



Racial Segregation and Educational Outcomes in Metropolitan Boston

By

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April 2004

Racial Segregation and Educational Outcomes in Metropolitan Boston Executive Summary

Even as we commemorate the fiftieth anniversary of the landmark *Brown vs. Board of Education* Supreme Court decision, in which “separate” was deemed “inherently unequal,” and the thirtieth anniversary of the Boston school desegregation order, school segregation and its associated unequal opportunities persist and are increasingly metropolitan-wide in scope. In many ways, metro Boston provides an interesting example of the dynamics of segregation. Since the 1970s, the City of Boston has been the center of attention for desegregation efforts in the urban North. Boston’s urban desegregation experience was, in important respects, the nation’s worst, due to a unique level of violence and political polarization in the city. However, two of the region’s most important demographic trends: the continued outward movement of the population to the suburbs and the rapid growth of multiple racial and ethnic population groups--particularly in urbanized satellite cities outside Boston--suggest that the Boston model may no longer be the most relevant. It is notable that the most recent major desegregation battle occurred in the satellite city of Lynn, where the use of race in school assignments was contested in the federal district court in *Comfort v. Lynn School Committee*¹ (2003.) In upholding the use of race to maintain racially and ethnically diverse schools, this decision cited detailed local demographic and educational research on the value of integration for education. We need to look beyond the much-maligned Boston Public School experience, consider the real successes in some metro communities such as Lynn, and develop new policies to insure equity and opportunity for all children across the whole metropolitan area.

The Boston metropolitan area is overwhelming white and suburban. Of the 767,601 students attending 1,457 public schools in 2001-02, approximately 76 percent of the students were non-Latino white, ten percent were Latino, nine percent black, and five percent Asian. Seven out of every ten students attended schools in the suburbs. By contrast, the Boston Public Schools enrolled just eight percent of public school students in the metropolitan area and only two percent of white students.

White students in Metro Boston attend very segregated schools, and over the 1990s, school segregation remained at high levels. Seven in ten white students attend schools in the outer suburbs—schools that are over ninety percent white. In contrast, more than three quarters of black and Latino students attend schools in the City of Boston or in one of the urbanized satellite cities. Not only are students segregated by race, they are also highly segregated by language. Latino and Asian English Language Learners (ELLs) are highly isolated and are much more likely to attend schools with significant numbers of Latino and Asian students, respectively, than are English Language Speakers.

Even more than the national average, segregated minority schools in Metro Boston are also high-poverty schools. Ninety-seven percent of the intensely-segregated-minority schools (those over 90 percent minority) have a majority of students who are eligible for free or reduced lunch, compared to only one percent of low-minority schools (those over 90 percent white.) Because of this high correlation, there are almost no low-poverty /high-minority schools or high-poverty/low-minority schools in the metropolitan area. Almost one in five black and Latino students attend a school which is **both** 90 percent of more minority and where over half of the students are eligible for free or reduced lunch.

Segregation is related both to key aspects of schooling opportunity and also to test results and graduation rates. For example, 94 percent of the teachers in schools with less than 10 percent poor and minority

¹ *Comfort ex rel. Neumyer v. Lynn School Committee*, 263 F.Supp. 209 (D.Mass. 2003).

students are certified, in contrast to only 78 percent in high-minority and high-poverty schools. Despite state regulations of teacher certifications and The No Child Left Behind requirement that schools have highly qualified teachers, there is still significant variation in the proportion of certified teachers by poverty and minority composition in the schools.

The Massachusetts Comprehensive Assessment System (MCAS) has been the centerpiece of Massachusetts educational reform in recent years and is used to evaluate the success of schools and to target sanctions both under state policy and under the federal No Child Left Behind Act. MCAS has been endlessly discussed, but its relationship with segregation has not been systematically explored. Our analysis shows a disturbingly powerful relationship. We recognize that, given the context of intense segregation in the metropolitan area and the disproportionately high enrollment of students in low-minority and low-poverty schools, one must be careful in drawing conclusions about MCAS results. Given these considerations, however, the differences in the percent of tenth grade students passing the English Language Arts (ELA) MCAS between intensely-segregated-white schools and intensely-segregated-minority schools are striking enough to merit comment, especially given that the introduction of the MCAS as a high school graduation requirement will affect access to higher education and future earnings for all students in the state. On average, 96 percent of students in low-minority, low-poverty schools passed the English Language Arts (ELA) MCAS. In contrast, just 61 percent of the students passed in intensely-segregated-minority/ high-poverty schools. Districts in which less than half of the students scored “proficient” or “advanced” tend to be those with high concentrations of minority students, such as Boston, Lawrence, Lowell, and Lynn. In the future, we hope to provide further analysis of MCAS scores of students attending schools with varying degrees of desegregation, though this research is contingent on the willingness of the State Department of Education to make appropriate data available.

Differences in estimated high school completion rates between schools with different racial and poverty compositions are also quite remarkable in the Boston Metropolitan Area. Less than half of the students in high-poverty/high-minority schools are estimated to complete high school on time (45%), compared to more than three quarters (79%) of their peers in low-poverty /low-minority schools. We cannot underestimate the seriousness of the large numbers of students in the metro area who are not completing their education, not only for their own prospects, but also for the largely minority communities where they live, many of which already have high shares of adults without high school diplomas.

The metropolitan region has a serious problem, and it will not go away by itself. The area has a rich variety of experiences in ways to address the challenge positively, including the popular yet underfunded METCO program. Some of the positive impacts of desegregation are very similar to the diversity benefits for all students recognized by the Supreme Court in its 2003 decision upholding affirmative action at the University of Michigan. Citing social science research, the Supreme Court held that interracial schooling had benefits for all students, that it helped prepare leadership that could function across racial lines, and that it aided major American institutions and our democracy. Furthermore, surveys of high school students in Cambridge and Lynn found that students of all races in these diverse and desegregated districts report positive interracial learning experiences and very high levels of confidence about their ability to live and work together as adults. This paper shows that separate schools are still profoundly unequal in spite of an intense educational reform issue in Massachusetts. In fact, when the reforms ignore these inequalities they can end up unfairly punishing their victims who were never offered an equal opportunity to learn. It is time for a region-wide discussion on ways in which we can have more schools that will prepare all of our children for the far more multiracial society that is rapidly emerging in the metropolitan region.

Background: Why Study Racial Segregation and High Stakes Testing in Metropolitan Areas?

A half-century after the Supreme Court found that segregated schools are “inherently unequal,” there is growing evidence that the Court was correct. Desegregated schools offer tangible advantages for students of each racial group. The Supreme Court clearly recognized this for American higher education in its *Grutter v. Bollinger* decision last summer.¹ Our work at the Harvard Civil Rights Project, however, shows that as public schools across the nation have become steadily more nonwhite, there has been a dramatic trend towards school resegregation in both suburbs and central cities.² Segregation is now less an urban issue than it is a metropolitan one.³

National Trends

Some contend that the trend towards segregation is inevitable because desegregation failed and American families have overwhelmingly turned against it.⁴ In fact, armed with more information on the benefits of desegregation, public opinion has actually become more favorable.⁵ Others contend that school segregation is growing for minority families because housing segregation has increased. While residential segregation is strongly linked to school segregation, housing actually became modestly *less* segregated for minorities, particularly for black families, during the 1980s and 1990s,⁶ and yet children are becoming increasingly segregated in the schools they attend.

Our research identifies two basic trends that parallel increasing school segregation. One is the rapidly changing face of our nation’s schools. Since 1968, the white share of public school enrollment has dropped from 80 percent to its present share of 60 percent.⁷ Concurrent with the decrease in the white proportion is the increase in the Latino share: 17 percent of public school enrollment is now Latino, compared to less than 5 percent in 1968. Latinos now make up the same share of the school enrollment as do

¹ *Grutter v. Bollinger*, 123 S. Ct. 2325 (2003).

² Orfield, G. and Lee, C. “Brown at 50: King’s Dream or Plessy’s Nightmare?” Cambridge, MA: The Civil Rights Project at Harvard University.

³ Clotfelter, C.T. (1999). “Public School Segregation in Metropolitan Areas. *Land Economics*. 75(Nov):487-504; Reardon, S. and Yun, J. (2001). “Private School Racial Enrollments and Segregation.” Cambridge, MA: The Civil Rights Project.

⁴The most recent Gallup Poll found in 1999 that 60% of Americans believe that more should be done for desegregation “Gallup Poll Topics: Education, “ (Gallup Poll, qn23 July 1999). Five years earlier, the year after the Supreme Court had authorized a return to segregated schools, 60% had also believed that more should be done (Gallup Poll, Question qn34, April 1994). Furthermore, in a 1998 survey conducted by Public Agenda, less than one-tenth of Blacks and only one fifth of whites said that it was “not too important” to have “a diverse student body with kids from different ethnic and racial backgrounds.” (Farkas, S., Johnson, J., Immerwarh, S., & McHugh, J. *Time to Move on: African-Americans and White Parents Set an Agenda for Public*. New York: Public Agenda, 1998).

⁵Ibid. qn21, July 1999. 67% of Americans said that desegregation had improved Black education and 50% said that it had improved education for whites.

⁶ Logan, J. “Ethnic Diversity Grows, Neighborhood Integration Lags Behind.” Albany, NY: Lewis Mumford Center, 2001.

⁷ Orfield, G. and Lee, C. (2004). “Brown at 50: King’s Dream or Plessy’s Nightmare?” Cambridge, MA: The Civil Rights Project at Harvard University.

African Americans. Given these rapid changes in enrollment, it is perhaps reasonable to expect less exposure of minority students to white students in our nation's schools.

However, these trends do not entirely explain the *extent* to which the schools are racially isolated nor do they explain the period from the late 1960s to the late 1980s in which black desegregation *increased* even as white share of enrollment *decreased*. Our research has shown that the resegregation for black students closely paralleled a set of Supreme Court decisions that reversed much of the progress made by active enforcement of desegregation orders that took place before the 1990s. After decades of relatively stable desegregation, three Supreme Court decisions between 1991 and 1995 limited school desegregation and authorized a return to segregated neighborhood schools, decisions which were interpreted by a number of Southern courts as prohibiting even voluntary race-conscious plans to maintain desegregated schools where local authorities believed integration to be a crucial local goal.⁸ The impact of these desegregation orders cannot be underestimated, particularly when we examine the increasing segregation for Latino students, for whom there was never any serious desegregation effort. The share of Latino students in 90-100% minority schools more than tripled between 1968 and 2001, from 12 percent to 37 percent.⁹ The high segregation levels for both black and Latino students in the Northeast and Midwest are largely due to a Supreme Court that very seriously limited desegregation in the North with its Detroit decision, *Milliken v. Bradley* (1974).¹⁰ This decision blocked desegregation across city-suburban boundaries despite evidence that lasting desegregation was increasingly impossible within overwhelmingly nonwhite city school districts.¹¹ The city of Boston unsuccessfully urged the Supreme Court to include suburbs in desegregation plans, correctly predicting that limiting them to the city would create major problems.¹²

In addition to the reversals by courts, inaction or opposition by executive agencies was also a factor in maintaining segregation. Most notably during the Nixon Administration, the executive branch stopped enforcing desegregation (until ordered to resume by a federal court). There have been no significant policy initiatives to foster desegregated schooling for thirty years. Clearly, the patterns of segregation, desegregation and resegregation for black students reflect the direction of social policy and are the result of government inaction and court rulings. Furthermore, school options that emphasize choice without making provisions for equity have contributed to the segregation of minority students, especially in urban centers of large metropolitan areas.¹³

⁸ The Civil Rights Project cosponsored a conference on the resegregation of the South in Chapel Hill with the University of North Carolina and the Thurgood Marshall School of Law at Southern University in Houston. The nineteen new studies produced for that conference and exploring many dimensions of Southern resegregation can be found at www.civilrightsproject.harvard.edu and in a forthcoming book from the University of North Carolina Press.

⁹ Orfield, G. and Lee, C. "Brown's Dream or Plessy's Nightmare?" Cambridge, MA: The Civil Rights Project at Harvard University.

¹⁰ In *Milliken v. Bradley*, 418 U.S. 717 (1974), the Supreme Court ruled against desegregation across city-suburban lines, exempting majority white suburbs from the desegregation effort outside the South.

¹¹ Orfield, G. & Eaton, S.E. (1996). *Dismantling Desegregation: The Quiet Reversal of Brown v. Board of Education*, New York: New Press, chapters 1-3.

¹² *Bonner-Lyons v. School Committee of City of Boston*, 480 F.2d 442 (1973).

¹³ For a discussion on the impact of voucher programs on segregation, see Reardon, S. and Yun, J. (2002) "Private School Racial Enrollments and Segregation." Cambridge, MA: The Civil Rights Project at

The increasing levels of segregation must be considered in the context of the strong correlation between race and poverty. Children in segregated schools often experience conditions of concentrated disadvantage, including less experienced or unqualified teachers, fewer demanding pre-collegiate courses and more remedial courses, and higher teacher turnover.¹⁴ The strong correlation between race and poverty means that a great many black and Latino students attend schools of concentrated poverty.

At the same time that segregation levels are rising, policymakers are relying more on high-stakes tests to hold schools responsible for helping all children meet achievement targets. While this serves as an incentive for schools to improve teaching and learning in principle¹⁵, there has been evidence that high stakes tests, rather than promote educational excellence for all children, disadvantage minority students who are disproportionately found among those who fail to meet the cutoff scores.¹⁶ As a result, these students are more likely to drop out of high school and fail to receive the training necessary to succeed in the labor market and postsecondary academic institutions.¹⁷ Other studies have found that using high-stakes tests to determine whether a student will graduate from high school or not, such as those in states such as Massachusetts, might severely set back students of color and result in students dropping out of school.¹⁸

Harvard University. For an analysis of charter schools and segregation in public schools, see Well, A.S. (Ed.). (2002) *Where Charter Policy fails: The Problems of Accountability and Equity*. New York: Teachers College Press.

¹⁴ B.A., and Smith, T.M. (1997). The Social Context of Education. *The Condition of Education*, 97-991; Freeman, C., Scafidi, B., & Sjoquist, D.L. (2002). Racial segregation in Georgia public schools, 1994-2001: Trends, causes, and impact on teacher quality. Paper presented at the Resegregation of Southern Schools Conference, University of North Carolina at Chapel Hill; Orfield, G. and Eaton, S. (1996). *Dismantling Desegregation*. New York: New Press, Chapter 3. For a full discussion of the consequences of segregation, see discussion infra.

¹⁵ Education Week. (1999). *Quality Counts 1999*. Bethesda, MD: Education Week.; Elmore, R. F., Abelman, C. H., & Fuhrman, S. H. (1996). The New Accountability in State Education Reform: From Processes to Performance. In H. F. Ladd (Ed.), *Holding Schools Accountable* (pp. 65-98). Washington, DC: The Brookings Institution Press.

¹⁶ Horn, C. (2003). High-Stakes Testing and Students: Stopping or Perpetuating a Cycle of Failure? *Theory into Practice*, v.42(1), pp. 30-51; Kohn, A. (2000). *The Case Against Standardized Tests: Raise the Scores, Ruin the Schools*. Portsmouth, NH: Heinemann; Kornhaber, M., & Orfield, G. (2001). High-Stakes Testing policies: Examining their Assumptions and Consequences. In G. Orfield & M. Kornhaber (Eds.), *Raising Standards or Raising Barriers? Inequality and High Stakes Testing in Public Education*. (pp. 1-19). New York: The Century Foundation.

¹⁷ Figueroa, R.A., and Hernandez, S. (2000). Testing Hispanic Students in the United States: Technical and policy issues. Washington, D.C.: U.S. Department of Education, President's Advisory commission on Educational Excellence for Hispanic Americans; Haney, W., Madaus, G., Abrams, L., Wheelock, A., Miao, J. and Grura, I. (2004). "The Educational Pipeline in the U.S., 1970-2000." Boston, MA: The National Board on Education Testing and Public Policy; Madaus, G., & Clarke, M. (2001). The Adverse Impact of High-Stakes Testing on Minority Students: Evidence from One Hundred Years of Test Data. In G. Orfield & M. L. Kornhaber (Eds.), *Raising Standards or Raising Barriers? Inequality and High Stakes Testing in Public Education*. New York: The Century Foundation Press.

¹⁸ A study from Boston College found that after accounting for factors such as migration, home-schooling, private school enrollment, and teen mortality, the authors found states requiring schools to retain students or deny them high school diplomas on the basis of test scores have the sharpest declines in graduation rates. See Haney, W., Madaus, G., Abrams, L., Wheelock, A., Miao, J. and Grura, I. (2004). "The Educational Pipeline in the U.S., 1970-2000." Boston, MA: The National Board on Education Testing and Public Policy; Brennan, R., Kim, J., Wenz-Gross, M., and Siperstein, G. (2001). "The Relative Equitability of

Dropout rates in urban settings with high concentrations of poor and minority students far surpass the national average, according to recent estimates by the Urban Institute. The average dropout rate in the largest 47 urban districts is nearly twice that of the national average. When one breaks down these numbers by race, only about half of blacks and Latinos are graduating from high school on time.¹⁹ According to the U.S. Census, the economic cost of dropping out is more than a quarter million dollars (\$270) over the course of a person's working life.²⁰ Even more disturbing is the fact that the earnings gap between high school graduates and dropouts has increased since 1975 by as much as 20 percentage points. Whereas high school dropouts earned 90 percent as much as high school graduates in 1975, they now earn 70 percent as much and, due to changes in the economy, unemployment is also on the rise for high school dropouts. The unemployment rate for dropouts is about 7 percent, compared to 4 percent for high school graduates.²¹

Some of the positive impacts of integration are very similar to the diversity benefits for all students recognized by the Supreme Court in its 2003 decision upholding affirmative action at the University of Michigan. Citing social science research, the Supreme Court held that interracial schooling had benefits for all students, that it helped prepare leadership that could function across racial lines, and that it aided major American institutions and our democracy. Justice O'Connor's majority opinion concluded that "numerous studies show that student body diversity promotes learning outcomes, and 'better prepares students for an increasingly diverse workforce and society, and better prepares them as professionals.' "These benefits," she concluded, "are not theoretical but real, as major American businesses have made clear that the skills needed in today's increasingly global marketplace can only be developed through exposure to widely diverse people, cultures, ideas, and viewpoints....What is more, high-ranking retired officers and civilian leaders of the United States military assert that, '[b]ased on [their] decades of experience,' a 'highly qualified, racially diverse officer corps ... is essential to the military's ability to fulfill its principle mission to provide national security.' ...To fulfill its mission, the military ... must train and educate a highly qualified, racially diverse officer corps in a racially diverse setting.' We agree that '[i]t requires only a small step from this analysis to conclude that our country's other most selective institutions must remain both diverse and selective.'"²² Recent surveys of high school students have produced very similar findings.²³ Desegregation is related to

High Stakes Testing versus Teacher Assigned Grades: An Analysis of the Massachusetts Comprehensive Assessment System (MCAS)", *Harvard Education Review*. 71(2):173-216.

¹⁹ Orfield, G., Losen, D., Wald, J., and Swanson, C. (2004). "Losing Our Future: How Minority Youth are Being Left Behind by the Graduation Rate Crisis." Cambridge, MA: The Civil Rights Project at Harvard University

²⁰ U.S. Bureau of Labor Statistics, "Manufacturing," on-line table, modified October 2, 2003 (U.S. Department of Education, National Center for Education Statistics, 2003, Table 380); U.S. Census Bureau, 2003, Table POV29; U.S. Census, *The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings*, (2003). Retrieved February 18, 2004 from <http://www.census.gov/prod/2002pubs/p23-210.pdf>.

²¹ Ibid.

²² *Grutter v. Bollinger*, 123 S.Ct. 2325 (2003).

²³ Kurlaender, M. and Yun, J. (2001). "Is Diversity a Compelling Educational Interest? Evidence from Louisville." In Gary Orfield (Ed.), *Diversity Challenged*. Cambridge, MA: Harvard Education Publishing Group. For evidence from Lynn and Cambridge, see <http://www.civilrightsproject.harvard.edu>.

academic gains but is also linked to better understanding of people of different backgrounds, a greater receptivity to living and working in diverse settings, and life chances.

The Case of Metropolitan Boston

In many ways, metro Boston provides an interesting example of the dynamics of segregation in metropolitan areas. It has been a focus of attention for desegregation efforts in the urban North. The argument for the use of race in school assignments was recently contested in the federal district court in *Comfort v. Lynn School Committee*²⁴, decided in mid-2003. In upholding the use of race to maintain racially and ethnically diverse schools, this decision cited detailed local demographic and educational research on the value of integration for education.

However, since the 1970s, it has been the City of Boston, rather than the metropolitan area as a whole, that has been the primary center of conflict for desegregation efforts. Boston's urban desegregation experience was, in important respects, the nation's worst, due to a unique level of violence and political polarization in the city. Further, Boston has an unusually small share of the metropolitan region's population, since it was the first major city in the country whose population growth was cut off by surrounding independent suburbs. The City of Boston has had a constantly shrinking share of the total metropolitan population for generations. Like other metropolitan areas in the country, most population growth has taken place in overwhelmingly white suburbs.²⁵ Metropolitan Boston is the nation's third whitest large metropolitan area, and its white suburbs are strikingly segregated in housing and schools. While the suburbs as a whole remain predominantly white, some suburban areas are becoming more diverse, as minority families move into them. However, most black and Latino families are settling in a limited number of suburban communities and are segregated from white homeowners.²⁶

This paper examines the dynamics of segregation, demographic changes, and educational attainment in the Boston metropolitan area over the last decade. The metropolitan area studied, formally known as the Boston New England County Metropolitan Area (NECMA), includes the counties of Bristol, Essex, Middlesex, Norfolk, Plymouth, Suffolk, and Worcester. For the purposes of this study, the metropolitan area is divided into five regions: City of Boston, inner satellite cities, outer satellite cities, inner suburbs, and outer suburbs. Satellite cities are those areas defined by the Office of Management and Budget as "central cities" as of 1999 plus other cities with population densities over 10,000 people per square mile. "Inner" satellite cities include Brockton, Cambridge, Chelsea, Everett, Lynn, Malden, Somerville, Gloucester, and Waltham.²⁷ "Outer" satellite cities include Worcester, Leominster, Attleboro, Fall

²⁴ *Comfort ex rel. Neumyer v. Lynn School Committee*, 263 F.Supp. 209 (D.Mass. 2003).

²⁵ Logan, J. (2001). "Ethnic Diversity Grows, Neighborhood Integration Lags." Presented at National Press Club, April 3, 2001.

²⁶ Stuart, G. (2000). "Segregation in the Boston Metropolitan Area at the End of the Twentieth Century." Cambridge, MA: The Civil Rights Project at Harvard University.

²⁷ Central cities that lie within Route 495 are considered inner satellite cities; those that lie without, outer satellite cities.

River, Fitchburg, Lawrence, Leominster, Lowell, and New Bedford. Inner suburbs are those areas that lie roughly within Route 128, excluding the City of Boston and designated inner satellite cities. Outer suburbs are those areas that lie roughly outside of Route 128, excluding designated outer satellite cities.

Using data collected by the National Center for Education Statistics (NCES), the study examines the composition of public schools from 1989-2001 and the distribution of students between regions for each racial group.²⁸ It also examines the relationship among poverty, race and school quality as measured by percent of teachers who are certified, on-time passing rates, dropout rates, and MCAS results. The Massachusetts Comprehensive Assessment System (MCAS) is a standardized test designed to measure the performance of students and schools on English/Language Arts, Mathematics, Science, and Social Sciences. The 2003 MCAS test results show that black and Latino students were disproportionately represented among those who scored in the “failing and “needs improvement” categories.²⁹ As the state imposes very strong sanctions on high school students on the basis of the MCAS results, it is increasingly important to examine these relationships.

Boston Metropolitan Demographics

The Boston metropolitan area is overwhelming white and suburban. Of the 767,601 students attending 1,457 public schools in 2001-02, 76 percent of the students are non-Latino white (hereafter referred to as “white,”) and seven out of every ten students attend schools in the suburbs (Table 1). By contrast, Boston’s central city school district (Boston Public Schools) enrolls just eight percent of public school students in the metropolitan area. Latino students are the largest minority group at ten percent, followed closely by black students (9%). About five percent of students enrolled in public schools are Asian.³⁰

The differences in the distribution of white students across the metropolitan area are quite marked. Eighty-two percent of the public school student population in the inner suburbs and 91 percent of the outer suburban students are white. In contrast, only 15 percent of the public student enrollment in Boston is white, and close to half of the students are black. In exam schools such as Boston Latin School and Boston Latin Academy, white students are over-represented at 51 percent and 42 percent respectively.³¹ White students are also heavily under-enrolled in the satellite cities, where more than one fifth of the student enrollment is Latino.

²⁸ The school districts are divided into five metropolitan regions that include Boston, inner satellite cities, outer satellite cities, inner suburbs, and outer suburbs (see Figure A in the Appendix for a map of the cities under each of the categories).

²⁹ <http://www.doe.mass.edu/mcas/about1.html>

³⁰ Because Native Americans are not present in the Boston Metropolitan Area in enough numbers for an accurate portrayal of the demographic changes, they are not included in the analysis and discussion.

³¹ See Table 1 in the Appendix.

Table 1: Enrollment and Racial Composition of Public Schools by Location and Race, 2001-02

	White (%)	Black (%)	Latino (%)	Asian (%)	Percent of Total Enrollment by Region (Column Percentages)
Boston	15	47	28	9	8
Inner Satellite Cities	47	22	22	8	9
Outer Satellite Cities	55	8	28	9	13
Inner Suburbs	82	5	4	9	11
Outer Suburbs	91	2	3	3	59
Total Enrollment	76	9	10	5	100

*Note: Totals may not add up to 100 due to rounding.

Demographic Trends Over Time

Two strong demographic trends have affected metro Boston for some time: the continued movement of population to the suburbs and the increasing share of the population that is non-white.³² At the same time that total enrollment has increased in the metropolitan area as a whole, the city of Boston has captured a shrinking share of this enrollment (Table 2). While *numeric* enrollment in every region has increased, only the outer suburbs enroll a growing *percentage* of total students. The city of Boston had the slowest rate of growth (5%) over 11 years, and now enrolls just eight percent of the students. The outer suburbs experienced the most growth (31 percent) and now enroll three out of every five students.³³

³² 1989 was the earliest year in which enrollment data were disaggregated by race and by grade.

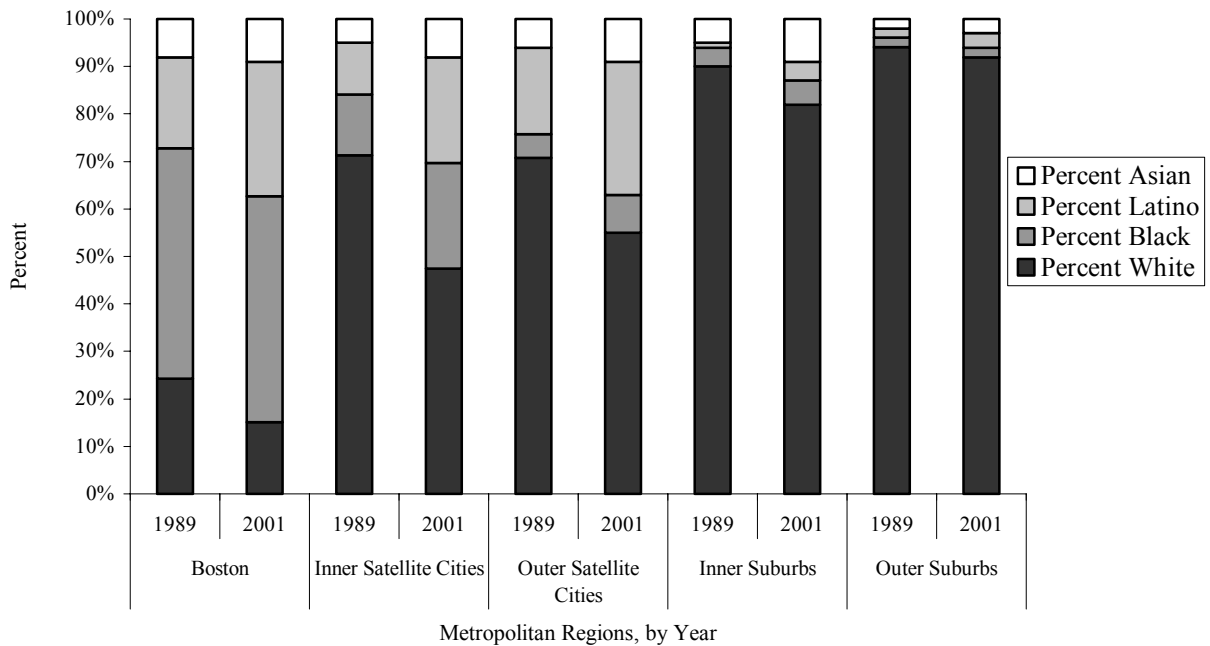
³³ For the most part, the suburbs are small and predominantly white. The 20 largest suburbs are still more than 80 percent white and except for Newton, enroll less than 10,000 students. Framingham, Quincy, Brookline, Revere, and Salem are suburbs (as defined by the Office of Management and Budget) where at least 30 percent of the student body is non-white. For a breakdown of racial composition of the 20 largest suburbs, see Table 2 in the Appendix.

Table 2: Growth of Enrollment Across Boston Metropolitan Area, By Region (1989-2001)

	1989		2001		Growth (1989- 2001)	Percent Change (1989- 2001)
	Enrollment	<i>Percent of Total</i>	Enrollment	<i>Percent of Total</i>		
Boston	59,184	9	62,141	8	2,957	5
Inner Satellite Cities	61,942	10	70,403	9	8,461	14
Outer Satellite Cities	86,210	14	99,612	13	13,402	16
Inner Suburbs	75,821	12	84,881	11	9,060	12
Outer Suburbs	347,768	56	455,453	59	107,685	31
Total	625,552	100	767,601	100	142,049	23

The second major trend is the growing presence of minority students, especially in the satellite cities. In the inner satellite cities, the African American share of the total student population increased substantially, from 13 percent in 1989 to more than one fifth (Figure 1). In a little more than ten years, the Latino presence doubled, from 11 percent to 22 percent in the inner satellites. The growth of Asian students is more evenly spread regionally. Except for the outer suburbs, where they make up about 3 percent of students, Asians now constitute about 10 percent of the student population in each of the regions.

Figure 1: Change in Racial Composition Across the Boston Metropolitan Area, 1989-2001



The continued movement of whites to the suburbs and away from more urbanized areas exacerbates the uneven racial distribution of students across the metro area. White students are disproportionately enrolled in the suburbs: more than 4 out of every 5 white students in the Boston metropolitan area attend schools there (Table 3). Only two percent of all white students in the metropolitan area attend public schools in Boston, compared to 71 percent who attend school in the outer suburbs.

In contrast, black students are disproportionately concentrated in Boston: the city itself accounts for more than 40 percent of the total black public school enrollment in the metropolitan area, and more than half of black students in the metro area attend schools in just two cities: Boston and Brockton (Table 3). Of all groups, the share of black students enrolled in the suburbs is the smallest (22%).

The Latino student population is also concentrated in a few cities. Close to half of all Latino students in the metropolitan area attend schools in just three cities: Boston, Lawrence, and Worcester. About one out of every five Latino students in the metro attend schools in Boston (Table 3).

The spatial distribution of the Asian student population provides an interesting contrast to both the black and Latino patterns. In general, Asians are more evenly distributed spatially than are either blacks or Latinos. At the same time, 11 percent of the Asian students attend school in just one city, Lowell, which has high concentrations of Cambodians.³⁴

³⁴ U.S. Census Bureau. Census 2000, Summary File 1. Table PCT5.

**Table 3: Distribution of Public School Students
Across the Boston Metropolitan Area,
by Race 2001-02 (in Percent)**

	White	Black	Latino	Asian
Boston	2	44	23	14
<i>Satellite Cities</i>				
Attleboro	1	0	0	1
Brockton	1	11	2	1
Cambridge	0	4	1	2
Chelsea	0	1	5	1
Everett	1	1	1	1
Fall River	2	1	1	1
Fitchburg	1	1	2	2
Gloucester	1	0	0	0
Lawrence	0	1	13	1
Leominster	1	0	2	1
Lowell	1	1	4	11
Lynn	1	3	6	5
Malden	1	1	1	3
New Bedford	2	3	3	0
Somerville	0	1	2	1
Worcester	2	4	9	5
Waltham	1	1	1	1
Inner Suburbs	12	6	4	19
Outer Suburbs	71	16	19	30
Total	100	100	100	100

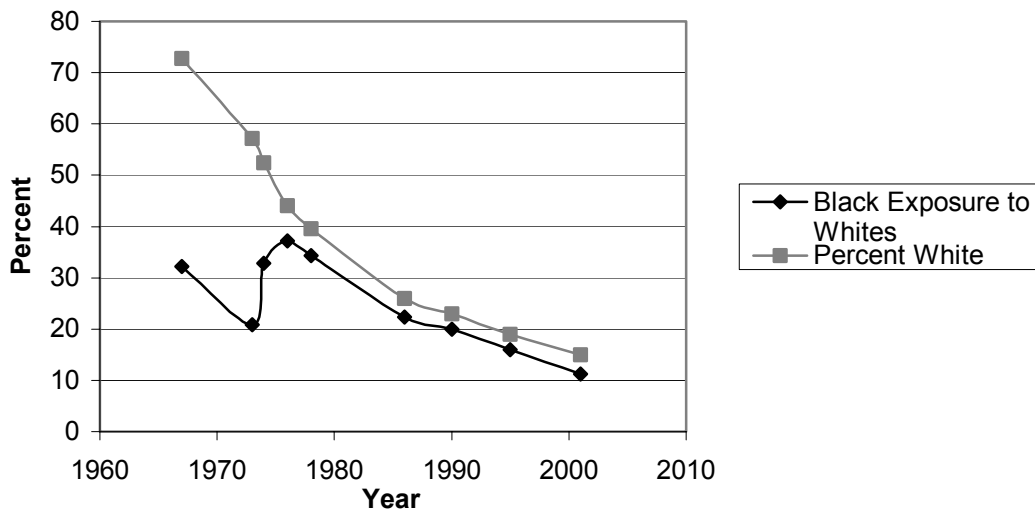
The high degree of fragmentation that characterizes the metropolitan area, in which many independent incorporated cities and towns have their own separate school districts instead of large consolidated districts, leads to greater sorting among students and very little overlap between minority students and white students. The inter-district segregation that results from a highly fragmented metropolitan area is clearly illustrated by the levels of segregation in Boston (Figure 2). In 1967, two years after the Massachusetts state legislature passed the 1965 Racial Imbalance Act which declared racially imbalanced schools illegal³⁵, the average black student in the Boston Public

³⁵ Racially imbalanced schools were those schools with student compositions that were more than half minority.

Schools attended a school that was 32 percent white, at a time when the public school enrollment was 73 percent white. By 1973, the average black attended a school that was just 21 percent white, when total district enrollment was 57 percent white. In the years immediately following the court order in 1974,³⁶ this trend was briefly reversed. By 1976, the average black attended a school that was 37 percent white. However, shortly thereafter, previous trends returned. After decades of decreasing white enrollment, as more and more white families moved out to suburbs, the average black student in Boston now attends a school that is 11 percent white in a school district that is 15 percent white.

The story of Boston desegregation offers several important points for observation. It epitomizes the limitations of intra-district desegregation in large cities in the wake of the *Milliken v. Bradley* order.³⁷ Attempts to desegregate within an urban center with decreasing white enrollment in a fragmented metropolitan area are, at best, limited and fleeting, in contrast to the relatively stable countywide desegregation in the South that incorporated both urban and suburban centers in the same school district.³⁸ Before the 1974 court order, white share of the enrollment was already dropping, and while Judge Garrity’s order of intra-district busing might have accelerated the trend, to argue that the desegregation order initiated white flight is to ignore the demographic changes that were already taking place. Lastly, the example of Boston illustrates that any desegregation plan that purports to address segregation in large urban centers with low shares of white enrollment must address the issue at a metropolitan-wide scale. While segregation in the late 1960s was still largely an urban issue, it is now, increasingly, a metropolitan one.

Figure 2: The Percent of White Students in Schools Attended by the Average Black Student in Boston, 1967-2001



³⁶ *Morgan v. Hennigan*, 379 F. Supp. 410.

³⁷ See Supra note 10.

³⁸ Frankenberg, E. and Lee, C. (2002). “Race in American Public Schools: Rapidly Resegregating Districts”. Cambridge, MA: The Civil Rights Project.

Even as some minority families move out to the suburbs or satellite cities, segregation in the housing market contributes to the intense concentration of minorities in these areas. Outside of Boston, close to half of the homes purchased by black and Latino buyers from 1993-98 were located in seven out of a 126 communities: Chelsea, Randolph, Everett, Lynn, Somerville, Milton, and Malden.³⁹ Income differences do explain some of the variation in settlement patterns between whites and minorities in the suburbs, but a recent report found that high degrees of segregation remain even after taking into account differing abilities to afford housing.⁴⁰

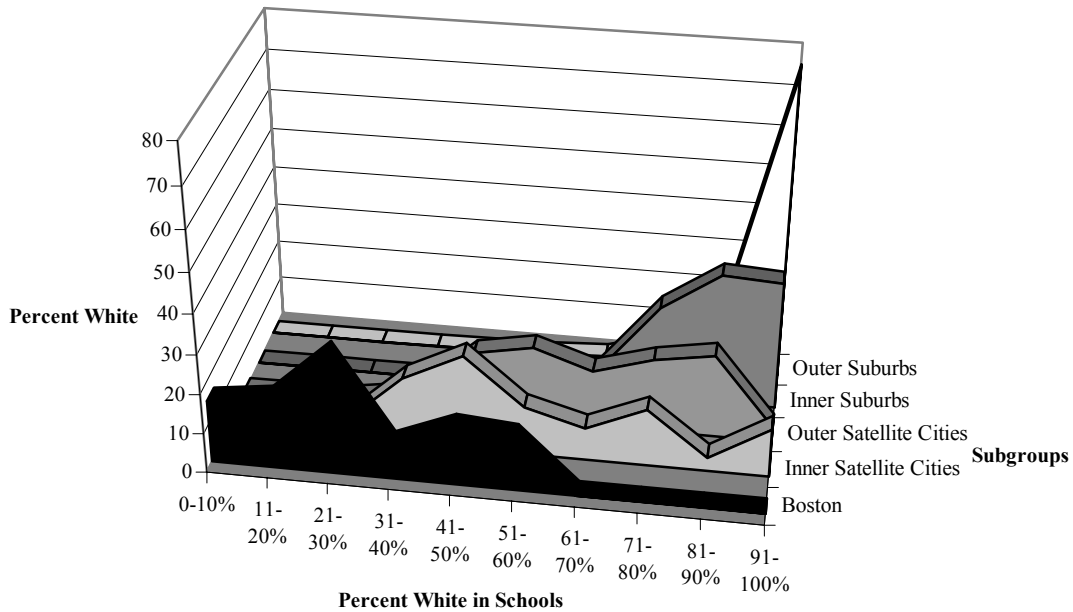
³⁹ Stuart, G. (2000). "Segregation in the Boston Metropolitan Area at the End of the Twentieth Century." Cambridge, MA: The Civil Rights Project at Harvard University. Stuart found that to in order to achieve racial and ethnic integration, more than half of the minority homebuyers would have had to have purchased a home in a different city from 1993-1998.

⁴⁰ Harris, David J. and Nancy McArdle. (2004). "More than Money: The Spatial Mismatch Between Where Homeowners of Color in Metro Boston Can Afford to Live and Where they Actually Reside". Cambridge, MA: The Civil Rights Project at Harvard University.

Interracial Exposure of Students Across the Boston Metropolitan Area

A high degree of school segregation persists among the different regions of metropolitan Boston. In the metropolitan area overall, 60 percent of the white students attend intensely-segregated-white schools (schools where more than 90 percent of the students are white). In the outer suburbs, over 70 percent of white students attend intensely-segregated-white schools⁴¹, while, in Boston, there are no schools that are more than 60 percent white (Figure 3.)⁴² Furthermore, in the inner satellite cities, where only 47 percent of enrollment is white, twelve percent of the white students attend intensely-segregated-white schools (schools where more than 90 percent of the students are white.)

Figure 3: Distribution of White Students in the Metropolitan Area by Subgroup



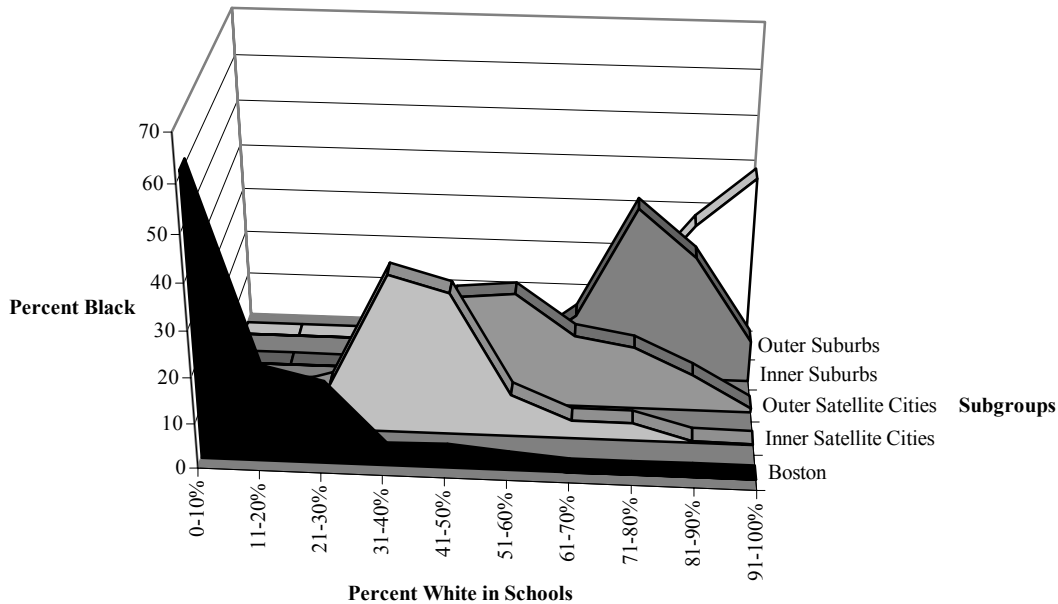
Note: To see data that underlie figures 3-6, see Appendix Table 7.

⁴¹ Throughout the report, we use the term “intensely-segregated-white” for schools where at least 90% of the student body is white.

⁴² The problem is compounded by the fact that about half of Boston’s white students attend private schools so that the white share of enrollment (14%) is smaller than their proportion of the under-18 population of 25 percent). See Logan, J. Oakley, D. and Stowell, J.(2003) *Segregation in Neighborhoods and Schools: Impacts on Minority Children in Boston Region*. Cambridge, MA: The Civil Rights Project at Harvard University.

Figure 4 shows that 61 percent of the black students in Boston Public Schools attend intensely-segregated-minority schools, those in which 90 percent or more of the students are nonwhite.⁴³ In regions where white students are most disproportionately concentrated, such as the outer suburbs, whites attend schools that are *overwhelmingly* white. In Boston, where blacks are most disproportionately concentrated, black students attend schools that are *overwhelmingly* minority. In contrast, where there are no such large concentrations of blacks and whites, such as the satellite cities, black and white students tend to attend schools with higher levels of diversity. Only three percent of the black students in the outer satellite cities attend intensely-segregated-minority schools. However, because of the high concentration of black students in a few cities, particularly Boston and Brockton, more than a quarter (27%) of the black students in the metropolitan area as a whole attend schools that are more than 90 percent minority. There can be no meaningful interracial exposure if substantial numbers of students from several racial groups are not present in the same school system. Where a metropolitan area has high housing segregation and severe segmentation into many school districts it is possible to have both a very large white majority and severe segregation of nonwhites, even if there is not high segregation *within* individual districts. This is the case with metro Boston.

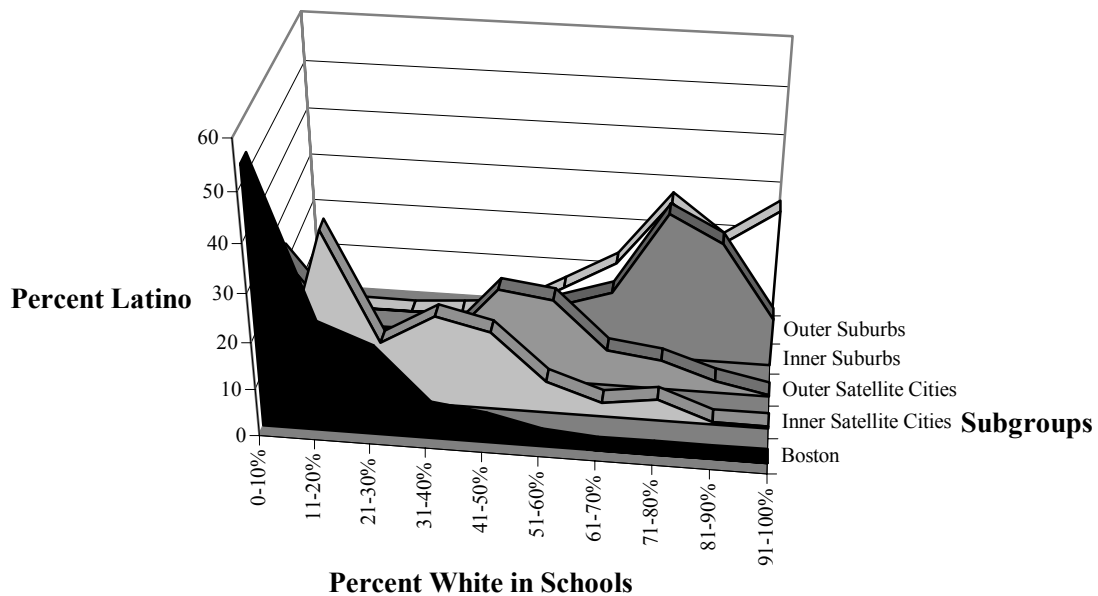
Figure 4: Distribution of Black Students in Schools by Region, 2001-02



⁴³ Throughout the report, we use the term “intensely-segregated-minority” for those schools where at least 90% of the student body is non-white.

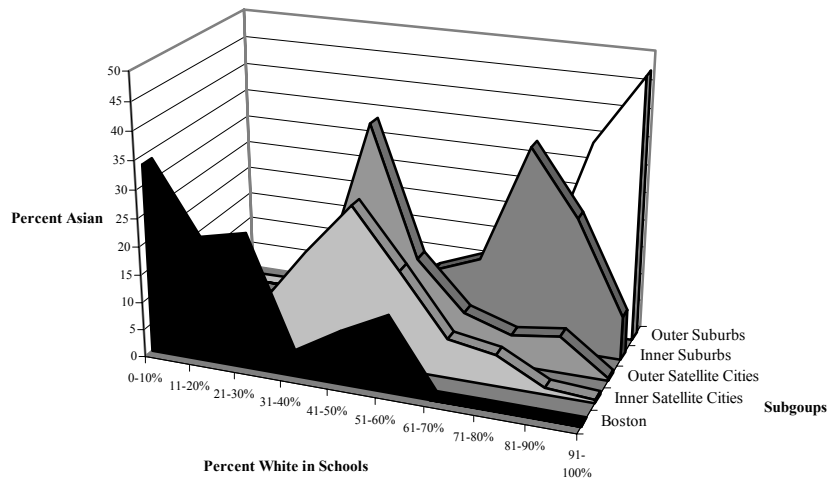
As with black students, Latinos are highly segregated in the city of Boston: 54 percent of the Latino students in Boston attend intensely-segregated-minority schools (Figure 5). Furthermore, Latinos are also highly segregated in the satellite cities, especially the outer satellite cities where almost one out of every four students (24%) attend intensely segregated minority schools. In the inner satellite cities, almost half attend schools where less than one third of the students are white. One might claim that the high degree of Latino segregation in these urbanized regions is due to surging Latino enrollment levels. Since 1989, the Latino share of enrollment has grown by ten percentage points in both the inner and outer satellite cities, places where Latino students are highly concentrated. While this argument is partly true, the problem is further exacerbated by the high degree of fragmentation of the metro area into many school districts, so that overall, one out of every five Latino students is attending an intensely-segregated-minority school. Latinos are most highly segregated in regions where they are growing quickly and already highly concentrated.

Figure 5: Distribution of Latino Students in Schools by Region, 2001-02



The most striking finding about Asian enrollment patterns is the bimodal distribution in Boston and the inner satellite cities. As Figure 6 shows, there are two peaks in the distribution pattern of Asian students in Boston. On the one hand, more than one third of Asian students (34%) attend intensely-segregated-minority schools in Boston. On the other hand, about 12 percent of Asians attend schools where more than half of the student body is white, similar to the rate of white students. (13%). Aggregated data on Asians tend to mask the substantial variation that exists among different Asian subgroups and obscure the bimodal nature of the Asian population. Census data show that about half (46%) of the Asian public school students living in Boston are Chinese, and another 38 percent Vietnamese.⁴⁴ Some Asian subgroups, largely those who are more affluent and living in the suburbs, attend schools with very substantial white enrollment. Others, predominantly those lower income students living in inner satellite cities and Boston, attend much more segregated schools.

Figure 6: Distribution of Asian Students in Schools by Region, 2001-02



In summary, the fragmentation of the metropolitan area into many school districts and the differential pattern of growth of racial groups within separate regions results in increasingly high segregation of students in those regions where they are most highly concentrated.⁴⁵

⁴⁴ 2000 Census, Summary File 4.

⁴⁵ The overenrollment of white students in private schools in metropolitan areas such as Boston also contributes to the segregation of minority students in the public schools. See Logan, J. Oakley, D. and Stowell, J.(2003) *Segregation in Neighborhoods and Schools: Impacts on Minority Children in Boston Region*. Cambridge, MA: The Civil Rights Project at Harvard University; Reardon, S. F., & Yun, J. T. (2002). *Private School Racial Enrollments and Segregation*. Cambridge, MA: Harvard Civil Rights Project, Harvard University.

Isolation of English Language Learners

Not only are students segregated by race, they are also highly segregated by language. Latino and Asian English Language Learners (ELLs) are highly isolated compared to English Language Speakers across the whole Boston metropolitan area (Table 4).⁴⁶ The average Latino ELL student attends a school that is 47 percent Latino, more than three times the exposure of the average English Language Speaker to Latino students (14%).⁴⁷ Asian ELL students experience, on average, more than three times as much exposure to Asian students than English Language Speakers do to Asian students (25% versus 7%).

Table 4
Racial Composition of Schools Attended by English Language Learners
in Boston Metropolitan Area, 2000-01

<i>Average Percent of Each Race in School (%)</i>	<i>Racial Composition of School Attended by Average:</i>			
	<i>English Language Speakers</i>	English Language Learner	Latino English Language Learner	Asian English Language Learner
White	67	40	31	48
Black	12	20	16	15
Latino	14	30	47	12
Asian	7	10	5	25
Total	100	100	99	100

The racial composition of schools attended by English Language Learners in the City of Boston and the outer satellite cities show that they are highly isolated with students of their own race (see Tables 5 and 6). The average Latino ELL student in Boston attends a school where over half of the students are Latino, almost twice the average English Language Speaker's exposure to Latino students (28%). The average Asian ELL student attends a school with almost four times as many Asian students as does the average English Language Speaker in Boston (33% versus 9%).

⁴⁶The computations are derived from numbers reported to the Office for Civil Rights by schools for the year 1999-2000. For the racial composition of schools attended by English Language Learners in the other regions of the metropolitan area, please see Tables 3-5 in Appendix.

⁴⁷ Students who are not classified as English Language Learners are not necessarily native English speakers, but for clarity of language, the author refers to a "non-English Language Learner" as a "English Language Speaker".

Table 5
Racial Composition of Schools Attended by English Language Learners
in the City of Boston, 2000-01

<i>Average Percent of Each Race in School (%)</i>	<i>Racial Composition of School Attended by Average:</i>			
	<i>English Language Speakers</i>	English Language Learner	Latino English Language Learner	Asian English Language Learner
White	13	10	10	12
Black	49	41	33	36
Latino	28	40	53	17
Asian	9	8	4	33
Total	99	99	100	98

Latino and Asian English Language Learners are similarly isolated in the outer satellite cities (Table 6). The average Latino English Language Learner attends a school where more than half of the students are Latino, in contrast to the average English Speaker who attends a school with 30 percent Latino students. The average Asian English Language Learner attends a school where 32 percent of the students are Asian, or about three times the exposure of the average English Language Speaker to Asian students (11%). In general, both Latino and Asian ELL students are highly isolated in the Boston metropolitan area.

Table 6
Racial Composition of Schools Attended by English Language Learners
in the Outer Satellite Cities, 2000-01

<i>Average Percent of Each Race in School (%)</i>	<i>Racial Composition of School Attended by Average:</i>			
	<i>English Language Speaker</i>	English Language Learner	Latino English Language Learner	Asian English Language Learner
White	51	40	33	43
Black	8	6	5	5
Latino	30	42	55	20
Asian	11	12	7	32
Total	100	100	100	100

Racial Segregation in Private and Charter Schools

It is interesting to note that, despite the high levels of segregation in the public schools, both private schools and charter schools are even more racially segregated. For white and Asian students, enrollment rates in private schools are highest in Boston, while they are highest for black and Latino students in the inner suburbs (Table 7). A full 44 percent of the white students living in the city of Boston attend private schools.⁴⁸ The enrollment of white students in private schools, coupled with the white isolation in public schools, results in even higher levels of segregation in Boston. One national study found that, although private schools in the 20 largest metropolitan areas are 70 percent white, the average white student attends a private school that is typically 85 percent white. Black and Latino students attend private schools that are less than half white.⁴⁹ In the Boston metropolitan area, the average white student attends private schools that are 89 percent white.

Table 7: Share of K-12 Students Enrolled in Private Schools by Race and Location

	Metro Total	Boston	Inner Suburbs	Outer Suburbs	Inner Satellites	Outer Satellites
White	13.2	44.3	16.9	10.5	14.8	15.5
Black	10.8	11.2	14.8	11.3	11.2	5.7
Hispanic	6.5	8.2	11.3	6.6	5.5	5.2
Asian	9.5	11.9	8.6	11.6	7.9	7.2

Source: 2000 Census Summary File 3.

Note: Whites are non-Hispanic whites. Hispanics may be of any race.

Charter schools in Massachusetts also reflect more racial concentration than do public schools. On average they are 54 percent white, but the average white student attends charter schools where almost 80 percent of the students are white.⁵⁰ In contrast, the average black and Latino charter school student in Massachusetts attends a school that is only 22 and 26 percent white, respectively.

⁴⁸ Private school enrollment data is from the 2000 Census, Summary File 3. These estimates may differ from official school statistics for a number of reasons. Census data are self-reported and reflect where students reside, which may or may not coincide with where students attend school. Census estimates are also computed from sample data and therefore are subject to some sampling error. Nevertheless they give us a big picture of the private school enrollment rate among students in different regions.

⁴⁹ Reardon, S. and Yun, J. (2002). "Private School Racial Enrollments and Segregation". Cambridge, MA: The Civil Rights Project.

⁵⁰ Frankenberg, E. and Lee, C. (2003). "Charter Schools and Race: A Lost Opportunity for Integrated Education". Cambridge, MA: The Civil Rights Project.

Relationship between Poverty and Racial Segregation

Racial segregation must be viewed in the context of the strong relationship between race and poverty.⁵¹ Concentrated poverty is powerfully related to both school opportunities and achievement levels. Nationally, the average black or Latino student attends a school where close to half of the students are poor.⁵² Past research has shown that segregated schools tend to have high concentrations of poverty, low parental involvement, and high dropout rates.⁵³ Students attending these schools are exposed to less credentialed teachers, higher teacher turnover, and lower educational aspirations and career options than students in more desegregated settings.⁵⁴ In contrast, suburban schools, which tend to be majority white, usually provide a more rigorous curriculum, have more highly skilled and experienced teachers, and tougher academic competition than their urban counterparts.⁵⁵ Exposure to more desegregated settings can break the tendency for racial segregation to become self-perpetuating for all students, regardless of race, later in life.⁵⁶ Students of all races who are exposed to integrated educational settings are more likely to live and work among people of diverse racial and ethnic backgrounds.⁵⁷

Table 8 shows the correlation between poverty and segregation in schools in the Boston metropolitan area. The numbers in each of the cells represent the percentage of

⁵¹ Poverty levels are measured by the percent of students eligible for free or reduced lunch.

⁵² Frankenberg, E., Lee, C., and Orfield, G. (2003). "A Multiracial Society with Segregated Schools: Are We Losing the Dream?" Cambridge, MA: The Civil Rights Project.

⁵³ Balfanz and Legters found that cities with high dropout rates also had high poverty rates. See Balfanz, R. and Legters, N. (2001). "How Many Central City High Schools Have A Severe Dropout Problem, Where Are They Located, and Who Attends Them?" Paper presented at the Dropout conference, Graduate School of Education at Harvard University. See also Schofield, J.W. (1995). "Review of Research on School Desegregation's Impact on Elementary and Secondary School Students." In Banks, J.A. and Banks, C.A.M. (Eds.) *Handbook of Research on Multicultural Education*. New York, NY: Simon & Schuster Macmillan; Natriello, G., McDill, E.L., and Pallas, A.M. (1990). *Schooling Disadvantaged Children: Racing Against Catastrophe*. New York, NY: Teachers College Press.

⁵⁴ In Georgia, Freeman, Scafidi, and Sjoquist found that teachers who transferred moved to schools with higher student achievement and fewer minority and poor students. See Freeman, C., Scafidi, B., and Sjoquist, D.L. (2002). "Racial Segregation in Georgia Public Schools, 1994-2001: Trends, Causes, and Impacts on Teacher quality." Paper presented at Resegregation of Southern Schools Conference, University of North Carolina at Chapel Hill; Anyon, J. (1997). *Ghetto Schooling: A Political Economy of Urban Educational Reform*. New York, NY: Teachers College Record; Dawkins, M.P. and Braddock, J.H. (1994). "The Continuing Significance of Desegregation: School Racial Composition and African American Inclusion in American Society." *Journal of Negro Education*. 63(3): 394-405.

⁵⁵ Eaton, S.E. (2001). *The Other Boston Busing Story*. New Haven: Yale University Press. In this study, Eaton documents the experiences of scores of Boston students who had access to the white suburban public schools and the powerful impact this has had in their adult lives. See also Wells, A.S., and Crain, R.L. (1994). "Perpetuation Theory and the Long-Term Effects of School Desegregation." *Review of Educational Research*, 64, 531-555.

⁵⁶ See Wells, A.S., and Crain, R.L. (1994). "Perpetuation Theory and the Long-Term Effects of School Desegregation." *Review of Educational Research*, 64, 531-555; Braddock, J.H. and McPartland, J. (1989). "Social-Psychological Processes that Perpetuate Racial Segregation: The Relationship Between School and Employment Segregation." *Journal of Black Studies*. 19(3):267-289.

⁵⁷ The Impact of Racial and Ethnic Diversity on Educational Outcomes: Cambridge, MA School District, Civil Rights Project, Harvard University, January 2002.

schools with a certain share of minority students that are also of a specific poverty level. For example, of those schools with 10 percent or fewer minority students, 73 percent had 10 percent or fewer students who were eligible for free or reduced lunch (low poverty schools).

The correlation between race and poverty is very dramatic. Almost all (97%) of the intensely segregated black and Latino schools were also high poverty schools. Because of this high correlation, there are almost no low-poverty/high-minority or low-minority/high-poverty schools in the metropolitan area.⁵⁸ Five percent of all students in the metropolitan area attend high-poverty and high-minority schools, and almost one in five (18 percent) of black and Latino students attend these schools.

Table 8: Relationship Between Segregation by Race and by Poverty, 2001-02
Percent Minority Students in Schools

% Poor in Schools	0-10%	10-20%	20-30%	30-40%	40-50%	50-60%	60-70%	70-80%	80-90%	90-100%
0-10%	73	59	23	10	1	1	0	0	0	0
10-25%	21	19	28	14	8	3	3	0	0	0
25-50%	5	16	30	47	35	21	8	2	2	3
50-100%	1	5	19	30	55	75	90	98	98	97
Total	100	100	100	100	100	100	100	100	100	100
% of Schools	48	15	8	5	5	5	3	3	3	5

*The correlation between percent black and Latino enrollment and percent poor is very strong ($r=.85$).

**Numbers may not add up to one hundred due to rounding.

Segregation and Achievement Test Scores

The MCAS testing system has been the centerpiece of Massachusetts educational reform in recent years and is used to evaluate the success of schools and to target sanctions both under state policy and under the federal No Child Left Behind Act. MCAS has been endlessly discussed, but its relationship with segregation has not been systematically explored. The following analysis shows a disturbingly powerful relationship. Segregation is related both to key aspects of schooling opportunity and to test results and graduation rates.

Low-poverty, low-minority schools generally have a greater percentage of certified teachers than do high-poverty, high-minority schools.⁵⁹ For example, 94 percent of the teachers in schools with less than 10 percent poor and minority students are

⁵⁸ For the purposes of this report, low minority and low poverty schools are schools with less than 10 percent minority students and where less than 10 percent of the students are on free and reduced lunch.

⁵⁹ The percent of certified teachers is the ratio of those teachers that meet state teacher certification standards as a share of full-time teachers at schools that reported data to Office for Civil Rights.

certified, in contrast to only 78 percent in higher minority and high-poverty schools (or schools with at least 50 percent minority students and at least 50 percent on free and reduced lunch (Table 9)). Despite state regulations of teacher certifications and The No Child Left Behind requirement that schools have highly qualified teachers, there is still significant variation in the proportion of certified teachers by poverty and minority composition in the schools.

Table 9: Relationship Between Segregation by Race and by Poverty and Teacher Certification, 2000-01

Percent Minority in Schools				
% Poor in Schools	0-10%	10-25%	25-50%	50-100%
0-10%	94	95	90	69
10-25%	89	75	80	71
25-50%	--	86	81	83
50-100%	93	98	88	78
% of Schools (Row Totals)	25	23	19	33

Source: 2000 Office for Civil Rights E&S Data.

Relationship between MCAS Scores and Segregation by Race and Poverty

We recognize that, given the context of intense segregation in the metropolitan area and the disproportionately high enrollment of students overall in low-minority and low-poverty schools, one must be careful in drawing conclusions about MCAS results. Given these considerations, however, the differences in the percent of tenth grade students passing the English Language Arts (ELA) MCAS between intensely-segregated-white schools and intensely-segregated-minority schools are striking enough to merit comment, especially given that the introduction of the MCAS as a high school graduation requirement will affect access to higher education and future earnings for all students in the state.⁶⁰ For some time, we have been requesting individual level data for MCAS tests at the school level to analyze these patterns more closely, but the State Department of

⁶⁰Those students that do not score at Needs Improvement or better on the 10th grade MCAS and subsequent retests will not be granted a high school diploma, regardless of their grades in high school. A recent study shows that in the last decade there has been a marked increase in the numbers of students forced to repeat 9th grade as well as a drop in the share of students graduating, especially in states implemented high-stakes tests. Given the retention bulge in 9th grade, the cohort starting out in 10th grade is usually much smaller than the 9th grade cohort. For implications of these policies, see Haney, W., Madaus, G., Abrams, L., Wheelock, A., Miao, J. and Grura, I. (2004). “The Educational Pipeline in the U.S., 1970-2000.” Boston, MA: The National Board on Education Testing and Public Policy.

Education has not yet provided these data. Thus, this study uses only school level data.⁶¹ We hope that the Commonwealth will make more complete information available in the near future.

The correlation between poverty and racial composition is markedly stark at the high school level. (Table 10). Tenth graders that attended schools with lower proportions of poor and minority students in the student body tend to do better on the tests than their peers in schools with higher concentrations of poor and minority students.⁶² On average, 96 percent of students at these low-minority, low-poverty schools passed the English Language Arts (ELA) MCAS. In contrast, 61 percent of the students passed in intensely-segregated-minority schools that also had more than 50 percent of their student body on free and reduced lunch. If one were to map out districts where less than half of the students were scoring at proficiency level, one would find that these tend to be districts with high concentrations of minority students in them, such as Boston, Lawrence, Lowell, Lynn, and so forth (see Figure B in Appendix).

Table 10: Percent of 10th Graders Passing MCAS English Language Arts, by Race and Poverty, 2002-03

% Poor in Schools	Percent Minority in Schools									
	0-10%	10-20%	20-30%	30-40%	40-50%	50-60%	60-70%	70-80%	80-90%	90-100%
0-10%	96	97	94	98	0	0	0	0	0	0
<i>N</i>	99	22	5	2						
10-25%	91	82	91	91	80	0	0	0	0	0
<i>N</i>	15	5	11	2	2					
25-50%	90	89	76	84	92	80	83	0	0	50
<i>N</i>	3	3	3	2	2	6	2			2
50-100%	0	0	0	42	70	90	79	70	67	61
<i>N</i>				2	4	3	4	7	4	9
% of High Schools (Column Totals)	53	13	9	4	4	4	3	3	2	5

Source: Massachusetts Department of Education, <http://www.doe.mass.edu/mcas/results.html?yr=03>

Tenth graders who do not pass the MCAS on their first try may still graduate if they pass the retests. The class of 2003 had five more opportunities after the spring of 2001 to pass the MCAS. According to the results published by the Massachusetts Department of Education, 90 percent of the class of 2003 passed MCAS by September

⁶¹ Absent data at the student level, we are limited in our ability to analyze the context effects of attending high minority and high poverty schools on achievement. At the school level, performance is low in these schools.

⁶² We are aware that students have many opportunities to retake the MCAS after their 10th grade so these are not the actual numbers of students who fail to graduate. This analysis is to show the relative preparation of the students at the 10th grade level. The state not yet provided the data that would allow for computations for retest data.

2003 after six testing opportunities.⁶³ However, because the official MCAS pass rate is based on the enrollment of seniors taking the test in June 2003, it inflates the MCAS pass rates by not accounting for the attrition of students between grade nine and grade twelve due to transfer, retention, or dropouts. The on-time pass rates or the ratio of the number of students who passed the MCAS to the number of ninth graders four years earlier, is closer to 70 percent, a difference of 20 percentage points from the official 90 percent figure.⁶⁴ These numbers—while at best a rough estimate of the actual number of students of the original freshman class of 1999 who passed the MCAS four years later—are probably closer to the actual numbers of students progressing on time through high school since they account for student attrition.

Table 11 shows the on-time passing rates for Boston and the satellite cities. Of the satellite cities, Lawrence has the lowest on-time passing rate: only one out of every three of the original class of 2003 met the MCAS requirements four years later. In Boston, a little more than one out of every two students had passed four years later. Lowell has an on-time passing rate of 52 percent. In short, cities where minorities are concentrated have among the lowest on time MCAS passing rates.

Table 11: On-Time MCAS Pass Rates by September, 2003 by District

	9 th Grade Enrollment	# 12 th Graders who passed MCAS	On time Passing Rate	Reported Passing Rates
Boston	5634	3091	55	83
Attleboro	547	363	66	93
Brockton	1090	749	69	93
Cambridge	484	378	78	87
Chelsea	401	182	45	82
Everett	416	304	73	96
Fall River	1105	506	46	90
Fitchburg	460	253	55	76
Gloucester	345	292	85	95
Lawrence	917	315	34	72
Leominster	483	353	73	95
Lowell	1228	638	52	90
Lynn	1165	740	64	93
Malden	400	320	80	93
New Bedford	994	541	54	94
Somerville	560	360	64	97
Waltham	406	350	86	95
Worcester	1979	1223	62	93

⁶³ <http://www.doe.mass.edu/mcas/2003/results/0903cdprogrpt.pdf>

⁶⁴ Haney, W., Madaus, G., and Wheelock, A., (2004). "DOE Report Inflates MCAS 'Pass Rates' For Class of 2003." Boston, MA: The National Board for Educational Testing and Public Policy.

Dropout Rates in the Boston Metropolitan Area

A recent major national study by the Urban Institute exposed the high correlation between highly segregated schools and low graduation rates.⁶⁵ Using the Cumulative Promotion Index (CPI), a measure of student promotion through progressive school years designed to offset some of the deficiencies of official drop-out rates, scholars found that estimated completion rates differ substantially by race.⁶⁶ Nationally, Asians have the highest on-time completion rate at 77 percent, followed by 75 percent of the white students. In contrast, a little more than half of all black, Latino, and Native American students were estimated to graduate on time in 2001-2002.⁶⁷ In Massachusetts as a whole, graduation rates for low and high poverty schools differ by 28 percentage points. More than three quarters of students in low-poverty schools were estimated to have graduated from high school on time, compared to less than half of the students (49%) in high-poverty schools.⁶⁸

While poverty is a strong predictor of graduation rate, high levels of segregation are also powerfully related to higher dropout rates. Students attending majority-white schools are more likely to graduate on time than their peers in majority-minority schools. In Massachusetts as a whole, three out of every four students in majority-white schools graduated from high school on time in 2001-2002 compared to less than half (49%) of the students in majority-minority schools, according to The Urban Institute's estimates.

Differences in estimated completion rates between schools with different racial and poverty compositions are quite remarkable in the Boston Metropolitan Area (see Table 12).⁶⁹ Less than half of the students in schools with high concentrations of poverty and minority students graduate on time (45%), compared to more than three quarters (79%) of their peers in low-poverty and low-minority schools.

⁶⁵ Orfield, G., Losen, D., Wald, J., and Swanson, C. (2004). "Losing Our Future: How Minority Youth are Being Left Behind by the Graduation Rate Crisis." Cambridge, MA: The Civil Rights Project at Harvard University; Balfanz, R. and Legters, N. (2003). "Weak Promoting Power, Minority Concentration, and High Schools with High Dropout Rates in Urban America: A Multiple Cohort Analysis of the 1990s Using the Common Core of Data." Prepared for *Making Dropouts Visible* conference at Teachers College, Columbia University.

⁶⁶ The CPI does not follow particular students over time, but, instead, tracks three grade-to-grade promotion transitions and the ultimate graduation event over two successive years. For a more detailed explanation of the CPI index, see the Appendix.

⁶⁷ Orfield, G., Losen, D., Wald, J., and Swanson, C. (2004). "Losing Our Future: How Minority Youth are Being Left Behind by the Graduation Rate Crisis." Cambridge, MA: The Civil Rights Project at Harvard University.

⁶⁸ In the Urban Institute study, low poverty schools are schools with less than 38 percent of their students eligible for free and reduced lunch; schools that are high poverty schools have more than 38 percent of their students eligible for free and reduced lunch.

⁶⁹ The calculations reported in this study differ from those developed by the Urban Institute in 2 ways. Districts with less than five enrolled students of a particular race/ethnicity of interest in grade 10 in 2002 were excluded from analysis, and if the number of students enrolled in a specified grade exceeded the number enrolled in the previous grade during the preceding year, enrollment of the latter grade was revised to equal the enrollment in the previous grade during the preceding year.

**Table 12: Metro Boston Cumulative Promotion Index 2001-02
By Poverty and Racial Composition of School District (Percent)**

	Cumulative Promotion Index
Share of students on free/reduced lunch	
Less than 50%	79.1
50% or More	46.4
Share of students who are Minority	
Less than 50%	76.2
50% or More	48.3
Lower Poverty/Lower Minority	78.6
Higher Poverty/Higher Minority	45.1

White students are more likely to graduate on-time than students from any other racial/ethnic background: 67 percent of white students in the metro area are estimated to graduate on-time, followed by 60 percent of Asian students, and 49 percent of black students. Overall, Latino students have the lowest graduation rate at 41 percent when calculated with the cumulative promotion index. (see Table 13).

Graduation rates not only differ by race, but by region as well. Regardless of race, students in inner suburbs are more likely to graduate on time than students in other regions in the metropolitan area, followed closely by students in the outer suburbs. Both these regions have student populations that are more than 80 percent white. Except for Asian students, students attending schools in regions with high concentrations of minority students have the lowest on-time completion rates; in Boston, less than half of the white, black and Latino students are estimated to have graduated from high school on-time in 2001-2002. Asian students have the lowest graduation rates in the outer satellite cities, which have substantial populations of Southeast Asian refugee groups. It is interesting to note that while Asians have the second highest, if not the highest, estimated graduation rate in most the regions, less than half of the Asian students in the outer satellite cities graduate. This is likely due to the high concentrations of disadvantaged immigrant populations living there (see Figure C in the Appendix).

Table 13:
Metro Boston Cumulative Promotion Index by Race and Location, 2001-02

	Metro	Inner		Outer		
	Total	Boston	Suburbs	Suburbs	Inner	Outer
					Satellites	Satellites
White	67.0	48.9	79.7	75.1	58.3	56.2
Black	48.8	42.2	65.4	64.2	64.4	47.4
Hispanic	40.9	30.0	56.1	54.8	54.5	41.5
Asian	59.9	68.9	73.8	74.2	58.2	44.5
Total	60.2	41.9	80.5	77.4	59.8	51.5

There is disagreement on the magnitude of actual dropout numbers—disagreement that is inevitable until high quality data exists that follow individual students over the years and across districts. However, all agree that the consequences of dropping out of high school are devastating at the individual, societal, and national levels.

A recent study shows that children who go to school in the Boston suburbs also live in the most affluent neighborhoods with high median incomes, low poverty rates, high educational attainment, and the least exposure to non-English speakers, and that black and Latino children live in highly disadvantageous settings.⁷⁰ Given these structural inequalities, policies such as the No Child Left Behind Act create perverse incentives for schools to focus on tested content and make adequate yearly progress. Because of the high correlation between race, poverty and language ability,⁷¹ schools with large minority enrollments will have to meet more achievement targets than predominantly white schools under the “subgroup” rules.⁷² Past research has documented that high-minority and high-poverty schools often face the strongest performance pressures.⁷³ Of the 38 schools in Massachusetts identified for No Child Left Behind corrective action in 2003, except for six schools, all are predominantly minority schools, and only two (Springfield and Holyoke) of the eleven districts are not satellite cities of Boston, but represent struggling cities in western Massachusetts.⁷⁴ Three out of every four schools needing corrective action have a higher minority share than the overall school districts of which they are a part. Almost a third of these schools are located in

⁷⁰ Logan, J. Oakley, D. and Stowell, J.(2003) *Segregation in Neighborhoods and Schools: Impacts on Minority Children in Boston Region*. Cambridge, MA: The Civil Rights Project at Harvard University.

⁷¹ Miller, L.S. (1999). Promoting High Academic Achievement Among Non-Asian Minorities. In E.Y. Lowe (Ed), *Promise and Dilemma: Perspectives on Racial Diversity and Higher Education*. Princeton, NJ: Princeton University Press;Puma, M. J., Karweit, N., Price, C., Ricciuti, A. E., Thompson, W., & Vaden-Kiernan, M. (1997). *Prospects: Final Report on Student Outcomes*. Bethesda, MD: Abt Associates.

⁷² Kim, J., & Sunderman, G. L. (2004). *Large Mandates and Limited Resources: State Response to the No Child Left Behind Act and Implications for Accountability*. Cambridge, MA: The Civil Rights Project at Harvard.

⁷³ Madaus, G., & Clarke, M. (2001). The Adverse Impact of High-Stakes Testing on Minority Students: Evidence from One Hundred Years of Test Data. In G. Orfield & M. L. Kornhaber (Eds.), *Raising Standards or Raising Barriers? Inequality and High-Stakes Testing in Public Education*. New York: The Century Foundation Press; Reardon, S. F. (1996). *Eighth Grade Minimum Competency Testing and Early High School Dropout Patterns*. Paper presented at the Annual Meeting of the American Educational Research Association, New York.

⁷⁴ See Table 6 in Appendix.

Boston alone. In the suburbs, MCAS scores for schools with concentrations of minority, poor, or limited-English-speaking students, are much lower than those of their higher-achieving counterparts.⁷⁵

Conclusion and Implications

Though metropolitan Boston is still one of the nation's whitest metropolitan areas, its growth is increasingly non-white and multiracial. Given the demographic trends and the high fragmentation that characterizes the metropolitan area, students are most segregated in regions where they are highly concentrated: black students in Boston, Latino and Asian students in certain satellite cities, and white students in the suburbs. The segregation is not just by race or ethnicity but is increasingly by language. High levels of segregation are also very dramatically linked to social and economic differences, proportion of credentialed teachers, and to differences in schooling outcomes such as MCAS scores and completion rates. Segregated minority schools are markedly less successful in terms of academic achievement as measured by the state's mandated tests.

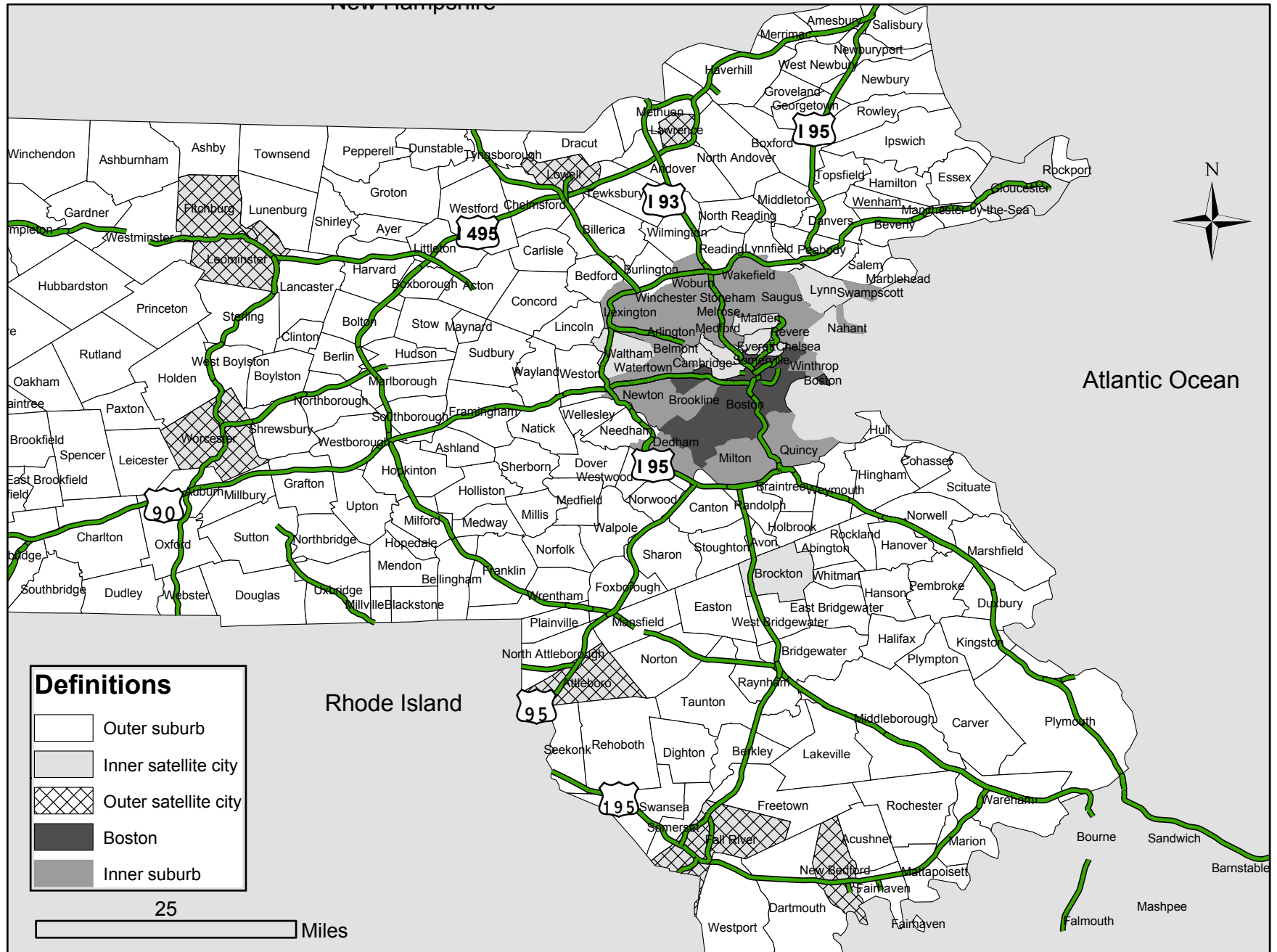
There are some metro Boston communities where there has been a long, successful and continuing commitment to diversity. Communities such as Lynn and Cambridge have taken important positive steps, steps sweepingly upheld by a federal court in the 2003 Lynn decision. Metropolitan Boston is also home to one of the oldest city-suburban voluntary desegregation policies. METCO, the Metropolitan Council for Educational Opportunities, has been in operation for more than a third of a century. More than 30 Boston suburbs voluntarily receive minority transfer students from the city and none have withdrawn in spite of the explosive battles in Boston or the failure of the state government to adequately reimburse their costs in providing the spaces. Though the program serves only a few thousand students, it is very popular, has strong support in many suburban communities and faces an intense demand from minority families in Boston.

However, while METCO provides better schooling opportunities for the students that it serves, it is small-scale and largely privately funded. In addition, as demand for school transfers exceeds the capacity of higher-performing schools to accept transfer, intra-district choice for students in inner city districts such as Boston is unlikely to increase.

The metropolitan region has a serious problem, and it will not go away by itself. The area has a rich variety of experiences in ways to address the challenge positively. This paper shows that separate schools are still profoundly unequal in spite of an intense educational reform issue in Massachusetts. In fact, when the reforms ignore these inequalities they can end up unfairly punishing their victims who were never offered an equal opportunity to learn. It is time for a region-wide discussion on ways in which we can have more schools that will prepare all of our children for the far more multiracial society that is rapidly emerging in the metropolitan region.

⁷⁵ Schworm, P. (2003, December 14). Lingering MCAS Achievement Gap Troubles Educators. The Boston Globe, Globe West, p. 1.

Area Definitions



Appendix:

Table 1: Racial Composition of Boston Exam Schools: 2001-2002

	%White	%Black	%Latino	%Asian
Boston Latin School	51	14	6	28
Boston Latin Academy	42	26	11	22
O'Bryant School of Math/Science	10	47	15	28

Source: National Center for Education Statistics, Common Core of Data.

Appendix:**Table 2****Racial Composition of the 20 Largest Suburban Districts, 2001-02**

	Enrollment	White (%)	Black (%)	Latino (%)	Asian (%)
Newton	11,219	81	5	3	11
Plymouth	9,133	96	2	1	1
Quincy	8,675	69	4	3	24
Haverhill	8,590	80	3	15	2
Framingham	8,391	70	7	17	5
Taunton	8,173	88	6	6	1
Methuen	7,132	80	2	15	3
Weymouth	7,102	92	2	3	2
Wachusett	6,797	97	1	1	1
Peabody	6,715	90	2	7	2
Billerica	6,412	95	0	2	2
Bridgewater-Raynham	6,062	96	2	1	1
Lexington	6,010	78	5	2	15
Brookline	5,951	67	9	5	18
Andover	5,848	90	1	2	7
Revere	5,844	68	5	16	10
Chelmsford	5,662	92	1	1	6
Franklin	5,609	96	1	1	2
Shrewsbury	5,065	87	2	3	9
Salem	5,030	65	4	28	3
TOTAL	139,420	84	3	7	6

Source: National Center for Education Statistics, Common Core of Data.

Appendix:

Table 3

Racial Composition of Schools Attended by English Language Learners in the Inner Satellite Cities, 2000-01

<i>Average Percent of Each Race in School (%)</i>	<i>Racial Composition of School Attended by Average:</i>			
	<i>Non-English Language Learner</i>	English Language Learner	Latino English Language Learner	Asian English Language Learner
White	48	40	34	47
Black	21	21	13	20
Latino	21	30	46	15
Asian	9	9	7	18
Total	99	99	100	100

Table 4

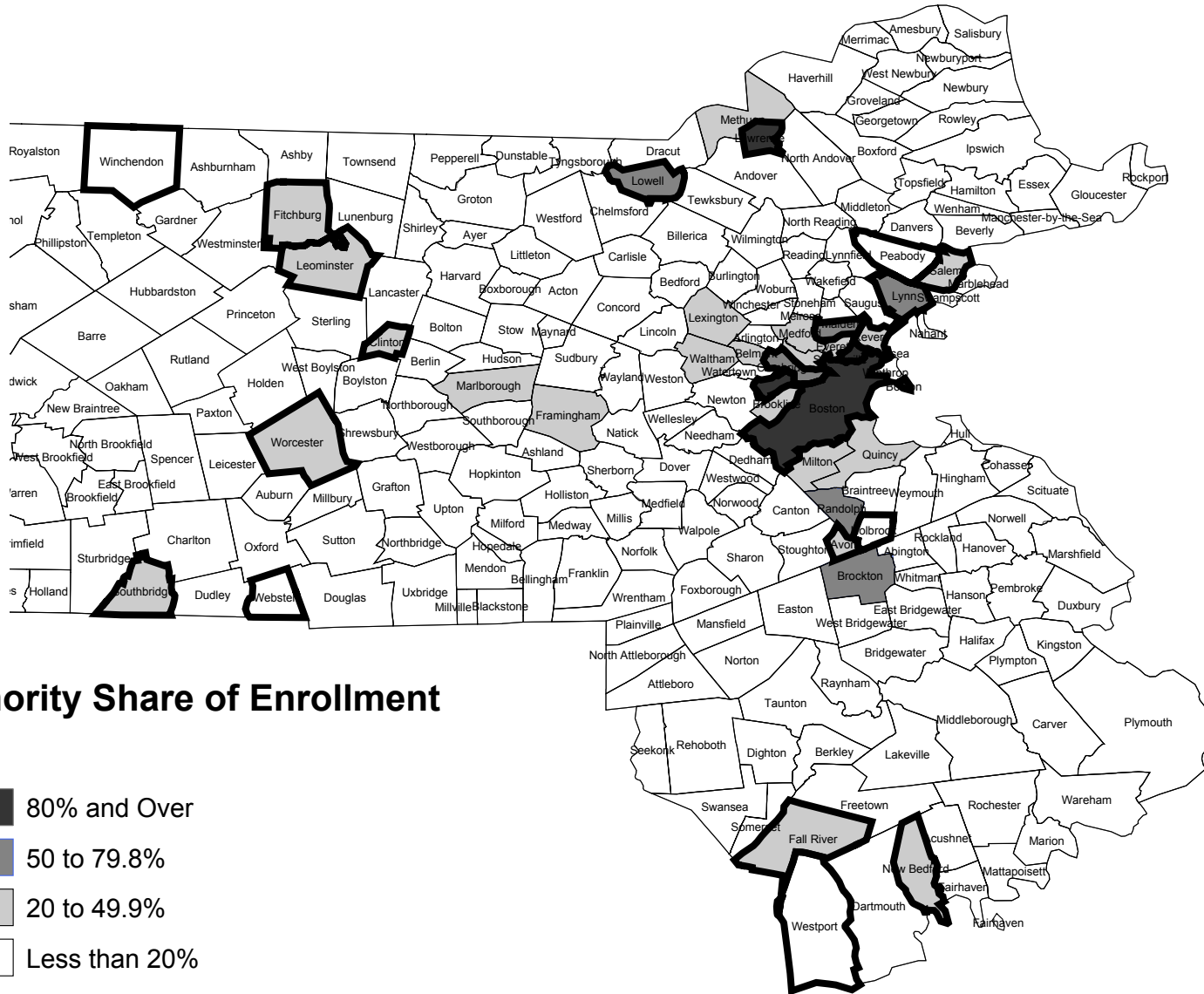
Racial Composition of Schools Attended by English Language Learners in Inner Suburbs, 2000-01

<i>Average Percent of Each Race in School (%)</i>	<i>Racial Composition of School Attended by Average:</i>			
	<i>Non-English Language Learner</i>	English Language Learner	Latino English Language Learner	Asian English Language Learner
White	81	72	77	68
Black	5	6	7	5
Latino	4	5	6	4
Asian	10	17	10	23
Total	100	100	100	100

Table 5
Racial Composition of Schools Attended by English Language Learners
in the Outer Suburbs, 2000-01

<i>Average Percent of Each Race in School (%)</i>	<i>Racial Composition of School Attended by Average:</i>			
	<i>Non-English Language Learner</i>	English Language Learner	Latino English Language Learner	Asian English Language Learner
White	88	76	71	79
Black	3	6	4	8
Latino	5	14	21	5
Asian	3	4	4	8
Total	99	100	100	100

Minority Share of Enrollment and Districts with Less than Half of 10th Graders Scoring at Proficiency Level or Better on English MCAS



Minority Share of Enrollment

- 80% and Over
- 50 to 79.8%
- 20 to 49.9%
- Less than 20%

Districts with less than half of students at proficiency level



Note: Minority share as of 2002-2003 year; MCAS scores as of Spring 2003.
Source: Massachusetts Department of Education and National Center for Education Statistics.

**Appendix:
Technical Notes on The Cumulative Promotion Index**

The Cumulative Promotion Index (CPI) is a “flexible and intuitive method for measuring graduation rates”, developed by Christopher B. Swanson of the Urban Institute and described in detail in “Who Graduates? Who Doesn’t? A Statistical Portrait of Public High School Graduation, Class of 2001¹.”

This study used the CPI along with enrollment data from the National Center for Education Statistics Common Core of Data to “approximate the probability that a student entering the 9th grade will complete school on time with a regular diploma. . . . It does this by representing high school graduation as a stepwise process composed of three grade-to-grade promotion transitions (9 to 10, 10 to 11, and 11 to 12) in addition to the ultimate high school graduation event (grade 12 to diploma.).

The equation below illustrates the formula for calculating the CPI using the class of 2001 as an example:

$$CPI = \left[\frac{E_{2002}^{10}}{E_{2001}^9} \right] * \left[\frac{E_{2002}^{11}}{E_{2001}^{10}} \right] * \left[\frac{E_{2002}^{12}}{E_{2001}^{11}} \right] * \left[\frac{G_{2001}}{E_{2001}^{12}} \right]$$

where

G_{2001} is the count of students who graduated with a regular high school diploma during the 2000-2001 school year

E_{2001}^9 is the count of enrolled in grade 9 at the beginning of the 2000-01 school year

E_{2002}^{10} is the count of students enrolled in grade 10 at the beginning of the 2001-02 school year

By multiplying grade-specific promotion ratios together, the CPI estimates the likelihood that a ninth grader from a particular school system” (or grouping of school systems,) “will complete high school with a regular diploma given the conditions prevailing in that school system during the 2000-01 school year.”²

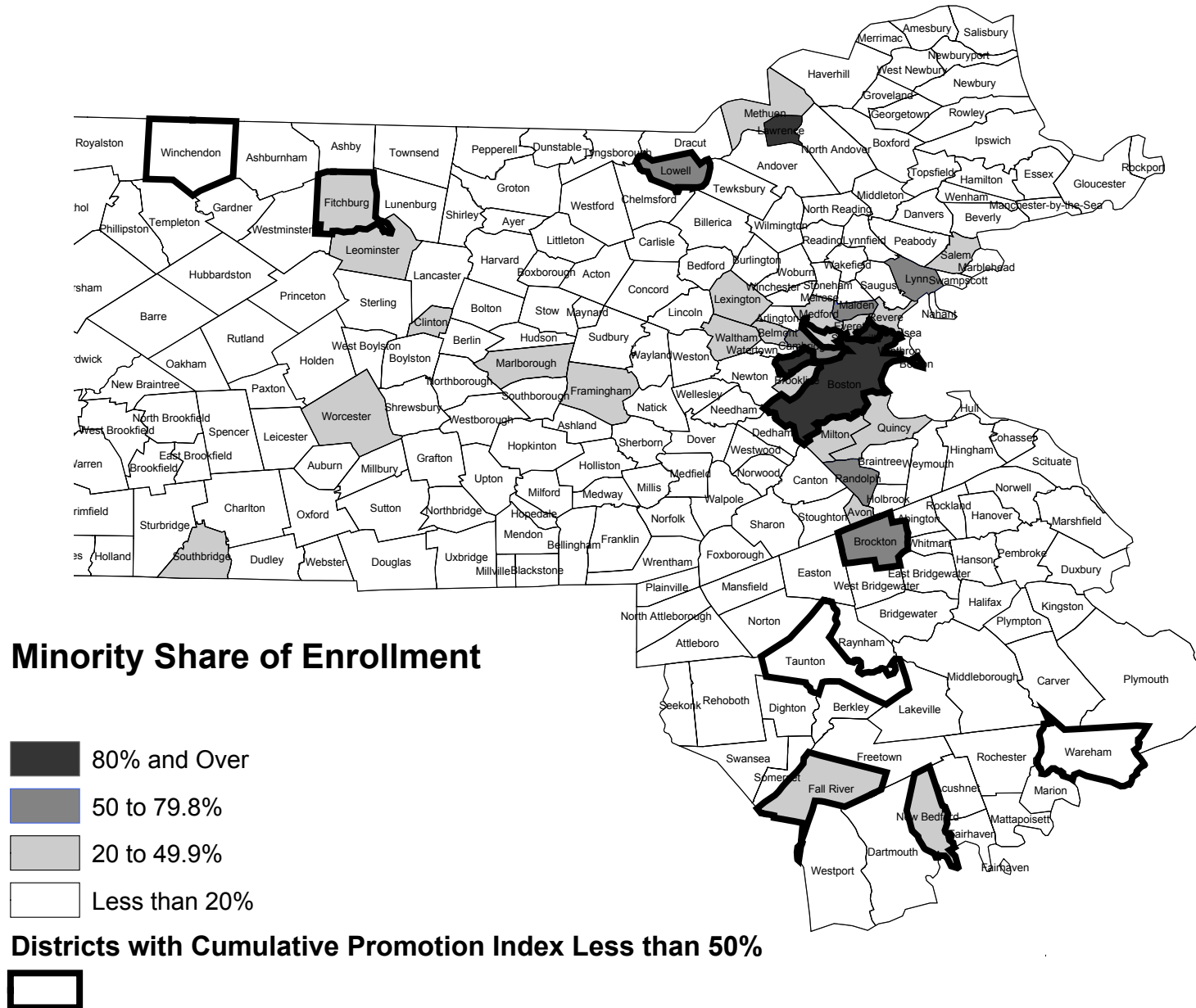
The calculations reported in this study differ from those developed by Swanson in 2 ways.

¹ http://www.urban.org/UploadedPDF/410934_WhoGraduates.pdf

² Swanson, Christopher B. “Who Graduates? Who Doesn’t? A Statistical Portrait of Public High School Graduation, Class of 2001. p. 7. The Urban Institute. Education Policy Center. Washington, D.C. 2004.

- 1) Districts with less than 5 enrolled students of the particular race/ethnicity of interest in grade 10 in 2002 were excluded from the analysis.
- 2) If the number of students enrolled in a specified grade exceeded the number enrolled in the previous grade during the preceding year, enrollment of the latter grade was revised to equal the enrollment in the previous grade during the preceding year.

Minority Share of Enrollment and Districts with Cumulative Promotion Index Less than 50 Percent



Note: Minority share as of 2002-2003 year; CPI calculated based on transitions from 2000-2001 to 2001-2002 school year.
Source: Massachusetts Department of Education and National Center for Education Statistics.

Appendix:**Table 6: Percent Minority in Schools Identified for Corrective Action, 2003**

District	School	Corrective Action?	Percent	Percent
			Minority in School	Minority in District
Boston	Charles H Taylor	Math	98	85
Boston	Elihu Greenwood	Math	91	85
Boston	James J Chittick	Math	94	85
Boston	John Marshall	Math	98	85
Boston	Lucy Stone	ELA	96	85
Boston	Mattahunt	Math	96	85
Boston	Maurice J Tobin	Math	99	85
Boston	Michael J Perkins	Both	70	85
Boston	Paul A Dever	Both	87	85
Boston	William M Trotter	Both	96	85
Boston	Grover Cleveland	Math	94	85
Boston	Washington Irving Ms	Math	77	85
Cambridge	M E Fitzgerald	Both	57	61
Cambridge	Benjamin Banneker Charter School	Math	97	61
Fall River	William S Greene	Math	35	21
Fall River	Edmond P Talbot Midd	Math	22	21
Fall River	Henry Lord Middle	Both	19	21
Holyoke	Dr Wm R Peck Middle	Math	76	75
Lawrence	James F Leonard	Math	94	89
Lawrence	South Lawrence East	Math	85	89
Lawrence	Emily G Wetherbee	Math	78	89
Lawrence	Lawrence Family Development Charter School	Math	99	89
Lowell	James Sullivan Middle School	Math	48	56
Lynn	E J Harrington	ELA	82	58
New Bedford	Keith Jr High	Math	40	33
New Bedford	Normandin Jr High	Math	22	33
Somerville	Powder House Community	Math	70	52
Springfield	Brightwood	ELA	93	77
Springfield	Elias Brookings	Math	83	77
Springfield	William N Deberry	Math	96	77
Springfield	Homer Street	Both	92	77
Springfield	Washington	ELA	82	77
Springfield	White Street	ELA	87	77
Springfield	Gerena	ELA	93	77
Springfield	John J Duggan Middle School	Math	84	77
Springfield	M Marcus Kiley Middle School	Math	75	77
Springfield	Mass Career Dev Inst	Math	83	77
Worcester	Accelerated Learning	ELA	63	48

Appendix: Table 7

Share of Students of Each Race/Ethnicity Attending Schools With Specified Share White Enrollment, by Region: 2001-2002

Percent White in Schools	Boston				Inner Satellite Cities				Outer Satellite Cities				Inner Suburbs				Outer Suburbs			
	White	Black	Latino	Asian	White	Black	Latino	Asian	White	Black	Latino	Asian	White	Black	Latino	Asian	White	Black	Latino	Asian
0-10%	16	61	54	34	0	0	0	0	1	2	24	2	0	0	0	0	0	0	0	0
11-20%	18	18	21	21	5	6	36	13	1	1	10	1	0	0	0	0	0	0	0	0
21-30%	30	15	16	23	4	10	13	8	2	2	6	8	0	0	0	0	0	0	0	0
31-40%	9	2	5	3	17	35	19	19	4	7	7	12	0	0	0	0	0	6	1	2
41-50%	14	2	3	8	24	31	17	28	16	24	19	39	1	7	8	6	0	8	2	2
51-60%	13	1	1	12	12	9	7	18	19	25	18	17	3	4	10	11	0	2	8	1
61-70%	0	0	0	0	8	4	3	7	14	16	8	8	6	14	14	15	1	3	14	2
71-80%	0	0	0	0	14	4	5	6	18	14	6	5	24	38	32	36	5	13	28	10
81-90%	0	0	0	0	3	0	1	1	21	8	3	7	33	28	26	24	16	29	20	35
91-100%	0	0	0	0	12	0	1	1	4	1	0	0	33	9	10	8	77	40	28	47
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Note: Schools which are 0-10% white are classified as intensely-segregated-minority schools. Schools which are 91-100% white are classified as intensely-segregated-white schools.

Source: National Center for Education Statistics.