An Analysis of Massachusetts Minority and White Student Achievement Gaps

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Introduction

While Massachusetts is widely recognized for the high academic achievement of its students when compared to other states, unacceptably achievement gaps persist between historically under-achieving minority groups— African-American and Hispanic students—and White students.1 Using the 2009 results from the Massachusetts Comprehensive Assessment System (MCAS), for example, 61 percent of White students in Grade 4 achieved Proficiency in English Language Arts (ELA) but only 29 percent of African-American students in the same grade attained Proficiency, resulting in an achievement gap of 32 percentage points. Similarly, 56 percent of White students in Grade 8 met Proficiency standards in Mathematics, but only 22 percent of Hispanic students in the same grade achieved Proficiency, resulting in a gap of 34 percentage points.

Massachusetts is not unusual in reporting such large achievement gaps. The federallyadministered National Assessment Educational Progress (NAEP) has regularly documented large achievement gaps in its nationally representative sample of American students. In 2007, NAEP reported that 83 percent of White students in grade 8 achieved Basic skills or higher in Reading, while only 57 percent of Hispanic students attained the same level, resulting in an achievement gap of 26 percent. In 2005, NAEP reported that 70 percent of White students in grade 12 achieved Basic or higher skills in Mathematics, while only 30 percent of African-American students attained the same level, resulting in an achievement gap of 40 percentage points. In fact, the academic performance of minority students in 12th grade on the NAEP is closer to that of White students in 8th grade than it is to White students at the same grade.2

It is in our nation's interest for achievement gaps of this magnitude to be narrowed substantially. Each student has but one chance to obtain a high quality elementary and secondary education before facing the highly competitive world of higher education or work. Addressing basic academic skill deficits after students have left high school presents practical challenges. Many students lacking such skills never develop them. With limited skills, they are hobbled in the modern work world and face drastically limited choices for post-secondary education. If they do attempt higher education, such students have difficulty completing it and often remain substantially behind as their higher-skilled peers add to a stronger foundation.

This report analyzes achievement gaps for African-American and Hispanic minority students in selected Massachusetts school districts. It examines the gaps in English Language Arts and Mathematics achievement on the state assessment, MCAS, between each minority group and White students.

Typically, analyses of the achievement gap compare the performance African-American or Hispanic students in a district with local White students in the same district. When situations are found where minority students appear to be receiving less educational benefit than majority students, such cases should be investigated and addressed. Often, however, Massachusetts school districts that are not very effective in educating minority students to high standards are also not very effective in educating White students to high standards. African-American or Hispanic students from less successful school districts. after they leave school, will still have to compete with better educated White students from other school systems. From the perspective of Hispanic or African-American students and their parents, little solace can be taken from knowing that they obtained an education that is as deficient as that received by the White students sitting next to them in school. For this reason, this report analyzes the achievement gaps between African-American and Hispanic students in each district and White students state-wide, rather than simply the gaps with local White students in the same district.

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Further, the report also analyzes the achievement gaps between local district White students and White students state-wide. Often, districts are found to outperform others in educating one student subgroup but not another. Only a few outperform other districts in educating both their minority and White students, while a comparable few under-perform their peers in educating both minority and White students.

Racial and ethnic differences in academic achievement are an important concern for general policymakers and the public, not only for those who are affected directly. As noted above, such differences impact success on the job as well in post-secondary education. The United States remains committed to ameliorating socially divisive gaps in employment, income, housing and other areas that manifest themselves along racial and ethnic lines. Many of these are, at

Figure 1: Individual District Report for Boston

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Figure 2: District Actual Gap by Subgroup and Subject (2007-2009)

least in part, exacerbated by differences in academic skills and outcomes; it is difficult to imagine sustained progress in these other areas without progress in closing achievement gaps. As many business groups and others have recognized, the large achievement gap also implies underutilization of a substantial part of our economy's human capital, reducing our ability to compete and create well-paying employment in a global market.

Actual Achievement Gap

In addressing achievement gaps, data can be illuminating. Analysis of well-designed reports can highlight areas to target for improvement and provide evidence of progress, or the lack of it.3 School system administrators can find it useful to review detailed reports that track achievement gaps at each grade and subject. Figure 1 provides an example of such a report for the Boston school district. This report, developed by the Community Partners Initiative (CPI)4, provides a detailed break out of the achievement gaps between various student subgroups and White students state-wide. Achievement gaps are disaggregated in each subject and grade, for each student subgroup. Overall averages across the grades are also provided in the columns on the left. As shown on the report, the achievement gaps can be quite large, including -34.3 percentage points for Hispanic students in Mathematics, and -36.2 percentage points for African-American students in ELA. When considering only a single district, the size of the gaps may appear daunting. (Results using the same report type for select school districts in this study are provided in Appendix C.)

For policymakers and citizens interested in more than just one district, or for anyone seeking a broader context for interpreting a single district's results, it is helpful to consider the achievement gaps in multiple school districts. Figure 2 provides overall (i.e., cross-grade) minority achievement

		ubject (2007	,	
DISTRICT	BLACK		HISPANIC	
	ELA	MATH	ELA	MATH
	Actual Gap*	Actual Gap*	Actual Gap*	Actual Gap*
Attleboro	**	**	-26.9	-27.1
Boston	-36.6	-36.4	-36.5	-33.4
Brockton	-29.6	-31.3	-30.0	-30.2
Brookline	-11.4	-17.9	-5.8	-5.2
Cambridge	-28.3	-31.0	-22.0	-27.0
Chelsea	-39.0	-32.3	-35.0	-26.3
Chicopee	**	**	-39.7	-40.0
Everett	**	**	-31.0	-31.5
Fall River	-36.9	-40.4	-43.8	-42.3
Fitchburg	**	**	-37.8	-34.0
Framingham	-18.7	-23.6	-34.8	-32.5
Haverhill	-23.0	-32.6	-40.6	-42.1
Holyoke	**	**	-52.5	-48.7
Lawrence	-32.5	-37.4	-41.3	-40.5
Leominster	**	**	-38.0	-30.9
Lowell	-30.2	-36.5	-44.3	-42.4
Lynn	-31.0	-32.8	-35.1	-31.3
Malden	-30.4	-35.6	-26.8	-28.3
Marlborough	**	**	-29.4	-25.7
Medford	-26.4	-30.7	-19.2	-20.4
Methuen	**	**	-37.1	-37.7
Milton	-20.0	-23.6	-25.2	-27.2
New Bedford	-36.9	-34.1	-43.4	-36.5
Newton	-17.6	-21.2	-8.1	-5.8
Northampton	**	**	-33.0	-40.3
Peabody	**	**	-26.0	-29.6
Pittsfield	-34.8	-34.4	-42.0	-41.2
Quincy	-28.3	-32.6	-29.3	-34.9
Randolph	-31.7	-35.5	**	**
Revere	**	**	-19.7	-16.7
Salem	**	**	-39.1	-37.5
Somerville	-35.1	-36.4	-32.4	-31.5
Springfield	-35.8	-40.3	-44.1	-41.7
Stoughton	-12.7	-18.5	**	**
Taunton	-27.2	-30.7	-25.9	-28.5
Waltham	-18.0	-29.2	-25.0	-32.1
Westfield	**	**	-35.3	-38.9
Worcester	-32.5	-33.5	-42.6	-39.8

^{*}Actual Gap = District Subgroup Proficiency minus State White Proficiency.

^{**} Data for subgroup in this district does not meet minimum requirements for inclusion in the study.

gaps for most medium- to large-sized school districts in Massachusetts. To ensure a sufficient amount of data to permit comparisons, it pools results from the three most recent state test administrations, including 2007, 2008, and 2009. It includes the "actual" achievement gaps, without any adjustments for differences in family background.

The actual achievement gap between African-American students and state White students can be quite large in both ELA and Mathematics. Notice in Figure 2, the gap in ELA performance ranges from a best case of -11.4 percentage points in Brookline (e.g., 61.5 percent Proficient for district African-Americans minus 72.9 percent Proficient for state Whites) to a high of -39.0 percentage points in Chelsea, while the gap in Mathematics ranges from -17.9 percentage points in Brookline to -40.4 percentage points in Fall River.

Similarly, the performance gap between Hispanic students and White students state-wide varies substantially in ELA as well as Mathematics. The gap in ELA performance ranges from a best case of -5.8 percentage points in Brookline to a high of -52.5 percentage points in Holyoke, while the gap in Mathematics ranges from -5.2 percentage points in Brookline to -48.7 percentage points in Holyoke.

Actual v. Predicted Gap

While reviewing achievement gap data from multiple districts can provide context, it can also be misleading. Certain family and community background characteristics tend to increase, or reduce, the challenge to school systems in educating students to high academic standards.⁵ In Massachusetts, minority populations vary enormously between school districts on key background characteristics, including poverty and educational attainment, that have been shown to influence student achievement. For example, the proportion African-Americans lacking a high school education varies from less than 4 percent in one school district to nearly 47 percent

in another. Similarly, the proportion of Hispanic student families living below the federal poverty line varies from less than 6 percent in one district to nearly 66 percent in another district. Similar ranges between school districts are also present for White students

While such differences should never be used to excuse or ignore low student achievement for students from more challenging backgrounds, considering them when comparing school districts provides important information. Taking into account non-school factors that influence academic achievement can identify school districts that are reducing achievement gaps despite a challenging social environment. At the same time, this type of analysis can expose districts that appear to have reduced gaps but which are, in fact, benefiting from a less challenging climate.

To the extent possible, this report analyzes data on all Massachusetts school districts for which data were available. Drawing on student demographic data for each district regarding educational attainment as well as the proportion of students living in poverty, it identifies the "predicted" achievement gaps that one might expect for each district based on the achievement gaps for similar students across the state. In effect, it compares each district's success in reducing the achievement gaps with the success of other districts in the state serving students with similar background characteristics. It is thus based on actual results accomplished by Massachusetts school systems, not goals or aspirations. Districts that manage to shrink their achievement gaps to a greater extent than predicted are reported positively, while districts that have larger achievement gaps than predicted are reported negatively.

The benefits of this approach have already been mentioned. The risks associated with such an analysis, however, must also be acknowledged so that they may be avoided. If such an analysis were viewed as a *replacement* for addressing the

large, actual achievement gaps that currently exist, it could well lead to lower expectations for school districts serving students from challenging backgrounds, which in turn could lead to lower expectations for the students. That would clearly be an injustice to many students.

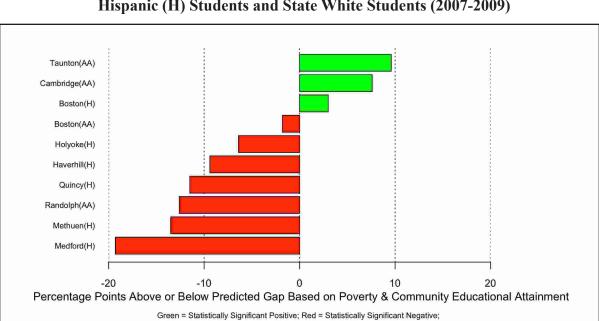
Therefore, this analysis should instead be used to accompany and add to the information contained in the raw achievement data. Remaining differences in the size of academic achievement gaps, even after taking into account non-school factors, provide an opportunity to identify districts that may offer lessons on narrowing such gaps. Such differences can also provide an opportunity to identify districts that would benefit the most from intervention, because other school systems in Massachusetts have already shown that similar students can achieve at higher levels of performance. Perhaps just as important, a range of achievement gaps after accounting for differences in family background can help to counter the unspoken belief—sometimes present even among the best-intentioned—that there is really very little that communities and school systems can do when faced with challenging social conditions among some minority families. In fact, there is quite a lot that can be done, as some Massachusetts school districts are already demonstrating.

Results

District Minority Achievement Gaps with State White Students

Figures 3 and 4 indicate the extent to which individual school districts are performing statistically significantly better, or worse, than other Massachusetts districts in reducing the gap between minority students (i.e., African-American or Hispanic students) from similar household poverty and community education levels and state White students in ELA and Mathematics. The size of the achievement in gap in other Massachusetts districts serving similar students is the "predicted gap." The graphs only include results for those districts where the gaps are significantly smaller—better—or significantly larger—worse—than those in other Massachusetts districts serving similar minority students; significant results tend to be larger districts or districts with larger gaps.⁶

Taunton and Cambridge stand out for substantially smaller achievement gaps between their African-American students and state White students, besting the predicted gap in ELA and in Mathematics. African-American students in Stoughton have a significantly smaller achievement gap with state White students in Mathematics. Boston Hispanic students



Non-significant districts not shown.

Figure 3: ELA % Proficient Achievement Gap: African-American (AA) and Hispanic (H) Students and State White Students (2007-2009)

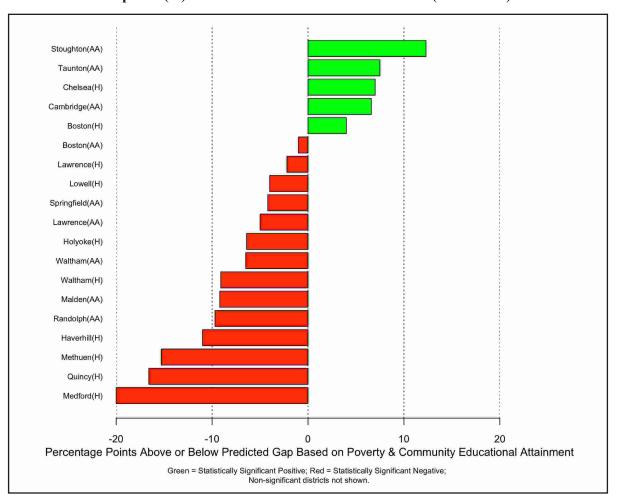


Figure 4: Math % Proficient Achievement Gap: African-American (AA) and Hispanic (H) Students and State White Students (2007-2009)

achieve a slightly smaller achievement gap in ELA and Mathematics, while Chelsea Hispanic students achieve a smaller achievement gap in Mathematics.

Unfortunately, several districts stand out for significantly larger achievement gaps for African-American students in ELA or Mathematics than students from similar backgrounds in other districts, including Randolph, Malden, Waltham, Lawrence, Springfield, and, to a slight extent, Boston. Similarly, a number of districts have significantly larger achievement gaps for Hispanic students in ELA or Mathematics than other districts serving students from similar backgrounds, including Medford, Methuen, Quincy, Haverhill, Waltham, Holyoke, Lowell and, to a slight extent, Lawrence.

District White Achievement Gaps with State White Students

This analysis also reviewed the extent of achievement gaps between district White students and state White students, comparing the district results to the size of achievement gaps in other Massachusetts districts serving students from similar backgrounds. Figures 5 and 6 indicate the extent to which individual school districts are performing statistically significantly better, or worse, than other Massachusetts districts in reducing the gap between district White students from similar poverty and education levels and state White students in ELA and Mathematics. The size of the achievement in gap in other Massachusetts districts serving similar students is the "predicted gap." As might be expected since White students are more numerous than minority

students in most Massachusetts districts, results for a larger number of districts were determined to be statistically significant. Cases where district Whites exceed the performance of state Whites are marked in gold on the graphs.⁷

Stoughton, Taunton, Holyoke, Newton, New Bedford, Lynn and, to a slight extent, Boston stand out for *significantly smaller than predicted achievement gaps* between their district White students and state White students in both ELA and in Mathematics. Leominster, Waltham and Revere attained smaller than predicted achievement gaps between district White students and state White students in either ELA or Mathematics.

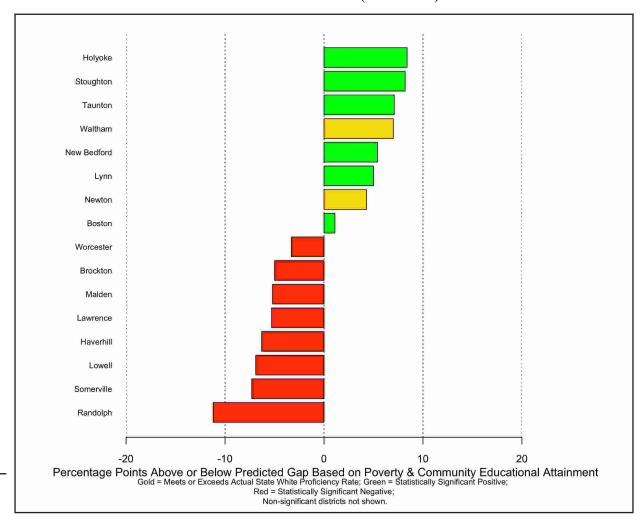
Unfortunately, several districts achieved significantly larger than predicted achievement gaps between their district White students

and state White students in both ELA and Mathematics. These include Randolph, Haverhill, Lawrence, Malden, Lowell and Somerville. Several districts attained larger than predicted achievement gaps predicted achievement gaps between district White students and state White students in either ELA or Mathematics, including Quincy, Northampton, Everett, Brockton, Chicopee and Worcester.

Districts Outperforming Others with Both Minority and White Students

Two districts stand out as significantly exceeding the performance of other Massachusetts districts in serving both minority and White students, achieving smaller than predicted gaps with state White students for both groups. Taunton achieved smaller gaps in both ELA and Mathematics with its African-American students, as well as smaller

Figure 5: ELA % Proficient Achievement Gap: Local White Students and State White Students (2007-2009)



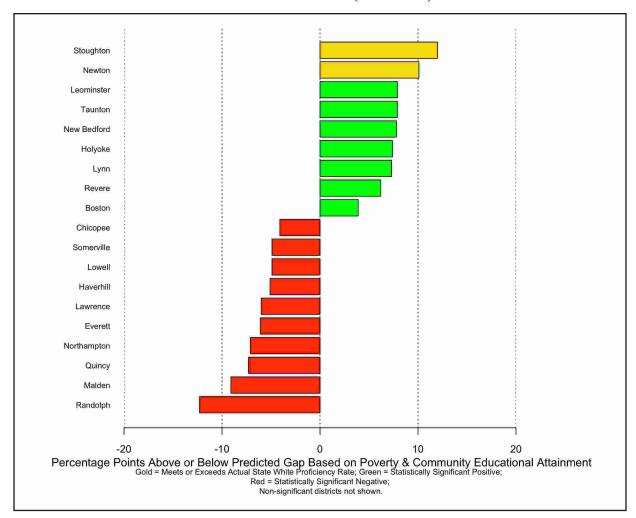


Figure 6: Math % Proficient Achievement Gap: Local White Students and State White Students (2007-2009)

gaps in both ELA and Mathematics with its White students. Stoughton achieved a smaller gap in Mathematics with its African-American students, as well as smaller gaps in both ELA and Mathematics with its White students.

Districts Underperforming Others with Both Minority and White Students

Three districts stand out as performing significantly worse than other Massachusetts districts in serving both minority and White students, resulting in larger than predicted gaps with state White students for both groups. Randolph had larger gaps in both ELA and Mathematics with its African-American students, as well as larger gaps in both ELA and Mathematics with its White students. Haverhill

had larger gaps in both ELA and Mathematics with its Hispanic students, as well as larger gaps in ELA and Mathematics with its White students. Similarly, Malden had a larger gap in Mathematics with its African-American students, as well as larger gaps in both ELA and Mathematics with its White students.

Districts with a Substantial Disparity in Success Between Minority and White Students

Some school districts outperformed other districts in serving one group of students, but did not outperform with other groups of students. Other districts underperformed in serving one group of students, but did not underperform with other groups of students. One district, however, stood out for underperforming other

districts in serving its minority students, while outperforming other districts in serving its White students. Holyoke had larger than predicted gaps in both ELA and Mathematics with its Hispanic students, but smaller than predicted gaps in both ELA and Mathematics with its White students. While Holyoke is to be commended for its relative success with White students, it should investigate the reasons for this apparent disparity and take the steps necessary to ensure that its minority students are receiving equitable educational opportunities.

Study Design Overview

This study analyzed the size of "actual" achievement gaps in 93 Massachusetts school districts for local minority and White students with state White students by comparing them to the size of "predicted" gaps. Results from approximately 1.7 million student test administrations over three years in ELA, as well as a similar number in Mathematics, were incorporated in the analysis. Since it is assumed that reducing or eliminating such gaps is an important educational goal, a district with a smaller than predicted gap is described in this report as performing better than the predicted gap or exceeding the predicted gap. A district with a larger than predicted gap is referred to as performing worse than the predicted gap or below the predicted gap.

The actual achievement gap is defined as the difference between the academic achievement of the student subgroup and the comparable figure for state White students. The predicted gap for each district was determined through a regression analysis that took into account poverty of households with children in the school district, educational attainment of community members in the school district, and the size of the actual achievement gap for all Massachusetts districts for which data were available. Three years of data from the American Community Survey (ACS),

conducted by the United States Census Bureau, were used as an estimate of household poverty and community educational attainment in districts with a population large enough to permit a reliable sample (over 20,000 total population). Poverty and educational attainment data were analyzed for each racial or ethnic group at the district level. The ACS survey is used by the federal government to generate Title I funding allocations to school districts based on poverty and is an independent and sufficiently reliable indicator for this purpose. It should be noted that Free and Reduced Lunch statistics collected by school districts, which are often used as a proxy for poverty data when these are not available, are calculated differently and are not directly comparable. Free and Reduced Lunch data are also not publicly available for individual school districts in a form that is disaggregated by racial or ethnic group.

Three years of achievement data for each school district were used to generate results for enough students that reliable analysis could be performed. Achievement data, which were obtained online from the Massachusetts Department of Elementary and Secondary Education (DESE), were based on the percent of students attaining Proficient or above on the state Massachusetts Comprehensive Assessment System (MCAS) test in ELA or Mathematics.

If the actual gap was found to be smaller than the predicted gap, the difference between the two was reported in the graphs as a positive number. If the actual gap was larger than the predicted gap, the difference was reported in the graphs as a negative number.

Statistical tests were used to determine whether the actual gap was significantly different from the predicted gap. The likelihood that a result was statistically significant was a function of the magnitude of the result and the number of participants in the Census survey. The statistical test used was designed to permit identification of districts that accomplish positive (or negative) results in a subject with a high level of confidence that the results were not simply due to chance.

The graphs in the main body of this report only included districts with achievement gaps that were statistically significantly different from the predicted achievement gaps, or where the district minority or district White students exceeded the performance of state Whites.

Extensive additional technical information about the design of the analysis is included in Appendix A

Conclusion

The findings in this report lead to one overwhelming conclusion - demography is not destiny. Higher poverty and lower educational attainment levels certainly pose additional challenges to educators. But some Massachusetts school systems are substantially more successful in reducing African-American and Hispanic student achievement gaps than other districts serving students with similar backgrounds in these key areas. Similarly, some districts are also more successful in educating their White students than other districts in the state serving students from similar backgrounds. The results stand out, positively as well as negatively, indicating that even relevant family and community characteristics need not be decisive in determining the future of Massachusetts students.

Taunton, Cambridge, Chelsea, and certain other school districts are significantly more successful than most Massachusetts districts in reducing ELA or Mathematics achievement gaps between minority students and White students state-wide. Unfortunately, a number of school systems are less successful in reducing achievement gaps than other districts serving students with similar backgrounds. African-American students in Randolph, Malden, and several other districts have significantly larger achievement gaps,

while Hispanic students in Medford, Haverhill, and other districts also face significantly larger achievement gaps.

It is noteworthy that, after accounting for nonschool factors, Taunton and Stoughton appear to significantly reduce achievement gaps with state White students in ELA or in Mathematics. for both minority students and district White students. It is vital, however, not to lose sight of the actual, unadjusted achievement gaps. which indicate how much work still remains. For example, a significant proportion of Taunton's minority students are from communities of poverty and limited education; even though Taunton is more successful than other districts in reducing achievement gaps for minority students, the gaps that remain are still too large. Conversely, Randolph, and Haverhill stand out for the opposite reason. Such districts perform significantly worse in ELA and in Mathematics than other Massachusetts districts serving students from similar backgrounds. Minority students perform worse than predicted, as do local White students.

Some school districts are effectively addressing the challenge of educating disadvantaged students. Even these more successful communities need to continue to find new ways to accelerate their work and further reduce achievement gaps; but they deserve credit for what they have accomplished so far and less effective districts might derive useful lessons from them. Others districts should focus on improving their practices, not their students' demographics. State education officials have a responsibility to investigate the more egregious situations thoroughly and, if the findings of this study are confirmed, to intervene expeditiously.

Endnotes

- 1. See Closing the Achievement Gap: An Annual Massachusetts Report on Performance Based High School Interventions and Turnarounds (Boston: Mass Insight Education, 2009), retrieved on November 12, 2009 from: www.massinsight.org.
- 2. A. Vanneman, L. Hamilton, J. Anderson Baldwin, and T. Rahman, *Achievement Gaps: How Black and White Students in Public Schools Perform in Mathematics and Reading on the National Assessment of Educational Progress* (NCES 2009-455) (National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC 2009).
- 3. For a review of ways to use MCAS data to make instructional, grouping, and organizational decisions, see Madigan, K., Rebarber, T., and Bean. B., Closing Springfield's Achievement Gap: Innovative Ways to Use MCAS Data to Drive School Reform (Boston: Pioneer Institute 2009).
- 4. The Community Partners Initiative (CPI) provides school districts with many other types of reports beyond the one included here. Additional information on CPI reports is available on their website: http://www.cpieducate.org.
- 5. See Caroline Hoxby's study for more complete discussion of the degree to which different demographic factors are correlated with student achievement in "If Families Matter Most, Where Do Schools Come In?" in Terry M. Moe (ed.) A Primer on America's Schools (Stanford University: Hoover Institute Press, 2001). Or see V.E. Lee and D.T. Burkam, "Inequality at the Starting Gate: Social Background Differences in Achievement as Children Begin School," Economic Policy Institute (2002), from http://epicpolicy.org/files/Inequality%20at%20the%20Starting%20Gate.pdf retrieved on November 20, 2009. Or see L. Woessmann, How Equal are Educational Opportunities? Family Background

- and Student Achievement in Europe and the US. CESifo Working Paper Series No. 1162 (March 2004), abstract available at: http://ssrn.com/ abstract=528209. For more information about community influences on student achievement see: Christopher Jencks and Susan Mayer in their oft cited work "The Social Consequences of Growing up in a Poor Neighborhood," in L. Lynn and M. McGreary (eds.) *Inner-city Poverty* in the United States (Washington, D.C.: National Academy Press 1990). Jencks and Mayer propose that communities could influence student achievement, for example, by providing role models or enforcement of social norms, such as earning a high school diploma (or not). For an interesting discussion on the community variables impacting student achievement, see Gary Solon, M.E. Page, and Greg J. Duncan's paper, "Correlations between neighboring children in their subsequent educational attainment," in The Review of Economic and Statistics, August 2000, 82(3): 383-392.
- 6. Achievement gap data for all districts in the analysis, including non-statistically significant results, may be found in Appendix B.
- 7. No statistical test for significance was performed on results where district Whites exceed state Whites, but they are included in the graphs and are discussed in this section along with the results that are statistically significant.

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About Pioneer:

Pioneer Institute is an independent, nonpartisan, privately funded research organization that seeks to change the intellectual climate in the Commonwealth by supporting scholarship that challenges the "conventional wisdom" on Massachusetts public policy issues.

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Follow the Money: Charter School Funding and District Funding in Massachusetts, White Paper, November 2009

Appendices

for

Beyond Demographic Destiny An Analysis of Massachusetts Minority and White Student Achievement Gap

By Richard Cross, Theodor Rebarber, Kathleen Madigan, and Bruce Bean

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Appendix A: Study Design, Methods and Procedures

Introduction

The goal of this research study was to examine the differences in district-wide academic achievement of selected subgroups (Hispanic, African-American and Local White) with the academic performance of state White students. For the purposes of this report the difference between actual performance of each subgroup and state White performance is labeled as the "actual gap". Although educators, civic leaders, and policy makers, have discussed the issue of closing the "actual gap", this report seeks to provide a different lens for examining the issue by controlling for what are often called "non-school factors". The non-school factors used for this study have been strongly correlated with student achievement, but not directed or regulated by the school.

Which Non-School Factors Were Controlled?

Evidence from academic research suggests that a student's achievement is strongly connected to certain family and community characteristics.1 The data sources used in this study had sufficient information for analysis using two wellestablished factors: household income level and community educational attainment.2 That is, students living in poverty in a neighborhood with few high school graduates tend to perform worse in mathematics, reading, and writing than students who are not living in poverty and live in a community with a majority of individuals who have graduated from high school. Unless, the students are systematically provided with excellent educational opportunity and instruction, the gap between those who are poor and live in a less well-educated neighborhood tends to widen.3

The Poverty Metric

Support for the correlation between poverty and student achievement is not only cited in research, but also can be found in school policy and finance decisions. Specifically, recognizing the challenges associated with teaching students

who come from poverty, Massachusetts provides additional funding for students in poverty. Kevin Carey in his paper reviewing state poverty based funding options indicates that the Massachusetts funding formula generated \$2,405 in additional funding per student in grades 1 - 6 receiving free and reduced lunch; in 2001 – 2002. The base per student funding level for all students in grades 1-6 was \$5,180.4 More recently the Education Trust's EdWatch State report detailing information about Massachusetts noted that in MA high poverty and high minority districts received more funds (5% and 15 % more respectively) than low poverty or low minority districts. Given that a student's status below poverty level tends to negatively impact the results of educational effects and this status is outside the control of the school, this study controlled for the poverty level associated with each subgroup.

Community Educational Attainment

ACS provides estimates of the educational attainment by ethnic groups of all persons who were over 25 years of age within a school district's geographic region. These data would likely capture the student's family's educational level, plus the educational attainment of other individuals in the community who could also influence the student's achievement level.⁵ Given that a student living in a community with fewer high school graduates tends to negatively impact the results of educational effects, this study controlled for the community educational attainment level associated with each subgroup.

Non-School Factors and the Predicted Gap

For the purposes of this study, a student subgroup's poverty and community education characteristics, along with estimated regression coefficients, were used to calculate predicted test scores and the "predicted gap." By subtracting the "predicted gap" from the "actual gap," the study was able to measure the size of the gap after accounting for key inputs outside the school district's control.

Rationale for Poverty Data Source

In research there are often two main sources of data often used for determining the proportion of low-income students in a school district: 1) Free and/or reduced lunch and 2) Census Bureau Data from the American Community Survey Program (ACS)⁶. The following provides a description for the rationale for selecting ACS as the data source for determining the poverty level for each group.

Schools can receive cash subsidies and donated commodities in return for offering free or reducedprice lunches to eligible children by participating in the Department of Agriculture's National School Lunch Program. Eligibility for free and reduced lunch is based on the family's income level compared to a federally established standard for poverty. For example, free lunch qualification is set at 130 percent of the poverty level or below, and reduced-price lunch qualification is set at between 130 and 185 percent of the poverty level. (See http://www.fns.usda.gov/cnd/lunch for more information.) A common procedure in educational research is to use free and/or reduced lunch data as a proxy for poverty level data. The challenge with using free and reduced lunch information was that data were collected at the school level, which can result in questions about the accuracy of those data.7 In addition, some eligible lowincome students in the upper grades may fail to enroll in the free and reduced-price lunch program because of the social stigma associated with poverty.8 Plus, poverty/low-income information for each school or district, generated by free and/ or reduced lunch program participation, was not broken out by ethnicity or race.

Without the specific information about poverty level for each sub group, estimating gaps could be biased when applying a whole district or school-wide low-income index across all students. Specifically, just because a student is African-American, does not indicate that he/she is from a low-income background. For example, if the study had used the district wide poverty rate reported by Lawrence as 83% (see District information from October, 2007) for all

minority student, then differences in achievement rates between African-American, Hispanic and local White Students would not have been detected. Specifically, the most recent ACS data in Lawrence indicated that African-American students have a 21% poverty rate, while Hispanic have a 40% and White students have 15%. This indicates that educating Hispanic students may present more challenges than educating African-American or White students in Lawrence who have roughly comparable poverty rates.

District level poverty data broken out by ethnic groups, was available from the United States Census Bureau, American Community Survey (ACS) School District Tabulation. The ACS provides household level poverty statistics by ethnic group for students who attended public schools in the Commonwealth. Importantly, these data were provided at the district level for poverty for each ethnic group.⁹

Further, ACS is used by the United States Department of Education to determine Title I funding; since data were collected by an external agency there is no financial stake in the outcome. Using surveys, the census estimates were based on information from a sample of households in each school district.

Methods, Procedures, and Design

Data sources

Massachusetts 2008-09 Enrollment By Race/ Gender Report-District Level. http://profiles.doe.mass.edu/state_report/enrollmentbyracegender.aspx?mode=district&orderBy=&year=2009

2007 - 2009 MCAS Report (DISTRICT) for Grade 3 - 10 / Black or Afr. Amer., Hispanic, White Students; 2006 Rules/Policies Applied http://profiles.doe.mass.edu/state_report/mcas.aspx

United States Census Bureau, American Community Survey School District Tabulation (ST030) School District Demographics System American Community Survey 2006-08 – three year estimates

http://factfinder.census.gov/servlet/ DatasetMainPageServlet?_program=ACS&_ submenuId=datasets 2& lang=en

- Total Relevant Children enrolled -- Public
- Race & Ethnic Groups--Social, Economic, and Housing Characteristics
- Black or Afr. American/ Hispanic or Latino /White alone, not Hispanic or Latino
- Householder Alone
 - ACS Poverty Status tables C17020x¹⁰
 - ACS Educational Attainment tables C15002x.

ACS Public Use Microdata Sample http://www.census.gov/acs/www/Products/PUMS/

(PUMS) 2005-2007 3-Year. (See the "2005-2007 PUMS Accuracy of the Data (Accuracy PUMS.pdf) and the ACS PUMS DATA DICTIONARY – 2005-2007 HOUSING January 26, 2009 for details on how to access and use the data files.)

District and Group Selection – Criteria of Inclusion

District size

Beginning in 2008, the Census Bureau released its first 3-year estimates based on ACS data collected from 2005 through 2007. These 3-year estimates were available annually for geographic areas with a population of 20,000 or more, including the nation, all states and the District of Columbia, all congressional districts, approximately 1,800 counties, and 900 metropolitan and micropolitan statistical areas, among others. For areas with a population less than 20,000, 5-year estimates will be available. The first 5-year estimates, based on ACS data collected from 2005 through 2009, will be released in 2010.¹¹

The initial review of the Massachusetts school districts included only districts with 2006-2008 average enrollments of at least 2000 students; these were deemed large in this study. Districts with enrollments below 2000 students were not reviewed or reported. From among this original district pool characteristics of minority enrollment

and poverty level were reviewed to ensure adequate number of students in each subgroup.

Poverty estimates

The tabulated ACS district poverty estimates were provided by subgroups based upon all children under the age of 18, including students in both public and private schools, and children younger than school age. As such, in order to arrive at a more accurate estimate of poverty level for each subgroup of children enrolled in public schools, the study used 1) the ACS Public Use Microdata Sample (PUMS) estimates, which contained a sub-sample of the ACS sample at the individual household level including children's ages and enrollment status in public school; and compared that to 2) ACS tabulated estimates of the poverty percentage of all children in the district under the age of 18. This resulted in two poverty estimates. Districts where these two poverty estimates diverged by more than 15% points within a group were not included in the analysis. In the included districts, an adjustment to the tabulated ACS poverty estimate was made based upon the PUMS estimate.12 The average adjustment by district amounted to fewer than 3 percentage points.

Minority Participation for Academic Achievement

Because the focus was on the achievement gap between the minority student groups and the state white groups, the minority sample sizes needed to be large enough to provide statistically reliable results, thus the study included district groups that had at least 500 student-test results (pooled over three years) in either subgroups: Hispanic or African-American students. Further, in all districts with the minimum level of Hispanic and/or African-American participation, the local white student performance was evaluated.

Community Educational Attainment

Educational attainment in the ACS survey is measured by answers to Question #11. Individuals responded to the highest degree or education attained. For example, they could

respond that they received a high school diploma or had a high school diploma and some college. Distinctions were made between regular high school diploma and GED or other alternatives. In addition, individuals who were educated in a foreign or ungraded system were asked to report their attainment level as an equivalent in the regular American system. The ACS community educational attainment by subgroup data were drawn from persons 25 years of age and over in the school district geographic region who do not obtain a high school diploma or a GED.

For a list of the districts used in the analysis and their data sets see Figures 8-10 in Appendix B.

Procedures

The analysis objective is to evaluate selected school districts in MA using MCAS African-American and Hispanic student academic performance in English Language Arts (ELA) and Mathematics (Math) while noting any discrepancies with the state's white student performance with a specific analysis that controls for the effects of each district's subgroup's poverty level and that subgroup's community educational attainment level.

These discrepancies were measured for ELA and Math using the District Performance Discrepancy (DPD) with state white student. The DPD had two forms, the Actual DPD (DPD_actual) and the Expected DPD (DPD_expected), defined by the following equations:

Definitions

DPD_actual = State white percent proficient - district group percent proficient

DPD_ expected = State white percent proficient - district group poverty/education adjusted percent proficient

The DPD_ expected score served as the control. In all instances, the percent proficient includes all students at or above proficient on the MCAS pooled across the three years 2007 - 2009. The DPD_actual and DPD_expected results were

derived for Math and ELA percent proficient results.

The DPD_actual scores for each district group were based on the MCAS results disaggregated by subgroup within grade level (3, 4, 5, 6, 7, 8, and 10). Grade level results were pooled into an overall result, that is the proficient N counts within each district for each grade were added, and then divided by the total number of students tested. This provided the actual percent proficient.

The DPD_expected scores were derived from regression equations on state-provided MCAS data as well as the 2006-2008 American Community Survey three-year estimates for poverty and community educational attainment. Equation predictors were taken from the ACS data on poverty (which was adjusted using PUMS data to account for the difference between private and public school students) and the community educational attainment proxy in the proportion of adults without a high school diploma within the district.

All districts with ACS provided statistics were used to generate six (6) regression-adjusted prediction formulas (see Figure 7a): African-American, ELA; African-American, Math; Hispanic, ELA; Hispanic, Math; Local White, ELA; White, Math.

A multivariate regression was conducted on MCAS ELA and Math results using educational and poverty estimates. These regression estimates were used to determine the predicted district performance. The predicted district performance and the actual gap with state whites were used to calculate the predicted gap. Separate regressions of MCAS Math and ELA performance across poverty and education levels for each subgroup were weighted for district subgroup size based on the ACS estimates of student counts within the district. Since ACS data were estimates, it was also important to correct for regression dilution due to any measurement error associated with those estimates.¹³ Therefore, the regression coefficients were "adjusted" (see equation in Figure 7b) to correct for the regression dilution.

Prediction scores for each district included three scores for ELA (African-American, Hispanic, Local White), and Mathematics (African-American, Hispanic, Local White). Poverty/educational-adjusted proportions were used in the DPD_expected equation. Sampling standard errors from the ACS scores were computed¹⁴ and applied to the predicted scores for each district and group. The application of the ACS standard errors created a confidence interval about the predicted score. The DPD_Actual scores that fell beyond the confidence interval of the DPD_expected scores were deemed significant.

Figure 7a: Prediction Equations

African American

Ypredicted ELA logit = $-0.96 - 0.226 * \gamma 1$ African American - $0.256 * \gamma 2$ African American Ypredicted Math logit = $-1.21 - 0.226 * \gamma 1$ African American - $0.014 * \gamma 2$ African American

Hispanic

Ypredicted ELA logit = $-0.95 - 0.314 * \gamma 1$ Hispanic $-0.262 * \gamma 2$ Hispanic Ypredicted Math logit = $-1.32 - 0.338 * \gamma 1$ Hispanic $-0.176 * \gamma 2$ Hispanic

White

Ypredicted ELA logit = $-0.70 - 0.016 * \gamma 1$ White $-0.525 * \gamma 2$ White Ypredicted Math logit = $-1.07 - 0.121 * \gamma 1$ White $-0.505 * \gamma 2$ White

 $\gamma 1 = ACS$ Poverty Logit

 γ 2 = ACS no High School Diploma Logit

Figure 7b: Regression Dilution Adjustment Equation

Regression dilution correction were made to each regression coefficient for poverty and community education level using:

$$B = \hat{\beta} * \left(1 + \frac{\operatorname{var}(P_{err})}{\operatorname{var}(P_{i})}\right)$$

where P_t is the true score proportion estimated by $P_t = \left(1 - \frac{P_{err}}{P_{estimate}}\right)$

and P_{err} and $P_{estimate}$ are the ACS standard errors of the proportion and estimated proportions respectively for each district's (i) ethnic groups.

Definition of Selected Terms for American Community Survey (ACS) from the United States Census Bureau

What is the ACS?

The ACS asks essentially the same questions as the Census 2000 long form. However, it offers different data products, and there were some differences in resulting estimates because of differences in reference periods and in how the data were collected (U.S. Census Bureau, 2006b). The ACS has been producing one-year estimates of population demographics since 1997 for selected geographic areas. The ACS sample was increased to its full size starting in 2005, and starting with estimates for 2005 the ACS provides full sets of estimates annually for all states and for all communities of 65,000 persons or more. For less populous communities, such as rural areas, city neighborhoods, or very small population groups, the sample size is too small to make reliable estimates from one year of ACS sample. Starting in 2008, geographic entities with populations of at least 20,000 received three-year estimates (U.S. Census Bureau, 2009).¹⁵ ACS data were available using prepared summary tabulations or Public Use Microdata Sample files (PUMS). PUMS data files contain actual participant responses to non-confidential ACS survey questions. Each record has an individual weight, which allows researchers to develop population estimates. Plus, each record provides replicate weights that were used to produce standard errors and to do statistical testing.¹⁶

School Districts

School districts were defined as geographic entities within which state, county, or local officials or the Department of Defense that provided public educational services for the areas residents. The U.S. Census Bureau obtained the boundaries and names for school districts from state officials. The U.S. Census Bureau first provided data for school districts in conjunction with the 1970 census. For Census 2000, the U.S. Census Bureau tabulated data for three types of school districts:

elementary, secondary, and unified. Each school district was assigned a five-digit code that was unique within state. School district codes were assigned by the Department of Education and were not necessarily in alphabetical order by school district name.¹⁷

Income used for Poverty Classification

"Total income" was defined as the sum of the amounts reported separately for wage or salary income; net self-employment income; interest, dividends, or net rental or royalty income, or income from estates and trusts; social security or railroad retirement income; Supplemental Security Income; public assistance or welfare payments; retirement, survivor, or disability pensions; and all other income. The estimates were inflation-adjusted using the Consumer Price Index.¹⁸

Understanding Statistical Significance

The poverty-adjusted and community educational attainment predictors were based on ACS samples of persons within the districts, and as such the results were subject to sampling error. In order to determine if the differences between the actual and expected scores exceed the margin of error, the study applied statistical tests for significance based upon the sampling error estimated in the ACS. The term significant does imply a judgment about the degree or relevance of the difference. It means that these results were most likely due to something other than the margin of error. By the same token, if the results were not significant, it doesn't mean that they lack relevance. It merely means that the ACS error estimates were large enough that one needs to be cautious in interpreting the results. For the purposes of this study, significance levels at .05 level or at the 95% level of confidence were used.¹⁹

References for More Information About American Community Survey

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- Census Bureau (2007d). "About the Data (Methodology): The Multiyear Estimates Study: About the Multiyear Estimates Study". http://www.census.gov/acs/www/AdvMeth/Multi_Year_Estimates/study_details.html
- Census Bureau (2008a). "A Compass for Understanding and Using American Community Survey Data." http://www.census.gov/acs/www/UseData/Compass/compass_series.html

Appendix B: Data Tables for Districts – Non-School Factors, Actual and Predicted Gaps

Figure 8a: ACS Estimated District Poverty and Educational Attainment – African-American

District	ACS N (est.)	Below Poverty (prop.)	Below Poverty stdErr (prop.)	No HS Diploma 25+ (prop.)	No HS Diploma stdErr (prop.)
Boston	39,752	0.35	0.02	0.22	0.01
Brockton	9,865	0.13	0.03	0.21	0.02
Cambridge	3,007	0.47	0.08	0.17	0.02
Chelsea	819	0.31	0.16	0.48	0.05
Fall River	852	0.52	0.15	0.14	0.05
Haverhill	739	0.28	0.08	0.10	0.04
Lawrence	528	0.21	0.07	0.32	0.07
Lowell	1,813	0.20	0.13	0.10	0.03
Lynn	4,684	0.24	0.07	0.25	0.03
Malden	2,042	0.08	0.12	0.09	0.03
Milton	692	0.02	0.14	0.14	0.04
New Bedford	1,871	0.36	0.11	0.31	0.03
Quincy	842	0.29	0.11	0.05	0.02
Randolph	2,759	0.07	0.03	0.12	0.03
Somerville	666	0.37	0.32	0.17	0.05
Springfield	9,901	0.38	0.04	0.20	0.02
Stoughton	781	0.17	0.08	0.07	0.03
Taunton	1,082	0.51	0.12	0.17	0.04
Waltham	670	0.04	0.05	0.17	0.05
Worcester	4,331	0.32	0.07	0.16	0.02

ACS N (est.): Estimated student N by ACS in computing proportion of students at or below poverty; used also as weighting estimate in the regression equations.

Below Poverty (prop.): ACS estimate of proportion of students in district at or below poverty; PUMS adjusted for students in public schools.

Below Poverty stdErr (prop.): Standard error term of the proportion for poverty.

No HS Diploma 25+ (prop.): ACS estimate of proportion of persons 25 and older in district who have not attained a high school diploma.

No HS Diploma 25+ stdErr (prop.): Standard error term of the proportion for no high school diploma.

Figure 8b: ACS Estimated District Poverty and Educational Attainment – Hispanic

District	ACS N (est.)	Below Poverty (prop.)	Below Poverty stdErr	No HS Diploma 25+	No Diploma stdErr
A1	7.60	0.20	(prop.)	(prop.)	(prop.)
Attleboro	760	0.29	0.13	0.37	0.10
Boston	29,647	0.41	0.02	0.37	0.01
Brockton	3,283	0.18	0.05	0.31	0.04
Brookline	846	0.38	0.24	0.10	0.04
Cambridge	1,200	0.20	0.08	0.12	0.04
Chelsea	6,325	0.25	0.05	0.43	0.03
Chicopee	2,803	0.49	0.10	0.34	0.06
Everett	1,683	0.23	0.12	0.43	0.08
Fall River	1,517	0.67	0.08	0.38	0.05
Fitchburg	3,016	0.50	0.10	0.30	0.05
Haverhill	2,748	0.27	0.09	0.25	0.05
Holyoke	7,236	0.58	0.04	0.46	0.03
Lawrence	18,141	0.40	0.03	0.45	0.02
Leominster	1,811	0.47	0.14	0.30	0.06
Lowell	5,795	0.44	0.06	0.40	0.04
Lynn	7,873	0.27	0.05	0.50	0.03
Malden	1,310	0.20	0.10	0.22	0.12
Medford	1,274	0.02	0.04	0.08	0.04
Methuen	3,617	0.08	0.04	0.36	0.05
Newton	1,007	0.24	0.20	0.21	0.06
Northampton	550	0.65	0.19	0.18	0.06
Pittsfield	551	0.43	0.12	0.17	0.07
Quincy	528	0.07	0.07	0.21	0.06
Revere	3,345	0.04	0.03	0.51	0.05
Somerville	1,097	0.33	0.18	0.28	0.05
Springfield	19,214	0.57	0.03	0.40	0.02
Waltham	1,524	0.09	0.08	0.37	0.07
Westfield	907	0.45	0.20	0.14	0.07
Worcester	10,775	0.51	0.04	0.33	0.02

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Figure 8c: ACS Estimated District Poverty and Educational Attainment—Local White

District	Mean enrollment N*	ACS N (est)	Below Poverty (prop.)	Below Poverty stdErr	No HS Diploma 25+	No Diploma stdErr
A ttlah ara	6.075	9.540	0.04	(prop.)	(prop.)	(prop.)
Attleboro	6,075	8,540	0.04	0.02	0.13	0.01
Boston Brockton	56,635	44,569	0.20	0.02	0.10	0.01
Brookline	15,615	8,312	0.12	0.03	0.14	0.01
Cambridge	6,108	7,884				
Chelsea	5,695	5,831	0.08	0.02	0.04	0.01
	5,518	4,331	0.10	0.06	0.27	0.03
Chicopee Everett	7,657	9,267	0.12	0.04	0.17	0.01
Fall River	5,433	5,225	0.17	0.04	0.19	0.02
Fitchburg	10,512 5,511	15,584 6,335	0.21	0.03	0.34	0.01
Haverhill		10,156	0.27	0.00	0.10	0.02
Holyoke	7,525 6,287	8,995	0.11	0.02	0.11	0.01
Lawrence	12,259	4,087	0.46	0.04	0.22	0.02
Leominster	6,175	7,807	0.13	0.04	0.23	0.02
Lowell	13,834	10,973	0.18	0.03	0.13	0.01
Lynn	13,685	11,239	0.18	0.03	0.19	0.01
Malden	6,331	6,074	0.22	0.03	0.13	0.01
Medford	4,796	6,425	0.19	0.03	0.11	0.01
Methuen	7,438	7,680	0.04	0.03	0.12	0.01
Natick	4,612	7,182	0.06	0.02	0.03	0.01
New Bedford	13,178	15,949	0.35	0.03	0.36	0.01
Newton	11,633	16,036	0.06	0.02	0.03	0.00
Northampton	2,861	3,330	0.07	0.03	0.07	0.01
Pittsfield	6,353	7,297	0.18	0.03	0.11	0.01
Quincy	8,810	8,676	0.10	0.04	0.09	0.01
Randolph	3,410	1,977	0.06	0.03	0.10	0.02
Revere	5,864	9,453	0.13	0.04	0.21	0.02
Somerville	5,003	4,554	0.15	0.04	0.10	0.01
Springfield	25,410	13,402	0.42	0.03	0.19	0.01
Stoughton	3,941	4,758	0.08	0.03	0.15	0.02
Taunton	8,133	11,026	0.14	0.03	0.17	0.01
Waltham	4,764	5,235	0.11	0.03	0.10	0.01
Westfield	6,375	8,936	0.19	0.05	0.10	0.01
Worcester	23,501	23,372	0.24	0.03	0.15	0.01

^{*} Entire enrollment including all racial/ethnic groups 2006-2008.

Figure 9a: African-American Actual and Predicted Achievement Gaps: MCAS English Language Arts Achievement (2007 – 2009)

District	Tested N ²⁰ (African	%Prof+21	Gap Upper- Bound	Predicted Gap% ²³	Gap Lower Bound	Actual Gap% ²⁵	Gap Difference% ²⁶	Significant
	American ELA)		95% ²²		95% ²⁴			
Boston	98,778	36.3	33.7	34.8	36.6	36.6	-1.8	*
Brockton	34,668	43.3	21.8	27.5	30.1	29.6	-2.0	
Cambridge	9,171	44.6	32.2	36.0	41.3	28.4	7.6	*
Chelsea	1,737	33.9	25.2	41.1	47.8	39.1	2.0	
Fall River	3,981	36.0	24.0	35.5	46.2	36.9	-1.4	
Haverhill	1,341	49.9	14.8	27.3	35.5	23.0	4.3	
Lawrence	1,137	40.4	24.8	34.2	39.4	32.5	1.7	
Lowell	4,041	42.7	-3.3	25.1	34.6	30.2	-5.2	
Lynn	8,250	41.9	25.3	33.0	37.9	31.0	2.0	
Malden	5,688	42.5	-4.2	18.3	30.6	30.5	-12.2	
Milton	3,885	52.9	-2.0	13.4	32.2	20.0	-6.6	
New Bedford	7,191	36.0	30.2	37.9	43.7	36.9	1.0	
Quincy	2,118	44.6	7.3	22.7	32.9	28.3	-5.6	
Randolph	8,235	41.2	5.2	19.1	24.3	31.7	-12.6	*
Somerville	2,916	37.8	-0.7	33.5	51.3	35.2	-1.6	
Springfield	27,375	37.1	32.7	35.0	38.2	35.8	-0.7	
Stoughton	2,775	60.2	4.3	21.1	29.8	12.7	8.4	
Taunton	3,030	45.7	29.6	36.8	44.8	27.2	9.6	*
Waltham	1,884	54.9	-0.9	18.3	26.9	18.0	0.3	
Worcester	13,500	40.4	26.9	31.9	36.9	32.5	-0.7	

Figure 9b: Hispanic Actual and Predicted Achievement Gaps: MCAS English Language Arts Achievement (2007 – 2009)

District	Tested N (Hispanic ELA)	%Prof+	Gap Upper- Bound 95%	Predicted Gap%	Gap Lower Bound 95%	Actual Gap%	Gap Difference%	Significant
Attleboro	2,610	46.0	16.3	35.7	45.5	26.9	8.7	
Boston	84,486	36.4	37.5	39.5	41.0	36.5	3.0	*
Brockton	9,927	42.9	19.4	29.3	34.2	30.0	-0.6	
Brookline	2,205	67.1	-13.3	28.2	45.8	5.8	22.4	
Cambridge	3,531	50.9	6.7	22.6	30.9	22.0	0.6	
Chelsea	18,390	37.9	28.4	35.5	39.3	35.0	0.5	
Chicopee	8,859	33.2	33.0	41.0	47.9	39.7	1.3	
Everett	5,841	41.9	12.8	34.9	43.8	31.0	3.9	
Fall River	6,855	29.1	41.6	46.8	53.0	43.8	2.9	
Fitchburg	9,765	35.1	32.3	40.2	47.3	37.8	2.3	
Haverhill	7,164	32.3	18.5	31.2	38.6	40.6	-9.4	*
Holyoke	20,673	20.4	43.4	46.1	49.1	52.5	-6.4	*
Lawrence	50,391	31.6	38.4	41.2	43.2	41.3	-0.1	
Leominster	6,678	34.9	27.9	39.5	48.8	38.0	1.4	
Lowell	15,003	28.6	35.8	40.9	45.1	44.3	-3.4	
Lynn	26,310	37.8	32.4	38.3	41.6	35.1	3.2	
Malden	5,178	46.1	-5.1	27.1	38.6	26.8	0.3	
Medford	2,175	53.7	-15.5	0.0	13.4	19.3	-19.3	*
Methuen	8,010	35.8	4.0	23.7	29.6	37.1	-13.5	*
Newton	3,183	64.8	-8.9	28.7	42.9	8.1	20.6	
Northampton	1,821	39.9	25.0	40.7	59.1	33.0	7.6	
Pittsfield	1,818	30.9	18.4	34.0	44.2	42.1	-8.1	
Quincy	1,809	43.6	-8.9	17.8	28.1	29.3	-11.5	*
Revere	9,480	53.2	-1.3	22.6	29.3	19.7	2.9	
Somerville	6,996	40.5	8.7	34.4	45.6	32.4	1.9	
Springfield	62,874	28.8	43.0	44.7	46.9	44.1	0.5	
Waltham	5,727	47.9	-4.8	24.4	34.2	25.0	-0.6	
Westfield	2,889	37.6	9.2	33.1	48.0	35.3	-2.3	
Worcester	36,180	30.3	38.1	41.1	44.2	42.6	-1.5	

Figure 9c: Local White Actual and Predicted Achievement Gaps: MCAS English Language Arts Achievement (2007 – 2009)

				7111 05 710111				
District	Tested N (Local White ELA)	%Prof+	Gap Upper- Bound 95%	Predicted Gap%	Gap Lower Bound 95%	Actual Gap%	Gap Difference%	Significant
Attleboro	22,425	66.4	-2.3	4.5	8.4	6.5	-1.9	
Boston	33,036	66.0	7.2	8.0	10.3	6.9	1.1	*
Brockton	22,950	58.9	4.9	9.0	12.6	14.0	-5.0	*
Brookline	16,617	88.5	-16.1	-11.4	-7.1	-15.6	4.1	
Cambridge	8,988	77.5	-8.5	-5.7	-2.4	-4.6	-1.1	
Chelsea	2,358	51.4	13.1	20.7	25.9	21.5	-0.8	
Chicopee	23,850	57.3	8.1	12.4	15.9	15.7	-3.3	
Everett	13,659	55.2	9.7	14.9	19.6	17.7	-2.7	
Fall River	34,620	48.8	24.0	26.8	29.1	24.1	2.7	
Fitchburg	11,202	59.6	10.3	15.0	20.1	13.3	1.7	
Haverhill	25,695	61.5	1.8	5.1	8.5	11.4	-6.3	*
Holyoke	5,505	58.1	20.8	23.2	27.0	14.8	8.4	*
Lawrence	4,449	49.4	13.4	18.2	22.1	23.5	-5.3	*
Leominster	19,644	63.7	5.7	10.2	14.7	9.2	1.0	
Lowell	26,430	51.0	12.1	15.0	18.0	21.9	-6.9	*
Lynn	17,451	61.4	13.6	16.5	19.8	11.5	5.0	*
Malden	11,454	60.8	2.9	7.0	11.3	12.1	-5.2	*
Medford	14,721	66.6	1.4	6.0	9.9	6.3	-0.2	
Methuen	26,481	65.7	-2.4	3.8	7.5	7.2	-3.4	
Natick	18,846	82.6	-13.6	-9.8	-5.9	-9.7	-0.1	
New Bedford	31,452	47.9	28.7	30.4	32.4	25.0	5.4	*
Newton	38,523	86.0	-12.5	-8.8	-5.5	-13.1	4.3	*
Northampton	10,338	75.0	-6.6	-1.5	2.9	-2.1	0.6	
Pittsfield	22,848	61.8	3.8	7.4	11.5	11.1	-3.7	
Quincy	24,144	66.5	-2.3	3.0	7.2	6.4	-3.5	
Randolph	4,005	59.7	-9.8	2.0	8.3	13.2	-11.2	*
Revere	13,245	62.8	9.7	15.3	19.5	10.1	5.2	
Somerville	8,763	60.2	1.6	5.4	9.3	12.8	-7.3	*
Springfield	17,529	53.3	18.5	20.1	23.3	19.6	0.5	
Stoughton	14,190	72.4	2.4	8.7	13.5	0.5	8.2	*
Taunton	30,444	67.4	9.2	12.6	15.8	5.5	7.1	*
Waltham	12,093	75.6	-0.7	4.2	8.5	-2.7	7.0	*
Westfield	25,878	66.1	2.4	7.0	11.9	6.8	0.2	
Worcester	42,402	56.4	11.5	13.2	15.9	16.5	-3.3	*

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Figure 10a: African-American Actual and Predicted Achievement Gaps: MCAS Math Achievement (2007 – 2009)

District	%Prof+	Gap Upper-	Predicted Gap%	Gap Lower	Actual Gap%	Gap Difference%	Significant
		Bound 95%		Bound 95%			
Boston	24.8	35.1	35.5	36.4	36.5	-1.0	*
Brockton	29.9	27.0	29.6	31.8	31.4	-1.8	
Cambridge	30.2	35.6	37.7	40.0	31.1	6.6	*
Chelsea	28.9	24.9	35.2	40.0	32.4	2.7	
Fall River	20.8	33.7	38.3	42.9	40.5	-2.2	
Haverhill	28.6	29.9	34.0	37.0	32.7	1.2	
Lawrence	23.8	28.4	32.5	35.5	37.5	-5.0	*
Lowell	24.7	9.6	31.9	36.9	36.6	-4.6	
Lynn	28.4	29.3	33.3	36.2	32.9	0.4	
Malden	25.6	9.5	26.5	34.3	35.7	-9.2	*
Milton	37.6	9.7	19.1	33.8	23.7	-4.6	
New Bedford	27.1	31.6	35.9	39.4	34.2	1.7	
Quincy	28.6	27.5	33.9	37.8	32.7	1.2	
Randolph	25.7	16.9	25.9	29.5	35.6	-9.7	*
Somerville	24.8	9.8	35.9	46.1	36.5	-0.6	
Springfield	20.9	35.1	36.2	37.7	40.4	-4.2	*
Stoughton	42.7	21.7	30.9	34.8	18.6	12.3	*
Taunton	30.5	35.0	38.3	41.8	30.8	7.5	*
Waltham	32.0	9.8	22.7	29.3	29.3	-6.5	*
Worcester	27.7	32.3	35.0	37.4	33.6	1.4	

Figure 10b: Hispanic Actual and Predicted Achievement Gaps: MCAS Math Achievement (2007 – 2009)

District	%Prof+	Gap Upper- Bound 95%	Predicted Gap%	Gap Lower Bound 95%	Actual Gap%	Gap Difference%	Significant
Attleboro	34.1	16.4	34.0	41.5	27.2	6.8	
Boston	27.8	35.9	37.5	38.7	33.5	4.0	*
Brockton	31.0	19.4	28.7	32.6	30.3	-1.6	
Brookline	56.0	-16.7	30.9	44.6	5.3	25.5	
Cambridge	34.2	9.6	24.9	31.7	27.1	-2.2	
Chelsea	34.9	27.1	33.4	36.4	26.4	7.0	*
Chicopee	21.2	32.8	39.0	44.1	40.1	-1.1	
Everett	29.7	11.4	32.8	39.9	31.6	1.3	
Fall River	18.9	40.0	43.6	48.0	42.4	1.2	
Fitchburg	27.2	32.5	38.6	44.0	34.1	4.6	
Haverhill	19.1	19.9	31.2	37.0	42.2	-11.0	*
Holyoke	12.5	40.5	42.4	44.7	48.8	-6.4	*
Lawrence	20.7	36.0	38.3	39.9	40.6	-2.2	*
Leominster	30.3	28.6	38.1	45.2	31.0	7.1	
Lowell	18.8	34.6	38.5	41.7	42.5	-4.0	*
Lynn	29.9	30.3	35.4	37.9	31.4	4.0	
Malden	32.9	-1.7	27.7	36.3	28.4	-0.7	
Medford	40.8	-18.9	0.4	14.6	20.5	-20.0	*
Methuen	23.5	1.2	22.5	27.5	37.8	-15.3	*
Newton	55.4	-12.8	29.3	40.9	5.9	23.4	
Northampton	20.9	28.5	40.3	53.3	40.4	-0.1	
Pittsfield	20.0	22.9	34.7	42.1	41.3	-6.6	
Quincy	26.3	-12.8	18.4	27.5	35.0	-16.6	*
Revere	44.5	-6.9	19.8	25.7	16.8	3.1	
Somerville	29.7	8.2	33.7	42.7	31.6	2.1	
Springfield	19.5	40.4	41.6	43.3	41.8	-0.1	
Waltham	29.1	-9.5	23.2	31.7	32.3	-9.1	*
Westfield	22.3	13.7	34.3	45.5	39.0	-4.7	
Worcester	21.4	37.0	39.2	41.6	39.9	-0.7	

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Figure 10c: Local White Actual and Predicted Achievement Gaps: MCAS Math Achievement (2007 – 2009)

District	%Prof+	Gap Upper- Bound 95%	Predicted Gap%	Gap Lower Bound 95%	Actual Gap%	Gap Difference%	Significant
Attleboro	55.6	-1.1	6.7	10.0	5.7	1.1	
Boston	56.1	8.0	9.2	11.2	5.2	3.9	*
Brockton	49.3	6.3	10.8	13.8	12.0	-1.2	
Brookline	80.8	-19.9	-13.3	-8.4	-19.5	6.2	
Cambridge	67.1	-9.6	-5.7	-2.3	-5.8	0.1	
Chelsea	41.0	15.0	22.0	26.0	20.3	1.7	
Chicopee	43.0	9.8	14.2	16.9	18.3	-4.1	*
Everett	38.7	11.2	16.5	20.3	22.6	-6.1	*
Fall River	33.0	24.7	27.2	28.7	28.3	-1.1	
Fitchburg	47.9	11.5	16.2	20.5	13.4	2.8	
Haverhill	49.5	2.8	6.8	9.7	11.8	-5.1	*
Holyoke	45.3	21.1	23.4	26.4	16.0	7.4	*
Lawrence	35.6	15.1	19.8	22.8	25.8	-6.0	*
Leominster	57.4	6.9	11.7	15.5	3.9	7.9	*
Lowell	39.9	13.5	16.5	18.8	21.4	-4.9	*
Lynn	50.8	14.7	17.8	20.4	10.5	7.3	*
Malden	43.8	3.8	8.5	12.3	17.5	-9.1	*
Medford	52.3	2.6	7.9	11.2	9.0	-1.1	
Methuen	52.9	-1.2	6.1	9.2	8.4	-2.2	
Natick	74.3	-16.4	-10.9	-6.5	-13.0	2.1	
New Bedford	39.2	28.4	29.9	31.3	22.1	7.8	*
Newton	80.9	-14.5	-9.5	-6.1	-19.6	10.1	*
Northampton	54.8	-6.9	-0.6	3.7	6.5	-7.1	*
Pittsfield	51.4	4.7	8.8	12.5	9.9	-1.1	
Quincy	49.6	-1.5	4.5	8.3	11.7	-7.3	*
Randolph	45.3	-10.1	3.8	9.6	16.0	-12.3	*
Revere	50.4	11.5	17.1	20.4	10.9	6.2	*
Somerville	49.6	2.5	6.8	10.3	11.7	-4.9	*
Springfield	40.9	18.9	20.6	23.2	20.4	0.2	
Stoughton	62.5	3.8	10.8	15.0	-1.2	12.0	*
Taunton	54.8	10.7	14.4	16.9	6.5	7.9	*
Waltham	60.0	0.2	5.8	9.7	1.3	4.4	
Westfield	49.1	3.3	8.3	12.8	12.2	-3.8	
Worcester	46.6	12.6	14.5	16.7	14.7	-0.1	

Appendix C: Individual District Performance Charts (CPI)

Boston

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:	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students	Shak Sauraki c	Chapman Co.	-	J		,			0		10	(SEC	12	-	,	-	J	0	- 1		5	10	c-tite	12
	20.5	27.5	85	25	24	22	24	20	20		22				24	27	27	20	20	20		40		-
Dis. Less St. White	-29.5	-27.5	85	-35	-31	-33	-31	-29	-26		-22			,	-34	-27	-27	-30	-28	-28	ć:	-19	:	
District		8 9	8	31	30	38	43	48	59		64		- 6		33	27	33	33	28	28	8	62		-
State White	-14 T-		2	66	61	71	74	77	85		86	,		-	67	54	60	63	56	56		81		_
District - # Students T	aking res	SI .		3962	3938	3799	3273	3/17	3916		3933				3971	3971	3795	3299	3833	3972	-	3892		_
African American	00.0	07.1		100000				-	-						-			-	21.5					-
Dis. Less St. White	-36.2	-37.4		-41	-36	-39	-37	-37	-34		-30				-44	-33	-34	-42	-40	-40		-30		
District		17.		25	25	32	37	40	51		56				23	21	26	21	16	16		51		_
State White		10	214	66	61	71	74	77	85		86				67	54	60	63	56	56		81		_
District - # Students T	aking Tes	st	<u> </u>	1401	1567	1519	1274	1514	1603		1537	Ri .			1404	1585	1517	1286	1538	1632	i i	1540		_
Asian		35	88	le .				- 4	(3		8						- 35		85	6				
Dis. Less St. White	-8.3	9.4	82	-21	-10	-11	-8	-2	-5		-5				-6	5	12	11	13	16	ć.	11		
District		s 38	80	45	51	60	66	75	80		81				61	59	72	74	69	72		92	9 9	
State White	100 100 1		30	66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students T	aking Tes	st .		283	274	317	305	348	374		401				286	277	320	307	354	375		404		
Hispanic	127																		214					
Dis. Less St. White	-35.8	-34.3	58	-41	-35	-40	-38	-38	-30		-27				-40	-32	-34	-36	-35	-37		-25		
District		175	500	25	26	31	36	39	55		59				27	22	26	27	21	19		56		
State White		9 10	92	66	61	71	74	77	85		86	ř			67	54	60	63	56	56		81		
District - # Students T	aking Tes	st	į,	1643	1444	1410	1218	1307	1320		1328	Š.			1649	1453	1412	1234	1333	1338	į.	1298		
Limited English Pr	oficient	. 8	8	e															S.	9				
Dis. Less St. White	-57.9	41.8		-45	-46	-60	-63	-69	-71		-70				-38	-36	-44	-48	-48	-46		-36		
District				21	15	11	11	8	14		16				29	18	16	15	8	10	j	45		
State White		1		66	61	71	74	77	85		86				67	54	60	63	56	56		81		$\overline{}$
District - # Students T	aking Tes	st	1	1020		711	604	548	410		491				1026	751	713	637	583	432		489		$\overline{}$
Low Income	308	×			-				- 0												2			
Dis. Less St. White	-34.9	-32.6	C.	-40	-36	-38	-36	-36	-30		-27				-40	-31	-31	-34	-34	-34		-23		
District	0.710	0210		26	25	33	38	41	55		59			à	27	23	29	29	22	22	-	58		
State White		19	92	66	61	71	74	77	85		86				67	54	60	63	56	56	9	81		_
District - # Students T	aking Tes	sto o	e e	3195		3121	1000	40000	2901		2626			2	0.000		3116		2841	2941		2602		
SPED		40. (3	2)	3133	3131	5121	2013	2101	2001		2020				3201	3101	3110	2004	2041	2041		2002		
Dis. Less St. White	-60.6	-51.6		-56	-54	-60	-62	-66	-64		-63				-54	-45	-51	-55	-51	-51		-56		
District	-00.0	-01.0	62.	10	7	11	12	11	21		23		13	-	13	9	9	-33	-5	-51	61	25		
State White		S //S		66	61	71	74	77	85		86				67	54	60	63	56	56	10	81		1
District - # Students T	aking Tee	et e	2	835	892	937	828	882	900		650			-	840	906	933	827	893	919		653		+-
White	arang rea	100	Š.e	033	032	337	020	362	300		000			÷	040	300	933	027	093	313	G	003		
Dis. Less St. White	-7.9	-6.9	S	-11	-12	-12	-9	-9	-3		-1				-12	0	-10	-6	-10	4		1		
	-1.9	-0.3	C.			59	-9 65	-9 68	82		85					-8 4C		-6	-	52		82		-
District Character 10/hite		6 59	63	55	49										55	46	50		46					+-
State White District - # Students T				66 525	61 548	71 473	74 405	77 529	85 541		86 586				67 525	54 555	60 472	63 408	56 536	56 551		81 577		₩

Pioneer Institute for Public Policy Research

Brockton

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Brockton																								
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		10 30	6					E S	ercer	it Au	vario	eurr	TOTIC	ieiit	- 200	9								
	Average	Average						nglis	h										Math					
	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students				0																				
Dis. Less St. White	23.2	24.9		-30	-27	-30	-24	-22	-16		-12				-30	-23	-23	-21	-25	-28		-24		
District				36	34	41	50	55	69		74				37	31	37	42	31	28		57		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st		1137	1139	1134	1153	1200	1141		952				1136	1145	1136	1155	1199	1144		943		
African American	40.2								- 1															
Dis. Less St. White	-28.3	32.1	14	-35	-33	-38	-28	-26	-22		-16				-38	-30	-31	-29	-32	-35		-30		
District		120	100	31	28	33	46	51	63		70				29	24	29	34	24	21		51		
State White		10	16	66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st	ii.	542	571	545	574	577	559		524				542	575	548	573	577	560		518		
Asian			20	2				- 6	- 6		8)					9	- 15		85	e				
Dis. Less St. White	-6.6	0.8		-21	-14	-3	6	4	2		-5	2			-17	6	4	4	8	4		1		
District		s 98		45	47	68	80	73	87		81				50	60	64	67	64	60		82		
State White	6 360 766	3	40	66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st		36	30	34	24	29	23		21				36	30	34	24	30	23		22		
Hispanic	312								11															
Dis. Less St. White	29.6	-30.3	14	-40	-33	-35	-32	-25	-22		-16	2	1		-38	-24	-28	-28	-29	-31		-36		
District		12. 993	100	26	28	36	42	52	63		70				29	30	32	35	27	25		45		
State White		10	34	66	61	71	74	77	85		86	0			67	54	60	63	56	56		81		
District - # Students		st	ĵ.	172	165	156	148	198	159		104				172	167	155	148	199	159		105		_
Limited English P			3	9				0	6		88	0				9	- 6		is.	e				
Dis. Less St. White	56.1	45.4		-45	-51	-61	-62	-65	-65		-66				-41	-44	-45	-50	-45	-47		-56		
District				21	10	10	12	12	20		20				26	10	15	13	11	9		25		
State White		l		66	61	71	74	77	85		86		_		67	54	60	63	56	56		81		<u> </u>
District - # Students	aking Te	BT		301	203	167	105	114	104		102				300	205	167	105	115	105		103		<u> </u>
Low Income	00.4	00.0						-											-					
Dis. Less St. White	-28.1	-29.9		-35	-33	-36	-28	-26	-20		-16				-35	-28	-29	-25	-29	-35		-28		
District				31	28	35	46	51	65		70				32	26	31	38	27	21		53		_
State White	Folding T-			66	61	71	74	77	85		86		-		67	54	60	63	56	56		81		<u> </u>
District - # Students	aking re	ST.	ii.	848	843	822	846	898	845		625				847	847	823	847	897	849		621		
SPED	00.7	50.0	35	2				-			8	ė.				_								_
Dis. Less St. White	-60.7	-52.9	7.	-60	-56	-64	-63	-64	-54		-64		1		-59	-50	-52	-48	-49	-53	-	-68		
District		s	4	6 66	5	7	11	13	31		22 86	2			8 67	4	8	15	7	3		13 81		\vdash
State White District - # Students	Folking To:	l .	-		61	71	74	77	85	-		-	-			54		63 191	56	56	-		-	\vdash
	aking re	5L	Co.	172	191	200	191	236	179		108				172	193	199	191	235	181		103		<u> </u>
White	42.4	42.2		40		- 10	40								00	- 10	40	-				10		
Dis. Less St. White	-13.1	-13.2		-18	-16	-18	-16	-14	4		4				-20	-13	-10	-7	-14	-17		-12		
District				48	45	53	58	63	81		82				47	41	50	56	42	39		69		<u> </u>
State White District - # Students "				332	61 336	71 365	74 366	77 357	85 356		281		_	_	332	54 336	60 366	63 369	56 354	56 359		276		

Brookline

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20 12010			-	-	-				-		-				1.0									-
Brookline			e.																					
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	Average	Average					E	nglis	h										Math					
	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students				6					- /											0				
Dis. Less St. White	10.5	16.5		11	10	13	14	13	8		4				17	15	20	18	18	20		8		
District				77	71	84	88	90	93		90				84	69	80	81	74	76		89		
State White			Ü	66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Tes	st		494	423	426	429	386	382		424				496	426	426	433	388	382		422		
African American		P 9					1														-		-	
Dis. Less St. White	-11.9	-13.9	100	-30	-27	-13	-9	8	3		-14				-17	-17	-12	-31	0	4		-19		
District				36	34	58	65	85	88		72				50	37	48	32	56	52		62		
State White		10	90	66	61	71	74	77	85		86	8			67	54	60	63	56	56	1	81		
District - # Students	Taking Tes	st	8	40	38	36	31	34	43		39				40	38	36	31	34	43		39		
Asian		91	20	0					U.			0				Į.				0				
Dis. Less St. White	11.7	26.2		21	-1	12	11	13	11		10				29	18	27	23	35	38		15		
District				87	60	83	85	90	96		96				96	72	87	86	91	94		96		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Tes	st		97	63	64	67	49	52		57				98	63	65	69	48	51		56		
Hispanic			i k														90		CC.					
Dis. Less St. White	-6.5	-1.0	S.C.	-26	-10	0	-2	4	-7		-7	2			4	0	5	9	-3	-9		4		
District		90	100	40	51	71	72	81	78		79				63	54	65	72	53	47	0	77	-	
State White		10		66	61	71	74	77	85		86				67	54	60	63	56	56	1	81		
District - # Students	Taking Tes	st	8	32	33	37	29	38	32		43				32	33	37	29	38	32		43		
Limited English P	roficient																							
Dis. Less St. White	-23.7	6.8		-22	-8	-21					-56				13	-1	9	27				-21		
District				44	53	50					30				80	53	69	90				60		
State White				66	61	71					86				67	54	60	63				81		
District - # Students	Taking Tes	st		25	15	16					10				25	15	19	10				10		
Low Income	(0)		. Cor		4				- 4								-		. 0-					
Dis. Less St. White	-14.5	-18.1	S.C	-37	-20	-15	-6	0	-8		-11	19			-28	-24	-18	-8	-18	-14		-15		
District		7.		29	41	56	68	77	77		75				39	30	42	55	38	42		66		
State White		14	90	66	61	71	74	77	85		86				67	54	60	63	56	56	8	81		\Box
District - # Students	Taking Tes	st .	8	59	49	55	50	49	49		44				59	49	55	51	50	48		45		
SPED		, ,	35	2								2	,				- 2		8					
Dis. Less St. White	-17.9	-19.2		-26	-26	-17	-17	-12	-17		-12				-15	-24	-21	-14	-24	-26		-13		
District				40	35	54	57	65	68		74				52	30	39	49	32	30		68		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Tes	st		79	68	74	98	82	76		83				79	68	73	99	84	75		82		
White	- 32	90	No.	The second													97		100		-			
Dis. Less St. White	16.0	20.8	100	19	21	18	19	16	10		8				22	20	25	22	21	24		12		
District				85	82	89	93	93	95		94				89	74	85	85	77	80		93		
State White		1 10	92	66	61	71	74	77	85		86				67	54	60	63	56	56	ii.	81		$\overline{}$
District - # Students	Taking Tes	st	8	289	275	264	277	249	240		266				289	277	264	279	252	241		264		-

Cambridge

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PARTN											2009	MC	AS I	Prof	icien	cv -	ΔΙΙ S	uhie	cte	and				
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											DIST	rict	Les	s St	ate (/	Acni	even	nent	Gap	VS.	vvn	ite S	tuae	nts)
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	Average		ðs.	50.	30 1		Ŀ	nglis	h		96		30		22 0				Math		30	323		
	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students									- /			0								0				
Dis. Less St. White	-12.5	-13.2		-9	-11	-20	-12	-13	-7		-16				-10	-6	-18	-12	-15	-14		-18		
District	12.10	70.12		57	50	51	62	64	78		70				57	48	42	51	41	42		63		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		-
District - # Students	Taking Te	st		421	399	407	397	377	399		375				422	400	407	393	377	396		381		_
African American	100		l.															1			-		- 9	
Dis. Less St. White	29.5	-31.6	T.	-29	-31	-41	-26	-33	-18		-30	9			-29	-26	-34	-29	-38	-35		-29		
District	20.0	01.0	S.	37	30	30	48	44	67		56				38	28	26	34	18	21	5	52		
State White		100	10	66	61	71	74	77	85	<u> </u>	86				67	54	60	63	56	56	1	81	-	+
District - # Students	Taking To-	st		145	124	155	148	144	169	-	148		-		145	125	155	147	143	166	h —	148		1
Asian	anning 16			143	124	100	140	144	103		140				143	123	100	197	143	100	1	140		
Dis. Less St. White	0.9	9.2	15	1	1	6	1	2	4		-13	2			1	16	13	14	12	8		1		-
District	0.5	3.2	do.	67	62	77	75	79	89		73		1		68	70	73	77	68	64	C:	82		
State White		8 8	4	66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Tolding To	- t	4	60	47	38	39	43	34		26	6	-		61	47	37	39	43	34	-	27	-	-
Hispanic	Taking re	51	, in	60	47	30	39	43	34		20				01	47	37	39	43	34	-	21		
Dis. Less St. White	-21.0	-28.5	Č.	-25	-25	-39	-19	-10	-14		-15	-		-	- 00	0.4	-30	-36	-29	-22		-29		_
	-21.0	-20.3			36	32	-19	67	71		71			-	-32 35	- 21	30	27	27	34		52		
District				41				77	85	_							60		56	56		81		_
State White	Talsina Ta	-4		66	61	71	74			_	86				67	54		63						_
District - # Students			8	53	56	55	57	58	49		52				54	57	56	58	59	49	1	55	- 1	_
Limited English P			3	2			-	-	- 6			2			-	-	- 4			8				_
Dis. Less St. White	53.3	-39.7	6	-34	-55		-65	-70	- 3		-66				-28	-36		-54	-49			-48		
District				32	6		9	7			20				39	18		9	7			33		
State White	<u> </u>	L		66	61		74	77	_		86				67	54		63	56		_	81		└
District - # Students	aking Te	St		31	17	_	11	15			15			_	31	17		11	15		_	15		Ь—
Low Income																						L		
Dis. Less St. White	-28.7	-30.8		-27	-37	-40	-26	-30	-15		-26				-27	-27	-35	-30	-33	-35		-27		
District		920		39	24	31	48	47	70		60				40	27	25	33	23	21		54		
State White		100	5.	66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st	ß	203	171	197	184	172	194		127	1		į	204	171	197	183	173	191		128		
SPED		100	- 18						100			0					-			0				
Dis. Less St. White	47.9	44.9		-41	-45	-52	-49	-50	-39	_	-63		9		-39	-42	-49	-46	-43	-44		-51		
District			0.	25	16	19	25	27	46		23	-			28	12	11	17	13	12		30		
State White	6 381 374	100		66	61	71	74	77	85		86	,			67	54	60	63	56	56		81		
District - # Students	Taking Te	st		91	110	130	114	110	128		81				91	110	129	111	109	125		87		
White	(0)	100							T T										1					
Dis. Less St. White	4.7	5.1	10	11	9	3	3	2	5		-1	9			11	8	0	8	6	8		-6		
District		10		77	70	74	77	79	90		85	9			78	62	60	71	62	64	-	75	- 3	
State White		1 10	101	66	61	71	74	77	85		86	0			67	54	60	63	56	56	1	81	1	1
District - # Students	Taking Te	st		148	156	143	146	125	138		138				147	156	143	142	125	138	t -	140		\vdash

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COMMU																						helse		
PARTN											2009	MC	AS I	Profi	cien	cy -	All S	ubje	cts	and	Gra	des (Dist	rict)
- IINITIA	IVE										Dist	rict	Les	s Sta	ate (/	Achi	even	nent	Gap	vs.	Wh	ite S	tude	nts)
Chelsea																								Ė
								Pe	ercer	nt Ad	vance	ed+F	rofic	ient	- 200	9						_		_
	Average	Average					F	nalis	h										Math					_
	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students																								
Dis. Less St. White	-30.1	-25.3	22	-33	-21	-35	-30	-27	-28		-38				-20	-12	-32	-28	-22	-29		-38		
District		2010		33	40	36	44	50	57		48				47	42	28	35	34	27		43		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		\vdash
District - # Students	Taking Tes	st		444	391	389	397	365	359		286				443	392	389	396	367	360		287		\vdash
African American	(D)		. Co																		4			
Dis. Less St. White	38.4	-33.1	ii.	-40	-35	-36	-37	-32	-32		-59				-31	-22	-24	-39	-35	-31		-52		
District		- 1	. O	26	26	35	37	45	53		27				36	32	36	24	21	25		29		
State White		10	101	66	61	71	74	77	85		86	9			67	54	60	63	56	56		81	- 1	
District - # Students	Taking Tes	st	6	34	35	23	22	33	28		26				33	35	22	21	33	28		28		
Asian		1 10		l.																				
Dis. Less St. White	9.9	9.5		1	31				-3)			0	15				16				
District				67	92				82						67	69				72				
State White	100 000			66	61				85						67	54				56				
District - # Students	Taking Tes	st		15	13				11						15	13				11				
Hispanic	499				2																			
Dis. Less St. White	-31.9	-26.2	5.5	-34	-25	-36	-32	-27	-30		-40				-22	-13	-32	-30	-20	-31		-39		
District			.53	32	36	35	42	50	55		46				45	41	28	33	36	25		42		
State White		100	11	66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students		st		369	303	331	320	289	276		223				369	304	331	320	290	277		221		
Limited English P		, s	3	2							8													
Dis. Less St. White	-60.0	-51.7	80	-46	-50	-66	-66	-65	-77		-78			,	-42	-48	-60	-58	-45	-53		-70		
District			30	20	11	-5	8	12	8		8				25	6	0	5	11	3		11		
State White	100 20		22	66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Tes	st		85	75	40	38	35	37		38				84	75	41	38	35	37		38		$oxed{\Box}$
Low Income	118																							
Dis. Less St. White	-32.6	-26.3		-35	-24	-37	-33	-28	-32		-41				-22	-15	-32	-28	-22	-30		-40		
District		1	578	31	37	34	41	49	53		45				45	39	28	35	34	26		41		
State White	<u> </u>			66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Tes	st	ß.	386	322	333	335	309	289		222	Š.			385	323	333	333	311	290		220		
SPED		1 6	22	0				- 9			8	o .				9	- 33		22	- 0				
Dis. Less St. White	-67.8	-53.6	2	-61	-52	-66	-68	-73	-76	-	-80				-46	-47	-54	-58	-50	-55		-68		
District				5	9	5	6	4	9		6				21	7	6	5	6	1		13		
State White	L			66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Tes	st		59	68	64	65	70	67		54				59	68	63	65	71	68		53		₩
White		10.0																						
Dis. Less St. White	17.7	-18.6		-11	-1	-25	-18	-35	-23		-10				9	0	-31	-20	-38	-23		-23		
District		1	100	55	60	46	56	42	62		76			_	76	54	29	43	18	33		58		_
State White	L			66	61	71	74	77	85		86				67	54	60	63	56	56		81		\perp
District - # Students	Taking Tes	ST	8	24	40	30	40	33	42		25	17			24	39	31	40	34	42		26		

Chicopee

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PARTN											2009	MC	AS I	Profi	cien	cy -	All S	ubje	cts	and	Gra	des (Dist	rict
- INITIA	IVE										Dist	rict	Les	s Sta	ate (Achi	even	nent	Gap	vs.	Wh	ite Si	tude	nts
Chicopee				1															T.					
								Pe	ercer	nt Ad	vanc	ed+F	rofic	ient	- 200	9								_
	Average	Average					F	nglis	h										Math					_
	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students									-			0					-			ė.				
Dis. Less St. White	-21.5	-24.1		-23	-26	-17	-17	-30	-18		-20				-25	-22	-22	-21	-24	-24		-30		
District			263	43	35	54	57	47	67		66				42	32	38	42	32	32		51		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st		510	536	559	511	525	590		611				508	535	559	513	525	592		613		
African American	(B)								1				1											
Dis. Less St. White	-29.4	38.0	CC .	-27	-37	-39	-17	-31	-38		-18				-28	-46	-51	-16	-23	-42		-41		
District		12		39	24	32	57	46	47		68				39	8	9	47	33	14		40		
State White		14	92	66	61	71	74	77	85		86	0			67	54	60	63	56	56		81	- 1	
District - # Students	Taking Te	st	Š.	13	25	22	16	13	15		28	9			13	25	22	15	12	15		30		
Asian			20	Į.													93			ė.				
Dis. Less St. White	-12.5	5.7			-28		6									13		-3						
District					33		80									67		60						г
State White					61		74									54		63						
District - # Students	Taking Te	st			12		10		1							12		10						
Hispanic		*	i.c														- 50							
Dis. Less St. White	-37.3	-39.6	S.	-36	-34	-35	-34	-47	-31		-46				-36	-38	-39	-38	-42	-37		-49		
District		177	.53	30	27	36	40	30	54		40				31	16	21	25	14	19	-	32		
State White		10	92	66	61	71	74	77	85		86			9 3	67	54	60	63	56	56		81		
District - # Students	Taking Te	st		147	152	167	144	154	147		118				145	152	167	145	151	150		120		
Limited English P	roficient																							
Dis. Less St. White	54.3	41.5		-43	-45	-56	-49	-77	-78						-39	-38	-40	-44	-46	-49				
District			80	23	16	15	25	0	7						28	16	20	19	10	7				
State White	33 74	3 14		66	61	71	74	77	85						67	54	60	63	56	56				
District - # Students	Taking Te	st		44	31	20	16	22	14						43	31	20	16	22	14				
Low Income	412																							
Dis. Less St. White	-28.7	-31.9	100	-28	-29	-24	-22	-42	-28		-30				-33	-29	-29	-27	-32	-34		-41		
District		10		38	32	47	52	35	57		56				34	25	31	36	24	22		40		
State White		18		66	61	71	74	77	85		86				67	54	60	63	56	56		81	-	
District - # Students	Taking Te	st	Š	341	340	333	225	232	222		247				340	339	333	228	232	224		252		
SPED			38	0					- 3		3	2				- 3	- 33		88	2				
Dis. Less St. White	-63.0	56.2	20	-56	-55	-62	-62	-69	-69		-70				-54	-48	-55	-59	-55	-50		-73		
District		E 05	0	10	6	9	12	8	16		16				13	6	5	4	1	6		8		
State White	5 385 385	S (6)	80	66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st		87	102	90	100	85	85		82				87	101	91	100	86	86		87		
White	(0)	977	100																1					
Dis. Less St. White	-14.9	-17.6	S.C.	-17	-22	-8	-11	-20	-12		-15				-21	-15	-12	-15	-16	-18		-24		
District		E 92	(4	49	39	63	63	57	73		71				46	39	48	48	40	38		57	- 3	
State White		S 56		66	61	71	74	77	85		86	9	9		67	54	60	63	56	56		81	1	
District - # Students	Taking Te	st	ŝ.	328	327	350	325	338	406		444				328	326	350	327	342	406		441	1	

Everett

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Everett																								
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			_				2	_		it Au	vario	eurr	TOTIC	leiit	- 200	9			20110					
	Average	Average	- -	50 5	20 3	20 0		nglis	h		000	50 5	30		30 0	2 0			Math		90 0	B 6	00 0	0
	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students			14																					
Dis. Less St. White	-23.5	-25.0		-23	-27	-32	-20	-29	-14		-20				-21	-22	-25	-22	-27	-28		-30		
District	Loio	2010		43	34	39	54	48	71		66				46	32	35	41	29	28		51		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	aking Tes	st	-	400	370	385	414	390	403		372				402	373	387	415	391	404		369		
African American	- 42	-							- 1															
Dis. Less St. White	-32.7	-34.3	100	-30	-32	-42	-35	-38	-13		-44				-32	-32	-29	-30	-28	-35		-53		
District		177	37	36	29	29	39	39	72		42				35	22	31	33	28	21		28		
State White		1 19		66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	aking Tes	st	1	56	74	58	65	59	77		63			1	57	74	58	65	59	77		64		
Asian			10	-		-	-	-			-								-					
Dis. Less St. White	-3.1	2.1		9	-28	-15	10	-12	15		-2				3	4	-16	11	2	16		8		
District			2	75	33	56	84	65	100		84				70	50	44	74	58	72		89		
State White			-	66	61	71	74	77	85		86			-	67	54	60	63	56	56		81		
District - # Students	aking Tes	st	-	20	15	25	18	17	18		19			\vdash	20	16	25	19	17	18	1	19		
Hispanic		1 10	Ç.								1.0								-	1.5			1	
Dis. Less St. White	-30.0	-29.6	55	-26	-35	-41	-27	-35	-24		-20				-25	-26	-33	-27	-33	-34		-31		
District	55.5	20.0	ST.	40	26	30	47	42	61		66				42	28	27	36	23	22		50		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	aking Tes	st		120	107	104	101	102	95		86				120	109	104	101	103	94		86		
Limited English P															1		-							
Dis. Less St. White		47.8		-53	-50	-67	-63	-65	-58		-74				-50	-40	-56	-34	-48	-42		-65		
District	55.7	,,,,,	7	13	11	4	11	12	27		12				17	14	4	29	8	14		16		
State White			-	66	61	71	74	77	85		86			\vdash	67	54	60	63	56	56		81		
District - # Students	aking Tes	st		46	28	25	28	25	22		24			H	46	28	25	28	25	22		24		
Low Income			-										-							1			- 1	
Dis. Less St. White	-26.6	-27.1	S.	-26	-30	-35	-24	-30	-16		-26				-23	-26	-27	-25	-29	-30		-31		
District	23.0		Č.	40	31	36	50	47	69		60				44	28	33	38	27	26		50	-	
State White			10	66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	aking Tes	st		293	264	274	303	288	286		221				294	266	275	303	288	286		222		
SPED																				1				
Dis. Less St. White	-61.0	-52.7		-60	-55	-65	-60	-70	-51		-64				-54	-48	-49	-50	-51	-52		-67		
District	0	72		6	6	6	14	7	34		22				13	6	11	13	5	4		14		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	aking Tes	st	-	79	66	82	83	86	74		67				80	67	83	84	86	76	1 -	65		\vdash
White			Ce .						- 1				1				10			1	-			
Dis. Less St. White	-18.9	-22.1	S.C.	-23	-18	-25	-15	-25	-12		-15				-19	-17	-19	-19	-27	-26		-27		
District			S.C.	43	43	46	59	52	73		71				48	37	41	44	29	30		54		
State White		1 19	61	66	61	71	74	77	85		86				67	54	60	63	56	56		81	-	—
District - # Students	aking Te	et	3	201	169	196	227	209	209		202			-	202	170	198	227	208	211		198		

Fall River

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PARTN											2009	MC	ASI	Prof	icien	cv -	ΔII S	ubie	cts	and	Grad	des (Dist	rict)
- INITIAT	IVE —	7													ate (
											Disi	rict	Les	SOL	ate (/	ACIII	even	ieni	Gap	VS.	VVII	ile o	uue	nts,
Fall River																								
								В.		+ 14	vanc	- d+ D	rafia	iont	200	0								
		-						E.5	ercer	IL AU	vario	eurr	TOTIC	lent	- 200	J								
	Average	Average					E	nglis	h										Math					
	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students	a negotiano de la compositione d	Victoria III			-	_	-	•	-					-	-	-	-		·	-	-			
Dis. Less St. White	-28.4	-30.0	is	-31	-33	-27	-34	-30	-21		-21	-			-34	-26	-29	-29	-28	-30		-35		
District	-20.4	-30.0	10	35	28	44	40	47			65	4	1		33		31	34	28	26	1	46		
State White			0	66	61	71	74	77	64 85		86	2	0		67	28 54	60	63	56	56		81		_
District - # Students	Taking To	ot .	-	817	805	802	781	746	831	-	567	-		-	817	811	799	778	748	833	-	576	_	-
African American	running Te	J		017	003	002	701	740	031		307				017	011	199	110	746	033		3/0		
Dis. Less St. White	-36.3	-39.6	S.	-43	-36	-42	-47	-45	-17		-25				-51	-32	-39	-37	-44	-34		-44		
District	-30.3	-33.0		23	25	29	27	32	68		61				16	22	21	26	12	22		37		
State White	-	3 50	92	66	61	71	74	77	85		86				67	54	60	63	56	56		81		-
District - # Students	l Faking To-	L et	2	48	72	64	58	53	55	-	61	53			48	74	64	58	52	57		67		-
Asian	raking re-	51	-	40	12	04	30	33	33		01				40	7.4	04	30	32	37		67		
Dis. Less St. White	-27.1	19.6	20	-41	-32	-24	-31	-32	-12		-19	2			-27	-23	-24	-14	-17	-12		-23		
District	-21.1	-13.0		25	29	47	43	45	73		67	_			40	31	36	49	39	44		58		
State White			4	66	61	71	74	77	85		86	2			67	54	60	63	56	56		81		_
District - # Students	Taking To	nt .	8	28	28	32	39	33	33		31				28	29	33	39	33	32		31		_
Hispanic	raking re	51	i.e	20	20	32	39	33	33		31				20	29	33	39	33	32	0	31		
Dis. Less St. White	44.6	41.9	G.	-44	-47	-36	-55	-51	-36		-40				-47	-41	-39	-49	-37	-37		-41		
District	-44.0	41.3	O.	22	14	35	19	26	49		46				20	13	21	14	19	19		40		
State White		9	12	66	61	71	74	77	85		86	7			67	54	60	63	56	56		81		-
District - # Students	Taking To	ot .		146	150	123	130	109	112		70	y			145	150	122	127	110	113	-	70	-	-
Limited English P		οι -	-	140	130	123	130	109	112		7.0				143	130	122	127	110	113		70		
Dis. Less St. White		-50.3	3	-54	-56	-53	-64	-71	-51		-67	-			-50	-49	-42	-53	-53	-49		-65		
District	-30.0	-30.3	10	12	-50	18	10	6	34		19	4	1		17	-49	18	10	-33	7	1	16	1	
State White		- V	-	66	61	71	74	77	85		86				67	54	60	63	56	56		81	-	_
District - # Students	L Faking Te	et .		79	73	56	51	31	29	\vdash	26	-			79	73	55	52	31	30	-	26		\vdash
Low Income	adding 16			10	7.5	30	31	91	23		20				13	13	33	92	31	30		20	- 4	
Dis Less St. White	-34.3	-35.1	C.	-39	-38	-32	-40	-36	-26		-27				-41	-34	-34	-33	-33	-33		-39		
District	-54.5	-55.1	C.	27	23	39	34	41	59		59				26	20	26	30	23	23		42		
State White		5 59		66	61	71	74	77	85	-	86				67	54	60	63	56	56		81		\vdash
District - # Students	Taking Te	st .	8	603	592	594	593	541	600		389	33			603	597	591	588	543	600		396		_
SPED	and gree			003	332	334	333	341	000		503			9	003	331	331	300	343	000		330		
Dis. Less St. White	60.8	-54.3	20	-56	-54	-56	-61	-67	-64		-70				-57	-48	-50	-56	-53	-52		-70		
District	-00.0	-54.5	0.	10	7	15	13	10	21		16				10	6	10	7	-33	-32	1	111		
State White	-			66	61	71	74	77	85		86				67	54	60	63	56	56		81		\vdash
District - # Students	Taking Te:	r st		153	151	151	168	166	181		95	-			155	153	149	167	165	182	-	98	-	\vdash
White	9 10	2 72	CC.	.55	.01	131	, 30	.00	101		33		-			. 33	140	101	.00	102	0	1 30		
Dis. Less St. White	-24.3	-26.5	Œ.	-26	-29	-24	-29	-24	-20		-17			-	-29	-22	-25	-24	-25	-29		-33		
District	-24.3	-20.3	G.	40	32	47	45	53	65		69				38	32	35	39	31	27		48		
State White		9 50		66	61	71	74	77	85		86	0		2	67	54	60	63	56	56		81		_
District - # Students	Taking To	et .	2	558	539	560	537	535	616	 	391	8			559	542	557	537	538	616		394		\vdash

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	Average	Average	-				F	nglis	h					Ī					Math					
	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students				,																e				
Dis. Less St. White	-27.5	-27.2		-24	-31	-31	-29	-32	-19		-26				-24	-27	-31	-27	-24	-28		-30		
District				42	30	40	45	45	66		60				43	27	29	36	32	28		51		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st		426	415	407	379	372	378		304				427	419	404	381	371	382		306		
African American	98		No.						Y.		8													
Dis. Less St. White	-28.9	-28.9	4	-27	-13	-23	-35	-37	-32		-30				-28	-14	-35	-38	-32	-31	1	-23		
District		- 10	8	39	48	48	39	40	53		56				39	40	25	25	24	25	-	58		
State White		100	90	66	61	71	74	77	85		86				67	54	60	63	56	56	8	81		
District - # Students	Taking Te	it	6	18	27	21	41	25	32		34				18	27	20	41	25	32		36		
Asian		- 4		8																				
Dis. Less St. White	-31.0	-23.0		-21	-45	-42	-24	-33	-20		-36				-19	-38	-28	-19	-15	-22		-26		
District				45	16	29	50	44	65		50				48	16	32	44	41	34		55		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st		27	19	28	32	29	23		22				27	19	28	32	29	23		22		
Hispanic	500	92	4.5						19		8						- 90		No.					
Dis. Less St. White	-37.7	-36.3		-37	-33	-46	-34	-45	-26		-46				-33	-32	-40	-33	-39	-36		-47		
District		92		29	28	25	40	32	59		40				34	22	20	30	17	20	-	34		
State White		1 12	30	66	61	71	74	77	85		86	9		ż.	67	54	60	63	56	56	0.0	81	1	
District - # Students	Taking Te	st	9	200	194	172	140	159	153		89	37		1	201	196	170	141	157	154		90		
Limited English P	roficient			e					- 6		8								, T	P				
Dis. Less St. White	-59.6	48.8		-56	-51	-63	-60	-73	-56		-65				-49	-50	-47	-55	-52	-51		-16		
District				10	10	8	14	4	29		21				18	4	13	8	4	5		65		
State White	5 381 185		80	66	61	71	74	77	85		86				67	54	60	63	.56	56		81		
District - # Students	Taking Te	st		77	49	38	36	46	41		14				77	49	38	36	46	42		14		
Low Income	(1)																							
Dis. Less St. White	-35.5	-34.9		-33	-37	-40	-35	-42	-24		-38	1			-30	-32	-42	-34	-35	-35		-38		
District		- 12		33	24	31	39	35	61		48				37	22	18	29	21	21	-	43		
State White		100	91	66	61	71	74	77	85		86				67	54	60	63	56	56	1	81		
District - # Students	Taking Te	3t	9	297	296	270	256	243	248		169	N.		į.	298	298	268	258	244	250		169		
SPED		1 13	ls.								8	Į.							85					
Dis. Less St. White	-60.9	-51.7	22	-51	-56	-64	-67	-68	-63	-	-57				-51	-44	-50	-58	-51	-51		-62		
District				15	-5	7	7	9	22		29				16	10	10	5	5	5		19		
State White	4 33 33			66	61	71	74	77	85		86				67	54	60	63	.56	56		81		
District - # Students	Taking Te	st .		84	91	92	75	86	81		60				84	91	91	75	83	84		56		
White	110000000		**	1				-																
Dis. Less St. White	-17.1	-17.9	74	-12	-27	-15	-24	-17	-11		-14	7			-12	-20	-23	-19	-9	-20		-22		
District		100	69	54	34	56	50	60	74		72	3			55	34	37	44	47	36	0	59		
State White		1 50	91	66	61	71	74	77	85		86	9			67	54	60	63	56	56		81		
District - # Students	Taking Te:	st	S	170	163	175	161	153	165		159	ý.		3	170	164	175	161	155	166	10	158		

Framingham

COMMU	NITY											-								F	rami	ngha	m (#	D12
PARTN											2000	MC	AS F	Prof	ician	CV/ -	ΔΙΙ S	uhia	cte			des (
- INITIAT	TIVE -			-																				
											DIS	rict	Less	s St	ate (/	Acni	even	nent	Gap	vs.	wn	te S	tude	nts)
Framingham																								
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		ř 3	£							it Ad	vanc	eatr	ronc	ient	- 200	9			niecos (te)					
	Average	Average	ās.				E	nglis	h										Math					
	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students																								
Dis. Less St. White	-9.9	-7.4		-12	-11	-9	-8	-12	-9		-8				-9	-7	-5	-14	-10	-5		-1		
District	0.10			54	50	62	66	65	76		78				58	47	55	49	46	51		80		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st		624	640	628	599	591	637		519				625	643	630	596	591	632		517		$\overline{}$
African American		r -							- 9				-				-		-		-			
Dis. Less St. White	-20.9	-22.5	100	-18	-23	-17	-32	-24	-7		-28				-24	-24	-10	-39	-26	-17		-23		
District			8.7	48	38	54	42	53	78		58		-		43	30	50	24	30	39		58		
State White				66	61	71	74	77	85		86	-			67	54	60	63	56	56	t .	81		
District - # Students	Taking Te:	st	ē.	35	43	44	33	40	50		53	8	6		35	43	44	33	40	49		54	- 9	
Asian		Ĭ i		-			-00	,,,	-									-				-		
Dis. Less St. White	1.2	11.7		8	-13	-1	4	16	0		4				21	8	6	14	12	7		15		
District	112		65.	74	48	70	78	93	85		82				88	62	66	77	68	63		96		
State White			-	66	61	71	74	77	85		86				67	54	60	63	56	56	-	81		
District - # Students	Taking Te	st		41	36	46	36	29	35		28				41	37	46	36	28	35	<u> </u>	28		\vdash
Hispanic		ľ -	S.C.		-			-					-			-	- 10	-		-	-		-	
Dis. Less St. White	-35.8	-34.7	55	-44	-37	-42	-29	-39	-28		-30				-44	-36	-40	-45	-28	-28		-15		
District	-55.0	-54.1	8	22	24	29	45	38	57		56				23	18	20	18	28	28		66		
State White		10	2/	66	61	71	74	77	85		86		3		67	54	60	63	56	56		81	-	
District - # Students	Taking Te:	st	6	134	142	117	128	122	135		86	7			133	143	118	127	122	134		82	- 9	
Limited English P				134	172	111	120	122	100		- 00				155	143	110	121	122	134		02	i i	
Dis. Less St. White		-39.7	0	-54	-35	-49	-60	-51	-49		-69				-37	-30	-39	-55	-42	-44		-59		
District	73.7	-55.1	17	12	26	22	14	26	36		17				30	24	21	8	14	12	91	22		
State White			-	66	61	71	74	77	85	1	86				67	54	60	63	56	56		81		-
District - # Students	L Taking Te	st		116	109	81	51	42	33	 	24	-		—	116	110	83	50	41	33	1	23		\vdash
Low Income	g 16			110	103	01	- 51	42	33		24		-		110	110	0.5	30	71	33	-	23	- 4	
Dis. Less St. White	-31.0	-29.6		-39	-33	-33	-34	-35	-22		-18				-38	-28	-31	-44	-28	-25		-7		
District	-01.0	-23.0		27	28	38	40	42	63		68				29	26	29	19	28	31	-	74		
State White		10	92	66	61	71	74	77	85		86		3 .		67	54	60	63	56	56	3	81	-	
District - # Students	Taking To	st	-	226	226	201	220	231	254	_	154	33		_	228	227	201	217	231	252		154		
SPED.	- u.u./g 10			220	220	201	220	231	234		134				220	221	201	217	201	232		134		
Dis. Less St. White	46.0	-38.6	85	-42	-41	-46	-46	-50	-51		-46				-40	-31	-30	-49	-41	-43		-37		
District		-55.6	£.	24	20	25	28	27	34		40		12		27	23	30	14	15	13	61	44		
State White				66	61	71	74	77	85	1	86			\vdash	67	54	60	63	56	56		81		\vdash
District - # Students	Taking Te	st		129	179	160	162	159	161	1	103	-		 	129	179	160	161	158	155	t	108		\vdash
White	anning 16		S. C	123	173	100	102	133	101		103				128	173	100	101	130	133	-	100	. 4	
Dis. Less St. White	-1.7	0.7	G	4	0	1	-1	4	4		0	-			0	4	4	-5	4	2		4		
District	*1.7	0.1		62	61	72	73	73	81		86				67	58	64	58	52	58		85		_
State White		1 10	92	66	61	71	74	77	85		86				67	54	60	63	56	56	-	81		\vdash
District - # Students	Tokina To	ot .	0	405	412	419	400	400	413	-	350			—	407	414	420	398	401	409		351		\vdash

Haverhill

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PARTN											2009	MC	AS I	rofi	cien	cv -	All S	ubje	cts	and	Gra	des (Dist	rict
- INITIAT	IVE																					ite S		
Eu unu			_												1,									-
Haverhill																								
								Pe	ercer	it Ad	vance	ed+P	rofic	ient	- 200	9								
	Average	Average					Е	nglis	h										Math					
	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students	Sump Shares (C)	V-SONATC	_	3	_	3	•	_	0	3	10	(0.00	12	-	3	-	3	0	24.7		3	10		- 12
Dis. Less St. White	-19.4	19.3	- 22	-20	-21	-23	-24	-22	-13		-11				-21	-16	-22	-22	-19	-18		-17		-
District	-13.4	-13.3		46	40	48	50	55	72		75	2			46	38	38	41	37	38	-	64		_
State White				66	61	71	74	77	85		86			H	67	54	60	63	56	56		81		+
District - # Students	Taking Tes	et e	10	488	491	483	555	601	588		397	-			486	490	486	560	607	588		399		⊢
African American	anang 10	1	Gr.	700	731	700	533	001	330		331				700	730	700	300	007	300	-	555	. 9	H
Dis. Less St. White	-24.2	-36,2	Č.	-38	-25	-21	-16	-22	-16		-36				-45	-26	-22	-33	-32	-35		-56		
District	-24.2	-30.2	N.	28	36	50	58	55	69		50				22	28	38	30	24	21		25		_
State White	l		10	66	61	71	74	77	85		86				67	54	60	63	56	56		81		+
District - # Students	L Taking Tes	t t	8	18	14	14	24	29	23		20				18	14	13	24	29	23		20	5 5	\vdash
Asian	arang 10		-	1.0	14	14	24	25	23		20				10	14	13	24	25	23		20		
Dis. Less St. White	-1.8	0.2	10	2				-7	-3		4	2				- 9	- 3		4	16		-21		-
District	-1.0	0.2	32	(- 1		70	82		90								60	72	4	60		-
State White			-			-		77	85		86						-		56	56		81		-
District - # Students	Taking Tes	ot .					-	10	11		11		-	-	-		-		10	11		10		₩
Hispanic	ranning rea	ot .	SCC.		0 1			10	-11		-11		0 0			-	90		10	- 11	-	10		\vdash
Dis. Less St. White	40.3	41.7	ST.	-43	-42	-44	-40	-45	-33		-31				-48	-34	-40	-41	-43	-44		-43		\vdash
District	-40.3	-41.7	87	23	19	27	34	32	52		55				19	20	20	22	13	12		38		-
State White			92	66	61	71	74	77	85		86				67	54	60	63	56	56		81		⊢
District - # Students	Taking Tes	et :	3	101	117	110	111	120	107		68	2			100	116	111	113	123	105		74		\vdash
Limited English P		,,	<i>2</i> 2	101	TILE	110	111	120	107		00	4			100	110	1.1.1	113	123	100		7.4		\vdash
Dis. Less St. White		-55.6	ly	-66	-61	-68	-65	-62	-62		-63	9			-63	-50	-54	-60	-51	-52		-67		-
District	-04.0	-55.0		-00	-01	3	9	15	23		23	2			4	-30	6	3	-51	-32		14		_
State White			2	66	61	71	74	77	85		86			H	67	54	60	63	56	56		81		+
District - # Students	Taking Tee	st -	10	25	26	33	33	40	26		13	-			26	25	33	33	44	26		14		+
Low Income	and ing 10		Gr.	23	20	33	00	70	20		1.0				20	23	33	33	74	20		14		
Dis. Less St. White	-35.8	-36,3		-38	-38	-40	-36	-41	-27		-27				-38	-32	-38	-38	-37	-34		-37		
District	-55.0	-30.5		28	23	31	38	36	58		59				29	22	22	25	19	22		44		_
State White	 	1 10	92	66	61	71	74	77	85		86	0			67	54	60	63	56	56		81		\vdash
District - # Students	L Taking Tee	t t	8	234	230	239	266	282	237		160				232	227	241	269	286	237		160		\vdash
SPED.	arang 10		-	234	230	233	200	202	237		100				232	221	241	203	200	231		100		
Dis. Less St. White	-57.7	-51.2	85	-51	-47	-61	-63	-68	-58		-50	8			-57	-42	-51	-54	-51	-49		-56		\vdash
District	-51.1	-51.2	0.	15	14	10	11	9	27		36	k	1 1		10	12	9	9	-51	7	1	25		-
State White			-	66	61	71	74	77	85		86				67	54	60	63	56	56		81		\vdash
District - # Students	Taking Tes	et .	Ÿ	94	109	96	130	130	120		76	-	-		94	110	97	133	131	122		82		\vdash
White	Tuning 16		. Ce	34	103	30	130	130	120		-0				34	110	37	133	131	122	-	02		\vdash
Dis. Less St. White	-13.6	12.7	ii.	-14	-13	-17	-21	-16	-8		4				-11	-9	-16	-17	-13	-13		-8		-
District	-13.0	-12.1		52	48	54	53	61	77		82				56	45	44	46	43	43		73		-
State White			-	66	61	71	74	77	85		86				67	54	60	63	56	56	-	81		\vdash
District - # Students	Toking To	.+	7	358	350	355	412	438	446	-	295			-	357	351	358	415	442	448		292		+

Holyoke

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Holyoke																								
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		1 1						- 180°		it Au	i v ai i c	cu·i	10110	ient	- 200	-			1000000					_
	Average	Average					E	Englis	h										Math					
	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students			8	e							8	e												
Dis. Less St. White	45.1	42.5		-45	-45	-53	-49	-49	-40		-34				-48	-40	-47	-40	-42	-42		-39		
District				21	16	18	25	28	45		52				19	14	13	23	14	14		42		
State White	180 04			66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st		376	408	401	451	457	463		375				378	408	405	455	461	458		388		
African American	100																							
Dis. Less St. White	38.1	44.6	iles	-33	-53	-35	-54	-59	-21		-15				-56	-46	-46	-49	-50	-33		-28		
District		1		33	8	36	20	18	64		71				11	8	14	14	6	23		53	i i	
State White		1 56	90	66	61	71	74	77	85		86	0		, ,	67	54	60	63	56	56		81		
District - # Students	Taking Te	st	ĺ.	18	12	14	15	17	14		17		- 10		18	12	14	14	18	13		15		
Asian		3 33	36	6					25		86			3 5			19		bs.					
Dis. Less St. White		3 35	35	6					213		85			3 3			13		100	6		8 8		
District		g	0								100													
State White	140 140																		,					
District - # Students	Faking Te	st																						
Hispanic																								
Dis. Less St. White	-53.4	49.0		-54	-51	-58	-57	-58	-47		-48				-55	-46	-51	-47	-47	-48		-50		
District		12		12	10	13	17	19	38		38				12	8	9	16	9	8		31		\perp
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students		st	Ü.	288	304	319	345	344	365		258				290	303	323	349	346	361	1	272		
Limited English P			io.	9					- 6		8	9					- 4		5	e		102 5		
Dis. Less St. White	69.6	-58.9		-62	-57	-68	-72	-76	-79		-84		:		-61	-52	-57	-61	-56	-56		-81	-	
District				4	4	3	2	_1_	6		2				6	2	3	2	0	0		0		
State White			(1)	66	61	71	74	77	85		86			_	67	54	60	63	56	56		81		
District - # Students	aking re	ST		124	113	100	96	110	97		45				126	112	104	97	110	96		51		
Low Income	F4.0	17.0									-													_
Dis. Less St. White	-51.3	47.0		-51	-50	-55	-55	-55	-46		-45				-52	-44	-49	-45	-48	-46		-45		
District				15	11	16	19	22	39		41				15	10	11	18	8	10		36		\vdash
State White	Foling T-			66	61	71	74	77	85		86				67	54	60	63	56	56		81		\vdash
District - # Students T SPED	aking le	51	Ь	321	343	335	357	350	367		231	ž.			325	343	339	361	353	363		243		
	CO C	EQ.C	32	cc	co	co	70	70	CC		70	ė.			CE	FO	F7	FC	FF	F.1		70		
Dis. Less St. White	-68.6	-58.6	8.	-66	-60	-68	-70	-73 4	-68		-79	4			-65	-52	-57	-59	-55	-54	1	-76		
District State White				0 66	61	71	74	77	17 85		7 86				2 67	2 54	3 60	63	56	2 56	-	5 81	-	\vdash
State vvnite District - # Students	Faking To	l ot	10	108	132	120	140	135	142		73	-	-	-	111	133	121	141	137	140	-	81		\vdash
White	aking 18	01	3.0	108	132	120	140	135	142		13				111	133	121	141	13/	140	-	81		\vdash
	46.2	10 C	C.	44	20	24	40	40	42		2	10			20	22	20	40	20	40		42		
Dis. Less St. White	-16.3	-18.6		- 14	-20 41	- 34	- 19	-16	-13		83				-20 47	-23 31	-30 30	-10 53	- 20	- 18		-13		
District State White		1 50	-	52 66	61	71	74	77	72 85		86	2		,	67	54	60	63	56	56		81		-
District - # Students	Felina Te	ot .		63	86	65	88	95	81	_	95	63	-		63	87	66	89	96	81	-	97		-

Lawrence

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PARTN											2009) MC	CAS	Prof	icien	cy -	All S	Subje	cts	and	Gra	des	Dist	rict)
- INITIA	IVE										Dist	trict	Less	s St	ate (Achi	ever	nent	Gap	vs.	Wh	ite S	tude	nts)
Lawrence																								
								P	ercen	t Ad	vanc	ed+F	rofic	ient	- 200	9								
	Average	Average					E	nglis	h				000		-27				Math	i			99 0	
	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students			is.	l.					- 10											l.				
Dis. Less St. White	-37.4	-37.7		-32	-34	-39	-41	-41	-36		-40				-30	-25	-35	-44	-41	-42		-51		
District				34	27	32	33	36	49		46				37	29	25	19	15	14		30		
State White	100			66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Tes	st		940	936	857	907	964	1016		643				941	938	865	908	972	1011		629		
African American	(42	1					1																	
Dis. Less St. White	-39.7	43.1		-31	-36		-37	-47	-28		-66				-29	-35	5.	-44	-46	-35		-74		
District		100	- CR	35	25		37	30	57		20				38	19		19	10	21	-	7		
State White		1 12	94	66	61		74	77	85		86	2			67	54	1/	63	56	56	1	81		
District - # Students	Taking Tes	st	j,	17	16		22	20	23		15				16	16		22	20	23		15		
Asian		, ×							- 3			2							88					
Dis. Less St. White	15.3	-7.3		-12	12	-19	-30	-31	-6		-17				4	19	-1	-16	-29	-14		-14		
District				54	73	52	44	46	79		69				71	73	59	47	27	42		67		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Tes	st		24	22	27	18	30	19		16				24	22	27	17	30	19		15		
Hispanic	(0)	100	14					1	7								- 7.		100	1				
Dis. Less St. White	-38.9	-39.3		-35	-35	-41	-43	-42	-37		-40				-32	-26	-38	-45	-42	-44		-52		
District		12	G.	31	26	30	31	35	48		46				35	28	22	18	14	12		29		
State White		9 99	11	66	61	71	74	77	85		86	0		1	67	54	60	63	56	56		81		
District - # Students	Taking Tes	st	ñ.	825	837	754	798	849	890		586	8		1	827	839	761	800	856	883	i i	571		
Limited English P	roficient											,												
Dis. Less St. White		-50.9		-52	-51	-61	-69	-69	-70		-85				-48	-39	-50	-62	-53	-49		-76		
District				14	10	10	5	8	15		1				19	15	10	1	3	7		5		
State White			-	66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Tes	st	7	205	169	127	76	107	97		78				209	173	129	78	108	97		74		
Low Income		1																						
Dis. Less St. White	-38.3	38.4	C.	-33	-34	-39	-43	-42	-37		-41	-			-31	-25	-36	-45	-42	-42		-52		
District		17	Q.	33	27	32	31	35	48		45				36	29	24	18	14	14		29		
State White			10	66	61	71	74	77	85		86		1		67	54	60	63	56	56		81		
District - # Students	Taking Tes	st	Š.	817	830	764	816	862	890		546	8		ŝ	820	833	772	817	868	884	8	542		
SPED			10																					
Dis. Less St. White	-63.6	-55.0		-55	-55	-64	-64	-68	-66		-74				-51	-44	-56	-59	-54	-54		-76		
District				11	6	7	10	9	19		12				16	10	4	4	2	2		5		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Tes	st	-	167	204	199	233	269	263		113		t		166	202	202	231	276	263	1	107		
White		- 20	300						-/-					-					100		-	-	-	
Dis. Less St. White	-21.8	-22.7	13	-21	-22	-26	-21	-21	-17		-32				-15	-17	-9	-30	-30	-25	9	-45		
District	2			45	39	45	53	56	68		54				52	37	51	33	26	31		36		
State White		: 12	es:	66	61	71	74	77	85		86				67	54	60	63	56	56	10	81		
District - # Students	Taking Tes	st	3	68	60	68	68	65	84		26		t -		69	60	68	68	66	85		28		

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											Disi	rict	Les:	5 31	are (4CIII	even	ieni	Gap	vs.	VVII	ile o	uue	nis
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E:	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
	g		2	3	4	3	0	-1	0	9	10	313	12	Z	3	4	3	0	1	0	9	10	-11	12
All Students			32	e				-			8	0				9	0		ls.	g.		-		
Dis. Less St. White	-16.1	-11.0		-17	-21	-14	-18	-21	-9		-12	_			-12	-16	-7	-5	-5	-18	-	-14		
District				49	40	57	56	56	76		74				55	38	53	58	51	38		67		
State White	1 20 100			66	61	71	74	77	85		86				67	54	60	63	56	56		81		_
District - # Students	aking Fe	SI		502	471	486	476	471	488		397			_	500	473	487	471	477	489		402		_
African American																								
Dis. Less St. White	-29.8	-27.7		-22	-46	-33	-29	-29	-8		-39				-25	-34	-23	-18	-20	-34		-38		
District				44	15	38	45	48	77		47				42	20	37	45	36	22		43		
State White		1 59	0.1	66	61	71	74	77	85		86	9			67	54	60	63	56	56		81		
District - # Students	Taking Tes	st		29	40	29	29	25	31		23				29	40	30	29	25	31		23		
Asian				2		9 - 9		- 9	- 4		8	e —				9	- 35		8					
Dis. Less St. White	-17.1	-7.6		-19	-11	4	-39	-19	-21		5				-15	7	6	-28	2	-35		10		
District			3	47	50	67	35	58	64		91				52	61	66	35	58	21		91		
State White	161 165	20		66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Tes	st		19	18	12	17	26	14		11				19	18	12	17	26	14		11		
Hispanic			3						T. Y								27		3.6					
Dis. Less St. White	-35.5	-29.5		-41	-38	-30	-35	-38	-29		-37				-33	-31	-25	-28	-25	-34		-31		
District			.51	25	23	41	39	39	56		49				34	23	35	35	31	22		50		
State White		10	101	66	61	71	74	77	85		86	9	1		67	54	60	63	56	56		81		
District - # Students	Taking Tes	st	1)	114	120	114	108	114	105		92				112	120	113	105	115	107		92	1 8	
Limited English Pr	roficient																							
Dis. Less St. White	-55.9	46.4		-47	-54	-46	-61	-65	-61		-80				-44	-40	-47	-52	-36	-53		-75		
District				19	7	25	13	12	24		6				23	14	13	11	20	3		6		
State White				66	61	71	74	77	85		86				67	54	60	63	.56	56		81		
District - # Students	Faking Tes	st		80	58	40	47	43	37		17				80	58	39	46	44	38		17		
Low Income																								
Dis. Less St. White	-32.3	-25.9		-37	-37	-31	-33	-39	-19		-29				-28	-29	-21	-23	-19	-33		-28		
District			.53	29	24	40	41	38	66		57				39	25	39	40	37	23		53		
State White		1 1	145	66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Tes	st	Š.	216	215	204	192	174	194		141				214	217	205	188	176	195		145	- 8	
SPED		1 12		8													- 22							
Dis. Less St. White	-58.6	48.6		-54	-53	-57	-61	-70	-51		-67				-50	-45	-48	-46	-47	-51		-59		
District				12	8	14	13	7	34		19				17	9	12	17	9	5		22		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	aking Tes	st		98	89	107	100	77	56		52				97	89	108	98	78	57		50		
White		100																	100				-	
Dis. Less St. White	-7.7	-2.5	53	-9	-11	-5	-11	-14	-2		-2				-3	-9	1	6	3	-10		-6		
District		2.0		57	50	66	63	63	83		84				64	45	61	69	59	46		75		
State White			52	66	61	71	74	77	85		86				67	54	60	63	56	56		81	-	-
District - # Students	Faking Te	et .		333	284	317	311	292	330	_	264	\$1			333	285	318		297	329	<u> </u>	268	1 0	-

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PARTN											2009	MC	AS I	rof	cien	cv -	All S	ubie	cts	and	Gra	des (Dist	rict
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Lowell				_											(,									-
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	Average	Average					E	nglis	h										Math					
	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students																								
Dis. Less St. White	-29.1	-24.5		-33	-33	-33	-28	-33	-22		-19				-33	-25	-25	-17	-26	-25		-18		
District				33	28	38	46	44	63		67				34	29	35	46	30	31		63		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		-
District - # Students	Taking Tes	st	-	1092	992	984	988	1107	1086		772				1098	1000		983	1104			794		-
African American	502	1	S.V								100										1		-	
Dis. Less St. White		-34.2	5.5	-40	-37	-38	-29	-27	-14		-26	-			-47	-34	-40	-31	-27	-32		-30		
District			Q.	26	24	33	45	50	71		60				20	20	20	32	29	24		51		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		\vdash
District - # Students	Taking Tes	st	Š.	65	56	63	70	64	71		79	5			65	57	63	70	65	71		83	- 8	
Asian																								
Dis. Less St. White	-27.9	18.1		-36	-30	-31	-25	-26	-21		-25				-31	-20	-19	-6	-15	-21		-10		-
District			-	30	31	40	49	51	64		61				36	34	41	57	41	35		71		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		\vdash
District - # Students	Taking Tes	st	-	325	278	274	260	275	306		236				326	282	275	258	277	301	1	233		-
Hispanic	- 20	() () () () () ()	3.00					-									- 1		No.					
Dis. Less St. White	42.4	40.1	Š.	-47	-44	-49	-41	-48	-31		-33				-50	-38	-43	-31	-39	-36		-44		
District		100	i d	19	17	22	33	29	54		53				17	16	17	32	17	20		37		
State White			92	66	61	71	74	77	85		86				67	54	60	63	56	56		81		-
District - # Students	Taking Tes	st	Ú.	270	249	254	244	300	259		172	8			274	251	254	243	298	260		177	- 3	-
Limited English P	roficient																							
Dis. Less St. White		-36.7		-45	-40	-45	-47	-60	-48		-46				-42	-33	-33	-26	-46	-42		-35		
District				21	21	26	27	17	37		40				25	21	27	37	10	14		46		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Tes	st		471	424	363	283	257	261		209				473	428	361	279	256	258		212		
Low Income	400																							
Dis. Less St. White	-36.6	-31.7	C.	-41	-38	-39	-35	-42	-29		-29				-41	-32	-30	-24	-34	-32		-26		
District		10	3.9	25	23	32	39	35	56		57				26	22	30	39	22	24		55		
State White			di.	66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Tes	st	Š	760	702	711	705	783	769		422				762	707	712	700	779	765		438	- 6	
SPED		1 10																						
Dis. Less St. White	-64.3	-52.7		-57	-57	-62	-65	-71	-70		-67				-55	-48	-51	-53	-52	-52		-64		
District			20	9	4	9	9	6	15		19				12	6	9	10	4	4		17		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Tes	st		157	194	198	204	220	196		85				158	196	198	201	208	191		95		
White	11/01/4	- 1	i.e					1											100					
Dis. Less St. White	-21.5	17.8	S.	-20	-27	-24	-22	-29	-19		-4	100			-24	-19	-16	-12	-23	-19		-8		
District		120	39	46	34	47	52	48	66		82				43	35	44	51	33	37		73		
State White			92	66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Tes	st	Š.	421	393	386	407	462	437		283	8			423	396	386	405	459	438		298	- 8	

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	Average	Average					E	nglis	h										Math					
	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students				,																				
Dis. Less St. White	-27.3	-25.3		-29	-29	-29	-27	-30	-24		-23				-23	-24	-22	-25	-31	-28		-25		
District	27.10	2010		37	32	42	47	47	61		63				44	30	38	38	25	28		56		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		-
District - # Students	Taking Tes	st		1048		953	845	898	904		945				1051	968	953	845	894	904		936		
African American	502	f							10												0			
Dis. Less St. White	-32.6	-34.8	55	-33	-32	-38	-30	-32	-29		-33				-34	-33	-33	-35	-31	-36		-41		
District			3.7	33	29	33	44	45	56		53				33	21	27	28	25	20	15	40		
State White		5 50	24	66	61	71	74	77	85		86				67	54	60	63	56	56	1	81		†
District - # Students	Taking Tes	st	1	132	129	148	121	116	133		132				132	129	147	120	113	135	1	131		
Asian															1.02		1		1			101		
Dis. Less St. White	-22.1	-13.4		-25	-32	-24	-25	-25	-11		-17				-11	-23	-5	-10	-20	-14	1	-11		
District	-22.1	-10.4		41	29	47	49	52	74		69				56	31	55	53	36	42		70		_
State White			-	66	61	71	74	77	85		86			_	67	54	60	63	56	56		81		-
District - # Students	Taking Tes	st		88	74	85	87	105	112		89	-			88	73	85	87	104	110	-	87	-	_
Hispanic	l alang ro		5.0	- 00	17	0.5	01	100	112		-03				- 00	13	0.5	01	104	110		01		
Dis. Less St. White	-35.4	-33.1	55	-39	-38	-40	-35	-37	-29		-28				-31	-31	-31	-33	-38	-35		-34		
District	-55.4	-55.1		27	23	31	39	40	56		58				36	23	29	30	18	21		47		
State White		10 10	100	66	61	71	74	77	85		86				67	54	60	63	56	56		81		_
District - # Students	Taking Tes	st		543	470	419	361	390	393		411				546	471	421	361	389	393		410		-
Limited English P				343	470	410	301	330	333		711				340	711	421	301	303	333		410		
Dis. Less St. White		-39.6		-42	-42	-53	-56	-62	-60		-62				-32	-35	-35	-47	-47	-50		-56		1
District	-30.1	-33.0	-	24	19	18	18	15	25		24	-			35	19	25	16	9	6	i i	25	- 1	_
State White		- 2	-	66	61	71	74	77	85	_	86				67	54	60	63	56	56		81	- 2	-
District - # Students	Taking Tes	et	-	401	353	255	173	124	124	-	142	-		_	402	353	256	172	125	124	1	141	_	_
Low Income	. along 100	1		401	000	200	113	124	124		142				402	000	200	1172	123	124		141	. 4	
Dis. Less St. White	-33.1	-30.6	55	-35	-36	-37	-34	-35	-28		-26	-			-28	-29	-27	-32	-35	-34		-30		
District	-55.1	-50.0		31	25	34	40	42	57		60				39	25	33	31	21	22		51		
State White	\vdash	100	61	66	61	71	74	77	85	\vdash	86				67	54	60	63	56	56		81		\vdash
District - # Students	L Taking Tee	st .	6	820	743	716	621	690	678		694	2			823	744	716	623	686	675	8 8	687		-
SPED.	anning 10:			020	143	710	021	030	010		034				023	744	710	023	000	073	+	007		
Dis. Less St. White	-62.3	-51.4	85	-51	-57	-60	-66	-65	-68		-71				-48	-43	-51	-53	-53	-53		-61		
District	-02.3	-51.4	82	15	4	11	-00	12	17		15				19	11	9	10	3	3	9	20	-	
State White		-	-	66	61	71	74	77	85		86				67	54	60	63	56	56	-	81		
District - # Students	I Taking Tes	et .	-	173	189	221	168	188	191		146	-	-		175	189	222	169	185	193	1-	142	-	₩
White	l and great			173	103	221	100	100	131		140				175	103	222	103	103	193		142		
Dis. Less St. White	-13.2	-12.2	-	-7	-10	-11	-16	-22	-15		-12				-3	-7	-8	-15	-22	-20	-	-11		-
District	-13.Z	-12.2		59	51	60	58	55	70		74				64	47	52	48	34	36		70		
State White	l	1 14		66	61	71	74	77	85		86				67	54	60	63	56	56	-	81	-	₩
District - # Students	L Tokina Tok	nt .		240	267	271	242	256	234		284		-	_	241	268	272	242	257	232	1	279		\vdash

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PARTN											2009) MC	AS F	Profi	cien	cy -	All S	ubje	cts	and	Gra	des (Dist	rict
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	Average	Average					E	Englis	h										Math					
	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students	Altoret Constitution	Commerce of	_		-	_	Ů	-	-	9	10		12	-		-					,	10		-12
Dis. Less St. White	-18.3	40 C	is .	-26	-32	-23	-14	-12	7		-13	2			-20	-24	-18	-15	-18	-19	-	-16		-
	-18.3	-18.6	10		29	48			-7		73					30				37	1	65		_
District State White	 		-	40		71	60 74	65	78					-	47	54	42	48	38		-			-
District - # Students	Taldes Ta			66	61			77	85		86		_		67		60	63	56	56	-	81	-	₩
		ot .		491	461	469	485	477	467		392				491	463	468	485	479	469		383		\vdash
African American		25.4			40			-				-				0.5	0.7			- 0.0		-		-
Dis. Less St. White	-29.5	-35.4		-41	-40	-41	-29	-21	-13		-20				-38	-35	-37	-34	-36	-36		-31		
District	.			25	21	30	45	56	72	_	66				29	19	23	29	20	20	1	50	_	₩.
State White				66	61	71	74	77	85		86				67	54	60	63	56	56	1	81		_
District - # Students	Taking Te	ST.	9	94	85	110	86	101	91		89	0			94	85	110	86	100	91		90		_
Asian			8	2								2					3		82	e				
Dis. Less St. White	-7.3	6.1	32	-11	-20	-5	-2	-10	4		-6			_	-7	-1	14	8	9	9		12		
District		es - 18	20	55	41	66	72	67	89		80		5		60	53	74	71	65	65		93		
State White	<u> </u>			66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	Bt .		102	86	93	96	98	79		91				102	85	93	95	96	79		90		_
Hispanic																						1		
Dis. Less St. White	-29.4	-28.8	100	-35	-48	-40	-18	-22	-14		-23				-29	-31	-32	-19	-27	-31		-36		
District		120		31	13	31	56	55	71		63				38	23	28	44	29	25		45		
State White		6 92	3	66	61	71	74	77	85		86	8		-	67	54	60	63	56	56		81		
District - # Students		st	9	117	95	73	93	80	76		60	1			119	96	72	93	81	76		56		_
Limited English P			às	e					- 3		0	2							às .	8		10		
Dis. Less St. White	-54.3	-37.9		-42	-50	-50	-49	-62	-71		-70				-47	-44	-36	-24	-34	-46		-27		
District			20	24	11	21	25	15	14		16				20	10	24	39	22	10		54		
State White		3 8		66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te:	st		41	38	33	28	26	22		25				41	39	33	28	27	22		22		
Low Income																					1			
Dis. Less St. White	-26.1	-24.3		-32	-42	-36	-22	-20	-11		-18				-28	-29	-26	-23	-24	-25		-13		
District		92	5.5	34	19	35	52	57	74		68				39	25	34	40	32	31		68		
State White		1 10	2	66	61	71	74	77	85		86			ė.	67	54	60	63	56	56		81		
District - # Students	Taking Te:	st		283	270	252	266	280	253		218			4	284	271	250	266	280	253		215		
SPED			88																85					
Dis. Less St. Whit	-61.7	-55.0		-58	-59	-68	-62	-61	-56		-68				-54	-46	-59	-50	-53	-51		-77		
District				8	2	3	12	16	29		18				13	8	1	13	3	5		4		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st		77	66	94	81	87	78		56				77	66	93	83	91	79		55		
White	- 30	×2	e c						7		1						20		S.C	Ť.	1			
Dis. Less St. White	-14.0	-16.8		-20	-27	-12	-12	-8	-9		-11	-			-15	-24	-16	-11	-17	-17		-18		
District		10		46	34	59	62	69	76		75				52	30	44	52	39	39		63		г
State White		1 69	42	66	61	71	74	77	85		86	9			67	54	60	63	56	56		81		
District - # Students	Taking Te	st	6	157	170		186		199		141				157	172		187		200	1	136		-

New Bedford

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PARTN											2009	MC	ASI	rof	cien	cv -	All S	ubie	cts	and	Gra	des (Dist	rict
- INITIA	LIVE																			VS.				
New Bedford									=						,									
New Bealord								D		+ A 4	vanc	- d+F		ione	200	0								
		ř	£				-	- 140		IL AU	valle	eur	TOTIC	leiit	- 200	3								
	Average	Average	85	30	99		ا	nglis	h		80	00	10	ş					Math	200				e.
	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students			83	e							8	8							2	e				
Dis. Less St. White	-31.9	-26.4	85	-28	-28	-32	-38	-36	-31		-31				-23	-20	-20	-23	-32	-34		-38	, ,	
District			35	38	33	39	36	41	54		55		g:		44	34	40	40	24	22	g	43	, ,	
State White	100 100			66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st		932	1059	957	857	910	1003		543				936	1064	959	862	920	1009		533		
African American	318																							
Dis. Less St. White	-37.0	-32.7		-32	-34	-28	-38	-47	-39		-42				-34	-24	-19	-28	-36	-42		-49		
District		100	S-1	34	27	43	36	30	46		44				33	30	41	35	20	14		32		
State White		18	94	66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st		98	110	102	96	106	141		66	8			99	109	103	97	106	141		65		
Asian			30	e							85					9	36		88	e				
Dis. Less St. White	-20.1	2.3	ăs.	-6	G		-20	-31							3			14	-10					
District			30	60			54	46							70			77	46		c			
State White				66			74	77				,			67			63	56	,				
District - # Students	Taking Te	st		10			13	13							10			13	13					
Hispanic																								
Dis. Less St. White	41.4	-32.5		-34	-34	-43	-53	-42	-42		-50				-29	-22	-26	-38	-38	-40		-50		
District		100	200	32	27	28	21	35	43		36				38	32	34	25	18	16		31		
State White		1 16	16	66	61	71	74	77	85		86	8			67	54	60	63	56	56		81		
District - # Students		st	6	276	328	264	247	232	237		107	Š.			277	333	266	244	237	239		105		1_
Limited English P		, xt	do.	e	,						8								15	0				
Dis, Less St. White	-60.0	48.3		-40	-53	-60	-64	-63	-66		-82				-39	-33	-53	-50	-51	-51		-76		
District		3 03	30	26	8	11	10	14	19		4				28	21	7	13	5	5		5		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Tes	st		34	39	27	30	35	36		23				36	43	28	31	37	40		22		
Low Income																								
Dis. Less St. White	-36.4	-30.5		-31	-34	-34	-42	-41	-35		-42				-27	-24	-22	-29	-35	-39		-47		
District				35	27	37	32	36	50		44				40	30	38	34	21	17		34		
State White	<u> </u>		25	66	61	71	74	77	85		86				67	54	60	63	56	56		81		\perp
District - # Students	laking Te	ST.	S.	704	793	700	668	672	750		319	1	ii .		707	796	701	671	682	755		315		₩
SPED			88	e							8	2					3		8	2				
Dis. Less St. White	-61.6	48.3	35.	-49	-47	-60	-67	-70	-71		-76		4		-45	-35	-44	-49	-52	-53		-73		
District				17	14	11	7	7	14		10		5		22	19	16	14	4	3		8		_
State White	T-May 7		20	66	61	71	74	77	85	_	86				67	54	60	63	56	56		81		\vdash
District - # Students	raking Fe	SI .		193	179	196	177	168	165		97				193	180	197	178	170	170		96		\vdash
White	05.4																							
Dis. Less St. White	-25.4	-21.1		-24	-22	-26	-29	-30	-23		-24				-18	-18	-15	-14	-27	-29		-30		
District				42	39	45	45	47	62		62				49	36	45	49	29	27		51		_
State White			35	66	61	71	74	77	85		86				67	54	60	63	56	56		81		_
District - # Students	Taking Tes	st	ŝ	492	527	516	437	459	521		301				494	527	515	439	462	520		295		

Newton

COMMU																						lewto		
INITIAT															icien									
INTERNATION CANADAGES											Dist	rict	Les	s St	ate (Achi	even	nent	Gap	vs.	Wh	ite S	tude	nts
Newton																								
								Pe	ercer	nt Ad	vanc	ed+F	rofic	ient	- 200	9								
	Average	Average	310	70			E	nglis	h		6	1/2	000		97				Math	100	50	300	· ·	22
	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students			3)						- 15		8)	9							53	9				
Dis. Less St. White	9.4	16.8	10	10	14	12	10	10	4		5				16	21	20	15	17	21		8		
District			80	76	75	83	84	87	89		91				83	75	80	78	73	77		89		
State White	161 185			66	61	71	74	77	85		86	,			67	54	60	63	56	56		81		П
District - # Students	Taking Te	st		941	890	904	836	831	804		883				941	894	907	836	835	806		878		
African American	50%																							
Dis. Less St. White	-19.2	-23.8	115	-42	-14	-27	-10	-11	-13		-18				-29	-21	-19	-18	-31	-18		-30		
District				24	47	44	64	66	72		68				38	33	41	45	25	38		51		
State White		12		66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st	Š.	41	41	46	42	44	43		50	i i			40	40	46	42	44	42		49		
Asian			8					-	- 6		8								8					
Dis. Less St. White	12.6	26.0		13	21	16	12	14	5		6				19	29	29	24	32	33		17		
District			20.	79	82	87	86	91	90		92				86	83	89	87	88	89		98		
State White				66	61	71	74	77	85		86				67	54	60	63	.56	56		81		
District - # Students	Taking Te	st		146	137	125	125	97	125		111				147	137	126	125	98	125		111		
Hispanic	302		3.00		-				7				4				-90		.00	1				
Dis. Less St. White	-8.3	-7.2	55	-15	-1	-10	-9	-2	-16		-8				-1	3	-2	-15	-20	-12		-15		
District			W.	51	60	61	65	75	69		78				66	57	58	48	36	44		66		$\overline{}$
State White		: 10	100	66	61	71	74	77	85		86		-		67	54	60	63	56	56	1	81		$\overline{}$
District - # Students	Taking Te	st	ii.	63	74	59	40	48	39		46				62	76	59	40	48	39		47		$\overline{}$
Limited English P	roficient																							
Dis. Less St. White	-21.3	5.5		-17	-15	-33	-38	-9	-22		-19				8	4	-7	0	18	10		8		
District				49	46	38	36	68	63		67				75	58	53	63	74	66		89		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		-
District - # Students	Taking Te:	st		62	55	34	33	25	32		18				62	56	34	33	27	32		19		\vdash
Low Income	GX		SV-				1		10								70				6			
Dis. Less St. White	-17.1	-15.0	C.C.	-26	-16	-19	-21	9	-16		-12		-		-11	-13	-12	-17	-20	16		-17		
District			O.	40	45	52	53	68	69		74				56	41	48	46	36	40		64		
State White			11	66	61	71	74	77	85		86	-			67	54	60	63	56	56		81		-
District - # Students	Taking Te:	st		94	92	87	81	88	70		87				94	92	89	81	90	71		86		-
SPED			N.									0												
Dis. Less St. White	-22.1	-17.8		-31	-22	-24	-25	-21	-22		-12				-16	-17	-15	-20	-22	-19		-16		
District				35	39	47	49	56	63		74				51	37	45	43	34	37		65		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56	-	81		\vdash
District - # Students	Taking Te	st		160	160	187	168	178	177		206				159	162	189	168	179	177	1	204		-
White	- 32	- 1	100														77		CC .					
Dis. Less St. White	12.1	19.3	100	15	17	16	12	10	6		8				18	24	23	18	20	23		10		
District				81	78	87	86	87	91		94				85	78	83	81	76	79		91		
State White		1 9	91	66	61	71	74	77	85		86	0			67	54	60	63	56	56		81		-
District - # Students	Taking To	s+ :		658	584	636	587	596	545	_	641				660	586	638	587	600	548	_	636		-

Peabody

COMMU																					P	eaboo	ly (#	D12
PARTN											2009	MC	AS I	Prof	icien	cv -	All S	ubie	cts	and	Gra	des (Dist	rict)
INITIA	LIVE —				-																	ite S		
Christian Co. Son			_								Dist	HICE	Les:	5 31	are (-CIII	CVCI	Helit	Gap	V 5.	4411	ile o	uue	iits
Peabody																								
								P	ercer	nt Ad	vance	ed+F	rofic	ient	- 200	9								
	Average	Average					Е	nglis	h										Math					
	English	Math	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students																								
Dis. Less St. White	-6.5	-10.9		-15	-1	4	-1	-6	-6		-13				-11	-9	-12	-7	-12	-13		-12		
District		1010		51	60	67	73	71	79		73				56	45	48	56	44	43		69		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st		437	473	491	464	518	513		476				439	472	491	464	517	513	t	477		
African American	- 32																				-			
Dis. Less St. White	-26.6	-26.6	T.	-22	-17	-28		-44	- 7						-16	-17	-39		-39					
District				44	44	43		33							51	37	21		17					
State White		10	14	66	61	71	- 1	77	14		N	r.			67	54	60		56		1	1 1		
District - # Students	Taking Te	st	ŝ	16	16	14		12	- 3						16	16	14		12		8			
Asian		98		6					9								99			6	,			
Dis. Less St. White	-1.7	8.1			2			-19	15							18			-6	14				
District					63			58	100							72			50	70				
State White					61			77	85							54			56	56				
District - # Students	Taking Te	st			11			12	10							11			12	10				
Hispanic	98	ľ	N.C						7								-90		il e		-			
Dis. Less St. White	-28.4	-31.9	100	-30	-25	-22	-15	-31	-24		-41				-26	-33	-28	-22	-39	-32		-39		
District		100		36	36	49	59	46	61		45				41	21	32	41	17	24	6	42		
State White		5.00		66	61	71	74	77	85		86				67	54	60	63	56	56	-	81		
District - # Students	Taking Te	st	i,	65	39	47	51	69	44		80	Š.			66	38	47	51	69	45	8	77		
Limited English P	roficient								- 10										20	8				
Dis. Less St. White	43.6	-38.9		-41	-35			-47	-45		-66				-28	-38			-56	-46		-61		
District				25	26			30	40		20				39	16			0	10		20		
State White	100 00			66	61			77	85		86	l,			67	54			56	56		81		
District - # Students	Taking Te	st .		41	19			10	10		10				41	19			10	10		10		
Low Income	1000000																							
Dis. Less St. White	-25.0	-27.9		-26	-20	-26	-16	-31	-21		-36				-19	-25	-32	-30	-32	-30		-30		
District			100	40	41	45	58	46	64		50				48	29	28	33	24	26		51		
State White		16	14	66	61	71	74	77	85		86	ř.			67	54	60	63	56	56		81		
District - # Students	Taking Te	st .	Š.	158	126	132	119	134	118		97	8		į	159	126	132	119	133	116	6	98		
SPED			35										, ,						35	8				
Dis. Less St. White	49.2	48.0		-50	-43	-45	-42	-55	-51		-57				-42	-42	-50	-47	-51	-50		-54		
District			20	16	18	26	32	22	34		29				25	12	10	16	5	6		27		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st .		98	89	81	89	89	100		96				98	88	81	89	89	100		99		
White																								
Dis. Less St. White	-2.5	-7.5	100	-11	2	0	0	1	-5		-6	9			-8	-7	-9	-5	-6	-11		-6		
District				55	63	71	74	78	80		80	Ť			59	47	51	58	50	45	-	75		
State White		16		66	61	71	74	77	85		86	Ť			67	54	60	63	56	56		81		
District - # Students	Taking Te	st	Š.	333	395	415	385	411	440		374				334	395	415	385	410	439	9	378		

Springfield

COMMU																						ngfie		
PARTN											2009	MC	ASI	Profi	cien	cy -	All S	ubje	cts	and	Gra	des (Dist	rict)
- INITIA	IVE			1							Dist	rict	Les	s Sta	ate (Achi	even	nent	Gar	vs.	Wh	ite S	tude	nts)
On the official			_												,					-			-	,
Springfield																								
								Pe	ercer	it Ad	lvance	ed+F	rofic	ient	- 200	9								
	Average	Average					F	nglis	h										Math					
	English	Math	25 V=20	i es		1 30	_	_	_	685	Total I	0.000	1	500						100	go Thursts	Total Control		
	English	Matri	2	3	4	5	6	7	8	9	10	11	12	2	3	4	5	6	7	8	9	10	11	12
All Students				2															25	e				
Dis. Less St. White	-36.2	36.6		-30	-33	-34	-43	-41	-37		-36				-29	-27	-30	-42	-40	-45		-45		
District			0.0	36	28	37	31	36	48		50				38	27	30	21	16	11		36		
State White				66	61	71	74	77	85		86	,			67	54	60	63	56	56		81		
District - # Students	Taking Te	st		1930	1856	1837	1809	1712	1901		1551				1942	1871	1852	1819	1741	1878	3	1530		
African American	(0)																				1			
Dis. Less St. White	-34.4	-39.2		-28	-32	-36	-43	-38	-32		-33				-30	-29	-33	-47	-41	-47		-46		
District				38	29	35	31	39	53		53				37	25	27	16	15	9		35		
State White		10		66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st	ĺ.	411	387	413	391	357	448		478	2			410	388	416	391	360	448		468		- 9
Asian				e		8 8			- 3		83						- 20							
Dis. Less St. White	-9.6	-1.4		-13	-16	-14	-8	0	-5		-12				-3	-7	4	15	4	-15		-6		
District				53	45	57	66	77	80		74				64	47	64	78	60	41		75		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st .		28	42	28	41	35	39		39				28	43	28	41	35	39		40		
Hispanic	(1)2	A	, CC						7		Y										-			
Dis. Less St. White	42.8	41.8		-37	-38	-38	-48	-49	-46		-45				-36	-32	-35	-48	-44	-49		-53		
District		100	19	29	23	33	26	28	39		41				31	22	25	15	12	7		28		
State White		1 18	92	66	61	71	74	77	85		86	2	-		67	54	60	63	56	56		81		9
District - # Students	Taking Te	st	Š.	1036	1110	1075	1064	1025	1051		713				1050	1122	1088	1076	1046	1030)	703		
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Dis. Less St. White	-64.9	-52.8		-50	-50	-65	-70	-73	-82		-78				-49	-43	-50	-60	-54	-54		-70		
District				16	11	6	4	4	3		8				18	11	10	3	2	2		11		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st .		272	272	217	206	197	208		140				288	277	225	210	203	199		144		
Low Income				-																				
Dis. Less St. White	-39.5	-39.1	374	-33	-36	-37	-47	-44	-41		-40	1			-32	-29	-34	-46	-42	-47		-48		
District		100	170	33	25	34	27	33	44		46				35	25	26	17	14	9	-	33		
State White		100	11	66	61	71	74	77	85		86				67	54	60	63	56	56	-	81		1
District - # Students	Taking Te	st	j.	1681	1611	1606	1537	1432	1562		1092	3			1691	1626	1621	1549	1454	1541	16	1081		- 1
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Dis. Less St. White	-63.4	-54.7		-49	-54	-58	-68	-71	-70		-71				-48	-46	-50	-60	-54	-55	1	-71		
District				17	7	13	6	6	15		15				19	8	10	3	2	1		10		
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		
District - # Students	Taking Te	st		391	415	434	435	457	573		364				394	418	439	444	471	562		370		
White	(1)	77	1						T'		Ť						, Y							
Dis. Less St. White	-20.1	-18.8	i e	-13	-16	-16	-30	-21	-22		-24				-7	-8	-12	-22	-26	-29		-29		
District			, ce	53	45	55	44	56	63		62				60	46	48	41	30	27		52		
State White		1 10	0.1	66	61	71	74	77	85		86	8			67	54	60	63	56	56	1	81		9
District - # Students	Taking Te	st	š	300	250	252	245	229	278		261	8			300	253	253	244	235	275		260		

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State White District - # Students	alden Ta		4	66	61	71	74	77	85		86	_	-		604	54	60	63	56	56	_	81	_	_
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Dis Less St. White	20.0	20.0		24	22	25	27	40	27		25				22	47	24	20	20	42		200		
	-26.8	-29.9		-31	-23	-25	-37	-18	-27		-25				-23	-17	-21	-36	-39	-42		-29		
District State White				35 66	38 61	46 71	37 74	59 77	58 85		61 86			_	67	37 54	39 60	27 63	17 56	14 56	_	52 81		₩
State vvnite District - # Students														_										
Asian	aking res	ol .	0);	48	45	53	54	46	54		46				48	46	53	53	46	57		45		
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District				42	45		54		61						46	35				22				₩
State White District - # Students	-13 T-			66	61	71	74	77	85		86			_	67	54	60	63	56 67	56		81		
		51	D)	63	83	81	57	64	68		44		0		63	83	81	57	67	67		44		
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Dis. Less St. White	24.0	-24.7	Č.	40	40	20	20	22	24		-19				47	40	20	20	-30	22		-30		
District	-21.6	-Z4.1		- 18	- 18	-29 42	-20 54	- 22	-24 61		67				- 17	-10	-26 34	-29 34	26	-33 23		51		
State White			-	66	61	71	74	77	85	_	86				67	54	60	63	<i>2</i> 6	56		81	-	-
District - # Students	aking To-	+	2	271	273	263	263	278	271	-	150			\vdash	269	273	263	264	281	274		146		\vdash
SPFD	aning 18:	ot .	-	211	213	203	203	216	211		100				209	213	203	204	281	214		140	-	
Dis. Less St. White	-56.3	-50.7	10	-44	47	04	-57	-60	O.F.		62	2			10	42	-51	E7	-51	Ed		-62		
Dis. Less St. White	-30.3	-30.7	85	22	-47 14	-61 10	17	17	- 65		-62 24		6 -		21	- 42	-51	-57 6	-51	- 51	G.	19		
State White			0	66	61	71	74	77	85		86		6		67	54	60	63	56	56		81		
District - # Students	aking To-	l of		108	111	125	116	107	108		58	_	-	<u> </u>	107	112	125	117	108	107	-	59	<u> </u>	-
White	aning rea	20	VI.	106	1111	123	110	107	108		36		9 15		107	112	123	1117	100	107		28		
Dis. Less St. White	4.3	-5.7		-	2	-9	-3	-5	-7		2			-	1	5	-7	0	-11	-13		-5		
Dis. Less St. vvnite	4.3	-3.7		-1 65	-2	62	71	72	78		-2 84				68	59	53	- 8	45	43		76		
State White			-	66		71	74	77	85		86			-	67	54	60	63	56	56		81	-	-
District - # Students	olding To			468	61 467	467	513	529	509		338			\vdash	467	469	468	512	532	512		330		-

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All Students																								
Dis. Less St. White	-26.8	-24.5		-31	-30	-29	-26	-26	-26		-19				-27	-23	-24	-20	-25	-28		-24		
District	2010	2.110	2	35	31	42	48	51	59		67				40	31	36	43	31	28		57		$\overline{}$
State White				66	61	71	74	77	85		86				67	54	60	63	56	56		81		-
District - # Students	Taking Tes	st		1824				1480	1599		1604					1664	1645		1507			1597		-
African American	(0):		Ç.						10.				1											
Dis. Less St. White	-28.4	-33.1		-36	-36	-28	-27	-30	-27		-17				-36	-31	-31	-30	-37	-36		-31		
District		17		30	25	43	47	47	58		69		-		31	23	29	33	19	20		50		
State White		10	92	66	61	71	74	77	85		86		1	!	67	54	60	63	56	56	-	81		-
District - # Students	Taking Tes	st	-	215	215	219	218	196	229		248	8			214	216	221	220	205	229		245		-
Asian				1	Ť	T	1									<u> </u>		1						
Dis. Less St. White	-14.8	-3.7		-19	-27	-22	-15	-6	-13		0				-11	-6	-3	4	2	-10		0		
District				47	34	49	59	71	72		86		-		56	48	57	67	58	46		81		+-
State White		2	-	66	61	71	74	77	85		86				67	54	60	63	56	56		81		-
District - # Students	Taking Tes	st		146	123	131	125	116	133		125		1	t	146	123	132	126	121	135		123		+
Hispanic		100	, CC		120											120	102	120			-	1.00		
Dis. Less St. White	41.3	-38.0	Ç.	-47	-43	-47	-40	-40	-38		-32	9			-40	-32	-36	-36	-41	-43		-38		
District				19	18	24	34	37	47		54	-			27	22	24	27	15	13		43		_
State White		1 10	12	66	61	71	74	77	85		86	7		1	67	54	60	63	56	56	1	81		-
District - # Students	Taking Tes	st .	-	690	611	579	557	572	593		539	8	le .		688	609	583	561	574	595		541		1
Limited English P				000	011	0,0	-	012	000		000),			-	000	000	001	01.4			041		
Dis. Less St. White		42.7	-	-44	-48	-54	-55	-64	-67		-67				-37	-33	-42	-48	-48	-50		-66		
District	-5014	72.1	17.	22	13	17	19	13	18		19				30	21	18	15	8	6		15		_
State White				66	61	71	74	77	85		86		-	1	67	54	60	63	56	56		81		† -
District - # Students	Taking Tes	st	7	624	459	387	305	238	221		155				625	455	392	310	243	221	1	155		-
Low Income				02.	100	001	000	200			100				020	100	002	0.0	2.10			100	-	
Dis Less St White	-35.9	-33.7		-41	-39	-41	-35	-34	-33		-26	4			-37	-31	-34	-30	-34	-37		-32		
District	00.0			25	22	30	39	43	52		60			1	30	23	26	33	22	19		49		1
State White		1 10	91	66	61	71	74	77	85		86				67	54	60	63	56	56	-	81		-
District - # Students	Taking Tes	st		1273		1099		1042	1116		991				1272				1060			986		-
SPED				-		-																		
Dis. Less St. White	-61.3	-52.6		-56	-56	-60	-63	-64	-66		-63				-54	-45	-52	-54	-50	-55		-59		
District	0	02.0	2.	10	5	11	11	13	19		23			Y	13	9	8	9	6	1		22		_
State White				66	61	71	74	77	85		86			t	67	54	60	63	56	56		81		$\overline{}$
District - # Students	Taking Tes	st .		332	372	376	373	372	427		321	-		l –	331	373	381	376	381	427		318		-
White		99	Sec.			1			7/		1	1						1	N.	1	-	1		
Dis. Less St. White	-15.6	-13.1	54	-19	-18	-16	-15	-14	-15		-12				-15	-15	-13	-8	-11	-16		-13		
District	-10.0	-10.7		47	43	55	59	63	70		74				52	39	47	55	45	40		68		_
State White			92	66	61	71	74	77	85		86		-	 	67	54	60	63	56	56	-	81		-
District - # Students	Taking Tes	et .	2	703	661	654	635	561	616	-	673	Si .	1	1	702	663	657	637	571	613	1	668		+

Endnotes

- 1. See Caroline Hoxby's study for more complete discussion of the degree to which different demographic factors are correlated with student achievement in "If Families Matter Most, Where Do Schools Come In?" in Terry M. Moe (ed.) *A Primer on America's Schools* (Stanford University: Hoover Institute Press, 2001).
- 2. See also V.E. Lee and D.T. Burkam, "Inequality at the Starting Gate: Social Background Differences in Achievement as Children Begin School," *Economic Policy Institute* (2002), from http://epicpolicy.org/files/Inequality%20at%20 the%20Starting%20Gate.pdf retrieved on November 20, 2009. Or see L. Woessmann, *How Equal are Educational Opportunities? Family Background and Student Achievement in Europe and the US*. CESifo Working Paper Series No. 1162 (March 2004), abstract available at: http://ssrn.com/abstract=528209.
- 3. See the recent American Institutes of Research study detailing which instructional models provide significant gains disadvantaged students. American Institutes for Research review and evaluation of the top school reform models suggests that only two school reform models have sufficient evidence that using the model will promote significant gains in learning: Direct Instruction and Success for All. Although other models are discussed as having potential for effects, the size of the effect according to the report is not as substantial as the other two models. The report contains a good review of the literature and research studies for all models and can be found at: http://www.csrq.org/documents/

<u>CSRQCenterCombinedReport_Web11-03-</u>06.pdf

- 4. From Kevin Carey: November 7, 2002; *State Poverty-Based Education Funding: A survey of current programs and options for improvement*, at www.cbpp.org.
- 5. Christopher Jencks and Susan Mayer in their oft cited work "The Social Consequences of Growing up in a Poor Neighborhood," in L. Lynn and M. McGreary (eds.) Inner-city Poverty in the United States (Washington, D.C.: National Academy Press 1990). Jencks and Mayer propose that communities could influence student achievement, for example, by providing role models or enforcement of social norms, such as earning a high school diploma (or not). For an interesting discussion on the community variables impacting student achievement, see Gary Solon, M.E. Page, and Greg J. Duncan's paper, "Correlations Between Neighboring Children in their Subsequent Educational Attainment," in The Review of Economic and Statistics, August 2000, 82(3): 383-392.
- 6. For more information about the American Community Survey (ACS) see references at the end of this Appendix.
- 7. From Kevin Carey, State Poverty-Based Education Funding: A survey of current programs and options for improvement, November 7, 2002; at www.cbpp.org.
- 8. Research cited in Carey page 14: http://www.cbpp.org/archiveSite/11-7-02sfp.pdf.
- 9. A household's poverty level status is determined based on answers to the income questions of the ACS. If a family is below the appropriate poverty threshold, the household is classified as poor. (For more information, see ACS information in references.)

- 10. "x" denotes sub-tables A, B, and I for white, African-Americans, and Hispanics, respectively.
- 11. Information quoted from ACS webpage retrieved on November 11, 2009 from: <a href="http://factfinder.census.gov/jsp/saff/SAFFInfo.jsp?_pageId=sp1_acs&_submenuId="http://gov/jsp/saff/SAFFInfo.jsp?_pageId=sp1_acs&_submenuId="http://gov/jsp/saff/SAFFInfo.jsp?_pageId=sp1_acs&_submenuId="http://gov/jsp/saff/SAFFInfo.jsp?_pageId=sp1_acs&_submenuId="http://gov/jsp/saff/SAFFInfo.jsp?_pageId=sp1_acs&_submenuId="http://gov/jsp/saff/SAFFInfo.jsp?_pageId=sp1_acs&_submenuId="http://gov/jsp/saff/SAFFInfo.jsp?_pageId=sp1_acs&_submenuId="http://gov/jsp/saff/SAFFInfo.jsp?_pageId=sp1_acs&_submenuId="http://gov/jsp/saff/SAFFInfo.jsp?_pageId=sp1_acs&_submenuId="http://gov/jsp/saff/SAFFInfo.jsp?_pageId=sp1_acs&_submenuId="http://gov/jsp/saff/SAFFInfo.jsp?_pageId=sp1_acs&_submenuId="http://gov/jsp/saff/SAFFInfo.jsp?_pageId=sp1_acs&_submenuId="http://gov/jsp/saff/SAFFInfo.jsp?_pageId=sp1_acs&_submenuId=sp1_acs&_s
- 12. A regression analysis was conducted using ACS poverty estimates across the PUMS poverty estimates; the resulting predicted scores were used as the adjusted ACS poverty score.
- 13. J. Hausman, "Mismeasured Variables in Econometric Analysis: Problems from the Right and Problems from the Left," *Journal of Economic Perspectives* (2003): 57–67.
- 14. See the ACS manual "Accuracy of the Data" p. 11-13
- 15. From Michael Beaghen and Lynn Weidman, Statistical Issues of the Interpretation of the American Community Survey's One-, Three- and Five-Year Estimates. US Census Bureau, (October, 2008).
- 16. For more information on PUMS see: http://www.census.gov/acs/www/Products/PUMS/ (accessed on November 19, 2009)
- 17. A 5 Geographic Terms and Concepts, ACS Fact Finder, www.uscensus.org
- 18. From ACS Design Methods: Survey Rules, Concepts, and Definitions, see references for more information.
- 19. For more information about similar tests of significance used in gap studies see, A. Vanneman, L. Hamilton, J. Anderson Baldwin, and T. Rahman, Achievement Gaps: How Black and White Students in Public Schools Perform in Mathematics and Reading on the National Assessment of Educational

- *Progress* (NCES 2009-455) (National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC 2009).
- 20. Tested N: Number of completed MCAS tests 2007-2009.
- 21. %Prof+: Percent proficient and above 2007-2009.
- 22. Gap Upper-Bound 95%: The upper boundary (95% confidence interval) of the performance gap with state whites. Actual gaps that are smaller than this boundary are significantly different from the Predicted Gap.
- 23. Gap Lower-Bound 95%: The lower boundary (95% confidence interval) of the performance gap with state whites. Actual gaps that exceed this boundary are significantly different from the Predicted Gap.
- 24. Actual Gap%: Actual gap % between the state white performance and district performance.
- 25. Predicted Gap%: Predicted gap % between the state white performance and district performance based upon the predictions using district poverty and adult educational attainment.
- 26. Gap Difference%: Equals the difference between the Actual Gap % and the Predicted Gap %. A positive value, if significant, indicates the district exceeded expectations of the predictors. A negative value, if significant, indicates district did not meet expectations of the predictors.

