



Subdivision Staging Policy: FY15 Annual School Test Results



Mary Dolan, Chief, Functional Planning & Policy, Mary.Dolan@montgomeryplanning.org, 301-495-4552



Pamela Dunn, Planner/Coordinator, Pamela.Dunn@montgomeryplanning.org, 301-650-5649

Completed: 05-22-14

Description

Every spring, following the adoption of the Capital Budget, the Planning Board adopts the annual school test for the upcoming fiscal year. The annual school test determines if residential subdivision in any school cluster should be subject to either a school facility payment or a moratorium, based on the estimated utilization of school facilities.

Staff Recommendation

Approve the FY15 Annual School Test results effective July 1, 2014.

Summary

The Montgomery County Subdivision Staging Policy (SSP) continues to monitor school capacity by means of an annual test of school capacity. The school test compares projected enrollment five years into the future with projected capacity for each of the 25 high school clusters at the elementary, middle and high school levels. The school test results are finalized in May of each year upon the Council's adoption of the Capital Budget and Amendments to the Capital Improvements Program. If projected enrollment at any level exceeds 105 percent of program capacity, new residential subdivisions in the affected cluster will be required to make a school facility payment. In addition, if projected enrollment at any level exceeds 120 percent of program capacity, new residential subdivisions in the affected cluster will be under moratorium.

The annual school test analysis is prepared by Montgomery County Public Schools (MCPS) staff. Planning staff has reviewed the results of the MCPS annual school test analysis; below are the results.

FY2015 Annual School Test

For FY2015, the total number of clusters exceeding 105 percent program capacity is sixteen, five of which exceed at more than one school level. Residential development in these sixteen clusters will be subject to a school facility payment. For those clusters inadequate at more than

one school level, a school facility payment will be required for each inadequate school level. No school cluster exceeds the 120 percent program capacity ceiling. Therefore, residential subdivisions will not be under moratorium in any school cluster.

According to the analysis, a school facility payment will be required in the following clusters at the elementary school level: Blair, Clarksburg, Gaithersburg, Magruder, Northwood, Paint Branch, Quince Orchard, and Seneca Valley. At the middle school level, residential development in the Blair, Kennedy, Northwood, Rockville, Wheaton, and Whitman clusters will require a school facility payment. And, at the high school level, a school facility payment will be required in the Clarksburg, Einstein, Walter Johnson, Richard Montgomery, Northwest, Northwood, Quince Orchard, and Whitman clusters. A school facility payment will be levied at each school level found to be inadequate.

These results represent a slight improvement over the school test for FY2014. During FY2014 eighteen school clusters required the payment of a school facility fee with seven school clusters exceeding capacity at more than one school level.

In the 2007-2009 Growth Policy the administration of a school capacity ceiling, commonly referred to as the School Queue, was introduced. If a subdivision would cause a cluster to exceed the 120% threshold at any level, only the number of dwelling units that would reach the threshold would be allowed. Similarly, if a subdivision would cause a cluster to exceed the 105% threshold at any level, then the number of dwelling units which would exceed the threshold would make a School Facilities Payment to proceed to approval.

It is worth noting that four clusters have a utilization rate greater than 103% as of the July 1, 2014 effective date: two at the elementary school level (Blake 104.3%, and Einstein 103.7%) and two at the high school level (Blair 103.9%, and Churchill 103.9%). This means that an application for residential subdivision in one of these clusters may tip the utilization rate above 105% and require a school facility payment at the applicable level for those units that exceed 105%. Following this approval, the cluster will require a school facility payment at the affected school level for all new residential subdivisions. The Wheaton school cluster is at 119.2% utilization and approval of residential development could potentially put this cluster into moratorium within fiscal year 2015.

Planning staff recommends that the Planning Board accept the results of the school test as calculated by Montgomery County Public Schools staff, for FY2015. These findings are attached on pages 6 (summary table), 7 and 8 (detailed table by cluster for each school level). Once accepted by the Planning Board, these tables (along with the resolution adopted by the Council in November 2012) will constitute Montgomery County's Subdivision Staging Policy as it relates to school capacity.

Below is a summary of the methodology used by MCPS staff to calculate the projected enrollment and capacity figures stated in the annual school test.

Calculation of Enrollment and Capacity

Adequate school capacity is a calculation that compares projected enrollment numbers with existing and planned facility capacity, often referred to as school utilization. The current SSP school test uses a definition of facility capacity that is based on MCPS program capacity. Program capacity is the number of students planned per classroom, per school level based on curriculum standards.

Projected Capacity

Projected capacity figures used in the annual school test are based on existing capacity and planned capacity with planned capacity measured as capacity funded in the 6-year Capital Improvements Program.

Projected enrollment figures are based on several factors. The following explanation of these factors has been provided by the Division of Long Range Planning, Montgomery County Public Schools:

Projected Enrollment

MCPS staff calculates projected enrollment using a variety of tools. First, enrollment numbers are generated by using actual birth rates to establish a base kindergarten cohort for the year and then projections of enrollment through 12th grade are made using a “cohort survivorship model.” The forecast is adjusted for in/out migration; factors that apply to specific schools and growth from newly approved but not yet built development. Students from new development are added to the forecast when it appears that the development will be online during the six-year forecast period. The number of students generated from new development is calculated by housing unit type. Enrollment forecasts are developed every year in September and revised in March.

The factors that affect MCPS enrollment are highly interrelated and, in some years, difficult to predict. Enrollment change is the result of the interaction of three factors; births, aging of the school-age population, and migration. Births and the aging of children constitute what may be seen as “natural increase” in enrollment (comparable to natural increase in the total population). Migration is driven by economic forces tied to job and housing opportunities and is the more variable element of enrollment change.

Births

In forecasting school enrollments, trends in county births are compared to subsequent enrollment in kindergarten. In recent years, kindergarten enrollment in any given year has represented about 75 to 80 percent of resident births five years earlier. This is a net figure since some children not born in the county move in as preschoolers, while other children born in the county move out before entering kindergarten.

Since 2007 there has been a marked increase in school system enrollment—especially at the elementary school level. One factor in this growth was the State of Maryland mandate that all public schools provide a full-day kindergarten program.

Aging

Once students are enrolled in kindergarten, forecasting enrollment by the “aging” of students from kindergarten through Grade 12 is the most straightforward component of the enrollment forecast. Past records of the rate of change between grades show that, at most grade levels, enrollment can be accurately forecast by simply moving grade cohorts forward one grade for each year of the forecast.

The consistency of grade cohort movements is most dependent on the economic climate. During a period of rapid job growth and housing construction migration to the system will increase and the grade cohort change from one level to the next will increase. During more stable periods fewer students will migrate into the system from outside of MCPS.

Migration

Migration, defined as the movement of students into and out of the school system, is the least predictable component of enrollment change.

Over the past several years Montgomery County has experienced a net in-migration of students each year. In addition to the trend of increases in MCPS enrollment attributable to in-migration into the county, a pronounced increase in enrollment is also attributed to students entering MCPS from nonpublic schools. This trend is driven by the reputation of the public schools and, more recently, to the impacts of the recession on households’ ability to afford nonpublic schools.

Housing

The turnover of existing homes and apartments, and the occupancy of new housing, facilitate the migration of households to the county and children to the school system. There are many more existing homes available for resale, and rental units for lease, than there are *new* residential units coming on the market in any given year. Therefore, turnover of existing residential units has a much greater impact on enrollment change than new home sales and new apartment rentals.

Whatever the level of activity in the housing market, MCPS factors it into enrollment forecasts. In the case of new housing, MCPS tracks subdivision applications and incorporates them in school enrollment forecasts once they have received preliminary plan approval. Once a subdivision plan has approval, developers and builders are contacted regularly to determine build schedules and estimated completion dates. School enrollment forecasts are adjusted annually to account for changing home construction schedules. Factors are applied to the different housing types to estimate the

number of school-age children that will be generated by a development. Until now, the official source of these “yield” factors, or student generation rates, has been the Montgomery County Planning Department’s Census Update Survey. Planning Staff is requesting that the Planning Board approve a new method for calculating student generation rates for development approvals in conjunction with the approval of the FY2015 Annual School Test. A separate staff report outlines this proposal.

Forecast Accuracy

MCPS enrollment forecasts, by taking into account the various factors affecting enrollment, have a high degree of accuracy. The total county one-year forecast—the forecast that drives staffing allocations and relocatable placements—is typically within one percent of actual enrollment. The six-year forecast—the last year projected for the CIP planning period—is typically within one to two percent of what was forecast six years prior. More challenging are forecasts for individual school service areas. A forecasting maxim holds that accuracy is greatest the larger the area being projected and the larger the population in the area. At the small level of individual schools pronounced variations in enrollment can occur, resulting in a larger margin of forecast error.

Summary

The factors that affect MCPS enrollment change shows them to be highly interrelated and, in some years, difficult to predict. The unexpected consequence of the recession was an unprecedented surge in enrollment that began in 2008. This sudden change in enrollment trends was particularly pronounced in elementary schools in the lower half of the county (the Bethesda-Chevy Chase, Walter Johnson, and Richard Montgomery clusters.) All of these clusters serve established communities with little new housing construction. Adjusting to these rapid increases in enrollment will take several years as school capacity projects are planned and funds requested through the capital improvements program (CIP.)

Subdivision Staging Policy

Results of School Test for FY 2015

Reflects County Council Approved FY 2015 Capital Budget and FY 2015–2020 Capital Improvements Program (CIP)
Effective July 1, 2014

School Test Level	Description	Cluster Outcomes by Level		
		Elementary Inadequate	Middle Inadequate	High Inadequate
<u>Clusters over 105% utilization</u> School facility payment required in inadequate clusters to proceed.	5-year test Effective July 1, 2014 Test year 2019-20	Blair (107.8%) Clarksburg (115.2%) Gaithersburg (114.3%) Magruder (106.9%) Northwood (106.7%) Paint Branch (114.2%) Quince Orchard (112.3%) Seneca Valley (113.2%)	Blair (113.5%) Kennedy (107.0%) Northwood (112.8%) Rockville (110.7%) Wheaton (119.2%) Whitman (109.7%)	Clarksburg (116.0%) Einstein (108.6%) Walter Johnson (112.6%) Richard Montgomery (108.1%) Northwest (108.4%) Northwood (111.9%) Quince Orchard (108.3%) Whitman (112.7%)
<u>Clusters over 120% utilization</u> Moratorium required in clusters that are inadequate.	5-year test Effective July 1, 2014 Test year 2019-20	None	None	None

Subdivision Staging Policy FY 2015 School Test: Cluster Utilizations in 2019–2020

Reflects County Council Approved FY 2015 Capital Budget and FY 2015–2020 Capital Improvements Program (CIP)

Effective July 1, 2014

Elementary School Test: Percent Utilization >105% School Facility Payment and >120% Moratorium

Cluster Area	Projected August 2019 Enrollment	100% MCPS Program Capacity With BOE Requested FY15–20 CIP	Cluster Percent Utilization in 2019	School Test Result Capacity is:	Cluster is?
Bethesda-Chevy Chase	3,449	3,813	90.5%	Adequate	Open
Montgomery Blair	4,471	4,148	107.8%	Inadequate	School Payment
James Hubert Blake	2,296	2,201	104.3%	Adequate	Open
Winston Churchill	2,645	2,928	90.3%	Adequate	Open
Clarksburg	4,461	3,872	115.2%	Inadequate	School Payment
Damascus	1,847	2,133	86.6%	Adequate	Open
Albert Einstein	3,074	2,963	103.7%	Adequate	Open
Gaithersburg	4,385	3,838	114.3%	Inadequate	School Payment
Walter Johnson	4,141	4,353	95.1%	Adequate	Open
John F. Kennedy	2,875	3,046	94.4%	Adequate	Open
Col. Zadok Magruder	2,768	2,590	106.9%	Inadequate	School Payment
Richard Montgomery	2,762	2,882	95.8%	Adequate	Open
Northwest	4,234	4,519	93.7%	Adequate	Open
Northwood	3,666	3,435	106.7%	Inadequate	School Payment
Paint Branch	2,561	2,242	114.2%	Inadequate	School Payment
Poolesville	560	758	73.9%	Adequate	Open
Quince Orchard	3,135	2,791	112.3%	Inadequate	School Payment
Rockville	2,639	2,580	102.3%	Adequate	Open
Seneca Valley	2,471	2,183	113.2%	Inadequate	School Payment
Sherwood	1,912	2,422	78.9%	Adequate	Open
Springbrook	3,266	3,178	102.8%	Adequate	Open
Watkins Mill	2,714	2,790	97.3%	Adequate	Open
Wheaton	3,212	3,631	88.5%	Adequate	Open
Walt Whitman	2,605	2,561	101.7%	Adequate	Open
Thomas S. Wootton	2,710	3,222	84.1%	Adequate	Open

Middle School Test: Percent Utilization >105% School Facility Payment and >120% Moratorium

Cluster Area	Projected August 2019 Enrollment	100% MCPS Program Capacity With BOE Requested FY15–20 CIP	Cluster Percent Utilization in 2019	School Test Result Capacity is:	Cluster is?
Bethesda-Chevy Chase	1,694	2,041	83.0%	Adequate	Open
Montgomery Blair	2,672	2,354	113.5%	Inadequate	School Payment
James Hubert Blake	1,263	1,354	93.3%	Adequate	Open
Winston Churchill	1,439	1,716	83.9%	Adequate	Open
Clarksburg	2,113	2,380	88.8%	Adequate	Open
Damascus	785	791	99.2%	Adequate	Open
Albert Einstein	1,304	1,434	90.9%	Adequate	Open
Gaithersburg	1,872	1,866	100.3%	Adequate	Open
Walter Johnson	2,126	2,188	97.2%	Adequate	Open
John F. Kennedy	1,658	1,550	107.0%	Inadequate	School Payment
Col. Zadok Magruder	1,277	1,602	79.7%	Adequate	Open
Richard Montgomery	1,341	1,445	92.8%	Adequate	Open
Northwest	2,258	2,225	101.5%	Adequate	Open
Northwood	1,760	1,560	112.8%	Inadequate	School Payment
Paint Branch	1,380	1,384	99.7%	Adequate	Open
Poolesville	288	468	61.5%	Adequate	Open
Quince Orchard	1,496	1,695	88.3%	Adequate	Open
Rockville	1,064	961	110.7%	Inadequate	School Payment
Seneca Valley	1,271	1,391	91.4%	Adequate	Open
Sherwood	1,098	1,456	75.4%	Adequate	Open
Springbrook	1,288	1,250	103.0%	Adequate	Open
Watkins Mill	1,298	1,379	94.1%	Adequate	Open
Wheaton	1,773	1,488	119.2%	Inadequate	School Payment
Walt Whitman	1,455	1,326	109.7%	Inadequate	School Payment
Thomas S. Wootton	1,455	1,640	88.7%	Adequate	Open

High School Test: Percent Utilization >105% School Facility Payment and >120% Moratorium

Cluster Area	Projected August 2019 Enrollment	100% MCPS Program Capacity With BOE Requested FY15–20 CIP	Cluster Percent Utilization in 2019	School Test Result Capacity is:	Cluster is?
Bethesda-Chevy Chase*	2,286	2,399	95.3%	Adequate	Open
Montgomery Blair	3,053	2,938	103.9%	Adequate	Open
James Hubert Blake	1,749	1,743	100.3%	Adequate	Open
Winston Churchill	2,091	2,013	103.9%	Adequate	Open
Clarksburg	2,297	1,980	116.0%	Inadequate	School Payment
Damascus	1,433	1,551	92.4%	Adequate	Open
Albert Einstein	1,760	1,621	108.6%	Inadequate	School Payment
Gaithersburg	2,240	2,317	96.7%	Adequate	Open
Walter Johnson	2,630	2,336	112.6%	Inadequate	School Payment
John F. Kennedy	1,801	1,847	97.5%	Adequate	Open
Col. Zadok Magruder	1,663	1,995	83.4%	Adequate	Open
Richard Montgomery	2,416	2,236	108.1%	Inadequate	School Payment
Northwest	2,430	2,241	108.4%	Inadequate	School Payment
Northwood	1,762	1,575	111.9%	Inadequate	School Payment
Paint Branch	2,059	2,047	100.6%	Adequate	Open
Poolesville	1,146	1,170	97.9%	Adequate	Open
Quince Orchard	2,012	1,857	108.3%	Inadequate	School Payment
Rockville	1,504	1,570	95.8%	Adequate	Open
Seneca Valley	1,282	1,994	64.3%	Adequate	Open
Sherwood	1,748	2,136	81.8%	Adequate	Open
Springbrook	1,921	2,167	88.6%	Adequate	Open
Watkins Mill	1,672	1,917	87.2%	Adequate	Open
Wheaton	1,610	1,596	100.9%	Adequate	Open
Walt Whitman	2,121	1,882	112.7%	Inadequate	School Payment
Wootton	2,158	2,154	100.2%	Adequate	Open