# First-Round Analysis of BPS Proposed 6-zone, 9zone, 11-zone, and 23-zone School Assignment Plans 

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# First-Round Analysis of BPS Proposed 

# 6-zone, 9-zone, 11-zone, and 23-zone 

## School Assignment Plans

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Copies and access to original data files available for download at https://sites.google.com/site/bpschoiceanalysis/home

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## First-Round Analysis of BPS Proposed 6-zone, 9-zone, 11-zone, and 23-zone School Assignment Plans: Executive Summary

This report is a first-pass attempt to analyze Boston children's opportunities for equitable access to high quality schools under the four zoned school assignment proposals presented by Boston Public Schools officials on September 25, 2012. It does not address the no-zone proposal.

## How do we measure school quality? What is the availability of high quality primary schools in BPS?

Our School Quality Index (SQI) averages the three measures of school quality provided by BPS: MCAS composite score (combining absolute attainment and student growth over the past two years), DESE ranking by the MA Department of Education, and Popularity. Each of these measures is on a 1-4 scale, with 1 as the best and 4 the worst. It is worth noting that this index does not include important indicators of school quality such as caring teachers, demographic diversity, parent involvement, or equitable outcomes.

According to this measure, BPS currently has $\mathbf{1 2}$ High Quality Schools (SQI = 1.0-1.9), 29 Medium Quality Schools (SQI = 2.0-2.9), and $\mathbf{2 4}$ Low Quality Schools (SQI = 3.0-3.9) among zoned primary schools. 11 early learning centers and recently merged or newly created schools are missing DESE data; we left them unranked.

Given current student enrollments, only 20\% of primary school students in BPS attend high quality zoned schools. Nearly one-third of all zoned primary students attend low quality schools.

## Who has access to high quality schools now? How is that access distributed?

Even if all children had an equal chance of accessing high-quality schools, four out of five children would be unable to attend high quality schools because of lack of capacity. However, access to high quality schools is unevenly distributed by geography, race, ethnicity, income, and language status.

```
On average, the student body in high quality On average, the student body in low quality
zoned primary schools is:
- 28% limited English proficient (LEP)
- 56% low income
- 18% black - 39% black
- 13% Asian
- 44% Hispanic
- 22% white
```

zoned primary schools is:

- $34 \%$ LEP
- $73 \%$ low income
- 39\% black
- $4 \%$ Asian
- $49 \%$ Hispanic
- $5 \%$ white

Furthermore, whereas over one-third of white and Asian children are currently enrolled in high-quality schools, barely 1 in 10 black and 1 in 5 Hispanic children currently attend such schools.

Geography also affects high quality school access. Currently, $14 \%$ of students in the East Zone attend high quality schools, as compared to $\mathbf{2 0 \%}$ in the North Zone and $\mathbf{2 7 \%}$ in the West Zone. West Zone students therefore have twice the access to high quality school seats than students in the East Zone.

## Who is likely to have access to current high quality schools under each of the four new zoned proposals? How will that access be distributed?

In its "Definition of Equitable Access," the External Advisory Committee (EAC) stated that "A new student assignment process should seek to provide every child, in every neighborhood...with the same opportunity to learn and succeed in the Boston Public Schools. If the new student assignment plan is geographically based, each defined area should seek to provide an equal opportunity to receive a quality education" (July 16, 2012).

Under the 6-Zone plan, children living in Zone 6 have seven times the access to high-quality primary school seats than children living in Zone 3. Only 5\% of the school seats in Zone 3 are in high quality schools, as compared to $35 \%$ of the school seats in Zone 6.

Disparities get even worse under the other plans. A full third of the zones in the nine-zone plan have under $10 \%$ high quality seats, and over half the zones in the $\mathbf{2 3}$-zone plan have no high quality seats at all. It is worth noting that children often have additional walk zone school choices beyond their designated attendance zone. This will be especially true in the 23-zone plan, since the zones are so small that many schools within a mile of children's residences will lie beyond their designated zone. But access to high quality schools will be significantly more inequitable than the current 3-zone policy under any of the new school assignment plans.

Finally, it is essential to recognize that school quality is not fixed. It is likely that as student attendance patterns and programs shift under a new plan, some schools will get better, and others may well get worse. Although it is possible that transportation savings will enable new investments in schools and teachers, it is also possible that further segregating schools by income and neighborhood will create new challenges that threaten to pull medium and even high quality schools down.

## What changes could affect these patterns or alter our analysis?

This analysis works with the data and the stated policies we had as of Sep. 26. But many policies are still unspecified or fluid. These include whether newly out-of-zone students will be allowed to stay in their current schools (i.e. be "grandfathered in"), whether their siblings can attend, and whether transportation will be provided across zones. Another policy that may change is the percentage of seats reserved for walk zone students. Furthermore, there are policy proposals about giving kids with only low quality walk zone schools priority access to other schools. Some officials have also suggested creating more citywide or magnet schools. Any of these policy changes could substantially change the patterns we identified above to make access even less equitable (e.g. broadening walk zone priority) or potentially more equitable (e.g. increasing access to high quality citywide schools).

## Introduction

This report is a first-pass attempt to analyze Boston children's opportunities for equitable access to high quality schools under the four zoned school assignment proposals presented by Boston Public Schools officials on September 25, 2012. It does not address the no-zone proposal. In preparing this analysis, we made use of the extensive public data posted by BPS on http://bostonschoolchoice.org, as well as drawing on data publicly available from the Massachusetts Department of Education website and the Boston Public Schools website. We did not have access to, nor did we include, any information that had not been made publicly available by BPS as of September 26, 2012.

The purpose of this report is to give Boston families and residents an additional set of tools to deliberate about the four zoned proposals presented by BPS. Although BPS has done a remarkable job of making massive data files available to the public, these can be hard to understand and interpret. In addition, many questions that may be on the minds of Boston families are impossible to answer based on the released data alone. In some cases, additional calculations need to be done. We tried to do those where possible. In other cases, the data simply don't exist-or haven't yet been made available.

Boston families, educators, district officials, residents, business owners, and others all agree that all children in Boston should attend high quality schools throughout their K-12 years. This is of paramount importance. However, we also all know that not all schools in BPS are of high quality. Right now, many children in Boston are not receiving a high quality education, in part because they are attending medium or even low quality schools.

It is unclear how, or if, rezoning schools will enable the development of more high quality schools while maintaining schools that are already high quality. It is likely that as student attendance patterns and programs shift under a new plan, some schools will get better, and others may well get worse. Although it is possible that transportation savings will enable new investments in schools and teachers, it is also possible that further segregating schools by income and neighborhood will create new challenges that threaten to pull medium and even high quality schools down.

We are unable to model, or make any predictions, about how school quality will change over time in response to new school assignment plans. What we can do, however, is offer Bostonians some insights into how children's access to current high quality schools is likely to change under each of the proposed plans. We also present data to enable readers to think about children's equitable access to high quality schools. Who has the opportunity to attend high quality schools now? Who is likely to have such opportunity in the future, under each plan? To what extent are these opportunities to attend a high quality school contingent on race/ethnicity, income, language, special needs, or home address? We invite you to think about these questions as you read this report, and to reflect on what the answers mean for you, your children, your neighbors, and your city.

## School Quality Index

In order to compare students' access to quality schools under the different assignment plans, we needed to create a metric by which to identify High, Medium, and Low Quality schools. To do so quickly, we created a School Quality Index (SQI) that averages the three measures of school quality provided by BPS in their map of schools across the district: MCAS composite score (combining absolute attainment and student growth over the past two years ${ }^{1}$ ), DESE ranking by the MA Department of Education, and Popularity. Because each of these measures is on a 1-4 scale, with 1 being best and 4 worst, we simply averaged (as opposed to standardizing) the scores. We chose to combine these three measures evenly as opposed to weighting them because each captures distinct components of "quality" that emerged through the community meetings and the External Advisory Council's (EAC's) working definition. We thought that Popularity was especially important to weight equally because it perhaps captures parents' perceptions of safety, school climate, and special offerings (art, music, etc.) that are not included in the MCAS and DESE rankings. It is worth noting that this index does not include important indicators of school quality such as caring teachers, demographic diversity, parent involvement, or equitable outcomes. We discuss the reasons for this later in the report.

Schools fell clearly into three School Quality Index buckets, as shown here:


We hence identified 12 High Quality Schools (SQI = 1.0-1.9), 29 Medium Quality Schools (SQI = 2.0-2.9), and $\mathbf{2 4}$ Low Quality Schools (SQI = 3.0-3.9). Note that we created combined SQI scores for the Kilmer and the Roosevelt. There were 11 schools that were missing DESE data; we have therefore left them unranked. These were mostly early learning centers and recently merged or newly created schools.

[^0]BPS Primary Schools by School Quality Index (SQI)

| SCHOOL | Mean | SQI |
| :--- | ---: | :--- |
| Beethoven | 1.00 | High |
| Eliot K--8 | 1.00 | High |
| Quincy | 1.00 | High |
| Henderson | 1.33 | High |
| Otis | 1.33 | High |
| PJ Kennedy | 1.33 | High |
| Curley K-8 | 1.67 | High |
| Hurley K-8 | 1.67 | High |
| Lyndon K-8 | 1.67 | High |
| Murphy K-8 | 1.67 | High |
| Ohrenberger | 1.67 | High |
| Roosevelt (K1-8) | 1.83 | High |
| Conley | 2.00 | Medium |
| Harvard-Kent | 2.00 | Medium |
| Manning | 2.00 | Medium |
| Mission Hill K-8 | 2.00 | Medium |
| Sumner | 2.00 | Medium |
| Kilmer (K-8) | 2.17 | Medium |
| Bates | 2.33 | Medium |
| Bradley | 2.33 | Medium |
| Hale | 2.33 | Medium |
| Haley | 2.33 | Medium |
| Lee | 2.33 | Medium |
| Lyon K-8 | 2.33 | Medium |
| Mason | 2.33 | Medium |
| Mather | 2.33 | Medium |
| Mozart | 2.33 | Medium |
| Philbrick | 2.33 | Medium |
| Russell | 2.33 | Medium |
| Sarah Greenwood K-8 | 2.33 | Medium |
| Warren-Prescott K-8 | 2.33 | Medium |
| Clap | 2.67 | Medium |
| Condon | 2.67 | Medium |
| Dever | 2.67 | Medium |
| Everett | 2.67 | Medium |
| McKay K-8 | 2.67 | Medium |
| O'Donnell | Medium |  |
| Orchard Gardens K-8 | 2.67 | Medium |
| Perry K-8 | 2.67 | Medium |
| Taylor |  |  |
| Young Achievers K-8 | 2.67 | Medium |
|  |  |  |


| Adams | 3.00 | Low |
| :--- | ---: | :--- |
| Blackstone | 3.00 | Low |
| Channing | 3.00 | Low |
| Ellis | 3.00 | Low |
| Gardner Pilot | 3.00 | Low |
| Guild | 3.00 | Low |
| Holland | 3.00 | Low |
| Jackson Mann K-8 | 3.00 | Low |
| Kenny | 3.00 | Low |
| Tobin K-8 | 3.00 | Low |
| Winship | 3.00 | Low |
| Chittick | 3.33 | Low |
| Hennigan | 3.33 | Low |
| Holmes | 3.33 | Low |
| Marshall | 3.33 | Low |
| Mendell | Low |  |
| Winthrop | 3.33 | Low |
| E. Greenwood | 3.67 | Low |
| Grew | Low |  |
| JF Kennedy | 3.67 | Low |
| Mattahunt | 3.67 | Low |
| Perkins | 3.67 | Low |
| Trotter | 3.67 | Low |
| Tynan | 3.67 | Low |
| Baldwin |  | Unrated |
| BTU Pilot K-8 |  | Unrated |
| East Boston EEC |  | Unrated |
| Edison K-8 |  | Unrated |
| Ellison Parks EEC |  | Unrated |
| Haynes EEC |  | Unrated |
| Higginson/Lewis K-8 |  | Unrated |
| King K-8 |  | Unrated |
| Lee Academy |  | Unrated |
| Mildred Ave. K-8 |  | Unrated |
| Umana/Alighieri K-8 |  | Unrated |
|  |  |  |

# Demographic and Program Comparisons of Current High, Medium, and Low Quality Schools Districtwide 

In judging the different plans' implications for students' equitable access to high quality schools, it may be helpful to understand current enrollment patterns. This table shows the percentage of particular kinds of students currently enrolled in High, Medium, and Low Quality schools. For example, as shown in the right-hand column, Limited English Proficient (LEP) students make up 34\% of all the students in the district. If they were distributed evenly among all schools, $34 \%$ of the student body in every school would be LEP. Instead, huge variation in the percentage of LEP students enrolled in each school. Among high quality schools, for example, only $13 \%$ of the students in one school (the Henderson) are Limited English Proficient, whereas 71\% of the students in another school (the Otis) are LEP. The other 10 high quality schools have an LEP student population somewhere between those two extremes. We calculated the average* percentage of high quality schools' student body who are LEP students by averaging the percent of LEP students in each high quality school, weighted by the schools' total enrollment. This means that larger schools are proportionately weighed more heavily in the calculation of the average. On average, high quality schools are $28 \%$ LEP students.

|  |  | High Quality | Medium <br> Quality | Low Quality | District |
| :---: | :--- | ---: | ---: | ---: | ---: |
| Limited English Prof. | Range | $13 \%-71 \%$ | $10 \%-69 \%$ | $8 \%-67 \%$ | $8 \%-71 \%$ |
|  | Average* | $28 \%$ | $36 \%$ | $34 \%$ | $34 \%$ |
|  | Range | $42 \%-79 \%$ | $33 \%-89 \%$ | $49 \%-92 \%$ | $33 \%-92 \%$ |
|  | Average | $56 \%$ | $66 \%$ | $73 \%$ | $67 \%$ |
| Special Education | Range | $8 \%-27 \%$ | $9 \%-35 \%$ | $7 \%-24 \%$ | $7 \%-35 \%$ |
|  | Average | $15 \%$ | $17 \%$ | $16 \%$ | $17 \%$ |
| Black | Range | $3 \%-35 \%$ | $2 \%-76 \%$ | $2 \%-69 \%$ | $2 \%-76 \%$ |
|  | Average | $18 \%$ | $30 \%$ | $39 \%$ | $31 \%$ |
| Asian | Range | $0 \%-57 \%$ | $0.4 \%-31 \%$ | $0 \%-16 \%$ | $0 \%-57 \%$ |
|  | Average | $13 \%$ | $7 \%$ | $4 \%$ | $7 \%$ |
| Hispanic | Range | $19 \%-85 \%$ | $17 \%-91 \%$ | $22 \%-89 \%$ | $17 \%-91 \%$ |
|  | Average | $44 \%$ | $46 \%$ | $49 \%$ | $47 \%$ |
| White | Range | $8 \%-41 \%$ | $1 \%-62 \%$ | $0.3 \%-23 \%$ | $0.3 \%-62 \%$ |
|  | Average | $22 \%$ | $15 \%$ | $5 \%$ | $12 \%$ |

[^1]
## Students' Access to High, Medium, and Low Quality Schools, by Demographic and Program

Another way to think about students' equitable access to quality schools is to examine how students are distributed across school type. This table shows the percentage of children from various demographic and program groups attending each kind of school. Across the district, 6139 students, or $20 \%$ of the total number of children who attend BPS primary schools, are currently enrolled in high quality schools. $32 \%$ of children are enrolled in medium quality schools, and $31 \%$ in low quality schools. $17 \%$ are enrolled in schools we were unable to rate because of missing data. These overall numbers, however, do not tell the full story. For example, although approximately $20 \%$ of all available primary school seats ${ }^{2}$ are in high quality schools, only $11 \%$ of black children attend those schools, while $37 \%$ and $35 \%$ of Asian and white children, respectively, attend high quality schools. Similarly, black children are disproportionately likely to attend low quality schools, as approximately $31 \%$ of all the seats are in low quality schools, but $40 \%$ of black children attend them. ${ }^{3}$

|  | High Quality | Medium <br> Quality | Low Quality | Unrated | Total |
| :---: | ---: | ---: | ---: | ---: | :---: |
| Total student <br> enrollment | 6139 | 10076 | 9631 | 5443 | 31289 |
| Total \% of <br> enrollment | $20 \%$ | $32 \%$ | $31 \%$ | $17 \%$ | $100 \%$ |
| Limited English <br> Proficient | $16 \%$ | $37 \%$ | $32 \%$ | $15 \%$ | $100 \%$ |
| Low Income | $16 \%$ | $34 \%$ | $35 \%$ | $15 \%$ | $100 \%$ |
| Special Education | $18 \%$ | $36 \%$ | $30 \%$ | $16 \%$ | $100 \%$ |
| Black | $11 \%$ | $33 \%$ | $40 \%$ | $16 \%$ | $100 \%$ |
| Asian | $37 \%$ | $34 \%$ | $20 \%$ | $9 \%$ | $100 \%$ |
| Hispanic | $19 \%$ | $34 \%$ | $34 \%$ | $13 \%$ | $100 \%$ |
| White | $35 \%$ | $42 \%$ | $13 \%$ | $10 \%$ | $100 \%$ |

[^2]
## School Quality Distribution by Plan: Maps and Tables

In its "Definition of Equitable Access," the External Advisory Committee (EAC) stated that "A new student assignment process should seek to provide every child, in every neighborhood...with the same opportunity to learn and succeed in the Boston Public Schools. If the new student assignment plan is geographically based, each defined area should seek to provide an equal opportunity to receive a quality education" (July 16, 2012). ${ }^{4}$

One way of determining whether each defined area offers students "an equal opportunity to receive a quality education" is to compare their access to seats in high quality schools across zones for each plan. We hence calculated the number of high, medium, low, and unrated quality schools in each attendance zone under each plan, as well as the number of seats available to students in each zone. Finally, we calculated the percentage of high quality seats available with respect to the total number of seats. Under the current 3-zone plan, for example, the East Zone has 3 high, 10 medium, and 11 low quality schools, as well as 3 unrated schools. The high quality schools have a total enrollment of 1637 children, out of a total East Zone enrollment of 11,670 children ( $1637+4245+4770+1018$ ), or $14 \%$ of the total.

This can very roughly be interpreted as the average child's chance of getting a seat in a high quality school in her zone depending on the plan that is selected. In the East Zone under the current plan, about $14 \%$ of children are able to attend a high quality school. This contrasts with students in the North and West Zones, where about $20 \%$ and $27 \%$ of children, respectively, are able to attend a high quality school. Note that this interpretation is very rough because children often have additional walk zone school choices beyond their designated attendance zone. This will be especially true in the 23-zone plan, since the zones are so small that many schools within a mile of children's residences will lie beyond their designated zone.

We also used the three-zone map provided by BPS that codes schools by the three measures of quality that we incorporated into the School Quality Index (SQI) to create similar maps for the new proposals.

## Current 3 Zone Plan SQI Analysis by Zone

| East |  | High | Medium | Low | Unrated | \% High Quality Seats |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \# of Schools | 3 | 10 | 11 | 3 | $14 \%$ |
|  | \# of Seats | 1637 | 4245 | 4770 | 1018 |  |
| North |  | High | Medium | Low | Unrated | \% High Quality Seats |
|  | \# of Schools | 5 | 8 | 8 | 4 | $20 \%$ |
|  | \# of Seats | 2153 | 3430 | 3340 | 1888 |  |
| West |  | High | Medium | Low | Unrated | \% High Quality Seats |
|  | \# of Schools | 4 | 11 | 5 | 4 | $27 \%$ |
|  | \# of Seats | 2349 | 3194 | 1966 | 1299 |  |

[^3]
## 6 Zone Plan SQI Analysis by Zone

| Zone 1 |  | High | Medium | Low | Unrated | \% High Quality Seats 21\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \# of Schools | 3 | 5 | 2 | 2 |  |
|  | \# of Seats | 989 | 2289 | 555 | 856 |  |
| Zone 2 |  | High | Medium | Low | Unrated | \% High Quality Seats$24 \%$ |
|  | \# of Schools | 1 | 1 | 3 | 2 |  |
|  | \# of Seats | 821 | 125 | 1381 | 1032 |  |
| Zone 3 |  | High | Medium | Low | Unrated | \% High Quality Seats 5\% |
|  | \# of Schools | 1 | 5 | 9 | 3 |  |
|  | \# of Seats | 343 | 2221 | 3762 | 989 |  |
| Zone 4 |  | High | Medium | Low | Unrated | \% High Quality Seats$25 \%$ |
|  | \# of Schools | 1 | 6 | 1 | 2 |  |
|  | \# of Seats | 811 | 1739 | 230 | 512 |  |
| Zone 5 |  | High | Medium | Low | Unrated | \% High Quality Seats17\% |
|  | \# of Schools | 2 | 7 | 4 | 2 |  |
|  | \# of Seats | 1140 | 2806 | 2122 | 816 |  |
| Zone 6 |  | High | Medium | Low | Unrated | \% High Quality Seats35\% |
|  | \# of Schools | 4 | 5 | 5 | 0 |  |
|  | \# of Seats | 2035 | 1689 | 2026 | 0 |  |



## 9 Zone Plan SQI Analysis by Zone

| Zone 1 |  | High | Medium | Low | Unrated | \% High Quality Seats$21 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \# of Schools | 3 | 5 | 2 | 2 |  |
|  | \# of Seats | 989 | 2289 | 555 | 856 |  |
| Zone 2 |  | High | Medium | Low | Unrated | \% High Quality Seats$24 \%$ |
|  | \# of Schools | 1 | 1 | 3 | 2 |  |
|  | \# of Seats | 821 | 125 | 1381 | 1032 |  |
| Zone 3 |  | High | Medium | Low | Unrated | \% High Quality Seats 0\% |
|  | \# of Schools | 0 | 1 | 5 | 1 |  |
|  | \# of Seats | 0 | 170 | 2198 | 412 |  |
| Zone 4 |  | High | Medium | Low | Unrated | \% High Quality Seats 8\% |
|  | \# of Schools | 1 | 4 | 4 | 2 |  |
|  | \# of Seats | 343 | 2051 | 1564 | 577 |  |
| Zone 5 |  | High | Medium | Low | Unrated | \% High Quality Seats35\% |
|  | \# of Schools | 1 | 4 | 1 | 1 |  |
|  | \# of Seats | 811 | 1078 | 230 | 202 |  |
| Zone 6 |  | High | Medium | Low | Unrated | \% High Quality Seats 25\% |
|  | \# of Schools | 1 | 5 | 1 | 0 |  |
|  | \# of Seats | 894 | 1976 | 775 | 0 |  |
| Zone 7 |  | High | Medium | Low | Unrated | \% High Quality Seats 9\% |
|  | \# of Schools | 1 | 1 | 3 | 2 |  |
|  | \# of Seats | 246 | 482 | 1347 | 816 |  |
| Zone 8 |  | High | Medium | Low | Unrated | \% High Quality Seats <br> 0\% |
|  | \# of Schools | 0 | 7 | 3 | 1 |  |
|  | \# of Seats | 0 | 2247 | 1433 | 310 |  |
| Zone 9 |  | High | Medium | Low | Unrated | \% High Quality Seats 66\% |
|  | \# of Schools | 4 | 1 | 2 | 0 |  |
|  | \# of Seats | 2035 | 451 | 593 | 0 |  |



## 11 Zone Plan SQI Analysis by Zone

| Zone 1 |  | High | Medium | Low | Unrated | \% High Quality Seats 20\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \# of Schools | 2 | 3 | 2 | 2 |  |
|  | \# of Seats | 672 | 1260 | 555 | 856 |  |
| Zone 2 |  | High | Medium | Low | Unrated | \% High Quality Seats$24 \%$ |
|  | \# of Schools | 1 | 2 | 0 | 0 |  |
|  | \# of Seats | 317 | 1029 | 0 | 0 |  |
| Zone 3 |  | High | Medium | Low | Unrated | \% High Quality Seats 24\% |
|  | \# of Schools | 1 | 1 | 3 | 2 |  |
|  | \# of Seats | 821 | 125 | 1381 | 1032 |  |
| Zone 4 |  | High | Medium | Low | Unrated | \% High Quality Seats 0\% |
|  | \# of Schools | 0 | 1 | 5 | 1 |  |
|  | \# of Seats | 0 | 170 | 2198 | 412 |  |
| Zone 5 |  | High | Medium | Low | Unrated | \% High Quality Seats 8\% |
|  | \# of Schools | 1 | 4 | 4 | 2 |  |
|  | \# of Seats | 343 | 2051 | 1564 | 577 |  |
| Zone 6 |  | High | Medium | Low | Unrated | \% High Quality Seats 25\% |
|  | \# of Schools | 1 | 5 | 1 | 0 |  |
|  | \# of Seats | 894 | 1976 | 775 | 0 |  |
| Zone 7 |  | High | Medium | Low | Unrated | \% High Quality Seats 35\% |
|  | \# of Schools | 1 | 4 | 1 | 1 |  |
|  | \# of Seats | 811 | 1078 | 230 | 202 |  |
| Zone 8 |  | High | Medium | Low | Unrated | \% High Quality Seats 9\% |
|  | \# of Schools | 1 | 1 | 3 | 2 |  |
|  | \# of Seats | 246 | 482 | 1347 | 816 |  |
| Zone 9 |  | High | Medium | Low | Unrated | \% High Quality Seats <br> 0\% |
|  | \# of Schools | 0 | 5 | 1 | 1 |  |
|  | \# of Seats | 0 | 1724 | 694 | 310 |  |
| Zone 10 |  | High | Medium | Low | Unrated | \% High Quality Seats |
|  | \# of Schools | 3 | 1 | 0 | 0 | 77\% |
|  | \# of Seats | 1538 | 451 | 0 | 0 |  |
| Zone 11 |  | High | Medium | Low | Unrated | \% High Quality Seats |
|  | \# of Schools | 1 | 2 | 4 | 0 | 21\% |
|  | \# of Seats | 497 | 523 | 1332 | 0 |  |



## 23 Zone Plan SQI Analysis by Zone

| Zone 1 |  | High | Medium | Low | Unrated | \% High Quality Seats 0\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \# of Schools | 0 | 1 | 1 | 0 |  |
|  | \# of Seats | 0 | 292 | 275 | 0 |  |
| Zone 2 |  | High | Medium | Low | Unrated | \% High Quality Seats42\% |
|  | \# of Schools | 2 | 1 | 0 | 1 |  |
|  | \# of Seats | 672 | 281 | 0 | 656 |  |
| Zone 3 |  | High | Medium | Low | Unrated | \% High Quality Seats 0\% |
|  | \# of Schools | 0 | 1 | 1 | 1 |  |
|  | \# of Seats | 0 | 687 | 280 | 200 |  |
| Zone 4 |  | High | Medium | Low | Unrated | \% High Quality Seats 24\% |
|  | \# of Schools | 1 | 2 | 0 | 0 |  |
|  | \# of Seats | 317 | 1029 | 0 | 0 |  |
| Zone 5 |  | High | Medium | Low | Unrated | \% High Quality Seats 0\% |
|  | \# of Schools | 0 | 2 | 2 | 0 |  |
|  | \# of Seats | 0 | 1035 | 622 | 0 |  |
| Zone 6 |  | High | Medium | Low | Unrated | \% High Quality Seats 71\% |
|  | \# of Schools | 1 | 0 | 1 | 0 |  |
|  | \# of Seats | 821 | 0 | 342 | 0 |  |
| Zone 7 |  | High | Medium | Low | Unrated | \% High Quality Seats 0\% |
|  | \# of Schools | 0 | 1 | 2 | 2 |  |
|  | \# of Seats | 0 | 125 | 1039 | 1032 |  |
| Zone 8 |  | High | Medium | Low | Unrated | \% High Quality Seats 0\% |
|  | \# of Schools | 0 | 0 | 3 | 0 |  |
|  | \# of Seats | 0 | 0 | 1422 | 0 |  |
| Zone 9 |  | High | Medium | Low | Unrated | \% High Quality Seats 0\% |
|  | \# of Schools | 0 | 1 | 1 | 1 |  |
|  | \# of Seats | 0 | 241 | 591 | 373 |  |
| Zone 10 |  | High | Medium | Low | Unrated | \% High Quality Seats 0\% |
|  | \# of Schools | 0 | 4 | 0 | 0 |  |
|  | \# of Seats | 0 | 1364 | 0 | 0 |  |
| Zone 11 |  | High | Medium | Low | Unrated | \% High Quality Seats |
|  | \# of Schools | 0 | 1 | 2 | 1 | 0\% |
|  | \# of Seats | 0 | 170 | 776 | 412 |  |
| Zone 12 |  | High | Medium | Low | Unrated | \% High Quality Seats |
|  | \# of Schools | 1 | 1 | 1 | 1 |  |
|  | \# of Seats | 343 | 775 | 351 | 204 |  |


| Zone 13 |  | High | Medium | Low | Unrated | \% High Quality Seats 39\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \# of Schools | 1 | 1 | 1 | 0 |  |
|  | \# of Seats | 894 | 612 | 775 | 0 |  |
| Zone 14 |  | High | Medium | Low | Unrated | \% High Quality Seats15\% |
|  | \# of Schools | 1 | 0 | 3 | 0 |  |
|  | \# of Seats | 246 | 0 | 1347 | 0 |  |
| Zone 15 |  | High | Medium | Low | Unrated | \% High Quality Seats67\% |
|  | \# of Schools | 1 | 1 | 1 | 0 |  |
|  | \# of Seats | 811 | 161 | 230 | 0 |  |
| Zone 16 |  | High | Medium | Low | Unrated | \% High Quality Seats <br> 0\% |
|  | \# of Schools | 0 | 3 | 0 | 1 |  |
|  | \# of Seats | 0 | 917 | 0 | 202 |  |
| Zone 17 |  | High | Medium | Low | Unrated | \% High Quality Seats 0\% |
|  | \# of Schools | 0 | 1 | 0 | 2 |  |
|  | \# of Seats | 0 | 482 | 0 | 816 |  |
| Zone 18 |  | High | Medium | Low | Unrated | \% High Quality Seats 0\% |
|  | \# of Schools | 0 | 3 | 0 | 1 |  |
|  | \# of Seats | 0 | 1009 | 0 | 310 |  |
| Zone 19 |  | High | Medium | Low | Unrated | \% High Quality Seats <br> 0\% |
|  | \# of Schools | 0 | 2 | 1 | 0 |  |
|  | \# of Seats | 0 | 715 | 694 | 0 |  |
| Zone 20 |  | High | Medium | Low | Unrated | \% High Quality Seats 0\% |
|  | \# of Schools | 0 | 2 | 2 | 0 |  |
|  | \# of Seats | 0 | 523 | 739 | 0 |  |
| Zone 21 |  | High | Medium | Low | Unrated | \% High Quality Seats56\% |
|  | \# of Schools | 1 | 1 | 0 | 0 |  |
|  | \# of Seats | 581 | 451 | 0 | 0 |  |
| Zone 22 |  | High | Medium | Low | Unrated | \% High Quality Seats$100 \%$ |
|  | \# of Schools | 2 | 0 | 0 | 0 |  |
|  | \# of Seats | 957 | 0 | 0 | 0 |  |
| Zone 23 |  | High | Medium | Low | Unrated | \% High Quality Seats |
|  | \# of Schools | 1 | 0 | 2 | 0 | 46\% |
|  | \# of Seats | 497 | 0 | 593 | 0 |  |



## School Quality Distribution by Plan: Overall Comparison

In order to compare the plans' capacities to ensure students' equitable access to high quality schools, we have summarized the tables here, showing just the percentage of high quality seats available in each zone under each plan.

| 3 Zone | East | North | West |
| :---: | :---: | :---: | :---: |
|  | $14 \%$ | $20 \%$ | $27 \%$ |


| 6 Zone | 1 | 2 | 3 | 4 | 5 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $21 \%$ | $24 \%$ | $5 \%$ | $25 \%$ | $17 \%$ | $35 \%$ |


| 9 Zone | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $21 \%$ | $24 \%$ | $0 \%$ | $8 \%$ | $35 \%$ | $25 \%$ | $9 \%$ | $0 \%$ | $66 \%$ |


| 11 Zone | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 20\% | 24\% | 24\% | 0\% | 8\% | 25\% | 35\% | 9\% | 0\% | 77\% | 21\% |


| 23 Zone | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0\% | 42\% | 0\% | 24\% | 0\% | 71\% | 0\% | 0\% | 0\% | 0\% | 0\% | 21\% |
|  | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |  |
|  | 39\% | 15\% | 67\% | 0\% | 0\% | 0\% | 0\% | 0\% | 56\% | 100\% | 46\% |  |

## School Quality Distribution by Plan: Sample Students' Perspectives

While the tables and maps provide an important overview of the demographic and quality distributions in each proposal, we also recognized that such an approach can obscure vast individual differences. For this reason, we wanted to look closely at current school assignments for a subsample of students and consider how these students' experiences could change under each proposal.

In order to do this, we selected four schools in each zone (one high quality, two middle quality, and one low quality) and then selected one anonymous student from these schools and projected what their options would be under each of the proposed plans. Student demographic information was drawn from data released by BPS about the 2011-2012 school year. ${ }^{5}$ Based on the geocode provided in students' demographic data, we chose a random address within these geocodes to project where students might be assigned under a no zone plan, the boundaries of their zone under each of the four zoned proposals, and the distribution of quality schools within those zones. Because we could not project the distribution of special programs (like special education or Sheltered English Immersion) under the new plans, all projections assume that the student would be attending general education programs.

Each of these children represents an actual student currently enrolled in BPS. However, we do not know who these students are; their identities are anonymous in the data released by BPS. ${ }^{6}$ We have also removed or obscured any potentially identifying data that would enable someone with an intimate knowledge of their school to identify any child. All names are pseudonyms.

[^4]
## INTRODUCING THE EAST ZONE

## Meet Ibrahim

- Black boy
- Speaks English at home
- Receives special education services
- Lives in Roslindale
- Was assigned to his second choice school (Henderson Elementary, a "high performer")


## Meet Ibrahim's Options



## Meet Aida

- Hispanic girl
- Qualifies for Free/ Reduced lunch
- First language is Spanish and currently classified as LEP
- Lives in South Dorchester
- Was assigned to her first choice school (Everett Elementary, a "mid performer")



## Meet Aida's Options



## Meet Roberto

- Hispanic boy
- Qualifies for Free/Reduced Lunch
- Speaks both English and another language at home
- Receives special education services
- Lives in South Dorchester
- Was assigned to his second choice school (Russell Elementary, a "mid performer")

Under a no zone plan, Roberto could be assigned to the
Henderson (high), the Holmes
(low), or the Marshall (low).

## Meet Roberto's Options



## Meet Siena

- Black girl
- Qualifies for Free/ Reduced Lunch
- Speaks English at home
- Lives in North Dorchester
- Was assigned to her first choice school (Marshall Elementary, a "low performer")


Under a no zone plan, Siena could be assigned to the Everett (mid), the Mather (mid), or the Russell (mid).

## Meet Siena＇s Options



## INTRODUCING THE WEST ZONE

## Meet Louis

- Black boy
- Qualifies for Free/ Reduced Lunch
- First language is not English and currently classified as LEP
- Lives in West Roxbury
- Walks to school
- Was assigned to his first choice school (the Ohrenberger, a "high performer")
 Channing (low).


## Meet Louis's Options




23 Zones:

## School Key:

A School within your Walk Zone
HPS Citywide school

Wehool within your Home Zone ㅊ. BPS charter school

Your Home Zone Boundaries Ell other Home Zones

## Meet Nina

- Hispanic girl
- Qualifies for Free/ Reduced Lunch
- Speaks English at home
- Lives in Mattapan
- Was administratively assigned to her school (the Hale, a "mid performer")



## Meet Nina’s Options



## Meet Suzanne

- White girl
- Qualifies for Free/ Reduced Lunch
- Speaks English at home
- Receives special education services
- Lives in Roslindale
- Was assigned to her first choice school (the Kilmer, a "mid



## Meet Suzanne's Options



## Meet Derrick

- Black boy
- Qualifies for Free/Reduced Lunch
- First language is not English
- Receives special education services
- Lives in Roxbury
- Was specially assigned to his school for SPED services (the Mendell, a "low performer")



## Meet Derrick's Options



## INTRODUCING THE NORTH ZONE

## Meet Dennis

- Asian boy
- Qualifies for Free/ Reduced Lunch
- Speaks English at home
- Lives in Jamaica Plain
- Was assigned to his second choice school (the Eliot, a "high performer")



## Meet Dennis's Options



## Meet Lisa

- White girl
- Speaks English at home
- Lives in Charlestown
- Walks to school
- Was assigned to her first choice school (the Warren/Prescott, a "mid performer")



## Meet Lisa＇s Options



## Meet Latonya

- Black girl
- Qualifies for Free/ Reduced Lunch
- Speaks English at home
- Lives in East Boston
- Walks to school
- Was assigned to her first choice school (the McKay, a "mid performer")



## Meet Latonya’s Options



## Meet Corinna

Corinna goes to school here.

- Hispanic girl
- Speaks Spanish at home
- Classified as LEP

Student

- Lives in East Boston
- Was assigned to her third choice school (the Guild, a "low performer")



## Meet Corinna’s Options



## Limitations and Unanswered Questions

We hope that this report has given Boston families and community members a useful tool for reflecting and deliberating about children's equitable access to high quality schools in BPS. It is crucial to note, however, that there are significant limitations to the analysis we have provided here.

First and perhaps foremost, as we noted in the Introduction, school quality is not fixed. Low quality schools can get better; high quality schools can get worse. Some of these shifts are likely to occur as a result of new student assignments. For example, there is overwhelming evidence showing that schools have a very hard time serving children who are isolated in high-poverty, high-minority, and high-ELL settings. Internationally famed researcher Gary Orfield at UCLA calls this the threat of "triple segregation." To the extent that these assignment plans intensify segregation along multiple dimensions, they are likely to intensify school quality disparities as well. This means that schools' current level of quality, as measured by their SQI, is not a highly predictable indicator of their future quality. It may well be that families in Fall 2014 (when a new assignment plan is slated to go into effect) will have approximately the opportunities outlined in this report. But the choices facing families in Fall 2016, let alone Fall 2020, will likely look very different. This means that the tables, maps, and student profiles are reliable only in the relatively short term.

A second major limitation of this report lies in our measure of school quality itself. The SQI-an average of only three data points selected by BPS in its measure of quality (MCAS composite, DESE level, and Popularity), each of which are themselves fairly volatile-is an extremely crude metric by which to measure and sort schools. It inevitably captures little about the internal vitality of a school, its culture and customs, its caring teachers and involved parents, its engaged children immersed in an array of learning opportunities, or its diverse community humming with energy. Furthermore, schools' SQI rankings may falsely suggest that they are internally homogeneous: that all students within a "high quality" school receive a high quality education, or that students and families experience a "low quality" school as being bad across the board. This is clearly false. Schools may be very good at serving some students (general education students, say, or native English speakers) and lousy at serving others (those with special needs, or English Language Learners). Or, a school that offers students a fairly low quality education may nonetheless be sought out by families because their children feel safe and they are treated with respect. Individual students and families, therefore, may judge a school's quality far differently from one another, and from the SQI.

A third crucial limitation in this report is that a number of student assignment policies, regardless of the zone plan, are yet to be announced. Will children be grandfathered into out-of-zone schools if their siblings already attend? How large will the walk zones be, and how will they be calculated? What kinds of priority will walk zone children receive? What percentage of seats in each school, if any, will be saved for children in the walk zone? Where will programs for English Language Learners be located? Answers to these kinds of questions are essential for modeling students' likely access to high quality schools.

A final limitation is due to resources: both data and time. This report was prepared by Harvard Graduate School of Education (HGSE) Professor Meira Levinson and a team of extraordinary Harvard
doctoral students over a period of three days. We were also assisted by Timothy Reardon, Metropolitan Area Planning Council, and HGSE Professor Jal Mehta. We were committed to doing this work quickly so the analyses could get in the hands of Boston families and residents near the beginning of the community consultation process. But that means we inevitably had to leave many important questions unanswered. Furthermore, we were limited to working with the data that BPS made available on its website. As noted, these data are extensive and extremely useful. But they also are incomplete. As of Sep. 27, there was no individualized student achievement data available. Nor were shapefiles available for the proposed new zones with which we might have been able to conduct much more informed geographic and neighborhood analyses. (We also would have been able to create more elegant maps!)

We think it is especially important for Boston Public Schools to model projected enrollments for each school, or a set of representative schools, dependent on zone assignment, walk zone policies, grandfathering decisions about current students and their siblings, and transportation provision. This is a complex analytic task, but it is important. In the meantime, if BPS posts its shapefiles, it is possible that an organization like the Metropolitan Area Planning Council could make walkshed maps for each school.

Projected school enrollment patterns can help Boston families evaluate the set of proposals with respect to educational access and opportunity. But our analyses—and our collective conversation as engaged Bostonians-should not stop at the impact on school quality, and equitable educational opportunities, themselves. Schools are part of a larger urban ecology. They influence neighborhood and civic life, property values, and overall demographics as families choose to move into or out of the city based on their perceptions of the schools. As we consider what neighborhoods and children have reliable access to high quality schools, and analyze patterns of equity and inequity that result, we need to keep in mind the implications for our shared civic life as a whole. Will property values in particular areas of the city rise even higher or fall even lower than they have already? What will knit us together-on our block, in our neighborhood, across the city? What might drive us apart? What kind of city do we want to live in, and be proud of contributing to, in 5, 10, or 20 years' time? These are admittedly large questions, but they are essential to our collective deliberations about the Boston Public Schools.


[^0]:    ${ }^{1}$ Note that MCAS results were calculated for general education students, students with disabilities in resource rooms, and ELL students with an English Language Development level of 4 or 5. This means that the scores of approximately $50 \%$ of students with disabilities and $75 \%$ of ELL students were included in the MCAS composite calculations, with the others excluded as likely "outliers" in a school's results. See http://www.bostonpublicschools.org/files/2012-06-01 determining school quality - chart from kamal.pdf.

[^1]:    *This is a weighted average, by school enrollment. A school with a larger enrollment will be weighted proportionately higher than a school with a smaller enrollment in calculating the average percent of students from each category in each kind of school.

[^2]:    ${ }^{2}$ Note that we used current enrollment as a proxy for seats, as data on seat allocations for each school were not made publicly available until the evening of Sep. 27. For seat availability, as distinguished from current enrollment, see http://www.bostonpublicschools.org/files/building capacity 0.xls.
    ${ }^{3}$ Note that late on Sep. 27, BPS posted data on ELL, special education, and other program demographics by current and proposed zones here: http://www.bostonpublicschools.org/files/student demand - kO-
    8th grade by program.xls. These zone-based analyses are useful complements to this city-wide analysis.

[^3]:    ${ }^{4}$ http://www.bostonpublicschools.org/files/equitable access definition - draft 7-16.docx

[^4]:    ${ }^{5}$ http://www.bostonpublicschools.org/files/demand- student descriptive data all boston sy 2011-2012.xls
    ${ }^{6}$ We do wish to note, however, that we are deeply disturbed by the risk to student confidentiality posed by BPS' release of such detailed student descriptive data in the above-referenced spreadsheet. Although student identifiers are removed, anyone who knows a class or school well (e.g. a teacher, parent, school volunteer, or student herself) could readily identify particular students based on the information provided in the spreadsheet. Children are identified by race and ethnicity, special program, geocode, home and first language, income, gender, school, grade, transportation status, and distance from school (among other details). This provides enough information to enable anyone who knows families and students at a school to match the anonymous descriptors with specific children. We applaud BPS' commitment to transparency during this process, but urge the district to consider more carefully their public release of highly sensitive and potentially identifiable information.

