



Office of Deputy Mayor Jennifer C. Niles  
John A. Wilson Building | 1350 Pennsylvania Ave, NW, Suite 307 | Washington, DC 20004

### **Analysis of the Proposed Charter Walkability Preference (2/9/17)**

#### **Definition of the Proposed Opt In Public Charter Walkability Preference**

- The current proposal for the public charter walkability preference is defined as:
  - Elementary students would qualify for a walkability preference for charter enrollment if their DCPS elementary zoned school is greater than .5 miles away from their home (walkable distance) and if there is a participating charter elementary school within .5 miles (walkable distance).
- The proposed public charter walkability preference would only be applied to the eligible student if:
  - The charter elementary school that is within .5 miles opts in to participate.
  - The student would have to apply in the lottery process and rank the walkable charter.
- DCPS currently implements a similar preference called a proximity preference.
  - Elementary students qualify for the proximity preference for DCPS enrollment if their DCPS elementary zoned school is greater than .5 miles away from their home (walkable distance) and if there is another DCPS elementary school within .5 miles (walkable distance).
  - This preference was implemented starting SY2015-16 based on the recommendation from the Advisory Committee on Student Assignment. This replaced the previous DCPS proximity preference that was applied if an elementary student lived within 3,000 feet of an elementary school that was not their zoned DCPS elementary school.

#### **Data Sources and Assumptions**

- This preliminary analysis used the following assumptions:
  - All charters would participate. This is a broad assumption, which DME does not expect, but was used first to estimate what could be the greatest impact.
  - All charters that are participating would rank this preference below sibling preference. This also is a broad assumption, as all schools have the flexibility of establishing the order of their accepted preferences.
  - The analysis is based mostly on a .5 mile radius “as the crow flies” and not walkable distances (taking sidewalks and crossable streets into account) of .5 miles. Due to this, the analysis will slightly over-estimate the impact.
    - In the preliminary analysis, please note that DCPS students were identified for the walkability preference using actual walkability distances rather than “how the crow flies” because the walkability distances were calculated for the SY15-16 lottery.
- This analysis uses historic elementary student-level residences and common lottery applications, and it uses the supply of DCPS and public charter schools as of SY15-16. This model is not predictive in nature and does not try to estimate the impact of how behaviors may change.
- Data sources
  - Public school student residences based on audited SY15-16 enrollment data.
  - SY15-16 application data from My School DC.



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Approximately 18,000 (37%) elementary school students have a DCPS elementary school of right that is not walkable (i.e., further than .5 miles)

Elementary students (grades PK3-5), SY2015-16

	Lives within .5 miles of their in-boundary DCPS ES	Lives further than .5 miles of their in-boundary DCPS ES
Elementary Grade Students	30,550 (63%)	18,050 (37%)
Attend In-Boundary (IB) DCPS	10,373 (34%)	4,507 (25%)
Attend out of boundary (OOB) DCPS	7,762 (25%)	5,220 (29%)
Attend charter	12,415 (41%)	8,323 (46%)

Approximately 10,600 elementary school students (or 22% of all public elementary school students) would qualify for a walkability preference for charter enrollment under the current assumptions (i.e., their DCPS zoned elementary school is greater than .5 miles and an elementary public charter school is within .5 miles)

Elementary students who live further than .5 miles from their IB DCPS Elementary School (grades PK3-5), SY2015-16

	Has a public charter school within .5 of their home	Has a public charter school further than .5 of their home
Elementary Grade Students	10,650 (59%)	7,400 (31%)
Attend IB DCPS	1,696 (16%)	2,811 (38%)
Attend OOB DCPS	3,163 (30%)	2,057 (28%)
Attend charter	5,791 (54%)	2,532 (34%)

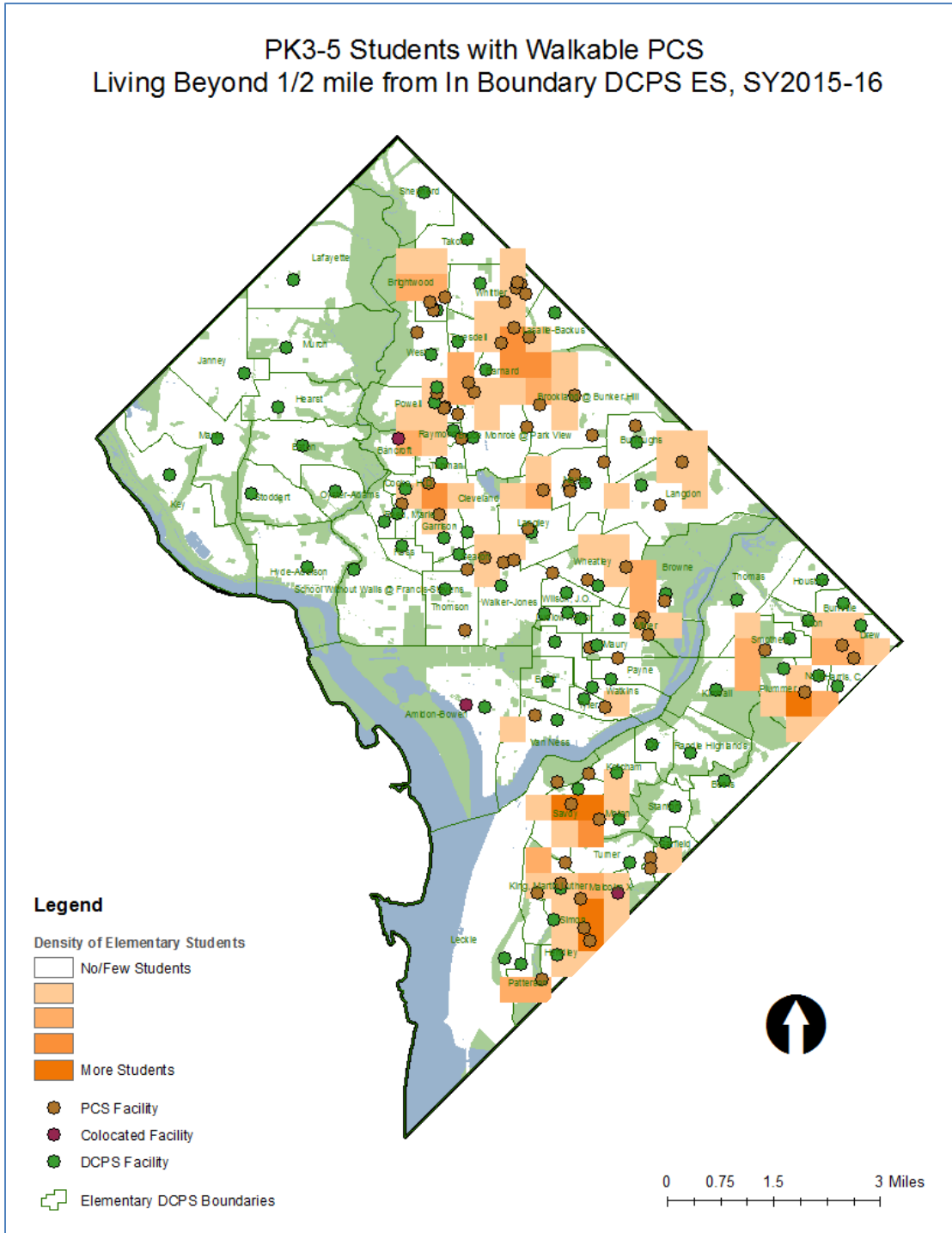
- Of those qualified for the preference, 4,859 currently attend a DCPS school (46% of elementary students who live further than .5 miles from their IB DCPS school and have a charter school within .5 miles);
- If all 4,859 wanted to attend a walkable charter school they would have to:
  - Apply and rank the walkable charter;
  - The walkable charter would have to opt in to the preference; and,
  - There would have to be an available seat at their grade level not filled by another student with a higher preference (such as sibling).

Wards 5 and 8 have the greatest number of elementary school students who would qualify for a charter walkability preference, if all public charter elementary schools participated. See the following map.

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PK3-5 Students with Walkable PCS  
Living Beyond 1/2 mile from In Boundary DCPS ES, SY2015-16





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**SY15-16 Lottery Results Modeled with Walkability Preference**

The following analysis simulates the impact of the walkability preference on all eligible elementary school students assuming that all public charter elementary schools participated and the existing DCPS proximity preference was still in effect, called the mock lottery. The mock lottery identifies eligible students from the historic SY15-16 lottery applicants that applied to a PCS or DCPS school that was within a ½ mile of their residence (as the crow flies for PCS, walkable measurement for DCPS) and their in boundary (IB) elementary school was farther than a ½ mile from their residence. The mock lottery also assumes that the walkability preference would apply to an existing sibling currently attending the school. This assumes that all charter elementary schools opt in. Some applicants received the preference at more than one school. *NOTE: If this preference was to be put into effect, presumably not all eligible charter schools would opt into the preference.*

**Total gained matches that would have utilized the walkability preference in the mock lottery was 254. This is 18% of applicants that qualify for the preference (1,441) and 2% of the total number of original PK3-5<sup>th</sup> applicants (14,470).**

**SY15-16 Lottery Applicants by Grade and Walkability Preference, Mock Lottery Results**

GRADE	Total Number of Original Applicants	Number of Applicants With Walkability Preference in Mock Lottery	Number of Different Matches with Walkability Preference in Mock Lottery
PK3	4925	572	71
PK4	2998	331	53
K	1811	161	42
1st	1236	96	29
2nd	981	92	22
3rd	890	73	18
4th	788	71	12
5th	841	45	7
<b>Total</b>	<b>14,470</b>	<b>1,441</b>	<b>254</b>

- Total Applicants in the SY15-16 Lottery: 20,349
  - 1,441 unique applicants qualified for the preference. 10% of all PK3-5<sup>th</sup> lottery applicants qualified, and 2% would have utilized the preference.
  - 693 were flagged as At-Risk students.
  - Total gained matches for applicants with the walkability preference was 254 (18% of applicants that qualify for the preference and 2% of the total number of original PK3-5th applicants).

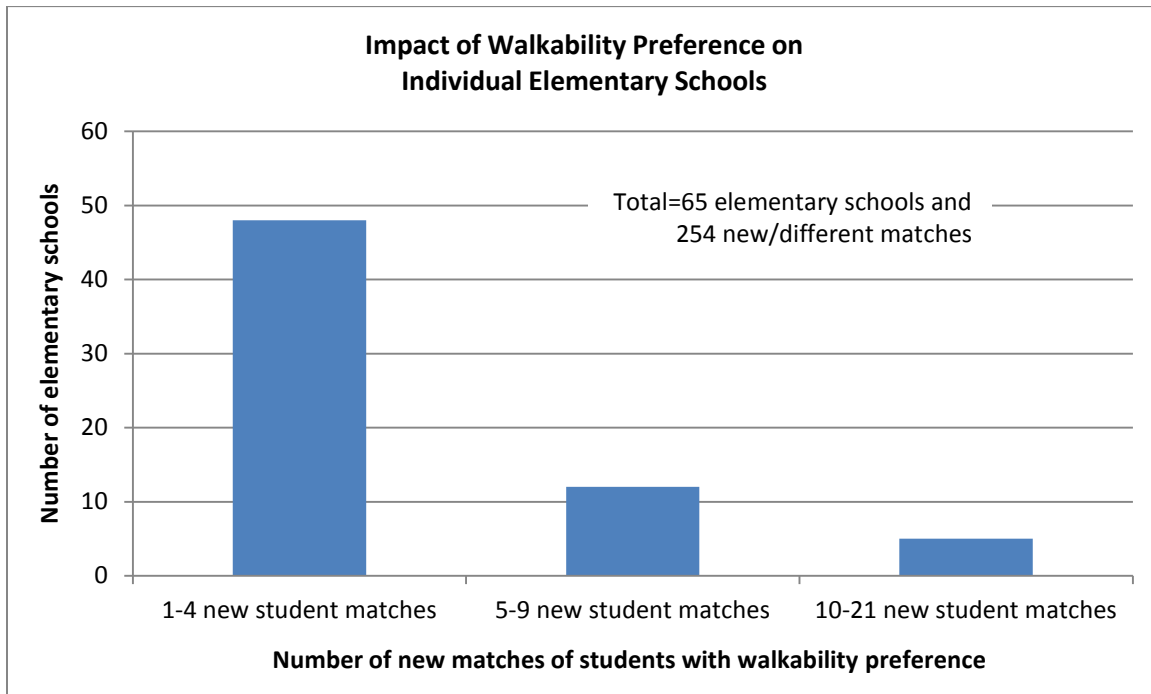


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**The impact of the walkability preference is relatively modest on DCPS and public charter schools.**

The following table shows how many new matches the mock lottery would result in. Most DCPS and public charter elementary schools (48 schools) would have between 1 and 4 students that would receive a match that the student did not receive in the original lottery. Five schools would have between 10 and 21 students receiving a new match.



**Both the DCPS and public charter sector experience a modest gain in walkable students matched when estimating the impact of the charter walkability preference.**

The table above shows the impact on the individual schools. However, while individual schools may be impacted, it is important to remember that lottery results are all interconnected and, on the whole, most of these students are switching between schools. Even assuming that all public charter elementary schools participate, DCPS and the public charter sectors would each gain a modest amount of matches implementing the public charter walkability preference. This is because even though some students may receive a new match to a public charter school that they would not have received without the walkability preference, those seats would be filled by someone else.



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**SY15-16 Mock Lottery Results Ward and Sector**

Ward of School	Number of DCPS and PCS Schools with Eligible Students for Walkability or Proximity Preference in Mock Lottery	PCS Original Matches, No Applied Walkability Preference	PCS Mock Lottery Matches With Walkability Preference	DCPS Original Matches With Applied Proximity Preference (DCPS)	DCPS Mock Lottery Matches With Walkability and Proximity Preferences	DCPS and PCS Original Total Number of Matches (No Applied Walkability (PCS), With Applied Proximity Preference (DCPS))	DCPS and PCS Mock Total Number of Matches With Walkability and Proximity Preferences	Net Matches Gained Comparing Original and Mock Lotteries
Ward 1	6 schools	651	651	995	995	1,646	1,646	0
Ward 2	1 school	*	*	*	*	899	899	0
Ward 3	3 schools	not applicable	not applicable	546	546	546	546	0
Ward 4	10 schools	788	787	1,092	1,094	1,880	1,881	1
Ward 5	14 schools	2,414	2,416	785	784	3,199	3,200	1
Ward 6	10 schools	977	979	1,094	1,096	2,071	2,075	4
Ward 7	9 schools	1,366	1,366	552	558	1,918	1,924	6
Ward 8	12 schools	1,931	1,936	502	506	2,433	2,442	9
<b>Total</b>	<b>65 schools</b>	s	s	s	s	<b>14,592</b>	<b>14,613</b>	<b>21</b>

\*Match counts stayed the same for both PCS and DCPS in Ward 2, numbers not revealed to preserve school identity and lottery results.  
s - Totals for DCPS and public charter schools suppressed to keep school identities anonymous.

**The walkability preference has very little net effect on the outcome of At-Risk applicants in the mock lottery, overall:**

- 42 At-Risk applicants lost a match completely, but 62 At-Risk applicants gained a match that they did not have before.
- 60 At-Risk applicants received a worse, less preferred match, but 44 At-Risk applicants received a better, more preferred match.
- 5,798 At-Risk applicants saw no change in their outcome.