

## **Trailer Removal and the Impact of Boundary Changes over the Next 10 Years**

FTS was requested to examine how many temporary classrooms would be removed over the next 10 years under our current capital funding as well as whether boundary and program changes would help accelerate the trailer removal.

It is important to note, that the current CIP Cash Flow was developed with the fact that FCPS received \$180M from fiscal years 2019 to 2025, with increases of \$25M in fiscal years 2025 and 2030.

A related point to consider is that according to the CPI's rate of inflation since 2005, our cash flow cap should have increased by 1.9% annually. What this means is that our current cash flow cap should be \$197M and the increases that we are proposing for FY 2025 and 2030 are in very close alignment with CPI. This assumption is far below the average annual cost increase for construction, which has averaged more than 3% over the past 10 years, with increases of more than 6% per year over the past 3 years.

Therefore, this analysis examines the possibility of additional funding from 2 perspectives – an acceleration of the currently identified projects and secondly strictly using the funding to reduce the quantity of temporary classrooms.

### ***Capital Project Acceleration***

With respect to capital projects an infusion of capital funding does not result in a sudden acceleration of future projects as the projects require time to engineer and plan (1 to 2 years) as well as permitting (typically 18 months). Therefore, the impact will begin to materialize approximately 3 years after the implementation. However, once the projects are aligned with the additional funding, we would realize significant acceleration of the renovation projects as well as the future capacity enhancement projects.

As currently estimated, the CIP cash flow assumes that 2009 Renovation Queue projects will have funding for either planning or construction by the fall of 2027 and estimated to be completed in FY 2032. This infusion will result in 19 of 30 unfunded schools in the renovation queue being completed 3 years earlier in FY2029. The additional funding would be utilized to maintain our current renovation cycle of 37 years in lieu of the 44-year cycle that is anticipated by FY2028.

Therefore, since we are anticipating that the Renovation Queue projects will be completed over the next 10 years, we will examine their impact to the current temporary classroom quantity.

### ***Temporary Classroom Reduction via Capital Projects***

Presently, we have 754 instructional temporary classrooms at our elementary, middle and high schools. This report does not include temporary classrooms used as swing space for schools in renovation. The following table displays the quantity of temporary classrooms by region, pyramid, and level:

School Year 2018/19 Temporary Classrooms					
HS Pyramid	Region	ES	MS	HS	Total
Herndon	1	16	6	27	49
Langley	1	3	4	0	7
Madison	1	12	0	3	15
Oakton	1	22	8	8	38
South Lakes	1	20	9	2	31
Region Totals		73	27	40	140
Annandale	2	52	5	14	71
Falls Church	2	36	17	8	61
Justice	2	34	0	0	34
Marshall	2	16	14	0	30
McLean	2	18	2	14	34
Region Totals		156	38	36	230
Edison	3	3	4	0	7
Hayfield	3	20	0	0	20
Lee	3	30	0	0	30
Mt. Vernon	3	22	0	0	22
West Potomac	3	27	0	18	45
Region Totals		102	4	18	124
Centreville	4	23	0	14	37
Lake Braddock	4	10	0	0	10
Robinson	4	10	0	17	27
South County	4	6	0	0	6
West Springfield	4	11	0	9	20
Region Totals		60	0	40	100
Chantilly	5	24	4	9	37
Fairfax	5	14	0	8	22
Westfield	5	43	1	13	57
Woodson	5	33	9	2	44
Region Totals		114	14	32	160
		ES	MS	HS	Total
FCPS Totals		505	83	166	754

Source: *Temporary Classrooms*: FCPS Design and Construction, Trailer Asset Report, October 2018.

Over the past 5 years, the Capital Program has proven to be effective in reducing the quantity of temporary classrooms as our total count in school year 2014-15 was more than 970 classrooms. Most temporary classrooms were removed as a result of the completion of nearly 20 renovation projects.

The current CIP has approximately 50 capital projects displayed, all in various forms such as under construction, in planning or unfunded. The following tables are divided by region and display the estimated year that the construction will be completed, the total quantity of temporary classrooms from the entire pyramid, the total quantity within the next 10 years as well as the total amount of temporary classrooms removed via the capital program.

It should be noted that the only new school which was included in this count is North West County as it is currently under construction. The other new and/or repurposed schools such as Fairfax/Oakton ES, Silver Line ES, Western HS, Dunn Loring Center repurpose, Pimmit Hills Center repurpose and Virginia Hills Center repurpose will be considered later in this analysis.

## Region 1 Capital Projects

There are approximately 15 capital projects currently under construction, in the planning stages or scheduled as part of the renovation queue. These projects will result in the elimination of 80 temporary classrooms over the next 10 years.

At the high school level, the addition to South Lakes was recently completed and we intend to remove all temporary classrooms from the site. There is also an addition in the planning stages at Madison HS, which will result in the removal of the temporary classrooms. Both Herndon HS and Oakton HS are amid renovation projects, which will increase their capacity resulting in the removal of temporary classrooms at both schools which have been a fixture since the 1980's.

The Hughes MS renovation will begin in the spring of 2019 resulting in the removal of 9 temporary classrooms. The Cooper MS renovation will begin in early 2020 resulting in the removal of 4 temporary classrooms and a modular addition.

There are 9 elementary renovation projects within Region 1. At this time, only Fox Mill ES is in the planning stage, however Mosby Woods ES, Louise Archer ES and Crossfield ES will receive planning funds in the upcoming bond referendum. The cumulative temporary classroom reduction from these projects will result in 27 less temporary classrooms and the removal of 2 modular additions.

### Region 1

#### HERNDON HS PYRAMID

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
Herndon HS	2021	27	-	27
Armstrong ES	2026	-	-	-
Clearview ES	2021	4	-	4
Dranesville ES	2027	-	-	-
Herndon ES	2027	4	-	4
<b>Pyramid Totals*</b>		<b>49</b>	<b>14</b>	<b>35</b>

#### LANGLEY HS PYRAMID

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
Cooper MS	2023	4	-	4

<b>Pyramid Totals*</b>	<b>7</b>	<b>3</b>	<b>4</b>
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#### **MADISON HS PYRAMID**

<b>School</b>	<b>Estimated Year of Completion</b>	<b>SY 2018-19 Temporary Classrooms</b>	<b>SY 2028-29 Temporary Classrooms</b>	<b>Temporary Classrooms Removed Via Capital Program</b>
Madison HS	2022	3	-	3
Louise Archer ES	2022	2	-	2
<b>Pyramid Totals*</b>		<b>15</b>	<b>10</b>	<b>5</b>

#### **OAKTON HS PYRAMID**

<b>School</b>	<b>Estimated Year of Completion</b>	<b>SY 2018-19 Temporary Classrooms</b>	<b>SY 2028-29 Temporary Classrooms</b>	<b>Temporary Classrooms Removed Via Capital Program</b>
Oakton HS	2022	8	-	8
Crossfield ES	2024	-	-	-
Mosby Woods ES	2024	6	-	6
Waples Mill ES	2029	8	-	8
<b>Pyramid Totals*</b>		<b>38</b>	<b>16</b>	<b>22</b>

#### **SOUTH LAKES HS PYRAMID**

<b>School</b>	<b>Estimated Year of Completion</b>	<b>SY 2018-19 Temporary Classrooms</b>	<b>SY 2028-29 Temporary Classrooms</b>	<b>Temporary Classrooms Removed Via Capital Program</b>
South Lakes HS	Completed	2	-	2
Hughes MS	2022	9	-	9
Fox Mill ES	2022	3	-	3
<b>Pyramid Totals*</b>		<b>31</b>	<b>17</b>	<b>14</b>

*\* Includes all temporary classrooms in a pyramid.*

Source: *Temporary Classrooms*: FCPS Design and Construction, Trailer Asset Report, October 2018.

### **Region 2 Capital Projects**

In Region 2 there are 7 capital projects, 4 of which are renovations with additions, while the other 3 are primarily focused upon capacity relief through conventional and modular additions. We anticipate that these projects will result in the elimination of 76 temporary classrooms.

At the high school level Falls Church HS is scheduled to be renovated starting in late 2021. There is a conventional addition in the planning stages for Justice HS. FTS is planning to install a modular addition at Mclean HS within the next 2 years due to the severe overcrowding. These projects will result in the elimination of 22 temporary classrooms.

FTS will begin the planning of a modular addition at Kilmer MS soon. Upon completion we will be able to remove 14 temporary classrooms.

Within the Region 2 elementary schools, we have 3 renovation projects. Annandale Terrace ES is currently under construction. The Braddock ES project is in the planning stages. The Bren Mar Park ES renovation will begin planning in 2020. These projects will result in the elimination of 40 temporary classrooms and 2 modular additions.

## Region 2

### ANNANDALE HS PYRAMID

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
Annandale Terrace ES	2021	19	-	19
Braddock ES	2022	10	-	10
Bren Mar Park ES	2025	11	-	11
<b>Pyramid Totals*</b>		<b>71</b>	<b>31</b>	<b>40</b>

### FALLS CHURCH HS PYRAMID

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
Falls Church HS	2025	8	-	8
<b>Pyramid Totals*</b>		<b>61</b>	<b>53</b>	<b>8</b>

### JUSTICE HS PYRAMID

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
Justice HS	2022	-	-	-
<b>Pyramid Totals*</b>		<b>34</b>	<b>34</b>	<b>0</b>

### MARSHALL HS PYRAMID

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
Kilmer MS		14	-	14

<b>Pyramid Totals*</b>	<b>30</b>	<b>16</b>	<b>14</b>
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#### **MCLEAN HS PYRAMID**

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
McLean HS	2021	14	-	14
<b>Pyramid Totals*</b>		<b>34</b>	<b>20</b>	<b>14</b>

*\* Includes all temporary classrooms in a pyramid.*

Source: *Temporary Classrooms*: FCPS Design and Construction, Trailer Asset Report, October 2018.

### **Region 3 Capital Projects**

There are 9 capital projects either under construction, in planning or scheduled within the next 10 years of the capital program. These projects will result in the elimination of approximately 63 temporary classrooms.

At the high school level we are planning an addition to West Potomac HS which will eliminate the need for 18 temporary classrooms.

Twain MS and Saratoga ES are some of the last schools within the renovation queue to be renovated. Upon their completion we will be able to remove 8 trailers.

Presently there are 4 elementary schools in Region 3 under construction – Mount Vernon Woods ES, Belle View ES, Hollin Meadows ES, and Waynewood ES. Upon their completion we will have removed 8 temporary classrooms and 2 modular additions.

There are 2 elementary schools within Region 3 which are in the planning stage – Washington Mill ES and Hybla Valley ES. Upon the completion of these 2 schools we will remove an additional 29 temporary classrooms and a modular addition.

### **Region 3**

#### **EDISON HS PYRAMID**

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
Twain MS	2029	4	-	4
<b>Pyramid Totals*</b>		<b>7</b>	<b>3</b>	<b>4</b>

#### **HAYFIELD HS PYRAMID**

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
<b>Pyramid Totals*</b>		<b>20</b>	<b>20</b>	<b>-</b>

**LEE HS PYRAMID**

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
Saratoga ES	2029	4	-	4
<b>Pyramid Totals*</b>		<b>30</b>	<b>26</b>	<b>4</b>

**MOUNT VERNON HS PYRAMID**

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
Mount Vernon Woods ES	2020	2	-	2
Washington Mill ES	2022	13	-	13
<b>Pyramid Totals*</b>		<b>22</b>	<b>7</b>	<b>15</b>

**WEST POTOMAC HS PYRAMID**

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
West Potomac HS	2022	18	-	18
Belle View ES	2021	2	-	2
Hollin Meadow ES	2019	3	-	3
Hybla Valley ES	2022	16	-	16
Waynewood ES	2019	1	-	1
<b>Pyramid Totals*</b>		<b>45</b>	<b>5</b>	<b>40</b>

\* Includes all temporary classrooms in a pyramid.

Source: Temporary Classrooms: FCPS Design and Construction, Trailer Asset Report, October 2018.

**Region 4 Capital Projects**

There are 8 capital projects either under construction, in planning or scheduled within the next 10 years. These projects will eliminate the need for 44 temporary classrooms.

At the high school level, West Springfield's renovation project will be completed later this year. The Centreville HS renovation will receive planning funds in the 2021 Bond and construction funding in a later bond. At their conclusion these 2 projects will result in the elimination of 23 trailers and a modular addition.

There are 6 projects scheduled in Region 4 over the next 10 years. White Oakes ES renovation will be completed later this year. The Silverbrook ES renovation will begin shortly. The renovation of Bonnie Brae ES, Centre Ridge ES, Union Mill ES, and Sangster ES will occur in approximately 5 to 7 years. These projects will remove approximately 21 trailers.

#### Region 4

##### **CENTREVILLE HS PYRAMID**

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
Centreville HS	2028	14	-	14
Centre Ridge ES	2029	6	-	6
Union Mill ES	2028	4	-	4
<b>Pyramid Totals*</b>		<b>37</b>	<b>13</b>	<b>24</b>

##### **LAKE BRADDOCK HS PYRAMID**

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
Sangster ES	2029	5	-	5
White Oakes ES	2019	-	-	-
<b>Pyramid Totals*</b>		<b>10</b>	<b>5</b>	<b>5</b>

##### **ROBINSON HS PYRAMID**

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
Bonnie Brae ES	2024	2	-	2
<b>Pyramid Totals*</b>		<b>27</b>	<b>25</b>	<b>2</b>

##### **SOUTH COUNTY HS PYRAMID**

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
Silverbrook ES	2021	4	-	4
<b>Pyramid Totals*</b>		<b>6</b>	<b>2</b>	<b>4</b>

##### **WEST SPRINGFIELD HS PYRAMID**

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
West Springfield HS	2021	9	-	9
<b>Pyramid Totals*</b>		<b>20</b>	<b>11</b>	<b>9</b>



\* Includes all temporary classrooms in a pyramid.

Source: *Temporary Classrooms*: FCPS Design and Construction, Trailer Asset Report, October 2018.

## Region 5 Capital Projects

There are 12 capital projects which will be completed in the next 10 years within Region 5. These projects will eliminate the need for 77 trailers.

There are 3 middle school projects within the region, Franklin MS, Frost MS, and Rocky Run MS. Rocky Run is presently under construction, while Frost is in the planning stages with the construction funding to be included in the 2019 bond referendum. The Franklin MS planning funding is estimated to be included in the 2023 or 2025 bond referendums. These projects will reduce the trailer quantity by 13 and eliminate the requirement for 2 modular additions.

The new North West County ES which is under construction will eliminate the temporary classrooms at McNair ES. The Oak Hill project is currently in the planning stages and is expected to receive construction funding in the 2019 bond. The 2019 bond will also contain planning funds for Wakefield Forest. The remaining 6 projects will receive planning and construction funding in 2023, 2025 and 2025 bonds. These projects will result in the elimination of 64 temporary classrooms and a modular addition.

### REGION 5

#### CHANTILLY HS PYRAMID

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
Franklin MS	2027	-	-	-
Rocky Run MS	2021	4	-	4
Brookfield ES	2025	5	-	5
Lees Corner ES	2026	4	-	4
Oak Hill ES	2022	2	-	2
Poplar Tree ES	2029	3	-	3
<b>Pyramid Totals*</b>		<b>37</b>	<b>19</b>	<b>18</b>

#### FAIRFAX HS PYRAMID

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
Willow Springs ES	2028	8	-	8
<b>Pyramid Totals*</b>		<b>22</b>	<b>14</b>	<b>8</b>

#### WESTFIELD HS PYRAMID

	Estimated	SY 2018-19	SY 2028-29	Temporary Classrooms
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School	Year of Completion	Temporary Classrooms	Temporary Classrooms	Removed Via Capital Program
Cub Run ES	2028	6	-	6
McNair ES	2022	22	-	22
Virginia Run ES	2029	3	-	3
<b>Pyramid Totals*</b>		<b>57</b>	<b>26</b>	<b>31</b>

#### WOODSON HS PYRAMID

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
Frost MS	2024	9	-	9
Wakefield Forest ES	2024	11	-	11
<b>Pyramid Totals*</b>		<b>44</b>	<b>24</b>	<b>20</b>

\* Includes all temporary classrooms in a pyramid.

Source: *Temporary Classrooms*: FCPS Design and Construction, Trailer Asset Report, October 2018.

Based upon our current estimates, the renovation and addition projects will eliminate approximately 340 temporary classrooms as displayed in the following table:

#### Trailer Reduction via the Capital Program and Surplus Capacity

School	Estimated Year of Completion	SY 2018-19 Temporary Classrooms	SY 2028-29 Temporary Classrooms	Temporary Classrooms Removed Via Capital Program
Elementary	2029	505	312	193
Middle	2029	83	39	44
High	2028	166	63	103
<b>Total</b>		<b>754</b>	<b>414</b>	<b>340</b>

Source: *Temporary Classrooms*: FCPS Design and Construction, Trailer Asset Report, October 2018.

It should be noted that this analysis only contains 1 new school – North West County ES. The remaining new schools in the CIP such as Fairfax/Oakton ES, Silverline ES, Tysons ES, the new Western HS as well as the repurposed schools such as Dunn Loring Center, Pimmit Hills Center and Virginia Hills Center will be considered in a latter portion of this report.

#### *Temporary Classroom Reduction via Projected Enrollment*

From an FCPS perspective, the total temporary classroom count which should be considered is 414, as the known capital reduction amount has now been established. Our next goal is to determine whether the projected enrollment over the next 5 years could potentially result in further reductions to number of temporary classrooms.

The following table displays the projected enrollment change at our elementary, middle and high schools between the current school year and the 2023/24 school year.

**Actual SY2018-19 Membership Compared to Projected SY2023-24 Membership**

School Type	Actual Membership SY 2018-19	Projected Membership SY 2023-24	Projected 5 Year Membership Change
Elementary	97,692	95,184	-2,508
Middle	29,572	29,881	309
High	57,428	60,798	3,370
<b>Total</b>	<b>184,692</b>	<b>185,863</b>	<b>1,171</b>

Sources: FCPS, *Certified Membership*, September 30, 2018; FCPS Facilities Planning Services, *Membership Projections*, Fall 2018.  
Notes:

- 1) Membership numbers include general education, special education, AAP, FECEP/Head Start, and preschool (wherever applicable).
- 2) Membership numbers do not include adult education, home schooled, multi-agency, and private school special education services.
- 3) Dates for official budget counts are: special education and special education preschool (December 1); nontraditional sites (January 31); and FECEP/Head Start (March 31).

As referenced in the FY 2020-24 CIP, Historical and Projected Kindergarten section, the lower elementary membership is primarily related to the lower birth rate throughout the county.

If the projections are accurate, we will examine which schools are projected to be more than 10% under capacity over the next 5 years while having temporary classrooms.

#### Region 1

School	Program Capacity	SY 2018-19 Membership	SY 2018-29 Capacity Utilization	SY 2023-24 Membership	SY 2023-24 Capacity Utilization	Enrollment Change	Temporary Classrooms to be Removed
Forest Edge ES	694	541	78%	435	63%	-106	3
Churchill Road ES	891	751	84%	697	78%	-54	3
Lake Anne ES	726	606	83%	602	83%	-4	2
Hunters Woods ES	945	835	88%	838	89%	3	4
Dogwood ES	784	721	92%	696	89%	-25	8
							20

#### Region 2

School	Program Capacity	SY 2018-19 Membership	SY 2018-29 Capacity Utilization	SY 2023-24 Membership	SY 2023-24 Capacity Utilization	Enrollment Change	Temporary Classrooms to be Removed
Poe MS	1356	913	67%	866	64%	-47	5
Parklawn ES	822	672	82%	576	70%	-96	7
Camelot ES	755	606	80%	553	73%	-53	2
Freedom Hill ES	649	580	89%	489	75%	-91	5
Graham Road ES	504	431	86%	395	78%	-36	4
Jackson MS	1223	1113	91%	1005	82%	-108	17
Timber Lane ES	690	633	92%	568	82%	-65	2
Bailey's ES	864	760	88%	730	84%	-30	4
Annandale HS	2560	2173	85%	2197	86%	24	14
Weyanoke ES	609	546	90%	532	87%	-14	6
Sleepy Hollow ES	478	449	94%	430	90%	-19	5
							71

#### Region 3

School	Program Capacity	SY 2018-19 Membership	SY 2018-29 Capacity Utilization	SY 2023-24 Membership	SY 2023-24 Capacity Utilization	Enrollment Change	Temporary Classrooms to be Removed
Mount Eagle ES	464	379	82%	327	70%	-52	2
Lynbrook ES	722	576	80%	550	76%	-26	11
Forestdale ES	630	507	80%	483	77%	-24	6
Crestwood ES	652	611	94%	538	83%	-73	9
Groveton ES	878	748	85%	738	84%	-10	5
Rose Hill ES	794	698	88%	676	85%	-22	1
Riverside ES	892	827	93%	762	85%	-65	7
Hayfield ES	798	779	98%	695	87%	-84	2
							43

#### Region 4

School	Program Capacity	SY 2018-19 Membership	SY 2018-29 Capacity Utilization	SY 2023-24 Membership	SY 2023-24 Capacity Utilization	Enrollment Change	Temporary Classrooms to be Removed
Laurel Hill ES	948	848	89%	691	73%	-157	2
Bull Run ES	952	801	84%	757	80%	-44	13
West Springfield ES	618	519	84%	514	83%	-5	3
Kings Glen ES	560	499	89%	471	84%	-28	3
Hunt Valley ES	798	729	91%	683	86%	-46	1
Cardinal Forest ES	703	601	85%	605	86%	4	3
							25

#### Region 5

School	Program Capacity	SY 2018-19 Membership	SY 2018-29 Capacity Utilization	SY 2023-24 Membership	SY 2023-24 Capacity Utilization	Enrollment Change	Temporary Classrooms to be Removed
Olde Creek ES	504	381	76%	312	62%	-69	6
Eagle View ES	741	646	87%	535	72%	-111	2
Greenbriar East ES	978	920	94%	749	77%	-171	4
Fairfax Villa ES	692	621	90%	543	78%	-78	6
Stone MS	930	768	83%	740	80%	-28	1
London Towne ES	974	863	89%	819	84%	-44	2
Canterbury Woods ES	854	787	92%	748	88%	-39	2
Greenbriar West ES3	855	804	94%	765	89%	-39	6
							29

Sources:

FCPS, *Certified Membership*, September 30, 2018; FCPS Facilities Planning Services, *Membership Projections*, Fall 2018; *Program Capacity*: FCPS Facilities Planning Services, Capacity and Utilization Survey, SY 2018-19. *Temporary Classrooms*: FCPS Design and Construction, Trailer Asset Report, October 2018.

Notes:

- 1) Membership numbers include general education, special education, AAP, FECEP/Head Start, and preschool (wherever applicable).

- 2) Membership numbers do not include adult education, home schooled, multi-agency, and private school special education services.
- 3) Dates for official budget counts are: special education and special education preschool (December 1); nontraditional sites (January 31); and FECEP/Head Start (March 31).

There are approximately 38 schools which are projected to have a capacity surplus of 10% or greater which also have temporary classrooms, some of which are currently in that state and the remainder which may eventually have space. If the 38 schools mentioned in the table above were to have their trailers removed, it would result in the removal of another 188 temporary classrooms over the next 5 years.

Therefore, when we combine the removal of temporary classrooms from surplus capacity with those intended to be removed via the capital program the results should resemble the following:

#### **Trailer Reduction via the Capital Program and Surplus Capacity**

School Level	SCH YR 18/19 Trailer Classrooms	SCH YR 23/24 Trailers Removed via Capacity	SCH YR 28/29 Removed Via Capital Program	Total Trailers Remaining
<b>ES, MS, HS</b>	<b>754</b>	<b>188</b>	<b>340</b>	<b>226</b>

Source: *Temporary Classrooms*: FCPS Design and Construction, Trailer Asset Report, October 2018.

#### ***Temporary Classroom Reduction via Program Alignment and Scheduling***

While removing temporary classrooms via a capital project or available capacity is less controversial, it is important to acknowledge that programs have a profound impact upon our facilities and have led to a significant quantity of trailers throughout the system.

The one FCPS program which has undoubtedly led to the highest number of temporary classrooms is the Band & Strings offering at our elementary schools. This year this program utilizes 128 temporary classrooms as well as numerous spaces within our elementary schools. In comparison, at the elementary level FCPS uses 145 trailers for core instruction of 3<sup>rd</sup> to 6<sup>th</sup> grades, only 17 more trailers than the Band and Strings. If the program were offered before and after school like the elementary chorus program, we estimate that we could not only eliminate these 128 temporary classrooms immediately, but also free up an additional 25 to 30 classrooms within our elementary schools.

There are 2 county programs which consume considerable space within our elementary schools. The first of which is SACC. There are more than 250 SACC rooms in FCPS, with more coming available each year. Our current estimates are if SACC were to alter their model like the 2 private programs which operated within White Oaks ES and Clearview ES by using spaces other than classrooms, we could recapture the SACC spaces thus eliminating 200 temporary classrooms.

The second county program which has impacted the number of trailers is FECEP/Head Start. Currently there are 92 FECEP/Head Start rooms within FCPS elementary schools. Some of the FECEP/Head Start rooms have been constructed during capital projects, the majority have been

placed within the existing classroom inventory and thus resulted in the displacement of students to other spaces or temporary classrooms.

Obviously, FCPS considers both SACC and FECEP/Head Start to be very valuable programs, however the facility costs have been directly bourn by our capital program at a considerable cost. We began construction of SACC rooms in 1987 and it was not until 2009 that we received capital funding compensation and have not received funding at all for the FECEP/Head Start rooms. To date we have received approximately \$7.25M for the SACC rooms. We currently estimate that the value of the 250 SACC rooms and 92 FECEP/Head Start rooms at \$104.3M.

Just as important as the 3 previously listed programs, it is not possible to ignore the 2 FCPS programs which have also led to need for temporary classrooms throughout the system – AAP and Immersion. There are numerous examples where these programs have created a capacity issue as well as other concerns due to the number of students who transfer into a school and the quantity of temporary classrooms generated. The Planning Office has provided extensive information regarding the impact of these programs to the host schools, however further analysis regarding capacity impact of AAP and Immersion programs on FCPS facilities is needed.

From a facilities and equity perspective we have previously advised that both Immersion and AAP transfers be capped at the host school to ensure that the students who reside within the school's boundary are afforded the opportunity to have a classroom within the school.

### *Temporary Classroom Reduction via Boundary Changes*

In order to put into perspective, the potential for boundary changes we need to examine what each region and high school pyramid looks like based on the projected available capacity as well as how many temporary classrooms will remain after the 10-year capital program has been implemented.

Here is the overall summary of the projected available capacity and the trailers not removed by the capital program:

#### **FCPS School Year 2023-24 Enrollment and Capacity**

	Enrollment Change Over 5 Years				Available Capacity				Trailers Not Removed by Capital Program			
	ES	MS	HS	Total	ES	MS	HS	Total	ES	MS	HS	Total
FCPS	-	309	3,370	1,171	12,088	2,822	0	14,909	312	39	54	414
Totals	2,508											

Sources:

FCPS, *Certified Membership*, September 30, 2018; FCPS Facilities Planning Services, *Membership Projections*, Fall 2018; *Program Capacity*: FCPS Facilities Planning Services, Capacity and Utilization Survey, SY 2018-19. *Temporary Classrooms*: FCPS Design and Construction, Trailer Asset Report, October 2018.

Notes:

- 1) Numbers may not add due to rounding.
- 2) Membership numbers include general education, special education, AAP, FECEP/Head Start, and preschool (wherever applicable).
- 3) Membership numbers do not include adult education, home schooled, multi-agency, and private school special education services.
- 4) Dates for official budget counts are: special education and special education preschool (December 1); nontraditional sites (January 31); and FECEP/Head Start (March 31).

It is possible, that through boundary changes we could potentially eliminate more than 250 of the temporary classrooms as well as lessen the cost of the capital projects by reducing the membership at some of the schools.

The following are the region summaries:

#### FCPS Region 1 - School Year 2023-24 Enrollment and Capacity

	Enrollment Change Over 5 Years				Available Capacity				Trailers Not Removed by Capital Program			
	ES	MS	HS	Total	ES	MS	HS	Total	ES	MS	HS	Total
Pyramid Herndon	-104	-40	249	105	572	103	-52	623	8	6	0	14
Langley	-16	74	-62	-4	582	15	492	1,089	3	0	0	3
Madison	-216	221	106	111	419	-197	82	304	10	0	0	10
Oakton	-230	91	146	7	167	-69	-254	-156	8	8	0	16
South Lakes	-230	-77	131	-176	976	281	80	1,337	17	0	0	17
<b>Region 1 Total</b>	<b>-796</b>	<b>269</b>	<b>570</b>	<b>43</b>	<b>2,716</b>	<b>133</b>	<b>348</b>	<b>3,197</b>	<b>46</b>	<b>14</b>	<b>0</b>	<b>60</b>

Sources:

FCPS, *Certified Membership*, September 30, 2018; FCPS Facilities Planning Services, *Membership Projections*, Fall 2018; *Program Capacity*: FCPS Facilities Planning Services, Capacity and Utilization Survey, SY 2018-19. *Temporary Classrooms*: FCPS Design and Construction, Trailer Asset Report, October 2018.

Notes:

- 1) Numbers may not add due to rounding.
- 2) Membership numbers include general education, special education, AAP, FECEP/Head Start, and preschool (wherever applicable).
- 3) Membership numbers do not include adult education, home schooled, multi-agency, and private school special education services.
- 4) Dates for official budget counts are: special education and special education preschool (December 1); nontraditional sites (January 31); and FECEP/Head Start (March 31).

In Region 1, we are projecting that the South Lakes and Langley pyramids will have more than 1,000 seats each available at the elementary level. While in the short term this may seem advantageous, it is important to note that both pyramids are expected to experience enrollment growth associated with the development of Tysons as well as the Silver Line. In fact, all the schools within Region 1 will be affected by the development in the previously referenced area. We do believe that boundary changes could result in the approximate reduction of 46 trailers within the region.

#### FCPS Region 2 - School Year 2023-24 Enrollment and Capacity

	Enrollment Change Over 5 Years				Available Capacity				Trailers Not Removed by Capital Program			
	ES	MS	HS	Total	ES	MS	HS	Total	ES	MS	HS	Total
Pyramid Annandale	20	-57	98	61	380	698	671	1,750	12	5	14	31
Falls Church	-41	-108	296	147	198	218	-413	3	36	17	0	53
Marshall	-65	125	115	175	245	-103	-7	135	16	0	0	16
McLean	-146	181	250	285	-16	-126	-523	-665	18	2	0	20
Justice	-173	33	264	124	746	20	48	814	34	0	0	34
<b>Region 2 Total</b>	<b>-405</b>	<b>174</b>	<b>1,023</b>	<b>792</b>	<b>1,553</b>	<b>707</b>	<b>-223</b>	<b>2,037</b>	<b>116</b>	<b>24</b>	<b>14</b>	<b>154</b>

Sources:

FCPS, *Certified Membership*, September 30, 2018; FCPS Facilities Planning Services, *Membership Projections*, Fall 2018; *Program Capacity*: FCPS Facilities Planning Services, Capacity and Utilization Survey, SY 2018-19. *Temporary Classrooms*: FCPS Design and Construction, Trailer Asset Report, October 2018.

Notes:



- 1) Numbers may not add due to rounding.
- 2) Membership numbers include general education, special education, AAP, FECEP/Head Start, and preschool (wherever applicable).
- 3) Membership numbers do not include adult education, home schooled, multi-agency, and private school special education services.
- 4) Dates for official budget counts are: special education and special education preschool (December 1); nontraditional sites (January 31); and FECEP/Head Start (March 31).

Region 2 has more temporary classrooms than any other region both before and after the implementation of the capital program projects. The pyramid which continues to concern Facilities is McLean. It is the only pyramid which is projected to have a severe capacity deficit over the next 5 years, which is why the CIP is proposing to reopen both Dunn Loring Center and Pimmit Hills Center to add capacity at the elementary level. Currently there is no real solution for McLean HS beyond adding a modular addition, however Langley HS has enough capacity to help relieve McLean HS. It is likely that as Tysons and the Silver Line development comes on line that boundary changes involving McLean HS and Marshall HS will need to occur in conjunction with other high schools to the west.

We believe that it is possible to remove approximately 100 temporary classrooms in Region 2 over the next 5 years based upon enrollment trends and available capacity.

### FCPS Region 3 - School Year 2023-24 Enrollment and Capacity

Pyramid	Enrollment Change Over 5 Years				Available Capacity				Trailers Not Removed by Capital Program			
	ES	MS	HS	Total	ES	MS	HS	Total	ES	MS	HS	Total
Edison	62	70	109	241	640	-106	-61	472	3	0	0	3
Hayfield	-234	-20	140	-114	452	189	17	657	20	0	0	20
Lee	-504	-49	68	-485	1,061	241	254	1,555	26	0	0	26
Mount Vernon	-254	-6	70	-190	917	191	375	1,483	7	0	0	7
West Potomac	-156	-26	224	42	1,257	-52	178	1,383	5	0	0	5
<b>Region 3 Total</b>	<b>-1,086</b>	<b>-31</b>	<b>611</b>	<b>-506</b>	<b>4,327</b>	<b>463</b>	<b>762</b>	<b>5,551</b>	<b>61</b>	<b>0</b>	<b>0</b>	<b>61</b>

Sources:

FCPS, *Certified Membership*, September 30, 2018; FCPS Facilities Planning Services, *Membership Projections*, Fall 2018; *Program Capacity*: FCPS Facilities Planning Services, Capacity and Utilization Survey, SY 2018-19. *Temporary Classrooms*: FCPS Design and Construction, Trailer Asset Report, October 2018.

Notes:

- 1) Numbers may not add due to rounding.
- 2) Membership numbers include general education, special education, AAP, FECEP/Head Start, and preschool (wherever applicable).
- 3) Membership numbers do not include adult education, home schooled, multi-agency, and private school special education services.
- 4) Dates for official budget counts are: special education and special education preschool (December 1); nontraditional sites (January 31); and FECEP/Head Start (March 31).

Region 3 is expected to face the largest enrollment decline over the next 5 years resulting in more than 5,500 seats available for capacity in that time frame. Therefore, we believe that all 61 temporary classrooms can be removed within the region.

#### FCPS Region 4 - School Year 2023-24 Enrollment and Capacity

	Enrollment Change Over 5 Years				Available Capacity				Trailers Not Removed by Capital Program			
	ES	MS	HS	Total	ES	MS	HS	Total	ES	MS	HS	Total
<b>Pyramid</b>												
Centreville	-160	-81	66	-175	594	269	-504	359	13	0	0	13
Lake Braddock	-143	-80	145	-78	565	270	176	1,011	5	0	0	5
Robinson	269	118	103	490	-20	-3	49	26	8	0	17	25
South County	-132	26	24	-82	569	172	235	976	2	0	0	2
West Springfield	-35	11	314	290	306	44	-245	105	11	0	0	11
<b>Region 4 Total</b>	<b>-201</b>	<b>-6</b>	<b>652</b>	<b>445</b>	<b>2,014</b>	<b>752</b>	<b>-289</b>	<b>2,476</b>	<b>39</b>	<b>0</b>	<b>17</b>	<b>56</b>

Sources:

FCPS, *Certified Membership*, September 30, 2018; FCPS Facilities Planning Services, *Membership Projections*, Fall 2018; *Program Capacity*: FCPS Facilities Planning Services, Capacity and Utilization Survey, SY 2018-19. *Temporary Classrooms*: FCPS Design and Construction, Trailer Asset Report, October 2018.

Notes:

- 1) Numbers may not add due to rounding.
- 2) Membership numbers include general education, special education, AAP, FECEP/Head Start, and preschool (wherever applicable).
- 3) Membership numbers do not include adult education, home schooled, multi-agency, and private school special education services.
- 4) Dates for official budget counts are: special education and special education preschool (December 1); nontraditional sites (January 31); and FECEP/Head Start (March 31).

Region 4 is projected to experience moderate growth over the next 5 years. However, the excess capacity at the elementary level could be utilized to redistribute programs and perform boundary studies to eliminate the 39 temporary classrooms within the region.

#### FCPS Region 5 - School Year 2023-24 Enrollment and Capacity

	Enrollment Change Over 5 Years				Available Capacity				Trailers Not Removed by Capital Program			
	ES	MS	HS	Total	ES	MS	HS	Total	ES	MS	HS	Total
<b>Pyramid</b>												
Chantilly	-406	-177	209	-374	674	324	-481	517	10	0	9	19
Fairfax	-71	35	2	-34	230	164	120	514	6	0	8	14
Westfield	397	-28	151	520	448	190	-29	609	12	1	13	26
Woodson	60	73	152	285	126	90	-209	7	22	0	2	24
<b>Region 5 Total</b>	<b>-20</b>	<b>-97</b>	<b>514</b>	<b>397</b>	<b>1,478</b>	<b>768</b>	<b>-598</b>	<b>1,647</b>	<b>50</b>	<b>1</b>	<b>32</b>	<b>83</b>

Sources:

FCPS, *Certified Membership*, September 30, 2018; FCPS Facilities Planning Services, *Membership Projections*, Fall 2018; *Program Capacity*: FCPS Facilities Planning Services, Capacity and Utilization Survey, SY 2018-19. *Temporary Classrooms*: FCPS Design and Construction, Trailer Asset Report, October 2018.

Notes:

- 1) Numbers may not add due to rounding.
- 2) Membership numbers include general education, special education, AAP, FECEP/Head Start, and preschool (wherever applicable).

- 3) Membership numbers do not include adult education, home schooled, multi-agency, and private school special education services.
- 4) Dates for official budget counts are: special education and special education preschool (December 1); nontraditional sites (January 31); and FECEP/Head Start (March 31).

Like Region 4, Region 5 will experience moderate growth over the next 5 years. The available capacity at the elementary level could be utilized through boundary changes to eliminate the 50 temporary classrooms.

The primary challenge in Region 5 is the Westfield HS pyramid as the Innovation Station development will severely impact the pyramid at all levels. We do not necessarily project for future development, however the rezoning and development which has been approved could potentially add more than 2,000 students and possibly up to 3,000. The CIP does contain 1 new elementary school in the pyramid (Silver Line ES), however we will need at least 1 more elementary school, as well as half of a middle and half of a high school.

### ***Capital Funding Limits and the impact upon Temporary Classrooms***

The earlier portions of this report have provided avenues to dramatically reduce our inventory of 754 temporary classrooms such as the elimination of 340 temporary classrooms via the renovations and addition projects, 200 by altering the method of program delivery via SACC, an additional 250 through the projected enrollment decline and potential boundary and/or program changes. However, there is no single solution which ultimately eliminates the need for temporary classrooms without some sort of increase in capital funding.

One of the primary reasons that we are unable to solve this problem is the fact that FCPS is compelled to satisfy facility requirements initiated by the County through the capital program without the appropriate funding increases. We provided an example earlier regarding the SACC and FECEP/Head Start spaces valued at more than \$100M with little to no compensation.

Beyond the shifting of the county's capital burden to FCPS for their programs the larger challenge for FCPS is about the development which has been approved by the county and will continue to do so into the future. We have noted from the Fairfax County Demographic Report that the county has built more than 56,000 residential units over the past 16 years, with many more than 115,000 residential units planned to be built by 2045.

It is evident that the approval of the new developments should result in additional capital funding for FCPS. The reason that our renovation cycle is 37 years long is the fact that we are attempting to house students associated with these approvals.

The most recent example of this conflict would be the case of Innovation Center Station area. The county has approved several rezoning cases that increase or introduce residential land use to areas previously planned for light industrial, commercial, or office uses. Many rezoning cases that have been approved reduce or eliminate office uses for increase residential (such as Arrowbrook or Maker's Rise). This will result in the approval of thousands of residential units in a small area in which FCPS already had 3 large elementary schools within 1 mile of each other. FCPS is slated to receive \$7M in proffers for these developments, however our estimated capital expenses are more than \$100M for the construction of 3 elementary schools, and \$125M for a high school to house the expected 2,000 to 3,000 students associated with the development. The situation is exacerbated by the fact that we do not have enough land to construct the schools.

The Innovation Center Station example will conservatively result in an additional \$225M from the FCPS capital fund. We are experiencing similar pressures within the pyramids which surround Tysons such as McLean, Marshall, Madison and Oakton. It is obvious that the proffers or even the provision of a school site are not enough to offset the direct impact to FCPS. Therefore it is incumbent upon the county to resolve the capital shortfall associated with the development that they alone control.

In addition to the challenges associated with the high-density development associated with Tysons, Innovation Center Station and Embark the fact remains that we cannot continue to renovate a facility every 35 to 40 years. In fact, without increases to our capital fund every 5 years to offset the impact of inflation, which for construction costs sits at more than 6% annually, the elongated renovation cycle places further burden upon FCPS's maintenance budget as they struggle to keep fundamental systems functional well beyond the expected life.

The analysis that we provided last year determined that FCPS will need approximately \$242M annually in order to renovate our schools every 25 years, not including capacity projects. While we understand the County's reluctance to entertain that level of funding it is important to acknowledge that our schools are not only used for instruction, but serve as community and recreation centers, which is why they are used more during non-school hours resulting in a reduced life-cycle of our facilities. This further impacts our maintenance budget as the mechanical, plumbing, and electrical systems are operated for much longer periods than desirable.

In order to truly partner with the county, it is essential that open and transparent discussion occur. From an FCPS Facilities perspective we have been instructed by county staff that our projects are to be treated just like a private developer. In order to obtain permits, we are frequently compelled to perform work not associated with the project – such as providing solutions to deficient storm water issues well away from the project site. Other conditions of permits may include providing land to the county for road construction and recreational fields that we do not necessarily want or need. These requirements are the equivalent of FCPS providing proffers for county agencies.

Another factor that should be examined is whether the County's debt limit can be raised to provide additional funding for the school system's needs or whether the bond funds are being distributed equitably. Frequently the county will state that FCPS receives a larger portion of the bond funds. However these statements cannot be entirely true as the county has a larger debt service annually. This means that the county is not financing projects strictly through GO Bonds, thus actually have a disproportionate share of the bond funding. Additionally, the county has access to tax revenue through the water authority to fund \$40M annually to their storm water projects. It appears possible that although FCPS has nearly 4 times the amount of square footage than the County, they receive more capital funding in various forms.

Therefore, we would recommend that FCPS receive the appropriate funding to renovate our schools every 25 years. In addition, the FCPS capital fund should receive increased proffers as well as monies to offset the increase in development which is being approved at the County level. **Facilities**