High School Boundary Change Data Analysis

January 11, 2017 Update: The following provides clarification of this analysis based on questions from the community.

The analysis below reflects the following:

- **Actual membership (enrollment) as of September 30, 2016.** Please note that the projections used in the boundary refinement process used the 2015 projections (based on September 30, 2016 enrollment) since the final membership data was not available until mid-way through the refinement process.
- **Total student counts for neighborhood boundaries.** This analysis does not subtract the number of students who will attend other schools or programs. The document below explains the rationale for this in greater detail.

Finally, Free and Reduced lunch was addressed in the data that was used to inform the decision-making process for the boundary refinements (see November 19, 2017 Data by Options). It is important to note that applications for free and reduced lunch are due annually after September 30, and the final count for this program is not available each year until late November.

This summary estimates the future demographics at the three Arlington Public Schools neighborhood high schools based on the School Board's actions on December 1, 2016. The analysis assumes the current students will attend high school in Arlington and does not account for any students who may move out of Arlington or for any new students who may move into Arlington. In the following analysis, the Fall 2020 high school population is based on current APS students enrolled in Grades 5, 6, 7 and 8 with the demographic information shown by their neighborhood high school zone both before and after the boundary change.

Across this analysis, students in small reporting groups (American Indian/Alaskan Native, Native Hawaiian/Other Pacific Islander, and multiple races) are counted together in the category "Other."

This report focuses on neighborhood boundaries. There are some caveats embedded in this analysis:

- APS cannot estimate the ethnicity of future students who may select another high school program (H-B Woodlawn, Arlington Tech, Arlington Community High School or Langston High School Continuation Program), students who will take advantage of the waiver that was part of the December 2016 Boundary decision, or students who request a transfer to another neighborhood high school.
- Analysis will be difficult to compare with existing membership reports that show students currently attending neighborhood schools and alternative programs since the future choices are not known for the cohort that will be in high school in Fall 2020.
- APS membership reports do not include Arlington high school students who currently attend Thomas Jefferson High School for Science and Technology, and we cannot predict which students will be accepted in future years.
- The data reflects the Limited English Proficient (LEP) identification of students at this time; however, by Fall 2020, many of those students will have attained English language proficiency and, therefore, will no longer be identified as LEP.

Comparisons of current and future classes of high school students is complicated by the fact that diversity in APS is decreasing.

It is important to note that comparisons of current and future classes of high school students also is complicated by the fact that diversity in APS is decreasing based on review of the demographics of our current

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elementary and middle school cohorts.   This means that the cohort of students in Grades 5, 6, 7 and 8 is less diverse than the cohort of students currently enrolled in Grades 9, 10, 11, and 12.

When looking at the impact on race/ethnicity, it's important to note that a student's race/ethnicity is self-reported based on choices that the family makes, often when they first register their student in APS. Federal reporting has families answer two different questions that are combined into one variable for reporting. The questions ask:

- Are you Hispanic – Yes/No
- Select all races that apply

If the answer to "Are you Hispanic" is "Yes", the student is identified as Hispanic for reporting purposes, regardless if the student was also identified with one or more race categories.

Table 1 (below) compares race/ethnicity of students by their neighborhood school boundary zone (regardless of where they are enrolled) for:

- Fall 2016 high school membership, using the current boundaries that apply today, AND
- Fall 2020 estimated high school membership, based on the boundary changes beginning in SY2017-18 that were approved by the Board in December 2016.

Note: The data used to compile the demographics for each group is detailed in the Appendix.

Table 1. Comparing fall 2016 Race/Ethnicity using the current neighborhood boundaries to estimated 2020 race/ethnicity with changed boundaries

Based on September 30, 2016
- o 2016 = current membership in Grades 9, 10, 11 and 12
- o 2020 = estimated future membership, using current population in grades 5, 6, 7 and 8

School	H.S. Neighbor-hood Cohorts	No. Students in Current and Future Cohorts	Asian		Black/ African American		Hispanic		White		Other	
		No.	No.	%	No.	%	No.	%	No.	%	No.	%
APS	2016 (2016 boundaries)	6,712	613	9%	737	11%	2,166	32%	2,835	42%	361	5%
APS	2020 (2017 boundaries)	7,337	624	9%	707	10%	1,942	26%	3,636	50%	428	6%
Wakefield	2016 (2016 boundaries)	2,108	192	9%	387	18%	935	44%	480	23%	114	5%
Wakefield	2020 (2017 boundaries)	2,418	250	10%	406	17%	926	38%	716	30%	120	5%
Washington-Lee	2016 (2016 boundaries)	2,418	245	10%	220	9%	884	37%	946	39%	123	5%
Washington-Lee	2020 (2017 boundaries)	2,123	196	9%	153	7%	657	31%	992	47%	125	6%
Yorktown	2016 (2016 boundaries)	2,186	176	8%	130	6%	347	16%	1,409	64%	124	6%
Yorktown	2020 (2017 boundaries)	2,796	178	6%	148	5%	359	13%	1,928	69%	183	7%

Table 1 Findings – comparing current and future high school cohorts:

Overall, as the population of Arlington high school students increase, the following changes are seen throughout the county:

- o Hispanic student enrollment decreases by 6 percentage points
- o Black student enrollment decreases by 1 percentage point
- o White student enrollment increases by 8 percentage points
- o "Other" population enrollment increases by 1 percentage point
- o Asian student enrollment remains constant at 9%

Looking at neighborhood high schools, estimates show the following changes:
- Decreases in the proportions (percentage points) of the following student groups:
  - o Wakefield – Black (-1), Hispanic (-6)

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- o Washington-Lee – Asian (-1), Black (-2), Hispanic (-6)
- o Yorktown – Asian (-2), Black (-1), Hispanic (-3)
- Increase in proportions (percentage points) of the following student groups:
  - o Wakefield – Asian (+1), White (+7)
  - o Washington-Lee – Multi (+1), White (+8)
  - o Yorktown – Multi (+1), White (+5)
- For Wakefield, there is no change in the proportion (percentage points) of students in the other reporting groups.

The boundary changes have no impact on the proportion of students identified with special needs.

Table 2 shows the estimated impact of the fall 2016 boundary changes on students identified with a disability. The proportions of students remain constant at each high school, before and after the boundary changes.

School	Fall 2020 Estimated Students identified w/a disability	Total	SWD		Non-SWD	
		No.	Yes	%	No.	%
APS H.S. TOTAL		**7,337**	**1,101**	**15%**	**6,236**	**85%**
Wakefield	Before boundary change	2234	403	18%	1,831	82%
	After boundary change	2418	432	18%	1,986	82%
Washington-Lee	Before boundary change	2525	398	16%	2,127	84%
	After boundary change	2123	340	16%	1,783	84%
Yorktown	Before boundary change	2578	300	12%	2,278	88%
	After boundary change	2796	329	12%	2,467	88%

Table 2. Fall 2020 High School Population Estimates for Students with Disabilities
Based on September 30, 2016 membership in Grades 5, 6, 7 & 8

The boundary changes have a small impact on the proportion of students identified as Limited English Proficient (LEP) today.

Table 3 (below) shows the estimated impact of the fall 2016 boundary changes on students identified as LEP today, as noted above many of these students may reach proficiency before they get to high school. The proportions of students who are LEP today is estimated to
- o remain constant at Washington-Lee
- o increase by 1 percent at Wakefield and
- o decrease by 1 percent at Yorktown

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School	Fall 2020 Estimated Students identified as LEP	Total	LEP		Non-LEP	
		No.	Yes	%	No.	%
APS H.S. TOTAL		**7,337**	**1,441**	**20%**	**5,896**	**80%**
Wakefield	Before boundary change	2234	692	31%	1,542	69%
	After boundary change	2418	763	32%	1,655	68%
Washington-Lee	Before boundary change	2525	548	22%	1,977	78%
	After boundary change	2123	471	22%	1,652	78%
Yorktown	Before boundary change	2578	201	8%	2,377	92%
	After boundary change	2796	207	7%	2,589	93%

Table 3. Fall 2020 High School Population Estimates for Students Identified as English Limited Proficient
Based on September 30, 2016 membership in Grades 5, 6, 7 & 8

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Appendix

2020 Neighborhood Race/Ethnicity

Table A-1 shows the small estimated impact of the December 2016 boundary changes on race/ethnicity. In most cases, race/ethnicity remains the same or changes by one percent. Among the 5 ethnic groups at the 3 high schools (in total - 15 groups), there was

- No Change in the proportion of students in 7 of the 15 groups including
  - Wakefield – White, Other
  - Washington-Lee – White, Other
  - Yorktown – Asian, Hispanic, Other
- A one percentage point decrease in the proportion of students in 4 of the 15 groups including
  - Wakefield – Hispanic
  - Washington-Lee – Asian, Black
  - Yorktown – Black
- A one percentage point increase in the proportion of students in 3 of the 15 groups including
  - Wakefield – Asian, Black
  - Yorktown – White
- A two percentage point increase in the proportion of Hispanic students at Washington-Lee

School	Fall 2020 Estimated Race/ Ethnicity	No. Students in Grades 5, 6, 7 ,8 Sept. 30 2016	Asian		Black/ African American		Hispanic		White		Other	
		No.	No.	%	No.	%	No.	%	No.	%	No.	%
APS	**Total H.S. Population**	**7,337**	**624**	**9%**	**707**	**10%**	**1,942**	**26%**	**3,636**	**50%**	**428**	**6%**
Wakefield	Before boundary change	2,234	211	9%	353	16%	877	39%	679	30%	114	5%
Wakefield	After boundary change	2,418	250	10%	406	17%	926	38%	716	30%	120	5%
Washington -Lee	Before boundary change	2,525	249	10%	211	8%	726	29%	1,195	47%	144	6%
Washington -Lee	After boundary change	2,123	196	9%	153	7%	657	31%	992	47%	125	6%
Yorktown	Before boundary change	2,578	164	6%	143	**6%**	339	13%	1,762	**68%**	170	7%
Yorktown	After boundary change	2,796	178	6%	148	**5%**	359	13%	1,928	**69%**	183	7%

Table A-1. Fall 2020 High School Population Estimates for Race/Ethnicity
Based on September 30, 2016 membership in grades 5, 6, 7 & 8

2016 Neighborhood Race/Ethnicity

Table A-2 shows the estimated impact of the fall 2016 boundary changes on race/ethnicity, for the current high school population. In most cases race/ethnicity remains the same or changes by one percent. Among the 5 ethnic groups at the 3 high schools (in total - 15 groups), there was

- No change in proportion of students in 8 of the 15 groups including
    - Wakefield – Other
    - Washington-Lee – White, Other
    - Yorktown – Asian, Black, Hispanic, White, Other
- A one percentage point decrease in the proportion of students in 4 of the 15 groups including
    - Wakefield – Hispanic, White
    - Washington-Lee – Asian, Black
- A one percentage point increase in the proportion of students in 2 of the 15 groups including
    - Wakefield – Asian, Black
- A two percentage point increase in the proportion of Hispanic students at Washington-Lee

School	Fall 2020 Estimated Race/ Ethnicity	No. Students in Grades 9, 10, 11 & 12 Sept. 30 2016	Asian		Black/ African American		Hispanic		White		Other	
		No.	No.	%	No.	%	No.	%	No.	%	No.	%
APS	**Total H.S. Population**	**6,712**	**613**	**9%**	**737**	**11%**	**2,166**	**32%**	**2,835**	**42%**	**361**	**5%**
Wakefield	Before boundary change	2,108	192	9%	387	18%	935	44%	480	23%	114	5%
Wakefield	After boundary change	2,277	230	10%	438	19%	981	43%	505	22%	123	5%
Washington-Lee	Before boundary change	2,418	245	10%	220	9%	884	37%	946	39%	123	5%
Washington-Lee	After boundary change	2,078	194	9%	166	8%	802	39%	814	39%	102	5%
Yorktown	Before boundary change	2,186	176	8%	130	6%	347	16%	1,409	64%	124	6%
Yorktown	After boundary change	2,357	189	8%	133	6%	383	16%	1,516	64%	136	6%

Table A-2. *Race/Ethnicity if the boundary changes applied to the current 2016-17 High School population*
Based on September 30, 2016 membership in Grades 9, 10, 11 and 12