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# Racial Equity and Opportunity in Metro Boston Job Markets

*By*

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## **Racial Equity and Opportunity in Metro Boston Job Markets**

### **Executive Summary**

People of color make up a vital and growing part of Metro Boston's workforce. They face substantial challenges, however, in obtaining employment (especially in faster-growing and higher-paying sectors), in accessing locations of rapid job growth, and in earning a livable income. Latinos and blacks face the greatest hurdles, yet certain Asian populations struggle as well—especially those with less education and those working in the shrinking manufacturing sector or low-paying service jobs. Previous work by the Metro Boston Equity Initiative of the Civil Rights Project at Harvard University has examined the related challenges of segregated housing patterns and unequal educational opportunities faced by racial and ethnic minorities in Metro Boston. This paper takes the next logical step—exploring how segregated living patterns result in limited minority access to fast growing job areas and how unequal educational opportunities and high drop-out rates handicap minorities in a labor market where the gap between the economic returns to those with education and skills and those without is widening.

Metro Boston's workforce is becoming more racially and ethnically diverse. Over the 1990s total employment growth was just 4%, but the number of Latino workers grew by over 50%, and the number of Asian workers grew by more than 70%. At the same time, the number of white workers declined slightly. Foreign immigration is the main driver behind minority employment growth. As of 2000, over 80% of employed Asian workers and over half of Latino workers were immigrants. Nevertheless, the Metro Boston workforce remains overwhelmingly (85%) white--the third whitest workforce among large metro areas. If current trends continue, the Metro Boston workforce will be about three quarters white by 2020, roughly matching the composition of today's entry-level workforce (age 20-30.) However, given the movement of the large, mostly white baby-boom generation toward retirement ages, it is likely that the future workforce will be even less white than current trends suggest.

Consistent with national spatial patterns, job growth continues to move outward, away from the areas of greatest minority population growth. The large majority (71%) of Metro Boston's net job growth over the 1990s occurred in the outer suburbs (suburban areas beyond Route 128.) While all of net white population growth occurred in these outer areas, only 18% of Latino, 24% of black, and 30% of net Asian population growth occurred there. In contrast, only 4% of Metro Boston's net job growth took place in the urbanized satellite cities (places such as Lowell, Lawrence, Brockton, and New Bedford), but 56% of Latino, 48% of black, and 33% of Asian net population growth occurred there. While people of color are finding jobs in suburban locations to a greater degree than in the past, if current trends persist, minority residential patterns and the geography of job growth will continue to diverge.

The spatial mismatch between where people of color live and where jobs are growing fastest makes access to transportation especially important in gaining and maintaining employment. Generally speaking, the ability to work in the outer suburbs depends on access to a reliable car. Yet, people of color are much less likely than whites to live in a household with a vehicle available. Almost a third of black and Latino and a fifth of Asian households have no vehicle access, versus 11% of white ones. Even in the suburbs, 1 in 7 black and 1 in 6 Latino households lack vehicle access. People of color, and blacks especially, are much more reliant on public transportation as a means of commuting to work than are whites. This pattern is partially explained by the much greater concentration of blacks in the City of Boston, where public transportation is most accessible. Yet, the disparity prevails within geographic sub-regions



as well, particularly in the suburbs. Even in the outer suburbs, about 12% of black workers and 7% of Asian workers rely on public transportation for their commute, compared to 4% of whites. Roughly 10% of suburban Latinos rely on public transportation. Relative to other groups, suburban Latinos disproportionately rely on carpooling, as do those Latinos living in the urbanized satellite cities.

Metro Boston's employment base is shifting not only in terms of location, but also in terms of occupation—a shift primarily from manufacturing to services. Over the 1990s, almost 72,000 manufacturing jobs were lost—close to one sixth of all manufacturing jobs in the metro. The majority (58%) of these losses occurred in the urbanized satellite cities, which lost close to a third of their manufacturing base. In almost all locations, the service sector added the most jobs and grew at the fastest rate (34%). The loss of manufacturing and production jobs is especially problematic for Latinos. As of 2000, Latinos were twice as likely as the general population to work in the production, transportation, and material moving occupations, occupations that generally require less English language fluency. Unlike most Asians, blacks and Latinos are over-represented in lower-paying service jobs, relative to their share of the total workforce, and greatly under-represented in professional and technical jobs. Thus, as of 2003, Latinos had the highest rates of poverty in Metro Boston (27% vs. 6% for the non-Latino white population.)

People of color are more disconnected from the workforce and from education than are whites. Unemployment rates for Metro Boston's blacks and Latinos are well over twice as high as for whites. Particularly troubling are the relatively high shares of Latino young people who have no high school diploma, yet are neither enrolled in school nor working. Over ten percent of Latinos ages 16-19 fall into this category—almost 12 percent in the satellite cities. High school graduates have lower unemployment rates for all racial groups, and a diploma is essential as a gateway to higher education. For example, the unemployment rate of young (aged 25-44) black men without a diploma in 2000 was 13.5%. That rate dropped to 9.7% for high school graduates and 3.5% for those with post-secondary education. Similarly, Latino women without a diploma earned \$18,000 per year in Metro Boston in 1999 while those with a diploma alone earned \$20,000 and those with further education earned \$28,000 annually. As the economy increasingly rewards workers with higher skills, college is even more crucial to earning a livable income. Relatively high levels of dropping out put minority youth at risk of criminal activity and imprisonment, and having a criminal record is increasingly a barrier to employment.

Employment discrimination, while less blatant than in the past, and the perception of discrimination also still remain as significant barriers for workers of color. A recent poll of 400 blacks and Latinos in Metro Boston commissioned by the Harvard Civil Rights Project revealed that over one in five African Americans (21%) and one in six (17%) Latinos reported that they were discriminated against at work during the past year because of their race/ethnicity. Almost a third of blacks (31%) and 15% of Latinos reported that they were denied a job they applied for in Metro Boston over the past decade because of their race or ethnicity.

After more than three years of sputtering, the employment outlook in Massachusetts is once again brightening, and it is likely that minority populations will continue to account for the vast majority of labor force growth. Lowering the hurdles that loom for these workers will benefit not only their families and communities but the Metro Boston economic engine as well. Specifically, to promote equity and opportunity for workers of color in Metro Boston we need to:

### **Reduce barriers that keep people of color from living in job growth areas**

- Produce more affordable housing in outlying, high employment growth areas.
- Provide information about non-traditional destinations to homeseekers of color and increase the number and reach of realtors who work with minorities.
- Vigorously enforce Fair Housing laws, with monies allocated for fair housing testing and education.

### **Develop employment opportunities where workers of color already live**

- Develop good-paying jobs in more urbanized areas, particularly many of the satellite cities that have experienced the greatest job losses.
- Take advantage of the existing workforce, reduce traffic congestion and its associated environmental impacts by creating more centralized jobs as a critical component of any “smart growth” strategy.

### **Facilitate transportation to job sites for workers who live at a distance**

- Whether through fixed route services or, more flexibly, subscription taxi, van services, or short term rentals--the public sector, employers, and non-profits must continue to strive to connect people with employment opportunities.

### **Promote quality education, foster inter-racial contact in schools, and retrain workers in some manufacturing sectors**

- Closing the achievement gap will likely take a multi-pronged effort including more equitable funding, early childhood intervention, smaller classes, and greater parent involvement. However, the substantial segregation of students of color in concentrated poverty schools must also be challenged. Many students of color are segregated into high-poverty schools that have trouble obtaining the best teachers, have less challenging curriculum, and have higher drop-out rates.
- As society becomes more multi-racial, the ability to interact successfully with co-workers and clients of different backgrounds becomes more important. Plans that facilitate integration, such as METCO, are needed to encourage interaction between youth of different races, leading to more successful and harmonious workplaces.
- Given the importance of immigrants to the metro’s workforce, it is necessary to increase funding and reduce waiting lists for English, literacy, and GED training, and workforce development.
- Support retraining for those in shrinking manufacturing sectors, either into higher-skilled technology manufacturing or more skilled services.

### **Actively support workers of color and challenge workplace discrimination**

- Encourage programs, such as those run by The Partnership, that support professionals of color.
- Enforce fair employment laws to fight employment discrimination and unfair labor practices.

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## **Racial Equity and Opportunity in Metro Boston Job Markets**

People of color make up a vital and growing part of Metro Boston’s workforce, yet they face substantial challenges in obtaining employment (especially in faster-growing and higher-paying sectors), in reaching locations of rapid job growth, and in earning a livable income. Latinos and blacks face the greatest hurdles, yet certain Asian populations struggle as well—especially those with less education and those working in the shrinking manufacturing sector or low-paying service jobs. Previous work by the Metro Boston Equity Initiative of The Civil Rights Project at Harvard University has examined the related challenges of segregated housing patterns and unequal educational opportunities faced by racial and ethnic minorities in Metro Boston. This paper takes the next logical step—exploring how segregated living patterns limit minority access to fast growing job areas and how unequal educational opportunities and high drop-out rates handicap minorities in a labor market where the gap between the economic returns to those workers with education and skills and those without is widening.

### **Increasing Diversity of Metro Boston’s Workforce**

Metro Boston’s<sup>1</sup> workforce<sup>2</sup> is becoming more racially and ethnically diverse. Since 1990, workers of color have accounted for all of the growth in Metro Boston’s labor market. Total employment growth during the 1990s was just 4%, but the number of Latino workers grew by over 50%, and the number of Asian workers grew by more than 70%. At the same time, the number of white workers declined slightly. Nevertheless, the Metro Boston workforce remains overwhelmingly (85%) non-Latino white<sup>3</sup>. Among the 26 largest metropolitan areas<sup>4</sup> in the U.S. in 2000, Metro Boston’s minority share of the employed workforce ranked at #24 (ahead of just Minneapolis and Pittsburgh.) This low ranking is primarily due to under-representation of blacks (rank #23 of 26) and Latinos (rank #19 of 26.) Asians were represented at a more substantial level (rank #13 of 26.) Within the higher-status managerial and professional occupations, Metro Boston ranked at approximately the same level as it did for total employment.

If current trends continue, the Metro Boston workforce will be about three quarters white by 2020, roughly matching the composition of today’s entry-level workforce (age 20-30.) However, given the movement of the large, mostly white baby-boom generation toward retirement ages, it is likely that the future workforce will be even less white than current trends suggest.

Within the City of Boston, now a “majority-minority” city in terms of population, people of color make up a significantly larger proportion of the workforce (25%) than they do in the

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<sup>1</sup> Unless otherwise specified, “Metro Boston” is defined as the Massachusetts portion of the Boston New England County Metropolitan Area (NECMA—as defined by the U.S. Office of Management and Budget) consisting of Bristol, Essex, Middlesex, Norfolk, Plymouth, Suffolk, and Worcester counties.

<sup>2</sup> Unless otherwise specified, data in this report refer to the civilian workforce only and exclude those in the Armed Forces.

<sup>3</sup> Unless otherwise specified, this report uses the term “white” to refer to “non-Latino whites.”

<sup>4</sup> Defined as Primary Metropolitan Statistical Areas (PMSAs) or Metropolitan Statistical Areas (MSAs) with populations over 2 million in 2000.

suburbs (11%) and the metro’s other large cities (16%.) (**Exhibit 1**) But the City’s *workforce* is considerably whiter than its *resident* population, due to the higher share of minority City residents in young, non-working age groups, higher levels of minority unemployment, and the influx of white commuters into the City of Boston.

**Exhibit 1**

<b>Racial and Ethnic Share of Employed Workforce: 2000</b>					
(Percent)					
	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>	<u>Other</u>
<b>METRO</b>	85.2	4.6	4.0	3.8	2.3
<b>City of Boston</b>	75.2	6.5	9.7	5.7	2.9
<b>Other Large Cities</b>	84.2	5.4	3.8	4.0	2.5
<b>Suburbs</b>	89.4	3.5	2.1	3.0	1.9

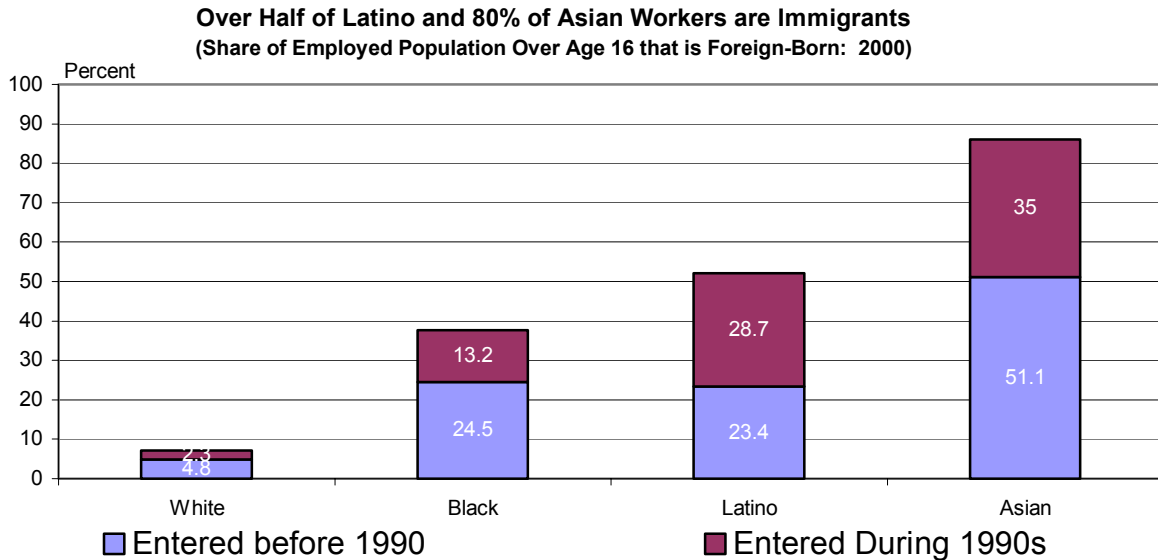
Source: Census 2000 Equal Employment Opportunity File.  
 Note: "Other Large Cities " include: Brockton, Brookline, Cambridge, Fall River, Framingham, Haverhill, Lawrence, Lowell, Lynn, Malden, Medford, New Bedford, Newton, Plymouth, Quincy, Somerville, Taunton, Waltham, Weymouth, Worcester.  
 Metro Area includes Counties of Bristol, Essex, Middlesex, Norfolk, Plymouth, Suffolk, and Worcester.  
 "Suburbs" defined as Metro Area outside of Boston and other large specified cities.

Foreign immigration has clearly been the driver behind the growth in the workforce of color. The Center for Labor Market Studies at Northeastern University estimates that **all** of the growth in the labor force in Massachusetts over the 1990s was due to immigration.<sup>5</sup> As of 2000, over 80% of employed Asian workers in Metro Boston were immigrants--35% recent immigrants (entered the U.S. during the 1990s) (**Exhibit 2.**) Over half of employed Latino workers were immigrants—29% recent immigrants. In contrast, only 7% of white workers were immigrants.

<sup>5</sup> Sum, Andrew et. al. "Foreign Immigration and Its Contribution to Population and Labor Force Growth in Massachusetts and the U.S.: A Recent Assessment of 2000 Census and CPS Survey Findings." Center for Labor Market Studies. Northeastern University. 2001. <http://www.nupr.neu.edu/12-01/immigrant.PDF>



## Exhibit 2



Note: Excludes people who indicated more than one race. Whites, blacks, and Asians are "non-Latino" members of those groups.  
Includes employees working in Bristol, Essex, Middlesex, Norfolk, Plymouth, Suffolk counties, and the southern half of Worcester County.  
Source: 2000 Census, 5% Public Use Microdata Sample.

### Job Growth Continues to Move Outward; Slowest in Urbanized Satellite Cities

Consistent with national spatial patterns, job growth has been fastest in Metro Boston's outer suburbs, far from the location of most Latino and black residents. Over the 1990s, the rate of job growth in the outer suburbs was almost ten times that of Boston's urbanized satellite cities<sup>6</sup> and twice that of the City of Boston or the inner suburbs<sup>7</sup>. Increases were particularly vigorous in the I-495 region (**Exhibit 3--map**). Unfortunately, these patterns of job growth align quite poorly with the locations where people of color, particularly blacks and Latinos, have historically settled or are now moving in greatest numbers.

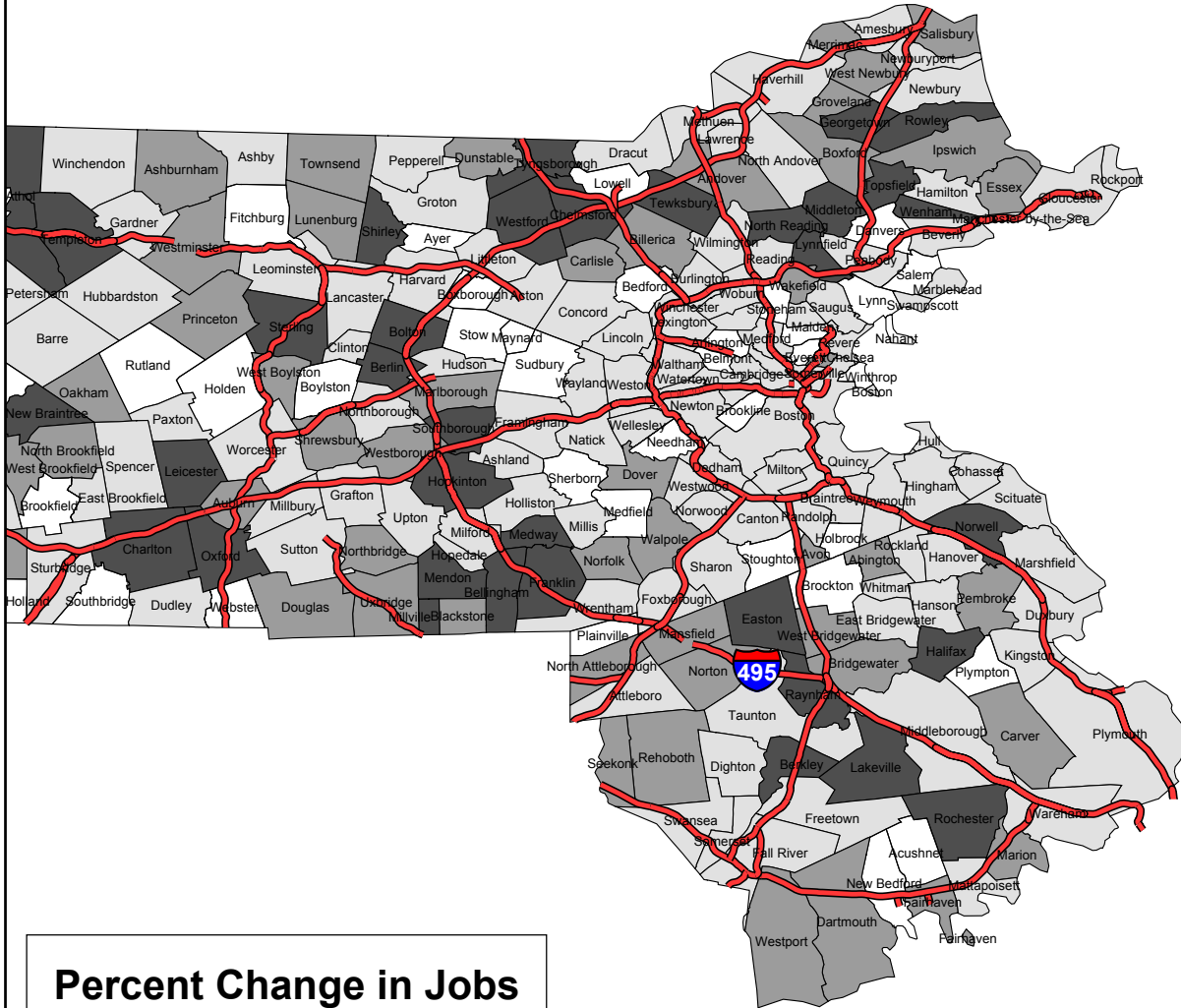
The majority (71%) of Metro Boston's net job growth (job gain minus loss) over the 1990s occurred in the outer suburbs (**Exhibit 4**). While **all** of net white population growth (population gain minus loss) occurred in these outer areas, only 18% of Latino, 24% of black, and 30% of net Asian population growth occurred there. In contrast, only about 4% of job growth took place in the urbanized satellite cities, but 56% of Latino, 48% of black, and 33% of Asian net population growth occurred there. While it is certainly true that people of color are finding jobs in suburban

<sup>6</sup> The "satellite cities" are defined as those, apart from the City of Boston, designated by the Office of Management and Budget as "central cities" as of 1999 plus other cities and towns with population densities over 10,000 people per square mile. These include: Attleboro, Brockton, Cambridge, Chelsea, Everett, Fall River, Fitchburg, Gloucester, Lawrence, Leominster, Lowell, Lynn, Malden, New Bedford, Somerville, Waltham, and Worcester.

<sup>7</sup> The "inner suburbs of Boston" are essentially those non-satellite cities which lie within the Route 128/I95 belt (excepting a few cities to the North where 128/I95 turns northward and down Cape Ann.) These suburbs include: Arlington, Belmont, Brookline, Dedham, Lexington, Medford, Melrose, Milton, Nahant, Newton, Quincy, Revere, Saugus, Stoneham, Swampscott, Wakefield, Watertown, Winchester, Winthrop, and Woburn.

# Exhibit 3

## Percent Growth in Jobs: 1990-2000



Source: Calculations based on data obtained from MA Dept. of Employment and Training.

locations to a greater degree than in the past, if current trends persist, the residential patterns of people of color and the geography of job growth will continue to diverge.

**Exhibit 4**

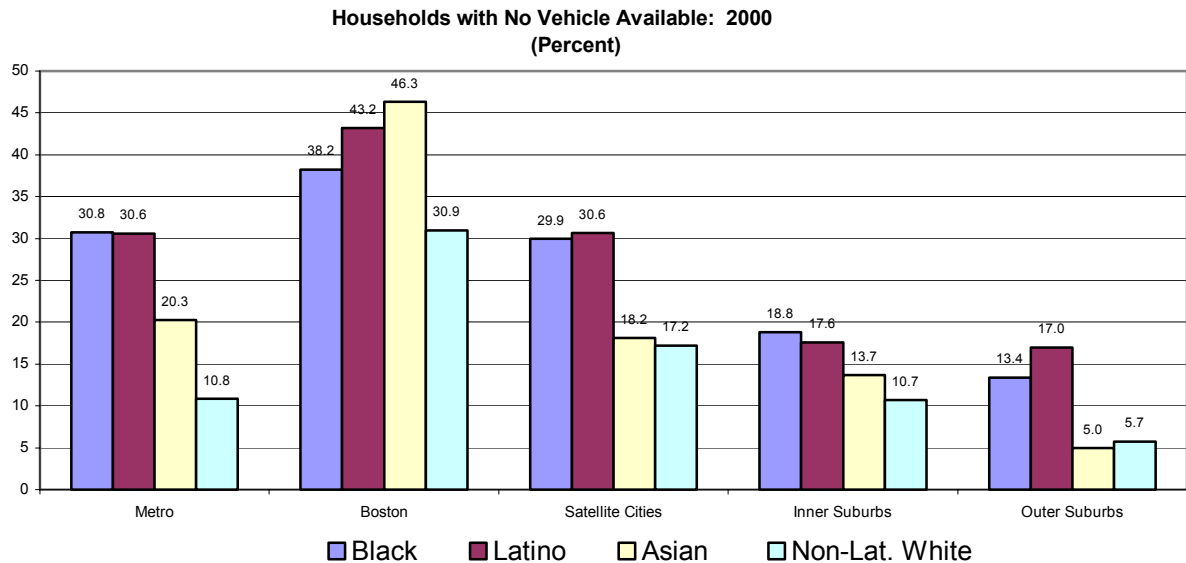
<b>Regional Shares of Net Job and Population Growth: 1990-2000</b>						
(Percent)						
	<b>Net Job Growth</b>	<b>Net Population Growth</b>				
		<b>Total</b>	<b>Latino</b>	<b>White</b>	<b>Black</b>	<b>Asian</b>
<b>City of Boston</b>	15.3	5.2	20.3	0.0	18.5	14.9
<b>Satellite Cities</b>	4.4	12.0	55.6	0.0	47.8	33.3
<b>Inner Suburbs</b>	9.2	3.5	5.8	0.0	10.2	21.8
<b>Outer Suburbs</b>	71.1	79.4	18.3	100.0	23.5	29.9
<b>Metro</b>	100.0	100.0	100.0	100.0	100.0	100.0

Note: Columns may not sum to 100 due to rounding.  
Sources: 1990 and 2000 Census, Summary File 1 and Mass. Dept. of Employment and Training.

**Minority Commuters Much More Dependent on Public Transportation**

The spatial mismatch between where people of color live and where jobs are growing fastest makes access to transportation an especially important factor in gaining and maintaining employment. Unfortunately, minorities in Metro Boston are much more likely to live in a household with no vehicle available than are whites (**Exhibit 5**). Almost a third of black and Latino and a fifth of Asian households have no vehicle access, compared to 11% of whites. Not surprisingly, given the density and availability of public transportation in the City of Boston, people of all races residing there are less likely to have access to a vehicle than those living in outlying areas. Yet, even in the outer suburbs, almost 1 in 7 black and 1 in 6 Latino households lack vehicle access.

## Exhibit 5



Source: 2000 Census, Summary File 3.

People of color, and blacks especially, are much more reliant on public transportation as a means of commuting to work than are whites (**Exhibit 6**). This pattern is partially explained by the much greater concentration of blacks in the City of Boston, where public transportation is most accessible, and the higher concentration of whites in suburbs. Yet, the disparity prevails within geographic sub-regions as well, particularly in the suburbs. Even in the outer suburbs, about 12% of black workers and 7% of Asians workers rely on public transportation for their commute, compared to 4% of whites. Roughly 10% of suburban Latinos rely on public transportation. Relative to other groups, suburban Latinos disproportionately rely on carpooling, as do those Latinos living in the urbanized satellite cities.

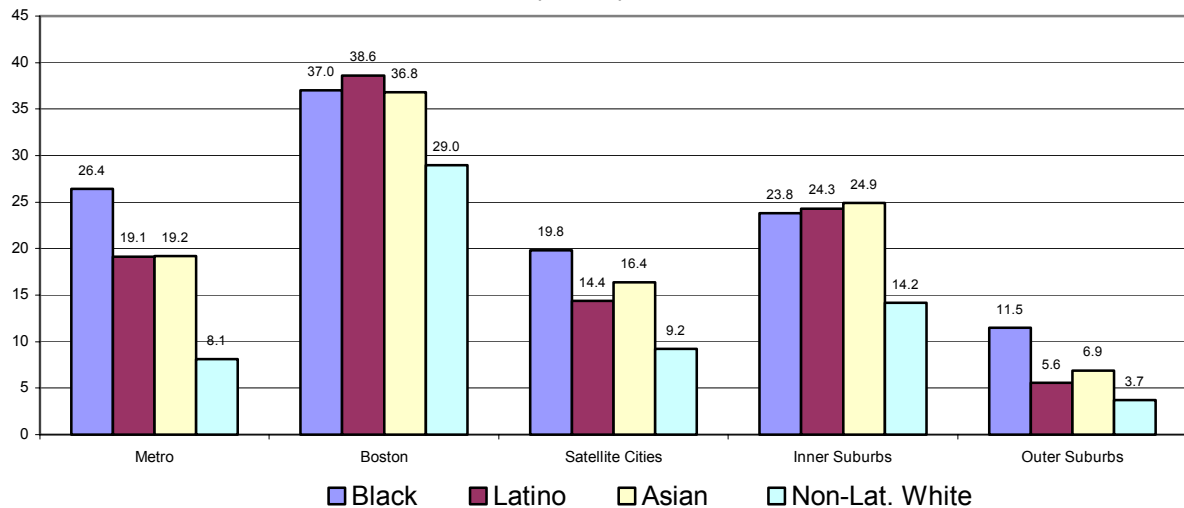
Further complicating the commute of certain populations is the requirement of a Social Security Number as a condition of obtaining a driver's license. The Massachusetts Immigrant & Refugee Advocacy Coalition estimates that there are over 150,000 immigrants in MA who cannot apply for a license because they do not have a Social Security Number<sup>8</sup>. A recent study by researchers at the University of Massachusetts, Boston highlights the difficulties of Latino immigrants without licenses, both in commuting to work and in being restricted to higher-priced housing because they cannot commute to their jobs from lower housing cost areas<sup>9</sup>.

<sup>8</sup>Massachusetts Immigration & Refugee Advocacy Council. "Driver's License Bill Fact Sheet." <http://www.miracoalition.org/2spring2004.htm>

<sup>9</sup>Uriate, Miren et. al. "Salvadorans, Guatemalans, Hondurans, and Colombians: A Scan of Needs of Recent Latin American Immigrants to the Boston Area." 2003 Practicum in Applied Research of the PhD Program in Public Policy. University of Massachusetts, Boston. December 2003.

## Exhibit 6

Share of Workers Age 16+ Who Take Public Transportation to Work: 2000  
(Percent)



Source: 2000 Census, Summary File 3.

Lack of transportation acts as an economic barrier not only to racial minorities but also to others who live far from the sites of new job creation (not to mention the importance of transportation in accessing healthcare, educational, shopping, and recreational facilities.) Metro Boston’s public transportation infrastructure was constructed primarily as a way for workers to commute in and out of downtown, and it has changed relatively little over time, even as job growth has shifted outward. In many outlying areas there is no public transportation at all, and if it does exist, it mainly shuttles people to and from the downtown. Some large companies have established van services to assist their employees, but this solution is not likely to be cost effective for individual smaller employers whose workers are spread over a wide area. The need for better transportation networks, particularly in the suburbs, will become even more urgent over the next two decades as the large baby-boom generation ages and the number of elders who do not drive increases. Many groups--workers without cars (who are disproportionately minority), the elderly, disabled, youth, and environmentalists—need to form and maintain broad coalitions to improve transportation access, and planners must consider equity issues when developing transportation plans.

### Overall Shift in Economy Away from Manufacturing Toward Services

Metro Boston’s employment base is shifting not only in terms of location, but also in terms of occupation—a shift primarily from manufacturing to services. Over the 1990s, almost 72,000 manufacturing jobs were lost--close to one sixth of all manufacturing jobs in the metro (**Exhibit 7**). The majority (58%) of these losses occurred in the urbanized satellite cities, which lost close to a third of their manufacturing base. Waltham and Lowell—two of the most important early manufacturing centers in the U.S.-- led the list, each losing over 8,000 manufacturing jobs. Disturbingly, the satellite cities also lost jobs in two sectors that were growing in the metro area overall—trade and “finance, insurance, and real estate.”

Exhibit 7

<b>Change in Employment by Sector: 1990-2000</b>							
	<b>Percent Change in Jobs</b>						
	<u>Government</u>	<u>Construction</u>	<u>Manufacturing</u>	<u>TCPU</u>	<u>Trade</u>	<u>FIRE</u>	<u>Services</u>
<b>Metro</b>	5.8	33.0	-16.0	12.2	7.2	10.3	34.1
<b>City of Boston</b>	-12.5	50.0	-13.9	2.1	2.6	15.2	20.6
<b>Satellite Cities</b>	17.0	22.2	-30.2	4.0	-4.7	-15.9	25.4
<b>Inner Suburbs</b>	7.1	9.9	-20.2	12.6	-9.5	13.1	35.4
<b>Outer Suburbs</b>	13.5	38.7	-7.9	23.1	16.9	19.0	51.7
	<b>Change in Number of Jobs</b>						
	<u>Government</u>	<u>Construction</u>	<u>Manufacturing</u>	<u>TCPU</u>	<u>Trade</u>	<u>FIRE</u>	<u>Services</u>
<b>Metro</b>	18,522	26,781	-71,932	13,176	41,858	18,796	258,254
<b>City of Boston</b>	-12,391	5,043	-4,377	718	1,936	11,628	43,465
<b>Satellite Cities</b>	10,617	3,359	-41,481	828	-5,760	-5,383	51,827
<b>Inner Suburbs</b>	1,916	1,297	-6,201	1,396	-7,731	3,410	33,520
<b>Outer Suburbs</b>	17,820	26,781	-19,958	9,911	51,450	8,917	127,994

Note: "TCPU" includes Transportation, Communication, and Public Utilities. "FIRE" includes Finance, Insurance, and Real Estate.  
 Source: Massachusetts Dept. of Employment and Training.

In all locations, the service sector added the most jobs and grew at the fastest rate (34%). The sole exception was the construction sector in the City of Boston, which grew by 50% over the decade, no doubt aided by employment generated by the Big Dig. Yet, even there, the additional 5,000 net construction jobs were dwarfed in numerical terms by the 43,000 increase in service sector jobs.

The loss of manufacturing and production jobs is especially problematic for Latinos. As of 2000, Latinos were twice as likely as the general population to work in the production, transportation, and material moving occupations (**Exhibit 8**). Latinos have a long history of working in Massachusetts' urbanized industrial centers, either having dropped out of the agricultural migration stream or been recruited from their native countries for production jobs.<sup>10</sup> However, being so highly concentrated in a struggling industry brings severe challenges—unsteady and often part-time work, relatively low wages, and few benefits. Latinos, particularly new immigrants, are also quite concentrated in low-wage service sector jobs. Thus, as of 2003, Latinos had the highest rates of poverty in Metro Boston (27% vs. 6% for the non-Latino white

<sup>10</sup> Borges-Mendez, and Miren Uriarte. "Tales of Latinos in Three Small Cities: Latino Settlement in Lawrence and Holyoke, Massachusetts and in Providence, Rhode Island." Unpublished. Cited with permission. 2003.

population,<sup>11</sup>) a situation made more challenging by the fact that many immigrants send a portion of their incomes to support family in their native countries.

**Exhibit 8**

<b>Occupation by Race/Ethnicity and Sex: 2000</b>					
<b>(Share in Each Occupation)</b>					
	<b>Total</b>	<b>Latino</b>	<b>White</b>	<b>Black</b>	<b>Asian</b>
<b>Males</b>					
Management, professional, and related occupations:	40.0	19.5	41.1	29.4	57.4
Service occupations:	11.5	23.8	10.2	21.1	11.5
Sales and office occupations:	18.7	16.5	19.2	19.7	12.5
Construction, extraction, and maintenance occupations:	13.6	11.0	14.3	9.9	4.3
Production, transportation, and material moving occupations:	15.8	28.5	14.9	19.8	14.2
<b>Females</b>					
Management, professional, and related occupations:	43.5	27.3	44.8	36.2	47.9
Service occupations:	15.3	25.0	14.1	25.9	12.0
Sales and office occupations:	34.0	28.5	34.9	32.0	24.2
Construction, extraction, and maintenance occupations:	0.6	0.9	0.5	0.5	0.3
Production, transportation, and material moving occupations:	6.5	18.0	5.5	5.4	15.5
Source: 2000 Census, Summary File 3.					

Blacks are under-represented in management and professional occupations relative to whites and Asians, but hold these jobs much more frequently than do Latinos.

Asians, on the other hand, particularly men, are more likely than average to work in management and professional occupations and much less likely to be in sales and office occupations and construction, extraction, and maintenance occupations. Asian women are twice as likely to work in production occupations than the average female worker. However, as with many socio-economic characteristics, the Asian population exhibits considerable diversity in its employment status. For example, 73% of Asian Indians and 67% of Japanese reported being in management, professional, and related occupations, compared to just 12% of Laotians and 16% of Cambodians. For a more complete description of the diversity of the Asian population in Metro Boston see *Asian Americans in Metro Boston: Growth, Diversity, and Complexity* by Paul Watanabe, et. al.<sup>12</sup>

<sup>11</sup> This 2003 estimate of poverty by race is from the 2003 American Community Survey (ACS) and covers a somewhat larger definition of “metro Boston” than that used in the rest of this paper. The ACS data refer to the Boston Consolidated Metropolitan Statistical Area (CMSA) that also contains a portion of southern New Hampshire.

<sup>12</sup> Watanabe, Paul et. al. “Asian Americans in Metro Boston: Growth, Diversity and Complexity.” May, 2004. <http://www.civilrightsproject.harvard.edu/research/metro/AAMetBos.pdf>

Exhibit 9

Top Specific Occupations by Race/Ethnicity and Sex in Metro Boston: 2000

**MALES**

<u>White</u>	<u>% of all Workers</u>
Computer specialists	5.3
Sales representatives, services, wholesale and manufacturing	3.7
Elect. Equip. mechanics and other installation, maintenance, and repair workers	3.5
Engineers	3.4
Material recording, scheduling, dispatching, and distributing workers (1)	3.4
<b><u>Latino</u></b>	
Cooks and food preparation workers	5.1
Laborers and material movers	5.0
Material recording, scheduling, dispatching, and distributing workers (1)	4.5
Metal workers and plastic workers	3.5
Driver/sales workers and truck drivers	3.3
<b><u>Black</u></b>	
Material recording, scheduling, dispatching, and distributing workers (1)	4.1
Driver/sales workers and truck drivers	3.6
Computer specialists	3.4
Other office and administrative support workers, including supervisors (2)	3.3
Other protective service workers, including supervisors (3)	2.9
<b><u>Asian</u></b>	
Computer specialists	18.3
Engineers	5.9
Life and physical scientists	4.9
Cooks and food preparation workers	4.1
Physicians and surgeons	3.2

**FEMALES**

<u>White</u>	<u>% of all Workers</u>
Secretaries and administrative assistants	6.4
Teachers, preschool, kindergarten, elementary, and middle school	5.1
Registered nurses	4.5
Business operations specialists	3.2
Information and record clerks, except customer service representatives	3.1
<b><u>Latino</u></b>	
Other office and administrative support workers, including supervisors (2)	5.1
Cashiers	4.7
Nursing, psychiatric, and home health aides	4.3
Secretaries and administrative assistants	3.9
Child care workers	3.6
<b><u>Black</u></b>	
Nursing, psychiatric, and home health aides	11.5
Other office and administrative support workers, including supervisors (2)	7.2
Secretaries and administrative assistants	5.2
Counselors, social workers, other community and social service specialists	4.1
Registered nurses	3.8
<b><u>Asian</u></b>	
Computer specialists	8.4
Assemblers and fabricators	6.3
Other office and administrative support workers, including supervisors (2)	5.3
Other production occupations, including supervisors	4.7
Life and physical scientists	3.7

(1) includes such jobs as postal clerks, postal carriers, postal sorters, stock clerks, shipping clerks, meter readers, dispatchers, couriers

(2) includes such jobs as computer operators, word processors, and data entry keyers, and office clerks

(3) excludes firefighters and police officers, includes such jobs as security guards and crossing guards

Note: To see more detail on occupations see: <http://factfinder.census.gov/metadoc/occupation.pdf> and <http://factfinder.census.gov/metadoc/pct86.pdf>

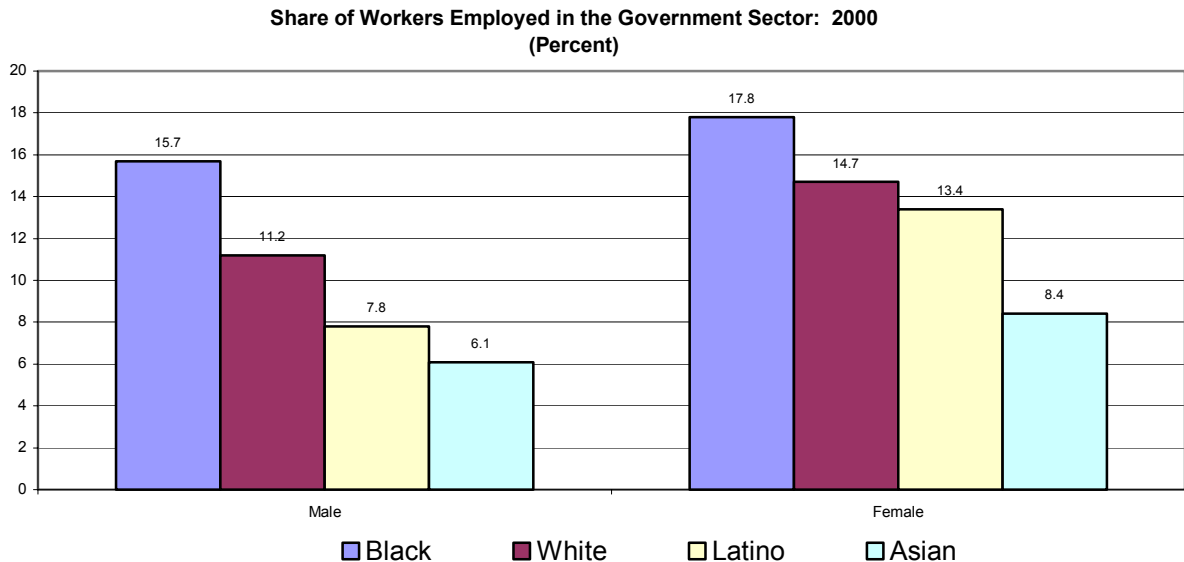
Source: 2000 Census, Summary File 4.



A closer look at the top specific occupations held by members of different racial/ethnic groups sheds even more light on employment diversity in Metro Boston (**Exhibit 9**). Of particular note is the extremely high share of Asian men working as computer specialists (18.3%)—a much higher concentration in a single occupation than found in any other occupation by any racial group. “Computer specialist” also ranks as the most common occupation held by Asian women, though not to the degree of Asian men. Also striking is the very high share of black women (11.5%) working as “nursing, psychiatric, and home health aides.”

Racial groups vary not only in their occupation, but also in their propensity to work in the public sector. About one in six black workers is employed in the public sector—the sector most directly affected by civil rights policies. Black men are twice as likely to work in the public sector than are Latino or Asian men, and black women are twice as likely to hold public sector jobs than are Asian women. (**Exhibit 10**).

**Exhibit 10**



**Racial Representation in Certain Occupations Varies Spatially**

Using newly released Equal Employment Opportunity (EEO) data from the 2000 Census, we can now look more closely at the over-and under-representation of racial groups in specified occupational fields (**Exhibit 11**.) These data allow us to compare a group’s representation in a particular occupational field<sup>13</sup> with their representation in the total employed workforce within geographic areas of interest. A value of over 100 represents statistical over-representation in a

<sup>13</sup> Occupations shown are EEO “occupational groups.” For a complete list of specific occupations within each group, see <http://www.census.gov/hhes/www/eoindex/jobgroups.pdf>.

# Exhibit 11

## Over- and Under-Representation of Racial Groups by Occupational Field and Location of Workplace: 2000

### Ratio: Share of Administrative Support Workers to Share of Total Employed

	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
Metro Total	101.4	94.0	117.8	67.9
City of Boston	99.0	98.9	126.3	75.9
Other Large Cities	101.5	94.8	106.9	79.1
Suburbs	102.3	89.0	109.8	53.1

### Ratio: Share of Construction and Extractive Craft Workers to Share of Total Employed

	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
Metro Total	107.8	56.6	56.3	26.2
City of Boston	111.5	64.8	70.7	40.2
Other Large Cities	108.5	54.8	44.6	28.8
Suburbs	105.6	57.2	57.2	18.5

### Ratio: Share of Healthcare Practitioner Professionals to Share of Total Employed

	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
Metro Total	103.8	35.5	79.2	139.7
City of Boston	108.9	35.7	56.2	155.6
Other Large Cities	107.7	27.8	72.0	90.8
Suburbs	102.3	36.1	94.3	137.9

### Ratio: Share of Installation, Maintenance and Repair Craft Workers to Share of Total Employed

	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
Metro Total	103.2	99.0	71.8	61.8
City of Boston	101.0	123.3	91.5	65.0
Other Large Cities	102.9	102.3	80.6	51.6
Suburbs	101.8	97.0	74.2	73.2

### Ratio: Share of Laborers and Helpers to Share Total Employed

	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
Metro Total	96.3	198.0	87.1	38.7
City of Boston	91.0	206.4	99.4	60.4
Other Large Cities	94.2	205.0	102.7	33.8
Suburbs	96.0	214.3	100.0	37.0

Source: Census 2000 Equal Employment Opportunity File.

Note: A value of under 100 signifies that the racial group is statistically under-represented in the specified occupation relative to their representation in the employed workforce as a whole in that area. A value of over 100 signifies that the racial group is statistically over-represented in the specified occupation relative to their representation in the employed workforce as a whole in that area.

# Exhibit 11 cont.

## Over- and Under-Representation of Racial Groups by Occupational Field and Location of Workplace: 2000

<b>Ratio: Share of Management, Business and Financial Workers to Share of Total Employed</b>				
	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
<b>Metro Total</b>	106.7	45.3	69.1	77.2
<b>City of Boston</b>	113.6	49.1	60.5	71.5
<b>Other Large Cities</b>	107.6	44.0	72.2	75.2
<b>Suburbs</b>	104.9	40.7	65.3	78.7

<b>Ratio: Share of Other Professional Workers to Share of Total Employed (1)</b>				
	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
<b>Metro Total</b>	104.1	66.2	93.8	74.0
<b>City of Boston</b>	107.9	65.1	85.7	75.2
<b>Other Large Cities</b>	103.8	69.7	92.3	86.8
<b>Suburbs</b>	104.6	56.2	77.7	53.3

<b>Ratio: Share of Production Operative Workers to Share of Total Employed (2)</b>				
	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
<b>Metro Total</b>	83.5	270.2	97.2	208.1
<b>City of Boston</b>	67.8	259.6	134.2	213.0
<b>Other Large Cities</b>	84.9	265.1	86.7	150.4
<b>Suburbs</b>	82.5	312.0	141.8	276.2

<b>Ratio: Share of Protective Service Workers to Share of Total Employed (3)</b>				
	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
<b>Metro Total</b>	100.0	93.0	173.6	21.7
<b>City of Boston</b>	95.9	100.5	177.7	25.1
<b>Other Large Cities</b>	100.7	90.9	149.0	31.8
<b>Suburbs</b>	102.5	82.0	148.9	8.9

<b>Ratio: Share of Sales Workers to Share of Total Employed</b>				
	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
<b>Metro Total</b>	104.1	77.5	74.1	71.2
<b>City of Boston</b>	102.6	98.5	83.8	89.3
<b>Other Large Cities</b>	102.8	81.5	90.3	84.2
<b>Suburbs</b>	103.4	71.7	72.0	60.6

Source: Census 2000 Equal Employment Opportunity File.

(1) includes such jobs as teachers, lawyers, artists, writers, and social workers

(2) includes such jobs as assemblers, fabricators, and machine operators

(3) includes such jobs as firefighters, police officers, and security guards

Note: A value of under 100 signifies that the racial group is statistically under-represented in the specified occupation relative to their representation in the employed workforce as a whole in that area.

A value of over 100 signifies that the racial group is statistically over-represented in the specified occupation relative to their representation in the employed workforce as a whole in that area.

# Exhibit 11 cont.

## Over- and Under-Representation of Racial Groups by Occupational Field and Location of Workplace: 2000

<b>Ratio: Share of Science, Engineering and Computer Professionals to Share of Total Employed</b>				
	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
<b>Metro Total</b>	97.1	43.1	52.5	304.5
<b>City of Boston</b>	103.9	44.0	41.5	232.9
<b>Other Large Cities</b>	97.1	38.7	49.8	306.2
<b>Suburbs</b>	95.0	46.0	72.3	353.4

<b>Ratio: Share of Service Workers, except Protective to Share of Total Employed</b>				
	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
<b>Metro Total</b>	87.4	204.3	183.7	103.8
<b>City of Boston</b>	65.8	269.5	192.7	129.9
<b>Other Large Cities</b>	87.2	194.8	185.2	100.5
<b>Suburbs</b>	93.4	171.9	179.0	90.4

<b>Ratio: Share of Technicians to Share of Total Employed</b>				
	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
<b>Metro Total</b>	99.3	70.6	114.1	144.0
<b>City of Boston</b>	96.7	72.4	100.8	172.3
<b>Other Large Cities</b>	100.4	60.0	113.8	151.2
<b>Suburbs</b>	99.9	77.0	130.4	112.6

<b>Ratio: Share of Transportation and Material Moving Operative Workers to Share of Total Employed</b>				
	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
<b>Metro Total</b>	94.8	165.0	167.1	33.3
<b>City of Boston</b>	82.8	169.2	201.0	32.9
<b>Other Large Cities</b>	93.7	171.3	167.8	43.0
<b>Suburbs</b>	97.4	168.0	151.5	29.4

Source: Census 2000 Equal Employment Opportunity File.

Note: A value of under 100 signifies that the racial group is statistically under-represented in the specified occupation relative to their representation in the employed workforce as a whole in that area. A value of over 100 signifies that the racial group is statistically over-represented in the specified occupation relative to their representation in the employed workforce as a whole in that area.

Note: "Other Large Cities" include: Brockton, Brookline, Cambridge, Fall River, Framingham, Haverhill, Lawrence, Lowell, Lynn, Malden, Medford, New Bedford, Newton, Plymouth, Quincy, Somerville, Taunton, Waltham, Weymouth, Worcester.

Metro Area includes Counties of Bristol, Essex, Middlesex, Norfolk, Plymouth, Suffolk, Worcester. "Suburbs" defined as Metro Area outside of Boston and other large specified cities.

particular field relative to that group's share of the total workforce. A value of under 100 indicates statistical under-representation in that field. Note that this analysis merely compares the distribution of workers in certain fields with those in the total workforce by race; it does not attempt to control for factors such as differential educational background or experience and does not prove discrimination. The geographic areas examined include the metro area as a whole; the city of Boston; a group of "other large cities" defined as those with populations over 50,000; and the suburbs, defined as the remaining cities and towns.

Blacks are **over-represented** as transportation and material moving workers; protective service workers, other service workers, and administrative support workers. In each of these fields, they are particularly over-represented among those working in the City of Boston. Within the suburbs, they are also over-represented as production operative workers and technicians. Blacks are most greatly **under-represented** as science, engineering, and computer professionals; healthcare practitioners; and management, business and financial workers, (particularly those working in the City of Boston.) Blacks are also under-represented as construction and extractive craft workers, particularly in the other large cities.

Latinos are extremely **over-represented** as laborers and helpers; production operative workers; service workers; and transportation and material moving workers. Within the City of Boston, they are also over-represented as installation, maintenance, and repair craft workers. Latinos are most **under-represented** as healthcare practitioners; science, engineering, and computer professionals; management, business and financial workers; and construction and extractive craft workers. This under-representation is fairly uniform across major geographic subareas.

Asians are **over-represented** as healthcare practitioners, and technicians, especially in the City of Boston. They are dramatically over-represented among science, engineering, and computer professionals, in which their share of employees is three times their share of the total workforce and even higher in the suburbs. They are over-represented as service workers within the City of Boston and as production operative workers throughout the region. Asians are very greatly **under-represented** as construction and extractive craft workers; laborers and helpers, protective service workers and transportation and material moving workers.

Whites are most **over-represented as** construction and extractive craft workers; management, business and financial workers; other professional workers; and healthcare practitioners, especially among the Boston workforce. They are somewhat under-represented as production operative workers and service workers, particularly in the City of Boston.

A closer look at selected occupations critical to public safety and to facilitating educational and residential mobility reveals some striking variations in racial employment patterns (**Exhibit 12.**)

- Among **preschool and kindergarten teachers**, Latinos and blacks are greatly over-represented in Boston and the other large cities, but under-represented in the suburbs, compared to their shares of total employment in each area.
- Among **elementary and middle school teachers**, blacks especially, but also Latinos are over-represented in Boston, but under-represented in other locations, in spite of a large, qualified workforce in the metro as a whole. Asians are under-represented in all areas.

# Exhibit 12

## Over- and Under-Representation of Racial Groups for Selected Occupations and Location of Workplace: 2000

<b>Ratio: Share of Preschool and Kindergarten Teachers to Share of Total Employed</b>				
	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
Metro Total	102.9	97.8	132.5	41.6
City of Boston	73.9	226.2	235.1	102.7
Other Large Cities	98.9	122.2	189.5	36.1
Suburbs	106.8	48.6	57.1	28.4

<b>Ratio: Share of Elementary and Middle School Teachers to Share of Total Employed</b>				
	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
Metro Total	108.6	54.3	65.0	29.8
City of Boston	94.0	113.8	161.9	52.7
Other Large Cities	110.2	61.1	42.1	26.0
Suburbs	107.3	37.1	47.6	29.1

<b>Ratio: Share of Secondary School Teachers to Share of Total Employed</b>				
	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
Metro Total	108.9	45.7	72.5	37.3
City of Boston	97.6	41.5	151.5	136.3
Other Large Cities	106.8	66.7	89.5	42.1
Suburbs	108.2	40.0	47.6	14.3

<b>Ratio: Share of Fire Fighters to Share of Total Employed</b>				
	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
Metro Total	107.2	43.5	142.5	2.3
City of Boston	91.0	61.5	267.0	5.3
Other Large Cities	109.5	55.6	78.9	3.2
Suburbs	108.6	22.9	76.2	0.0

<b>Ratio: Share of Police Officers to Share of Total Employed</b>				
	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
Metro Total	102.8	91.3	125.0	32.0
City of Boston	104.0	95.4	124.7	40.4
Other Large Cities	103.0	101.9	78.9	56.0
Suburbs	104.4	68.6	109.5	1.2

<b>Ratio: Share of Real Estate Brokers and Sales Agents to Share of Total Employed</b>				
	<u>White</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>
Metro Total	111.6	15.2	32.5	40.0
City of Boston	115.0	24.6	70.1	42.0
Other Large Cities	113.4	7.4	13.2	64.1
Suburbs	108.8	17.1	4.8	29.3

Source: Census 2000 Equal Employment Opportunity File.

Note: A value of under 100 signifies that the racial group is statistically under-represented in the specified occupation relative to their representation in the employed workforce as a whole in that area.

A value of over 100 signifies that the racial group is statistically over-represented in the specified occupation relative to their representation in the employed workforce as a whole in that area.

Note: "Other Large Cities" include: Brockton, Brookline, Cambridge, Fall River, Framingham, Haverhill, Lawrence, Lowell, Lynn, Malden, Medford, New Bedford, Newton, Plymouth, Quincy, Somerville, Taunton, Waltham, Weymouth, Worcester.

Metro Area includes Counties of Bristol, Essex, Middlesex, Norfolk, Plymouth, Suffolk, Worcester.

"Suburbs" defined as Metro Area outside of Boston and other large specified cities.

- Among **secondary school teachers**, Asians are the most over-represented group in Boston, though blacks are also over-represented. Latino teachers are underrepresented at this level in Boston. All minority groups are very under-represented in the suburbs.

The under-representation of teachers of color in the suburbs, even relative to the small minority workforce there, raises serious questions about whether suburban schools will be adequately prepared for the racial diversity that will clearly increase in Metro Boston's future.

Among **public safety workers**:

- Asians are seriously under-represented among both **police and firefighters**, particularly in the suburbs.
- Blacks, in contrast, are very over-represented as firefighters in Boston where there was a federal court order against discrimination for many years, but under-represented in other geographic areas. They are somewhat over-represented among police in Boston (though not to the extent of firefighters) and under-represented in the other large cities. The Boston Police Department was recently ordered to halt its affirmative action hiring policy after a federal judge determined that the Department had met racial parity in hiring.
- Latinos are under-represented as firefighters in all areas, particularly the suburbs. Among police, they are proportionally represented in Boston and the other large cities, but under-represented in the suburbs.

Of particular interest to those concerned with ongoing racial segregation in housing markets is the extreme under-representation of people of color as **real estate brokers and sales agents**.

- The Latino share of real estate professionals is only a sixth of their share of the total metropolitan workforce, and less than a tenth of their share of the workforce in the "Other Large Cities".
- Blacks have miniscule representation among real estate brokers in the suburbs.
- Asians are represented more than other minority groups, relative to their share of the total workforce. Yet even the Asian share of the real estate agent/broker profession is less than half their representation in the total workforce.

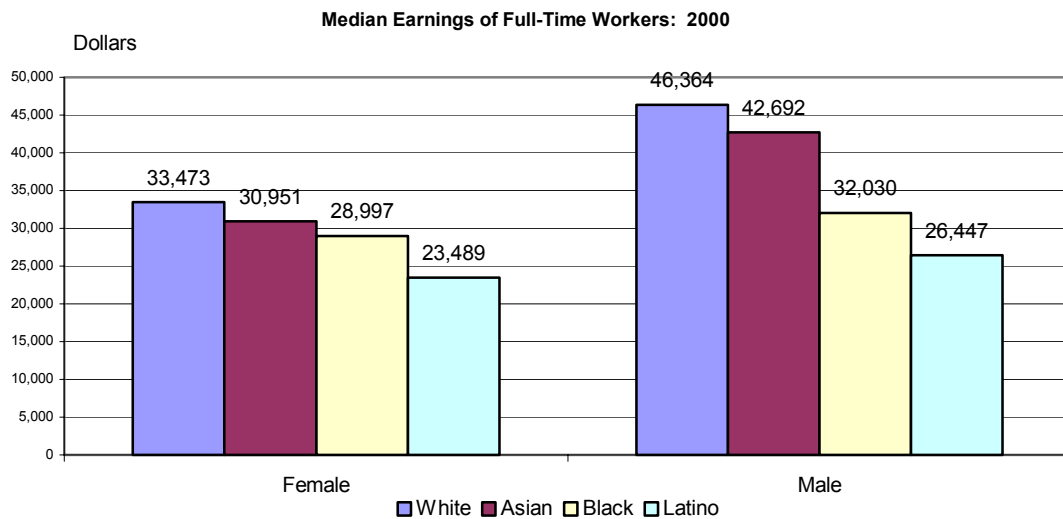
The dearth of real estate professionals of color, especially in the suburbs, is likely a hindrance to the spread of information about these outlying communities to potential homebuyers of color. While people of color may certainly employ white agents, they may feel more comfortable working with agents of their own background, particularly if they are immigrants or not native English speakers. In tight housing markets such as Boston, many homes do not stay on the market long. Networks that can quickly pass on information about available or soon-to-be-available homes are critical to making a purchase, and, in most suburban neighborhoods, an important part of these networks do not include people of color.

### **Different Occupational Profiles Result in Lower Earnings**

The heavy concentration of Latinos and blacks in relatively low-paying service sector and production jobs is one reason behind their low earnings. Although there is variation within

occupational subgroups, full-time workers in production and service jobs in Metro Boston earned less than \$28,000 in 1999, compared to \$45,000 for those in managerial and professional jobs. Thus, even among those working full-time, black male workers earned about 70% as much as white workers, and Latinos earned 57% as much as white workers. **(Exhibit 13.)** The roots of the occupational and earnings differentials between the races are complex. Barry Bluestone and his colleagues, in The Boston Renaissance<sup>14</sup>, explored these relationships in some detail. Interestingly, they found that the earnings deficit for Latinos was mostly explained by human capital deficits, such as less or inferior education. In contrast, the earnings deficit for black men was most largely due to racial discrimination and segregation and that for black women was most largely due to family composition-- that is, the high share that lived in single-parent households.

### Exhibit 13



Note: Metro area includes a small portion of New Hampshire.  
Source: 2000 Census, Summary File 3.

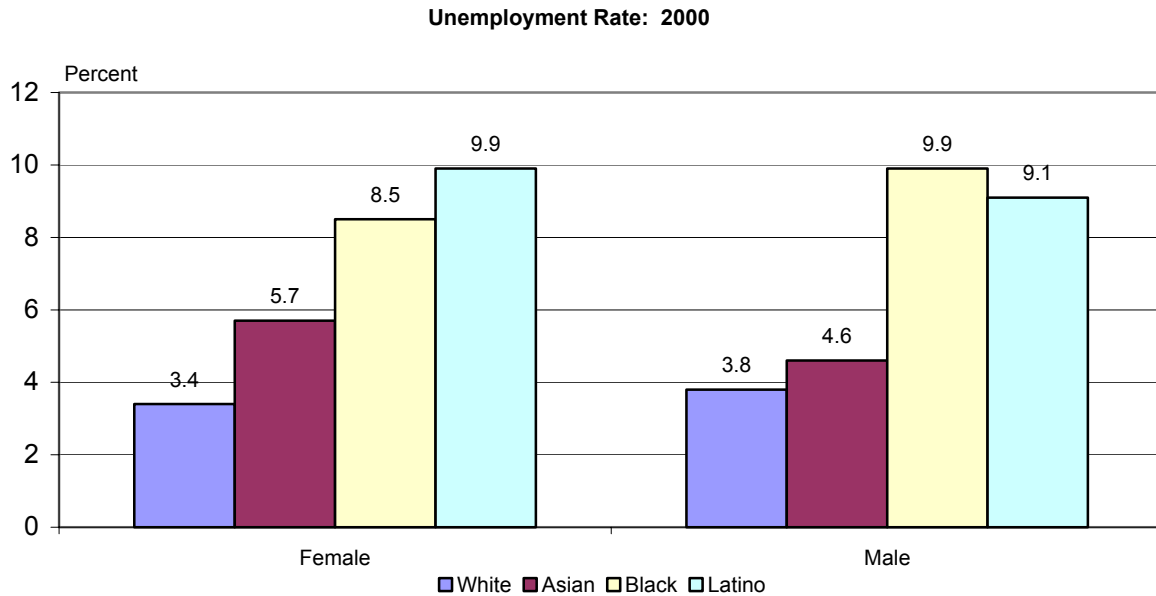
### Higher Levels of Unemployment for People of Color

Latinos and African-Americans are at a disadvantage not only because they generally live far from fast-growing job areas and tend to be concentrated in relatively low-paying employment sectors, but also because of their higher levels of unemployment. Unemployment rates in 2000 for Metro Boston blacks and Latinos were well over twice as high as whites', with Asian rates somewhat higher than whites' **(Exhibit 14).**

<sup>14</sup> Bluestone, Barry and Mary Huff Stevenson. The Boston Renaissance: Race, Space and Economic Change in an American Metropolis. Chapter 8. Russell Sage Foundation. 2000.



## Exhibit 14



Note: Metro area includes a small portion of New Hampshire.  
Source: 2000 Census, Summary File 3.

Among minority populations, immigrants had substantially lower unemployment rates than did the native-born. Immigrant blacks had an unemployment rate of 7% in 2000, versus 10.6% for native-born blacks. Immigrant Asians had an unemployment rate of 5% versus 10.5% for native-born Asians. Immigrant Latinos had an unemployment rate of 7.1% versus 12.3% for native-born Latinos. In contrast, immigrant status made no difference in the unemployment rate for whites (3.7%).

### **Detachment From the Labor Force and High Drop-Out Rates Pose Critical Barriers**

Also troubling are the relatively high shares of Latino young people who have no high school diploma, yet are neither enrolled in school nor working. Over ten percent of Latinos ages 16-19 fall into this category--almost 12 percent in the satellite cities. These levels of detachment from education and the workforce are highest in the satellite cities for most racial groups, but are highest for blacks in the City of Boston (**Exhibit 15**).

**Exhibit 15**

**Share of Civilian Population Age 16-19 Without Diploma,  
Not Enrolled in School and Not Employed: 2000**  
(Percent)

	<u>Total</u>	<u>Latino</u>	<u>Black</u>	<u>Asian</u>	<u>White</u>
<b>Boston Metro</b>	3.4	10.4	5.4	3.0	2.2
<b>City of Boston</b>	4.7	10.5	7.0	1.5	1.6
<b>Satellite Cities</b>	5.6	11.7	4.0	4.8	3.8
<b>Inner Suburbs</b>	1.4	4.5	0.9	1.2	1.1
<b>Outer Suburbs</b>	2.1	7.4	3.8	2.3	1.9

Note: Excludes localities that house state correctional facilities.  
Source: 2000 Census, Summary File 3.

Dropping out of high school has a pernicious effect on employment opportunities. While there is disagreement on the magnitude of actual dropout numbers in Metro Boston—disagreement that is inevitable until high quality data exist that follow individual students over the years and over districts—most measures show Latinos have the greatest difficulty completing high school. One measure, the cumulative promotion index, which measures promotion of grade cohorts through progressive school years, found that that just 41% of Metro Boston Latino students who should have graduated during the 2001-02 school year, actually completed high school on-time, compared to 49% of blacks, 60% of Asians and 67% of whites<sup>15</sup>. This disparity in dropout rates has many causes, including family educational background and peer group influences. However, the substantial segregation of students of color in concentrated poverty schools must also be considered. Ninety-seven percent of students who attend highly-segregated black and Latino schools (schools that are at least 90% black and Latino) are also enrolled in concentrated poverty schools (where at least half of students are eligible for free or reduced lunch) compared to only one percent of students attending highly-segregated white schools (schools that are at least 90% white.)<sup>16</sup> Students attending high poverty schools face challenges beyond their own families’ income status. Such schools have a harder time attracting and retaining good teachers, have less credentialed teachers, less rigorous curriculums, and students with lower educational aspirations and career options.<sup>17</sup> All of these factors likely contribute to higher drop out rates.

<sup>15</sup> Lee, Chungmei. “Racial Segregation and Educational Outcomes in Metropolitan Boston.” April, 2004. [http://www.civilrightsproject.harvard.edu/research/metro/Segregation\\_Educational\\_Outcomes.pdf](http://www.civilrightsproject.harvard.edu/research/metro/Segregation_Educational_Outcomes.pdf)

<sup>16</sup> Ibid. p. 21.

<sup>17</sup> Ibid. p. 20.

Exhibit 16

<b>Unemployment and Earnings by Educational Attainment of Workers Aged 25-44</b>						
	<u>Unemployment Rate (%): 2000</u>			<u>Median Wage and Salary (\$): 1999</u>		
	<u>Without Diploma</u>	<u>Diploma Alone</u>	<u>More Than Diploma</u>	<u>Without Diploma</u>	<u>Diploma Alone</u>	<u>More Than Diploma</u>
<b><u>Male</u></b>						
<b>White</b>	8.9	4.5	2.0	30,000	36,000	50,000
<b>Black</b>	13.5	9.7	3.5	25,000	25,000	35,000
<b>Asian</b>	10.6	4.5	2.3	21,000	26,000	52,000
<b>Latino</b>	8.5	6.8	3.6	22,000	26,000	35,200
	<u>Unemployment Rate (%) 2000</u>			<u>Median Wage and Salary (\$): 1999</u>		
	<u>Without Diploma</u>	<u>Diploma Alone</u>	<u>More Than Diploma</u>	<u>Without Diploma</u>	<u>Diploma Alone</u>	<u>More Than Diploma</u>
<b><u>Female</u></b>						
<b>White</b>	8.1	4.0	2.1	20,000	25,000	36,000
<b>Black</b>	14.6	8.5	4.0	20,400	24,500	33,000
<b>Asian</b>	8.9	5.9	3.1	20,000	20,000	38,000
<b>Latino</b>	15.1	7.6	5.9	18,000	20,000	28,000

Note: Includes workers living in Bristol, Essex, Middlesex, Norfolk, Plymouth, Suffolk Counties, and southern half of Worcester County.  
Wage and Salary data are for full-time, year-round workers.  
Source: 2000 Census, 5% Public Use Microdata Sample.

A high school diploma is strongly associated with lower unemployment rates for all groups and is equally important as a gateway to higher education. (**Exhibit 16.**) For example, the unemployment rate of young (aged 25-44) black men without a diploma in 2000 was 13.5%. That rate dropped to 9.7% for high school graduates and 3.5% for those with post-secondary education. The importance of a diploma as a stepping-stone to advanced education is even more apparent in relation to earnings. While young workers with a diploma earned more, on average, than those who didn't graduate for most groups, the much more substantial gains accrued to those with additional education. For example, Latino women without a diploma earned \$18,000 per year in 1999 while those with a diploma alone earned \$20,000. In contrast, those with education beyond high school earned a median amount of \$28,000 annually. A diploma is important, especially in improving the odds of employment. However, as the economy

increasingly rewards workers with higher skills, college has become even more crucial to earning a livable income.

At the other extreme, dropping out of high school also puts youth at risk of criminal activity and imprisonment, and having a criminal record is increasingly a barrier to employment<sup>18</sup>. The number of employers who have access to and who do check job applicants' criminal records (Criminal Offender Record Information or "CORI") in Massachusetts has increased. Currently there are over a million requests for records a year.<sup>19</sup> Additionally, there are special rules for people seeking a state-funded health or human services job in programs operated or funded by Massachusetts state agencies under the Executive Office of Health and Human Services. A positive CORI bars, for certain lengths of time, certain subjects from ever obtaining a human services position in the public sector<sup>20</sup>. According to "Dr. Daniel P, LeClair, former DOC Director of Research and member of the state Security and Privacy Council: 'CORI has been turned inside out . . . it was originally designed to protect the privacy rights of ex-offenders but is now often used against them when they apply for employment or housing.'<sup>21</sup>" Clearly, certain criminal histories raise legitimate concerns about the appropriateness of ex-offenders for certain types of jobs, but increasing barriers to employment leave many ex-offenders with few options. Increasing numbers of ex-offenders are now being released from prison, most commonly to their home communities--often high-minority, urban areas.

### **Experience and Perception of Discrimination**

Employment discrimination, while less blatant than in the past, and the perception of discrimination still remain as significant barriers for workers of color. A recent poll of 400 blacks and Latinos in Metro Boston commissioned by the Harvard Civil Rights Project revealed that over one in five African Americans (21%) and one in six (17%) Latinos reported that they were discriminated against at work during the past year because of their race/ethnicity. Almost a third of blacks (31%) and 15% of Latinos reported that they were denied a job they applied for in Metro Boston over the past decade because of their race or ethnicity.

These new findings are consistent with several other recent and disturbing studies. Researchers answering help-wanted ads for sales, administrative support, and clerical and customer support positions in the *Boston Globe* between July 2001 and January 2002 found that resumes with very white-sounding names received callbacks 52% more often than did resumes with very African-American sounding names. Furthermore, for white names, a better-quality resume received substantially more callbacks than did a lower-quality resume, but a better-quality resume elicited a far smaller increase in call-backs for African American names. Interestingly, applicants living

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<sup>18</sup>See "Transitioning from Chronic Homelessness to Employment: Impact of a Positive CORI Report." Research Brief. Community Work Services. Boston University. March, 2004.  
<http://www.bu.edu/vrc/briefs/Research%20Brief%20Four.pdf>

<sup>19</sup> Ibid.

<sup>20</sup> Ibid.

<sup>21</sup> Ibid.

in better neighborhoods received more callbacks, and this effect did not differ by race, highlighting the importance that employers place on area of residence<sup>22</sup>.

UMass/Lowell professors Philip Moss and Chris Tilly reached similar conclusions in their comprehensive research focusing on employers and managers. They reported,

*“Employers generally express disparaging views of inner-city workers and of the inner city as a business location. Not surprisingly, the ways employers describe inner-city workers conform in great measure to their descriptions of workers of color. Connected to racial perceptions are perceptions of a host of inner-city problems—notably crime—that compound the stereotypes of race and help to explain the shortcomings of minority workers in employers’ eyes<sup>23</sup>.”*

Moss and Tilly conclude, *“As long as business decision-makers shun—even fear—the inner city and its work force, neither subsidies for inner-city investment nor van pools that transport city dwellers to suburban industrial parks will crack inner-city isolation from jobs.<sup>24</sup>”*

### **Implications and Policy Prescriptions**

After more than three years of sputtering, the employment outlook in Massachusetts is once again brightening<sup>25</sup>, and it is likely that minority populations will continue to contribute the vast majority of labor force growth. Lowering the hurdles that loom for these workers will benefit not only their families and communities but the Metro Boston economic engine as well. Specifically we need to:

#### ***Reduce Barriers Keeping People of Color From Living in High Job Growth Areas***

Residential segregation has distanced people of color not only from whites but also from job opportunities. Production of affordable housing in employment growth areas is a critical part of the puzzle. Yet, affordability is only part of the answer<sup>26</sup>. People of color can afford to live in many parts of the metropolitan area, but are concentrated in just a few. More must be done to provide information about non-traditional destinations to homeseekers of color and to increase the number and reach of realtors who work with minorities. Similarly, fair housing laws must be vigorously enforced, with monies allocated for fair housing testing and education.

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<sup>22</sup> Bertrand, Marianne and Sendhil Mullainathan. “Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination.” National Bureau of Economic Research Working Paper # w9873. July 2003.

<sup>23</sup> Moss, Philip and Chris Tilly. “Pride and Prejudice: Employers Look for Skills, But Still Act on Stereotypes.” in *Commonwealth Magazine*. MassINC. Winter 2001.

<sup>24</sup> Ibid.

<sup>25</sup> Massachusetts Department of Employment and Training. Mass. Civilian Labor Force Statistics. [http://massstats.detma.org/websaras/frame\\_it.asp?theProductName=MassStats](http://massstats.detma.org/websaras/frame_it.asp?theProductName=MassStats)

<sup>26</sup> See Harris, David J. and Nancy McArdle, “More than Money: The Spatial Mismatch Between Where Homebuyers of Color Can Afford to Live and Where they Actually Reside.” 2004. Harvard Civil Rights Project. [http://www.civilrightsproject.harvard.edu/research/metro/residential\\_choice.php](http://www.civilrightsproject.harvard.edu/research/metro/residential_choice.php)

### ***Develop Employment Opportunities Where Workers of Color Already Live***

The spatial mismatch between where jobs are growing and where workers of color live should also be addressed by the development of good-paying jobs in more urbanized areas, particularly many of the satellite cities that have experienced the greatest job losses. In addition to taking advantage of an existing workforce, reducing traffic congestion and the associated environmental impacts, creating more centralized jobs is a critical component of any “smart growth” strategy. Job growth at the metro’s periphery often leads to less open space, less efficient use of infrastructure, and increased traffic. In fact, the Texas Transportation Institute found that the average commuter in Metro Boston spent 46 hours in traffic congestion in 2002, up from 16 hours in 1982<sup>27</sup>. Job creation in already developed areas, coupled with adequate transportation and affordable housing creation is a necessary step in producing opportunities for workers of color and also combating sprawl.

### ***Provide Transportation to Job Sites For Workers Who Live at a Distance***

Expanded transportation networks are necessary for a wide range of populations, but minorities’ relatively limited access to private vehicles and dependence on public transportation put them in special need. Several groups and coalitions are advocating for environmental and racial justice when it comes to state and federal funded transportation. The Environmental Justice Committee of the Boston Metropolitan Planning Organization (MPO) has explicitly highlighted the need for transportation to decentralized locations<sup>28</sup>. Whether through fixed route services or-- more flexibly, subscription taxi, van services, or short term rentals--the public sector, employers, and non-profits must continue to strive to connect people with employment opportunities.

### ***Promote Quality Education for All and Reduce Drop-Out Rates***

Many of the jobs being created in Metro Boston do not pay enough to support a family in this high cost area. The hospitality industry, for instance, which employs a disproportionate share of workers of color, is growing but pays just over \$18,000 per year on average.<sup>29</sup> According to the Massachusetts Budget and Policy Center, “the loss of jobs in Massachusetts in the wake of the national recession has resulted in a degradation of job quality. According to the Economic Policy Institute, the average wage among those sectors of the Massachusetts economy that contracted between November 2001 and November 2003 (that is, those sectors whose share of the Massachusetts economy shrank) was \$58,759 (in constant 2002 dollars). In stark contrast, the average wage among expanding sectors of the Massachusetts economy was \$34,640, a difference of 41 percent.<sup>30</sup>” Higher education, at least an undergraduate degree, is increasingly necessary to earn a sufficient income, but higher education is contingent on a good prior education and high school graduation.

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<sup>27</sup> Texas Transportation Institute. Urban Mobility Study. 2004.

<sup>28</sup> See “Boston Regional MPO: Regional Transportation Plan: 2004-2025. p. B-30. Contained in Title VI Report for the Boston MPO. January 7, 2004. Central Transportation Planning Staff.

<sup>29</sup> Blanton, Kimberly. “Shift in Mass. Economy Jars Some Workers.” *Boston Globe*. September 12, 2004.

<sup>30</sup> “The State of Working Massachusetts 2004: Down But Not Out.” Massachusetts Budget and Policy Center. 2004. <http://www.massbudget.org/article.php?id=253>

The disparity between the academic success of white students in Metro Boston and students of color, particularly blacks and Latinos, has been highlighted in other studies.<sup>31</sup> Closing this achievement gap will likely take a multi-pronged effort including more equitable funding, early childhood intervention, smaller classes, and greater parent involvement. However, the substantial segregation of students of color in concentrated poverty schools must also be challenged. The high correlation of racial segregation with concentrated poverty is a fact and one that threatens the educational opportunity of many children of color.

Segregated schools pose difficulties for the workforce beyond the academic abilities of students. As society becomes more multi-racial, the ability to interact successfully with co-workers and clients of different backgrounds becomes more important. The landmark Supreme Court decision *Grutter v. Bollinger*, 539 U.S. 306 (2003) supported businesses' position that "a racially and ethnically diverse graduate pool is of critical importance to businesses' success in an increasingly diverse global marketplace. *Grutter*, 539 U.S. at 330.<sup>32</sup>" More locally, the Lynn Business Partnership, made up of the top fifty businesses in the city of Lynn, and the Lynn Business Education Foundation wrote in favor of continuing Lynn School District's plan to reduce racial isolation in its schools. They stated "The existence of a racially and ethnically diverse workforce, encouraged by years of interaction in the public school system to tolerate and share its members viewpoints, contributes to the success of the Lynn business community."<sup>33</sup>

Similarly, the METCO program, functioning since the 1960s but serving a relatively small number of students and with a long waiting list, has aided students of color both in terms of academic achievement and in functioning well in an interracial context. The vast majority of parents place their children in METCO to take advantage of suburban academic offerings. In fact, METCO graduates closely match the college attendance rates of their suburban classmates, and, though they are drawn from the general Boston student population, they "attend 4-year colleges and universities at twice the rate of their Boston-educated neighbors."<sup>34</sup> A survey of METCO parents also illustrates their general happiness with the interracial experience of their children. Forty-nine percent of parents said METCO was an excellent experience in "learning how to get along with people from different backgrounds, and 43% more said the experience was 'good.'"<sup>35</sup> More plans are needed to encourage interaction between youth of different races, leading to more successful and harmonious workplaces.

Given the large number of immigrants who come to Metro Boston after their teenage years, nurturing an educated workforce must also include non-traditional training, including literacy and GED education and workforce development. Yet funding for low-cost English classes

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<sup>31</sup> Lee, Chungmei. Segregation and Educational Outcomes in Metro Boston. Harvard Civil Rights Project. 2004. [http://www.civilrightsproject.harvard.edu/research/metro/segregation\\_education.php](http://www.civilrightsproject.harvard.edu/research/metro/segregation_education.php)

<sup>32</sup> As summarized in Brief for Amici Curiae of Lynn Business Education Foundation and Lynn Business Partnership, Inc. in support of defendants in *Comfort v. Lynn School Committee*. U.S. First Circuit Court of Appeals. 2004. p. 5.

<sup>33</sup> *Ibid.* p. 11.

<sup>34</sup> McGuire, Jean. Metropolitan Council for Educational Opportunity (METCO.) "From K to College: Undoing the Barriers to Educational Achievement." Presentation for the Joint Committee on Ways and Means Education Hearing." March 10, 2003.

<sup>35</sup> Orfield, Gary et. al. "City-Suburban Desegregation: Parent and Student Perspectives in Metropolitan Boston." The Civil Rights Project at Harvard University. September, 1997.

remains insufficient and waiting lists long. According to the Department of Education, more than 17,000 people are on waiting lists for classes, and funding cuts from last year have not been restored in this year's budget.<sup>36</sup> Providing life and workplace enhancement skills for people who are eager to learn, and often make great sacrifices to further their education, is a prudent investment in the Metro Boston economy.

### ***Actively Support Workers of Color and Challenge Workplace Discrimination***

Because of the relatively small number of minority professionals in Metro Boston (relative to other large metros) and a lingering sense of racial unease, it is especially important to provide support for those who stay and encouragement for those who may chose to move here. In a recent study, the Partnership, a non-profit group dedicated to developing, retaining, and enhancing opportunities for professionals of color in Boston, report "93% of Greater Boston area corporate survey respondents believe it is more difficult to recruit Professionals of Color to Boston." Similarly, 94% of survey respondents who are area Professionals of Color believe that Professionals of Color from beyond the Greater Boston area view Boston negatively.<sup>37</sup> The study also reports that the area's retention rate of recent graduates of color is low, as is its share of minorities represented in boardrooms. More programs such as those run by the Partnership are necessary to enhance the experience of Metro Boston's professionals of color. In addition, ongoing enforcement of fair employment laws is also necessary to stem employment discrimination and unfair labor practices, particularly those that take advantage of vulnerable populations such as recent immigrants.

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<sup>36</sup> Rhor, Monica. "On a Waiting List for the American Dream." *Boston Globe*. September 19, 2004.

<sup>37</sup> "Race and Leadership: Benchmarking Boston's Progress in the Workplace." The Partnership. 2004. <http://www.thepartnershipinc.org/index.html>



## References

- Bertrand, Marianne and Sendhil Mullainathan. "Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination." National Bureau of Economic Research Working Paper # w9873. July 2003.  
<http://www.nber.org/papers/w9873>
- Billmen-Golemme, Lyn. Transportation Equity Coalition. Phone conversation. May 12, 2004.
- Blanton, Kimberly. "Shift in Mass. Economy Jars Some Workers." *Boston Globe*. September 12, 2004.
- Bluestone, Barry and Mary Huff Stevenson. **The Boston Renaissance: Race, Space and Economic Change in an American Metropolis.** Russell Sage Foundation. 2000.
- Borges-Mendez, and Miren Uriarte. "Tales of Latinos in Three Small Cities: Latino Settlement in Lawrence and Holyoke, Massachusetts and in Providence, Rhode Island." University of Massachusetts, Boston. Unpublished. Cited with permission. 2003.
- Boston Metropolitan Planning Organization. Central Transportation Planning Staff. "Title VI Report for the Boston Metropolitan Planning Organization: FY2003." January 7, 2004.
- Boston Metropolitan Planning Organization. Central Transportation Planning Staff. "Regional Transportation Plan 2004-2025 of the Boston MPO." 2003.
- Boston University. Community Work Services. "Transitioning from Chronic Homelessness to Employment: Impact of a Positive CORI Report." Research Brief. March, 2004.  
<http://www.bu.edu/vrc/briefs/Research%20Brief%20Four.pdf>
- Civil Rights Project at Harvard University. Metro Boston Attitudes Survey. Unpublished, cited by permission. 2004.
- Harris, David J. and Nancy McArdle, "More than Money: The Spatial Mismatch Between Where Homebuyers of Color Can Afford to Live and Where They Actually Reside." Harvard Civil Rights Project. 2004.  
[http://www.civilrightsproject.harvard.edu/research/metro/residential\\_choice.php](http://www.civilrightsproject.harvard.edu/research/metro/residential_choice.php)
- Lee, Chungmei. "Racial Segregation and Educational Outcomes in Metropolitan Boston." Harvard Civil Rights Project. 2004.  
[http://www.civilrightsproject.harvard.edu/research/metro/Segregation\\_Educationa1\\_Outcomes.pdf](http://www.civilrightsproject.harvard.edu/research/metro/Segregation_Educationa1_Outcomes.pdf)

- Lynn Business Education Foundation and Lynn Business Partnership, Inc. Brief for Amici Curiae in support of defendants in *Comfort v. Lynn School Committee*. U.S. First Circuit Court of Appeals. 2004.
- Marsh, Dwayne S. "Promise and Challenge: Achieving Regional Equity in Greater Boston." PolicyLink. 2003.
- Massachusetts Budget and Policy Center. "The State of Working Massachusetts 2004: Down But Not Out." 2004. <http://www.massbudget.org/article.php?id=253>
- Massachusetts Department of Employment and Training. Employment data by sector (SIC code) by city and town for 1990 and 2000. Obtained through email from Elliot Winer.
- Massachusetts Immigration & Refugee Advocacy Council. "Driver's License Bill Fact Sheet." <http://www.miracoalition.org/2spring2004.htm>
- McGuire, Jean. Metropolitan Council for Educational Opportunity (METCO.) "From K to College: Undoing the Barriers to Educational Achievement." Presentation for the Joint Committee on Ways and Means Education Hearing." March 10, 2003. <http://www.metcoinc.org/waysmeans.ppt>
- Metropolitan Area Planning Council. "A Decade of Change: Growth Trends in the Greater Boston Area—1990 to 2000." 2002.
- Moss, Philip and Chris Tilly. "Pride and Prejudice: Employers Look for Skill , But Still Act on Stereotypes." in *Commonwealth Magazine*. MassINC. Winter 2001. [http://www.massinc.org/handler.cfm?type=1&target=2001-1/considered\\_opinion.html](http://www.massinc.org/handler.cfm?type=1&target=2001-1/considered_opinion.html)
- Orfield, Gary et. al. "City-Suburban Desegregation: Parent and Student Perspectives in Metropolitan Boston." The Civil Rights Project at Harvard University. September, 1997. <http://www.civilrightsproject.harvard.edu/research/metro/housing97.php>
- Orfield, Myron et. al. "Boston Metropatterns: A Regional Agenda for Community Stability in Greater Boston." Metropolitan Area Research Corporation. 2001.
- Partnership, The. "Race and Leadership: Benchmarking Boston's Progress in the Workplace." 2004. <http://www.thepartnershipinc.org/index.html>
- Rhor, Monica. "On a Waiting List for the American Dream." *Boston Globe*. September 19, 2004.

- Sum, Andrew et. al. "Foreign Immigration and Its Contribution to Population and Labor Force Growth in Massachusetts and the U.S.: A Recent Assessment of 2000 Census and CPS Survey Findings." Center for Labor Market Studies. Northeastern University. 2001. <http://www.nupr.neu.edu/12-01/immigrant.PDF>
- Texas Transportation Institute. Urban Mobility Study. 2004. [http://mobility.tamu.edu/ums/congestion\\_data/tables/boston.pdf](http://mobility.tamu.edu/ums/congestion_data/tables/boston.pdf)
- Uriate, Miren et. al. "Salvadorans, Guatemalans, Hondurans, and Colombians: A Scan of Needs of Recent Latin American Immigrants to the Boston Area." 2003 Practicum in Applied Research of the PhD Program in Public Policy. University of Massachusetts, Boston. December 2003. <http://www.gaston.umb.edu/publications/pubs/sghc/salv-guat-hond-colo.pdf>
- U.S. Bureau of the Census. 2002 and 2003 American Community Survey accessed through American Factfinder. [http://factfinder.census.gov/home/saff/main.html?\\_lang=en](http://factfinder.census.gov/home/saff/main.html?_lang=en)
- U.S. Bureau of the Census. 2000 Census. Summary File 3 accessed through American Factfinder. [http://factfinder.census.gov/home/saff/main.html?\\_lang=en](http://factfinder.census.gov/home/saff/main.html?_lang=en)
- U.S. Bureau of the Census. 1990 Census. Summary Tape File 3 accessed through American Factfinder. [http://factfinder.census.gov/home/saff/main.html?\\_lang=en](http://factfinder.census.gov/home/saff/main.html?_lang=en)
- U.S. Bureau of the Census. 2000 Census. Summary File 4 accessed through American Factfinder. [http://factfinder.census.gov/home/saff/main.html?\\_lang=en](http://factfinder.census.gov/home/saff/main.html?_lang=en)
- U.S. Bureau of the Census. 2000 Census. Public Use Microdata 5% File.
- U.S. Bureau of the Census. Census 2000 Special EEO Tabulation. [http://www.census.gov/hhes/www/eeoindex/page\\_c.html](http://www.census.gov/hhes/www/eeoindex/page_c.html)
- Watanabe, Paul et. al. "Asian Americans in Metro Boston: Growth, Diversity and Complexity." Harvard Civil Rights Project. May, 2004. <http://www.civilrightsproject.harvard.edu/research/metro/AAMetBos.pdf>