

## **FACILITY NEEDS ANALYSIS**

The primary purpose of this Educational Facility Master Plan is to identify the present and future facility needs of Carroll County Public Schools. This plan addresses the need to provide capacity for projected student enrollments, the need to maintain and repair existing school buildings, and the need to provide a learning environment that meets the current instructional program of the school system. The following analysis will examine each of these factors to identify the facility needs for the 2016 to 2025 time frame.

### **Capacity Analysis**

In order to make sure that there is sufficient space provided within school facilities to accommodate student enrollments, a capacity analysis is performed annually after the enrollment projections are completed in the fall of each year. This analysis is based on the Board of Education's Policy on Adequate Facilities. The standards included in this policy are:

Adequate	Up to 100% of capacity
Approaching inadequate	101% - 105% of capacity (Elementary) 101% - 110% of capacity (Secondary*)
Inadequate	Greater than 105% (Elementary) Greater than 110% (Secondary*)

\*Functional Capacity is utilized when evaluating Middle School utilization percentages

### **System Wide Capacity Needs**

Total enrollment dropped by 328 students in 2015, to a total of 25,551 students. This is the tenth consecutive year that total enrollment has declined. This decline is mainly the result of smaller incoming kindergarten enrollments replacing larger graduating classes. Enrollment is projected to continue to decline over the coming decade due to lower countywide birth rates and limited migration into the county.

As result of annual declining enrollments, a Boundary Adjustment Committee was formed in February 2015 and charged with "developing appropriate county-side boundary line adjustment recommendations for Board consideration". The Committee's Report was presented to the Board of Education on September 9, 2015 and included a recommendation to close three elementary schools, one middle school and one high school. The schools listed in the report were Charles Carroll Elementary, Mt. Airy Elementary, Sandymount Elementary, New Windsor Middle and North Carroll High. This report was discussed at several Board meetings, and amended during October and November. After three public hearings were held, the Superintendent made a recommendation to the Board of Education to close Charles Carroll Elementary, New Windsor Middle, and North Carroll High schools effective July 2016. The Board of Education voted on December 9, 2015 in favor of the recommended school closure plan.

Based on the enrollment projections and school capacities included in the Superintendent's School Closure Plan, total utilization is projected to be 80% in 2016 and will decrease to 75% by 2025. If this trend continues, it is possible that additional school closings could be identified in future based on budget constraints and declining enrollments.

**Elementary School Capacity Needs**

Based on the current projections, overall elementary utilization is projected to decline from 80% to 75% in five years before increasing to 86% by the tenth year. In order to evaluate what areas of the County may have excess capacity, elementary schools were grouped into five geographic clusters of schools. Utilizations for the 1<sup>st</sup>, 5<sup>th</sup> year, and 10<sup>th</sup> years of the projection period were examined to determine areas of concern. Based on this analysis the two areas of the County with the lowest utilization percentage are the Southwest and Northeast Areas.

ELEMENTARY SCHOOL GEOGRAPHIC CLUSTER	UTILIZATION		
	2016	2020	2025
Northeast Area	79%	73%	85%
Northwest Area	82%	77%	88%
Westminster Area	83%	78%	89%
Southeast Area	83%	78%	90%
Southwest Area	72%	66%	75%

The enrollment projection methodology uses historical enrollment trends to project future enrollment. Therefore projections are more reliable when there is a consistent rate of growth. In order to identify areas where the growth rate is changing, a comparison of historical and projected permit activity was done for each elementary school. The table below compares the number of building permits issued for each school district for the past four years with the number of projected building permits for each school district for the next four years. Based on this analysis, Taneytown and Elmer Wolfe Elementary Schools have the most potential for an increase in the number of permits over the next four years.

SCHOOL	HISTORICAL PERMITS ISSUED					PROJECTED PERMITS				
	FY12	FY13	FY14	FY15	4 Yr. Total	FY16	FY17	FY18	FY19	4 Yr. Total
Carrolltowne	13	2	47	95	157	15	26	19	25	85
Cranberry Station	8	18	15	9	50	29	64	44	44	181
Ebb Valley	21	18	4	0	43	32	13	0	0	45
Eldersburg	4	4	29	0	37	5	0	0	0	5
Elmer Wolfe	1	5	2	3	11	7	55	106	23	191
Freedom	31	37	12	27	107	15	80	34	0	129
Friendship Valley	9	6	5	2	22	18	7	0	0	25
Hampstead	0	0	0	2	2	5	22	13	0	40
Linton Springs	7	12	19	26	64	52	16	0	0	68
Manchester	23	49	22	4	98	44	36	0	0	80
Mechanicsville	9	13	15	15	52	41	29	14	0	84
Mt. Airy*	40	45	43	16	144	13	10	0	50	73
Piney Ridge	47	30	51	17	145	20	17	8	0	45
Robert Moton	1	6	8	1	16	5	0	0	0	5
Runnymede	1	17	29	27	74	21	50	50	37	158
Sandymount	6	6	11	6	29	96	50	0	0	146
Spring Garden	3	0	3	2	8	19	36	0	0	55
Taneytown	4	3	6	1	14	26	100	80	0	206
Westminster	0	0	1	3	4	45	42	0	0	87
William Winchester	19	46	27	35	127	34	31	29	0	94
Winfield	8	16	9	12	45	65	28	0	0	93
<b>TOTALS</b>	<b>255</b>	<b>333</b>	<b>358</b>	<b>303</b>	<b>1249</b>	<b>607</b>	<b>712</b>	<b>397</b>	<b>179</b>	<b>1895</b>

Table does not include permits that were issued within Charles Carroll ES district

Source: Carroll County Department of Planning

### Middle School Capacity Needs

Based on the current projections, overall middle utilization is projected to decline from 92% to 75% over the coming decade. In order to evaluate what areas of the County may have excess capacity, middle schools were grouped into four geographic clusters of schools. Utilizations for the 1<sup>st</sup>, 5<sup>th</sup> year, and 10<sup>th</sup> years of the projection period were examined to determine areas of concern. Based on this analysis the area with the lowest utilization is the Northeast Area.

MIDDLE SCHOOL GEOGRAPHIC CLUSTER	UTILIZATION (1 YR, 5 YR, 10 YR)		
	2016	2020	2025
Southern Area	96%	84%	76%
Westminster Area	96%	88%	80%
Northeast Area	75%	73%	65%
Northwest Area	87%	87%	79%

The enrollment projection methodology uses historical enrollment trends to project future enrollment. Therefore projections are more reliable when there is a consistent rate of growth. In order to identify areas where the growth rate is changing, a comparison of historical and projected permit activity was done for each middle school. The table below compares the number of building permits issued for each school district for the past four years with the number of projected building permits for each school district for the next four years. Based on this analysis, Northwest Middle School has the most potential for an increase in the number of permits over the next four years.

SCHOOL	FY12	FY13	FY14	FY15	4 Yr. Total	PROJECTED PERMITS				4 Yr. Total	Difference
						FY16	FY17	FY18	FY19		
Mt. Airy	42	53	44	19	158	36	17	0	50	103	-55
North Carroll	44	67	26	4	141	79	55	0	0	134	-7
Northwest*	13	33	44	39	129	92	208	236	60	596	467
Oklahoma Road	45	40	59	122	266	35	106	53	25	219	-47
Shiloh	9	6	14	9	38	115	102	13	0	230	192
Sykesville	56	45	100	44	245	76	51	8	0	135	-110
Westminster East	30	67	48	49	194	90	97	73	44	304	110
Westminster West	19	25	30	22	96	111	78	14	0	203	107
<b>TOTALS</b>	<b>258</b>	<b>336</b>	<b>365</b>	<b>308</b>	<b>1267</b>	<b>634</b>	<b>714</b>	<b>397</b>	<b>179</b>	<b>1924</b>	<b>657</b>

\* Combined totals for Northwest & New Windsor MS

Source: Carroll County Department of Planning

### High School Capacity Needs

Based on the current projections, overall high utilization is projected to decline from 86% to 74% over the coming decade. In order to evaluate what areas of the County may have excess capacity, high schools were grouped into four geographic clusters of schools. Utilizations for the 1<sup>st</sup>, 5<sup>th</sup> year, and 10<sup>th</sup> years of the projection period were examined to determine areas of concern. Based on this analysis the areas with the lowest utilizations are the Southern and Northwest Areas.

HIGH SCHOOL GEOGRAPHIC CLUSTER	UTILIZATION (1 YR, 5 YR, 10 YR)		
	2016	2020	2025
Southern Area	85%	79%	68%
Northwest Area	81%	73%	69%
Northeast Area	100%	94%	87%
Westminster Area	84%	84%	77%

The enrollment projection methodology uses historical enrollment trends to project future enrollment. Therefore projections are more reliable when there is a consistent rate of growth. In order to identify areas where the growth rate is changing, a comparison of historical and projected permit activity was done for each high school. The table below compares the number of building permits issued for each school district for the past four years with the number of projected building permits for each school district for the next four years. Based on this analysis, Francis Scott Key High School has the most potential for an increase in the number of permits over the next four years.

SCHOOL	FY12	FY13	FY14	FY15	4 Year Total	PROJECTED PERMITS				4 Year Total	Difference
						FY16	FY17	FY18	FY19		
Century	56	45	100	44	245	76	51	8	0	135	-110
Francis Scott Key	6	25	37	31	99	53	205	236	60	554	455
Liberty	45	40	59	122	266	35	106	53	25	219	-47
Manchester Valley*	50	69	30	9	158	103	107	13	0	223	65
South Carroll	49	61	51	27	188	74	20	0	50	144	-44
Westminster	22	28	39	26	115	200	128	14	0	342	227
Winters Mill	30	68	49	49	196	93	97	73	44	307	111
<b>TOTALS</b>	<b>258</b>	<b>336</b>	<b>365</b>	<b>308</b>	<b>1267</b>	<b>634</b>	<b>714</b>	<b>397</b>	<b>179</b>	<b>1924</b>	<b>657</b>

\*Combined totals for Manchester Valley & North Carroll HS

Source: Carroll County Department of Planning

### Modernization Needs Analysis

In addition to providing school capacity to house student enrollments, another essential part of this Facilities Master Plan is to ensure that older facilities nearing the end of their useful life are meeting the demands of the current educational program, as well as county, state, and federal codes and requirements. Schools that are not meeting these standards are candidates for modernization, and are therefore scheduled for renovation or replacement in the Facilities Master Plan. Modernizations have historically taken a back seat to new schools due to the requirement to provide capacity relief to accommodate the enrollment growth. As a result there are several schools that were constructed in fifties, sixties, and seventies which are nearing the end of their useful life that are need of modernization.

The term “Modernization” refers to the “design, construction, and equipping process through which an aging facility is brought up to current educational standards and through which its systems are renewed and updated to meet current system, county, state and federal codes and requirements. Modernizations may be accompanied by additions or redesign of existing spaces to meet educational program requirements.”

In order to accurately assess a school buildings ability to meet today’s standards; both physical and functional educational evaluations are required.

#### Physical Assessment

In 2005 the Board of Education hired the firm of EMG to do building condition assessments of all school facilities in the system. EMG observed the major building components and assessed their physical condition. Estimated repair and replacement costs were developed and compared against the replacement value of the school to develop a Facilities Condition Index (FCI). The 2008 FCI number was then used to compare and rank the physical condition of school facilities. In order to update the physical assessment scores for these schools, a new FCI score is calculated every three years.

Although the work of EMG was valuable in helping to document the physical condition of our schools, the information is over ten years old. In order to provide more current facility condition information

and link it with our maintenance work order system, CCPS contracted with Schooldude to provide a more comprehensive solution. Utilizing Schooldude's Planning Direct web application and its Life Cycle Modeling, new FCI scores were developed for school facilities. These 2014 FCI scores for schools constructed prior to 1980 were then converted to a 1,000 point scale so that they could be added to the functional scores to create a combined assessment score.

Functional Assessment

In 2008, Carroll County Public Schools staff conducted an Educational Assessment of all school facilities that were constructed prior to 1980. This assessment included evaluations done for specific program areas of the school buildings conducted by the appropriate Instructional Area Supervisors. In order to update the functional assessment scores for these schools, some schools were re-evaluated in 2011 to reflect the capital improvements that had occurred since 2008. Since the last update was done in 2011, Robert Moton and William Winchester elementary schools have received major capital improvements. In order to update the functional scores for these schools, the same staff went back out in 2014 to re-evaluate the renovated areas.

Combined Assessment Score

In order to get a comprehensive view of how well a building is meeting the current building and instructional needs both the physical and functional scores are combined into one overall score. The 2014 combined scores for schools constructed prior to 1980 are included in the following table.

School	Physical Assessment Score	Functional Assessment Score	Total Score	Total Possible Score	Percentage
Charles Carroll ES	622	462	1084	2000	54%
Westminster East MS	626	579	1205	2000	60%
Westminster West MS	693	578	1271	2000	64%
William Winchester ES	783	524	1307	2000	65%
Westminster HS	742	654	1396	2000	70%
Eldersburg ES	734	699	1433	2000	72%
North Carroll HS	742	739	1481	2000	74%
Carrolltowne ES	746	747	1493	2000	75%
Northwest MS	786	723	1509	2000	75%
South Carroll HS	814	725	1539	2000	77%
Robert Moton ES	792	859	1651	2000	83%
Westminster ES	854	809	1663	2000	83%
Freedom ES	869	810	1679	2000	84%

Based on the Board of Education's decision to close Charles Carroll Elementary and North Carroll High schools, these two school buildings will no longer be considered for modernization. As a result, East Middle School now has the lowest score and is therefore the most in need of modernization.

In addition to the schools listed in the table, the Carroll County Career & Technology Center is also in need of a modernization. Although the Carroll County Career and Technology Center was constructed prior to 1980, it was not a part of combined assessment. The main reason for this is that the need to modernize this building and add program space was already identified by the Long Range Career and Technology Plan Committee.

During the Board of County Commissioners fiscal year 2017 capital budget deliberations, they made it clear that their top priority for addressing modernization needs for the foreseeable future is a Career & Technology Center project. Although they indicated that they would not be able to provide funding for an East Middle modernization, they did express a desire to take care of the failing building systems at East Middle. As a result, this plan include systemic renovation projects at East Middle and removes the modernization from the ten year calendar. Based on the significant investment required to replace the failing building systems at East Middle, it is unlikely that it will fiscally prudent to modernize East Middle for another 20 years.

### **Capital Renewal Analysis**

The average school building is expected to last a minimum of forty years before it receives a modernization. Although many of the systems that make up a school building may last for forty years, there are certain systems that must be replaced prior to modernization to keep the school in operation. Two of the larger systems that typically need replacing and are critical to the operation of a school are the roof and the heating, ventilation and air conditioning (HVAC) systems. Due to the size of these systems, the replacement costs are too large to be able to adequately fund them in the operating budget. Therefore these projects are prioritized annually based on age and condition and included in the annual capital budget requests to the County and State.

- **Roofs** - Replacement of aging roofs is necessary to protect building structure, and to preserve the learning environment. Without a roof replacement program, aging roofs will continue to deteriorate allowing water to infiltrate building envelopes. This water infiltration will damage the structural roof deck, interior ceilings, floor and wall finishes, and building contents. Water infiltration can also create conditions which could lead to air quality issues within the building. Additionally, persistent leaks disrupt learning areas and interfere with the learning environment in the school. Due to the large number of roofs constructed and replaced during the 1990's, there is currently a backlog of roofing projects that need to be replaced. The plan includes a total of 17 single-ply roofs that need to be replaced over the next decade. These types of roofs have an expected useful life of 15- 20 years. This plan is based on replacing these roofs around the 25 year mark, except in cases where there is a major HVAC project scheduled at a school. In those cases, the roof project is scheduled after the HVAC project to avoid damage to the new roof installations.

SCHOOL	ROOF TYPE	SQUARE FEET	DATE OF INSTALL	CURRENT AGE	EFMP YEAR	AGE AT REPLACEMENT
Manchester Elementary	Single Ply	63,777	1989	27	2016	27
Westminster Elementary	Single Ply	67,298	1990	26	2016	26
South Carroll High	Single Ply	95,546	1992	24	2016	24
Westminster High	Single Ply	137,593	1990	26	2016	26
Francis Scott Key High	Single Ply	111,762	1990	26	2017	27
Friendship Valley Elementary	Single Ply	58,550	1991	25	2017	26
Piney Ridge Elementary	Single Ply	45,857	1991	25	2017	26
Carrolltowne Elementary	Single Ply	53,491	1994	22	2018	24
Runnymede Elementary	Single Ply	62,652	1994	22	2018	24
Robert Moton Elementary	Single Ply	75,491	1996	20	2019	23
Elmer Wolfe Elementary	Single Ply	66,700	1998	18	2019	21
East Middle	Single Ply	54,574	1993	23	2020	27
Spring Garden Elementary*	Single Ply	63,500	1991	25	2020	29
Linton Springs Elementary*	Single Ply	73,112	1998	18	2021	23
Sandymount Elementary*	Single Ply	63,232	1991	25	2021	30
Cranberry Station Elementary	Single Ply	61,500	1999	17	2022	23
Winfield Elementary*	Single Ply	75,515	1992	24	2022	30
Oklahoma Road Middle*	Single Ply	116,399	1997	19	2023	26
Century High	Single Ply	1,350,000	2000	16	2024	24
Shiloh Middle	TPO	116,250	2000	16	2025	25
North Carroll Middle	Shingle	68,000	2005	11	2026	21

- HVAC** – Due to the significant impact of temperature and indoor air quality on the learning environment, the HVAC system plays a critical role in the daily operation of a school building. Replacement of aging systems and equipment is required to continue to provide a comfortable and healthy learning environment. The majority of the total system replacements included in this plan are at schools that have large Rooftop Units. These rooftop units are exposed to the elements and as a result have a shorter useful life than inside equipment. The plan is based on replacing the HVAC system at these schools when the Rooftop Units are 25 years old.

School	HVAC Scope	Date of Installation	Scheduled Replacement	Age at Replacement
East Middle	System Replacement	1975	2018	43
CCCTC	System Replacement	1970	2019	49
Spring Garden Elementary	System Replacement	1991	2019	28
Sandymount Elementary	System Replacement	1992	2020	28
Winfield Elementary	System Replacement	1993	2021	28
Oklahoma Road Middle	System Replacement	1997	2022	25
Northwest Middle	System Replacement	1976	2023	47
Carrolltowne Elementary	System Replacement	1976	2024	48
Liberty High	System Replacement	1980	2025	45

- Electrical Systems** – The electrical systems in older schools are starting to have pieces of equipment that need to be replaced. At the same time, the dramatic increase of the use of technology equipment has created electrical demands that were not present when these older schools were designed. This increasing dependence on technology has also created certain emergency and stand-by power requirements that did not exist when these schools were constructed. The following schools have electrical systems that require a comprehensive solution beyond the scope of typical maintenance: Westminster High, Career & Technology Center, and Sykesville Middle. The Career & Technology Center electrical project has been

removed based on the school modernization project moving forward. If the modernization is not completed, then the electrical system will need to be addressed.

- **Fire Alarm Systems** – As fire alarm systems age it becomes increasingly difficult to purchase replacement parts, make repairs and maintain communication between the components of the separate systems. The replacement of the system includes the central alarm panel, annunciator panel, pull stations, heat and duct detectors, signaling devices and other peripheral devices. The Maintenance Department has identified fire alarm systems in need of replacement at the following schools: Career & Technology Center. The Career & Technology Center fire alarm project has been removed based on the school modernization project moving forward. If the modernization is not completed, then the fire alarm system will need to be addressed.
- **Window Replacements** – Replacement of old single-pane windows is required to protect building structure and building components, to maintain good indoor air quality, and to improve the energy efficiency of these aging facilities. As these old windows fail, the exterior building envelop will continue to be compromised. Windows that have failed or are near failure are located at the following schools: Career & Technology Center, Westminster High, and South Carroll High. The Career & Technology Center window project has been removed based on the school modernization project moving forward. If the modernization is not completed, then the windows will need to be addressed.
- **Paving** – Maintaining the paved areas at 43 school locations delays or eliminates more costly parking and driveway reconstruction projects. It also prevents damage to school buses; maintenance vehicles during snow removal activities; and prevents damage to staff and parent vehicles. Without proper funding to adequately maintain paved areas, the quality of the paved surface will continue to deteriorate and ultimately fail. Due to the lack of adequate capital funding to maintain these areas, several schools have large areas where the paving has failed and now require total reconstruction. These schools include: Career & Technology Center, Westminster HS, East Middle MS, Robert Moton ES, Mt. Airy ES, Mechanicsville ES, Shiloh MS, Liberty HS
- **Technology Infrastructure** - A systematic replacement and upgrading of technology infrastructure is critical to preventing Carroll County Public Schools from slipping into technological obsolescence. Further, critical infrastructure upgrades are necessary to meet the requirements of the MSDE Technology Plan, the Federal No Child Left Behind Act, Maryland's Race-To-The Top initiative, Financial and the State Legislative Audits, other legislation including Sarbanes Oxley and CALEA, and the expectations of public agencies in regards to Business Continuity/Disaster Recovery. Adequate capital funding for technology infrastructure assures that the school system's computing hardware will keep pace with technological advances that will prepare students for the rapidly changing workforce. Without a planned program of server and switch replacements the school system will realize a degradation of its ability to support instructional programs and services. Further, technology investments are required to realize the cost savings and benefit of the Carroll County Public Network.

## Instructional Program Needs Analysis

In addition to changing enrollments and aging facilities, school facilities must also be able to respond to changes in instructional programs offered by the school system. These changes in instruction result from changes in federal or state requirements, and/or changes due to local initiatives. Since educational facilities exist to serve the needs of educators and students, they must be designed or renovated for these purposes. The following is a list of some recent instructional program changes that school facilities must support:

- **Special Education**

**Regional Centers** - Special Education has gone through a transition in recent years. Currently, elementary special education students have the opportunity to attend school in their local community school, or at a regional special education center. There are five regional special education centers at the elementary level which serve a geographic area and receive students from feeder schools. These five regional centers are: Carrolltowne Elementary, Hampstead Elementary, Robert Moton Elementary, Runnymede Elementary, and Winfield Elementary. Since there are not regional special education centers at the middle and high school level, these students are provided services within their home school.

**County-wide Autism** - In 2015, CCPS operated regional autism programs at Hampstead ES, Winfield ES, New Windsor MS, and North Carroll HS. Due to the Board of Education decision to close New Windsor MS and North Carroll HS, new locations have been identified for the middle and high school program. The middle school Autism program will be relocated to Shiloh Middle School, and the high school Autism program will be relocated to Winters Mill High School starting in the summer of 2016. These relocations can be done with minimal reconfiguration of these facilities, therefore they do not require capital funding to accomplish.

**Centralized High School BEST Program** – In order to allocate staff more efficiently, the High School BEST program was centralized in available space at Westminster High starting in the 2013-14 school year. Minor facility modifications were completed at Westminster High to make this shift possible. CCPS will utilize the existing Career and Technology Center bus routes to transport students to this centralized BEST program.

**Central Intensive Behavior Unit** – In 2013-14 CCPS implemented a new Intensive Behavior Unit in available space at Westminster High. This program is located in the same suite at the centralized BEST program so that resources are shared. Special Education law requires each school system to have programs that are gradually more restrictive in nature for placements as required by individualized education plans. This program provides an additional placement for students who require behavioral support as part of their individualized education plan.

- **Full Day Kindergarten**

Full-day Kindergarten was mandated in the State of Maryland through the 2002 Bridge to Excellence Act. In order to address this mandate, Carroll County Public Schools made the decision to construct permanent classroom additions to provide the additional classrooms required. A total of fourteen elementary schools received these kindergarten additions. Some

schools did not receive additions because they were a lower priority due to available classrooms in other grades. Although these schools have been able to accommodate the additional Kindergarten classes due to available capacity in other grades, there are a number of issues they deal with on a daily basis. These include: smaller classrooms that cannot accommodate the learning centers or provide room for young children to move; classrooms without restrooms; classrooms without sinks; and inability to have effective and continuous collaboration. The schools without an adequate number of early childhood classrooms are: Cranberry Station ES, Friendship Valley ES, Sandymount ES, and Taneytown ES.

- **Pre-Kindergarten Program**

Pre- Kindergarten services to all economically disadvantaged four year olds were also mandated in the State of Maryland through the 2002 Bridge to Excellence Act. Carroll County Public Schools was required to provide a minimum of fourteen half day sessions by the 2007-2008 school year to meet this mandate. Due to the fact that the population served by Pre-Kindergarten changes as the countywide demographics change, future Pre-Kindergarten needs will be evaluated on an annual basis. The table below lists the elementary schools that are scheduled to offer Pre-Kindergarten services in the 2015-2016 school year.

Pre-K Sessions for 2015-2016 School Year

<u>School</u>	<u>Sessions</u>	<u>Location</u>
Carrolltowne ES	1	Special Ed. Classroom
Cranberry Station ES	1	1st Grade Classroom
Ebb Valley ES	1	Pre-K Classroom
Eldersburg ES	1	Kindergarten Classroom
Elmer Wolfe ES	1	Pre-K Classroom
Hampstead ES	1	Kindergarten Classroom
Linton Springs ES	1	Pre-K Classroom
Manchester ES	1	Pre-K Classroom
Mechanicsville ES	1	Kindergarten Classroom
Parr's Ridge ES	1	Pre-K Classroom
Robert Moton ES	1	Pre-K Classroom
Runnymede ES	1	Pre-K Classroom
Sandymount ES	1	2nd Grade Classroom
Spring Garden ES	1	Kindergarten Classroom
Taneytown ES	2	Pre-K & Kindergarten Classrooms
Westminster ES	1	Health Classroom
William Winchester ES	1	Pre-K Classroom
Winfield ES	1	Kindergarten Classroom
<b>TOTAL</b>	<b>19</b>	

- **High School Science Rooms**

Another targeted instructional need is the renovation of aging high school science rooms. Due to changes in the manner in which science is taught, many of our older high schools make it difficult to teach the current science curriculum. Renovation of these science facilities will provide the environment necessary to deliver quality science instruction to meet the goals of the

science curriculum. Many of the science rooms at these older schools have already received renovations to bring them up to current standards, but there are a total of 12 classrooms at three high schools still to be completed. The following is the breakdown of the remaining science rooms to be renovated: Westminster High – 6, Liberty High – 4, South Carroll High – 2.

- **Relocatable Reduction Plan**

Due to declining enrollments, there are currently surplus relocatable classrooms that are no longer needed for classrooms. As a result, the Superintendent asked the Facilities Management Department to develop a plan for reducing our relocatable inventory. In 2012, a physical assessment of all of the relocatable classrooms was performed to determine the condition of our existing inventory. Principals were then surveyed to determine the utilization of all relocatable classrooms. Based on these two pieces of information, a relocatable utilization plan was developed that identified relocatable classrooms that could be removed from our inventory. As a result, the total number of relocatable classrooms has decreased from 125 classrooms to 82 classrooms. This plan continues to be implemented as funding becomes available.

## CARROLL COUNTY PUBLIC SCHOOLS TEN YEAR FACILITIES MASTER PLAN CALENDAR

MODERNIZATIONS	COMPLETION DATE	FISCAL YEARS										NOTES
		17	18	19	20	21	22	23	24	25	26	
<p><b>New Career &amp; Technology Center (Replacement)</b>                      This project involves the design and construction of a new Career &amp; Technology Center to replace the aging facility. In addition to providing a modern school facility to meet the current curriculum, it will also provide space for additional programs that are currently housed in relocatable classrooms.</p>	Aug. 2021		FS	P	C	C	O					
<p><b>West Middle Modernization</b>                      Due to the fact that William Winchester Elementary and West Middle share the same site, the modernizations of these facilities should be planned jointly.</p>	Aug. 2025						FS	P	C	C	O	
<p><b>William Winchester Elementary Modernization</b>                      Due to the fact that William Winchester Elementary and West Middle share the same site, the modernizations of these facilities should be planned jointly.</p>	Aug. 2026						FS		P	C	C	
<p><b>Westminster High Modernization</b>                      Due to the large investment made in the HVAC system at the school, a limited renovation targeting the instructional deficiencies may be a possibility for this school</p>	TBD										FS	

FS = Feasibility Study  
 P = Planning  
 C= Construction

## CARROLL COUNTY PUBLIC SCHOOLS TEN YEAR FACILITIES MASTER PLAN CALENDAR

CAPITAL RENEWAL PROJECTS	COMPLETION DATE	FISCAL YEARS										NOTES	
		17	18	19	20	21	22	23	24	25	26		
<b>Roof Replacement Projects</b>													
Manchester Elementary	Aug. 2016	C											
Westminster Elementary	Aug. 2016	C											
South Carroll High	Aug. 2016	C											
Westminster High	Aug. 2016	C											
Francis Scott Key High	Aug. 2017	P	C										
Friendship Valley Elementary	Aug. 2017	P	C										
Piney Ridge Elementary	Aug. 2017	P	C										
Carrolltowne Elementary	Aug. 2018		P	C									
Runnymede Elementary	Aug. 2018		P	C									
Robert Moton Elementary	Aug. 2019			P	C								
Elmer Wolfe Elementary	Aug. 2019			P	C								
East Middle	Aug. 2020				P	C							HVAC Project - 2018
Sandymount Elementary	Aug. 2020				P	C							HVAC Project - 2019
Linton Springs Elementary	Aug. 2021					P	C						
Spring Garden Elementary	Aug. 2021					P	C						HVAC Project - 2020
Cranberry Station Elementary	Aug. 2022						P	C					
Winfield Elementary	Aug. 2022						P	C					HVAC Project - 2021
Oklahoma Road Middle	Aug. 2023							P	C				HVAC Project - 2022
Century High	Aug. 2024								P	C			
Shiloh Middle	Aug. 2025									P	C		
North Carroll Middle	Aug. 2026											P	
<b>HVAC Replacement Projects</b>													
East Middle	Aug. 2019		P	C									Roof Project
Sandymount Elementary	Aug. 2020			P	C								Roof Project
Spring Garden Elementary	Aug. 2021				P	C							Roof Project
Winfield Elementary	Aug. 2022					P	C						Roof Project
Oklahoma Road Middle	Aug. 2023						P	C					Roof Project
Northwest Middle	Aug. 2024							P	C				
Carrolltowne Elementary	Aug. 2025								P	C			
Liberty High	Aug. 2026									P	C		
Carroll Springs School	Aug. 2027											P	

P = Planning  
C = Construction

# CARROLL COUNTY PUBLIC SCHOOLS TEN YEAR FACILITIES MASTER PLAN CALENDAR

CAPITAL RENEWAL PROJECTS	COMPLETION DATE	FISCAL YEARS										NOTES
		17	18	19	20	21	22	23	24	25	26	
<b>Electrical System Replacement/Upgrades</b>												
Westminster High	Aug. 2019	FS	P	C								
East Middle	Aug. 2019		P	C								Coordinate with HVAC Project
Sykesville Middle	Aug. 2021				P	C						
<b>Fire Alarm Replacement</b>												
East Middle	Aug. 2019		P	C								Coordinate with HVAC Project
<b>Window Replacement</b>												
South Carroll High	Aug. 2020			P	C							
East Middle	Aug. 2021				P	C						
Westminster High	Aug. 2022					P	C					
<b>Paving Replacement</b>	On-going	C	C	C	C	C	C	C	C	C	C	
<b>Technology Improvements</b>	On-going	C	C	C	C	C	C	C	C	C	C	

P = Planning

C = Construction

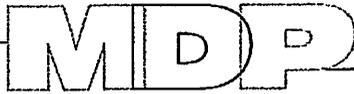
## CARROLL COUNTY PUBLIC SCHOOLS TEN YEAR FACILITIES MASTER PLAN CALENDAR

INSTRUCTIONAL PROGRAM	COMPLETION DATE	FISCAL YEARS										NOTES
		17	18	19	20	21	22	23	24	25	26	
<b>Taneytown Kindergarten Addition</b> This addition is needed to accommodate full day Kindergarten	Aug. 2019		P	C								
<b>Cranberry Station Kindergarten Addition</b> This addition is needed to accommodate full day Kindergarten	Aug. 2019		P	C								
<b>Friendship Valley Kindergarten Addition</b> This addition is needed to accommodate full day Kindergarten	Aug. 2020			P	C							
<b>Sandymount Kindergarten Addition</b> This addition is needed to accommodate full day Kindergarten	Aug. 2020			P	C							
<b>Westminster High Science Room Renovations</b> This project involves 6 original science rooms that have not been renovated.	Aug. 2019		P	C								
<b>South Carroll High Science Room Renovations</b> This project involves 2 original science rooms that have not been renovated.	Aug. 2020			P	C							
<b>Liberty High Science Room Renovations</b> This project involves 4 original science rooms that have not been renovated.	Aug. 2020			P	C							

P = Planning

C = Construction

# EXHIBITS



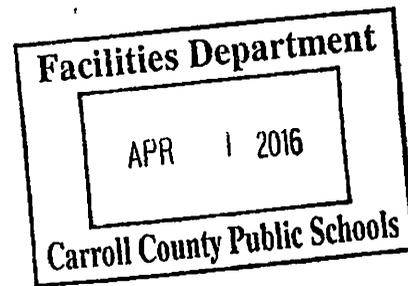
Maryland Department of Planning

Larry Hogan, Governor  
Boyd Rutherford, Lt. Governor

David R. Craig, Secretary  
Wendi W. Peters, Deputy Secretary

March 22, 2016

Mr. William Caine  
Facilities Planner  
Carroll County Public Schools  
125 North Court Street  
Westminster, Maryland 21157



Dear Mr. Caine:

We have received your letter dated March 15, 2016 and the enclosed Carroll County 2015 Actual Enrollments and 2016 - 2025 enrollment projections.

We compared Carroll County's projections to those generated by our Department. There is a difference of less than 5 percent for years 2016 - 2025. You may use the local projections (2016-2025) for updating your 2016 Educational Facilities Master Plan (EFMP). However, we noted that the 2015 actual enrollment on your calculation worksheet is not consistent with the official actual enrollment listed by the Maryland State Department of Education. The Maryland Department of Planning recognizes the Maryland State Department of Education's K-12 enrollment figure as the official actual enrollment for 2016.

We look forward to receiving your updated EFMP in July. A copy of this letter and its attachment should be included in the Plan. If you have any questions, please do not hesitate to contact Pat Goucher at 410.767.4564 or Arabia Davis at 410.767.4613.

Sincerely,

David R. Craig, Secretary  
Maryland Department of Planning

cc: Mr. Raymond Prokop, Director of Facilities Management (w/enclosure)  
Dr. David Lever, PSCP (w/enclosure)  
Mr. Mark Goldstein, MDP

Jurisdiction	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Carroll</b>	<b>25,082</b>	<b>24,684</b>	<b>24,273</b>	<b>23,836</b>	<b>23,516</b>	<b>23,156</b>	<b>22,983</b>	<b>22,917</b>	<b>22,961</b>	<b>23,105</b>	<b>23,221</b>
<b>MDP</b>	25,178	24,870	24,590	24,270	24,060	23,760	23,480	23,340	23,290	23,310	23,350
<b>Diff</b>	-96	-186	-317	-434	-544	-604	-497	-423	-329	-205	-129
<b>% Diff</b>	-0.38%	-0.75%	-1.29%	-1.79%	-2.26%	-2.54%	-2.12%	-1.81%	-1.41%	-0.88%	-0.55%

## **STATEMENT OF NON-DISCRIMINATION**

The Board of Education of Carroll County in its operation of the Carroll County Public Schools (CCPS) is firmly committed to creating equal employment and educational opportunities for all persons in its employment practices or in the provision of services, programs, or activities.

CCPS does not discriminate on the basis of age, color, genetic information, marital status, mental or physical disability, ancestry or national origin, race, religion, sex, or sexual orientation. CCPS provides nondiscriminatory access to school facilities in accordance with its policies and regulations regarding the community use of schools (including, but not limited to, the Boy Scouts).

CCPS maintains all of its policies and practices in strict compliance with all applicable Federal and State civil rights laws, including Titles VI and VII of the Civil Rights Act of 1964, Titles I and II of the Americans with Disabilities Act, Section 504 of the Rehabilitation Act of 1973, the Individuals with Disabilities Education Act, Title IX of the Education Amendments of 1972, and Title 20 of the State Government Article of the Annotated Code of Maryland.

No person will be denied admission to any school or to any program or course of study in CCPS on a basis that is contrary to any of the above stated laws.

---

James L. Doolan, President  
Board of Education of Carroll County

---

Stephen H. Guthrie  
Superintendent of Schools

---

Jonathan O'Neal  
Assistant Superintendent of Administration

---

Raymond Prokop  
Director of Facilities Management

# APPENDIX

## A

Report on Physical and Functional Assessment  
of Schools Constructed Prior to 1980

“Building the Future”

March 2008

School Facilities

## TABLE OF CONTENTS

	<u>Page #</u>
Study Participants	3
Introduction	4
Definition	4
Study Methodology	4
Findings	7
Next Steps	11
Appendices:	
A. Guide for School Facility Appraisal, 1998 Edition, The Council of Educational Facilities Planners, Int'l.	12
B. School Modernization Project, Assessment Report, Frederick County Public Schools, 2000	13
C. State of Maryland Public School Construction Program, Minimum Educational Adequacy, 2003.	26
D. Carroll County Public Schools Functional Assessment Criteria	34
E. Replacement Reserve Reports by School	51

The following individuals assessed or coordinated assessments of school buildings:

<u>Name</u>	<u>Title</u>
Raymond Prokop	Director of Facilities
Margaret Pfaff	Director of Curriculum, Instruction and Staff Development
Dana Falls	Director of Student Services
James Doolan	Director of Transportation Services
Karen Ganjon	Director of Minority Achievement and Intervention Programs
Gary Davis	Chief Information Officer
Larry Faries	Coordinator of School Security
Eulalia Muschik	Supervisor of Food Services
Douglas Gross	Supervisor of Operations
James Parker	Supervisor of Maintenance
Jeff Rogers	Supervisor of Fine Arts
Cindy Eckenrode	Supervisor of Elementary Education
Cindy McCabe	Supervisor of Elementary Education
Anna Varakin	Supervisor of Elementary Education
Donn Hicks	Supervisor of Elementary Education
Celeste Saxton	Supervisor of Social Studies
Marjorie Lohnes	Supervisor of Career and Technology Education
Kent Kreamer	Supervisor of Mathematics
Brad Yohe	Supervisor of Science
Jim Rodriguez	Supervisor of Physical Education/Athletics
Linda Kephart	Supervisor of Health and Elementary Physical Education
Jan Jayman	Supervisor of English and Modern/Classical Languages
Brian Wienholt	Supervisor of Middle School Reading and Language Arts
Irene Hildebrandt	Supervisor of Media
Mike Gray	Assistant Supervisor of Career and Technology Education

## **Introduction**

The desire to develop a process for prioritization of modernization projects has been a topic of discussion for some years with the Board of Education of Carroll County Public Schools. In March 2006, funds were made available to perform a physical assessment of all schools and utilize the data in a web based software application that, in addition to numerous other functions, provides a method of comparing and ranking modernization needs.

In March, 2007 the Board of Education indicated a desire to understand how the functional aspects of the facilities could be combined with the physical assessment to provide a comprehensive picture of a building's condition. The intended outcome is to provide as complete a picture of the condition of a building and compare that condition with the other buildings in the system inventory.

## **Definition**

An appropriate definition of modernization is “the design, construction and equipping process through which an aging school facility is brought up to current educational standards and through which its systems are renewed and updated to meet school system, county, state and federal codes and requirements. Modernizations may be accompanied by additions or redesign of existing spaces to meet educational program requirements.”

It must be understood that building condition is dynamic in nature and reflect many years of renovations, additions, space creation and alteration, equipment and systems replacement upgrades and maintenance projects. Both Physical and functional assessments must take this into account as data is gathered.

## **Study Methodology**

### **Physical Assessment**

As part of a strategic planning initiative, in June 2006, a contract to perform a physical assessment of forty one CCPS facilities was awarded to EMG of Hunt Valley. The scope provided to EMG included the following as it pertains to modernization prioritization:

- Identify the extent and severity of the deferred maintenance liability.
- Develop correction methods and estimated costs for deficient conditions.
- Prioritize and schedule projects to efficiently and economically dispatch corrections of singular or multiple requirements.
- Obtain a Facility Condition Index (FCI) that will illustrate the relative condition of facilities and infrastructure in the portfolio.

- Identify what is necessary to adapt the selected facilities and infrastructure to meet the planned future requirements of the institution, the requirements of today's standards and codes, and the needs of changing technology as it impacts space (i.e., plant adaptation).

The facility conditions survey included the following property elements:

- Exterior Systems – roofs, walls, window systems, doors, canopies
- Interior Construction – walls, doors, flooring, visible structural components
- Interior Finishes: Flooring, ceiling, wall finishes
- Health/Fire/Life Safety systems
- Accessibility issues
- Heating, Ventilation and Air Conditioning
- Plumbing
- Electrical and Service Distribution
- Fire Suppression
- Special Electrical Systems, Emergency Power, Telecommunications
- Security and Surveillance Systems
- Lighting Systems
- Special Construction
- Vertical Transportation
- Infrastructure/site utilities – chilled water, electric distribution systems, sewer, storm drainage, sidewalks, roads, plazas, landscaping
- Site amenities – site access from public thoroughfares, traffic patterns and signage, playfields, playgrounds

Calculation of the Facilities Condition Index (FCI) is defined as the value of the identified deficient items in the school divided by the replacement cost of the school; the larger the FCI, the greater the need for modernization. For the purposes of this report the inverse of the fractional FCI is multiplied by 1000 maximum points for each school to provide the physical assessment points to be combined with the functional points.

#### Functional Assessment – Instructional and Administrative Staff

In March 2007 the Board of Education directed that a functional assessment of the school system be conducted. The purpose was to combine the physical assessment with the results of the functional assessment to obtain a clearer picture of the overall condition of the system facilities. The criteria utilized for the functional assessment was developed after reviewing the criteria utilized in the *Guide for School Facility Appraisal, 1998 Edition, The Council of Educational Facilities Planners, Int'l*, a similar assessment conducted by Frederick County Public Schools in 2000 and the criteria the State of Maryland Public School Construction Program used to conduct a Minimum Educational Adequacy survey in 2003. These documents may be referenced in appendix A, B & C respectively.

The criteria utilized for this study is attached as Appendix D. Each school type was assigned a theoretical maximum value of 1000 points distributed over the assessed areas. Weighted values were provided after discussion with the instructional leaders.

The survey was conducted by the instructional area supervisors except for areas it was determined input from the administrative staff was more appropriate. A survey tool called CheckBox was assembled by Technology Services staff and the survey results were assigned values ranging from zero as the lowest score and five the highest. The results from each criteria group were averaged and that average determined the actual points assigned an area. The total points were then combined with the physical assessment points to achieve the modernization prioritization.

It was determined that schools constructed or modernized after 1980 would not be assessed as a part of this evaluation so the schools under consideration could receive the appropriate amount of attention to provide as accurate an assessment as possible. Since the Career & Technology Center recently had a complete facilities assessment performed in 2006 it was determined that it would not be a part of this study.

The schools assessed are noted in Table 1.

Table 1 – Schools Assessed

Name	Type	Year of Original Construction or Modernization	Size
Charles Carroll	Elem	1929	43,700
Freedom	Elem	1955	51,232
Westminster West	Middle	1958	135,733
Mt. Airy	Middle	1958	75,800
William Winchester	Elem	1962	54,947
South Carroll	High	1967	269,870
Westminster	High	1970	337,050
Eldersburg	Elem	1970	72,313
Westminster East	Middle	M1975	120,400
Westminster	Elem	1976	74,637
Robert Moton	Elem	1976	75,200
Northwest	Middle	1976	113,600
North Carroll	High	1976	233,400
Carrolltowne	Elem	1976	87,654

## Findings

The results of the assessments are shown in the attached tables. Table 2 provides the total scores by school for the physical and functional assessments as well as the combined score. Tables 3, 4 & 5 provide the area functional assessment scores by building type. The Replacement Reserve Reports that detail the deficient items at each school that make up the FCI are located in Appendix E.

Based on the total scores, Charles Carroll Elementary School is the school most in need of modernization. This is not a surprise in that Charles Carroll is the oldest school in the county and has many deficiencies associated with resource space and site conditions.

William Winchester Elementary received the second lowest behind Charles Carroll. The low functional assessment score for William Winchester is due primarily to the fact that it was originally constructed as an annex and not designed to operate as a stand alone facility.

The close scoring of the physical assessment was not a surprise as the overall condition of CCPS facilities has received consistently high ranking and praise whenever evaluations have been conducted.

Table 2 – Physical, Functional and Total Assessment Scores

School	Physical Assessment Score Max. 1000	Functional Assessment Score Max. 1000	Total Score Max. 2000
Charles Carroll	958	462	1420
William Winchester	964	495	1459
Mt. Airy MS	906	569	1475
Westminster East	952	579	1531
Westminster West	979	578	1557
Freedom	975	597	1572
Westminster HS	940	654	1594
South Carroll	980	630	1610
Robert Moton	995	634	1629
Northwest	969	694	1663
Eldersburg	974	699	1673
Westminster ES	971	735	1706
Carrolltowne	987	738	1725
North Carroll	988	739	1727

Table 3 – Elementary Assessment Scores by Area

School	<b>School Summary</b>								
	General Area Score	A&SS Score <sup>1</sup>	General Classroom Score	PreK/K	Visual Arts	Music	Media Center	Phys Ed	Food Services
Carrolltowne	64	122	135	73	57	50	81	100	56
Robert Moton	48	84	120	59	57	57	64	104	42
Westminster William	50	141	126	87	46	62	64	104	56
Winchester	42	34	132	71	32	41	43	71	28
Freedom	48	38	129	59	37	43	110	78	56
Charles Carroll	39	38	111	60	57	2	52	74	28
Eldersburg	53	103	120	100	50	53	95	97	28
Average	49	80	125	73	48	44	73	90	42
Maximum Score	70	190	150	100	80	80	130	130	70
Avg %	70%	42%	83%	73%	60%	55%	56%	69%	60%

**Overall Scores**

School	Overall Score	Total Possible	% of possible
Carrolltowne	738	1000	74%
Robert Moton	634	1000	63%
Westminster William	735	1000	74%
Winchester	495	1000	49%
Freedom	597	1000	60%
Charles Carroll	462	1000	46%
Eldersburg	699	1000	70%

- Administrative and Support Services

Table 4 – Middle School Scores by Area

School	General Area	A&SS Score <sup>1</sup>	General Classroom Score	School Summary				Media Center	Phys Ed	FCS&TE <sup>3</sup>	Food Services
				Science	Visual Arts	Music	TAD <sup>2</sup>				
East Middle	39	122	99	56	38	21	0	26	93	44	42
Mount Airy Middle	50	95	86	44	39	34	2	69	93	43	14
Northwest Middle	56	144	99	50	36	33	2	61	104	54	56
West Middle	48	49	107	36	41	31	2	104	100	18	42
Average	48	103	98	46	39	30	1	65	98	40	39
Maximum Score	70	190	130	60	60	60	40	130	130	60	70
Avg %	69%	54%	75%	77%	64%	49%	4%	50%	75%	67%	55%

**Overall Scores**

School	Overall Score	Total Possible	% of possible
East Middle	579	1000	58%
Mount Airy Middle	569	1000	57%
Northwest Middle	694	1000	69%
West Middle	578	1000	58%

1. Administrative and Support Services
2. Theater and Dance
3. Family and Consumer Sciences and Technology Education

Table 5 – High School Scores by Area

School	General Area	A&SS Score <sup>1</sup>	General Classroom Score	School Summary							Media Center	Phys Ed	F&C S <sup>3</sup>	Agri. Sci. <sup>4</sup>	Business Ed	Tech Ed	Food Serv.
				Sci	Visual Arts	Music	TAD <sup>2</sup>										
North Carroll High	53	141	88	38	42	52	9	106	97	13	14	18	13	56			
South Carroll High	56	103	70	50	36	27	2	97	93	8	7	15	11	56			
Westminster High	50	144	79	48	44	37	14	38	97	11	11	15	10	56			
Average	53	129	79	45	41	39	8	80	95	11	11	16	11	56			
Maximum Score	70	190	110	60	60	60	40	130	130	20	20	20	20	70			
Avg %	76%	68%	72%	75%	68%	64%	20%	62%	73%	53%	53%	80%	57%	80%			

**Overall Scores**

School	Overall Score	Total Possible	% of possible
North Carroll High	739	1000	74%
South Carroll High	630	1000	63%
Westminster High	654	1000	65%

1. Administrative and Support Services
2. Theater and Dance
3. Family and Consumer Sciences
4. Agriscience

## Next Steps

This study represents the first time that Carroll County Public School has taken on the task of evaluating the physical and functional aspects of schools. In the past, the age and physical aspects of each school dictated when a building was scheduled to be modernized. This study represents a large step forward in evaluating facilities in a comprehensive manner with the goal of attaining a more objective way of assessing older school facilities. In order to continue to improve this process, input is sought from the Board of Education, staff and the public.

As this study represents the first step in the evaluation and prioritization of modernization projects, it is recommended that this study begin by the Board of Education to consider what part capacity should play in modernization priority and how modernizations are to be prioritized with capacity projects. Based on projected lower enrollments over the next few years, an opportunity exists to address the highest priority modernization projects as represented by this study.

The assessment results will be utilized by the Facilities Department when developing the *2008-2017 Educational facilities Master Plan* and the *FY 2010-2016 Capital Improvement Plan*. Input from the Board of Education, staff and the public will be taken into consideration as the plans are developed.

Lastly, discussion needs to occur as to how this initial study is to be utilized in the development of future *Educational Facilities Master Plans*. For example the Facilities Condition Index (FCI) is expected to change each year as maintenance projects are deferred or completed. The functional scores could also change as programs are added or removed from schools. Depending on the evaluation schedule, these changes could result in changes to the modernization schedule potentially resulting in considerable public concern being expressed.

# APPENDIX

## B

# **Staffing Analysis and Class Size Report 2015 – 2016**

## **Executive Summary**

### **I. Elementary Schools**

- A. PreKindergarten (Page 3)
- B. Professional Staff (Page 4)
- C. Academic Class Size (Page 5)

### **II. Middle Schools**

- A. Professional Staff (Page 6)
- B. Academic Class Size (Page 6)

### **III. High Schools**

- A. Professional Staff (Page 7)
- B. Academic Class Size (Page 7)
- C. Academic Class Size Analysis (Pages 8-9)
- D. Non-Academic Class Size Analysis (Pages 10-13)
- E. Gateway School Class Size (Page 14)
- F. Carroll County Career and Technology Center Class Size (Page 15)
- G. Academy of Finance (Page 16)
- H. Teacher Academy (Page 16)
- I. SAT Prep (Page 16)

### **IV. Special Education**

- A. Elementary Schools (Page 18)
- B. Middle Schools (Page 19)
- C. High Schools (Page 20)
- D. Itinerant Special Education Staff (Page 21)

**Executive Summary**  
**Class Size/Classes Over 30**  
**2015 – 2016**

**Elementary Schools:** Average academic kindergarten through fifth grade class size as of September 30, 2015 is 20.9 students per home base class. The average for 2014-2015 was reported at 20.2 for grades K-5.

There were no classes with 30 or more students for 2015-2016.

**Middle Schools:** Average academic class size as of September 30, 2015 is 24.06 students per class, up from 23.52 in 2014-2015. The total number of academic classes with 30 or more students is 147 for 2015-2016.

**High Schools:** Average academic class size as of September 30, 2015 is 23.8 students per class, up from 23.6 in 2014-2015. The total number of academic classes with over 30 students is 295 for 2015-2016.

PreK  
2015-2016

Prekindergarten Site	Number of Students	Teacher FTE	Assistant FTE
Carrolltowne	15	0.5	0.5
Cranberry Station	13	0.5	0.5
Ebb Valley	14	0.5	0.5
Eldersburg	11	0.5	0.5
Elmer Wolfe	16	0.5	0.5
Hampstead	15	0.5	0.5
Linton Springs	18	0.5	0.5
Manchester	16	0.5	0.5
Mechanicsville	17	0.5	0.5
Parr's Ridge	18	0.5	0.5
Robert Moton	21	0.5	0.5
Runnymede	19	0.5	0.5
Sandymount	13	0.5	0.5
Spring Garden	15	0.5	0.5
Taneytown	32	1.0	1.0
Westminster	15	0.5	0.5
William Winchester	19	0.5	0.5
Winfield	14	0.5	0.5
	301	9.5	9.5

ELEMENTARY SCHOOL FTE TOTALS 2015-2016

School	See Notes below	K-5 Enrollment	Classroom Teachers (K-5)	Guidance	Math Resource	ELA Specialist	Art	Vocal Music	Instrumental Music	Health	PE	Media Specialist
Carrolltowne		483	23.0	1.0	0.5	1.0	1.2	1.2	0.6	1.2	1.6	1.0
Charles Carroll		229	13.0	1.0	0.4	1.0	0.6	0.6	0.4	0.6	0.8	0.6
Cranberry	(*)	490	24.0	1.0	1.0	1.0	1.2	1.2	0.6	1.2	1.6	1.0
Ebb Valley		467	22.0	1.0	0.6	1.0	1.2	1.2	0.5	1.0	1.6	1.0
Eldersburg		463	23.0	1.0	0.4	1.0	1.2	1.2	0.6	1.2	1.6	1.0
Elmer Wolfe	(*)	366	18.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.2	1.0
Freedom		468	22.0	1.0	0.4	1.0	1.2	1.2	0.8	1.0	1.6	1.0
Friendship Valley		484	23.0	1.0	0.4	1.0	1.2	1.2	0.8	1.0	1.6	1.0
Hampstead		322	15.0	1.0	0.4	1.0	0.8	0.8	0.5	0.8	1.2	1.0
Linton Springs		609	27.0	1.0	0.6	1.0	1.2	1.2	0.5	1.2	1.8	1.2
Manchester		588	27.0	1.0	0.4	1.0	1.2	1.2	0.5	1.2	1.8	1.2
Mechanicsville		466	23.0	1.0	0.4	1.0	1.2	1.2	0.7	1.0	1.6	1.0
Mt. Airy		465	21.0	1.0	0.5	1.0	1.0	1.0	1.0	1.0	1.5	1.0
Parr's Ridge		440	21.0	1.0	0.5	1.0	1.0	1.0	0.0	1.0	1.5	1.2
Piney Ridge		587	28.0	1.0	0.5	1.0	1.4	1.4	0.6	1.2	2.0	1.2
Robert Moton	(*)	370	19.0	1.0	1.0	1.0	1.0	1.0	0.6	0.8	1.4	1.0
Runnymede		511	25.0	1.0	0.6	1.0	1.2	1.2	0.5	1.2	1.6	1.2
Sandymount		429	21.0	1.0	0.5	1.0	1.0	1.0	0.5	1.0	1.4	1.0
Spring Garden		524	24.0	1.0	0.6	1.0	1.2	1.2	0.8	1.2	1.6	1.0
Taneytown	(*)	383	20.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.4	1.0
Westminster		463	22.0	1.0	0.4	1.0	1.2	1.2	0.8	1.0	1.6	1.0
Wm. Winchester		605	28.0	1.0	0.6	1.0	1.4	1.4	0.5	1.4	2.0	1.2
Winfield		494	24.0	1.0	0.5	1.0	1.4	1.4	0.7	1.2	1.8	1.0
Totals		10706	513.0	23.0	13.2	23.0	26.0	26.0	13.5	24.4	35.8	23.8
*Title I												
**Enrollments come from September 30, 2014												

Ratio- K=1:20; 1-5= 1:23

Class Size Report 2015-2016

School	FD-K Students	FD- K Staff	FD-K Ratio	1st Students	1st Staff	1st Ratio	2nd Students	2nd Staff	2nd Ratio	3rd Students	3rd Staff	3rd Ratio	4th Students	4th Staff	4th Ratio	5th Students	5th Staff	5th Ratio	Total Students	Total Staff	Total Ratio	
Carrolltowne	67	4.0	16.8	84	4.0	21.0	77	4.0	19.3	74	3.0	24.7	86	4.0	21.5	95	4.0	23.8	483	23.0	21.0	
Charles Carroll	32	2.0	16.0	24	2.0	12.0	40	2.0	20.0	39	2.0	19.5	40	2.0	20.0	54	3.0	18.0	229	13.0	17.6	
Cranberry*	90	4.0	22.5	87	5.0	17.4	92	4.5	20.4	74	3.5	21.1	82	4.0	20.5	65	3.0	21.7	490	24.0	20.4	
Ebb Valley	70	3.0	23.3	68	3.0	22.7	83	4.0	20.8	78	4.0	19.5	87	4.0	21.8	81	4.0	20.3	467	22.0	21.2	
Eldersburg	74	4.0	18.5	75	4.0	18.8	73	4.0	18.3	83	4.0	20.8	77	4.0	19.3	81	3.0	27.0	463	23.0	20.1	
Elmer Wolfe*	53	3.0	17.7	58	3.0	19.3	61	3.0	20.3	62	3.0	20.7	62	3.0	20.7	70	3.0	23.3	366	18.0	20.3	
Freedom	67	4.0	16.8	88	4.0	22.0	61	3.0	20.3	85	4.0	21.3	77	3.0	25.7	90	4.0	22.5	468	22.0	21.3	
Friendship Valley	69	4.0	17.3	80	4.0	20.0	84	4.0	21.0	91	4.0	22.8	71	3.0	23.7	89	4.0	22.3	484	23.0	21.0	
Hampstead	50	3.0	16.7	57	3.0	19.0	45	2.0	22.5	48	2.0	24.0	60	2.5	24.0	62	2.5	24.8	322	15.0	21.5	
Linton Springs	99	5.0	19.8	87	4.0	21.8	92	4.0	23.0	111	5.0	22.2	111	4.5	24.7	109	4.5	24.2	609	27.0	22.6	
Manchester	76	4.0	19.0	114	5.0	22.8	97	4.0	24.3	112	5.0	22.4	84	4.0	21.0	105	5.0	21.0	588	27.0	21.8	
Mechanicsville	63	4.0	15.8	67	4.0	16.8	83	4.0	20.8	64	3.0	21.3	92	4.0	23.0	97	4.0	24.3	466	23.0	20.3	
Mt. Airy										136	6.0	22.7	179	8.0	22.4	150	7.0	21.4	465	21.0	22.1	
Parr's Ridge	152	8.0	19.0	140	7.0	20.0	148	6.0	24.7										440	21.0	21.0	
Piney Ridge	95	5.0	20.0	81	4.0	20.3	105	5.0	21.0	112	5.0	22.4	79	4.0	19.8	115	5.0	23.0	587	28.0	21.0	
Robert Moton*	60	3.0	20.0	55	3.0	18.3	55	3.0	18.3	68	3.0	22.7	71	4.0	17.8	61	3.0	20.3	370	19.0	19.5	
Runnymede	92	5.0	18.4	79	4.0	19.8	79	4.0	19.8	101	5.0	20.2	89	4.0	22.3	71	3.0	23.7	511	25.0	20.4	
Sandymount	78	4.0	19.5	65	4.0	16.3	67	3.0	22.3	78	4.0	19.5	68	3.0	22.7	73	3.0	24.3	429	21.0	20.4	
Spring Garden	76	4.0	19.0	73	4.0	18.3	94	4.0	23.5	96	4.0	24.0	91	4.0	22.8	94	4.0	23.5	524	24.0	21.8	
Taneytown*	54	4.0	13.5	60	3.0	20.0	63	3.0	21.0	80	4.0	20.0	62	3.0	20.7	64	3.0	21.3	383	20.0	19.2	
Westminster	89	5.0	17.8	52	3.0	17.3	90	4.0	22.5	79	3.0	26.3	69	3.0	23.0	84	4.0	21.0	463	22.0	21.0	
Wm. Winchester	87	4.0	21.8	94	5.0	18.8	119	5.0	23.8	105	5.0	21.0	103	5.0	20.6	97	4.0	24.3	605	28.0	21.6	
Winfield	74	4.0	18.5	88	4.0	22.0	82	4.0	20.5	82	4.0	20.5	87	4.0	21.8	81	4.0	20.3	494	24.0	20.6	
Totals	1,667	90.0	18.5	1,676	86.0	19.5	1,790	83.5	21.4	1,858	85.5	21.7	1,827	84.0	21.8	1,888	84.0	22.5	10,706	513.0	20.9	
		Average	18.5	Average	19.3	19.3	Average	21.3	21.3	Average	21.8	21.8	Average	21.8	21.8	Average	22.6	22.6	22.6	Average	20.8	20.8
		High	23.3	High	22.8	22.8	High	24.7	24.7	High	26.3	26.3	High	25.7	25.7	High	27.0	27.0	27.0	High	22.6	22.6
		Low	13.5	Low	12.0	12.0	Low	18.3	18.3	Low	19.5	19.5	Low	17.8	17.8	Low	18.0	18.0	18.0	Low	17.6	17.6

~Class sizes in all grades are influenced throughout the day by the mainstreaming of special education students

## II. Middle Schools 2015-2016

### A. Professional Staff - Program 02 (September 30 Enrollment)

Middle Schools	Enrollment	Principal	Assistant Principals	Guidance	Media	Classroom Teachers	Average # of Students Per Teacher
East	710	1	2	2	1	41.5	17.1
Mt. Airy	638	1	1	2	1	35.0	18.2
New Windsor	382	1	1	1.5	1	21.9	17.4
North Carroll	590	1	1	2	1	33.0	17.9
Northwest	512	1	1	2	1	29.1	17.6
Oklahoma Road	759	1	1	2	1	42.7	17.8
Shiloh	657	1	1	2	1	35.8	18.4
Sykesville	800	1	1	2	1	43.0	18.6
West	1017	1	2	3	1	53.6	19.0
<b>Totals</b>	<b>6065</b>	<b>9</b>	<b>11</b>	<b>18.5</b>	<b>9</b>	<b>335.6</b>	<b>18.1</b>

### B. Academic Class Size and Number of Classes Over 30

Middle Schools	Total # of Students in Academic Classes	Total # of Academic Sections	Total # of Academic Classes	Academic Class Size Average	Total # of Academic Classes Over Thirty	Percentage Over 30
East	707	38	130	18.61	9	7%
Mt. Airy	640	25	113	25.60	21	19%
New Windsor	381	14	65	27.21	22	34%
North Carroll	592	24	96	24.67	20	21%
Northwest	510	20	68	25.50	9	13%
Oklahoma Road	757	33	132	22.94	0	0%
Shiloh	660	26	104	25.38	24	23%
Sykesville	800	32	132	25.00	26	20%
West	1017	40	167	25.43	16	10%
<b>Totals</b>	<b>6064</b>	<b>252</b>	<b>1007</b>	<b>24.06</b>	<b>147</b>	<b>15%</b>

2015-2016	6064	252	1007	24.06	147	15%
2014-2015	6022	256	1017	23.52	183	18%
2013-2014	6103	253	1064	24.12	180	17%
2012-2013	6051	270	1091	22.41	160	15%
2011-2012	6147	265	1078	23.20	193	18%
2010-2011	6129	279	1242	21.97	193	16%
2009-2010	6315	276	1130	22.88	156	14%
2008-2009	6337	271	1197	23.38	145	12%
2007-2008	6703	278	1223	24.11	241	20%
2006-2007	6833	273	1232	25.03	234	19%
2005-2006	6892	270	1211	25.53	272	22%

III. High Schools 2015-2016

A. Professional Staff: Program 02 (September 30 Enrollment)

High Schools	Enrollment	Principal	Assistant Principal	Guidance	Media	Classroom Teachers *	Coordinator of Facilities	Facilitator of Student Support	Average # of Students Per Teacher
Century	1095	1	2	4	1	53.99	1	1	20.3
Francis Scott Key	952	1	2	4	1	47.75	1	1	19.9
Liberty	1094	1	2	4	1	53	1	1	20.6
Manchester Valley	761	1	2	3	1	38.67	1	1	19.7
North Carroll	700	1	2	2.6	1	35	1	1	20.0
South Carroll	1031	1	2	4	1	53.34	1	1	19.3
Westminster	1511	1	4	5	1	73.17	1	1	20.7
Winters Mill	1085	1	2	4	1	54.33	1	1	20.0
<b>Totals</b>	<b>8229</b>	<b>8</b>	<b>18</b>	<b>30.6</b>	<b>8</b>	<b>409.25</b>	<b>8</b>	<b>8</b>	<b>20.1</b>

\* Totals do not include Special Education teachers

High Schools	Reading Specialists	HSA Intervention Teachers	Career and Technology Teachers
Career & Technology Center	0	2	35.6
Century	1	0	
Francis Scott Key	1	0	
Liberty	1	0	
Manchester Valley	1	0	
North Carroll	1	0	
South Carroll	1	0	
Westminster	1	0	1.0
Winters Mill	1	0	
<b>Totals</b>	<b>8</b>	<b>2</b>	<b>36.6</b>

B. Academic Class Size

High Schools	Average Class Size	Number of Classes Over Thirty	Number of Classes Under Twenty
Century	23.7	20	54
Francis Scott Key	23.7	28	53
Liberty	25.0	65	54
Manchester Valley	23.5	16	42
North Carroll	23.0	29	50
South Carroll	23.2	19	62
Westminster	24.5	75	78
Winters Mill	23.5	43	64
<b>Totals</b>	<b>23.8</b>	<b>295</b>	<b>457</b>

Totals	Average Class Size	Number of Classes Over Thirty	Number of Classes Under Twenty
2015-2016	23.8	295	457
2014-2015	23.6	279	485
2013-2014	23.5	270	467
2012-2013	24.3	326	470
2011-2012	24.0	308	475
2010-2011	24.7	422	429
2009-2010	24.6	367	420
2008-2009	24.5	314	424
2007-2008	24.9	408	417
2006-2007	25.7	466	330
2005-2006	25.7	538	380
2004-2005	25.9	543	N/A
2003-2004	26.5	613	N/A
2002-2003	25.9	530	N/A

## C. High School Academic Class Analysis

### English

High Schools	Number of Students	Number of Classes	Average Class Size	Number of Classes Over Thirty	% of Classes Over Thirty	Number of Classes Under Twenty	% of Classes under Twenty
Century	1225	54	22.7	6	11%	19	35%
Francis Scott Key	1033	43	24.0	5	12%	13	30%
Liberty	1239	48	25.8	19	40%	8	17%
Manchester Valley	840	38	22.1	4	11%	13	34%
North Carroll	803	32	25.1	8	25%	5	16%
South Carroll	1144	48	23.8	5	10%	9	19%
Westminster	1719	73	23.5	17	23%	22	30%
Winters Mill	1163	52	22.4	8	15%	20	38%
<b>TOTALS</b>	<b>9166</b>	<b>388</b>	<b>23.6</b>	<b>72</b>	<b>19%</b>	<b>109</b>	<b>28%</b>

### Social Studies

High Schools	Number of Students	Number of Classes	Average Class Size	Number of Classes Over Thirty	% of Classes Over Thirty	Number of Classes Under Twenty	% of Classes Under Twenty
Century	1193	47	25.4	10	21%	8	17%
Francis Scott Key	1165	44	26.5	10	23%	5	11%
Liberty	1270	51	24.9	14	27%	12	24%
Manchester Valley	782	34	23.0	4	12%	11	32%
North Carroll	800	34	23.5	7	21%	9	26%
South Carroll	1270	51	24.9	9	18%	8	16%
Westminster	1879	72	26.1	22	31%	11	15%
Winters Mill	1320	54	24.4	7	13%	11	20%
<b>TOTALS</b>	<b>9679</b>	<b>387</b>	<b>25.0</b>	<b>83</b>	<b>21%</b>	<b>75</b>	<b>19%</b>

### Math

High Schools	Number of Students	Number of Classes	Average Class Size	Number of Classes Over Thirty	% of Classes Over Thirty	Number of Classes Under Twenty	% of Classes Under Twenty
Century	1199	49	24.5	3	6%	8	16%
Francis Scott Key	988	42	23.5	10	24%	12	29%
Liberty	1369	55	24.9	14	25%	14	25%
Manchester Valley	780	33	23.6	5	15%	9	27%
North Carroll	764	36	21.2	5	14%	16	44%
South Carroll	1213	53	22.9	3	6%	15	28%
Westminster	1672	69	24.2	14	20%	17	25%
Winters Mill	1118	48	23.3	8	17%	12	25%
<b>TOTALS</b>	<b>9103</b>	<b>385</b>	<b>23.6</b>	<b>62</b>	<b>16%</b>	<b>103</b>	<b>27%</b>

### Science

High Schools	Number of Students	Number of Classes	Average Class Size	Number of Classes Over Thirty	% of Classes Over Thirty	Number of Classes Under Twenty	% of Classes Under Twenty
Century	1162	51	22.8	0	0%	12	24%
Francis Scott Key	1110	50	22.2	3	6%	17	34%
Liberty	1361	56	24.3	10	18%	14	25%
Manchester Valley	919	37	24.8	2	5%	6	16%
North Carroll	717	34	21.1	5	15%	19	56%
South Carroll	1351	61	22.1	1	17%	20	33%
Westminster	1707	67	25.5	17	25%	13	19%
Winters Mill	1115	48	23.2	9	19%	13	27%
<b>TOTALS</b>	<b>9442</b>	<b>404</b>	<b>23.4</b>	<b>47</b>	<b>12%</b>	<b>114</b>	<b>28%</b>

### Modern and Classical Language

High Schools	Number of Students	Number of Classes	Average Class Size	Number of Classes Over Thirty	% of Classes Over Thirty	Number of Classes Under Twenty	% of Classes Under Twenty
Century	645	28	23.0	1	4%	7	25%
Francis Scott Key	417	20	20.9	0	0%	6	30%
Liberty	685	27	25.4	8	30%	6	22%
Manchester Valley	366	15	24.4	1	7%	3	20%
North Carroll	341	13	26.2	4	31%	1	8%
South Carroll	603	28	21.5	1	4%	10	36%
Westminster	976	44	22.2	5	11%	15	34%
Winters Mill	697	28	24.9	11	39%	8	29%
<b>TOTALS</b>	<b>4730</b>	<b>203</b>	<b>23.3</b>	<b>31</b>	<b>15%</b>	<b>56</b>	<b>28%</b>

### ACADEMIC TOTALS

High Schools	Number of Students	Number of Classes	Average Class Size	Number of Classes Over Thirty	% of Classes Over Thirty	Number of Classes Under Twenty	% of Classes Under Twenty
Century	5424	229	23.7	20	9%	54	24%
Francis Scott Key	4713	199	23.7	28	14%	53	27%
Liberty	5924	237	25.0	65	27%	54	23%
Manchester Valley	3687	157	23.5	16	10%	42	27%
North Carroll	3425	149	23.0	29	19%	50	34%
South Carroll	5581	241	23.2	19	8%	62	26%
Westminster	7953	325	24.5	75	23%	78	24%
Winters Mill	5413	230	23.5	43	19%	64	28%
<b>TOTALS</b>	<b>42120</b>	<b>1767</b>	<b>23.8</b>	<b>295</b>	<b>17%</b>	<b>457</b>	<b>26%</b>

## D. High School Non-Academic Class Size Analysis

### Reading

High Schools	Number of Students	Number of Classes	Average Class Size	Number of Classes Over Thirty	% of Classes Over Thirty	Number of Classes Under Twenty	% of Classes Under Twenty
Century	28	3	9.3	0	0%	3	100%
Francis Scott Key	49	4	12.3	0	0%	4	100%
Liberty	47	4	11.8	0	0%	4	100%
Manchester Valley	18	2	9.0	0	0%	2	100%
North Carroll	40	3	13.3	0	0%	3	100%
South Carroll	21	1	21.0	0	0%	0	0%
Westminster	30	4	7.5	0	0%	4	100%
Winters Mill	36	4	9.0	0	0%	4	100%
<b>TOTALS</b>	<b>269</b>	<b>25</b>	<b>10.8</b>	<b>0</b>	<b>0%</b>	<b>24</b>	<b>96%</b>

### Business Education

High Schools	Number of Students	Number of Classes	Average Class Size	Number of Classes Over Thirty	% of Classes Over Thirty	Number of Classes Under Twenty	% of Classes Under Twenty
Century	384	15	25.6	2	13%	2	13%
Francis Scott Key	147	6	24.5	0	0%	0	0%
Liberty	211	8	26.4	1	13%	1	13%
Manchester Valley	159	8	19.9	0	0%	4	50%
North Carroll	270	10	27.0	0	0%	2	20%
South Carroll	137	5	27.4	1	20%	1	20%
Westminster	498	19	26.2	3	16%	2	11%
Winters Mill	195	9	21.7	0	0%	3	33%
<b>TOTALS</b>	<b>2001</b>	<b>80</b>	<b>25.0</b>	<b>7</b>	<b>9%</b>	<b>15</b>	<b>19%</b>

### Agriscience

High Schools	Number of Students	Number of Classes	Average Class Size	Number of Classes Over Thirty	% of Classes Over Thirty	Number of Classes Under Twenty	% of Classes Under Twenty
Century	128	6	21.3	0	0%	2	33%
Francis Scott Key	107	7	15.3	0	0%	5	71%
Liberty	119	7	17.0	1	14%	4	57%
Manchester Valley	44	4	11.0	0	0%	4	100%
North Carroll	84	6	14.0	0	0%	5	83%
South Carroll	95	7	13.6	0	0%	7	100%
Westminster	147	9	16.3	0	0%	6	67%
Winters Mill	68	5	13.6	0	0%	3	60%
<b>TOTALS</b>	<b>792</b>	<b>51</b>	<b>15.5</b>	<b>1</b>	<b>2%</b>	<b>36</b>	<b>71%</b>

### Technology

High Schools	Number of Students	Number of Classes	Average Class Size	Number of Classes Over Thirty	% of Classes Over Thirty	Number of Classes Under Twenty	% of Classes Under Twenty
Century	410	16	25.6	0	0%	3	19%
Francis Scott Key	396	18	22.0	5	28%	6	33%
Liberty	215	8	26.9	0	0%	0	0%
Manchester Valley	387	16	24.2	0	0%	4	25%
North Carroll	273	10	27.3	3	30%	0	0%
South Carroll	338	13	26.0	0	0%	1	8%
Westminster	578	21	27.5	1	5%	2	10%
Winters Mill	559	20	28.0	8	40%	1	5%
<b>TOTALS</b>	<b>3156</b>	<b>122</b>	<b>25.9</b>	<b>17</b>	<b>14%</b>	<b>17</b>	<b>14%</b>

### Art

High Schools	Number of Students	Number of Classes	Average Class Size	Number of Classes Over Thirty	% of Classes Over Thirty	Number of Classes Under Twenty	% of Classes Under Twenty
Century	295	13	22.7	1	8%	4	31%
Francis Scott Key	216	9	24.0	2	22%	2	22%
Liberty	322	13	24.8	6	46%	3	23%
Manchester Valley	117	6	19.5	0	0%	3	50%
North Carroll	216	10	21.6	2	20%	4	40%
South Carroll	243	14	17.4	0	0%	7	50%
Westminster	326	15	21.7	0	0%	5	33%
Winters Mill	305	15	20.3	3	20%	6	40%
<b>TOTALS</b>	<b>2040</b>	<b>95</b>	<b>21.5</b>	<b>14</b>	<b>15%</b>	<b>34</b>	<b>36%</b>

### Music/Drama

High Schools	Number of Students	Number of Classes	Average Class Size	Number of Classes Over Thirty	% of Classes Over Thirty	Number of Classes Under Twenty	% of Classes Under Twenty
Century	476	20	23.8	4	20%	7	35%
Francis Scott Key	338	18	18.8	2	11%	12	67%
Liberty	498	27	18.4	4	15%	17	63%
Manchester Valley	372	19	19.6	4	21%	11	58%
North Carroll	168	11	15.3	0	0%	8	73%
South Carroll	313	14	22.4	1	0%	7	50%
Westminster	763	35	21.8	4	11%	15	43%
Winters Mill	367	19	19.3	2	11%	9	47%
<b>TOTALS</b>	<b>3295</b>	<b>163</b>	<b>20.2</b>	<b>21</b>	<b>13%</b>	<b>86</b>	<b>53%</b>

### Family & Consumer Sciences

High Schools	Number of Students	Number of Classes	Average Class Size	Number of Classes Over Thirty	% of Classes Over Thirty	Number of Classes Under Twenty	% of Classes Under Twenty
Century	332	16	20.8	1	6%	7	44%
Francis Scott Key	369	16	23.1	0	0%	7	44%
Liberty	675	26	26.0	5	19%	6	23%
Manchester Valley	379	20	19.0	3	15%	12	60%
North Carroll	290	17	17.1	0	0%	11	65%
South Carroll	385	21	18.3	0	0%	16	76%
Westminster	504	28	18.0	0	0%	14	50%
Winters Mill	557	25	22.3	2	8%	6	24%
<b>TOTALS</b>	<b>3491</b>	<b>169</b>	<b>20.7</b>	<b>11</b>	<b>7%</b>	<b>79</b>	<b>47%</b>

### Physical Education

High Schools	Number of Students	Number of Classes	Average Class Size	Number of Classes Over Thirty	% of Classes Over Thirty	Number of Classes Under Twenty	% of Classes Under Twenty
Century	661	30	22.0	5	17%	13	43%
Francis Scott Key	658	21	31.3	12	57%	1	5%
Liberty	987	35	28.2	15	43%	3	9%
Manchester Valley	539	21	25.7	7	33%	7	33%
North Carroll	447	16	27.9	7	44%	2	13%
South Carroll	772	32	24.1	0	0%	9	28%
Westminster	1215	47	25.9	20	43%	9	19%
Winters Mill	818	32	25.6	8	25%	9	28%
<b>TOTALS</b>	<b>6097</b>	<b>234</b>	<b>26.1</b>	<b>74</b>	<b>32%</b>	<b>53</b>	<b>23%</b>

### Health

High Schools	Number of Students	Number of Classes	Average Class Size	Number of Classes Over Thirty	% of Classes Over Thirty	Number of Classes Under Twenty	% of Classes Under Twenty
Century	434	16	27.1	6	38%	3	19%
Francis Scott Key	305	9	33.9	8	89%	0	0%
Liberty	490	17	28.8	10	59%	1	6%
Manchester Valley	217	9	24.1	2	22%	2	22%
North Carroll	240	9	26.7	3	33%	1	11%
South Carroll	272	12	22.7	2	17%	5	42%
Westminster	609	23	26.5	9	39%	4	17%
Winters Mill	415	18	23.1	5	28%	8	44%
<b>TOTALS</b>	<b>2982</b>	<b>113</b>	<b>26.4</b>	<b>45</b>	<b>40%</b>	<b>24</b>	<b>21%</b>

### Marketing

High Schools	Number of Students	Number of Classes	Average Class Size	Number of Classes Over Thirty	% of Classes Over Thirty	Number of Classes Under Twenty	% of Classes Under Twenty
Century	47	2	23.5	0	0%	1	50%
Francis Scott Key	0	0	0.0	0	0%	0	0%
Liberty	0	0	0.0	0	0%	0	0%
Manchester Valley	0	0	0.0	0	0%	0	0%
North Carroll	22	1	22.0	0	0%	0	0%
South Carroll	0	0	0.0	0	0%	0	0%
Westminster	52	3	17.3	0	0%	1	33%
Winters Mill	25	2	12.5	0	0%	2	100%
<b>TOTALS</b>	<b>146</b>	<b>8</b>	<b>18.3</b>	<b>0</b>	<b>0%</b>	<b>4</b>	<b>50%</b>

### NON ACADEMIC TOTALS

High Schools	Number of Students	Number of Classes	Average Class Size	Number of Classes Over Thirty	% of Classes Over Thirty	Number of Classes Under Twenty	% of Classes Under Twenty
Century	3195	137	23.3	19	14%	45	33%
Francis Scott Key	2585	108	23.9	29	27%	37	34%
Liberty	3564	145	24.6	42	29%	39	27%
Manchester Valley	2232	105	21.3	16	15%	49	47%
North Carroll	2050	93	22.0	15	16%	36	39%
South Carroll	2576	119	21.6	4	3%	53	45%
Westminster	4722	204	23.1	37	18%	62	30%
Winters Mill	3345	149	22.4	28	19%	51	34%
<b>TOTALS</b>	<b>24269</b>	<b>1060</b>	<b>22.9</b>	<b>190</b>	<b>18%</b>	<b>372</b>	<b>35%</b>

### 9th Grade Transition Courses

#### Freshman Seminar/Teen Leadership

High Schools	Number of Students	Number of Classes	Average Class Size	Number of Classes Over Thirty	% of Classes Over Thirty	Number of Classes Under Twenty	% of Classes Under Twenty
Century	282	12	23.5	2	17%	4	33%
Francis Scott Key	203	10	20.3	0	0%	5	50%
Liberty	0	0	0.0	0	0%	0	0%
Manchester Valley	171	7	24.4	1	0%	3	43%
North Carroll	123	7	17.6	1	14%	4	57%
South Carroll	32	2	16.0	0	0%	1	50%
Westminster	22	2	11.0	0	0%	2	100%
Winters Mill	82	4	20.5	0	0%	2	50%
<b>TOTALS</b>	<b>915</b>	<b>44</b>	<b>20.8</b>	<b>4</b>	<b>9%</b>	<b>21</b>	<b>48%</b>

**E. The Gateway School (High School)  
2015 2016**

**Academic Class Size Analysis\* ESTIMATED**

<b>COURSE</b>	<b>NUMBER OF STUDENTS</b>	<b>NUMBER OF SECTIONS</b>	<b>AVERAGE CLASS SIZE</b>	<b>CLASSES OVER THIRTY</b>
English	204	17	12	0
Social Studies	140	14	10	0
Science	112	14	8	0
Spanish I & II	26	2	13	0
Distance Learning Lab – DLL	96	8	12	0
Math	210	21	10	0
<b>TOTALS</b>	<b>788</b>	<b>76</b>	<b>11</b>	<b>0</b>

**Non Academic Class Size Analysis\***

<b>COURSE</b>	<b>NUMBER OF STUDENTS</b>	<b>NUMBER OF SECTIONS</b>	<b>AVERAGE CLASS SIZE</b>	<b>CLASSES OVER THIRTY</b>
P. E.	121	13	18	0
CRD I,II,III	54	9	6	0
Financial Literacy	72	9	8	0
Princ. Bus. Admin/Mgmt.	18	2	9	0
Tech	80	6	13	0
Art	61	12	10	0
Experiential Ed.	12	2	12	0
Health	10	4	5	0
Intro to Foods	16	4	8	0
Seminar/Teen Leadership	240	44	10	0
<b>TOTALS</b>	<b>684</b>	<b>105</b>	<b>12</b>	<b>0</b>

\*Second semester figures are true estimates due to the transient nature of our students with a high school capacity of 118.

**F. Carroll County Career and Technology Center  
Class Enrollment for 2015-2016  
As of September, 2015**

<b>Program</b>	<b>Male</b>	<b>Female</b>	<b>Total Fall</b>		<b>Male</b>	<b>Female</b>	<b>Total Spring</b>	<b>Grand Total</b>
Academy of Health Professions	3	66	69		3	66	69	138
Auto Service Technology	34	0	34		29	1	30	64
Biomedical : PLTW I (Mod 1)	11	27	38		11	27	38	76
Biomedical : PLTW II (Mods 2&3)	14	27	41		14	28	42	83
Building Maintenance (5th Mod)	8	1	9		8	1	9	18
Carpentry	14	1	15		18	0	18	33
Cisco Networking Academy	21	1	22		20	2	22	44
Collision Repair Technology	15	0	15		14	0	14	29
Computer Technology (Mod 1)	13	3	16		13	3	16	32
Computer Technology	20	2	22		20	2	22	44
Cosmetology	0	40	40		0	76	76	116
Criminal Justice/Homeland Security (Mod 1)	19	19	38		19	19	38	76
Criminal Justice/Homeland Security (Mods 2&3)	33	12	45		31	16	47	92
Culinary Arts	14	6	20		7	15	22	42
Culinary Arts - Baking & Pastry	4	15	19		8	13	21	40
Drafting	9	5	14		11	3	14	28
Early Childhood Education	0	19	19		0	23	23	42
Electrical Construction	10	0	10		15	0	15	25
Heating, Ventilation and Air Conditioning	16	0	16		11	0	11	27
Heavy Equipment and Truck Technology	19	1	20		18	0	18	38
Manufacturing & Machine Technology	13	0	13		12	0	12	25
Masonry Technology	12	1	13		10	0	10	23
Physical Rehabilitation	5	15	20		5	14	19	39
Print Production	8	8	16		7	12	19	35
Project Lead the Way - Engineering I	54	12	66		38	6	44	110
Project Lead the Way - Engineering II	44	0	44		53	8	61	105
Textiles and Fashion Careers	1	11	12		0	18	18	30
Video Production	11	8	19		10	10	20	39
Video Production (5th Mod)	4	6	10		4	6	10	20
Welding Technology	18	0	18		18	0	18	36
Career Connections/Research and Development	2	9	11		2	13	15	26
<b>Total Enrollment for SY 2015-2016</b>	<b>449</b>	<b>315</b>	<b>764</b>		<b>429</b>	<b>382</b>	<b>811</b>	<b>1575</b>

**G. Finance Academy**

<b>HIGH SCHOOL</b>	<b>NUMBER OF STUDENTS</b>	<b>NUMBER OF SECTIONS</b>
Class at Westminster High	45	2

**H. Teacher Academy**

<b>TEACHING AS A PROFESSION</b>	<b>NUMBER OF STUDENTS</b>	<b>NUMBER OF SECTIONS</b>
Westminster High School*	28	2

<b>FOUNDATIONS OF CURRICULUM &amp; INSTRUCTION</b>	<b>NUMBER OF STUDENTS</b>	<b>NUMBER OF SECTIONS</b>
Westminster High School*	28	2

\*Students from FSK, LHS, MVHS, and SCHS are transported to Westminster High

**I. SAT Prep**

<b>HIGH SCHOOL</b>	<b>NUMBER OF STUDENTS</b>	<b>NUMBER OF SECTIONS</b>
Century	34	1
Francis Scott Key	118	4
<b>TOTALS</b>	<b>152</b>	<b>5</b>

**SPECIAL EDUCATION**  
**STAFF ANALYSIS AND CLASS SIZE REPORTS**

**2015 - 2016**

SPECIAL EDUCATION  
STAFF ANALYSIS AND CLASS SIZE REPORTS  
2015-2016

SCHOOL	LRE A *	LRE B *	LRE C *	LRE D *	LRE F *	LRE G *	LRE S *	LRE W *	LRE Y *	TOTAL STUDENTS	SP. ED. TCHRS	SPEECH THERAPISTS	ASST. F.T.E.	***HRLY ASST.
CSS	0	0	0	6	32	0	7	0	0	45	10.0	1.8	9.0	123.5
CT	34	6	3	0	0	0	11	7	0	61	6.0	3.0	5.6	54
CC	20	8	0	0	0	0	0	5	0	33	2.0	1.0	1.0	7
CSE	29	0	0	0	0	0	0	6	0	35	2.0	1.0	1.5	6.75
EBB	41	8	0	0	0	0	0	6	0	55	3.0	1.6	3.0	37
ELDER	37	4	0	0	0	0	1	5	0	47	3.0	1.0	1.5	24
EWE	27	3	2	0	0	0	1	8	1	42	3.0	.2	1.5	12.5
FREE	26	5	0	0	0	0	0	3	1	35	3.0	1.0	2.0	6.5
FVE	41	4	1	0	0	0	2	7	0	55	3.0	1.0	1.5	30
HAMP	18	9	8	1	0	0	10	1	0	47	7.0	2.0	7.0	104
LSE	34	3	0	0	0	0	0	7	0	44	3.0	1.0	2.5	6
MAN	50	5	0	0	0	0	0	4	1	60	3.0	1.6	2.0	37
MECH	50	2	0	0	0	0	1	11	1	65	3.0	1.0	4.5	18
MAE	45	7	0	0	0	0	0	0	0	52	3.0	1.0	1.5	12
PARRS	15	3	0	0	0	0	1	12	0	31	3.0	1.0	.6	6
PRE	38	3	2	0	0	0	1	9	0	53	3.0	1.4	2.5	12
RME	26	8	22	0	0	0	25	7	0	88	11.0	2.6	9.0	96.5
RUNNY	49	4	1	0	0	0	11	7	0	72	5.0	0	4.5	57.5
SANDY	36	1	0	0	0	0	0	7	1	45	2.0	1.0	2.0	11.5
SGE	34	8	0	0	0	0	0	6	0	48	3.0	1.4	2.0	6
TANEY	42	10	1	0	0	0	3	6	0	62	4.0	1.0	1.5	43.5
WES	36	4	0	0	0	0	1	8	0	49	3.0	1.4	2.0	24
WWE	51	1	0	0	0	0	1	12	0	65	3.0	1.6	2.5	6
WIN	41	11	10	0	0	0	7	8	3	80	11.0	3.0	9.6	136.5
<b>TOTAL</b>	<b>820</b>	<b>117</b>	<b>50</b>	<b>7</b>	<b>32</b>	<b>0</b>	<b>83</b>	<b>152</b>	<b>8</b>	<b>1269</b>	<b>102.0</b>	<b>32.6</b>	<b>80.3</b>	<b>877.75</b>

SPECIAL EDUCATION  
STAFF ANALYSIS AND CLASS SIZE REPORTS  
2015-2016

SCHOOL	LRE A*	LRE B*	LRE C*	LRE D*	LRE F*	LRE G*	LRE S*	LRE W*	LRE Y*	TOTAL STUDENTS	SP. ED. TCHRS	SPEECH THERAPISTS	ASST. F.T.E.	***HRLY ASST.
EAST MDL	76	7	14	0	0	0	0	0	0	97	9.4	0	8.0	44.75
MAM	50	2	2	0	0	0	0	0	0	54	4.0	1.0	4.0	43.5
N WIND	39	2	14	0	0	0	0	0	0	55	6.5	1.2	5.0	56
NCM	47	6	2	0	0	0	0	0	0	55	5.0	.8	5.0	25
NWEST	61	9	1	0	0	0	0	0	0	71	5.0	.8	4.0	24
ORMS	60	6	1	0	0	0	0	0	0	67	4.0	1.0	4.0	24.5
SHILOH	67	5	4	0	0	0	0	0	0	76	5.0	.8	3.6	39
SMS	69	9	1	0	0	0	0	0	0	79	4.0	1.0	4.0	24
WEST	86	21	6	0	0	0	0	0	0	113	7.0	1.0	5.0	48.5
<b>TOTAL</b>	<b>555</b>	<b>67</b>	<b>45</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>667</b>	<b>49.9</b>	<b>7.6</b>	<b>4.6</b>	<b>329.25</b>

SPECIAL EDUCATION  
STAFF ANALYSIS AND CLASS SIZE REPORTS  
2015-2016

SCHOOL	LRE A *	LRE B *	LRE C *	LRE D *	LRE F *	LRE G *	LRE S *	LRE W *	LRE Y *	TOTAL STUDENTS	SP. ED. TCHRS	SPEECH THERAPISTS	ASST. F.T.E.	***HRLY ASST.
CCCT-C											2.0	0	3.8	6
CHS	65	3	5	1	0	0	0	0	0	74	4.0	.4	4.0	19.5
FSKHIGH	88	2	10	0	0	0	0	0	0	100	5.0	0	7.0	32.5
GATEWAY CROSSROADS	24	0	0	0	0	0	0	0	0	24	3.0	0	2.0	6
LIBERTY	59	7	0	0	0	0	0	0	0	66	5.0	.6	4.0	60
MVHS	74	1	7	0	0	0	0	0	0	82	5.0	.6	4.0	54.5
NCHS	50	6	7	0	0	0	0	0	0	63	5.0	0	4.0	64.5
POST-SEC.	1	3	17	0	0	0	0	0	0	21	2.0	0	6.0	36
SCHS	61	10	1	0	0	0	0	0	0	72	5.0	0	4.0	38.5
WHS	89	30	35	0	0	0	0	0	0	154	16.0	0	17.6	74
WMHS	94	4	7	0	0	0	0	0	0	105	7.0	0	5.7	38.25
TOTAL	605	66	89	1	0	0	0	0	0	738	59.0	1.6	62.1	429.75
Nonpublic										Case Manage 75				

CCCT-C are included in Home High School Numbers

**\* LEAST RESTRICTIVE ENVIRONMENTS**

A = Out of General Education < 20% of school day

B = Out of General Education 21% < out < 60% of school day

C = Out of General Education > 60% of school day

D = Homebound > 50% of school day

F = Public Separate Day School > 50% of school day

G = Private Separate Day School > 50 % of school day

S = Separate Class age 3-5 Year Old

W = Attending a Regular Early Childhood Program > 10 hours per week and receiving majority of special education and related services in that setting

Y = Attending a Regular Early Childhood Program < 10 hours per week and receiving majority of special education and related services in that setting

\*\*\*Hours per day

SPECIAL EDUCATION  
STAFF ANALYSIS AND CLASS SIZE REPORTS  
2015-2016

RELATED SERVICE STAFF	F.T.E.	HOURLY/CONTRACTED
ADAPTED PHYSICAL EDUCATION	10.2	
ASSISTIVE TECHNOLOGY ASSISTANTS/TEACHER	3.8	
BEHAVIOR SUPPORT SPECIALIST - AUTISM	2.0	
HEARING RESOURCE	2.0	
HOME SPEECH THERAPY*	7.0	35 hours
INFANT & TODDLER LIAISONS	4.7	
INSTRUCTIONAL/PROGRAM CONSULTANTS	9.0	
SUPERVISORS/COORDINATORS	10.0	
OCCUPATIONAL THERAPIST	9.8	35 hours
CERTIFIED OCCUPATIONAL THERAPY ASSISTANTS	3.6	
PARTNERS FOR SUCCESS/FAMILY SUPPORT NETWORK	1.0	
PHYSICAL THERAPISTS*	5.4	60 hours
PHYSICAL TH. ASSISTANTS	1.0	
PRESCHOOL LIAISONS	3.6	
PRESCHOOL SPEECH THERAPY	4.6	35 hours
SIGN LANGUAGE INTERPRETERS	1.0	
SOCIAL WORKERS	4.0	
SPEECH AND LANGUAGE SERVICES*	41.8	399 hours
VISION RESOURCE*	1.0	70 hours
TOTAL	125.5	599 hours

\* Hourly/Contracted/weekly

# APPENDIX C



## Chapter 71, ADEQUATE PUBLIC FACILITIES AND CONCURRENCY MANAGEMENT

*[HISTORY: Chapter 167 was adopted 03/05/98 by Ord. No. 161 and amended 08/13/02 by Ord. No. 02-12. Comprehensive revisions and recodification adopted 04/20/04 by Ord. No. 04-13.]*

§ 71-1. Purpose.

§ 71-2. Definitions.

§ 71-3. Applicability.

§ 71-4. Building permits.

§ 71-5. Adequacy approval.

§ 71-6. Approval process.

§ 71-7. Residential development database and annual report.

### § 71-1. Purpose.

- A. The purpose of this chapter is to ensure that proposed or planned residential growth proceeds at a rate that will not unduly strain public facilities, including schools, roads, water and sewer facilities, and police, fire, and emergency medical services.
- B. This chapter establishes minimum adequacy standards or thresholds for these facilities and services and mandates that the cumulative impacts of proposed or planned residential growth, within the incorporated municipalities and the County, be considered in testing for adequacy under these standards.
- C. This chapter does not abrogate or supersede any other applicable statutes, ordinances, regulations, or policies.

### § 71-2. Definitions.

*[Amended 02/14/08 by Ord. No. 08-01]*

In this chapter the following terms have the meanings indicated. Any term not defined in this chapter shall have the meaning as defined in any chapter of the Code. Any term not defined in the Code in any chapter shall have its generally accepted meaning.

**ADEQUACY APPROVAL** -- The process by which the adequacy of public facilities and services is determined.

**AVAILABLE THRESHOLD CAPACITY or ATC** -- The amount of capacity available for future development under this chapter determined by balancing the County's ability to pay for infrastructure, schools, and police, fire, and emergency medical services with building permit reservations and phasing of projects. Capacity of a facility is determined by the County or the incorporated municipality, if applicable.

**BUILDING PERMIT** -- As used in this chapter, the term "building permit" includes only projects that create one or more new residential dwelling units or equivalent dwelling units.

**BUILDING PERMIT CAP** -- The number of residential building permits to be issued during a fiscal year in a specific area of the county or county-wide, as authorized by this chapter.

**BUILDING PERMIT RESERVATION** -- The ability to apply for a building permit, as authorized by this chapter.

**COMMISSION** -- The Carroll County Planning and Zoning Commission.

**COMMUNITY INVESTMENT PLAN or CIP** -- The 6-year plan adopted annually by the Board of County Commissioners to provide, expand, and renovate public facilities.

**COUNTY** -- The Board of County Commissioners or its designee.

**DEPARTMENT** -- The Department of Planning or any successor agency designated by the Board of County Commissioners.

**DEVELOPER** -- An individual, partnership, firm, corporation, or unincorporated association that undertakes or participates in the activities covered by this chapter.

**DEVELOPMENT PIPELINE** -- Unrecorded residential development projects for which the County has accepted a concept plan or an incorporated municipality has accepted a plan.

**DWELLING UNIT** -- A single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation.

**EQUIVALENT DWELLING UNIT** -- For multi-unit residential development which does not contain complete dwelling units, the number of dwelling units shall be calculated as follows:

- A. For the first 8 occupants, one dwelling unit; and
- B. For every 3 occupants after the first 8 occupants, one additional dwelling unit. *[Amended 02/14/08 by Ord. No. 08-01]*

**LATE RESPONSE** -- An incident when the primary unit from the first-due fire department responds after the allotted time has elapsed as determined by the Carroll County Volunteer Emergency Services Association or its successor.

**LEVEL OF SERVICE** -- A qualitative measure describing operational conditions on road segments and intersections. Designations of A (free flow) through F (heavily congested) are determined based on criteria established by the Department of Public Works or State Highway Administration, as applicable.

**MAXIMUM DAY DEMAND** -- The annual average day demand for water multiplied by 1.75.

**NO RESPONSE**-- An incident when the primary unit from the first-due fire department fails to respond.

**PHASING** -- The scheduled stages by which a project or sections of lots subject to this chapter may proceed which regulate the progress of the project concurrent with available or adequate public facilities or services, or future availability of a relief facility.

**PROJECTED ANNUAL AVERAGE DAILY FLOW** -- The annual average daily flow for sewerage plus the projected flow for the proposed use.

**RESIDENTIAL DEVELOPMENT** -- All proposed buildings or structures which will contain one or more dwelling units or equivalent dwelling units. This term includes an accessory dwelling, nursing home, continuing care retirement community, and assisted living facility. This term does not include a hospital, hotel, motel, or similar building used for transient overnight stays.

**RETIREMENT HOME** -- A development consisting of one or more buildings designed to meet the needs of, and exclusively for, the residences of persons at least 55 years of age. *[Added 02/14/08 by Ord. No. 08-01]*

**ROADS** -- Applies to public roads that the County or other governmental entity owns or has primary maintenance responsibility.

**SCHEDULED COMPLETION YEAR** -- The year established by the Planning and Zoning Commission for recordation of each section of a project.

**SCHOOLS** -- Applies only to public schools kindergarten through grade 12.

### **§ 71-3. Applicability.**

*[Amended 02/14/08 by Ord. No. 08-01]*

A. This chapter applies to:

- (1) Major residential subdivisions.
- (2) Minor residential subdivisions not in the Agricultural District.
- (3) Site plans for residential development.
- (4) Mobile home parks. *[Amended 02/14/08 by Ord. No. 08-01]*

B. This chapter does not apply to:

- (1) Off-conveyances, including off-conveyed lots and remainders.
- (2) Commercial and industrial projects.
- (3) Minor residential subdivisions in the Agricultural District.
- (4) Government uses of property and improvements.
- (5) Amendments to plats and site plans that do not increase residential density over that already approved.
- (6) Residential subdivisions on property subject to an agricultural land preservation easement. *[Added 05/17/07 by Ord. No. 07-07; amended 02/14/08 by Ord. No. 08-01]*

C. **Modified adequacy testing for certain projects.**

- (1) Provided retirement homes are located within a public water and a public sewer service area, retirement homes do not require adequacy approval as to schools but shall meet all other requirements of this chapter. *[Amended 02/14/08 by Ord. No. 08-01]*

- (2) Final plats and site plans for which the Commission or Department of Planning issued final approval but were not recorded on or before March 5, 1998, shall meet the building permit requirements of this chapter but are not required to obtain adequacy approval in order to be eligible for building permits.

#### **§ 71-4. Building permits.**

---

*[Amended 02/14/08 by Ord. No. 08-01]*

- A. In areas of Carroll County where thresholds are not met, are approaching inadequacy, or a need to finance facilities exists, the County may establish a building permit cap prescribing the number of residential building allocations to be issued in that area. In those areas, the County shall determine the total number of building permit reservations per year and the number of building permit reservations to be allocated per subdivision. Building permit reservations are nontransferable from one lot to another. The County may reserve a certain number of the building permits for projects not subject to this chapter.
- B. The County intends that the number of residential development building permit approvals issued in the county shall not exceed an average of 6,000 during any 6-year period. For purposes of counting the 6,000 permits, all building permits issued county-wide, including those issued in municipalities and those issued for projects that are not subject to this chapter, shall be included. In order to achieve this goal, the County may establish a building permit cap prescribing the number of residential building permits to be issued in Carroll County for projects listed in § 71-3A.
- C. The Department, in making recommendations to the Commission regarding the adequacy of public facilities and services for projects subject to this chapter, shall consider the cumulative impacts of the development pipeline in both the County and in the incorporated municipalities. In determining the adequacy of facilities and services, the Commission shall consider the impact of the project and the cumulative impact of the development pipeline in both the County and in the incorporated municipalities.
- D. Except as otherwise provided in subsections A or B above, building permits that are subject to this chapter shall be issued on a first-come-first-served basis.
- E. **Building permit limit.** *[Amended 02/14/08 by Ord. No. 08-01]*
- (1) Except as provided in paragraph (2), the County shall not issue more than 25 building permits per subdivision or 25 residential dwelling units or equivalent dwelling units, as applicable for the project, per fiscal year. The building permits are nontransferable from one lot to another and shall not exceed 25 per subdivision regardless of multiple or successive ownership.
  - (2) For multi-unit residential site plans, the County shall not issue a building permit or permits for more than 50 residential dwelling units or equivalent dwelling units, as applicable for the project, per fiscal year.
  - (3) A developer may not circumvent the provisions of this chapter by submitting piecemeal applications for approvals for any parcel of land subdivided after March 5, 1998.
  - (4) This subsection is in addition to and not in lieu of any other limit imposed by law, regulation, or public works agreement.
- F. Nothing in this chapter shall be construed to limit the number of building permits the County will issue for projects within the boundaries of incorporated municipalities.

#### **§ 71-5. Adequacy approval.**

---

*[Amended 02/14/08 by Ord. No. 08-01]*

- A. ATC is required for all years in the current 6-year CIP.
- B. No project may be approved by the Commission if a public facility or service is inadequate or projected to be inadequate during the current CIP, unless a relief facility is planned to address the inadequacy or the developer provides mitigation acceptable to the County. No residential plat may be recorded or final residential site plan approved until a relief facility planned to address the inadequacy in the current CIP has construction underway and completion is anticipated within 6 months or the developer provides mitigation acceptable to the County. *[Amended 02/14/08 by Ord. No. 08-01]*
- C. For projects that received preliminary approval by the Commission after March 5, 1998, and prior to April 22, 2004, the developer shall submit the project to the Commission for issuance of a recordation schedule and building permit reservations. For projects that received preliminary approval by the Commission prior to March 5, 1998, the project shall be tested for adequacy when final plan approval is sought pursuant to § 71-6E.

**D. Threshold requirements.**

**(1) Adequacy.** *[Amended 02/14/08 by Ord. No. 08-01]*

- (a) Schools. An elementary or high school serving a proposed project is adequate, for the purposes of this chapter, when projected enrollment equals or is less than 109% of the state-rated capacity. A middle school serving a proposed project is adequate, for the purposes of this chapter, when projected enrollment equals or is less than 109% of the functional capacity.
- (b) Roads. Projected level of service for road segments and intersections within the traffic impact study area for the proposed project is adequate if rated Level of Service C or better, according to the Department of Public Works or by the State of Maryland, as applicable.
- (c) Fire and emergency medical services. Services are adequate if:
  - [1] Projected total number of late and no responses is less than 15%, and the total number of no responses is less than 4% measured on a quarterly basis;
  - [2] *[Amended 02/14/08 by Ord. No. 08-01]* Using an average over the previous 24 months, response time is 8 minutes or less from time of dispatch to on-scene arrival with adequate apparatus and personnel; and
  - [3] All bridges and roads for the most direct route or acceptable secondary route to the project site are adequate to support fire and emergency response apparatus.
- (d) Police services. Services are adequate if the projected ratio of sworn law enforcement officers to population is 1.3:1,000. The ratio shall be calculated by counting all sworn officers with law enforcement responsibility in an incorporated municipality or within the county and by counting the total population within the incorporated municipalities and within the unincorporated county.
- (e) Water and sewer services. For water services, the facility is adequate if the maximum day demand is less than 85% of the total system production capacity. For sewer services, the facility is adequate if the projected annual average daily flow is less than 85% of the wastewater treatment facility permitted capacity. *[Amended 02/14/08 by Ord. No. 08-01]*

**(2) Approaching inadequacy.** *[Amended 02/14/08 by Ord. No. 08-01]*

- (a) Schools. An elementary school serving a proposed project is approaching inadequate, for the purposes of this chapter, when projected enrollment is 110% to 119% of the state-rated capacity. A middle school serving a proposed project is approaching inadequate, for the purposes of this chapter, when projected enrollment is 110% to 119% of the functional capacity. A high school serving a proposed project is approaching inadequate, for the purposes of this chapter, when projected enrollment is 110% to 119% of the state-rated capacity.
- (b) Roads. Projected level of service for road segments and intersections within the traffic impact study area for the proposed project is approaching inadequate if rated Level of Service D, according to the Department of Public Works or by the State of Maryland, as applicable.
- (c) Fire and emergency medical services. Services are approaching inadequate if:
  - [1] either the projected total number of late and no responses exceeds 15%, or the total number of no responses exceeds 4% measured on a quarterly basis, but not both; or *[Added 02/14/08 by Ord. No. 08-01]*
  - [2] using an average over the previous 24 months, response time is between 8 and 10 minutes from time of dispatch to on-scene arrival with adequate apparatus and personnel. *[Amended 02/14/08 by Ord. No. 08-01]*
- (d) Police services. Services are approaching inadequate if the projected ratio of sworn law enforcement officers to population is between 1.2-1.3:1,000. The ratio shall be calculated in accordance with § 71-5D(1)(d).
- (e) Water and sewer services. For water services, the facility is approaching inadequate if the projected maximum day demand is equal to or greater than 85% but less than 95% of the total system production capacity. For sewer services, the facility is approaching inadequate if the projected annual average daily flow is greater than or equal to 85% but less than 95% of the wastewater treatment facility permitted capacity. *[Amended 02/14/08 by Ord. No. 08-01]*

**(3) Inadequacy.** *[Amended 02/14/08 by Ord. No. 08-01]*

- (a) Schools. An elementary school serving a proposed project is inadequate, for the purposes of this chapter, when projected enrollment is equal to or greater than 120% of the state-rated capacity. A middle school serving a proposed project is inadequate, for the purposes of this

chapter, when projected enrollment is equal to or greater than 120% of the functional capacity. A high school serving a proposed project is inadequate, for the purposes of this chapter, when projected enrollment is equal to or greater than 20% of the state-rated capacity. *[Amended 02/14/08 by Ord. No. 08-01]*

- (b) Roads. Projected level of service for road segments and intersections within the traffic impact study area for the proposed project is E or F, according to the Department of Public Works or by the State of Maryland, as applicable.
  - (c) Fire and emergency medical services. Services are inadequate if:
    - [1] Projected total number of late and no responses exceeds 15%, and the total number of no responses exceeds 4% measured on a quarterly basis;
    - [2] *[Amended 02/14/08 by Ord. No. 08-01]* Using an average over the previous 24 months, response time exceeds 10 minutes from time of dispatch to on-scene arrival with adequate apparatus and personnel or
    - [3] A bridge or road is inadequate to support fire and emergency response apparatus for the most direct route and a bridge or road is inadequate to support fire and emergency response apparatus for the acceptable secondary route to the project site.
  - (d) Police services. Services are inadequate if the projected ratio of sworn law enforcement officers to population is anything less than 1.2:1,000. The ratio shall be calculated in accordance with § 71-5D(1)(d).
  - (e) Water and sewer services. For water services, the facility is inadequate if the projected maximum day demand is equal to or greater than 95% of the total system production capacity. For sewer services, the facility is inadequate if the projected annual average daily flow is greater than or equal to 95% of the wastewater treatment facility permitted capacity. *[Amended 02/14/08 by Ord. No. 08-01]*
- (4) **Building permit requirements.** The availability of building permit reservations as limited by a building permit cap as adopted pursuant to § 71-4 of this chapter.

## **§ 71-6. Approval process.**

*[Amended 02/14/08 by Ord. No. 08-01]*

- A. No development project subject to this chapter may be approved by the Commission until the project has satisfied the requirements of this chapter.
- B. Any permit or approval obtained in violation of this chapter is void.
- C. **Concept process.**
  - (1) A concept concurrency application for a residential subdivision or other project subject to this chapter shall be submitted when a concept plan, pursuant to Chapter 103, is submitted to the Department. The application shall contain:
    - (a) The number of units, type of units, and gross density of the proposed project;
    - (b) The location of the proposed project;
    - (c) Identification of the public facilities impacted by the proposed project;
    - (d) The tax account identification number; and
    - (e) Any other relevant information required by the County.
  - (2) Upon acceptance by the County of a completed concept concurrency application, the Department shall review the proposed project for ATC and compliance with this chapter. The Department, as staff to the Commission, shall issue a tentative determination as to the adequacy of public facilities. The tentative determination does not constitute any guarantee of adequacy of public facilities and is not binding upon the Commission. *[Amended 02/14/08 by Ord. No. 08-01]*
  - (3) The tentative determination shall expire 6 months after issuance unless a preliminary plan is submitted and accepted for review in accordance with Chapter 103.
- D. **Preliminary process.**
  - (1) A preliminary concurrency application for a residential subdivision or other project subject to this chapter shall be submitted when a preliminary plan, pursuant to Chapter 103, is submitted to the Department. The application shall contain:
    - (a) The number of units, type of units, and gross density of the proposed project;

- (b) The location of the proposed project;
  - (c) Identification of the public facilities impacted by the proposed project;
  - (d) A traffic impact study for roads and intersections completed in accordance with the traffic impact study guidelines contained in the Department of Public Works Design Manual, Volume I, Roads and Storm Drains, as revised or amended;
  - (e) The tax account identification number; and
  - (f) Any other relevant information required by the County.
- (2) Distribution and review.
- (a) After all review agency comments have been addressed and the Department has determined that the preliminary plan may be presented to the Commission, the Department shall distribute the ATC form and preliminary plan to the appropriate agencies for review and comment.
  - (b) Upon receipt of all applicable agency comments and ATC forms, the Department shall review the proposed project for ATC and compliance with this chapter.
  - (c) If no response is received from any applicable agency within 30 days of the date the Department distributes the ATC form, the ATC shall be presumed adequate for the particular facility or service for which no response was received.
  - (d) No preliminary plan may be presented to the Commission until the written report is prepared pursuant to paragraph (3).
  - (e) The preliminary plan may not be withdrawn from the Commission agenda by the developer after the distribution of the ATC form. The preliminary plan shall be presented to the Commission for adequacy approval.
- (3) The Department shall forward a written report to the Commission including a recommendation as to whether adequacy approval should be granted and the following information:
- (a) The number and type of units the proposed project would generate;
  - (b) The specific public facilities impacted by the proposed project;
  - (c) The extent of impact of the proposed project;
  - (d) The availability of ATC to serve the proposed project during the scheduled completion year and all remaining years in the existing CIP;
  - (e) The demand on existing and planned public facilities and services from all existing and approved development in the proposed project's applicable service area or district, including lots or projects not subject to this chapter, as follows:
    - [1] Existing lots and subdivisions, including residential units which have been approved by the Commission, in the impact area; and
    - [2] All residential building permits proposed or projected in the impact area for the 6-year CIP period including units which are not subject to this chapter, such as off-conveyances, minor subdivisions in the Agricultural District, and residential projects located in incorporated municipalities.
- (f) If any existing facilities or services are inadequate, whether any facilities or services are planned in the CIP or budget that would alleviate the inadequacy, including the year in which the facilities or services are projected to be completed and operational and the extent to which they would alleviate the inadequacy.
- (4) Planning and Zoning Commission adequacy determination.
- (a) Denial. If a public facility or service is inadequate or projected to be inadequate during the current CIP at the preliminary plan stage and no relief facility is planned in the 6-year CIP to address the inadequacy or no mitigation is accepted by the County pursuant to § 71-5B, the plan shall be denied by the Commission. At the request of the developer, the plan may be placed in a queue and re-tested on an annual basis.
  - (b) Conditional approval. If a public facility or service is inadequate and a relief facility is planned in the 6-year CIP to address the inadequacy or mitigation is accepted by the County pursuant to § 71-5B, or a public facility or service is approaching inadequate during the current CIP, the Commission may conditionally approve the plan to proceed to the final plan stage and issue a tentative recordation schedule and tentative building permit reservations, subject to modification at the final plan stage.

- (c) Approval. If all public facilities and services are adequate during the current CIP, the Commission may approve the plan to proceed to the final plan stage and issue a recordation schedule and building permit reservations, subject to a building permit cap adopted by the Board of County Commissioners in effect at the time of application for building permits.
- (5) For projects released from a queue, the project will be re-tested as to the facility or service which was inadequate or projected to be inadequate, in accordance with this subsection D.

**E. Final process.**

- (1) A final concurrency application for a residential subdivision or other project subject to this chapter shall be submitted when a final plat or site plan, pursuant to Chapter 103, is submitted to the Department. The application shall contain:
  - (a) The number of units, type of units, and gross density of the proposed project;
  - (b) The location of the proposed project;
  - (c) Identification of the public facilities impacted by the proposed project;
  - (d) The tax account identification number;
  - (e) For a site plan, a traffic impact study for roads and intersections completed in accordance with the traffic impact study guidelines contained in the Department of Public Works Design Manual, Volume I, Roads and Storm Drains, as revised or amended; and
  - (f) Any other relevant information required by the County.
- (2) Distribution and review.
  - (a) After all review agency comments have been addressed and the Department has determined that the final plan may be presented to the Commission, the Department shall distribute the ATC form and final plan to the appropriate agencies for review and comment.
  - (b) Upon receipt of all applicable agency comments and ATC forms, the Department shall review the proposed project for ATC and compliance with this chapter.
  - (c) If no response is received from any applicable agency within 30 days of the date the Department distributes the ATC form, the ATC shall be presumed adequate for the particular facility or service for which no response was received.
  - (d) No final plan may be presented to the Commission until the written report is prepared pursuant to paragraph (3).
  - (e) The final plan may not be withdrawn from the Commission agenda by the developer after the distribution of the ATC form. The final plan shall be presented to the Commission for adequacy approval.
- (3) The Department shall forward a written report to the Commission including a recommendation as to whether adequacy approval should be granted and the following information:
  - (a) The number and type of units the proposed project would generate;
  - (b) The specific public facilities impacted by the proposed project;
  - (c) The extent of impact of the proposed project;
  - (d) The availability of ATC to serve the proposed project during the scheduled completion year and all remaining years in the existing CIP;
  - (e) The demand on existing and planned public facilities and services from all existing and approved development in the proposed project's applicable service area or district, including lots or projects not subject to this chapter, as follows:
    - [1] Existing lots and subdivisions, including residential units which have been approved by the Commission, in the impact area;
    - [2] All residential building permits proposed or projected in the impact area for the 6-year CIP period including units which are not subject to this chapter, such as off-conveyances, minor subdivisions in the Agricultural District, and residential projects in incorporated municipalities; and
  - (f) If any existing facilities or services are inadequate, whether any facilities or services are planned in the CIP or budget that would alleviate the inadequacy, including the year in which the facilities or services are projected to be completed and operational and the extent to which they would alleviate the inadequacy.

(4) Planning and Zoning Commission adequacy determination. *[Amended 02/14/08 by Ord. No. 08-01]*

- (a) Denial. If a public facility or service is inadequate or projected to be inadequate during the current CIP at the final plan stage and no relief facility is planned in the 6-year CIP to address the inadequacy or no mitigation is accepted by the County pursuant to § 71-5B, the plan shall be denied by the Commission. At the developer's request, the plan may be placed in a queue and re-tested on an annual basis.
  - (b) Conditional approval. If a public facility or service is inadequate and a relief facility is planned in the 6-year CIP to address the inadequacy or mitigation is accepted by the County pursuant to § 71-5B or a public facility or service is approaching inadequate, the Commission may approve the plan subject to a phasing plan for recordation or may defer the project and place the plan in a queue to be re-tested on an annual basis. *[Amended 02/14/08 by Ord. No. 08-01]*
  - (c) Approval. If adequacy was not determined by the Commission at the preliminary plan stage and the Commission determines that all public facilities and services are adequate, the Commission may approve the plan and issue a recordation schedule and building permit reservations.
  - (d) For projects that received a conditional approval and tentative recordation schedule at the preliminary plan stage, the Commission shall review the facility or service which was inadequate or approaching inadequate at the preliminary plan stage and may modify the recordation schedule and building permit reservations or place the project in a queue, at the discretion of the Commission.
  - (e) For projects that received a recordation schedule and building permit reservations at the preliminary plan stage, the Commission shall inform the developer whether any existing or proposed building permit cap would be applicable to the project.
- F. The Department shall maintain an inventory of the disposition and current status of all pending projects, including those not subject to this chapter, and any queue.
- G. The County may assess fees to offset the costs of administering this chapter.
- H. In the event a project is placed in a queue, the Director of Planning may extend the sunset provision in accordance with § 103-16G. *[Added 02/14/08 by Ord. No. 08-01]*

**§ 71-7. Residential development database and annual report.**

---

*[Amended 02/14/08 by Ord. No. 08-01]*

- A. The Department shall develop and maintain a complete residential development database for use by the County, incorporated municipalities, and the public. The database shall contain the following information:
- (1) For each school district, fire district, community planning area, incorporated municipality, and other designated geographical boundary, the number of projects, lots, and residential units subject to this chapter and the number of projects, lots, and residential units not subject to this chapter.
  - (2) For each school district, community planning area, and other designated geographical boundary, a calculation of the ATC, for both residential and commercial/industrial land uses, for the facilities and services covered by this chapter, including the additional capacity of future public facilities in the CIP for which funds may be committed within the next 6 years.
  - (3) A list of County and State road segments and intersections with a level of service of D, E, or F.
  - (4) The current population and projected population growth.
- B. The Department shall prepare an annual concurrency management report for use by the Commission and the County in reviewing the CIP and in administering this chapter. In conjunction with its recommendations on the CIP, the Commission shall forward its comments on the report to the Board of County Commissioners with recommendations for building permit caps designated by area or county-wide; capital improvements needed to serve residential development; and amendments to this chapter. The concurrency management report shall contain:
- (1) A summary of all subdivisions and site plans approved by the Commission, approved lots, units, and projects subject to this chapter, building permits issued; *[Amended 02/14/08 by Ord. No. 08-01]*
  - (2) A summary of all units, lots, and projects not subject to this chapter, including an annual average for the last 4 fiscal years of all residential permits not subject to this chapter, including off-conveyances, minor subdivisions in the Agricultural District, pre-existing lots, and residential projects located in incorporated municipalities; *[Amended 02/14/08 by Ord. No. 08-01]*

- (3) An examination of growth trends and projections in the county, including building permits issued during the preceding 6 fiscal years; *[Amended 02/14/08 by Ord. No. 08-01]*
  - (4) Facility capacity information for each public facility and service listed in this chapter, including projections of capacity for each of the 6 years in the CIP;
  - (5) For each school, functional capacity, state-rated capacity, and any other relevant information; *[Amended 02/14/08 by Ord. No. 08-01]*
  - (6) Student population projections by the Board of Education and by the County;
  - (7) An evaluation of fire and emergency medical services with respect to late and no responses, response time, and adequacy of roads and bridges for each volunteer fire department;
  - (8) For each threshold adopted by the County, a calculation of remaining capacity;
  - (9) An inventory of timing of relief facilities in the CIP to mitigate current and future inadequacies and a staff recommendation for future capital improvements and building permit caps to achieve concurrency;
  - (10) Fiscal information including revenue estimates from new development, impact fee and other fee projections, and operating budget increases related to the facilities and services covered by this chapter;
  - (11) A cumulative total of all approvals and denials under this chapter, including a list of projects placed in a queue for an inadequate or approaching inadequate facility or service; *[Amended 02/14/08 by Ord. No. 08-01]*
  - (12) Proposed changes to the boundaries of impact areas for any public facility;
  - (13) Proposed changes to existing or adopted threshold standards;
  - (14) An evaluation of the feasibility of a plan for increasing the adequacy threshold for police services to a projected ratio of 1.5 sworn law enforcement officers to 1,000 total County population;
  - (15) Proposed changes in concurrency analysis methodologies; and
  - (16) Recommended amendments to this chapter including, but not limited to, changes to the thresholds imposed by this chapter, and changes to the concurrency management or development review programs.
- C. When a facility or service approaches inadequacy as determined by the Department or government agency responsible for funding the facility or service, the Department shall recommend changes to the ATC and adoption of a building permit cap in accordance with this chapter to the Board of County Commissioners.