

# UNEQUAL SCHOOLS

**UNEQUAL DEMOGRAPHIC, STAFFING, and NEIGHBORHOOD  
CHALLENGES THAT CREATE UNEQUAL OPPORTUNITIES FOR  
LOW-INCOME STUDENTS TO LEARN IN  
CPS ELEMENTARY SCHOOLS: FY15**

**Emily Dexter & Leslie Brunetta**

**CPS Parents**

**June 2014**

*(Version 06/07/14)*



**Note: This report was written by CPS parents Emily Dexter and Leslie Brunetta. We hope it will generate discussion about the complex differences between our schools and the factors that might underlie higher and lower test scores and enrollment trends. Ultimately we hope this report will result in more consideration of the unique staffing and resources needed by each school in order to create equitable opportunities for low-income students to learn across all twelve CPS elementary schools.**

**We welcome comments, corrections, criticisms, and suggestions for ways to improve our analysis.**

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**June 2014  
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# UNEQUAL DEMOGRAPHIC, STAFFING, and NEIGHBORHOOD CHALLENGES THAT CREATE UNEQUAL OPPORTUNITIES FOR LOW-INCOME STUDENTS TO LEARN IN CPS ELEMENTARY SCHOOLS: FY15

Emily Dexter & Leslie Brunetta, CPS Parents  
May 2014

**Introduction:** The Cambridge Public School system (CPS) consists of twelve elementary schools, four middle schools, and one high school. Of its roughly 7,000 students, 50% are in elementary school, 15% are in middle school, and 25% are in high school.

In this report we focus on the JK-5 program in order to ask: *Do low-income students have an equal opportunity to learn across Cambridge’s twelve elementary schools? Do the twelve schools face equal challenges in terms of demographics and neighborhood location? Is staffing per student equitable across the twelve schools?*

One purpose of this analysis is to go beyond the simple categorization of our schools as economically balanced vs. unbalanced, Title 1 vs. not Title 1, west side vs. east side, highly chosen vs. not highly chosen, or Level 1, 2, or 3. (The latter are DESE’s categories.) Instead, we examine multiple demographic, staffing, and neighborhood characteristics that we believe increase a school’s task load and stress, putting that school at risk for low test scores and low enrollment. A second purpose is to show that school populations differ on multiple dimensions, making it impossible to compare student performance across schools when students are identified by simple categories such as “low-income,” “white,” “African American,” or “not-low-income.”

To examine these questions, we compare *school demographics, staffing, and neighborhood characteristics* using data from the FY15 CPS Proposed Budget, the Massachusetts Department of Elementary and Secondary Education (DESE) website, and the city census.<sup>1</sup> A school is considered to have a risk factor if it is extreme relative to other schools on a particular variable. For example, in terms of total JK-5 core enrollment, schools with very high enrollment relative to other CPS schools are considered to have school size as one risk factor. After identifying risks for our chosen variables, we sum each school’s total number of risks into a risk total score. The results of that analysis suggest the following risks scores:

Low Risks (3)	Moderate Risk (4-5)	High Risk (6+)
<b>Amigos (3)</b>	<b>Cambridgeport (4)</b>	<b>Kennedy-Longfellow (6)</b>
<b>Baldwin (3)</b>	<b>Fletcher-Maynard (4)</b>	<b>King Open (10)</b>
<b>ML King (3)</b>	<b>Haggerty (4)</b>	
<b>Tobin (3)</b>	<b>Morse (4)</b>	
	<b>Graham &amp; Parks (5)</b>	
	<b>Peabody (5)</b>	

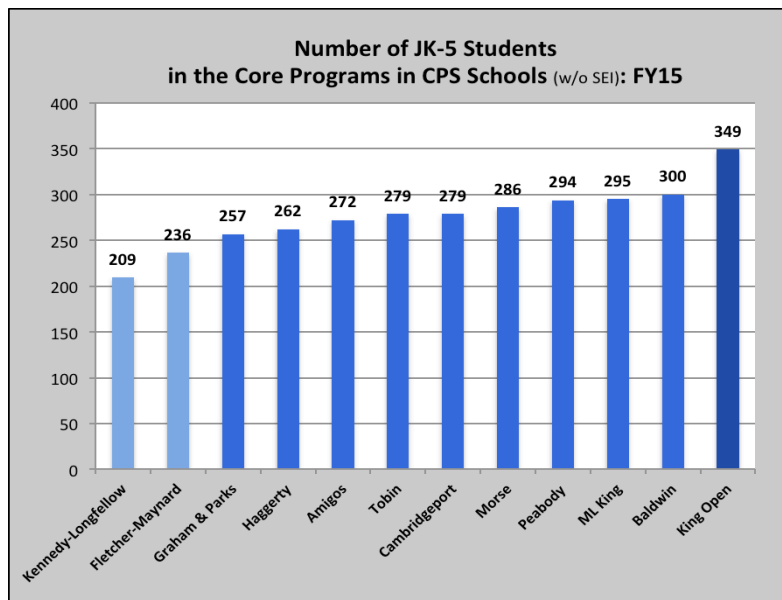
<sup>1</sup> Unless specified otherwise, all data are from the Proposed CPS FY15 budget. A comprehensive table at the end of this report lists all data described in this report.

## UNEQUAL DEMOGRAPHIC CHALLENGES

Our first question is: *How “challenged” or “at risk” is the student population in each school in terms of demographic characteristics associated with lower achievement?* Specifically, how large is the JK-5 population in the core program and does the school have high or low numbers or percentages of: low-income students, boys, students with disabilities, and/or students who speak a language other than English at home? All of these student characteristics are associated with lower achievement.

- SOME SCHOOLS ARE MUCH LARGER THAN OTHERS:** A school’s “core” JK-5 enrollment includes students enrolled in General Education, Special Education, and immersion classrooms.<sup>2</sup> In our twelve schools, the core JK-5 enrollment ranges from a low of 209 students at Kennedy-Longfellow to a high of 349 students at King Open. I.e. the largest school, King Open, is 65% larger than the smallest school, Kennedy-Longfellow.

Small JK-5 Programs (<250)	Mid-Sized JK-5 Programs (250-300)	Large JK-5 Programs (>300) (Challenge/Risk)
Kennedy-Longfellow w/o SEI (209) Fletcher-Maynard (236)	Graham & Parks w/o SEI (257) Haggerty (262) Amigos JK-5 (272) Cambridgeport (279) Tobin (279)	King Open (349)
Kennedy-Longfellow w/SEI (240)	Morse (286) Peabody (294) ML King (295) Baldwin (300)	Graham & Parks w/SEI (363)

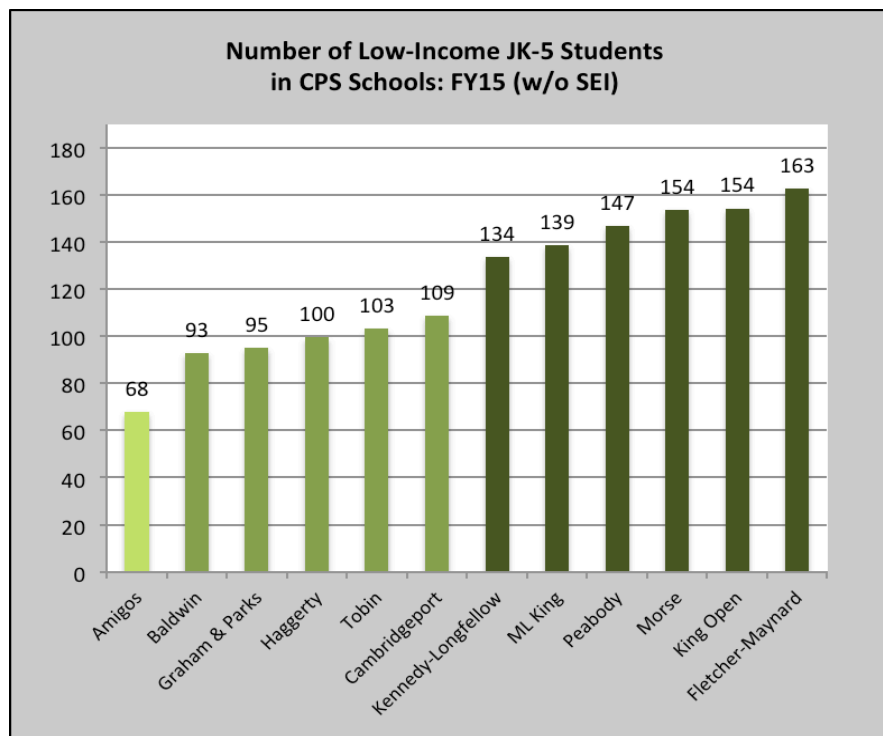


<sup>2</sup> Some of the elementary schools have additional programs, such as for pre-school students or Sheltered English Immersion programs (SEI) for English Language Learners. These programs usually have dedicated staff not available to the core JK-5 population. In some of these programs, the students stay only a few years in the school. See table at the end of this report for more details about each school’s total enrollment. In this report, we count all students in the Tobin Montessori Lower Elementary program as part of the “core” program. With its JK-5 SEI program, Kennedy-Longfellow has 240 JK-5 students. Similarly, with its 106 SEI students, Graham & Parks has 363 JK-5 students.

2. **SOME SCHOOLS HAVE MANY MORE LOW-INCOME STUDENTS THAN OTHER SCHOOLS:** Low-income students, on average, show much lower achievement than non-low-income students. For example, on the 2013 3<sup>rd</sup> grade MCAS Math exam, only 49% of Free/Reduced Lunch students in Massachusetts scored Proficient or Advanced, versus 77% of Paid Lunch students, a 28 percentage point income gap.<sup>3</sup>

The percentage and number of low-income students in the core program are lowest at Amigos (25%, 68 students) and highest at Fletcher-Maynard (69%, 163 students). Other schools with high percentages or numbers of low-income students are: Kennedy-Longfellow, ML King, Peabody, Morse, and King Open, all of which have 130-155 low-income students.

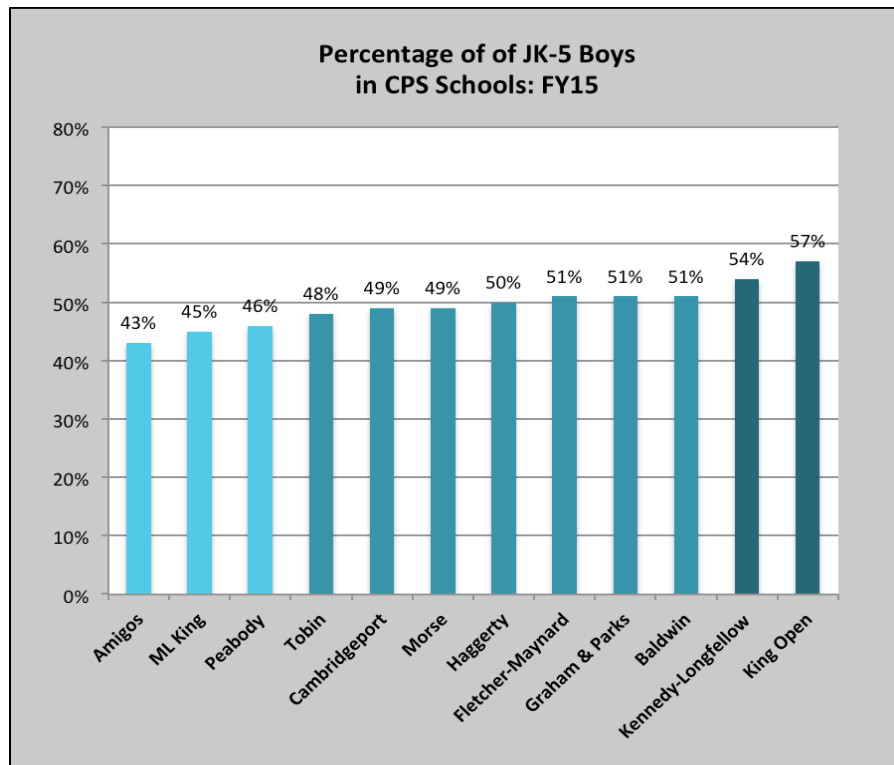
Fewer than 70 JK-5 Low-Income Students	90-110 Low-Income JK-5 Students	130-165 Low-Income JK-5 Students (Challenge/Risk)
Amigos JK-5 (68)	Baldwin (93) Graham & Parks (w/o SEI) (95) Haggerty (100) Tobin (103) Cambridgeport (109)	Kennedy-Longfellow (w/o SEI) (134) ML King (139) Peabody (147) Morse (154) King Open (154) Fletcher-Maynard (163)



<sup>3</sup> Research shows that low-income students have better outcomes if enrolled in schools with higher percentages of middle-income students. One of the goals of Controlled Choice is to prevent the segregation of low-income students, and CPS has achieved this goal more fully than most other districts. See research on the website of the National Coalition for School Diversity (NCSd): [http://www.school-diversity.org/full\\_text.php](http://www.school-diversity.org/full_text.php). In particular, see Black, D.W. (2012). "Middle-income Peers as an Educational Resource and a Constitutional Right to Access." *Boston College Review*, 32(2).

3. **SOME SCHOOLS ARE DISPROPORTIONATELY BOYS:** Elementary school boys, on average, show lower achievement than girls, particularly in reading. On the 2013 4<sup>th</sup> grade MCAS ELA test, for example, 63% of Massachusetts girls scored Proficient or Advanced versus only 45% of boys, a 17 percentage point gender gap. Nationally, boys are the subjects of more disciplinary actions, and CPS parents report that school climate is affected by gender imbalance.

CPS elementary schools unbalanced in favor of girls are: Amigos (43% boys), ML King (45% boys), and Peabody (46% boys). Schools unbalanced in favor of boys are the district's two Level 3 schools: Kennedy-Longfellow (54%) and King Open (57%). King Open has the highest number and percentage of boys, with an enrollment of roughly 200 boys and only 150 girls.<sup>4</sup>



<sup>4</sup> Gender percentages per school are derived from DESE enrollment data for 2013-2014. It is also critical to point out that gender differences, nationally, can be larger for black students than for white students; i.e the achievement differences between black girls and black boys can be larger than between white girls and white boys.

4. **SOME SCHOOLS HAVE FAR MORE STUDENTS WITH DISABILITIES:** Students with disabilities (those enrolled in Special Education) are an asset to every school. On average, though, students with disabilities show lower achievement than students without disabilities. For example, on the 2013 3<sup>rd</sup> grade Reading test, only 3% of students in the state *without* disabilities scored Warning/Failing versus 31% of students *with* disabilities. Most CPS MCAS subgroup scores include student with and without disabilities such that, for example, a school with many Latino students *with* disabilities would most likely have lower scores for the Latino subgroup than a school with many Latino students *without* disabilities. With CPS’s emphasis on inclusion, most students with disabilities spend some or all of their day in a General Education classroom, and receive additional services from Special Education staff. Schools with the lowest percentages of students with disabilities are: Amigos (11%), Kennedy-Longfellow (14%), Cambridgeport (15%), ML King (15%), and Tobin (16%). Schools with the highest percentages are: Haggerty (25%), King Open (25%), Fletcher-Maynard (26%), and Morse (30%).<sup>5</sup>

JK-5 Students with Disabilities (<17%)	JK-5 Students with Disabilities (17-24%)	JK-5 Students with Disabilities (>24%) (Challenge/Risk)
Amigos (11%) Kennedy-Longfellow (14%) Cambridgeport (15%) ML King (15%) Tobin (16%)	Graham & Parks (17%-24%) Peabody (19%) Baldwin (21%)	Haggerty (25%) King Open (25%) Fletcher-Maynard (26%) Morse (27%-30%)

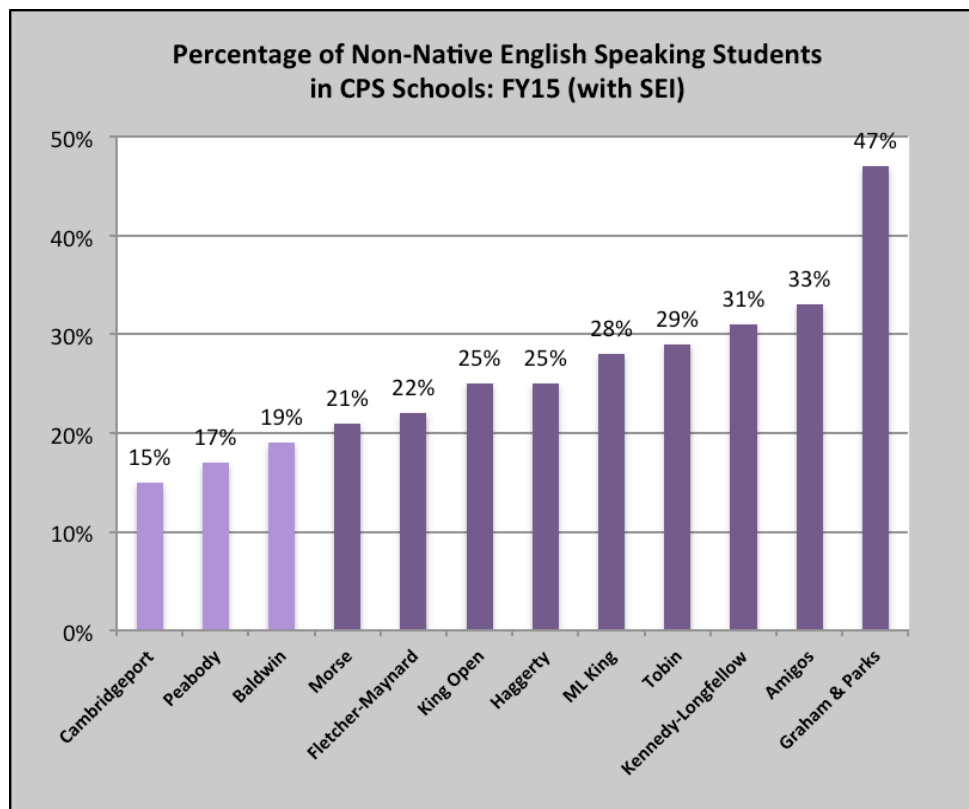
<sup>5</sup> CPS data reports Special Education percentages for the entire school without specifying percentages for the core JK-5 program. Most of the students with disabilities in Graham & Parks are probably in the core program (not SEI), which would mean their core JK-5 program percentage is closer to 24%. Similarly, Morse has a special education preschool, so the percentage of special education students in their core JK-5 program may be closer to 27%.



5. **SOME SCHOOLS HAVE FAR MORE STUDENTS WHOSE HOME LANGUAGE IS NOT ENGLISH:**

Children who learn a language other than English at home are fortunate in having the opportunity to learn two languages, and they are an asset to their schools. However, on average, non-native English speakers show lower achievement than native-English speakers and may require extra support. Therefore, non-native-English speakers pose an additional educational challenge and achievement risk to schools. Massachusetts does not report MCAS scores for non-native English-speakers as a subgroup, but does report scores for students who are or were ever classified as English Language Learners (ELL). Statewide, on the 2013 3<sup>rd</sup> grade Reading, 19% of ELL/Ever ELL students scored in Warning/Failing vs. only 6% of students never classified as ELL.

Only three CPS schools have fewer than 20% non-native English-speaking students: Cambridgeport (15%), Peabody (17%), and Baldwin (19%). In six CPS schools, non-native English speakers constitute 25% or more of the students in the core program: King Open (25%), Haggerty (25%), ML King (28%), Tobin (29%), and Amigos (33%).<sup>6</sup>



<sup>6</sup> All home language data is from DESE. The school-wide percentage of non-native English speakers in Graham & Parks totals 47%, but this includes 109 Sheltered English Immersion students who are not enrolled in the core program. In the core program, roughly 67 out of 257 students are non-native English speakers (27%). Similarly, the school-wide percentage for Kennedy-Longfellow is 31%, but that includes 31 students in the semi-separate SEI program. In the core program, roughly 43 of 201 students are non-native English speakers (21%).

## Summary of Unequal *Demographic* Challenges

This examination of the size and demographics of each CPS elementary school shows that there is an unequal distribution of challenges in terms of student demographics: 1) total number of JK-5 students, 2) percentage and number of low-income students, 3) percentage and number of boys, 4) percentage and number of students with disabilities, and 5) percentage of students who speak a language other than English at home. ***What is clear from this analysis is that the Kennedy-Longfellow and King Open schools educate students with more demographic challenges than students at other schools, in particular because of their disproportionate number of boys.***

The total number of demographic risks is as follows:

- Zero risks = Baldwin, Cambridgeport
- 1 risk: Peabody, Tobin
- 2 Risks: Amigos, Fletcher-Maynard, Graham & Parks, Haggerty, ML King, Morse
- 3 risks: Kennedy-Longfellow
- 5 risks: King Open

UNEQUAL DEMOGRAPHIC CHALLENGES ACROSS CPS ELEMENTARY SCHOOLS						
School	Large Size	Low-Income	Boys	Students with Disabilities	Non-Native Speakers	Total Risks
Baldwin						0
Cambridgeport						0
Peabody		X				1
Tobin					X	1
Amigos	X				X	2
Fletcher-Maynard		X		X		2
Graham & Parks	X				X	2
Haggerty				X	X	2
ML King		X			X	2
Morse		X		X		2
Kennedy-Longfellow		X	X		X	3
King Open	X	X	X	X	X	5

*The important point here is that our elementary school populations are not comparable. Therefore it makes little sense to compare MCAS scores across schools to try to determine school quality or school effectiveness.* Even when scores are disaggregated into subgroups, there are large differences in the subgroups students across schools. For example, the low-income population in one school may include many boys with disabilities, while the same subgroup in another school includes many girls without disabilities. Any comparison of scores for low-income students in the two schools is meaningless. Similarly, the African American/Black students in one school may include many students who speak a language other than English at home, while in another school this subgroup consists primarily of native English speakers. Again, comparing scores for African American/Black students in these two schools would yield little information about school quality or effectiveness, since the schools are educating students with different levels of achievement challenge.

## UNEQUAL STAFFING CHALLENGES

In addition to unequal student demographic challenges, CPS elementary schools are unequally and inequitably staffed. At the classroom level, some schools have the advantage of smaller average class sizes. At the school level, many staff are assigned on a one-per-school basis (such as reading intervention teachers and librarians), such that caseloads for these staff are higher in the larger schools. In our analysis of staffing challenges, we focus on: 1) class sizes for 1<sup>st</sup> and 2<sup>nd</sup> graders, 2) the number of low-income students per intervention teacher, 3) the number of total students per librarian, 4) the number of low-income students per family liaison, 5) whether a school shares a building, and 6) whether a school does not provide an opportunity for all students to learn an additional language.

1. **SOME SCHOOLS HAVE LARGER 1<sup>st</sup>-2<sup>nd</sup> GRADE CLASS SIZES:** The early elementary grades are critical for learning to read. Reducing early grade class sizes to 13-17 students (as compared with 22-25) has been shown to benefit low-income students.<sup>7</sup> In CPS schools, the average 1<sup>st</sup> and 2<sup>nd</sup> grade class sizes range from 15 to 24 students per class, but only three schools have average 1<sup>st</sup>-2<sup>nd</sup> grade class sizes of 18 or fewer: Kennedy-Longfellow (15), ML King (16), and Fletcher-Maynard (18). The FY15 budget projects that 45% of all CPS 1<sup>st</sup> and 2<sup>nd</sup> graders will be in classes of 23-24 students, and only one-third will be in classes of 20 or fewer. Schools projected to have an average of 23 students per 1<sup>st</sup> and 2<sup>nd</sup> grade classroom are: Haggerty, Peabody, Amigos, and Baldwin. Cambridgeport is projected to have an average of 24 students per 1<sup>st</sup> and 2<sup>nd</sup> grade classroom.

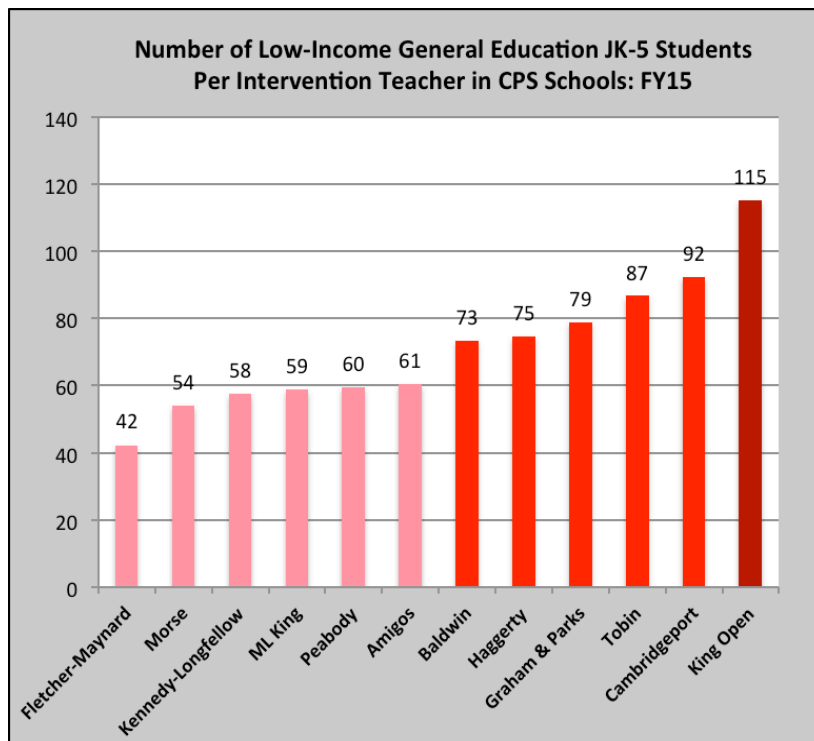
1 <sup>st</sup> -2 <sup>nd</sup> grade Average Class Size <20	1 <sup>st</sup> -2 <sup>nd</sup> grade Average Class Size 20-22	1 <sup>st</sup> -2 <sup>nd</sup> grade Average Class Size 23-24 (Risk)
Kennedy-Longfellow (15) ML King (16) Fletcher-Maynard (18)	Tobin (20) Morse (21) King Open (22) Graham & Parks (22)	Amigos (23) Baldwin (23) Haggerty (23) Peabody (23) Cambridgeport (24)

<sup>7</sup> This research has been recently reviewed by education professor Diane Witmore Schanzenback at the National Education Policy Center at University of Colorado, who writes, “Research shows that students in the early grades perform better in small classes. This is especially the case for students who come from disadvantaged backgrounds, who experience even larger performance gains than average students when enrolled in smaller classes. Small class sizes enable teachers to be more effective, and research has shown that children who attend small classes continue to benefit over their entire lifetime” (p. 1). Schanzenbach, D.W. (2014). “Does Class Size Matter?” National Education Policy Center, University of Colorado, Boulder, CO. [http://nepc.colorado.edu/files/pb\\_class\\_size.pdf](http://nepc.colorado.edu/files/pb_class_size.pdf).

In addition, the Institute of Education Sciences of the U.S. Department of Education has written a guide for schools entitled: “Identifying and Implementing Educational Practices Supported by Rigorous Evidence: A User-Friendly Guide.” The guide notes that, based on “gold standard” research, one evidence-based intervention is “Reducing class size in grades K-3” and that “the average student in small classes scores higher on the Stanford Achievement Test in reading/math than about 60% of students in regular-sized classes.” [http://ies.ed.gov/ncee/pubs/evidence\\_based/evidence\\_based.asp](http://ies.ed.gov/ncee/pubs/evidence_based/evidence_based.asp)

**2. SOME SCHOOLS HAVE MANY MORE LOW-INCOME STUDENTS PER INTERVENTION TEACHER:**

Early intervention is critical for closing the achievement gap, since many low-income students come to school with lower skills for learning to read than middle-income students. The Institute of Education Sciences identifies “one-on-one tutoring by qualified tutors for at-risk readers in grades 1-3” as an intervention supported by “gold standard” research.<sup>8</sup> All CPS elementary schools are assigned only one early literacy intervention teacher who works one-on-one or with small groups of students. (This is usually a Reading Recovery teacher.) The five Title 1 schools (Fletcher-Maynard, Kennedy-Longfellow, ML King, Morse, and Peabody) are also assigned one or more additional intervention teachers. If the “potential caseload” for these intervention teachers is all of the low-income students in the school, the potential caseload per intervention teacher ranges from a low of only 42 students per teacher at Fletcher-Maynard to the extreme high of 115 students per teacher at King Open, which has only one early literacy intervention teacher.<sup>9</sup> Other schools with more than 70 low-income students per intervention teacher are: Baldwin (73), Haggerty (75), Graham & Parks (79), Tobin (87), and Cambridgeport (92). Schools with higher caseloads per teacher are obviously at relative risk in terms of meeting the needs of all students working below grade level.



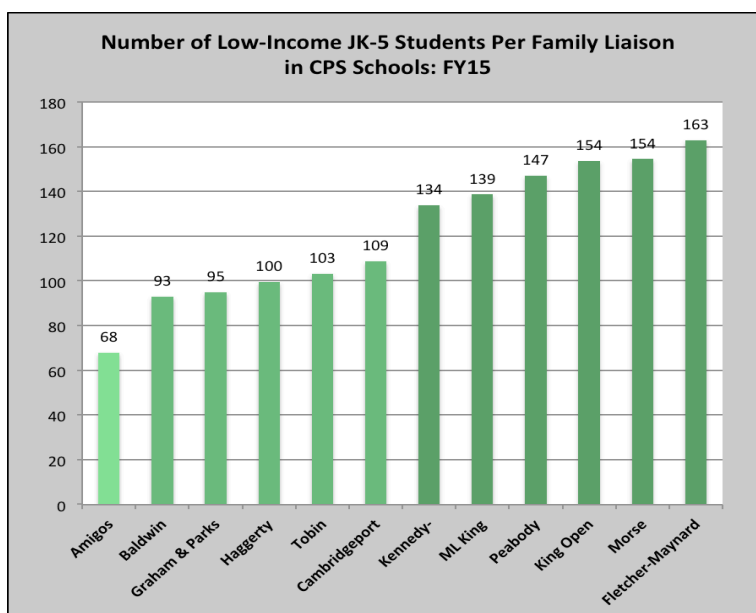
<sup>8</sup> [http://ies.ed.gov/ncee/pubs/evidence\\_based/evidence\\_based.asp](http://ies.ed.gov/ncee/pubs/evidence_based/evidence_based.asp)

<sup>9</sup> Some schools supplement their assigned intervention staffing with teachers who are not on staff but hired by the hour using School Improvement Funds or additional funds provided by the district. Staff hired hourly, however, are less integrated into the faculty and less available for faculty meetings, collaborating with the classroom teacher, or meeting with parents, as compared with full-time, on-staff intervention teachers or tutors.

3. **SOME SCHOOLS HAVE MANY MORE STUDENTS PER SCHOOL LIBRARIAN:** School librarians play an important role in fostering students' interest in reading, if they have the time to learn about each student in the school. Independent reading outside the classroom is a way avid readers gain reading practice, new vocabulary, and background knowledge. With one librarian assigned per CPS school, librarians at the smaller schools support the reading interests of far fewer students than the librarians at the large schools.<sup>10</sup>

250-265 Students per Librarian	290-330 Students per Librarian	345-365 Students per Librarian (Risk)
Fletcher-Maynard (254) Kennedy-Longfellow (255) Haggerty (262)	Tobin (291) ML King (295) Cambridgeport (302) Morse (304) Peabody (310) Baldwin (330)	Amigos (348) King Open (349) Graham & Parks (363)

4. **SOME SCHOOLS HAVE MANY MORE LOW-INCOME FAMILIES PER FAMILY LIAISON:** Family liaisons play a critical role in fostering school-family relationships, particularly for low-income parents who may not feel comfortable in schools. All CPS elementary schools are assigned one 0.63 FTE family liaison regardless of school size or number of low-income families, so the ratio of low-income students per part-time liaison varies from a low of 68 students per liaison at Amigos to a high of 163 low-income students per liaison at Fletcher-Maynard.<sup>11</sup>



<sup>10</sup> We consider the librarian's caseload to be all the students in the school, including those not in the core JK-5 program.

<sup>11</sup> For this analysis we use the number of students in the core JK-5 program because liaisons are typically not responsible for parents in the preschool programs or the SEI programs.

5. **SOME SCHOOLS HAVE TO SHARE THEIR BUILDING:** The four CPS elementary schools that share their building with upper schools experience more logistical stresses than the eight stand-alone elementary schools: Their access to their own cafeteria, library, auditorium, playground, and gym is limited, negatively affecting the students' experience. The four schools that currently share their buildings are: *Kennedy-Longfellow, King Open, Peabody, and Tobin*.
6. **SOME SCHOOLS DO NOT OFFER WORLD LANGUAGE INSTRUCTION FOR ALL STUDENTS:** Research shows that studying an additional language in elementary school results in higher achievement in reading and other subjects, so not offering language learning opportunities to all students in a school creates an achievement risk factor.<sup>12</sup> Only three CPS elementary schools offer language learning opportunities to all students in the school: Amigos (immersion Spanish), ML King (Immersion and non-Immersion Mandarin), and Fletcher-Maynard (non-immersion Spanish).

### SUMMARY OF UNEQUAL STAFFING CHALLENGES:

In this section we have reviewed the assigned FY15 staffing in terms of: 1) 1<sup>st</sup>-2<sup>nd</sup> grade class sizes, 2) low-income students per intervention teacher, 3) students per librarian, 4) low-income students per family liaison, 5) whether a school shares a building, and 6) whether the students are denied language learning opportunities. **According to this analysis, schools with the lowest staffing risk factors are ML King and Fletcher-Maynard because of their generous staffing, stand-alone structure, and language opportunities. Schools with the highest staffing risk factors are King Open and Peabody because of their high student-per-staffing ratios, shared buildings, and lack of language learning opportunities for all students.**

UNEQUAL STAFFING CHALLENGES ACROSS CPS ELEMENTARY SCHOOLS							
School	1 <sup>st</sup> -2 <sup>nd</sup> grade class sizes	Intervention teachers	Librarians	Family Liaisons	Shared Building	No Language Study	Total Risks
ML King				X			1
Fletcher-Maynard				X			1
Amigos	X		X				2
Morse				X		X	2
Baldwin	X	X				X	3
Cambridgeport	X	X				X	3
Graham & Parks		X	X			X	3
Haggerty	X	X				X	3
Tobin		X			X	X	3
Kennedy-Longfellow				X	X	X	3
Peabody	X			X	X	X	4
King Open		X	X	X	X	X	5

<sup>12</sup> Taylor, C & Lafayette, R. (2009). Academic achievement through FLES: A case for promoting greater access to foreign language study among young learners. *Modern Language Journal*, 94(1), 22-42.

## UNEQUAL NEIGHBORHOOD CHALLENGES

Cambridge neighborhoods differ in terms of socioeconomic resources. In wealthier neighborhoods, most of the adults have college degrees, professional jobs, and stable incomes; the opposite is true in poorer neighborhoods. In addition, children counted as “low-income” or “not low-income” by the school department differ by neighborhood such that “low-income” children living in poor neighborhoods are likely to be “more poor” than “low-income” children living in more affluent neighborhoods. Similarly, “not-low-income” children in poor neighborhoods are probably less advantaged than their counterparts in wealthy neighborhoods. The groundbreaking book, *From Neurons to Neighborhoods*, summarizes research showing that low-income students living in higher-poverty neighborhoods have worse outcomes than low-income students living in lower-poverty neighborhoods.<sup>13</sup> School location, therefore, constitutes a relative risk factor above and beyond the income of the individual student.<sup>14</sup>

**SOME SCHOOLS ARE IN VERY POOR NEIGHBORHOODS:** CPS’s 12 elementary schools are located in 10 official Cambridge neighborhoods.<sup>15</sup> School neighborhoods with the lowest median family incomes are: Riverside (\$66,535), Area 4 (\$59,384), and Wellington-Harrington (\$49,184), neighborhoods where 15%-17% of families live in poverty. The Wellington-Harrington neighborhood, where King Open is located, has the lowest median family income, the highest percentage of adults without a high school diploma (16%), and the highest percentage of households that speak a language other than English (40%).

Neighborhood	Schools	Median Family Income	% of Adults without HS Diploma	% Families Living in Poverty	% of Non-English Language Households
Agassiz	<b>Baldwin</b>	\$165,410	0%	3%	25%
West-Cambridge	<b>Tobin</b>	\$150,870	1%	4%	18%
Area 9	<b>Graham &amp; Parks</b>	\$119,302	4%	8%	29%
East Cambridge	<b>Kennedy-Longfellow</b>	\$103,757	8%	7%	39%
Strawberry Hill	<b>Haggerty</b>	\$100,151	5%	11%	25%
Cambridgeport	<b>Amigos Morse</b>	\$95,381	7%	9%	35%
North Cambridge	<b>Peabody</b>	\$76,967	6%	11%	34%
Riverside	<b>ML King</b>	\$66,535	6%	<b>17%</b>	35%
Area 4	<b>Cambridgeport Fletcher-Maynard</b>	\$59,384	7%	<b>15%</b>	31%
<b>Wellington-Harrington</b>	<b>King Open</b>	<b>\$49,184</b>	<b>16%</b>	<b>16%</b>	<b>40%</b>

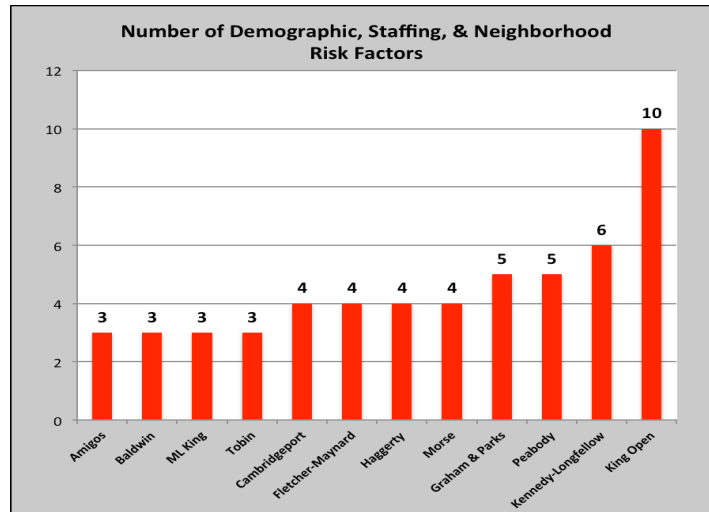
<sup>13</sup> Shonkoff, J. & Phillips, D.A. (Ed.) (2000). *From Neurons to Neighborhoods: The Science of Early Development*. Washington, DC: National Academies Press.

<sup>14</sup> Neighborhood census data can be found on the Cambridge City website: <http://www.cambridgema.gov/CDD/factsandmaps/statisticalprofiles.aspx>

<sup>15</sup> Four schools have magnet status for some or all of their enrollment such that their enrollment is less likely to reflect neighborhood enrollment: Amigos (whole school), Tobin Montessori (whole school), ML King (Chinese Immersion program), and King Open (Ola program).

## Summary of Unequal Challenges and Risk Factors

The graph and table below show the number of demographic, staffing, and neighborhood challenges for each school, which range from a low of only 3 risks/challenges to a high of 10 risks/challenges.



School	DEMOGRAPHIC CHALLENGES					STAFFING CHALLENGES						Neighborhood Challenges	Total Risks	
	School Size	Low-Income	Boys	Students with Disabilities	Non-Native Speakers	Class Sizes	Intervention teachers	Librarians	Family Liaisons	Shared Building	No Language Study			
Amigos					X	X		X						3
Baldwin						X	X				X			3
ML King		X							X			X		3
Tobin							X			X	X			3
Cambridgeport						X	X				X	X		4
Fletcher-Maynard		X		X					X			X		4
Haggerty				X		X	X				X			4
Morse		X		X					X		X			4
Graham & Parks	X				X		X	X			X			5
Peabody		X				X			X	X	X			5
Kennedy-Longfellow		X	X		X				X	X	X			6
King Open	X	X	X	X			X	X	X	X	X	X		10



*What is clear from this analysis is that some schools have much more challenging student populations than other schools. King Open, in particular, has high numbers of low-income students, a disproportionate number of boys, a large population of students with disabilities, and is located in the poorest school neighborhood in Cambridge. Kennedy-Longfellow, though it has a low percentage of students with disabilities, has disproportionate percentages of low-income students, boys, and students who are non-native English speakers.*

In addition, larger schools have fewer staff resources per student because of the district's one-per-school staffing for important positions such as reading intervention teachers, family liaisons, and librarians. In particular, the larger non-Title 1 schools such as King Open and Cambridgeport have fewer intervention teachers per low-income students than smaller schools or schools with additional Title 1 intervention staff.

Steps the district can take to address the unequal challenges of CPS elementary schools include the following:

- Provide more General Education staffing to larger schools and schools with more challenging populations.
- Provide on-staff social workers in schools located in the highest poverty neighborhoods.
- Factor in size of school in the Controlled Choice lottery to reduce the *number* of low-income students in the larger schools.
- Assign Title 1 status according to both percentage and number of low-income students.
- Provide students in *all* schools the opportunity to learn an additional language.
- Assigning intervention teacher FTEs according to the *number* of low-income students rather than one per building.
- Assigning family liaisons FTEs according to the *number* of low-income students rather than one per building.
- Provide library assistants to large schools.
- Provide supplemental School Improvement Funds to schools with many risk factors.

*In sum: Our twelve elementary schools are very different from one another and should be provided with staffing and financial resources that are matched to the unique demographics of their students, rather than through a one-size-fits-all model. Unequal staffing per student should be corrected. **It is also critically important that CPS administrators, teachers, and staff, as well as School Committee members, City Councilors, parents, and the community understand and acknowledge the unique challenges that each school faces and the unequal distribution of those challenges across our twelve elementary schools.***

**DEMOGRAPHIC, STAFFING, and NEIGHBORHOOD RISKS FOR CPS ELEMENTARY SCHOOLS: FY15**

	Amigos		Baldwin		Cambridgeport		Fletcher-Maynard		Graham & Parks		Haggerty		Kennedy-Longfellow		King Open		ML King		Morse		Peabody		Tobin		
DESE Level	Level 2	Not Title 1	Level 2	Not Title 1	Level 1	Not Title 1	Level 1	Not Title 1	Level 2	Not Title 1	Level 1	Not Title 1	Level 3	Not Title 1	Level 1	Not Title 1	Level 1	Not Title 1	Level 1	Not Title 1	Level 2	Not Title 1	Level 1	Not Title 1	
<b>Demographic Risks/Advantages</b>																									
Total Enrollment <sup>1</sup>	348	330	302	254	254	236	236	363	363	257	262	262	255	349	295	304	295	295	286	286	310	294	291	279	279
JK-5 Enrollment without SEI	272	300	279	236	236	236	363	257	262	262	262	209	349	295	286	286	295	295	286	286	294	294	279	279	279
JK-5 Enrollment with SEI <250 > 340	272	300	279	236	236	236	363	257	262	262	262	240	349	295	286	286	295	295	286	286	294	294	279	279	279
# Students in GenEd	348	294	276	231	231	231	245	245	262	262	262	209	336	295	259	259	295	295	259	259	294	294	279	279	279
% & # low-income	25%	31%	39%	69%	69%	69%	37%	37%	38%	38%	38%	64%	44%	47%	54%	54%	47%	47%	54%	54%	50%	50%	37%	37%	37%
# JK-5 low-income students (w/o SEI) <70 >130	68	93	109	163	163	163	95	95	100	100	100	134	154	139	154	154	139	139	154	147	147	103	103	103	103
% boys <47% >53%	43%	51%	49%	51%	51%	51%	51%	51%	50%	50%	50%	54%	57%	45%	49%	49%	45%	45%	49%	46%	46%	48%	48%	48%	48%
# JK-5 boys (w/o SEI)	117	153	137	120	120	120	131	131	131	131	131	113	199	133	140	140	133	133	140	135	135	134	134	134	134
% SWD students (SPED) <18% >24%	11%	21%	15%	26%	26%	26%	17%	17%	25%	25%	25%	14%	25%	15%	30%	30%	15%	15%	30%	19%	19%	16%	16%	16%	16%
# SWD (SPED) JK-5 students (w/o SEI)	30	63	42	61	61	61	44	44	66	66	66	29	87	44	86	86	44	44	86	56	56	45	45	45	45
% First Language Not English (FLNE) <20% >30%	33%	19%	15%	22%	22%	22%	47%	47%	25%	25%	25%	31%	25%	28%	21%	21%	28%	28%	21%	17%	17%	29%	29%	29%	29%
<b>Staffing Risks</b>																									
Average 1st & 2nd Grade Class size <18 >22	23.3	23.3	23.8	17.8	17.8	17.8	21.5	21.5	22.5	22.5	22.5	15.3	21.3	16.3	21.0	21.0	16.3	16.3	21.0	22.5	22.5	20.3	20.3	20.3	20.3
# Early Literacy Intervention Teachers & Title 1 Teachers	1.00	1.00	1.00	2.85	2.85	2.85	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00
# GenEd LI students per intervention/Title 1 teacher <75 >100	61	73	92	42	42	42	79	79	75	75	75	58	115	59	54	54	59	59	54	60	60	87	87	87	87
# students per librarian <265 >345	348	330	302	254	254	254	363	363	262	262	262	255	349	295	304	304	295	295	304	310	310	291	291	291	291
# low-income students per Family Liaison (w/o SEI) <70 >130	68	93	109	163	163	163	95	95	100	100	100	134	154	139	154	154	139	139	154	147	147	103	103	103	103
Shares a Building w/Upper School Campus	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Does not Offer World Language to All Students	Yes	No	No	Yes	Yes	Yes	No	No	No	No	No	No	No	No	Yes	No	Yes	Yes	No	No	No	No	No	No	No



	Amigos	Baldwin	Cambridgeport	Fletcher-Maynard	Graham & Parks	Haggerty	Kennedy-Longfellow	King Open	ML King	Morse	Peabody	Tobin
<b>Neighborhood Risks</b>												
% of Neighborhood Families Living in Poverty <5% >14%	9%	3%	15%	15%	8%	11%	7%	16%	17%	9%	11%	4%
% of Neighborhood Adults without HS Deiploma <5% >15%	7%	0%	7%	7%	3%	5%	8%	16%	6%	7%	6%	1%
<b>Total Risks</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>6</b>	<b>10</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>3</b>

1 Each school has a core JK-5 program, and many have additional semi-separate programs, such as for preschool or Sheltered English Immersion (SEI) students. "JK" refers to "Junior Kindergarten," and is distinct from "Preschool." Junior kindergartners are part of the core JK-5 program. Two schools, King Open and ML King, have immersion and non-immersion strands, both of which we include as part of the "core program." Eight of the 12 elementary schools also have CPS (not DHS) preschool programs, with enrollment ranging from 7-30 students: Baldwin (30), Cambridgeport (23), Fletcher-Maynard (18), Graham & Parks (7), Kennedy-Longfellow (15), Morse (18), Peabody (16), and Tobin (12). These students are not included in the core enrollment numbers for these schools. There are two Sheltered English Immersion programs (SEI) for English Language Learners, one at Graham & Parks (106 students) and one at Kennedy-Longfellow (31 students). SEI students are also not included in core enrollment numbers. The Amigos school, the only JK-8 school, also has an additional 76 students in grades 6-8. For the purposes of this analysis, we count only Amigos students in grades JK-5 as part of the core JK-5 program.