


May 23, 2022

**TO:** Peter Murphy, Chairman  
 Fairfax County Planning Commission

Barbara Byron, Director  
 Fairfax County Department of Planning and Development

Tracy Strunk, Director  
 Fairfax County Zoning Evaluation Division

**FROM:** Jeffrey Platenberg, Assistant Superintendent   
 Fairfax County Public Schools

**SUBJECT:** School Impact Proffer Formula and Student Yield Ratio Update

Periodically, the Office of Facilities Planning Services reviews and updates the suggested per student proffer contribution and student yield ratios. The per student proffer contribution is based on the FCPS Public Facilities Impact Formula and the related implementation of the Fairfax County Comprehensive Plan, Public Facilities Residential Development Criterion, that became effective on January 7, 2003. Pursuant to the implementation of the Public Facilities Criterion, it was anticipated that periodic updates and adjustments to the methodology be provided to reflect changes in student yield ratios by unit type and changes in capital construction costs. This includes changes to school capacity, changes in construction costs for elementary, middle, and high school buildings, and modular construction costs. The methodology excludes costs associated with land, fees, and equipment.

Using the adopted methodology, the suggested per student proffer contribution has increased from \$12,262 to \$14,956. The increase is primarily attributable to increasing construction costs. FCPS recommends that the new proffer amount of \$14,956 become effective for all applicable residential rezoning applications accepted on or after June 1, 2022. For ease of reference, the proffer formula and calculations are attached.

In addition to the change in the suggested per student proffer contribution, the student yield ratios used to calculate the suggested proffer contribution have changed. This change reflects the current ratios generated by matching September 30, 2019, student data to 2020 housing counts by unit type. These updated ratios will be used to calculate the potential student yield for new residential development and the suggested school cash proffer amount beginning June 1, 2022.

The updated countywide student yield ratios from school year (SY) 2019-20 are as follows:

<b>Single-Family Detached</b>	.261 Elementary	<b>Low-Rise Multifamily</b> (≤ 4 stories)	.202 Elementary
	.084 Middle		.057 Middle
	<u>.175 High</u>		<u>.098 High</u>
	.521 Total		.357 Total
<b>Single-Family Attached</b> (Townhouse)	.254 Elementary	<b>Mid/High-Rise</b> <b>Multifamily</b> (> 4 stories)	.061 Elementary
	.072 Middle		.019 Middle
	<u>.141 High</u>		<u>.028 High</u>
	.467 Total		.108 Total

To generate the new student yield ratios for SY 2019-20, housing information was obtained from the Integrated Parcel Life-Cycle System (IPLS) data layers that contain housing information by unit type from Fairfax County's Department of Neighborhood and Community Services. The City of Fairfax also provided

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GIS parcel data along with associated dwelling information. Similarly, Fort Belvoir's GIS Division provided housing data for the residential villages on post. Individual student addresses from the FCPS student information system were then matched to specific dwelling types. For reference, historic student yield ratios are attached.

Since the methodology used to derive the proffer contribution is based, in part, on current construction costs, and that actual development and construction may not begin for a while after rezoning approval, FCPS continues to recommend that an escalation clause be included as part of any monetary school proffer contribution. Many developers have provided appropriate proffer language to address the potential changes in the adopted proffer formula so that when the proffer trigger is reached, the developer contribution is based on the then current student yield ratios and/or contribution formula and suggested proffer amount.

If you have any questions, please feel free to contact Jessica Gillis, Executive Director, Capital Improvements and Planning, at 571-423-2330.

JP/kv

Attachments: Proffer Contribution Calculation, Historic Countywide Student Yield Ratios and Proffer Contributions, Comparison of Student Yield Ratios by School Level

cc: Bryan Hill, County Executive, Fairfax County  
Scott Brabrand, Superintendent, FCPS  
FCPS School Board Members  
Marty Smith, Chief Operating Officer  
Jessica Gillis, Executive Director, Capital Improvements and Planning

**Attachment 1: Proffer Contribution Calculation**

**Building Construction Costs**

Cost per Student for ES =  $\$325 \times 100,000 \text{ SF} / 950 \text{ Max Capacity} = \$34,211$   
Cost per Student for MS =  $\$325 \times 195,000 \text{ SF} / 1,350 \text{ Max Capacity} = \$46,944$   
Cost per Student for HS =  $\$325 \times 400,000 \text{ SF} / 2,500 \text{ Max Capacity} = \$52,000$

**Weighted Average Cost per Student**

ES =  $\$34,211 \times 142 \text{ (# of schools)} = \$4,857,962$   
MS =  $\$46,944 \times 26 \text{ (# of schools)} = \$1,220,544$   
HS =  $\$52,000 \times 25 \text{ (# of schools)} = \$1,300,000$   
Weighted Average Cost per Student =  $\$7,378,506 / 193 \text{ (# of schools)} = \$38,231$

**School Capacity Provided by Modular Multiplier\***

ES Program Capacity with Modular = 106,409  
MS Program Capacity with Modular = 32,235  
HS Program Capacity with Modular = 56,308  
Total Program Capacity with Modular = 194,952  
Modular Capacity = 6,987  
Total Capacity without Modular = 187,965  
Modular Capacity Multiplier =  $6,987 / 194,952 = 0.04$   
*\*based on FCPS Capital Improvement Program Fiscal Year 2021-25*

**Adjustment – Modular Construction Cost**

Construction Cost Offset by Modular =  $\$38,231 \text{ (weighted average)} \times 0.04 \text{ (school capacity provided by modular multiplier)} = \$1,529$   
Cost of Modular Construction is 45% of the permanent construction cost  
Modular Multiplier = 0.45  
Construction Cost of Modular =  $\$1,529 \text{ (construction cost offset by modular)} \times 0.45 \text{ (cost of modular multiplier)} = \$688$   
Cost per Student after Modular Adjustment =  $\$38,231 \text{ (weighted average)} - \$1,529 \text{ (construction cost offset by modular)} + \$688 \text{ (construction cost of modular)} = \$37,390$

**Adjustment – Level of Service (LOS)**

Average Age of FCPS Buildings = 20  
Life Expectancy of FCPS Buildings = 50  
Level of Service =  $20 / 50 = 0.40$

**Cost per Student after Modular Adjustment = \$37,390**

**Cost per Student after Level of Service Multiplier (0.40) =  $\$37,390 \times 0.40 = \$14,956$**

**Attachment 2: Historic Countywide Student Yield Ratios and Proffer Contributions**

Letter Date	School Year Student Data	Effective Date	Per Student Proffer	Single-Family Detached Ratio	Single-Family Attached Ratio	Low-Rise Multifamily Ratio	Mid/High-Rise Multifamily Ratio
June 13, 2002	2001-2002	January 7, 2003	\$7,500	0.473	0.372	0.227	0.102
May 22, 2006	2005-2006	June 1, 2006	\$11,630	0.479	0.356	0.199	0.076
June 28, 2007	2006-2007	July 1, 2007	\$12,400	0.480	0.348	0.193	0.078
October 15, 2008	2007-2008	November 1, 2008	\$11,548	No Change to Ratios (Transition from DIT to FTS)			
July 22, 2009	2008-2009	September 1, 2009	\$9,378	0.531	0.379	0.234	0.087
August 24, 2012	2011-2012	September 1, 2012	\$10,488	0.531	0.440	0.291	0.110
September 18, 2013	2012-2013	September 1, 2013	\$10,825	0.536	0.430	0.302	0.106
November 20, 2014	2013-2014	December 1, 2014	\$11,749	0.530	0.441	0.325	0.100
October 13, 2016	2015-2016	November 1, 2016	\$12,262	0.533	0.462	0.329	0.112
May 23, 2022	2019-2020	June 1, 2022	\$14,956	0.521	0.467	0.357	0.108

**Attachment 3: Comparison of Student Yield Ratios by School Level**

Housing Type / School Level	SY 2001-02	SY 2005-06	SY 2006-07	SY 2008-09	SY 2011-12	SY 2012-13	SY 2013-14	SY 2015-16	SY 2019-20
<b>Single-Family Detached Total</b>	<b>0.473</b>	<b>0.479</b>	<b>0.480</b>	<b>0.531</b>	<b>0.531</b>	<b>0.536</b>	<b>0.530</b>	<b>0.533</b>	<b>0.521</b>
Elementary	0.244	0.239	0.239	0.266	0.268	0.273	0.270	0.266	0.261
Middle	0.070	0.070	0.069	0.084	0.085	0.086	0.085	0.088	0.084
High	0.159	0.170	0.172	0.181	0.178	0.177	0.175	0.179	0.175
<b>Single-Family Attached Total</b>	<b>0.372</b>	<b>0.356</b>	<b>0.348</b>	<b>0.379</b>	<b>0.440</b>	<b>0.430</b>	<b>0.441</b>	<b>0.462</b>	<b>0.467</b>
Elementary	0.210	0.194	0.190	0.204	0.249	0.243	0.252	0.258	0.254
Middle	0.053	0.052	0.050	0.057	0.063	0.060	0.062	0.067	0.072
High	0.109	0.110	0.108	0.118	0.128	0.127	0.127	0.137	0.141
<b>Low-Rise Multifamily Total</b>	<b>0.227</b>	<b>0.199</b>	<b>0.193</b>	<b>0.234</b>	<b>0.291</b>	<b>0.302</b>	<b>0.325</b>	<b>0.329</b>	<b>0.357</b>
Elementary	0.137	0.114	0.109	0.136	0.173	0.181	0.194	0.188	0.202
Middle	0.030	0.026	0.025	0.032	0.040	0.042	0.046	0.047	0.057
High	0.060	0.059	0.059	0.066	0.078	0.079	0.085	0.094	0.098
<b>Mid/High-Rise Multifamily Total</b>	<b>0.102</b>	<b>0.076</b>	<b>0.078</b>	<b>0.087</b>	<b>0.110</b>	<b>0.106</b>	<b>0.100</b>	<b>0.112</b>	<b>0.108</b>
Elementary	0.063	0.042	0.043	0.047	0.059	0.059	0.056	0.062	0.061
Middle	0.011	0.010	0.011	0.013	0.019	0.017	0.016	0.019	0.019
High	0.028	0.024	0.024	0.027	0.032	0.030	0.028	0.031	0.028