

Build **BPS**

Demographics

Advisory Committee Report

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November 2, 2016

Purpose

The BuildBPS Demographics Advisory Committee was established to gain insight into the current and potential demographic trends and what impacts those trends might have on the district, and to study how demographics and enrollment projections affect the development of the 10 year Facility Master Plan (FMP).

Approach and Methodology

The Consultant (MGT of America) and the Advisory Committee worked closely on the following:

- Met with various agencies, city and district personnel to gain insights and gain an understanding of the District
- Reviewed historical demographic data on population and student enrollment
- Reviewed reports the Boston Planning and Development Agency (BPDA) has developed for Imagine2030, which are forward looking
- Considered options for weighing and presenting information

City of Boston Historical Population Trends

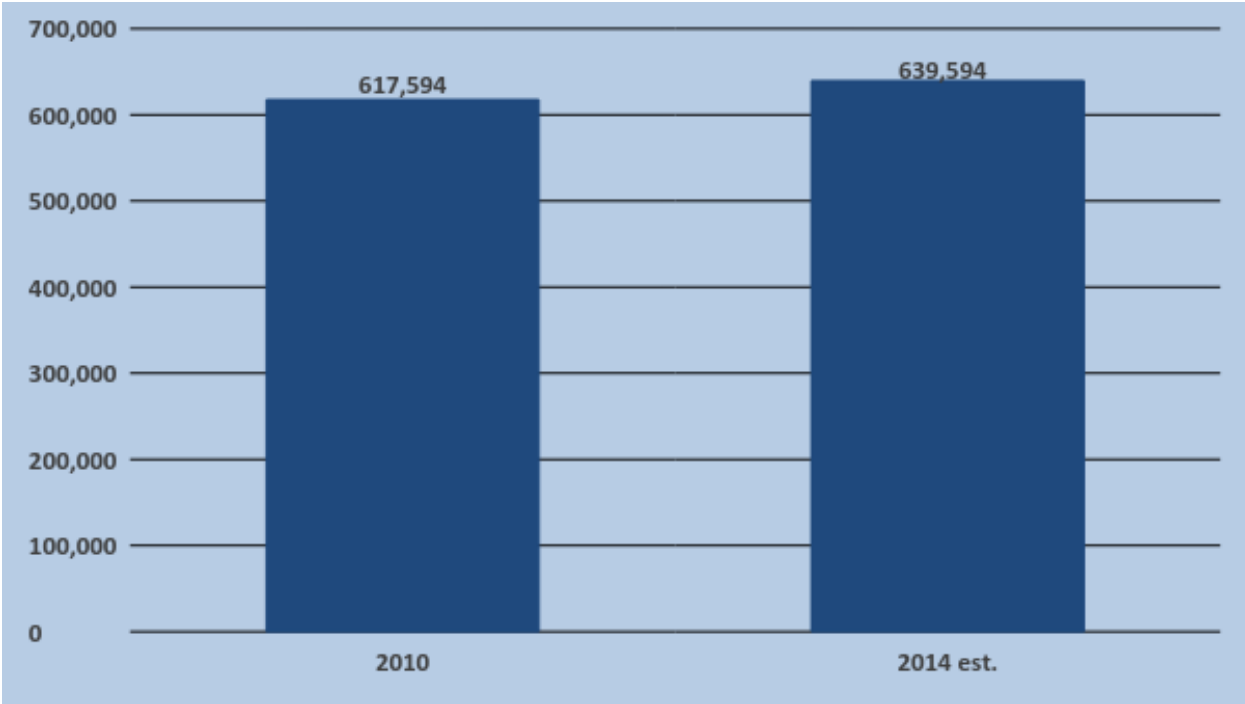
In order to estimate projected BPS enrollment, we first need to understand Boston's historical population trends.

1. The population of Boston is growing.
2. However, growth is occurring among older segments of the population, not among younger segments.
3. Additionally, fewer children are being born in Boston.

Findings: Overall Population

1. Boston's population is growing but.....

Exhibit 1: Total Population

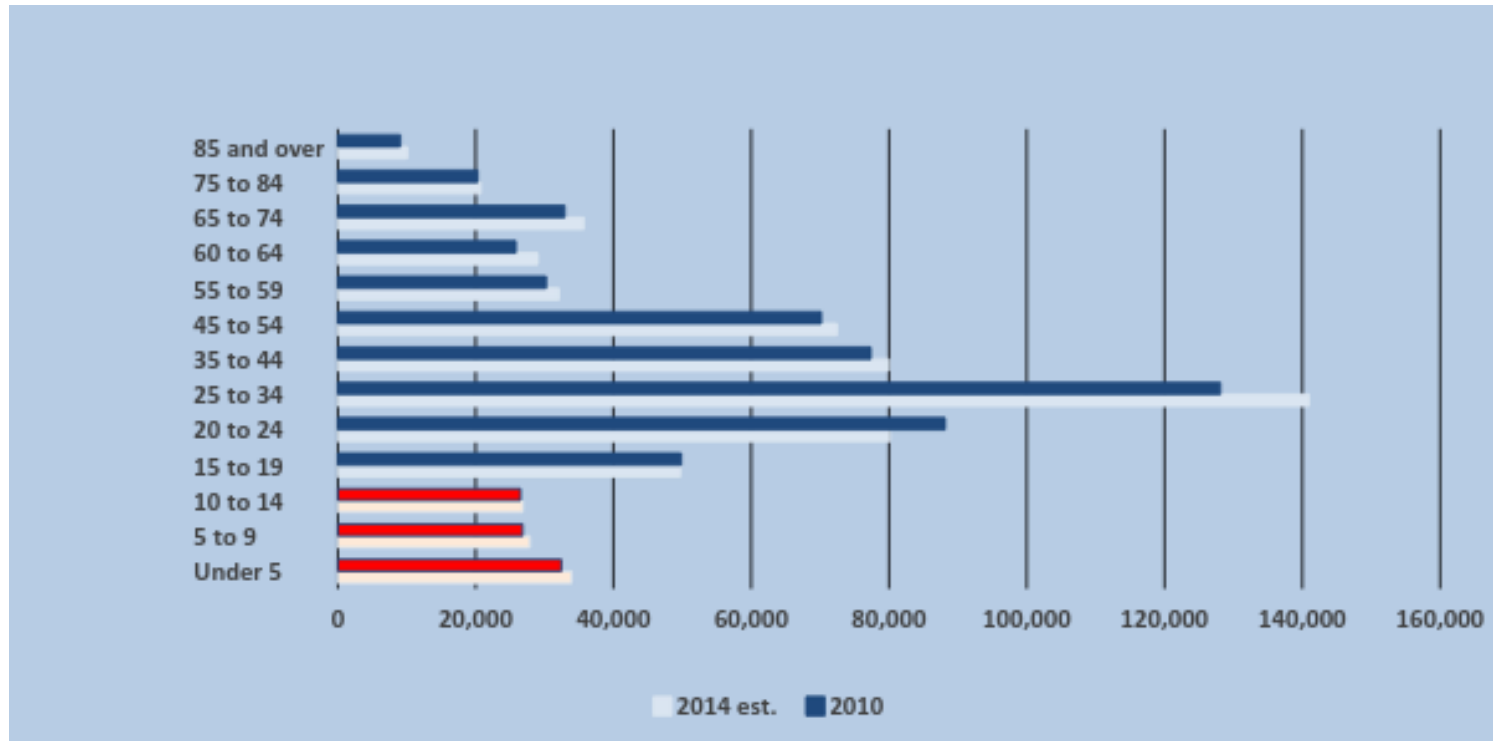


Source: U.S. Census Bureau.

Findings: Population by Age

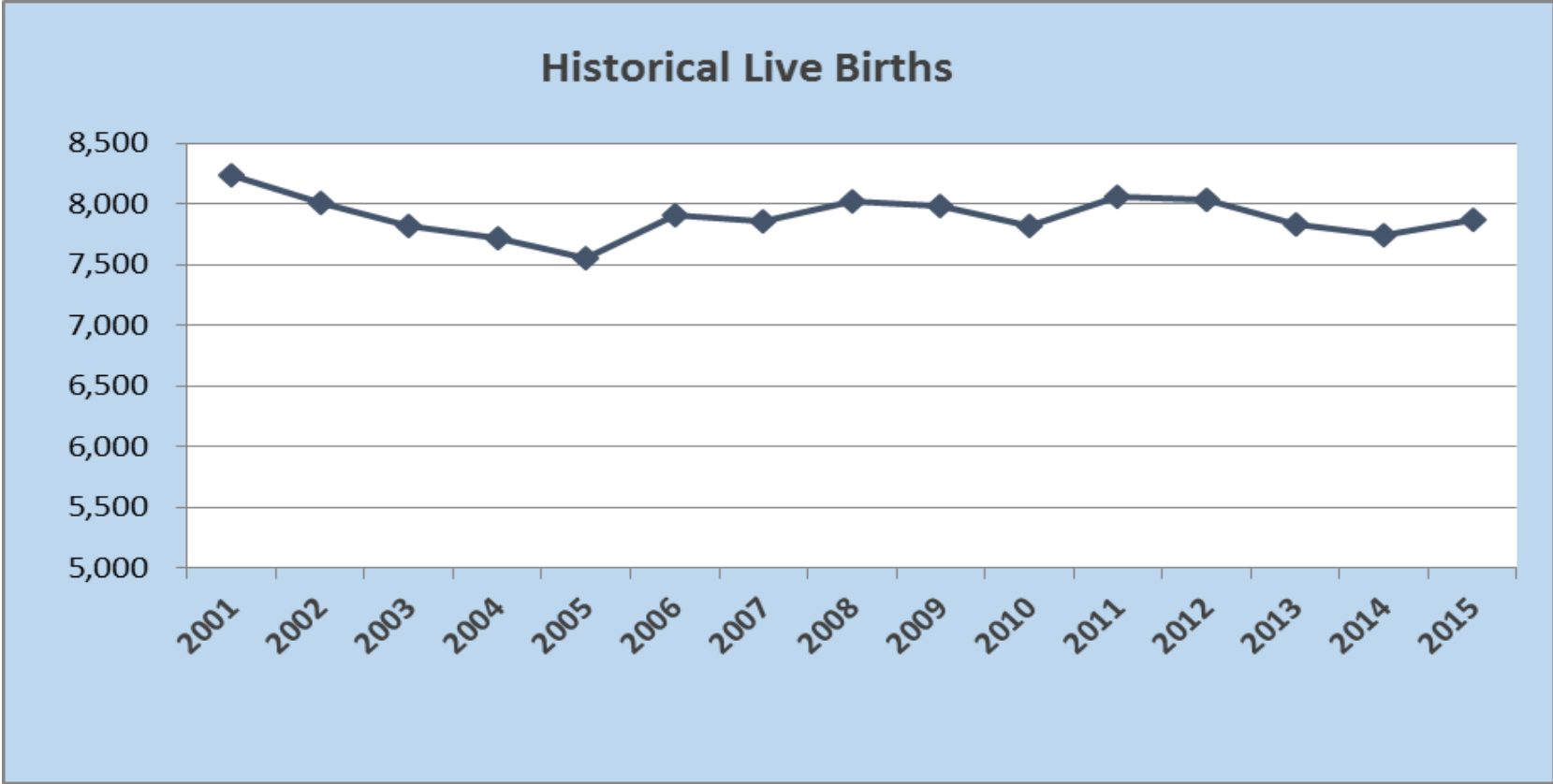
- Population growth is largest in areas that don't impact K-12 growth.

Exhibit 2: Population Age Structure



Findings: Birth Rate and Kindergarten Enrollment

3. Fewer children are being born.



BPS Historical Enrollment Trends

We also need to understand BPS's historical enrollment trends.

1. The proportion of K-12 students enrolled in BPS has been declining over time because:
 - a. Boston is growing older and fewer children are being born
 - b. Charter growth is impacting BPS' capture rate
2. The number of Pre-K students in BPS has increased over time because BPS has gained Pre-K market share.
3. However, BPS is historically losing students between grades 5 and 8 with some restoration of enrollment in grade 9.
4. Demand for schools and enrollment varies by neighborhood.

Findings: BPS Enrollment Over Time

1a. Student enrollment has been declining over time.

Exhibit 4

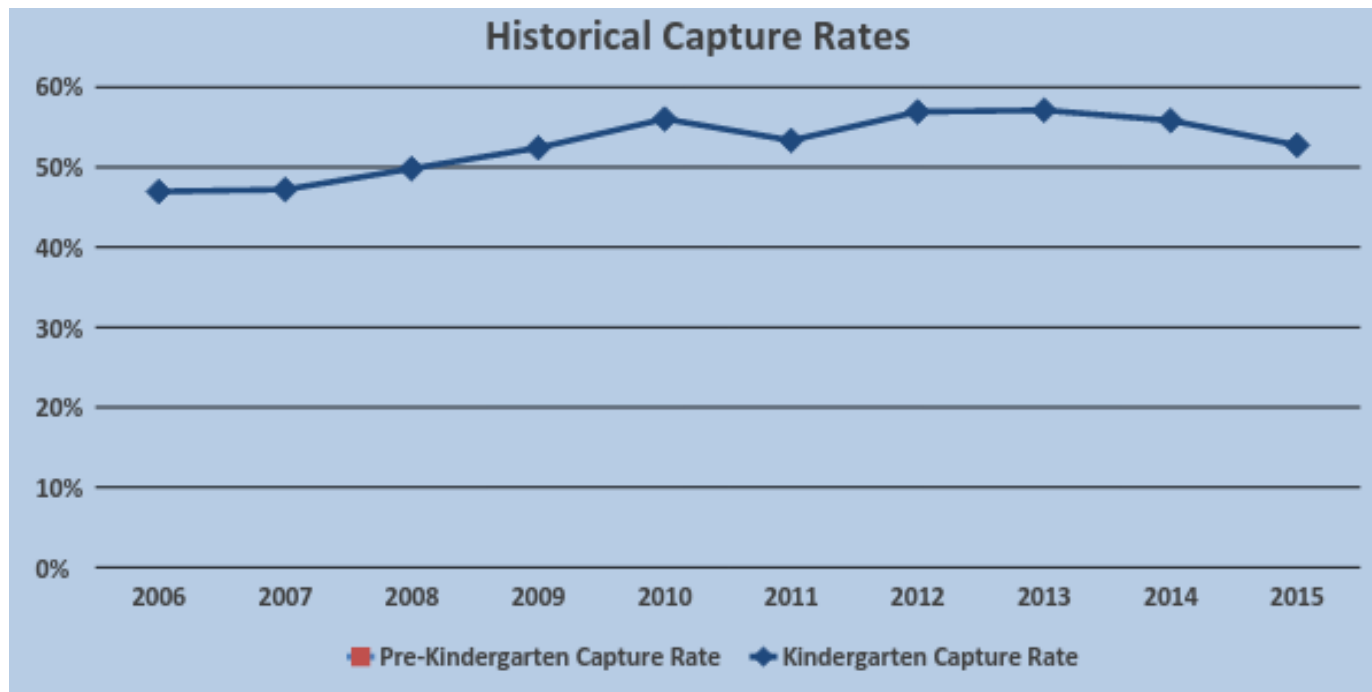
Grade	06 - 07	07 - 08	08 - 09	09 - 10	10 - 11	11 - 12	12 - 13	13 - 14	14 - 15	15 - 16
K2	3,865	3,781	3,897	4,047	4,232	4,220	4,471	4,580	4,453	4,122
1	4,167	4,196	4,117	4,272	4,372	4,369	4,595	4,723	4,749	4,539
2	4,007	3,994	4,092	3,999	4,195	4,243	4,180	4,378	4,598	4,602
3	4,016	3,992	4,033	4,049	3,971	4,141	4,202	4,154	4,274	4,525
4	3,825	3,960	3,999	3,999	4,101	3,977	4,106	4,109	4,078	4,147
5	3,827	3,578	3,839	3,856	3,788	3,836	3,382	3,505	3,546	3,509
6	3,701	3,571	3,327	3,683	3,716	3,605	3,657	3,234	3,435	3,437
7	4,183	4,005	3,917	3,767	4,007	4,046	3,971	4,002	3,491	3,690
8	4,286	4,096	4,024	3,960	3,791	3,966	4,078	4,001	4,004	3,536
9	5,679	5,315	5,186	5,030	4,889	4,641	4,783	4,712	4,731	4,584
10	4,580	4,508	4,460	4,484	4,370	4,228	4,041	4,384	4,176	4,216
11	4,380	4,348	4,175	4,272	4,254	4,263	4,202	4,045	4,254	4,156
12	4,162	4,349	4,432	4,440	4,519	4,360	4,355	4,234	4,341	4,528
K2-12	54,678	53,693	53,498	53,858	54,205	53,895	54,023	54,061	54,130	53,591

Source: Boston Public Schools, 2016.

Findings: Capture Rate

- 1b. BPS kindergarten enrollment as a percentage of eligible students (capture rate) has been declining since 2012.

Exhibit 15: Historical Capture Rate

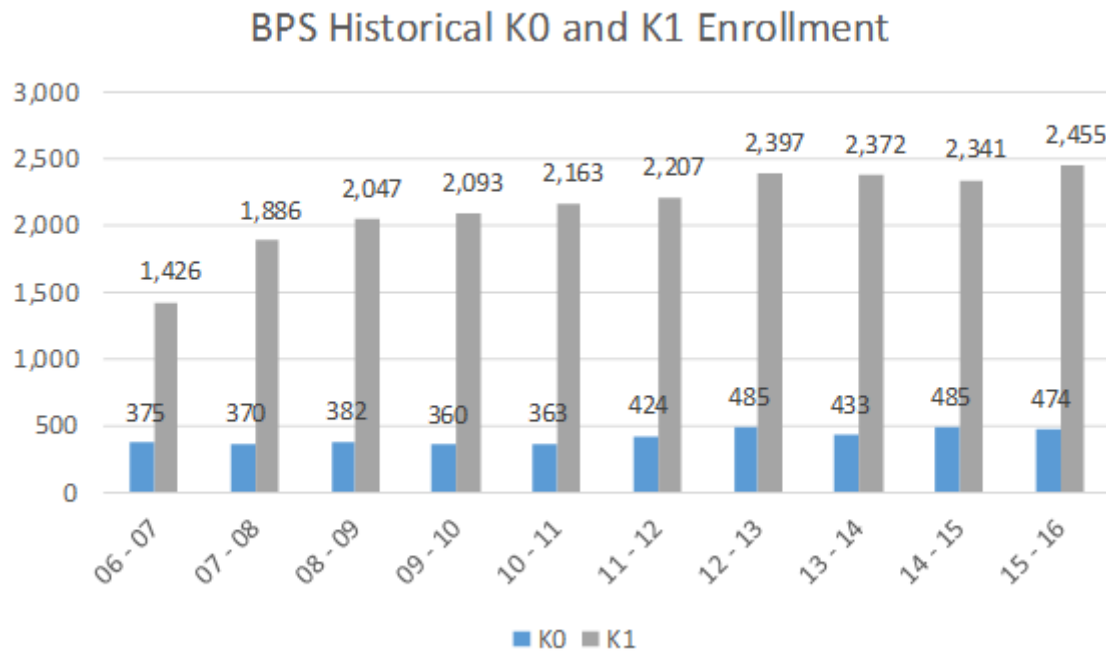


Findings: Pre-K Enrollment

2. The city has gained Pre-K students over the last decade as the City has created classroom space in existing schools for this age group...

Excerpt of Table A: Historical Early Childhood Enrollment

BPS has gained K0/K1 seats



Findings: 5-9 Enrollment

3. But lost students in Grades 5-9.

Exhibit 10: Historical Enrollment Grades 5-9 enrollment

GRADE	06 - 07	07 - 08	08 - 09	09 - 10	10 - 11	11 - 12	12 - 13	13 - 14	14 - 15	15 - 16
5	3,827	3,578	3,839	3,856	3,788	3,836	3,382	3,505	3,546	3,509
6	3,701	3,571	3,327	3,683	3,716	3,605	3,657	3,234	3,435	3,437
7	4,183	4,005	3,917	3,767	4,007	4,046	3,971	4,002	3,491	3,690
8	4,286	4,096	4,024	3,960	3,791	3,966	4,078	4,001	4,004	3,536
9	5,679	5,315	5,186	5,030	4,889	4,641	4,783	4,712	4,731	4,584

Findings: Students by Neighborhood

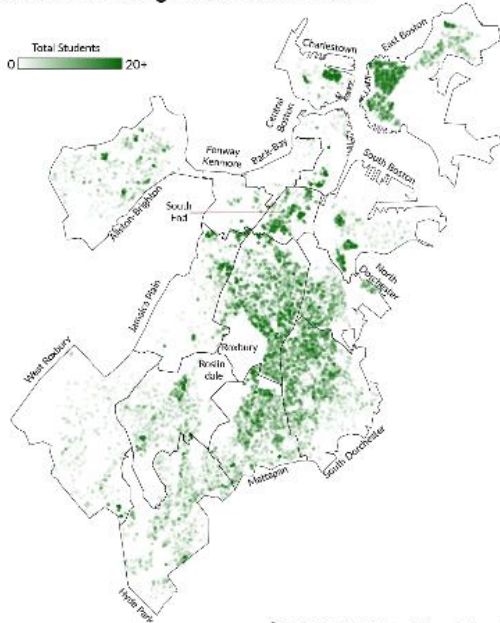
4. Boston's neighborhoods vary in the number of students.

In-District Enrollment by Neighborhood	K0	K1	K2	01	02	03	04	05	06	07	08	09	10	11	12	Grand Total
Allston-Brighton	42	128	179	214	182	186	165	150	165	196	151	251	191	163	185	2,548
Back Bay/BH	2	10	19	17	14	18	13	11	9	14	14	10	8	13	8	180
Central Boston	10	35	94	101	85	79	61	65	58	64	51	56	56	65	57	937
Charlestown	7	51	144	152	149	141	118	101	114	108	106	110	99	95	97	1,592
East Boston	59	252	511	548	552	587	491	420	396	379	365	587	484	450	426	6,507
Fenway/Kenmore	5	13	30	45	42	43	27	23	23	19	28	28	31	27	16	400
Hyde Park	31	163	221	267	244	240	253	191	195	202	217	284	281	308	347	3,444
Jamaica Plain	20	140	223	254	221	228	218	186	179	179	188	198	201	212	235	2,882
Mattapan	51	197	347	419	405	396	350	335	328	345	336	469	413	415	476	5,282
North Dorchester	14	138	214	244	202	239	210	191	205	174	186	235	228	236	271	2,987
Roslindale	32	178	252	295	294	292	258	207	204	247	214	275	260	289	308	3,605
Roxbury	77	431	745	784	867	799	774	591	595	639	620	772	719	688	769	9,870
South Boston	11	104	122	173	168	169	144	130	126	136	133	154	154	128	145	1,997
South Dorchester	72	366	589	643	720	655	684	551	535	598	596	712	689	675	749	8,834
South End	22	77	189	172	214	223	193	169	161	197	160	208	192	182	207	2,566
West Roxbury	16	169	240	202	226	209	170	174	130	177	157	215	180	186	199	2,650
Other-not specified	3	2	2	3	3	2	2	2	3	3	4	4	12	7	6	58
In-District Total	474	2,455	4,122	4,539	4,602	4,525	4,147	3,509	3,437	3,690	3,536	4,584	4,216	4,156	4,528	56,520

Findings: High need students

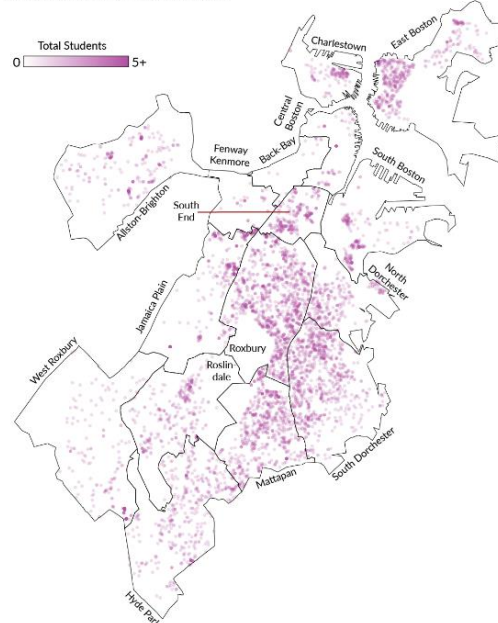
Students with higher needs (socio-economically disadvantaged, special needs, and English language learners) are concentrated in parts of the City.

Students Receiving Free & Reduced Lunch



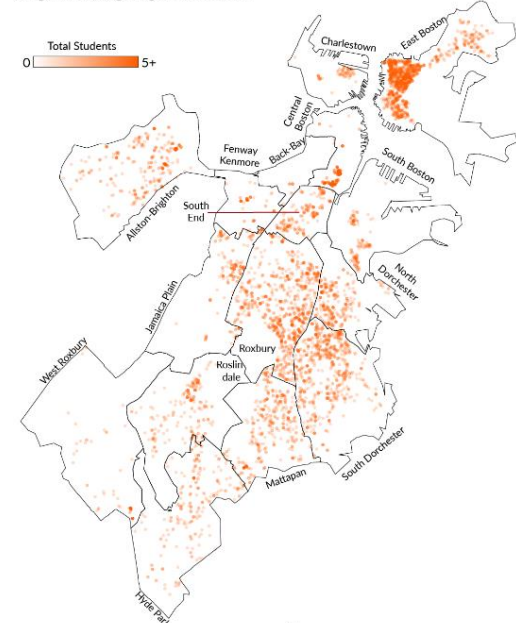
 BOSTON Public Schools

Students with Disabilities



 BOSTON Public Schools

English Language Learners



 BOSTON Public Schools

Historical Trends Were Used to Estimate Future BPS enrollment

Overview of Projection Methodology

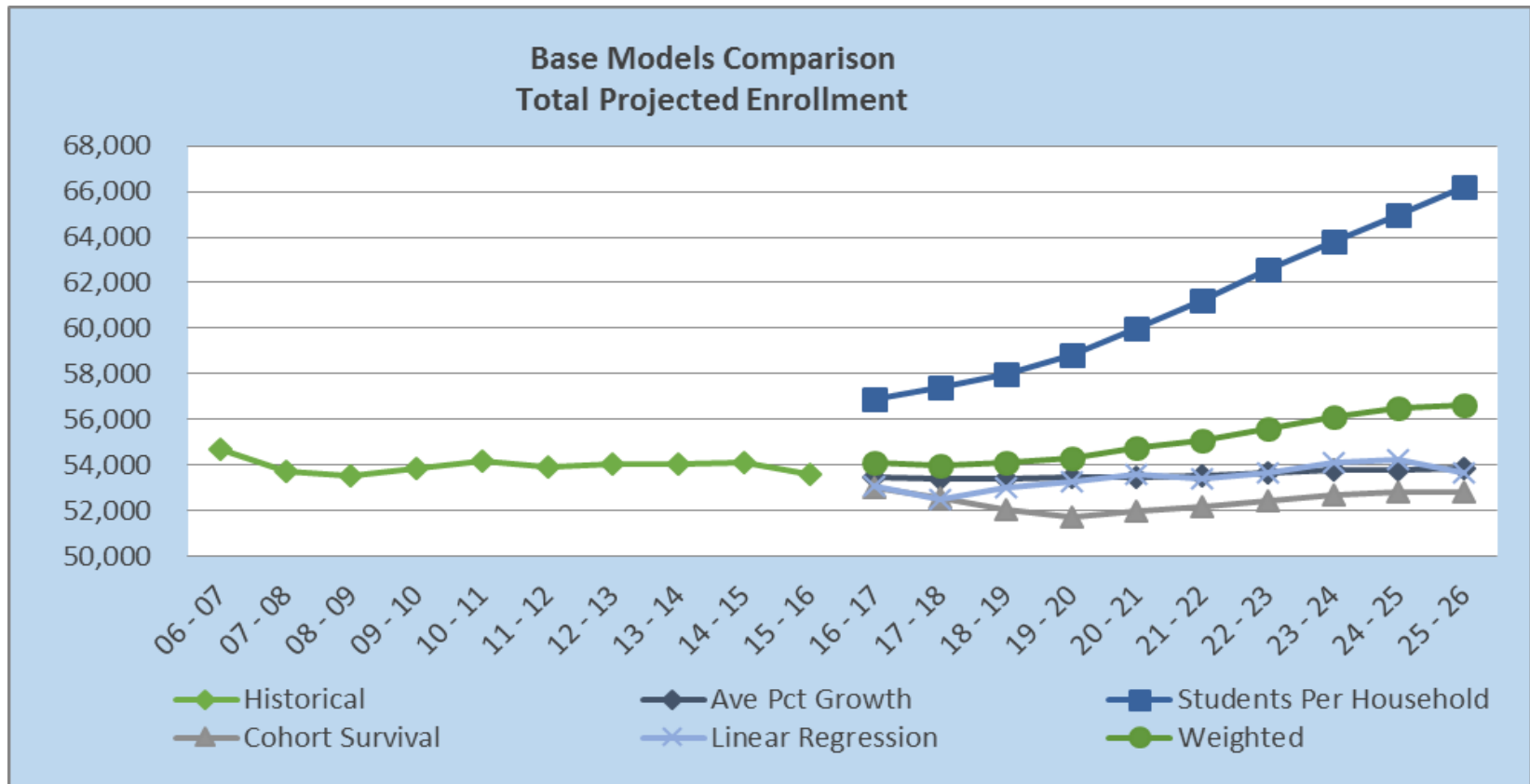
MGT projections are based on historical enrollment data, combining four projection methodologies into one weighted model:

- Average percentage growth
- Cohort survival
- Students per household
- Linear regression

Note: Enrollment projections are an estimate of future activity.

Our Analysis Produced Five Estimates

The weighted estimate is the basis of the projection.



Findings: Enrollment Projections

Based on historical trends and the patterns of our analytical models, BPS's K2-12 population is expected to grow modestly over the next decade.

PROJECTED ENROLLMENT										
Grade	16 - 17	17 - 18	18 - 19	19 - 20	20 - 21	21 - 22	22 - 23	23 - 24	24 - 25	25 - 26
K2	4,101	3,974	3,938	4,011	4,160	4,235	4,333	4,430	4,512	4,555
1	4,401	4,373	4,433	4,515	4,622	4,714	4,795	4,878	4,917	4,953
2	4,534	4,502	4,672	4,789	4,808	4,844	4,947	4,991	5,041	5,082
3	4,544	4,621	4,604	4,634	4,683	4,752	4,774	4,834	4,877	4,908
4	4,275	4,304	4,249	4,208	4,299	4,317	4,350	4,374	4,439	4,505
5	3,633	3,691	3,730	3,733	3,577	3,594	3,600	3,617	3,676	3,705
6	3,576	3,628	3,757	3,607	3,545	3,489	3,555	3,668	3,683	3,672
7	3,838	3,862	3,631	3,674	3,663	3,660	3,721	3,795	3,815	3,794
8	3,523	3,369	3,419	3,460	3,590	3,674	3,645	3,613	3,644	3,627
9	4,551	4,562	4,594	4,606	4,702	4,746	4,705	4,614	4,528	4,494
10	4,263	4,159	4,150	4,275	4,268	4,265	4,300	4,291	4,239	4,203
11	4,220	4,186	4,201	4,226	4,201	4,205	4,249	4,341	4,326	4,277
12	4,645	4,739	4,724	4,584	4,635	4,602	4,619	4,673	4,775	4,843
K2-12	54,103	53,969	54,103	54,323	54,753	55,096	55,591	56,120	56,472	56,618

Source: MGT, 2016

Next Steps

The Master Plan will leverage the information provided in the Demographics report to inform the Master Plan recommendations, including:

- Neighborhood population growth, particularly for K0/K1/K2 spaces.
- Special Ed and ELL population needs and pathways
- Program offerings which impact 4-8
- Community opinion that impacts the capture rate: we want to make BPS more competitive.

Share information by participating in the Community Engagement Survey at <http://bit.ly/2eGaN0x>