



Strategic Planning to Serve Off-Track Youth

Data Review and Strategic Implications

September 2007

Boston Public Schools

The Parthenon Group

Jobs for the Future

The Bill and Melinda Gates Foundation



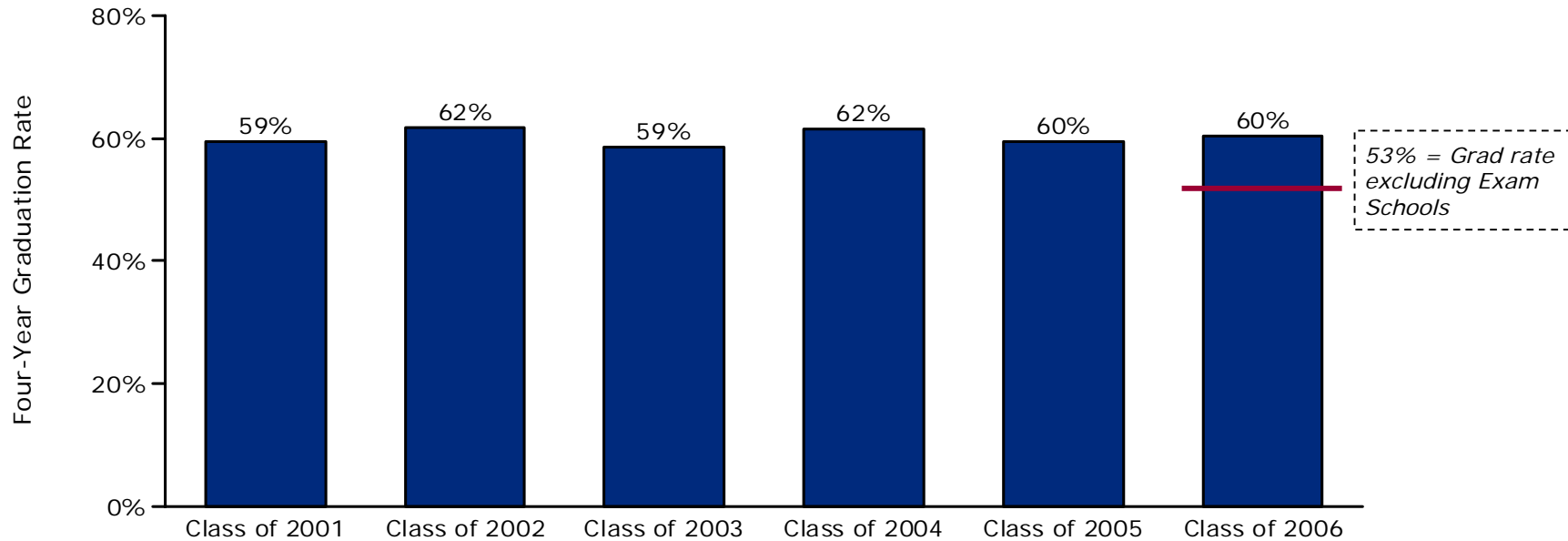
THE PARTHENON GROUP

Boston • London • San Francisco

Clarifying the Dropout Pipeline

BPS' Four-Year Graduation Rate Is Stagnant at ~60%, and the Number of Annual Dropouts Has Increased in Recent Years

BPS Four-Year Graduation Rate, Class of 2001 – Class of 2006

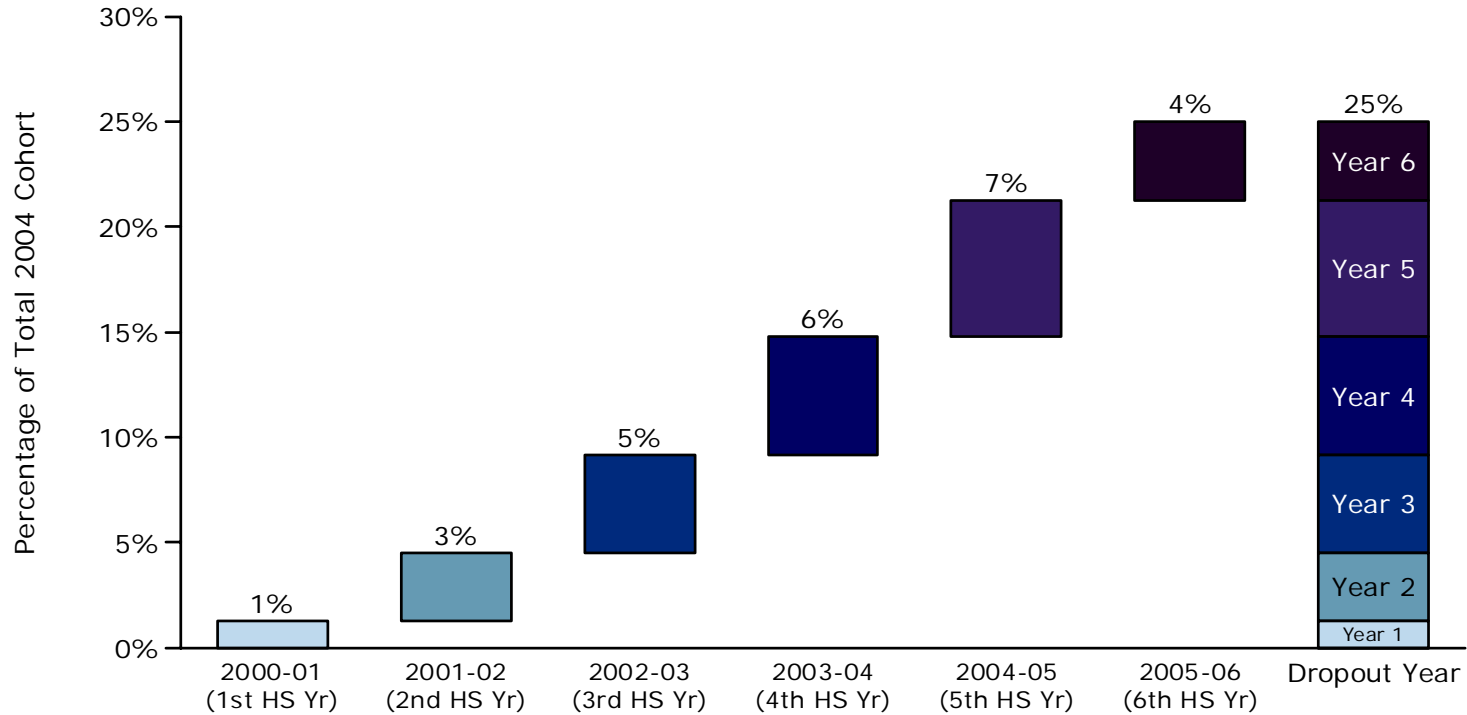


# Dropping-Out During School Year:	1.7K	1.5K	1.5K	1.5K	1.6K	1.9K
Dropouts as % of Total HS Enrollment:	8.6% <i>(2000-01)</i>	7.7% <i>(2001-02)</i>	7.3% <i>(2002-03)</i>	7.2% <i>(2003-04)</i>	8.0% <i>(2004-05)</i>	9.1% <i>(2005-06)</i>

Clarifying the Dropout Pipeline

84% of Dropouts Occur In the 3rd Year of High School or Later

Annual Student Dropouts for the Class of 2004, 2000-2006



Annual Dropouts:	54	136	196	235	274	158	1,053
-------------------------	----	-----	-----	-----	-----	-----	-------



**In total, BPS spent \$49MM on dropouts from the Class of 2004
within the high school years alone**

Clarifying the Dropout Pipeline

What *Did Not Work* in Defining Early Indicators for BPS Dropouts?

Entering High School Overage

- Only 15% of all dropouts enter high school at age 16 or older (although this group has only a 27% four-year graduation rate)

Attendance Prior to High School

- Only 10% of all dropouts had an attendance rate below 80% in 8th grade (though this group has only a 15% four-year graduation rate)

Middle School Course Performance

- Only 22% of all dropouts failed multiple courses in 8th grade (though this group has only a 26% four-year graduation rate)

Middle School MCAS Scores

- Students failing one or both middle school MCAS exam have a 48% four-year graduation rate (students failing one MCAS exam graduate at 57%, nearly the system average)

High School MCAS Scores

- 24% of all dropouts had passed both MCAS exams
- 39% of all dropouts have not taken either MCAS exam (mostly because they drop out before the test-taking point in 10th grade)

Clarifying the Dropout Pipeline

Three-Quarters of All BPS Dropouts Fit Into Four Key Segments, None of Which Have a 4-Year Graduation Rate Above 36%

Segments Are Mutually Exclusive (Overlap Between Segments Has Been Removed)

(1) Late Entrant ELL Students	(2) Substantially Separate SPED Students	(3) Students with One or More 8th Grade Risk Factors	(4) Students Failing Multiple Core Courses in 9th Grade
--------------------------------------	---	--	---

<u>Percent of Class of '04 Dropouts:</u>	13% of dropouts (137 dropouts)	17% of dropouts (169 dropouts)	26% of dropouts (274 dropouts)	18% of dropouts (190 dropouts)
---	--	--	--	--

<u>Graduation Rate:</u>	36% 4-year rate 47% 6-year rate	24% 4-year rate 32% 6-year rate	34% 4-year rate 40% 6-year rate	31% 4-year rate 48% 6-year rate
--------------------------------	---	---	---	---

- | | | | |
|--|---|---|--|
| <p><u>Description:</u></p> <ul style="list-style-type: none"> English language learning students who enter BPS for the first time during high school | <ul style="list-style-type: none"> All students who are substantially separate SPED at any point in grade 9-12, excluding students with severe disabilities not intended for a diploma | <ul style="list-style-type: none"> Risk factors include: <ul style="list-style-type: none"> - Attendance rate below 80% - Two or more years overage - Fail multiple core courses | <ul style="list-style-type: none"> First time 9th graders who fail one or more course in English, Math, Science or History |
|--|---|---|--|



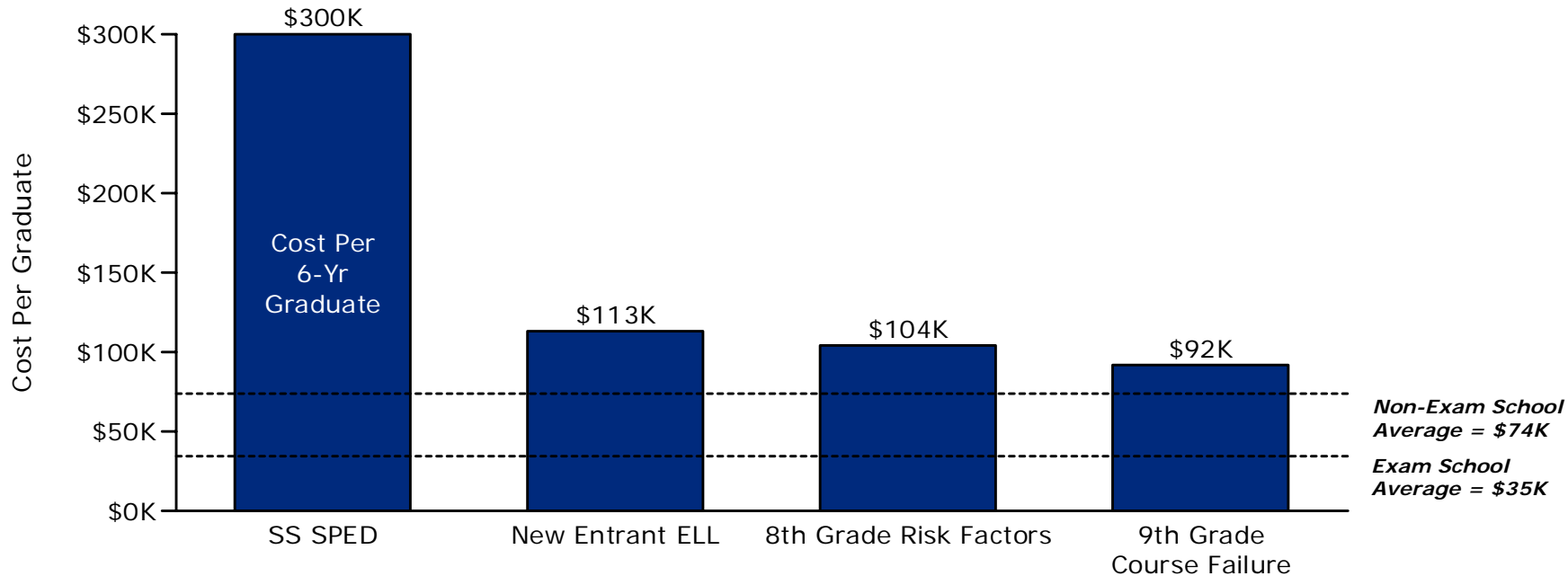
Each year, BPS high schools take in approximately 2,000 first-time 9th graders across these four segments

Note: In removing overlap between segments, students were assigned to a group based on the numbered hierarchy above
Source: BPS Internal Data

Clarifying the Dropout Pipeline

The Result of System-Wide Inability to Serve Off-Track Youth Is a Substantial Financial Investment per Graduate (Grade 9-12 \$ Only)

**High School Cost Per 6-Year Graduate,
by Mutually Exclusive Segments, Class of 2004 Cohort**



6-Yr. Grad. Rate	32%	47%	40%	48%
Avg. Cost Per Pupil	\$22,340	\$14,766	\$10,375	\$10,085
Avg. Yrs Per Pupil	4.3	3.6	4.0	4.4
Cost per Pupil	\$95,900	\$53,103	\$41,545	\$44,115

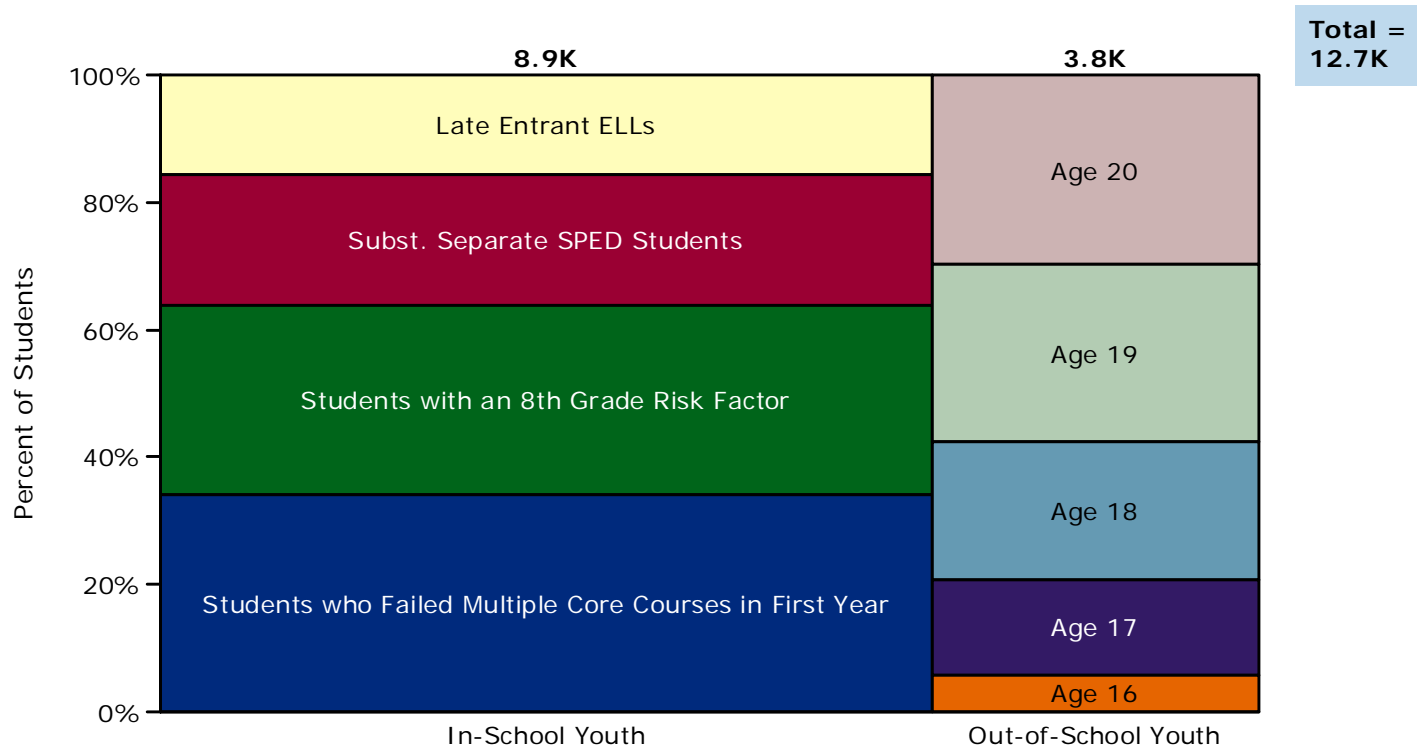
Note: Cost per graduate calculated for all students from Class of 2004 Cohort, including those in internal alternative education programs; Includes Instruction and Administrative costs only
Source: BPS Internal Data; ERS 2006 Financial Model

Clarifying the Dropout Pipeline

Nearly 13,000 Boston High School-Age Youth Are Off-Track, When Including Both In- and Out-of-School Youth

- The *in-school* off-track population represents 43% of BPS high school enrollment (or 61% when including out-of-school youth), based on an estimated 9-12 high school enrollment of ~20,000 in 2006

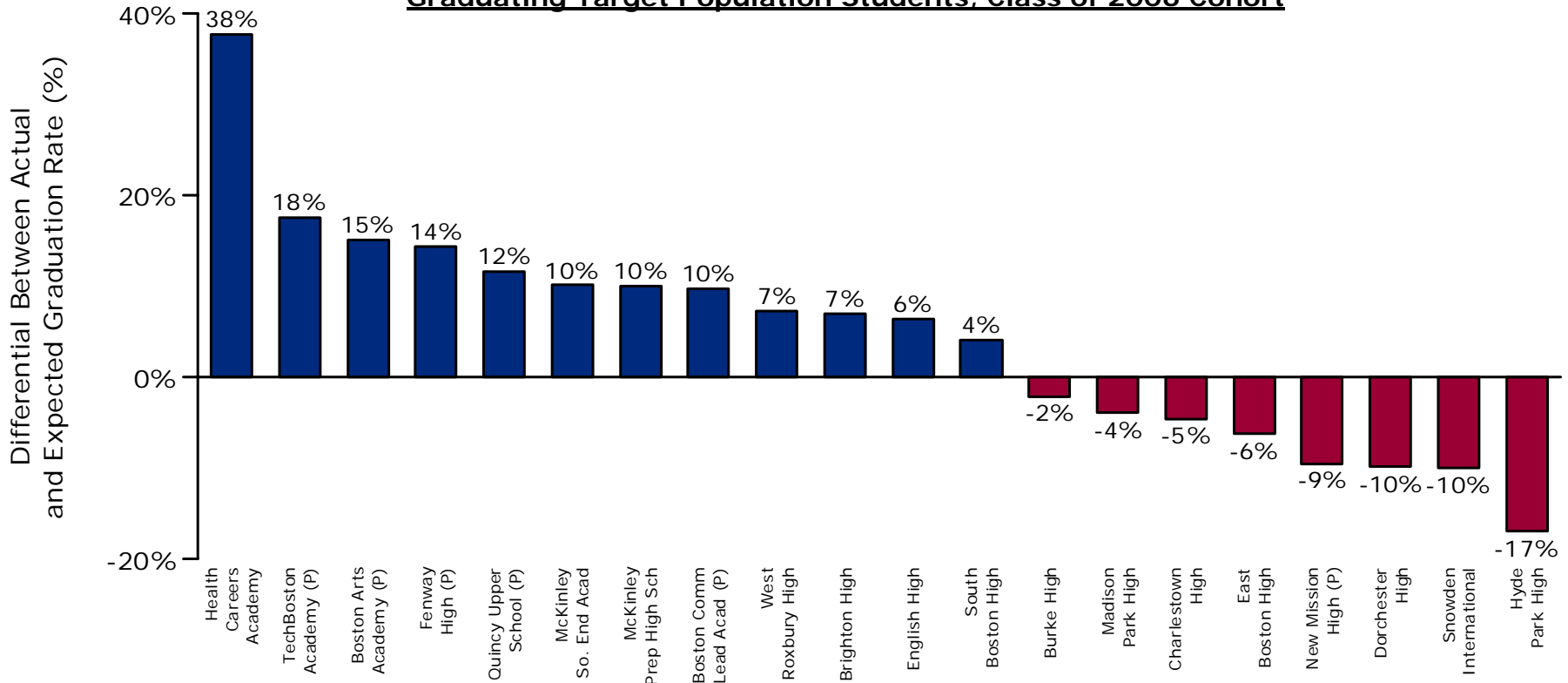
Estimated School Age Off-Track Population, In- vs Out-of-School, 2006



Performance and Resources of the “First Chance” System

Schools Show a Range of Performance with the Target Population

Over-and Under-Performance in
Graduating Target Population Students, Class of 2006 Cohort



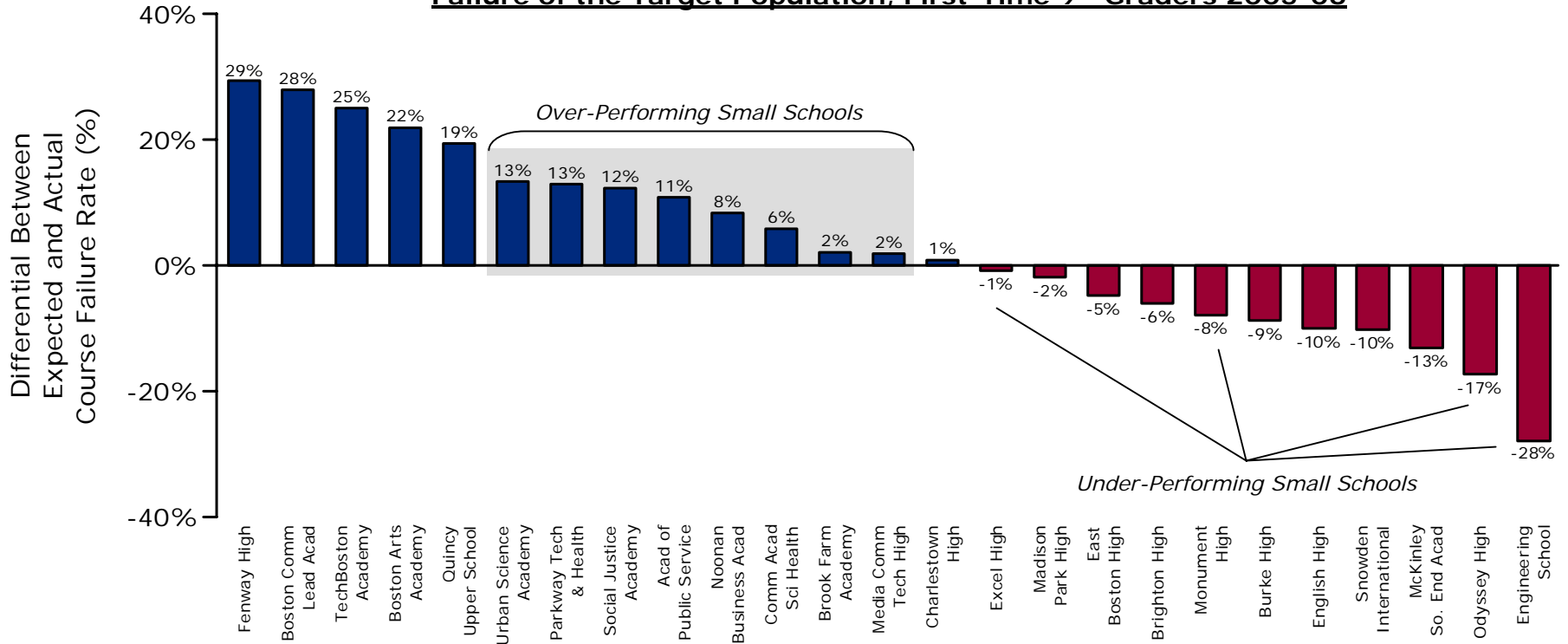
2002-2003 HS Enrollment:	182	73	381	265	53	127	91	511	1,264	1,119	1,148	973	799	1,563	1,176	1,384	206	798	409	1,062
Actual Target Pop. Grad Rate:	90%	72%	70%	71%	65%	31%	32%	59%	58%	55%	55%	52%	42%	43%	37%	42%	41%	30%	43%	26%
Expected Target Pop. Grad Rate:	52%	55%	55%	57%	53%	21%	22%	49%	51%	48%	49%	48%	44%	47%	41%	49%	51%	40%	53%	43%

Note: Actual graduation rates are calculated after tagging a student to a school on 06/01/2003; (P) denotes Pilot School
 Source: BPS Internal Data

Performance and Resources of the “First Chance” System

Course Performance Trends for Recent 9th Graders Show that Many Small Schools Are Over-Performers

Over- and Under-Performance Using First HS Year Multiple Course Failure of the Target Population, First-Time 9th Graders 2005-06



1st Time 9th Graders in Target Population:	27	57	52	31	26	45	50	26	37	39	28	47	61	222	50	298	227	192	66	137	230	92	34	59	23
Expected Multiple Course Failure:	37%	39%	38%	35%	42%	40%	39%	43%	41%	42%	38%	36%	38%	37%	41%	40%	37%	39%	41%	41%	39%	41%	49%	42%	42%
Actual Multiple Course Failure:	7%	11%	13%	13%	23%	27%	26%	31%	30%	33%	32%	34%	36%	37%	42%	42%	42%	45%	49%	50%	49%	51%	62%	59%	70%

Note: Excludes schools with sample size less than 20. Excludes New Mission due to unavailable data.
 Excludes Boston International due to different rates of taking core courses in the first year
 Source: BPS Internal Data

Assessing Alternative Education

The Quantity of Alt Ed Seats Falls Far Short of Potential Need Across Key Segments of Students

- At the end of 2005-06, there were ~4,500 students enrolled across the five segments
 - These five groups together accounted for 92% of Alternative Education enrollment over the course of 2005-06

Continuum of Age vs. Proximity to Graduation

Younger, Far from Graduation <i>16 or 17 years old; 2 or More Years Off-Track for Graduation</i>	Older, Far from Graduation <i>18 or Older; 2 or More Years From Graduation</i>	Older, Close to Graduation <i>18 or Older; Graduation Possible Within 1 Year</i>
<ul style="list-style-type: none"> • 1,323 total students <ul style="list-style-type: none"> - 1,046 students excluding substantially separate SPED (21% of total) 	<ul style="list-style-type: none"> • 1,171 total students <ul style="list-style-type: none"> - 937 students excluding substantially separate SPED (20% of total) 	<ul style="list-style-type: none"> • 913 total students <ul style="list-style-type: none"> - 704 students excluding substantially separate SPED (23% of total)

Additional Factors Defining Potential Need

<div> <p>Overage Late Entrant ELL Students</p> </div> <ul style="list-style-type: none"> • 462 students enter annually <ul style="list-style-type: none"> - Substantially separate SPED designations are highly rare in this category 	<div> <p>Returning Dropouts</p> </div> <ul style="list-style-type: none"> • 679 total students <ul style="list-style-type: none"> - 598 students excluding substantially separate SPED (estimated 12% of total) 	<div style="border: 1px dashed black; padding: 5px;"> <ul style="list-style-type: none"> • 38% Young & Far • 29% Old & Far • 9% Old & Close • 24% No Segment (mainly too young) </div>
---	--	---