



CB 61 and 62 Amendments to APFO



**COUNTY COUNCIL
WORK SESSION**

SEPTEMBER 25, 2017

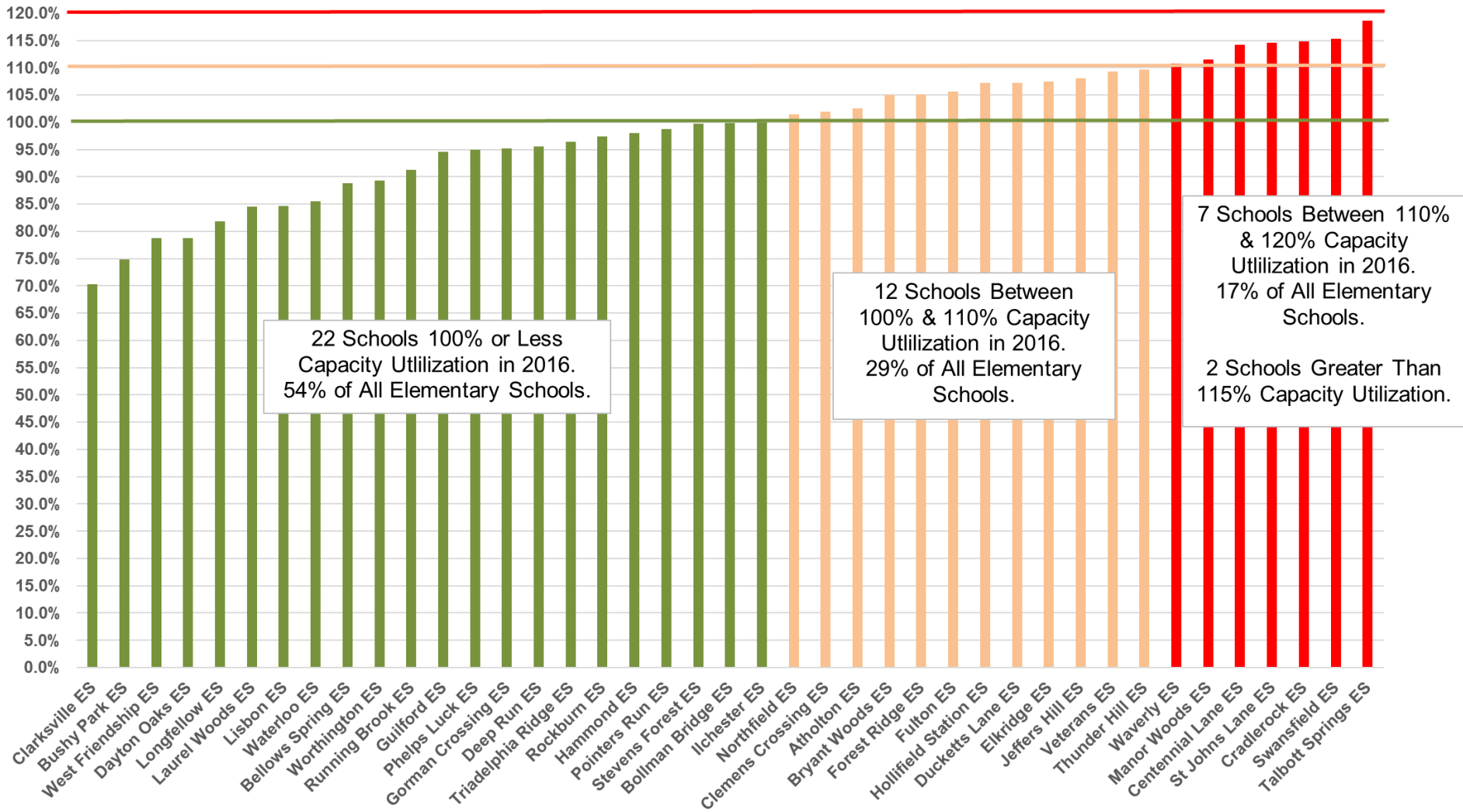


School Capacity Utilization & New Development Trends



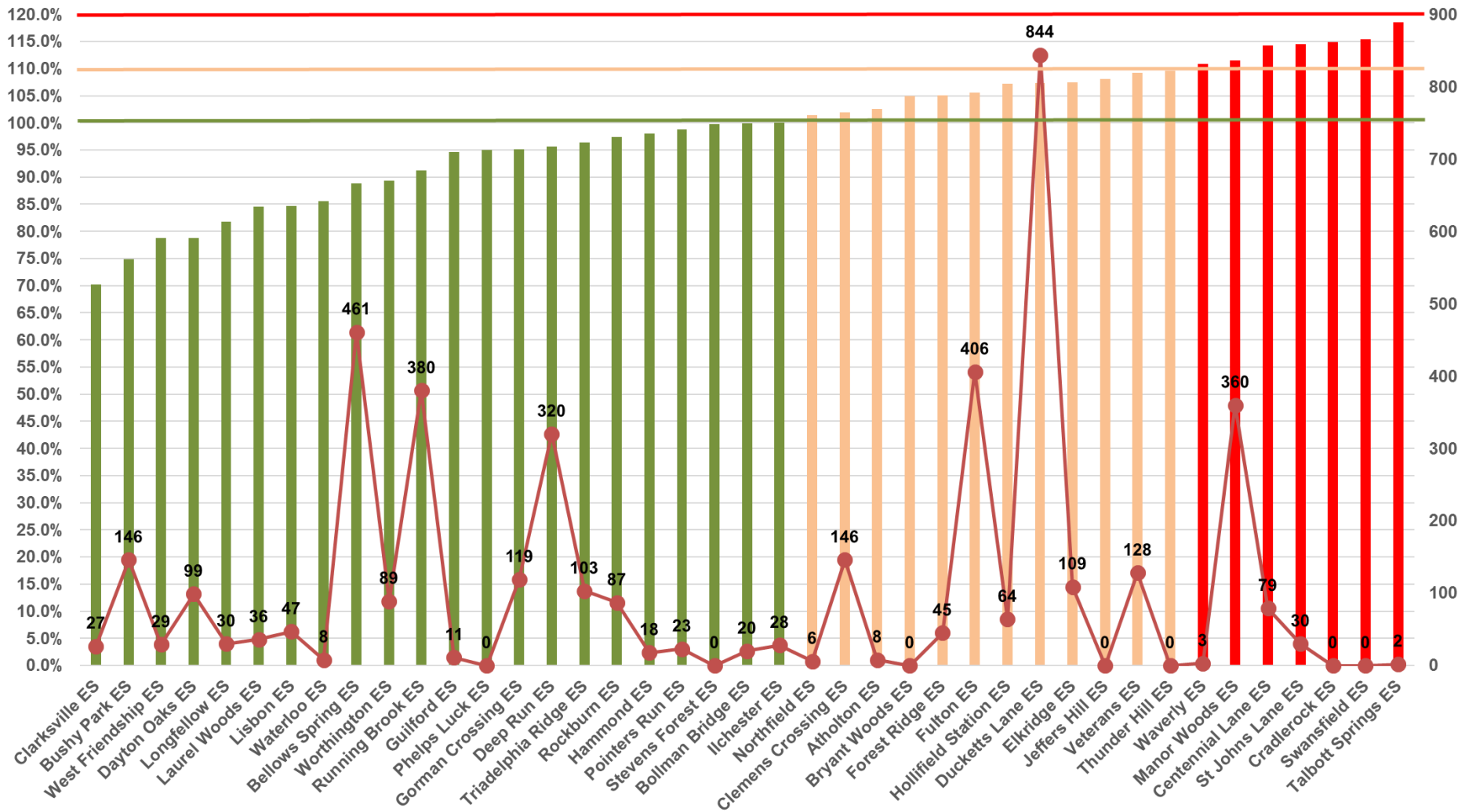
**FOR ELEMENTARY, MIDDLE & HIGH
SCHOOLS IN HOWARD COUNTY**

2016 Actual Elementary School Capacity Utilization



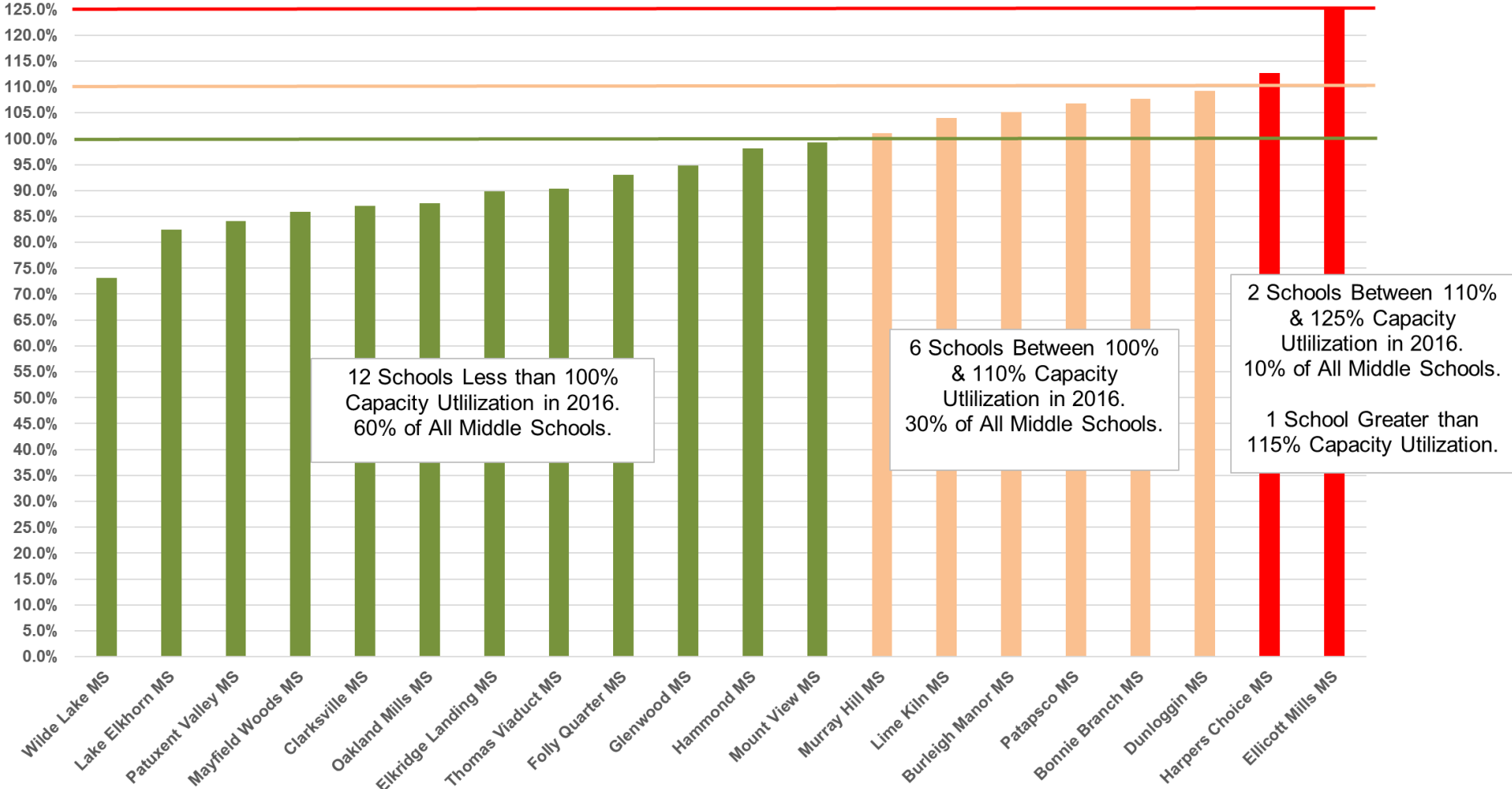
Sources: School capacities from HCPSS 2017 Feasibility Study (pre-measure chart). Enrollments from September, 2016 HCPSS Official Enrollments.

2016 Actual Elementary School Capacity Utilization & Number of Residential Units Built in Previous 3 Years (Oct. '13 through Sept. '16)



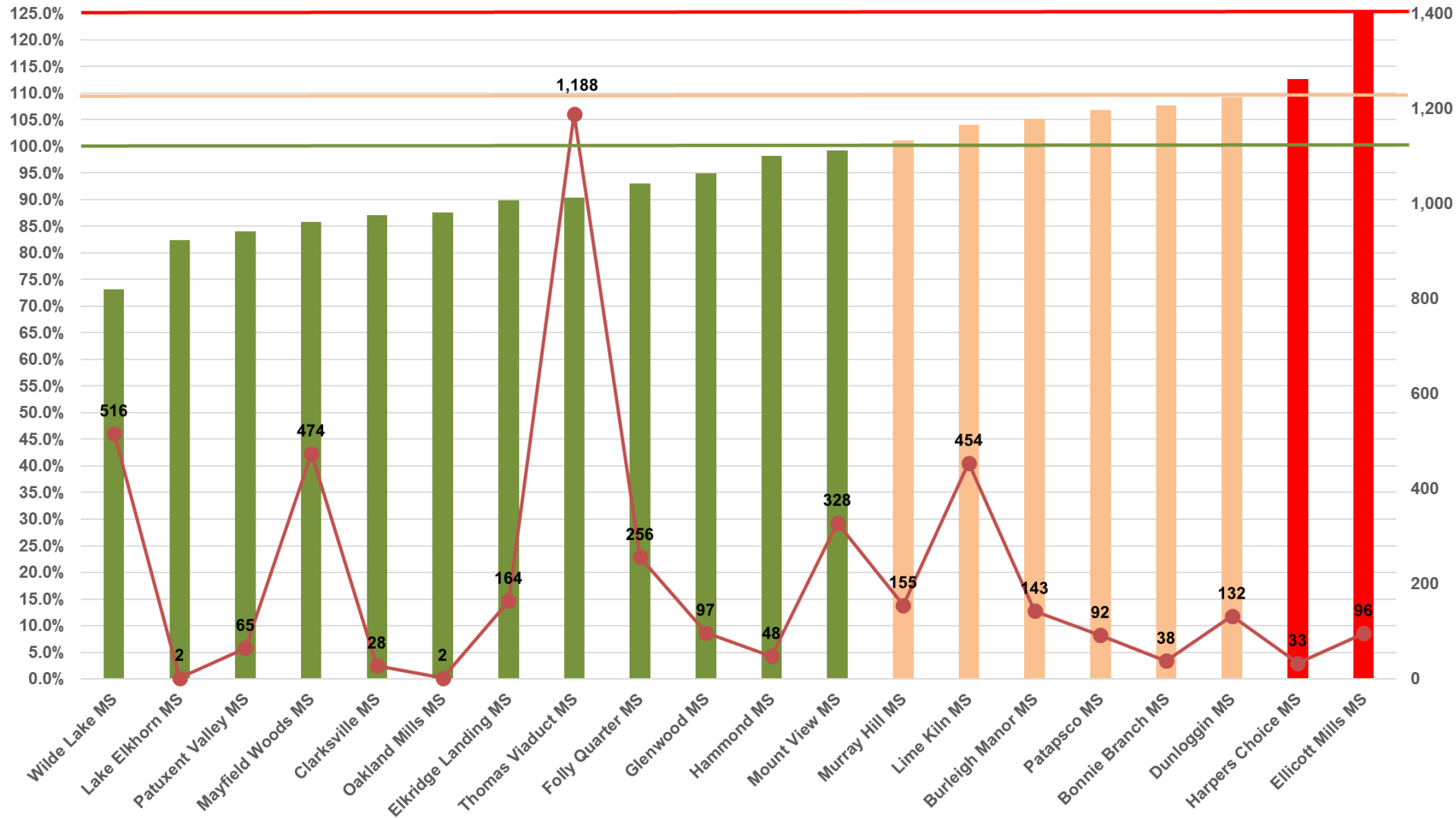
Sources: School capacities from HCPSS 2017 Feasibility Study (pre-measure chart). Enrollments from September, 2016 HCPSS Official Enrollments. Residential units built from DPZ Research Division.

2016 Actual Middle School Capacity Utilization



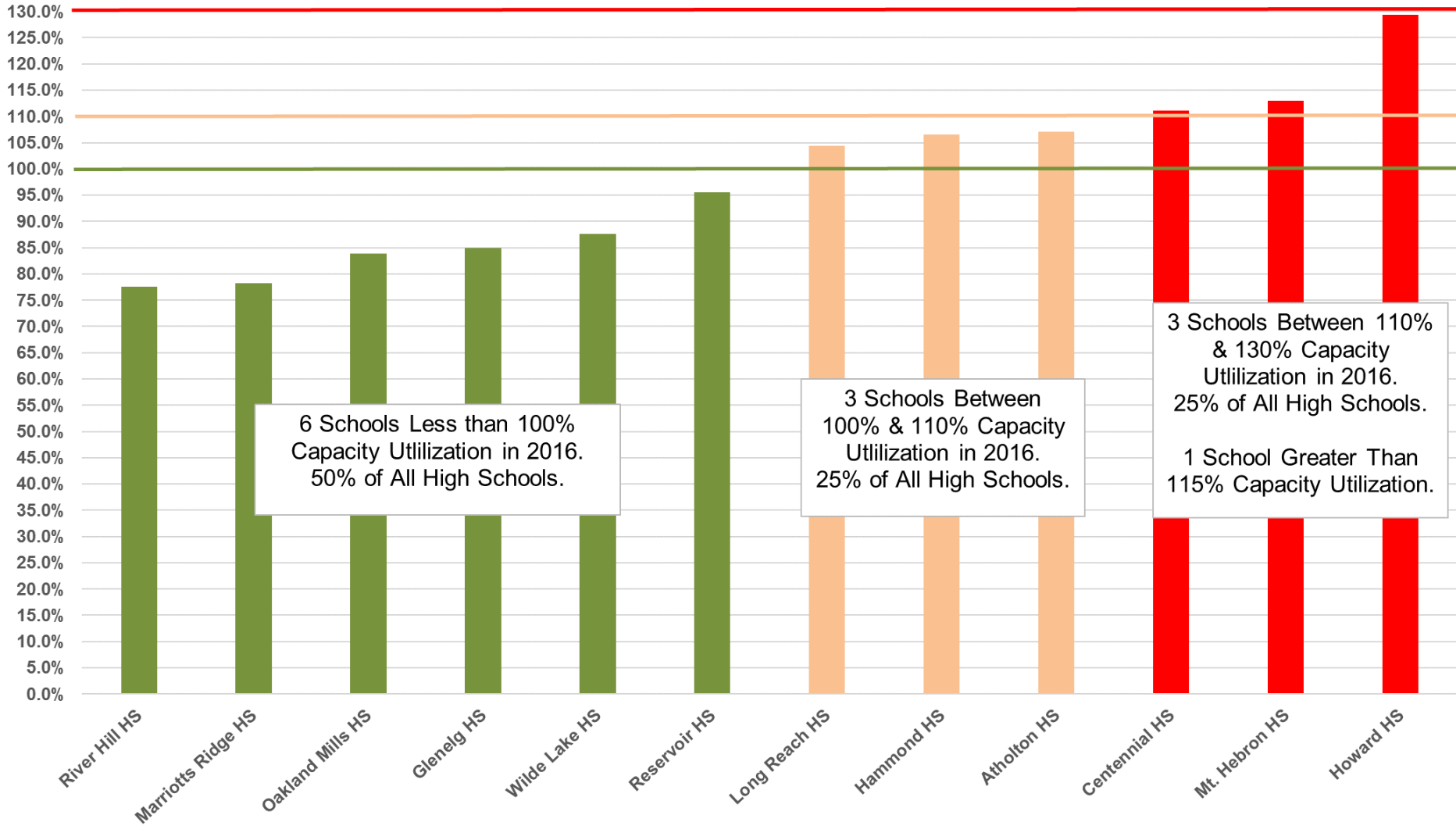
Sources: School capacities from HCPSS 2017 Feasibility Study (pre-measure chart). Enrollments from September, 2016 HCPSS Official Enrollments.

2016 Actual Middle School Capacity Utilization & Number of Residential Units Built in Previous 3 Years (Oct. '13 through Sept. '16)



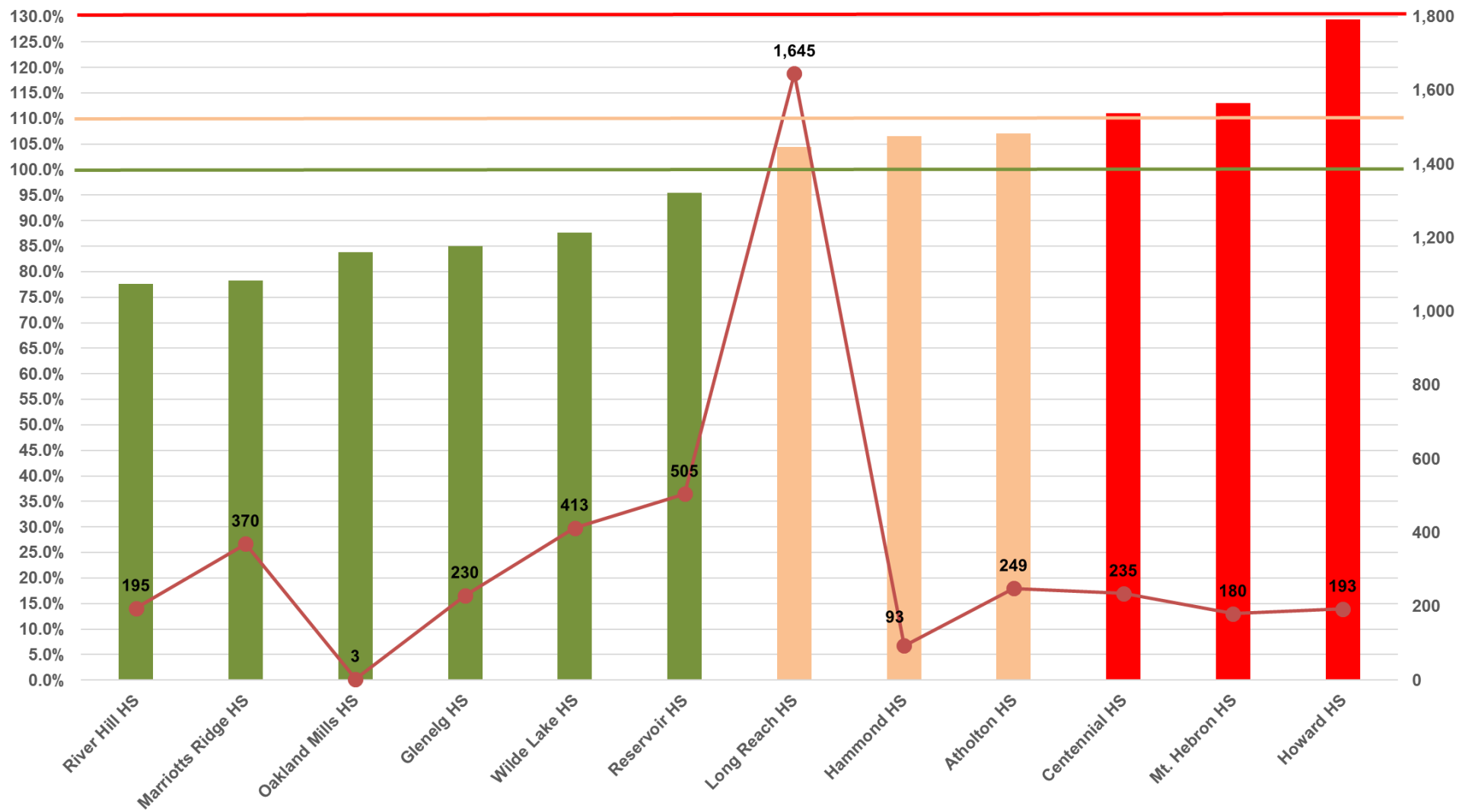
Sources: School capacities from HCPSS 2017 Feasibility Study (pre-measure chart). Enrollments from September, 2016 HCPSS Official Enrollments. Residential units built from DPZ Research Division.

2016 Actual High School Capacity Utilization



Sources: School capacities from HCPSS 2017 Feasibility Study (pre-measure chart). Enrollments from September, 2016 HCPSS Official Enrollments.

2016 Actual High School Capacity Utilization & Number of Residential Units Built in Previous 3 Years (Oct. '13 through Sept. '16)



Sources: School capacities from HCPSS 2017 Feasibility Study (pre-measure chart). Enrollments from September, 2016 HCPSS Official Enrollments. Residential units built from DPZ Research Division.

New Students



**FROM NEW HOMES & FROM
RESALES OF EXISTING HOMES AS
NEIGHBORHOODS TURNOVER**

**New Students added to the Howard County Public School System
From New Construction & Resales (September enrollments)**

Year	New Construction		Resales		Total	
	Number	Percent	Number	Percent	Number	Percent
2006	601	47%	682	53%	1,283	100%
2007	370	34%	725	66%	1,095	100%
2008	430	47%	482	53%	912	100%
2009	332	42%	452	58%	784	100%
2010	384	42%	530	58%	914	100%
2011	464	38%	763	62%	1,227	100%
2012	396	37%	685	63%	1,081	100%
2013	518	42%	715	58%	1,233	100%
2014	677	50%	670	50%	1,347	100%
2015	590	42%	806	58%	1,396	100%
Subtotal Past	4,762	42%	6,510	58%	11,272	100%
2016	640	46%	749	54%	1,389	100%
2017	770	50%	760	50%	1,530	100%
2018	785	50%	772	50%	1,558	100%
2019	679	46%	785	54%	1,464	100%
2020	696	47%	796	53%	1,492	100%
2021	629	44%	808	56%	1,437	100%
2022	552	40%	819	60%	1,371	100%
2023	524	39%	829	61%	1,353	100%
2024	417	33%	838	67%	1,254	100%
2025	370	30%	845	70%	1,216	100%
2026	354	29%	851	71%	1,205	100%
Subtotal Projected	6,416	42%	8,853	58%	15,268	100%
Grand Total	11,178	42%	15,363	58%	26,540	100%

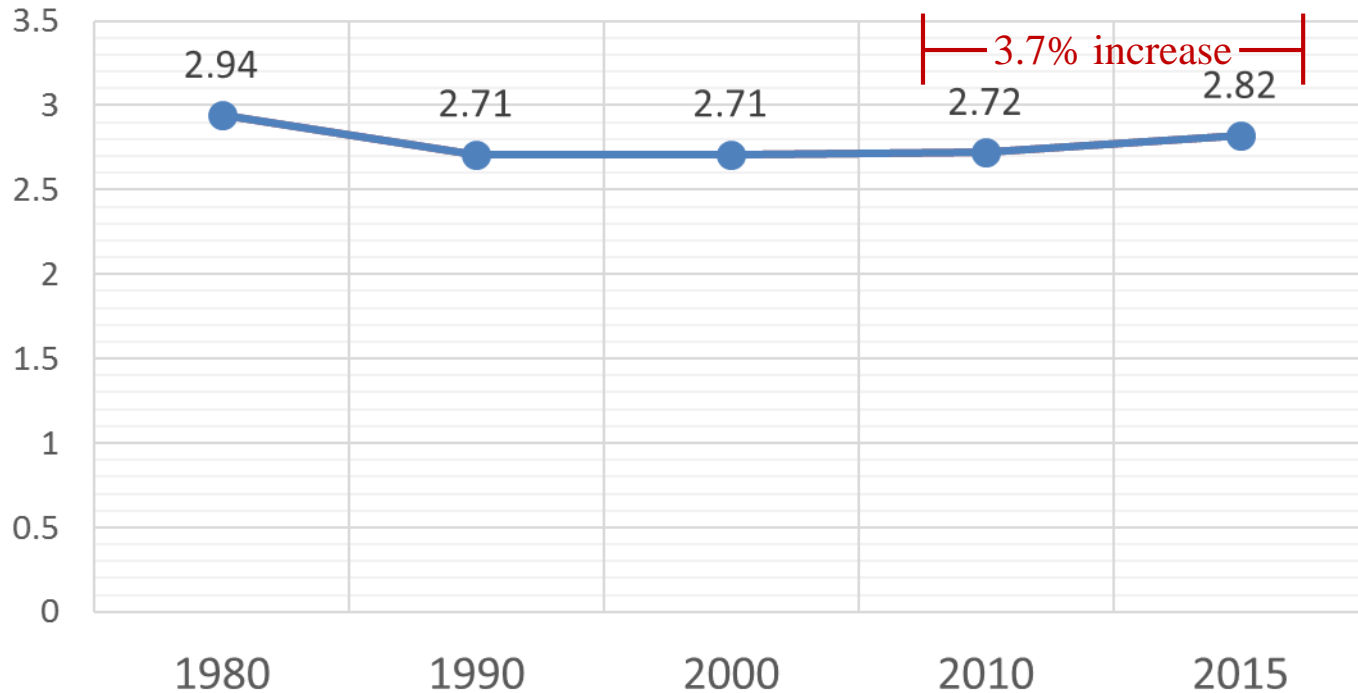
Source: HCPSS, Office of Planning, September 2016

Increasing Household Sizes



SHIFTING TRENDS

Persons per Household in Howard County Average for All Households



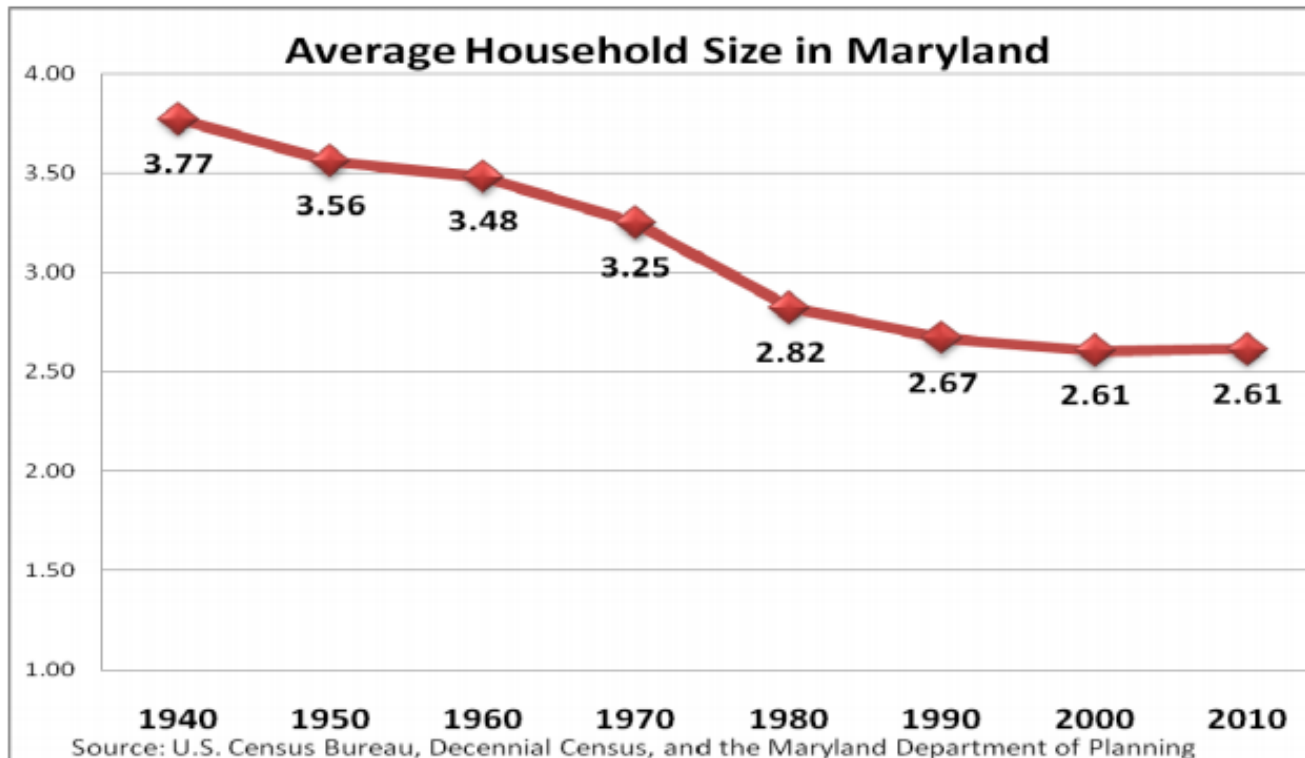
Source: U.S Census Bureau, Decennial Census, ACS for 2015. For 2015, margin of error is +/-0.04.

Includes all household types: single occupancy, family, & non-family.
Living in all unit types: single family detached, townhouse, condo & rental apt.

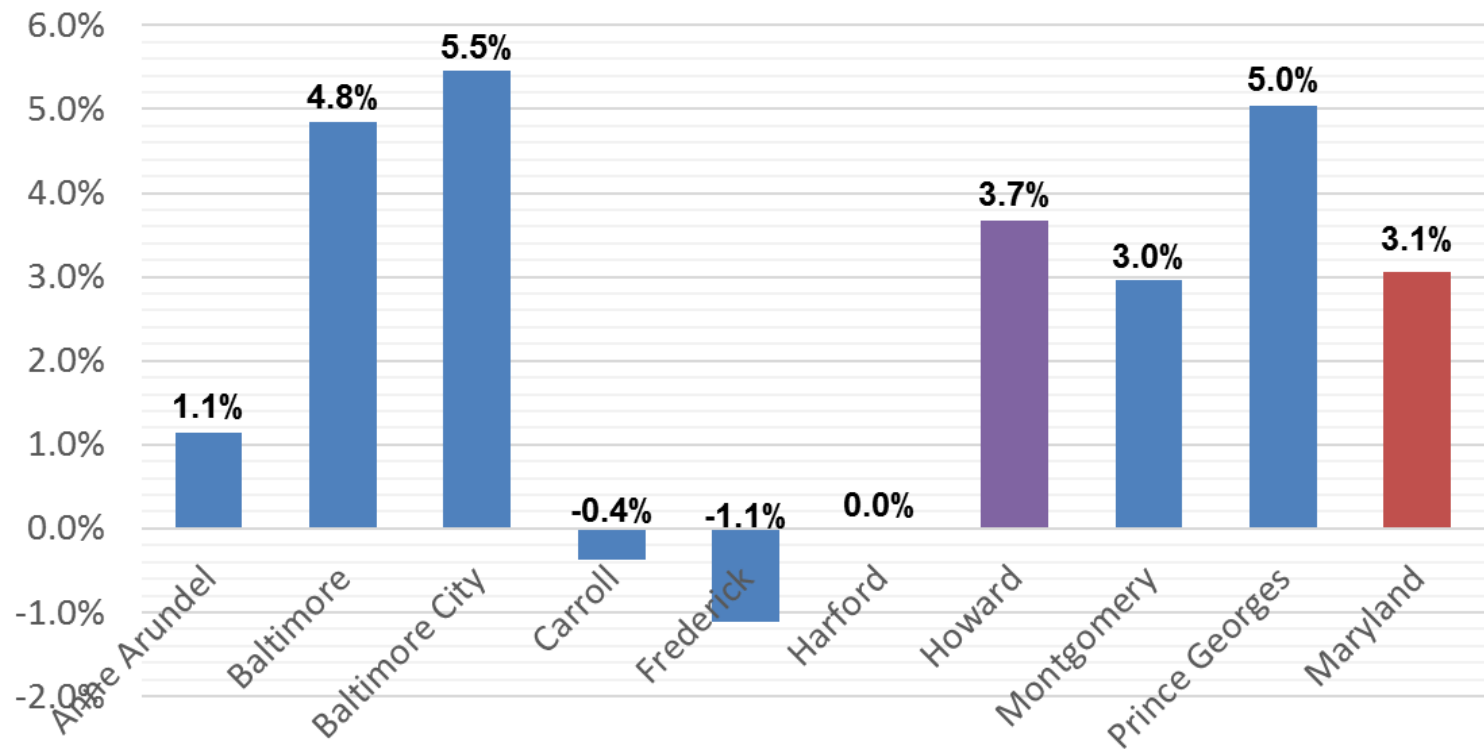
Average Household Size Stabilizes in Maryland

The average household size remained virtually the same in Maryland between 2000 and 2010, according to calculations from the Maryland Department of Planning, ending a downward trend from at least 1940.¹ And for eight jurisdictions, there was even an increase in the average household size due in part to growth of the foreign born and population gains from strong domestic migration.

The average household size in Maryland in 2010 was 2.61 virtually the same as in 2000.² In 1940 the average household size in the State was at 3.77 and fell steadily over the decades until 2000, with larger declines in the earlier decades.³



Persons per Household Percent Change 2010 to 2015 - All Households



Source: U.S Census Bureau, Decennial Census, ACS for 2015.

As of Sept. 30, 2016 there were 113,028 households in Howard County. An increase from 2.72 to 2.82 persons per household (3.7% increase) results in an additional 11,303 residents.

$$\begin{array}{r} 2.72 \times 113,028 = 307,436 \\ \underline{2.82 \times 113,028 = 318,739} \\ \text{Difference} \qquad \qquad 11,303 \end{array}$$

About 16.7% of all Howard County residents attend the HCPSS (53,348 students divided by 318,739 household population as of Sept. 30, 2016).

$$\underline{16.7\% \text{ of } 11,303 \text{ is } 1,888}$$

Capital Spending



**INCREASING DOLLARS BEING
SPENT ON SCHOOL RENOVATIONS
AND REPLACEMENTS**

Howard County Public School System Capital Funding (X \$1,000) - PERCENTAGES (1)

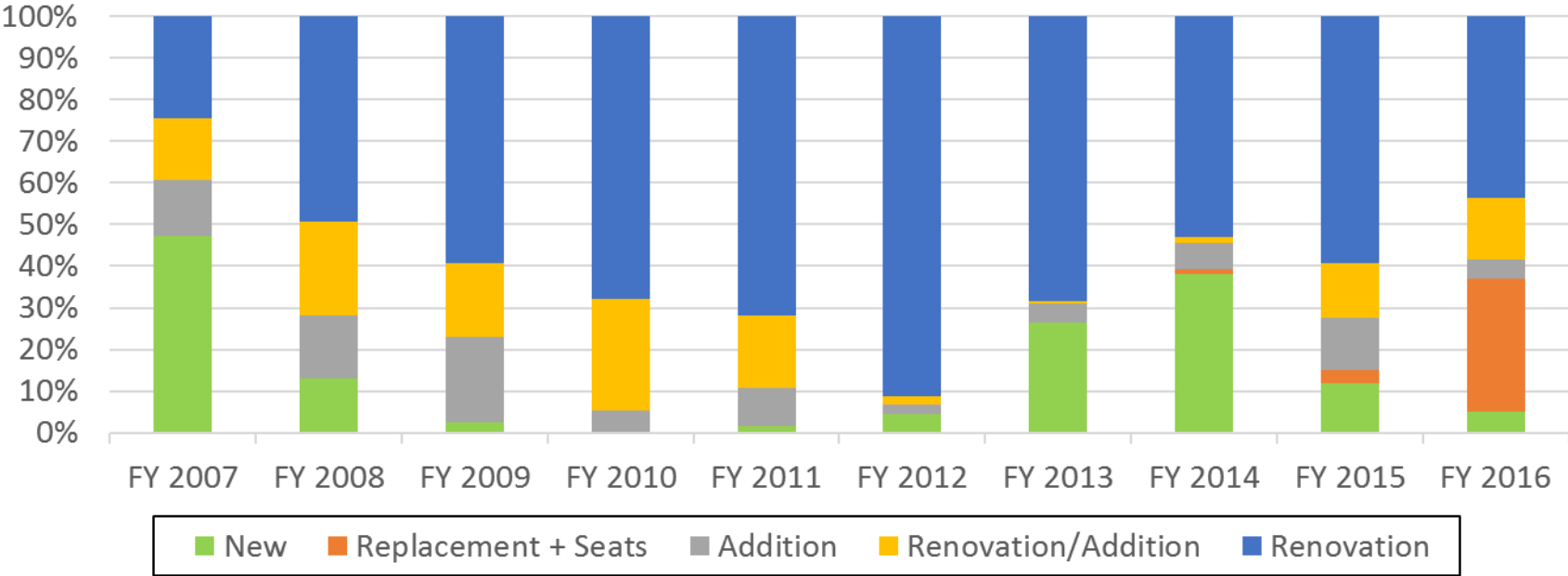
Fiscal Year (2)	Replacement			Renovation/		Total
	New	+ Seats	Addition	Addition	Renovation	
2007	47%	0%	13%	15%	25%	100%
2008	13%	0%	15%	22%	49%	100%
2009	3%	0%	20%	18%	59%	100%
2010	0%	0%	5%	27%	68%	100%
2011	2%	0%	9%	17%	72%	100%
2012	4%	0%	2%	2%	91%	100%
2013	26%	0%	4%	0%	69%	100%
2014	38%	1%	6%	1%	53%	100%
2015	12%	3%	12%	13%	59%	100%
2016	5%	32%	4%	15%	44%	100%
Total	18%	4%	9%	12%	57%	100%
2017	21%	20%	0%	29%	30%	100%
2018	29%	2%	0%	28%	41%	100%
2019	21%	0%	0%	2%	77%	100%
2020	53%	0%	0%	5%	42%	100%
2021	53%	0%	0%	29%	19%	100%
2022	67%	0%	0%	8%	25%	100%
2023	40%	0%	1%	0%	60%	100%
2024	7%	0%	7%	0%	87%	100%
2025	26%	0%	0%	0%	74%	100%
2026	26%	0%	0%	0%	74%	100%
2027	28%	0%	0%	0%	72%	100%
Total	34%	2%	1%	9%	55%	100%
Grand Total	27%	3%	4%	10%	56%	100%

(1) Capital dollars include individual project lines (renovations, additions, new schools, replacement schools renovations/additions), roofs, systemic renovations, Full Day K. Does not include projects grouped by type (barrier free, playgrounds, relocatables, site technology, parking lots, planning/design etc.), specific needs (MBR, etc.) special schools (Cedar Lane, etc.)

(2) FY 2007 through FY 2016 are actual expenditures, FY 2007 is funded amount and FY 2018 through FY2027 are funds requested in the Proposed FY2018 Capital Budget.

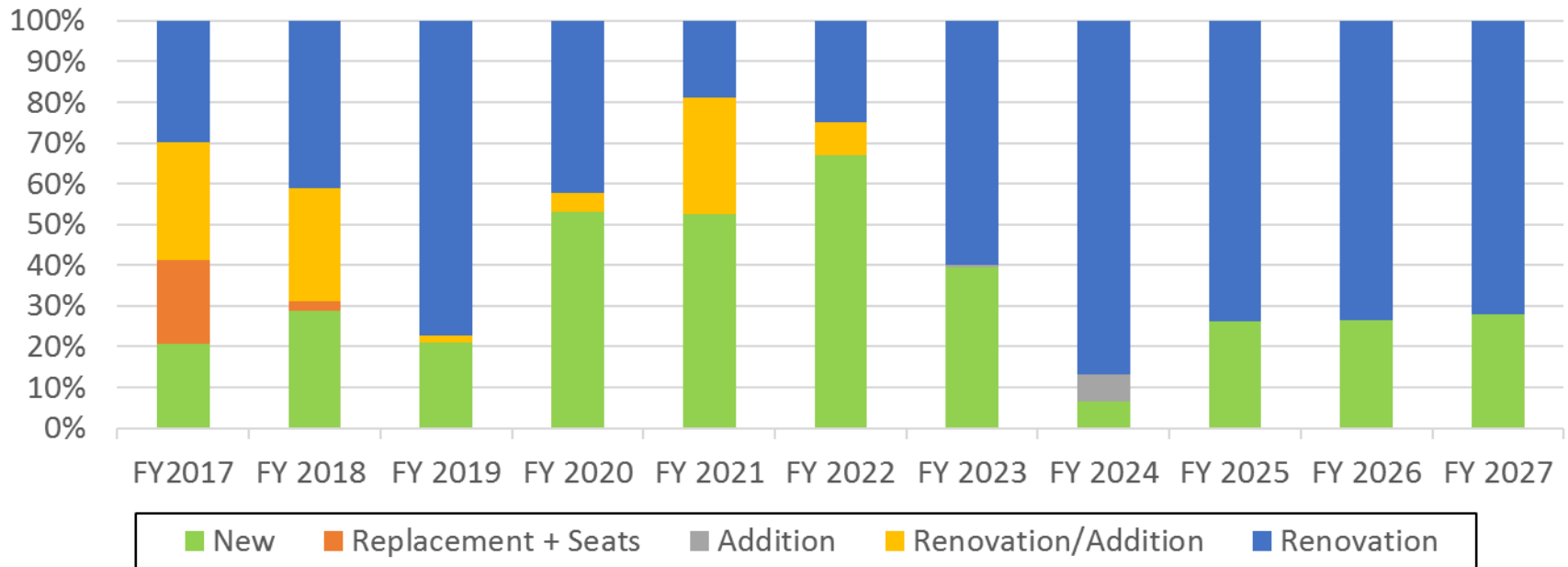
Source: Howard County Public School System, September, 2016

Actual Capital Expenditures by Type Howard County Public School System



Source: HCPSS, Office of Planning, September 2016 - Includes individual project lines (renovations, additions, new schools, replacement schools, renovation/additions), roofs, systemic renovations, full day Kindergarten

FY 2017 Capital Budget by Type Howard County Public School System



Source: HCPSS, Office of Planning, September 2016 - Includes individual project lines (renovations, additions, new schools, replacement schools, renovation/additions), roofs, systemic renovations, full day Kindergarten

Accommodating Growth



NEW SCHOOLS BUILT & REDISTRICTING

Attendance Area Adjustment History

Implementation	Purpose	Elementary	Middle	High	Approx. # of Students	Approx. # of Schools	Approx. # of Polygons*	Regions
August 1992	Open Burleigh Manor MS	Elementary	Middle		1000	10	N/A	North, Southeast, Columbia East, Northeast
August 1993	Open Rockburn ES, Mount View MS	Elementary	Middle	High	N/A	9	N/A	North, West, Northeast, Columbia West
August 1994	Open Manor Woods ES	Elementary	Middle	High	N/A	10	N/A	All
August 1995	Open Elkridge Landing MS	Elementary	Middle		560	5	N/A	Northeast, Columbia East, Southeast
August 1996	Open Ilchester ES, Long Reach HS, River Hill HS	Elementary		High	N/A	13	N/A	Northeast, West, North, Columbia West
August 1997	Open Fulton ES, Hollifield Station ES, Murray Hill MS	Elementary	Middle		N/A	9	N/A	Southeast, West, North
August 1998	Open Triadelphia Ridge ES, Gorman Crossing ES	Elementary			N/A	9	N/A	Southeast, West
August 1999	Open Lime Kiln MS		Middle		N/A	2	N/A	West
August 2000	Crowding in Columbia East/Southeast	Elementary		High	N/A	7	N/A	Columbia East, Southeast, Northeast
August 2001	Open Bonnie Branch MS		Middle		660	4	N/A	Northeast
August 2002	Open Reservoir HS	Elementary	Middle	High	1500	15	N/A	All
August 2003	Open Bellows Spring ES, Folly Quarter MS	Elementary	Middle		1500	39	151	West, Columbia West, Columbia East, Northeast, Southeast
August 2004	Adjustment for new development	Elementary	Middle	High	27	11	5	Northeast, Columbia East, Southeast, North, West, Columbia West
August 2005	Open Marriotts Ridge HS			High	840	9	99	All
August 2006	Open Dayton Oaks ES	Elementary	Middle	High	1300	18	64	North, West, Columbia East, Columbia West
August 2007	Open Veterans ES	Elementary	Middle		1200	11	40	Columbia West, North, Northeastern
August 2008	<i>(no change)</i>							
August 2009	<i>(no change)</i>							
August 2010	End open enrollment			High	**	3	13	West, North
August 2011	<i>(no change)</i>							
August 2012	Crowding in Southeast	Elementary			900	10	42	Southeast
August 2013	Open Ducketts Lane ES	Elementary			1860	16	37	Northeast, North, Columbia East
August 2014	Open Thomas Viaduct MS		Middle		1200	10	64	Northeast, Southeast, West, Columbia East
August 2015	<i>(no change)</i>							
August 2016	<i>(no change)</i>							
August 2017	<i>(no change)</i>							
August 2018	<i>Under consideration, open New ES #42</i>							

This data is an approximation.

* Number of polygons has evolved over time. Polygons were developed in 2002 and have been adjusted as needed. The number referenced was calculated based on the 2017 polygon IDs.

** Students who started at a high school were allowed to remain at that school. Trailing siblings were also allowed to enroll out of district with their older sibling, if they shared at least 1 year of high school together.

In the past 26 years (1992-2017)

Adjustments to boundaries took place in 20 years
Only 4 of those years did not include the opening of a new school

In the past 10 years (2008-2017)

Adjustments in boundaries took place in 4 years
2 years included the opening of a new school, 2 years did not
6 years had no boundary adjustments

Source: Howard County Public School System

APFO History



NUMBER OF UNITS ON HOLD

**Total Units on Hold
Allocations & Open/Closed Bin**

Allocation Year	Allocations	Open/Clsd Schools	Total
1995	0	0	0
1996	63	0	63
1997	832	62	894
1998	688	533	1,221
1999	869	0	869
2000	109	0	109
2001	74	51	125
2002	484	154	638
2003	360	0	360
GP 2000 Adopted			
2003	461	75	536
2004	497	376	873
2005	654	706	1,360
2006	676	782	1,458
2007	994	966	1,960
2008	1,002	756	1,758
2009	2,925	363	3,288
2010	553	0	553
2011	261	0	261
2012	248	16	264
2013	211	850	1,061
2014	37	13	50
2015	12	133	145
PlanHoward 2030 Adopted			
2015	17	151	168
2016	111	60	171
2017	485	182	667
2018	0	509	509
2019	0	849	849

APFO History



PLANS IN THE WAITING BIN

PROJECTS IN THE OPEN/CLOSED SCHOOLS BIN AT THE TIME OF THE MOST RECENT 2017 OPEN/CLOSED CHART ADOPTION IN JULY, 2017

	File Number	File Name	Elementary District		School Region		Middle District		Open/Closed Test	Allocations	Failure Number
1	F-13-116	Ellicott Woods	Worthington	Pass	Northeast	Pass	Ellicott Mills	Fail	Fail	2	4th failed test
2	F-14-074	Acra Property	Waterloo	Pass	Northeast	Pass	Ellicott Mills	Fail	Fail	2	4th failed test
3	F-15-014	Sunset View	Waterloo	Pass	Northeast	Pass	Ellicott Mills	Fail	Fail	2	4th failed test
4	SDP-14-074 (1)(2)	Long Gate Overlook	Veterans	Pass	Northeast	Pass	Ellicott Mills	Fail	Pass	73	5th failed test - PASSED
5	F-15-005	Gladys Woods	Waterloo	Pass	Northeast	Pass	Ellicott Mills	Fail	Fail	2	3rd failed test
6	F-15-024	Sunset Plains	Waterloo	Pass	Northeast	Pass	Ellicott Mills	Fail	Fail	1	3rd failed test
7	SP-15-013	Lacey Property	Veterans	Pass	Northeast	Pass	Dunloggin	Fail	Fail	12	2nd failed test
8	S-17-007	The Towns at Court Hill	Veterans	Pass	Northeast	Pass	Dunloggin	Fail	Fail	8	2nd failed test
9	SP-15-016	Hampton Hills	Worthington	Pass	Northeast	Pass	Ellicott Mills	Fail	Fail	13	3rd failed test
10	S-17-004	Dorsey Center	Ducketts Lane	Pass	Northeast	Pass	Thomas Viaduct	Fail	Fail	230	2nd failed test
11	S-17-006	Dorsey's Ridge	Veterans	Pass	Northeast	Pass	Ellicott Mills	Fail	Fail	52	2nd failed test
12	SP-16-013 (3)	Taylor Place	Worthington	Pass	Northeast	Pass	Ellicott Mills	Fail	Fail	252	3rd failed test
13	F-14-082	Dunwoody Property	Centennial Lane	Fail	North	Fail	Burleigh Manor	Fail	Fail	1	4th failed test
14	SP-14-004 (4)	Kings Forest	Centennial Lane	Fail	North	Fail	Burleigh Manor	Fail	Fail	37	4th failed test
15	F-16-095	Goldberg Property	Hollifield Station	Fail	North	Fail	Dunloggin	Fail	Fail	1	2nd failed test
16	S-16-004	Dorsey Overlook	Northfield	Pass	North	Fail	Dunloggin	Fail	Fail	75	2nd failed test
17	F-14-078	Jett Property	Waverly	Pass	North	Fail	Patapsco	Pass	Fail	1	4th failed test
18	F-14-112	Centennial Choice	Northfield	Pass	North	Fail	Dunloggin	Fail	Fail	2	3rd failed test
19	F-14-045	Goins Property	St. John's Lane	Fail	North	Fail	Patapsco	Pass	Fail	3	4th failed test
20	F-13-106 (2)	Melvin Property	Hollifield Station	Fail	North	Fail	Dunloggin	Fail	Pass	5	5th failed test - PASSED
21	SP-13-013 (2)	Tiber Woods	Northfield	Pass	North	Fail	Dunloggin	Fail	Pass	33	5th failed test - PASSED
22	F-15-057	Crestleigh Property	Northfield	Pass	North	Fail	Dunloggin	Fail	Fail	1	3rd failed test
23	F-16-034	Van Stone Property	Northfield	Pass	North	Fail	Dunloggin	Fail	Fail	1	3rd failed test
24	F-17-084	Harbin Property	Waverly	Pass	North	Fail	Mount View	Pass	Fail	1	2nd failed test
25	F-17-021	Honrao's Property	Northfield	Pass	North	Fail	Dunloggin	Fail	Fail	1	2nd failed test
26	SP-15-002	Sunell Property	Hollifield Station	Fail	North	Fail	Patapsco	Pass	Fail	38	3rd failed test
27	F-17-061	Margaret Tillman	Guilford	Pass	Southeast	Pass	Thomas Viaduct	Fail	Fail	2	2nd failed test

(1) This plan fails the school test for the fifth time (37 for year 2017 and 36 for year 2018).

(2) This project reached maximum failures so can now move forward.

(3) This plan fails the school test for the 3rd time (248 for 2018 and 4 for 2019).

(4) This plan fails for the fourth time (33 units for year 2017 and 4 units for 2018).

SUMMARY TOTAL IN OPEN/CLOSED SCHOOLS BIN

School Region	In Bin	Get Out	% Get Out
Northeast	649	73	11%
North	200	38	19%
Southeast	2	0	0%
Columbia East	0	0	0%
West	0	0	0%
Columbia West	0	0	0%
Total	851	111	13%

SUMMARY TOTAL FOR ALLOCATION AND O/C BINS

	In Bin	Get Out	Percent
Total units	851	111	13%
Total plans	27	3	11%