/guardian of a student in Carroll County Public Schools? (multiple choice)

	Responses	
Yes	666	67.27%
No	324	32.73%
Totals	990	100%



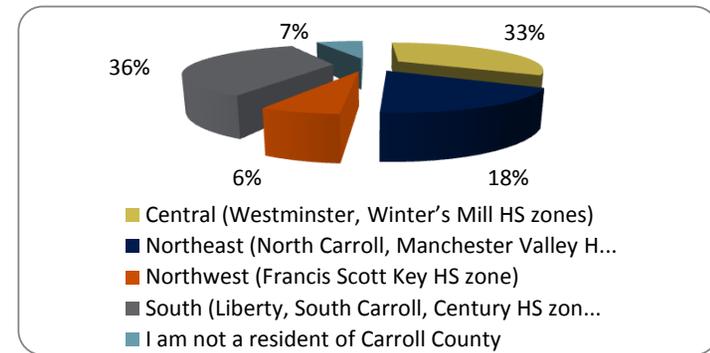
2.) Are you an employee of the Carroll County Public Schools? (multiple choice)

	Responses	
Yes	388	39%
No	597	61%
Totals	985	100%



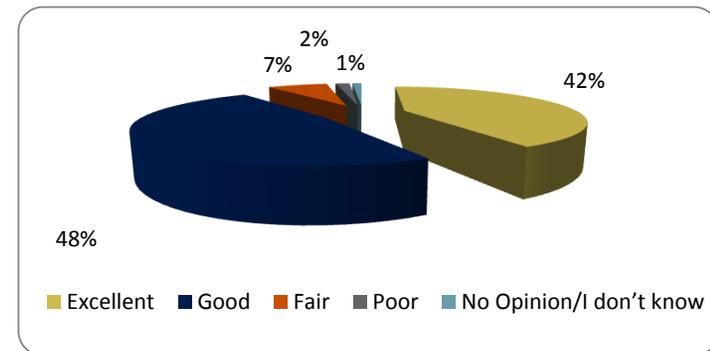
3.) The area of Carroll County that I reside in is: (multiple choice)

	Responses	
Central (Westminster, Winter's Mill HS zones)	329	33.33%
Northeast (North Carroll, Manchester Valley H...	175	17.73%
Northwest (Francis Scott Key HS zone)	61	6.18%
South (Liberty, South Carroll, Century HS zon...	352	35.66%
I am not a resident of Carroll County	70	7.09%
Totals	987	100%



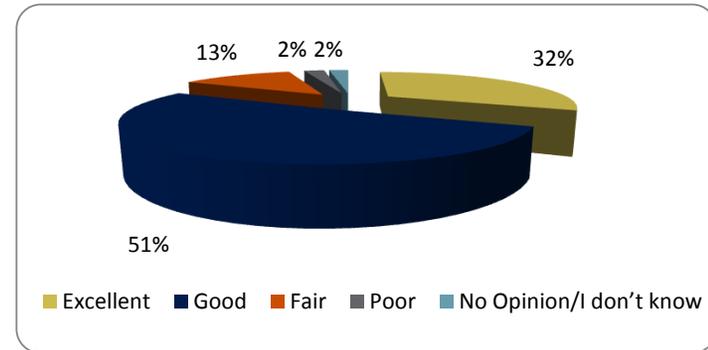
4.) How would you rate the quality of education students receive in Carroll County? (multiple choice)

	Responses	
Excellent	412	42.08%
Good	468	47.80%
Fair	71	7.25%
Poor	17	1.74%
No Opinion/I don't know	11	1.12%
Totals	979	100%



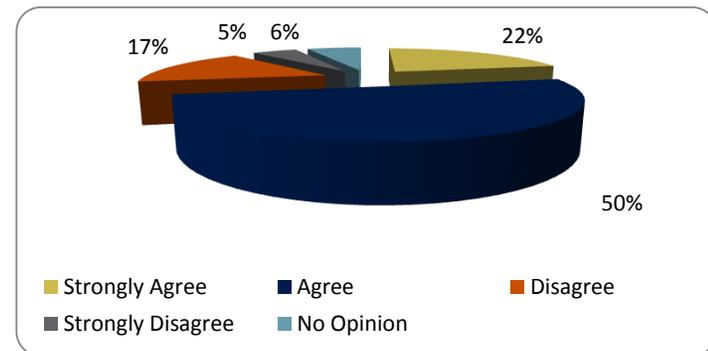
5.) How would you rate the overall range of program offerings in Carroll County Schools? (multiple choice)

	Responses	
Excellent	310	32%
Good	505	51%
Fair	124	13%
Poor	23	2%
No Opinion/I don't know	22	2%
Totals	984	100%



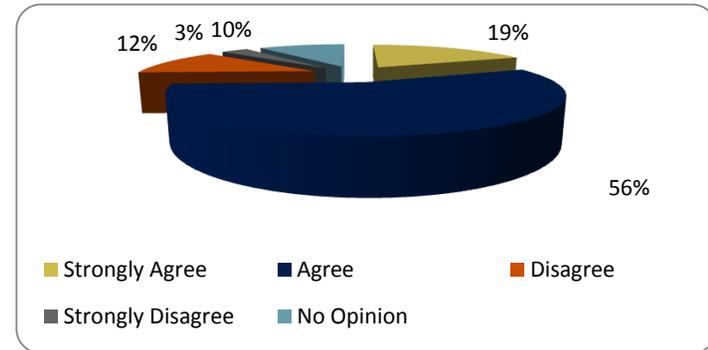
6.) Carroll County operates the right number of schools. (multiple choice)

	Responses	
Strongly Agree	211	21.66%
Agree	490	50.31%
Disagree	161	16.53%
Strongly Disagree	50	5.13%
No Opinion	62	6.37%
Totals	974	100%



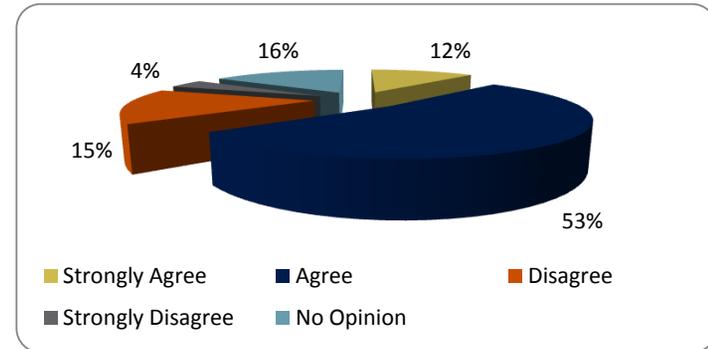
7.) Carroll County Elementary Schools are the appropriate size. (multiple choice)

	Responses	
Strongly Agree	183	18.85%
Agree	539	55.51%
Disagree	117	12.05%
Strongly Disagree	31	3.19%
No Opinion	101	10.40%
Totals	971	100%



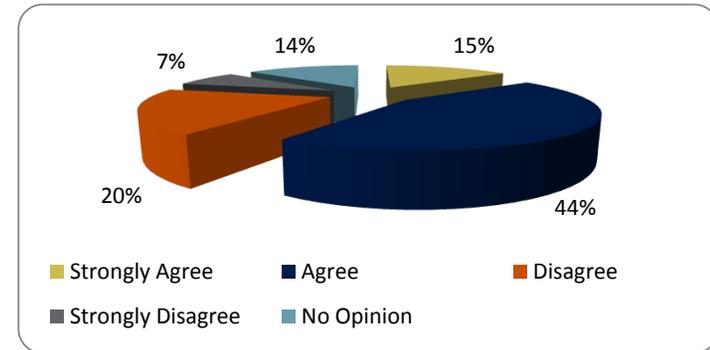
8.) Carroll County Middle Schools are the appropriate size. (multiple choice)

	Responses	
Strongly Agree	119	12.26%
Agree	513	52.83%
Disagree	149	15.35%
Strongly Disagree	38	3.91%
No Opinion	152	15.65%
Totals	971	100%



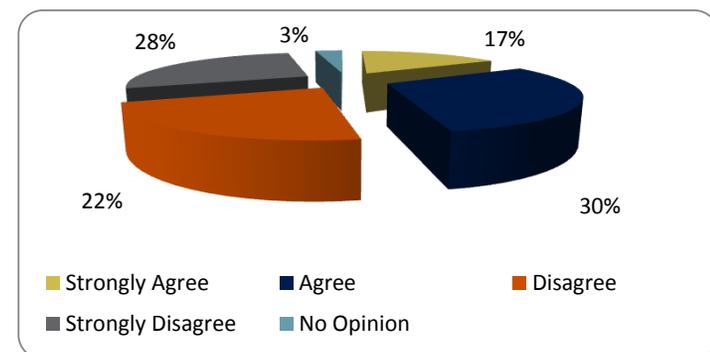
**9.) Carroll County High Schools are the appropriate size.
(multiple choice)**

	Responses	
Strongly Agree	146	15.05%
Agree	428	44.12%
Disagree	192	19.79%
Strongly Disagree	71	7.32%
No Opinion	133	13.71%
Totals	970	100%



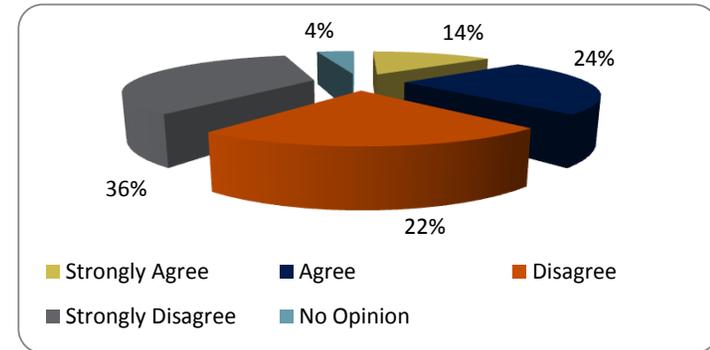
10.) I would support closing a school if it reduced costs while maintaining or improving program offerings. (multiple choice)

	Responses	
Strongly Agree	161	16.60%
Agree	296	30.52%
Disagree	214	22.06%
Strongly Disagree	267	27.53%
No Opinion	32	3.30%
Totals	970	100%



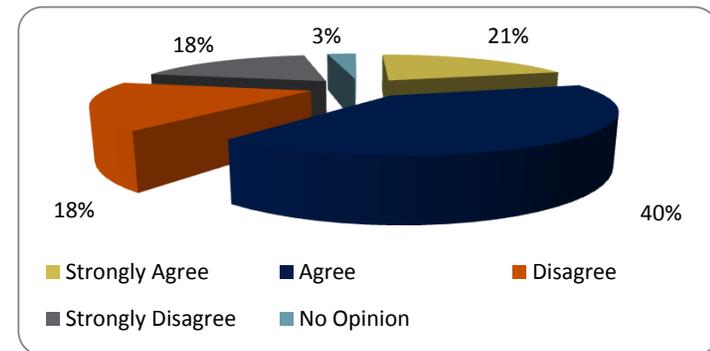
11.) I would support closing a school in my community if it reduced costs while maintaining or improving program offerings. (multiple choice)

	Responses	
Strongly Agree	138	14.10%
Agree	239	24.41%
Disagree	210	21.45%
Strongly Disagree	349	35.65%
No Opinion	43	4.39%
Totals	979	100%



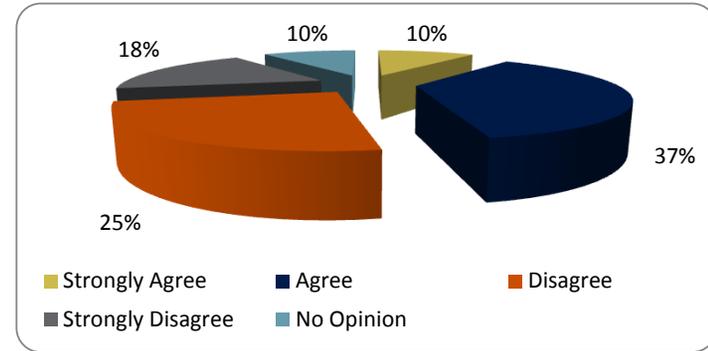
12.) I would support redistricting students to create better efficiencies. (multiple choice)

	Responses	
Strongly Agree	201	20.66%
Agree	386	39.67%
Disagree	177	18.19%
Strongly Disagree	179	18.40%
No Opinion	30	3.08%
Totals	973	100%



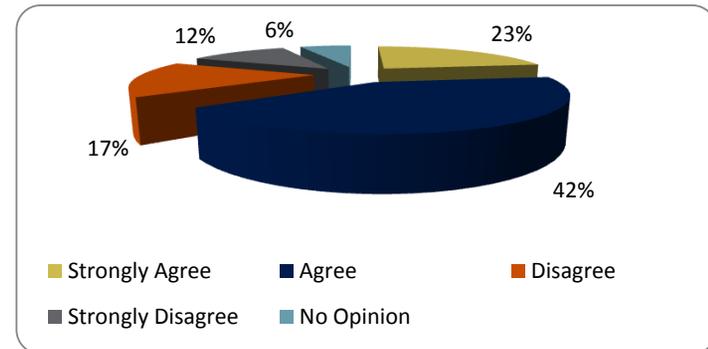
13.) I would support changing current grade structures to create better efficiencies. (multiple choice)

	Responses	
Strongly Agree	101	10.38%
Agree	356	36.59%
Disagree	240	24.67%
Strongly Disagree	179	18.40%
No Opinion	97	9.97%
Totals	973	100%

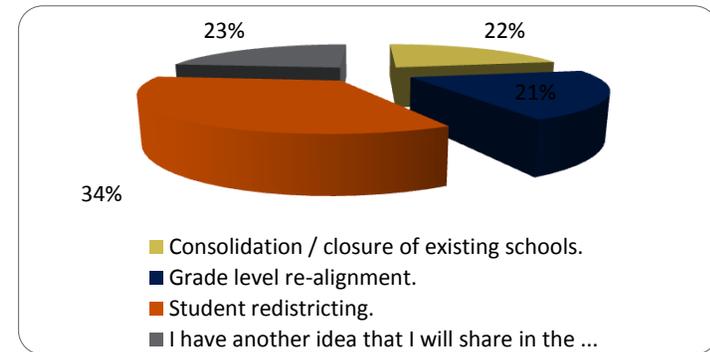


14.) I would support efforts to utilize school facilities for multiple public use (e.g. Library, Higher Education, County services, etc.) (multiple choice)

	Responses	
Strongly Agree	220	22.63%
Agree	413	42.49%
Disagree	161	16.56%
Strongly Disagree	116	11.93%
No Opinion	62	6.38%
Totals	972	100%



15.) Which of the following would have the greatest influence on improving school efficiency? (multiple choice)	Responses	
Consolidation / closure of existing schools.	202	21.91%
Grade level re-alignment.	191	20.72%
Student redistricting.	315	34.16%
I have another idea that I will share in the ...	214	23.21%
Totals	922	100%



16.) In my opinion the most important factor to consider in making school efficiency decisions is: (multiple choice)	Responses	
Financial considerations.	113	12%
Educational programs.	599	62%
Student travel time.	110	11%
I have another factor that I will share in th...	148	15%
Totals	970	100%

