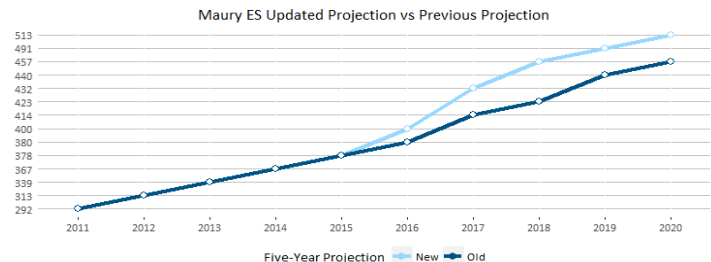


Maury Elementary School Five-Year Projection

Maury Elementary School **could enroll 513 students** by 2020. The potential 35% five-year growth is dependent on three key assumptions:

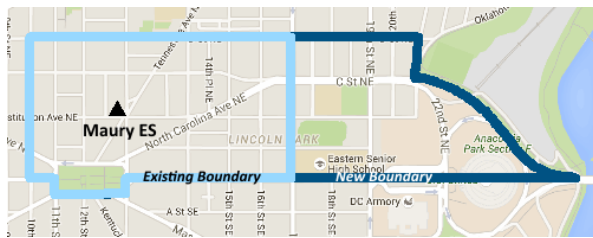
- Retention among rising 4th and 5th grade students will continue to improve.
- Kindergarten will experience rapid and sustained growth in the next five years.
- Early Childhood Classrooms will maintain their SY15-16 configuration.



How are DCPS's Five-Year Projections Constructed?

D.C. Public Schools employs a 'Cohort-Survival Ratio' to build one-year and five-year projections. A 'Cohort-Survival Ratio' applies a percent change to each rising grade to determine a school's future enrollment. The percent change is calculated from an average of the previous grade's four-year retention into the selected grade. The method is heavily dependent on current trends and underlying assumptions. Any significant deviations from these assumptions, such as increased charter competition or new housing starts, have the potential to impact the projection's accuracy.

How was Maury ES's Original Five-Year Projection Constructed?



Maury ES's original five-year projection was based on assumptions that are now outdated. The ratio used audited enrollment from SY14-15, and assumed a continued trend of weaker retention among 4th and 5th grade families due to strong charter preferences. In SY15-16, Maury greatly improved their 4th and 5th grade retention, suggesting that preference assumptions are beginning to shift. In addition, in 2014, Maury ES's

boundary was expanded east to the Anacostia River, and this change was not heavily factored into the original analysis. The smaller number of zoned housing units as well as the proposal to keep a stadium and parking lot in the new portion of the boundary suggested that fewer families would live with-in the boundary. However, the proposal to potentially create a green-space and develop additional housing units upends this assumption.

What Assumptions drive Maury ES's Updated Projection?

Maury ES's updated projection relies on three assumptions to reach 513 students by 2020. Those assumptions are:

- Retention among rising 4th and 5th graders will continue to improve.
 - Based on SY15-16's retention rate, the current projection assumes retention will continue to improve. This improvement is manually added to the projection by reducing the number of students that are lost from year to year.
- Kindergarten will experience rapid and sustained growth in the next five years.
 - Based on three years of rising pre-kindergarten-three (PK3) in-boundary lottery demand that could potentially enter Maury in SY17-18, the current projection assumes a base enrollment spike in Kindergarten to a class of 74 students. The out-year projections then presume that the kindergarten floor will relatively maintain its size with small fluctuations from year to year.
- Early Childhood Classrooms (ECE) will maintain their SY15-16 configuration.
 - ECE expansion at non-title schools incurs financial implications that are difficult to provide without exterior funding and financial support. In addition, as ECE classrooms are capped based

on their room type, any increase in ECE would require substantial physical space requirements. From this point of view, all five-year projections maintain the current ECE configuration into out-years for consistency. This does not mean that the resulting Kindergarten class will also maintain a relative size to the smaller ECE enrollment.

In addition, there are several elements five-year projections cannot control, among which the most important are changes in local construction:

- Housing starts and development in the new Maury boundary are currently in flux, and much could change given the final decision for the RFK stadium and parking lot. If the parking lot is turned into an aquarium, out-door green space, or shopping complex, the relative attractiveness for housing development in the immediate boundary would likely rise. Betting future enrollment on such activity is unwise at this time without knowledge of how many units may, or may not, be added.

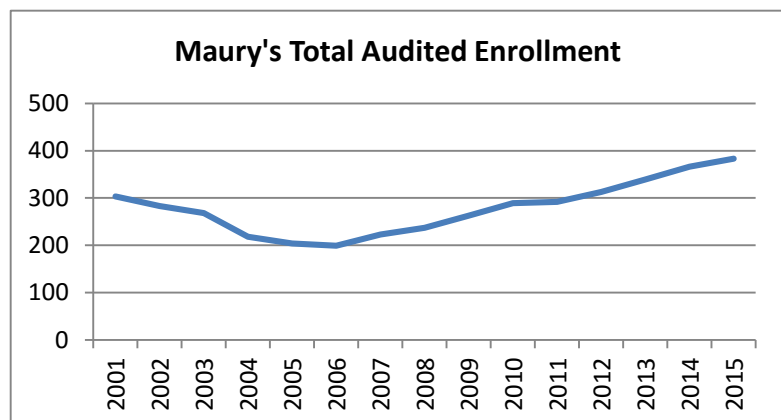
Maury ES Five-Year Projection by Grade

Maury ES's current five-year projection is outlined by grade below. To highlight how the projection was approached, the explanation begins with a historical view of Maury ES's audited enrollment since 2001. From there, a breakdown of the last five years of Maury ES audited enrollment by grade is provided. The grade level enrollment was used to construct both the one-year SY16-17 projection in the fall of 2015, as well as the five-year projection. Finally, the five-year projection is presented year by year and explained for each grade.

Maury ES Total Audited Enrollment, 2001 to 2015

Maury ES's previous nine years of enrollment have presented consistent and moderate growth due to changes in the school's grade configuration and improved student retention. Reaching its lowest enrollment in SY06-07, Maury ES's early childhood program was restructured in an attempt to re-enroll the school by adding PK3. In SY08-09, Maury's solitary 6th grade classroom was collapsed and PK3 and PK4 expanded. Improved retention from PK4 as well as improved in-boundary demand resulted in two full kindergarten classrooms the following year, SY09-10. SY09-10 was the first time Maury had needed two kindergarten classrooms in nearly nine years. The SY09-10 Kindergarten cohort maintained its size as it advanced 4th grade, dropping off finally in 5th. This pattern of larger kindergarten classes remaining into 4th continued until SY15-16, when two full 5th grade classrooms were formed for the first time in 15 years.

Year	Total Audited Enrollment	Yearly Change
2001	303	-
2002	283	-20
2003	268	-15
2004	218	-50
2005	204	-14
2006	199	-5
2007	223	+24
2008	237	+14
2009	263	+26
2010	289	+26
2011	292	+3
2012	313	+21
2013	339	+26
2014	366	+27
2015	383	+17



Maury ES Audited Grade Level Enrollment, SY11-12 to SY15-16

The current Maury five-year projection relies on audited grade level enrollment from SY11-12 to SY15-16. Over the past five years, Maury ES's largest growth has come from retention of upper-elementary students. In SY15-16, the majority of the school's growth was concentrated in maintaining their rising 4th grade class into 5th grade.

Grade	2011 Audited Enrollment	2012 Audited Enrollment	2013 Audited Enrollment	2014 Audited Enrollment	2015 Audited Enrollment
PK3	36	38	35	38	37
PK4	52	49	50	47	50
K	44	52	52	55	58
1	58	38	53	50	60
2	42	57	41	57	48
3	21	42	54	42	53
4	21	20	38	53	41
5	18	21	16	24	36
Total	292	317	339	366	383
Growth	+3	+25	+22	+27	+17
% Growth	+1.0%	+8.6%	+6.9%	+8.0%	+4.6%

Maury ES Projected Enrollment, SY16-17

Maury ES's SY16-17 projected enrollment was constructed in November of 2015. In December, it was negotiated upwards in discussion with Principal Albert-Garvey.

Grade	SY16-17 Projection	Explanation
PK3	36	Reflects two PK3 classrooms of 16 students each and half of a mixed-age classroom. Early stages seats have been removed to ensure the school is not held accountable for enrolling students outside of their control.
PK4	47	Reflects two PK4 classrooms and half of a mixed-age classroom. Early stages seats have also been removed.
K	60	Calculated based on 85% of rising PK4 students, 9 new in-boundary kindergarten students, and 4 out-of-boundary students accepted through the lottery. During negotiations in December of 2015 this projection was then adjusted upwards to 60 based on principal recommendation.
1	61	Calculated based on a 1.7% three year growth, and rounded up to 59. During negotiations in December of 2015 this projection was then adjusted upwards to 61 based on principal recommendation.
2	62	Calculated based on a 4.4% three year growth, and rounded up to 62.
3	49	Calculated based on a -3.2% three year decline, and rounded down to 47. During negotiations, this was adjusted up to 49 per principal request.
4	53	Calculated based on a -4.5% three year decline, and rounded down to 51. During negotiations, this was adjusted up to 53 per principal request.
5	32	To account for Maury ES's sudden change in retention over one year, a four-year moving average was used in this grade. The calculation was based on a -22.2% four-year decline, and rounded up to 32. For comparison a three-year moving average would have used a decline of -29.6%, resulting in a smaller 5 th grade class size.
Total	400	-

Growth	+17	-
% Growth	4.4%	-

Maury ES Projected Enrollment, SY17-18 – Year 2

At this stage the following projections incorporate previous projections to build out Maury’s future enrollment. Each growth or decline is once again added to 1, and then multiplied by the previous grade’s projection. Any manual adjustments based on assumptions are noted. Assumptions factor heavily into the following projections and are mentioned where relevant. As a reminder, they are:

- Retention among rising 4th and 5th grade students will continue to improve.
- Kindergarten will experience rapid and sustained growth in the next five years.
- Early Childhood Classrooms will maintain their SY15-16 configuration.

Grade	SY17-18 Projection	Explanation
PK3	36	Assumes that the ECE configuration established in SY15-16 will remain constant into this year at two PK3 rooms, and half of a mixed-age classroom, minus early stages seats.
PK4	47	Assumes that the ECE configuration established in SY15-16 will remain the same as well. Reflects two PK4 classrooms and half of a mixed-age classroom, minus early stages seats.
K	74	Assumes kindergarten will experience a rapid +14 growth over the previous year, based on increases in PK3 in-boundary lottery demand. Current kindergarten growth does not support this large of a one year jump, however this jump was included to reflect growing in-boundary PK3 lottery demand which would have a right to enter in this year.
1	63	Calculated based on a 4.5% three year growth.
2	64	Calculated based on a 5.4% three year growth.
3	62	Calculated based on a -0.4% three year decline.
4	47	Calculated based on a -3.4% three year decline.
5	38	Calculated based on a -27.8% three year decline.
Total	431	-
Growth	+31	-
% Growth	+7.8%	-

Maury ES Projected Enrollment, SY18-19 – Year 3

Grade	SY17-18 Projection	Explanation
PK3	36	Assumes that the ECE configuration established in SY15-16, minus early stages seats.
PK4	47	Assumes that the ECE configuration established in SY15-16, minus early stages seats.
K	70	Assumes kindergarten’s growth will maintain its rapid growth and was manually entered. Adjusted down to 70 to account for possible year-over-year fluctuation.
1	79	Calculated based on a 7.3% three year growth.
2	66	Calculated based on a 4.7% three year growth.
3	63	Calculated based on a -1.3% three year decline.

4	59	Calculated based on a -3.9% three year decline.
5	36	Calculated based on a -24.7% three year decline.
Total	456	-
Growth	+25	-
% Growth	+5.8%	-

Maury ES Projected Enrollment, SY19-20 – Year 4

Grade	SY17-18 Projection	Explanation
PK3	36	Assumes that the ECE configuration established in SY15-16, minus early stages seats.
PK4	47	Assumes that the ECE configuration established in SY15-16, minus early stages seats.
K	74	Assumes kindergarten's growth will maintain its rapid growth and was manually entered. Adjusted up to 74 to account for possible year-over-year fluctuation.
1	74	Calculated based on a 6.2% three year growth.
2	85	Calculated based on a 6.9% three year growth.
3	65	Calculated based on a -0.3% three year decline.
4	62	Calculated based on a -3.0% three year decline. Second to final year of decline manually edited to improve retention from 3 rd to 4 th grade.
5	48	Calculated based on a -19.9% three year decline. Second to final year of decline manually edited to improve retention from 4 th to 5 th grade.
Total	491	-
Growth	+34	-
% Growth	+7.5%	-

Maury ES Projected Enrollment, SY20-21 – Year 5

Grade	SY17-18 Projection	Explanation
PK3	36	Assumes that the ECE configuration established in SY15-16, minus early stages seats.
PK4	47	Assumes that the ECE configuration established in SY15-16, minus early stages seats.
K	78	Assumes kindergarten's growth will maintain its rapid growth and was manually entered. Adjusted up to 78 to account for possible year-over-year fluctuation.
1	73	Calculated based on a -1.6% three year decline. Final year of decline edited to ensure consistent grade pattern in fifth year.
2	79	Calculated based on a 5.7% three year growth.
3	85	Calculated based on a -0.4% three year decline.
4	64	Calculated based on a -2.3% three year decline. Final year of decline manually reduced to ensure a smaller 3 rd to 4 th grade loss.
5	52	Calculated based on a -15.9% three year decline. Final year of decline manually reduced to ensure a smaller 4 th to 5 th grade loss.
Total	513	-
Growth	+22	-
% Growth	+4.4%	-