

# BOSTON'S STRONG ECONOMY 2002

## Resisting the Recession

City of Boston  
Thomas M. Menino, Mayor  
Boston Redevelopment Authority  
Mark Maloney, Director

# Boston's Strong Economy - 2002

## *Resisting the Recession*



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# BOSTON'S STRONG ECONOMY – 2002

## *Resisting the Recession*

### **Executive summary and update of Boston's most recent economic conditions.**

After almost ten years of expansion, which included record-best figures in many sectors, Boston's economy began to show signs of finally slowing down in early 2001 and the tragedy of September 11<sup>th</sup> only compounded the slow-down.

Despite these signs, 2001 posted some positive numbers as jobs in the city continued to rise to an all-time modern high, thanks to the city's diverse economy that includes financial and business services, research and development, health care and higher education, tourism and retail trade, and Boston's office, hotel, and housing markets continued to be among the strongest in the nation.

The following report presents the major economic, demographic and market indicators that demonstrate the strength of the city's current economy and Boston's place as the engine of the state and regional economies as well.<sup>1</sup>

#### **OVERVIEW OF CURRENT ECONOMIC CONDITIONS**

Boston is the economic hub of both the Commonwealth and the New England region. It is a center for professional, business, financial, governmental, higher educational and medical services, as well as transportation, communications, export, cultural and entertainment activities. As a government center, the city is the state capital and is host to several federal offices. High technology, research and development, manufacturing, and wholesale distribution also contribute to the economy of the city and its suburbs.

As Boston started the year 2002, signs of a slowing economy in Massachusetts, metropolitan Boston and the city were still evident dating from Spring of 2001. The Boston economy peaked in the 1999-2000 time period as Boston's office, hotel, and housing markets were among the strongest in the nation by mid-year 2000 and into early 2001. From about March of 2001,

signs of economic slowing were notable even into early 2002. Boston's slower economic growth in 2001 was evidenced by: an increasing unemployment rate, a growing number of initial unemployment claims, a higher level of continuing unemployment claims, a falling hotel occupancy rate and lower average daily hotel room rate, a growing office vacancy rate, and a slowing in residential sales.

Many indicators of Boston's economic performance in 2001 registered weakness given the twin factors of a burgeoning economic recession which was evident in the summer of 2001 plus the tragic events of September 11<sup>th</sup>. Unemployment rates, which had declined to a low of 2.2%, 2.6%, and 2.9% in the Boston metropolitan area, the Commonwealth, and in the city, respectively, by the end of 2000, rose to levels of 3.3%, 3.7% and 4.1%, respectively for full-year 2001. Boston's office market, which ranked second best among the 20 largest downtown office markets in the nation in June of 2000 fell in performance to sixth place out of the 20 largest downtown office markets according to the real estate firm CB Richard Ellis by December 2001. Hotel occupancy fell to 70% in 2001 after being 78% in the year 2000. Additionally, the total number of residential sales, which had improved markedly from 1992 through 1999, showed small declines in number as measured by single-family and condominium sales. Residential prices, though, continued to hold steady.

So far in early 2002, it appears that the worst part of the recession may have passed, as evidenced by the peaking of employment losses in December, an improving unemployment rate, continued job growth, and improved hotel occupancy rates, although some time may be necessary for the recovery to take hold.

#### **POPULATION**

Boston's population reached 589,141 according to the 2000 U.S. Census, registering its second gain in the past two decades as testimony to Boston's economic and social strengths and its physical attractiveness. Boston's population has grown again by attracting young professionals from all over the country and by its role as a gateway city for new immigrants from all over the world.

<sup>1</sup> The text and data for the body of this report are based upon the City of Boston's bond prospectus from April 2002, but this summary section includes newer data for full year 2001 and early 2002 that were not available at that time.

Boston is the center of a metropolitan area of more than 3.2 million persons, and is the capital of the Commonwealth, which has over 6.3 million residents. Boston is also the center of the nation's seventh largest Consolidated Metropolitan Statistical Area, which stretches from Maine and New Hampshire down to Southeastern Massachusetts and Connecticut and contains 5.8 million people.

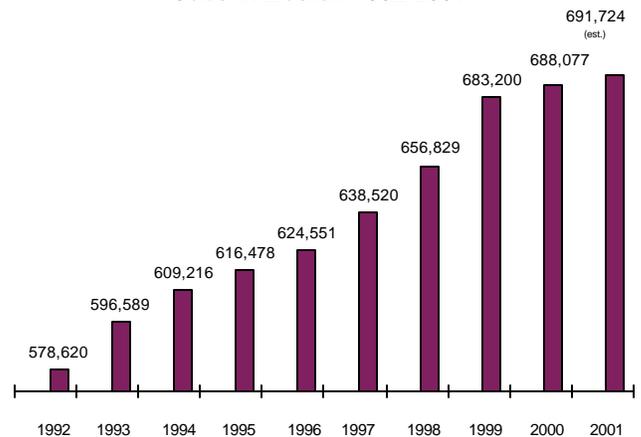
The population of Boston is young, in large part because of the high concentration of younger adults who come to the city to attend school or to work. Another characteristic of Boston's population is shown by the racial and ethnic diversity of its residents: the racial composition is 49.5% white and 50.5% minority. Hispanics and Asians are the city's fastest growing minority groups.

**EMPLOYMENT**

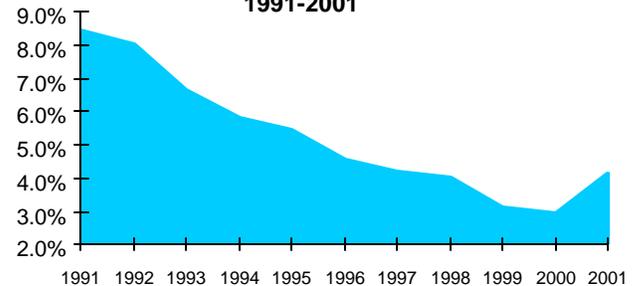
The total number of jobs in Boston continues to grow each year and in 2000 reached yet another modern high figure of 688,077, a gain of 109,457 since the low point of the recession in 1992. Despite the recession of 2001, third quarter data continue to show an increase and the projected total for the year is 691,724.

In 2001, Boston's unemployment rate increased for the first time in 10 years to an average of 4.1% for the year. Although much higher than the previous year's figure of 2.9%, it was still well below the recessionary peak of 9.5% in July 1991. In 2001, Boston's unemployment rate was slightly higher than the

**Jobs in Boston 1992-2001**



**Boston's Annual Average Unemployment: 1991-2001**



state's rate of 3.7% but lower than the U.S. rate of 4.8%. Boston ended 2001 with a unemployment rate of 4.5% in December, which rose to 5.1% in January, 2002. The unemployment rate has stabilized in the Spring of 2002 and was at 4.8% in May.

**COMMERCIAL MARKETS**

**HOTEL MARKET.** Boston's hotel market continues to stimulate considerable new development. Since 1980, the number of hotel rooms in the city has more than doubled, rising from 6,907 to 14,331 by mid-year 2002. In 2002, five new hotels representing 891 new rooms were under construction, while applications to construct ten additional hotel projects with a total of 3,966 rooms have been approved by the Boston Redevelopment Authority (BRA).

A slowing economy combined with the events of September 11<sup>th</sup> 2001 has brought a more challenging environment for the hospitality industry. In 2001 Boston's hotel occupancy, according to Pinnacle Advisory Group, stood at 69.6% compared with 78.4% for 2000. Similarly, average daily room rate registered \$182.52 in 2001 compared with \$198.00 for 2000. In

2002, however, people began returning to Boston's hotels and the occupancy rate for May 2002 was 78.6% compared to 77.1% for May 2001.

**OFFICE MARKET.** The city currently has approximately 54.1 million square feet of office space. By the fourth quarter of 2001 (December 31<sup>st</sup>) Boston's overall vacancy rate according to one source was reported to be 8.8% (up from 8.0% as of one year before and from 7.4% for the third quarter) while another realty firm placed it at 5.2% (11.7% when including space to sub-let). Certainly, given the economic slowdown of 2001 office vacancies did rise substantially. Net absorption (rental) of office space in 2001 was negative 1.9 million square feet.

In 2000, three office projects were completed: the Seaport Center East office tower (475,000 s.f.) on the South Boston waterfront; the Renaissance Center (200,000 s.f.), a renovation in Roxbury; and, the Landmark Center (600,000 s.f.), reuse project in the Fenway which includes 600,000 square feet of office space. In 2001, five office projects have opened: 10 St. James (570,000 s.f.) at the former Greyhound bus terminal site; 111 Huntington Avenue (874,000 s.f.) at the Prudential complex, 303 Congress Street (72,000 s.f.), a renovation; 326 Cambridge Street (70,000 s.f.); and Independence Wharf, (370,000 s.f.), a renovation project.

In 2002, five major downtown office projects with 3.1 million square feet of new office space are under construction, and scheduled for completion in the 2002-2004 time period: 131 Dartmouth Street (353,000 s.f.) in the Back Bay; Seaport Center West (575,000 s.f.) and ManuLife Financial (470,000 s.f.) on the South Boston Waterfront area; and One Lincoln Center (967,000 s.f.) and 33 Arch Street (600,000 s.f.) downtown. In addition, there are several large neighborhood office projects – in Brighton, Charlestown, Roxbury, the South End and South Boston - with nearly 1 million square feet of office space on-going.

Several more large office projects are in the planning stages: a 1.2 million square-foot tower on top of the South Station air-rights and Two Financial Center (200,000 s.f.) nearby; the Fan Pier project, which contains 1.3 million square feet of office space; and an 11-story office building developed next door to the Hynes Convention Center in the Back Bay.

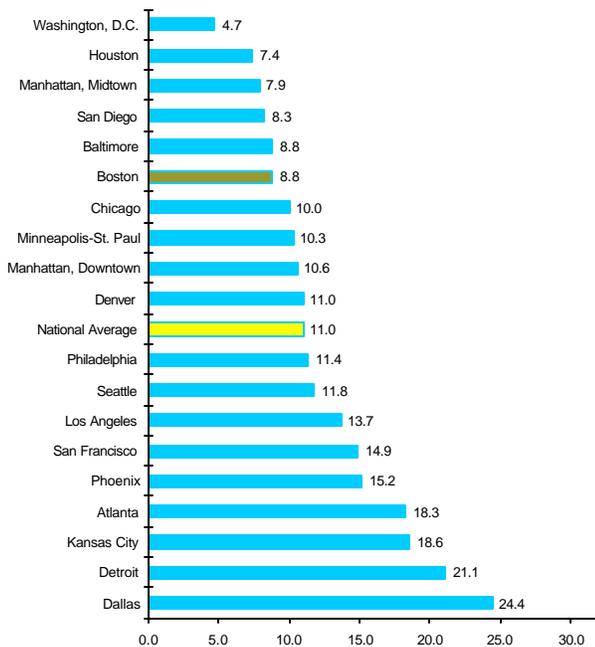
**RETAIL MARKET.** As of 1997, the date of the last U.S. Economic Census, Boston's metropolitan

regional retail market was the ninth largest in the nation. Over 2,200 retail establishments were located in the city, containing 10 million square feet, and enjoying estimated total sales of \$5.6 billion.

Recent major retail projects in downtown Boston include: TJ Maxx and H&M in the first phase of 33 Arch Street; Eddie Bauer's and Citizen's Bank in the Lafayette Corporate Center; a new CVS and a new Walgreen's; and a Sports Club/LA and Loew's Boston Common movie theaters at the new Ritz Carlton Towers at Millennium Place. In the Back Bay, projects include: renovation work on a new Ralph Lauren store at 93 Newbury Street, an addition to Prudential mall; and, an Eastern Mountain Sports Store opened on Boylston Street.

In the neighborhoods, the South Bay Center Mall, open 24 hours a day, is home to some of the highest grossing stores in the nation in an inner-city location. More recently, in the Fenway, the new Landmark Center has been completed, containing roughly 200,000 square feet of retail and theater space. There are now 21 neighborhood business districts operating within The Main Streets Program following the addition of ones in West Roxbury and Jamaica Plain. Nine new neighborhood supermarkets have opened in the past five years, while two have been expanded. The Grove Hall Mecca, an inner-city shopping mall has opened as part of a major Blue Hill Avenue redevelopment, and major efforts to redevelop retail business districts in Dudley Square and Grove Hall are showing building activity.

**Office Vacancy Rates for the 20 Largest Downtown Office Markets**



**HOUSING MARKET.** The U.S. Bureau of the Census reported in April of 2000 that the total number of housing units in Boston had grown to 250,863 units, 1,072 more than the number in 1990, the date of the previous decennial census.

After nearly five years of relative stability, 1992-1996, home prices have risen at a fast pace since the first quarter of 1996. The National Association of Realtors reported that the median sale price of existing homes in the Boston metropolitan area was \$314,200 for 2000, an 8.3% increase over the 1999 median sales price. The 2001 price of \$356,600 was 13.5% higher than the price for 2000. Between 1996 and 2001 the median price increased by 88%.

Within the city, residential sales prices increased steadily from the beginning of 1998 through the end of 2000. The median sales price for a single-family home in Boston reached \$229,000 in the fourth quarter of 2000, showing a strong 43% gain over two years, but still affordable, at 66% of the median metropolitan area price. Condominium prices have also increased from \$166,463 in the first quarter of 1999 to \$225,000 in the third quarter of 2000, a 42% rise.

Banker & Tradesman, a local trade journal, reported that during the full year 2001 there were 10.4% less

total residential sales in the city than there were in the full year 1999 (7,996 versus 8,862). Sales of single-family homes, multi-family houses, and condominiums all fell in 2001 compared with 2000 for the second consecutive year. Also, for full-year 2001, single-family home sales fell by 3.7% while condominium sales dropped by 7.9% over sales for 2000.

**PRIVATE DEVELOPMENT**

Since 1960, the public and private sectors have carried out a major expansion of capital construction and investment activities in Boston. Revenue from building permit activity fees through fiscal 2000 represented \$3.1991 billion of total construction activity. Data from July through October 2001 showed projected building permit revenues at an estimated annualized sum of \$21.2 million, resulting in a preliminary fiscal 2001 potential construction estimate of \$2.4 billion.

Development is presently centered on the five new hotels and 5 new office projects currently under construction. Retail development is also moving forward downtown with a retail component included in the recently-opened Ritz Carlton Towers at Millennium Place and planned in large projects planned at One Lincoln Place and on the Fan Pier. In the neighborhoods, new supermarkets continue to come on line, and the revival of many neighborhood retail districts is taking place through the Main Streets program. Residential housing development is also taking place, of both "affordable" and "market rate" units, in both downtown and the neighborhoods.

Boston's medical and higher education institutional sectors also continue to invest in new facilities, with a variety of projects under construction or set to begin. Under construction is Tufts University's \$40 million biomedical research building and nutrition center on Harrison Avenue scheduled to open in the summer of 2002. In the Longwood area, Children's Hospital has 440,000-sq. ft. of new clinical and research facilities under construction. Emmanuel College is constructing the Merck Building, a 300,000-sq. ft. medical research facility and also has an additional research building of 166,00-sq. ft. planned. Brigham and Women's Hospital has begun site preparation for a new \$87 million, 10-story clinical research facility. Elsewhere, Massachusetts General Hospital has begun work on a new 640,000-sq.ft. ambulatory care facility with an outpatient clinic and a 725-car garage.

Development of dormitory and academic facilities is also taking place or planned by Boston's colleges and universities. Wentworth Institute opened its new 563-bed dormitory on Huntington Avenue in 2001 and Mass. College of Art plans to open its new 9-story, 310-bed dormitory soon. Boston College, in its recently submitted master plan, is proposing to add 800 more dormitory beds. Boston University recently added 813 beds and is proposing to build more dormitory space for 1,200-1,500 students along with a new sports arena and a new recreational center on the site of the former Commonwealth Armory. At the Business School campus of Harvard University, where a five-year expansion and retrofit program is underway, new executive student housing is now complete, a new student center is nearly complete, and a graduate school housing and academic building project have begun construction. Northeastern University opened Davenport Commons, a \$51 million, 585-bed dormitory that also includes 60 affordable condominiums, and 2,100 square feet of retail space) and 780 Columbus Avenue (114 beds). Also at Northeastern, ground was broken for a new \$37 million Behrakis health sciences complex. Emerson College began construction of its new \$25-30 million, 11-story Performing Arts Center, and plans to build a 14-story dormitory and student center on Boylston Street at Piano Row; Simmon's College is planning a 40,000 square foot Graduate Center; Suffolk University has a new 368 bed dorm under construction on Beacon Hill, and UMass-Boston has a new Campus Center (\$75 million, 360,000 square feet) under construction with plans announced for housing 2,000 students on campus in future dormitory space.

The South Boston waterfront area is Boston's next development frontier. In February, 1999, the Boston Redevelopment Authority presented a Seaport Public Realm Plan to guide future growth in the 1,000 acre South Boston Waterfront district of the city. In addition to a new Boston Convention and Exhibition Center, the plans calls for creation of an additional 16-21 million square feet of development, including 6,000 new hotel rooms, up to 8,000 units of housing (at least 10% of which will be affordable), and 44 acres of open space, including an extension of the city's HarborWalk. Already, new hotels and office buildings are open or under construction there, and proposals for further development are being proposed to city and state agencies. The Pritzker mixed use plan for Fan Pier has recently received its state approvals.

In August 2000, state legislation was enacted authorizing public support for a plan by the Boston Red Sox to replace Fenway Park, its baseball stadium, with a new facility at the current site expanded to include adjacent areas. The legislation included provisions for the city to acquire and finance the site and the state to pay for transportation-related infrastructure improvements in the area. Subsequent to passage of this legislation, however, the team was sold to new owners who have begun to more closely examine whether Fenway Park can be renovated where it currently stands.

New private development is expected to continue during the next several years, with the strong economy stimulating demand, drawing down vacancy rates, and making new construction more desirable and financially feasible.

### **EMPOWERMENT ZONE DESIGNATION**

In January, 1999, the City of Boston was designated an Empowerment Zone (EZ) community by the U.S. Department of Housing and Urban Development. The ten-year EZ designation brings with it \$130 million in tax-exempt bonding authority for qualified projects, and \$100 million in grants to support job creation, business development, home ownership opportunities, affordable housing creation, transit system improvements, computer technology training, and job training and educational efforts. The Empowerment Zone, wholly in Boston, is a 5.8 square miles area that includes parts of the neighborhoods of South Boston, Downtown, the South End, Roxbury, Jamaica Plain, and Mattapan, containing 57,640 residents – roughly 10% of the city's population.

### **LARGE PUBLIC SECTOR PROJECTS**

Throughout the year 2004, Boston will continue to be the site of several major public sector projects which will significantly improve the infrastructure and increase the city's ability to attract and accommodate visitors.

**NEW CONVENTION CENTER.** The new 1.6 million square-foot Boston Convention and Exhibition Center is currently being built on a 60-acre site in South Boston through the joint efforts of the City of Boston, the Commonwealth of Massachusetts, the BRA, and the Massachusetts Convention Center Authority (MCCA). The facility will include approximately 516,000 square feet of contiguous exhibition space on one level, 160,000 square feet of meeting space and a 41,000 square foot ballroom, as well as banquet and lecture halls.

Under the legislation authorizing the development, the BRA has completed site acquisition for the BCEC, demolition, site preparation and tenant relocation. The Center's steel framework is rising and the project is currently expected to be completed in the spring of 2004.

**OTHER PROJECTS.** As of late August, 2001, the depression of the Central Artery, the section of U.S. 93 that runs through downtown Boston, and the construction of the four-lane Ted Williams Tunnel under Boston Harbor were, together, estimated to cost up to \$14.75 billion. The tunnel portion of the project has been open for some time for limited use and turnpike extension is expected to be connected with it in September 2002.

The Massachusetts Water Resources Authority (MWRA) has completed construction of one of the largest wastewater treatment facilities in the nation, a \$3.8 billion project which is bringing wastewater discharge in Boston Harbor into compliance with federal and state requirements. The MWRA is planning to spend another \$1.5 billion on additional wastewater and water system improvements over the next ten years. While relatively small portions of these improvements are located in Boston, they should nonetheless provide major improvements in the system infrastructure that serves the city.

The Massachusetts Port Authority (Massport) has developed a long-range capital program of approximately \$3.0 billion for improvements at its facilities, most of which are located in the city.

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Included is a major modernization of Logan Airport, currently underway, which will include a new double-deck roadway system, 3,150 car parking garage, 600-room hotel, and sign system.

The Boston Housing Authority (BHA) recently completed major revitalization initiatives at two of its public housing developments: Mission Main, in the Mission Hill neighborhood of Boston, and Orchard Gardens in Roxbury. The BHA received two HOPE VI grants from the Department of Housing and Urban

Development, totaling \$80 million, to implement these initiatives, which are designed to revitalize not only the BHA sites, but the surrounding neighborhoods as well.

By providing new and improved housing, transportation, convention, and water treatment facilities, these major infrastructure projects will increase private development investment, resident jobs and wages, and spin-off spending throughout the local economy and well into the 21st century.

## BOSTON'S ECONOMY – 2002

### OVERVIEW

The city is the economic hub of both the Commonwealth and the New England region. It is a center for professional, business, financial, governmental, higher educational and medical services, as well as transportation, communications, export, cultural and entertainment activities. As a government center, the city is the state capital and is host to several federal offices. High technology, research and development, manufacturing, and wholesale distribution also contribute to the economy of the city and its suburbs.

The city is the twentieth largest city in the United States and the center of the seventh largest Consolidated Metropolitan Statistical Area (CMSA) in the nation, consisting of the Boston Primary Metropolitan Statistical Area (PMSA) plus the contiguous PMSAs of Brockton, Fitchburg-Leominster, Lawrence, Lowell, Manchester (NH), Nashua (NH), New Bedford, Portsmouth-Rochester (NH-ME), and Worcester (MA-CT). The Boston CMSA had a population of 5,819,100 in 2000, as reported by the U.S. Department of Commerce, Bureau of the Census (the Bureau of the Census). In 2000, the city had a population of 589,141, as reported by the Bureau of the Census, and had 693,647 jobs as reported by the U.S. Bureau of Economic Analysis from data of the Massachusetts Division of Employment and Training. The ratio of jobs to population indicates that the city provides a direct source of employment and income for an area that extends well beyond its borders. Measured in terms of jobs, the city's economy comprises approximately 18% of the Massachusetts economy and 10% of that of the six New England states.

As Boston started the year 2002 signs of a slowing economy in Massachusetts, metropolitan Boston and the city were still evident dating from Spring of 2001. The Boston economy peaked in the 1999-2000 time period as Boston's office, hotel, and housing markets were among the strongest in the nation by mid-year 2000 and into early 2001. From about March of 2001 signs of economic slowing were notable even into early 2002. Boston's slower economic growth in 2001 was clear given existing information, including: an increasing unemployment rate, a growing number of initial unemployment claims, a higher level of continuing unemployment claims, a falling hotel occupancy rate and lower average daily hotel room

rate, a growing office vacancy rate, and a slowing in residential sales. So far in early 2002 it appears that the worst part of the recession may have passed, as evidenced by the peaking of employment losses in December and an improving unemployment rate through February, although some time may be necessary for recovery to take hold.

Many indicators of Boston's economic performance in 2001 registered weakness given the twin factors of a burgeoning economic recession which was evident in the summer of 2001 plus the tragic events of September 11<sup>th</sup> which compounded the slow-down. Unemployment rates, which had declined to a low of 2.2%, 2.6%, and 2.9% in the Boston metropolitan area, the Commonwealth, and in the city, respectively, by the end of 2000, rose to levels of 3.3%, 3.7% and 4.1%, respectively for full-year 2001. Boston's office market, which ranked second best among the 20 largest downtown office markets in the nation in June of 2000 fell in performance to fifth place out of the 20 largest downtown office markets according to the real estate firm CB Richard Ellis by December 2001. Hotel occupancy fell to 70% in 2001 after being 78% in the year 2000. Additionally, the total number of residential sales, which had improved markedly from 1992 through 1999, have shown small declines in number as measured by single-family and condominium sales. Residential prices, though, continue to hold steady.

This report presents the major economic, demographic, and market indicators for the Boston economy. For the most part, they demonstrate that the city's economy was very strong through the 1990s and into mid-year 2000. By early 2001 the economic slowdown was moving toward a national recession and then the events of September 11<sup>th</sup> compounded matters. Although the many measures of the regional economic slowdown are evident the Boston, the Boston metropolitan area, and Massachusetts each have a better unemployment rate than the nation. Recent prognoses at the national level from the public and private sectors indicate that the economic slowdown is expected to last through mid-2002. Regional economic conditions in New England, Massachusetts, greater Boston and the City of Boston appeared, as of March 2002, about the same as the economic problems nationally. Boston's economy continues to serve as the engine of the state and regional economy.

## **SOURCES OF STATISTICAL DATA**

Statistical data relating to population, employment and income are derived primarily from four separate sources: the U.S. Bureau of the Census, the U.S. Bureau of Labor Statistics, the U.S. Bureau of Economic Analysis (the BEA), and the city of Boston/Boston Redevelopment Authority (the BRA), each of which is described below.

The U.S. Bureau of the Census publishes information about population, housing and the economy. Data from the 2000 Decennial Census of Population and Housing is now available in part, with more data to be released in 2002 and 2003. In addition, some monthly and quarterly data are available through July 2001 on certain topics for the region, Massachusetts, and the Boston metropolitan area. The U.S. Bureau of the Census does not publish such interim data for the city. The U.S. Bureau of Labor Statistics publishes data and reports about the workforce and related subjects including unemployment rates, area wages, and cost-of-living adjustments. Final data for 2000 are the most recent annual data available; the most recent monthly data are for December 2001.

The U.S. Bureau of Economic Analysis publishes quarterly and annual statistics on income and employment. The most recent annual figures for the nation, New England and Massachusetts are from the September 2001 Regional Economic Information System (REIS) and from the May 2001 REIS revised series for the metropolitan counties and Suffolk County, which consists of the city plus the municipalities of Revere, Chelsea and Winthrop. The most recent quarterly statistics are for the second quarter of 2001. The city comprises approximately 87% of Suffolk County's population and approximately 96% of its employment.

The city and the BRA prepare reports and compile data on the population and economy of the city and its neighborhoods. BRA also provides data and trends from various local, regional, state and national sources on such topics as employment and occupation, large employers, city schools, universities and colleges, medical institutions, tourism and lodging, transportation, office and industrial markets, housing, building activity and urban redevelopment and infrastructure projects.

Statistical data do not necessarily reflect current activity because of delays resulting from the time

required to collect, tabulate and publish such data. While the city believes that it has used the most recent data readily available to it in the discussion in this section, because of such necessary delays, the data contained herein may not reflect current conditions or trends. Additionally, statistical data are approximations and generalizations subject to various sources of error inherent in the statistical process, and may be revised on the basis of more complete data. Within such limits, the statistical data contained herein describe past activity and are not presented with a view to predicting future economic activity either in particular categories or in general.

## **NEW ENGLAND, MASSACHUSETTS AND METROPOLITAN BOSTON ECONOMIES**

New England comprises a six-state region that had a combined population of 13.9 million persons and 8.8 million jobs in 2000 according to the U.S. Census Bureau and the Bureau of Economic Analysis annual data. Total personal income in New England grew at an annual average compound rate of 6.2% from 1990 through 1999, just below the 6.8% national rate for the same period. In the most recent period for which data is available, from second quarter 2000 through second quarter 2001, personal income in New England grew at a rate of 6.7%, which was just below the national rate of 6.9%. Employment in New England, grew by 718,971 from 1990 through 2000, an annual average of 0.9%.

The Massachusetts economy, with 6.4 million people and 4.1 million jobs in 2000 showed substantial growth in the 1990s. Total personal income grew at a 6.5% annual average rate from 1990 through 2000 versus a 6.8% national rate. From second quarter 2000 through second quarter 2001, it grew by 7.1%, higher than the 6.9% national average. Massachusetts also gained 340,508 jobs between 1990 and 2000, an annual average of 1.4%.

The five-county Boston metropolitan area (consisting of Essex, Middlesex, Norfolk, Plymouth, and Suffolk counties), had 4.0 million people and 2.8 million jobs in 2000, and has shown economic trends similar to those for the Commonwealth. The most recent data show a gain of 240,685 jobs for the 1990-2000 period, a gain of 0.9%. Table 1 shows the 1990 and 1996-2000 trends for the US, New England, Massachusetts, and Metropolitan Boston. Employment data for the city are set forth under "Employment Structure, Employment Trends and Occupational Changes" in Table 2.

**Table 1. Population, Income and Employment  
1990, and 1996-2000**  
(Income in current year dollars)

	1990	1996	1997	1998	1999	2000
<b>United States</b>						
Total Personal Income (\$000)	\$4,255,000,000	\$6,538,103,000	\$6,928,545,000	\$7,481,754,000	\$7,769,648,000	\$8,312,312,000
Per Capita Income (\$)	\$17,403	\$24,286	\$25,427	\$26,909	\$27,859	\$29,451
Population	244,499,000	269,214,762	272,492,958	275,694,585	278,890,252	281,421,906
Employment	134,517,900	152,607,200	156,230,200	160,257,200	163,828,100	167,511,300
<b>New England</b>						
Total Personal Income (\$000)	\$273,666,522	\$384,143,713	\$408,230,992	\$437,277,524	\$460,370,700	\$499,402,882
Per Capita Income (\$)	\$20,915	\$28,359	\$29,946	\$31,870	\$33,296	\$35,824
Population	13,084,523	13,545,844	13,632,385	13,720,665	13,826,472	13,922,517
Employment	8,082,456	8,084,631	8,251,811	8,424,622	8,598,889	8,801,377
<b>Massachusetts</b>						
Total Personal Income (\$000)	\$127,579,566	\$180,237,041	\$191,595,928	\$205,180,773	\$217,654,453	\$239,738,503
Per Capita Income (\$)	\$21,334	\$29,188	\$30,799	\$32,748	\$34,482	\$37,310
Population	5,979,983	6,175,085	6,220,762	6,265,452	6,312,193	6,349,097
Employment	3,770,718	3,752,171	3,845,046	3,929,491	4,009,044	4,111,226
<b>Metropolitan Boston <sup>(1)</sup></b>						
Total Personal Income (\$000)	\$87,261,912	\$124,773,282	\$132,654,806	\$142,766,163	\$152,915,120	NA
Per Capita Income (\$)	\$23,045	\$32,549	\$34,412	\$36,859	\$39,316	NA
Population	3,786,629	3,833,386	3,854,933	3,873,298	3,889,314	4,001,752
Employment	2,595,842	2,565,956	2,633,235	2,708,770	2,763,300	2,836,527

(1) This metropolitan area only includes five counties in Massachusetts (Essex, Middlesex, Norfolk, Plymouth and Suffolk) but excludes the one county in New Hampshire (Hillsborough) which together comprises the NECMA (New England Counties Metropolitan Area).

Source: U.S. Department of Commerce, Bureau of Economic Analysis, for U.S., New England, and Massachusetts. Metropolitan Boston data for 1990 and 1996-1999 from BEA May 2001 revised series. 2000 employment data for Metropolitan Boston is derived from the percentage change between 1999 and 2000 of the Bureau of Labor Statistics (BLS) "790 series" data for Non-Agricultural employment, applied to the 1999 BEA data. 2000 population figures for all of the above are from the U.S. Census Bureau.

## EMPLOYMENT STRUCTURE, EMPLOYMENT TRENDS AND OCCUPATIONAL CHANGES

Between 1990 and 2000, the city's employment structure continued to shift from traditional labor intensive manufacturing jobs to technology and service jobs, as shown in Table 2, "City of Boston Employment, 1990-2000 Selected Years by Industry." Over the past 10 years, the city's service industries, including transportation, communication, public utilities, finance, insurance and the full range of services, expanded their share of the city's total employment from 63.3% in 1990 to 67.3% in 2000, while the total employment in manufacturing and trade declined from 5.2% to 4.0%, and from 13.1% to 12.1%, respectively.

The economy of the Boston metropolitan area primarily rests on high technology, finance, professional and business services, defense, and educational and medical institutions. The city's economy is more specialized in the financial, governmental, business and professional services and educational and medical sectors than the suburban economy, which is more specialized in high technology and the defense industry. As used in this section, "professional services" includes business and professional services such as data processing, bookkeeping, news syndicates, law, accounting,

engineering, advertising, and architecture. "Non-professional business services" includes building maintenance, security guards, duplicating services, etc.

Table 2 shows Boston's employment growth by industry category over the ten-year period 1990-2000. Significant gains by industry are noted in the construction, financial securities, health, social, personal and repair, non-profit, cultural, non-professional business and professional services sectors while sizable losses are evident in manufacturing, wholesale trade, banking, insurance, and government.

The most current data on employment for Boston is through June of last year as of the beginning of April, 2002. However, a more recent picture of employment trends is available at the level of the Commonwealth of Massachusetts and the Boston metropolitan area through the Bureau of Labor Statistics (790 series) non-agricultural employment data. As of early April, 2002 these data were available through the month of February and are presented in Tables 3, 4 and 5.

These data show that employment softened in the Boston metropolitan area during early 2001 with employment changes, year-over-year, slowing down to nothing during the summer and then turning into

**Table 2. City of Boston Employment, 1990, and 1996-2000 Selected Years by Industry**

Industry	1990	1996	1997	1998	1999	2000
Fishing/Mining/Agriculture	1,316	1,188	1,264	1,299	1,545	1,732
Construction	13,835	12,928	13,678	15,811	18,982	20,091
Manufacturing	32,274	29,039	28,425	29,502	28,308	27,993
Transportation/Communication/Utilities	36,795	36,059	36,767	36,800	36,938	38,402
Wholesale Trade	19,369	16,304	16,178	16,585	17,152	17,855
Retail Trade	61,593	62,262	62,774	64,856	66,056	66,237
Finance/Insurance/Real Estate	93,264	97,168	101,257	104,352	108,157	107,963
Banking	24,540	20,386	21,491	22,586	22,932	25,954
Securities	23,029	38,743	42,171	44,994	47,150	44,615
Insurance	31,357	24,058	23,423	22,175	22,903	21,496
Real Estate and Other	14,338	13,980	14,172	14,595	15,172	15,900
Services	261,854	280,618	288,866	296,767	312,534	320,191
Hotel	13,441	11,250	11,260	11,937	12,632	13,196
Health	78,615	90,722	92,075	93,544	95,883	96,453
Educational	31,431	31,923	31,372	31,950	32,144	32,934
Cultural	9,657	9,564	10,096	10,417	10,127	10,577
Social and Non-profit	23,843	23,243	24,067	24,517	25,425	26,465
Professional	63,621	64,440	67,899	75,851	80,714	82,245
Non-Professional Business	29,540	38,184	40,250	36,283	42,291	44,111
Personal and Repair	11,706	11,292	11,846	12,271	13,318	14,212
Government	98,924	88,984	89,310	90,857	93,527	93,181
<b>Total</b>	<b>619,223</b>	<b>624,551</b>	<b>638,520</b>	<b>656,829</b>	<b>683,200</b>	<b>693,647</b>

Note: The only data for 2001 are for the first and second quarter of the year from the ES-202 series which when translated into the BEA format and annualized results in a yearly estimate of 703,146 jobs, a 9,499 job gain from 2000 and a rate of 1.4%. Since this is only based on two quarters of the year, this estimate is just noted here as preliminary and subject to confirmation when more data from the remainder of the year is reported.

Source: 1990-2000 figures are mathematically derived from U.S. Bureau of Economic Analysis Series for Suffolk County ("BEA Regional Economic Information System 1969-1999, May 2001") pro-rated to Boston geography. 2000 data are based on Massachusetts Division of Employment and Training ES-202 series (this series represents payroll jobs covered by the unemployment security system). These Boston employment data are used to derive an equivalent 2000 BEA series (for all jobs, full and part-time). Due to use of pro-rating factors, minor discrepancies of 1 to 3 units between totals and employment categories may result.

losses following August of 2001. Declines were evident through February 2002, although February's year-over-year change was less severe than December's change year-over-year. As of February a total decline of 42,600 jobs in the metropolitan area was evident over the previous year and the drop from the high last June was 70,700 jobs.

The industry composition of employment comparing February 2002 with February of 2001 shows that the most severe job losses were evident in manufacturing, transportation (particularly air transportation) and public utilities, business services, and wholesale trade. Gains were still evident in construction, government,

**Table 3. Boston Metropolitan Area Total Non-Agricultural Employment 2000-2002**

(not seasonally adjusted, employment in 000's)

Month	2000 Employment	Change From Previous Month	2001 Employment	Change From Previous Month	2002 Employment	Change From Previous Month
January	1,983.4	2.7%	2,041.1	2.9%	1,995.5	-2.2%
February	1,988.5	2.6%	2,039.3	2.6%	1,996.7	-2.1%
March	2,002.7	2.7%	2,042.1	2.0%	NA	NA
April	2,020.3	2.5%	2,050.2	1.5%	NA	NA
May	2,032.5	2.7%	2,055.0	1.1%	NA	NA
June	2,058.5	2.7%	2,067.4	0.4%	NA	NA
July	2,046.2	3.1%	2,046.2	0.0%	NA	NA
August	2,041.8	2.9%	2,040.8	0.0%	NA	NA
September	2,057.8	3.1%	2,041.4	-0.8%	NA	NA
October	2,073.7	3.2%	2,045.2	-1.4%	NA	NA
November	2,087.2	3.4%	2,045.7	-2.0%	NA	NA
December	2,098.9	3.2%	2,045.7	-2.5%	NA	NA
ANNUAL	2,041.0	2.9%	2,046.7	0.3%	NA	NA

Source: U.S. Department of Labor, bureau of Labor Statistics, 790 series of non-agricultural employment. April, 2002.

**Table 4. Non-Agricultural Wage and Salary Employment by Industry**  
**February 2001 and February 2002**  
**Boston, Massachusetts – New Hampshire PMSA**  
(seasonally unadjusted, employment in 000's)  
(First Quarter 2001 benchmark)

<b>Industry</b>	<b>2001</b>	<b>2002</b>	<b>Change</b>	<b>Percent</b>
Non-Agricultural Total	2,039.3	1,996.7	-42.6	-2.1%
Mining	0.6	0.6	0.0	0.0%
Construction	71.7	74.5	2.8	3.9%
General Building Contractors	15.9	16.2	0.3	1.9%
Heavy Construction (exc. Bldg.)	9.1	9.4	0.3	3.3%
Special Trade Contractors	46.7	48.9	2.2	4.7%
Manufacturing	217.1	202.7	-14.4	-6.6%
Durable Goods	141.9	129.7	-12.2	-8.6%
Fabricated Metals	14.4	13.2	-1.2	-8.3%
Industrial Mach. & Equip.	32.3	30.3	-2.0	-6.2%
Electronic & Electric Equip.	35.9	31.5	-4.4	-12.3%
Transportation Equipment	8.5	8.5	0.0	0.0%
Instruments	38.4	34.9	-3.5	-9.1%
Non-Durable Goods	75.2	73.0	-2.2	-2.9%
Food & Kindred Products	12.4	12.8	0.4	3.2%
Textiles, Apparel & Leather	6.3	5.5	-0.8	-12.7%
Paper & Allied Products	5.3	5.2	-0.1	-1.9%
Printing & Publishing	31.2	30.3	-0.9	-2.9%
Chemicals, Petroleum & Oth.	12.4	12.3	0.1	-0.8%
Rubber & Plastic Products	7.6	6.9	-0.7	-9.2%
Transportation & Public Utilities	91.2	86.0	-5.2	-5.7%
Transportation	56.4	51.7	-4.7	-8.3%
Communication	24.2	24.0	-0.2	-0.8%
<b>Industry</b>	<b>2001</b>	<b>2002</b>	<b>Change</b>	<b>Percent</b>
Electric, Gas & Sanitary	10.6	10.3	-0.3	-2.8%
Trade	419.4	414.2	-5.2	-1.2%
Wholesale Trade	105.6	100.4	-5.2	-4.9%
Durable Goods	66.9	62.6	-4.3	-6.4%
Non-Durable Goods	38.7	37.8	-0.9	-2.3%
Retail Trade	313.8	313.8	0.0	0.0%
Building Materials & Gdn.	10.2	10.6	0.4	3.9%
General Merchandise Stores	22.6	21.4	-1.2	-5.3%
Food Stores	50.2	50.6	0.4	0.8%
Auto Dealers & Service Stns.	23.0	23.5	0.5	2.2%
Apparel & Accessories	26.5	25.4	-1.1	-4.2%
Eating & Drinking Places	111.6	114.9	3.3	3.0%
Miscellaneous Retail	52.7	50.5	-2.2	-4.2%
Finance, Insurance & Real Estate	173.0	171.9	-1.1	-0.6%
Finance	106.0	104.0	-2.0	-1.9%
Depository Institutions	43.9	44.9	1.0	2.3%
Insurance	44.4	44.7	0.3	0.7%
Services	823.4	803.5	-19.9	-2.4%
Business Services	204.5	176.5	-28.0	-13.7%
Health Services	196.0	199.4	3.4	1.7%
Educational Services	112.2	114.0	1.8	1.6%
Social Services	52.1	54.2	2.1	4.0%
Engineering & Mgm't Services	110.1	110.0	-0.1	-0.1%
Other Services	148.5	149.4	0.9	0.6%
Government	242.9	243.3	0.4	0.2%
Federal Government	33.0	32.6	-0.4	-1.2%
U.S. Post Office	14.4	13.9	-0.5	-3.5%
State Government	66.8	65.8	-1.0	-1.5%
State Education	9.3	9.5	0.2	2.2%
Local Government	143.1	144.9	1.8	1.3%
Local Education	85.4	87.5	2.1	2.5%

Source: U.S. Department of Labor, bureau of Labor Statistics, 790 series of non-agricultural employment. April, 2002.

**Table 5. Occupational Change in the City's Resident Labor Force**

	1960		1970		1980		1990		2000	
	Number	%								
White-Collar	126,471	44	146,657	55	154,456	60	191,251	67	201,635	66
Manag'l., Profess'l & Relat'd	49,080	17	59,929	23	77,217	30	107,206	38	132,016	44
Sales and Office	77,391	27	86,728	33	77,239	30	84,045	29	69,619	23
Blue-Collar and Service	134,610	46	119,848	45	101,561	40	97,453	33	102,117	34
Constr'n, Extract'n, Maint.	32,398	11	27,157	10	19,772	8	18,453	6	13,729	5
Product'n, Transp'n., and Rel.	52,175	18	36,695	14	24,825	10	19,971	7	25,121	8
Service, Laborers, and Farm	50,037	17	55,996	21	56,964	22	59,029	20	63,267	21
Not Reported	27,115	9	—	—	—	—	—	—	—	—
<b>Total</b>	<b>288,196</b>	<b>100</b>	<b>266,505</b>	<b>100</b>	<b>256,017</b>	<b>100</b>	<b>288,704</b>	<b>100</b>	<b>303,752</b>	<b>100</b>

Source: U.S. Department of Commerce, Bureau of the Census for 1960, 1970, 1980 and 1990. Census Bureau 2000 Special Survey (C2SS) for 2000 pending actual 2000 Census data.  
Percentages may not add due to rounding.

education, and health care. Only small losses were apparent in finance, insurance, and real estate. Retail trade showed no net change but the detail showed that losses were obvious in apparel stores, general merchandise stores, and miscellaneous retailing while gains were indicated in food stores, building and garden stores, auto dealers, and eating and drinking establishments. Clearly, the recession has been causing job loss but some important sectors of the area's economy still remained strong as of February of 2002.

As of 2000, 66% of city residents were white-collar workers and 34% were blue-collar and service workers, as compared to 1960 when 44% were white-collar workers and 46% were blue-collar and service workers. As shown in the following table, this trend among city residents away from blue-collar and service occupations and toward white-collar occupations was evident between 1960 and 1990. During the decade of the 1990s this trend showed some change. White-collar occupations still grew but at a slower pace with managerial, professional, and technical jobs gaining but sales and office workers declining. At the same time, blue-collar and services occupations showed some small increases due to the growth in service, production, and transportation workers outpacing the continued decline in crafts and construction workers.

## UNEMPLOYMENT

The annual average unemployment rate for the city in 2001 was 4.1%, slightly above that of Massachusetts at 3.7% and also above that for the metropolitan rate at 3.3%, but below the national rate of 4.8%. All of these rates were above the lows reached in the year 2000. The average annual number of people unemployed in the city for 2001, was 12,067, an increase from 2000 when it was 8,495. The 1990 Census data for Boston, which differ from the Bureau of Labor Statistics rates shown below due to sample size, showed that when Boston's total unemployment rate was 8.3%, the rate for whites was 6.4%, the rate for all minority groups combined was 12.6%, and the rate for all youth aged 16-19 years was 18.9%. This pattern is typical of many of the nation's urban centers.

As Table 7 illustrates, 2001 monthly unemployment data showed a general increase over the same months in 2000 for Boston from March through December. In January 2002, Boston's unemployment rate registered 5.1% compared with the 3.2% mark one year earlier in January 2001. The number of unemployed in January 2002 was 15,370, having risen from the 9,417 unemployed as of January 2001. Unemployment clearly rose during the recession of 2001-2001 although the mark in January 2002 was

**Table 6. Annual Unemployment Rates**

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
City of Boston	8.0%	6.6%	5.8%	5.3%	4.4%	4.2%	3.4%	3.3%	2.9%	4.1%
Boston PMSA <sup>(1)</sup>	7.6	6.0	5.2	4.7	3.7	3.4	2.8	2.7	2.2	3.2
Massachusetts	8.6	6.9	6.0	5.4	4.3	4.0	3.3	3.2	2.6	3.7
New England	8.1	6.8	5.9	5.4	4.8	4.4	3.5	3.3	2.8	3.7
United States	7.5	6.9	6.1	5.6	5.4	4.9	4.5	4.2	4.0	4.8

(1) Primary Metropolitan Statistical Area, consisting of the City and 129 contiguous municipalities, with a population of approximately 3.4 million in 2000 according to U.S. Census data.

Sources: U.S. Bureau of Labor Statistics for United States, New England and Massachusetts and Massachusetts Division of Employment and Training for the City and Boston PMSA

**Table 7. Monthly Unemployment Rates for Boston, Boston PMSA, Massachusetts, New England and the United States for 2000, 2001 and 2002<sup>(1)</sup>**

	City of Boston			Boston PMSA <sup>(2)</sup>			Massachusetts			New England			United States		
	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
Jan.	3.5%	3.2%	5.1%	3.0%	2.6%	4.3%	3.7%	3.3%	5.0%	3.7%	3.5%	4.7%	4.5%	4.7	6.3%
Feb.	3.0	3.0	NA	2.7	2.6	NA	3.3	3.2	4.7	3.5	3.6	NA	4.4	4.6	6.1
Mar.	2.9	3.4	NA	2.4	2.8	NA	3.0	3.5	NA	3.1	3.6	NA	4.3	4.6	NA
Apr.	2.6	3.2	NA	2.1	2.5	NA	2.4	3.0	NA	2.6	3.2	NA	3.7	4.2	NA
May	2.7	3.7	NA	2.0	2.9	NA	2.4	3.2	NA	2.6	3.4	NA	3.9	4.1	NA
Jun.	3.3	4.3	NA	2.4	3.3	NA	2.8	3.7	NA	2.8	3.7	NA	4.2	4.7	NA
Jul.	3.3	4.7	NA	2.4	3.6	NA	2.8	4.0	NA	2.7	3.9	NA	4.2	4.7	NA
Aug.	2.9	4.5	NA	2.1	3.5	NA	2.4	3.8	NA	2.5	3.7	NA	4.1	4.9	NA
Sep.	3.2	4.8	NA	2.2	3.8	NA	2.6	4.1	NA	2.5	3.8	NA	3.8	4.7	NA
Oct.	2.7	4.7	NA	1.9	3.7	NA	2.2	3.9	NA	2.3	3.8	NA	3.6	5.0	NA
Nov.	2.6	4.7	NA	1.9	3.8	NA	2.2	4.2	NA	2.4	4.0	NA	3.8	5.3	NA
Dec.	2.3	4.5	NA	1.7	3.7	NA	3.0	4.0	NA	2.4	3.9	NA	3.7	5.4	NA

Unemployment rates are not seasonally adjusted. Most recent data are preliminary and subject to revision.

Primary Metropolitan Statistical Area, consisting of the City and 129 contiguous municipalities, with a population of approximately 3.4 million in 2000 according to U.S. Census data.

Sources: U.S. Bureau of Labor Statistics for United States, New England and Massachusetts and Massachusetts Division of Employment and Training for the City and Boston PMSA.

better than the national rate and not as severe, as yet, compared to the recession in Massachusetts of 1988-1992.

### LARGEST EMPLOYERS

Table 8 lists the thirty-six largest private employers in Boston, the total list of organizations with more than 1,000 employees, which had an aggregate of approximately 21% of private sector employment in 2001.

In addition, the public sector has large numbers of employees in the city. According to the BRA, using a series consistent with the Bureau of Economic Analysis, there were 93,181 government workers in the city in 2000, a reduction of 5,743 from 1990. Certain state government offices, federal regional offices, U.S. Postal Service facilities, state-chartered authorities and commissions, such as Massport and the MBTA, and the city's local government are all located within the city.

**Table 8. Largest Private Employers In Boston, 2001**  
(listed alphabetically)

Beth Israel Deaconess Medical Center	Liberty Mutual
Boston College	Massachusetts Eye and Ear Infirmary
Boston Medical Center	Massachusetts Financial Services
Boston University	Massachusetts General Hospital
Brigham and Women's Hospital	New England Baptist Hospital
Brown Brothers Harriman	New England Financial
Carney Hospital	New England Medical Center
Children's Hospital	Northeastern University
Dana Farber Cancer Institute	Northwest Airlines
Delta Airlines	Nstar (formerly Boston Edison)
Faulkner Hospital	Putnam Investments
Federal Reserve Bank of Boston	St. Elizabeth's Medical Center
Fidelity Investments	Shaw's
Filene's	State Street Corporation
Fleet Boston Financial	Stop & Shop Supermarkets
Gillette Company	Thompson Financial Services
Harvard University (Business and Medical)	US Air
John Hancock	WGBH

Note: The following large Boston companies were surveyed but did not respond and likely have over 1,000 employees: Boston Consulting Group, the Boston Globe, Citizen's Bank, Commercial Union Insurance, Liberty Financial Companies, Inc, Macy's, Pricewaterhouse Coopers LLP, Teradyne, UNNICO Services, and Verizon (formerly Bell Atlantic).

Source: Survey by BRA/EDIC, conducted in 2001.

**Table 9. Years of School Completed for Boston Residents Age 25 and Over, 1970-2000**

	1970		1980		1990		2000	
	Persons	Percent	Persons	Percent	Persons	Percent	Persons	Percent
Less than nine years	91,582	26.1%	54,932	16.6%	37,824	10.3%	31,828	8.8%
9 to 12 years, no diploma	71,511	20.4	49,407	14.9	51,051	14.0	35,210	9.7
High school grad. (or GED)	120,350	34.3	115,787	35.0	97,233	26.6	86,414	23.8
Some college or Associates	30,876	8.8	43,451	13.2	69,889	19.1	69,914	19.2
Bachelors, Masters, or Prof.	36,245	10.4	67,073	20.3	109,711	30.0	139,925	38.5
Total	350,564	100.0	330,650	100.0	365,708	100.0	363,291	100.0

Source: U.S. Department of Commerce, Bureau of the Census; 1970, 1980 and 1990. Census 2000 Special Survey for 2000 data.

**LABOR FORCE AND EDUCATION**

According to U.S. Department of Commerce, Bureau of the Census, the city’s resident labor force declined during the 1970s but increased during the 1980s. In contrast to the 12% decline in population between 1970 and 1980, the city’s labor force (those residents aged 16 and over, available to work) declined by only 4%. The difference in these rates of decline was attributable to the fact that the decline in population was concentrated in the under-16 age group. Since 1980, both the increasing population and its increasing age have combined with the rising labor force participation of women, minorities, youth and the elderly to produce a larger labor force. By 1990, the city’s population had increased by 2% over 1980 levels, while the city’s labor force increased by 12.8% in the same period, according to data from the U.S. Bureau of the Census. During the 1990’s Boston’s population continued to rise, posting a 2.6% increase between 1990 and 2000. During the same time period the city’s labor force decreased by 4%, according to Language training, pre-vocational and vocational training, adult literacy training, and support counseling. In addition, linkage contributions paid into the Neighborhood Jobs Trust provide a supplemental source of funding for job training programs. For a full discussion of the city’s housing and jobs linkage program see “The Linkage Program”.

**INCOME, WAGES, AND COST OF LIVING**

Per capita personal income for Suffolk County was \$40,748 in 1999, 43% above the national per capita personal income of \$28,546, according to the U.S. Bureau of Economic Analysis. An historical summary of per capita income shows that from 1980 to 1990 Suffolk County’s per capita income grew at a rate greater than that for the nation, in contrast to the 1970-1980 period when it rose at a slower rate. Suffolk County’s per capita income grew at a faster rate than the per capita income growth rates for the United States, New England, and Massachusetts and just barely below the rate of growth for Metropolitan Boston

the Massachusetts Department of Employment and Training.

General improvement in educational attainment of resident’s aged 25 and over continued throughout the 1970-2000 period. The percentage of this population that had completed four or more years of college almost quadrupled during this period from 10% to 39%. This change, in part, reflected the trend for an increasing percentage of graduates of the city school system to seek higher education. This percentage increased from 25% in 1960 to 36% in 1970, 44% in 1977, 54% in 1982, 66% in 1990, 61% in 1997, 77% in 1999, 69% in 2000, and 76% in 2001, based upon Boston School Department figures. Improving educational attainment levels and shifting occupational patterns suggest a concurrent transformation of the city’s work force as the city’s economy has moved to a service-dominated base.

The city supports entry-level and advanced job training programs, including the following: English-as-a-Second (as defined in the table below) between 1990 and 1997. The city’s median household income (in current year dollars), based on U.S. Census data, rose from \$7,835 in 1970, to \$12,530 in 1980 and \$29,180 in 1990. Median household income in 1998 for Suffolk County (of which Boston accounts for 87% of the population) was estimated at \$37,931 in current dollars. The figures in this paragraph and the chart directly below reflect earned income of persons residing in the named areas plus rents, interest and other unearned income and transfer payments from governmental entities. As such, these figures take into account certain income sources not included in the survey of average annual wages in the following paragraph, which reflects earned income of persons who work (but do not necessarily reside) in the named areas.

May 2001 data from the U.S. Bureau of Economic Analysis indicate that average annual wage per job for 1999, by place of work, have been consistently higher over time in Suffolk County than in the Boston

**Table 10. Per Capita Personal Income Comparison, 1970, 1980, and 1990-2000**  
(in current year dollars not adjusted for inflation)

	United States	New England	Massachusetts	Metro Boston(1)	Suffolk County(2)
1970	\$ 4,095	\$ 4,453	\$ 4,486	\$ 4,515	\$ 4,652
1980	10,183	10,701	10,673	10,806	10,477
1990	19,584	22,900	23,223	23,559	24,873
1991	20,089	23,257	23,749	24,078	25,909
1992	21,082	24,452	24,876	25,271	27,628
1993	21,718	25,208	25,664	26,028	28,607
1994	22,581	26,229	26,841	27,251	30,239
1995	23,562	27,426	28,051	28,520	31,311
1996	24,651	28,820	29,618	30,096	33,301
1997	25,874	30,676	31,330	31,869	35,072
1998	27,321	32,373	33,407	34,044	38,202
1999	28,546	34,173	35,527	36,285	40,748
2000.	29,451	35,824	37,710	NA	NA

Metropolitan Boston denotes the New England County Metropolitan Area (NECMA), which is larger than the Primary Metropolitan Statistical Area (PMSA). The NECMA consists of five Massachusetts counties and Hillsborough County in New Hampshire. Known as Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH (NECMA).

City residents constitute approximately 87% of Suffolk County's population.

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis, May 2001 revised series, Regional Economic Information System

metropolitan area and the Commonwealth. Suffolk County's average wage per job (\$49,671) was 24% greater than that in the Boston metropolitan area (\$40,196) and 26% greater than the average state

earnings level (\$39,352). The average annual wage per job reflect the combined income earned by individuals at their place of work for all industries combined.

**Table 11. Average Wage Per Job Comparison, 1969, 1979, 1989, and 1999**  
(in current year dollars not adjusted for inflation)

	United States	Massachusetts	Metro Boston(1)	Suffolk County(2)
1969	\$ 6,506	\$ 6,563	\$ 6,571	\$ 7,145
1979	12,368	12,368	12,444	14,090
1989	22,259	24,921	25,265	29,176
1999	32,711	39,352	40,196	49,671

Metropolitan Boston denotes the New England County Metropolitan Area (NECMA), which is larger than the Primary Metropolitan Statistical Area (PMSA). The NECMA consists of five Massachusetts counties and Hillsborough County in New Hampshire. Known as Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH (NECMA).

City residents constitute approximately 87% of Suffolk County's population.

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis, May 2001 revised series, Regional Economic Information System

**Table 12. Consumer Price Index for All Urban Consumers**  
(CPI-U)

	United States Index	Percent Change	Metro Boston Index	Percent Change
1991	136.2	NA	145.0	NA
1992	140.3	3.0	148.6	2.5
1993	144.5	3.0	152.9	2.9
1994	148.2	2.6	154.9	1.3
1995	152.4	2.8	158.6	2.4
1996	156.9	3.0	163.3	3.0
1997	160.5	2.3	167.9	2.8
1998	163.0	1.6	171.7	2.3
1999	166.6	2.2	176.0	2.5
2000.	172.2	3.4	183.6	4.3
2001	177.1	2.8	191.5	4.3
2001 (Jan.)	175.1	-	189.0	-
2001 (Nov.)	177.1	1.1	192.9	2.1

Note: Index based upon 1982-1984=100.0.

Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

**Table 13. Population of Massachusetts, Metropolitan Boston, and the City of Boston 1970, 1980, 1990 and 2000**

	1970	1980	1990	2000	1970-80 Population Change	Percent Change	1980-90 Population Change	Percent Change	1990-00 Population Change	Percent Change
Massachusetts	5,689,170	5,737,037	6,016,425	6,349,097	47,867	0.8%	279,388	4.9%	332,672	5.5%
Metropolitan Boston <sup>(1)</sup>	2,899,101	3,149,000	3,227,707	3,398,051			78,707	2.5	170,344	5.3
City of Boston	641,071	562,994	574,283	589,141	(78,077)	(12.2)	11,289	2.0	14,858	2.6

(1) Boston PMSA.

(2) Because of a metropolitan area boundary change from Standard Metropolitan Statistical Area ("SMSA") to PMSA, the 1970-1980 change is not shown

Source: U.S. Department of Commerce, Bureau of the Census.

During the years 1991-2000, based on the U.S. Bureau of Labor Statistics Consumer Price Index, the cost of living index rose at an annual average rate of 2.66% in the Boston metropolitan area, while the national index increased at a 2.64% annual rate. In 2001 the index for Boston rose at 4.3% while the national rate grew by 2.8%. From January 2001 to January 2002, the cost of living in the Boston metropolitan (Boston PMSA) area rose 2.1%, compared to a 1.1% rate rise for the nation.

## POPULATION

The U.S. Bureau of the Census reported the city's population as 589,141 in 2000, a 2.6% increase over 1990 and building on the 2.0% increase in the 1980s. The number of households in the city increased from 217,622 in 1970, to 218,457 in 1980, to 228,464 in 1990, and to 239,528 in 2000, while household size fell from 2.8 to 2.3 persons per household from 1970 to 2000. The U.S. Bureau of the Census population for Massachusetts in 2000 was 6,349,097, or an increase of 332,672 persons (5.5%) from the 1990 census. The population of metropolitan Boston rose to 3,398,051 in 2000, a rise of 170,344 persons or 5.3% over the decade.

Data from the 2000 Census (Summary File 1) were reported to Boston in 2001 and some information regarding the demographic and housing characteristics of Boston's resident population are available. Changes in racial patterns showed that Boston's racial composition was: White, Non-Hispanic 49.5%; Black, Non-Hispanic 23.8%; Hispanic 14.4%; Asian/Pacific Islander 7.5%; Multi-racial 3.1%; other single race 1.4%; and Native American 0.3%. Within the Asian/Pacific Islander classification, the largest growing groups were the Vietnamese, Chinese, Asian Indian, and Korean groups. Within the Hispanic classification the fastest growing groups were the Central and South Americans with a small but fast-growing Mexican community. Boston continues to be a city of young adults due to the large number of students and young adults living and working in the

city. One out of every three persons in Boston is between 20 and 34 years old. The baby boom population (aged 35 to 54 years) grew fast as that cohort aged and still showed a preference for city living, growing by 20%. The city saw a decline in the elderly population, aged 65 and over, between 1990 and 2000 as that segment declined by nearly 5,000 people to 10% of the population. Boston showed a general rise in children as that population (aged under 18) increased by over 6,700 persons to 20% of the population. The trend toward fewer families- related people living together- and more non-families- single persons and roommates – continued in Boston in the 1990s. There was a trend toward more "non-traditional" families as the data showed more relatives and non-relatives other than the householder and spouse living in families. Overall, the total number of households rose. Single person households continued to grow. Families with children under 18 also grew although married couples with young children fell because of the continued trend toward single-parent families with children. Children over 18 living with their families showed an upward trend as college students commuted at a greater pace and as the cost of housing kept older children at home longer. Group quarters population continued to increase both for the institutionalized and non-institutionalized populations, the vast majority of which is the student dormitory population. Household size has only fallen by 2.5%, going from 2.37 persons to 2.31 despite the large growth in single person households. Average family size only edged marginally lower from 3.19 to 3.17 persons.

## MEDICAL AND HIGHER EDUCATION INSTITUTIONS

Boston's medical and educational institutions are an important component of its economy, providing employment opportunities for residents of the city and the Boston metropolitan area. Expenditures by the institutions' patients, students and visitors are important to the city's trade and service sectors.

Twenty-two inpatient hospitals are located within the city, including Massachusetts General Hospital, Brigham and Women's Hospital, Beth Israel/Deaconess Hospital, Children's Hospital, the New England Medical Center and Boston Medical Center. These hospitals had a combined total of 5,888 beds in 2000 with total expenses of over \$5 billion. In 2000 the hospitals saw 217,000 in-patients, had over 3.8 million out-patient visits, and witnessed over 22,000 births according to data from the American Hospital Association. The city is also the home of the medical and dental schools of Harvard, Tufts and Boston Universities, and of twenty-five public neighborhood health clinics, not including health maintenance organizations and membership clinics.

In 2000, there were an estimated 96,453 persons employed in health services in the city, based on a series consistent with U.S. Bureau of Economic Analysis data. Health services represent over 1 out of every 7 jobs within the city. Growth in the health services sector has been stable, despite varying economic conditions. Data from the U.S. Bureau of the Census, County Business Patterns, showed that the number of hospital employees in Suffolk County between 1988 and 1999 grew from 44,690 to 52,120. According to the BRA, the city's hospital and medical school community invested close to \$1.1 billion in new facilities from 1984 to 1999. Large new projects were completed over the 1984-1996 period at the following city hospitals: Massachusetts General Hospital, Beth Israel/Deaconess Hospital, Brigham and Women's Hospital, Boston Medical Center, St. Elizabeth's and New England Medical Center. In 1996-1997 several hospital projects were completed including a Dana Farber research building and a Beth Israel ambulatory care facility. In 1999 the Shriner's Burns Institute's new building and the Franciscan Hospital gymnasium were completed.

As of December 2000, there was one hospital project and a variety of medical research projects under construction or set to begin. Under construction is Tufts University's \$65 million biomedical research building and nutrition center of 175,000 square feet on Harrison Avenue scheduled to open in the Summer of 2002. In the Longwood area, Children's Hospital has two buildings scheduled: a 12-story, \$130 million medical research building of 300,000 square feet is under construction and a clinical building of 194,000 square feet is approved and will begin construction in 2002. Also in the Longwood area, the Harvard Institutes of Medicine is in the second phase of the redevelopment of the old English High into medical research space with a \$250 million, 435,000 square-foot building. In addition, Emmanuel College has two medical research

buildings scheduled: a building of 320,000 square feet to be occupied by the Merck pharmaceutical company has begun construction and a speculative research building of 186,000 square feet is expected to start construction in 2003. Massachusetts General Hospital also has begun work on a \$320 million new 420,000 square foot ambulatory care facility with a 220,000 square foot outpatient clinic and a 725-car garage, as demolition work has commenced in 2001. Also, Brigham and Women's Hospital has begun site preparation for a new \$100 million, 10-story clinical research facility with the demolition and relocation of six, three-family houses and the sales of adjacent properties. Beth Israel Hospital is also in the early stages of planning for a research building.

Based on data from the National Institutes of Health for fiscal 2000, the city is the nation's largest center for health research, topping New York city for the fifth consecutive year. For fiscal 2000, the medical research institutions within Boston received \$1.078 billion in National Institutes of Health awards. This was a 14% increase from fiscal year 1999. According to the National Institute of Health Division of Research Grants, six of the seven independent hospitals in the nation which received the most National Institutes of Health research funding in fiscal 2000 were located in the city. In addition to public monies for medical research the Boston institutions also have private funding sources through agreements with private sector firms.

Boston is one of the nation's largest centers of medical research activities and biotechnology industries. In Massachusetts, one of the leading biotechnology centers in the United States, there were over 215 companies engaged in research and development and manufacturing of biotechnology products as well as scientific, equipment, supplies and support services to the industry in 1998 according to the Massachusetts Biotechnology Council. The Ernst & Young annual biotechnology industry report, "Convergence, Millennium Edition, 2000," showed the New England Region as the nation's second largest center for biotechnology by number of publicly-traded companies (53), total assets (\$7.3 billion), and R&D spending (\$1.5 billion), as well as the nation's third largest center as ranked by product sales (\$2.3 billion), and total revenues (\$3.2 billion) and the nation's fourth largest center as ranked by employees (18,395).

As of academic year 1999-2000, the New England Board of Higher Education reported 74 colleges and universities in the Boston metropolitan area (PMSA), at which approximately 269,540 students were enrolled. The city's 36 universities, colleges and community

colleges had a combined enrollment in fall 1999 of approximately 135,710, a 7.8% gain from fall of 1990. These numbers include some graduate schools of Harvard and Tufts Universities, whose principal campuses are in Cambridge and Medford, respectively, which had 5,200 students in the city in 1999. Based on total graduate and undergraduate enrollment, Boston University was the largest university in Boston in fall of 1999, with 28,487 students.

Educational institutions are a source of new highly skilled professionals for the city's labor force. For example, according to the Massachusetts Institute of Technology, although only 10% of its enrollees over the decade of the 1980s were from the Boston area, 24% remained in the area after graduation.

From 1991 through 1998, large projects at educational institutions in the city accounted for approximately \$300 million of investment, according to the BRA. These included new construction at Boston University, Northeastern University, Tufts University, Boston College, the Massachusetts College of Pharmacy, and Harvard University, as well as major renovations by Emerson College and Suffolk University. Recently completed projects include: the Boston University School of Management and the Photonics Center; Emerson College dormitory and administration space in renovated buildings; Suffolk University dormitory space; and, at Northeastern University, the Marino Recreation Center and a new Engineering and Science building. Completed in 1999 was the new \$65 million Suffolk University Law School on Tremont Street in downtown Boston and a new dormitory at Northeastern University with 630 beds. Completed in 2000 were an 819-bed dormitory for Boston University and two smaller dormitories at Northeastern University with a total of 470 beds.

Institutional development of dormitory and academic facilities is currently taking place or planned in Boston. Since 1990, colleges and universities have added 10,511 dormitory beds- the equivalent of freeing up approximately 2,600 apartment units. Wentworth Institute opened its new 475-bed dormitory at 610 Huntington Avenue in 2001. Mass. College of Art held "topping off" ceremonies for a 9-story, 600-bed dormitory in 2001 and it is scheduled for completion in July of 2002. Boston College, in its recently submitted master plan, is proposing to add 800 more dormitory beds. Boston University is proposing to build dormitory space for 2,300 students along with a new sports arena and a new recreational center on the site of the former Commonwealth Armory. At the Business School campus of Harvard University, where a five-year

expansion and retrofit program is underway, new executive student housing is now complete, a new student center is nearly complete, and a graduate school housing and academic building project were recently approved by the BRA and began construction in 2001. Northeastern University recently opened 15-unit Shawmut estates, Davenport Commons (\$51 million, 585-bed dormitory, 60 affordable condominiums, and 2,100 square feet of retail space) and 780 Columbus Avenue (114 beds). Also at Northeastern, ground was broken for a new \$37 million, 17,000 square foot health sciences complex. In other developments at educational institutions: Emerson College began construction of its new Tufts Performing Arts Center (\$25-30 million, 11-story, 80,000 square feet) adjacent to the Majestic Theater on Tremont Street and plans to build a 14-story dormitory and student center on Boylston Street at Piano Row; Simmon's College is planning a 40,000 square foot Graduate Center; Suffolk University announced plans to build more student housing; and UMass-Boston has a new Campus Center (\$75 million, 360,000 square feet) under construction with plans announced for housing 2,000 students on campus in future dormitory space.

## **TOURISM**

According to the Greater Boston Convention and Visitors Bureau (CVB), an estimated 13.5 million people visited the Boston metropolitan area in 2000, up by 13.4% from the 11.9 million visitors in 1999 and up 35% from the 10.0 million visitors in 1995. These data represent visitors, measured as tourists, business travelers and convention and meeting delegates who traveled at least 100 miles to get to the city. The latest data on the economic impact of tourism from the CVB shows that, for the five county region of greater Boston, visitors spent an estimated \$8.1 billion for hotel accommodations, meals, entertainment, shopping, transportation and other services during 1999. In Suffolk County alone the total domestic direct traveler impact in 1999 was \$5.2 billion supporting 53,880 jobs and a payroll of \$1.5 billion while generating \$130 million in state tax receipts and \$86 million of local tax receipts.

In recent years several large tourist events have taken place in Boston. In July 1992, Sail Boston, the tall ships flotilla, drew an estimated 6 million attendees, including visitors (as defined above) and local residents. During the summer of 1994, greater Boston was a regional host of the World Cup soccer championship. In April 1996, the 100<sup>th</sup> anniversary of the Boston Marathon attracted a record field of 38,708 runners and an estimated 750,000 spectators along

the route, with 150,000 of them at the Copley Square finishing line. In August 1998, the 200th Anniversary of the refurbished frigate USS Constitution, "Old Ironsides," was celebrated with a gala three-day event with other tall ships from around the world in attendance. Also in 1998, the "Monet in the 20<sup>th</sup> Century" exhibition at the Museum of Fine Arts, the only showing in the United States, topped all museum exhibits in the United States with almost 566,000 visitors. In 1999 Boston was the site of Major League Baseball's All Star game. In 2000, the city held a large celebration, Millennium 2000, lasting several days, and Sail Boston 2000, which attracted over 4 million people to the waterfront for a parade of Tall Ships. During 2001, Boston's 104<sup>th</sup> Marathon drew an estimated 1 million visitors, the Head of the Charles Regatta drew 550,000 attendees, and the US Figure Skating Championships, held at the Fleet Center in January 2001, attracted 108,000 visitors.

Every year there are a wide variety of special events in Boston including food, cultural, and musical events, ethnic celebrations, harbor, seaport and river festivals, parades, and collegiate and professional sporting contests which attract many visitors. In 1997 there were an estimated 75 such events in addition to the regular schedules of the three major professional sports teams—the Boston Red Sox baseball team, the Boston Bruins hockey team and the Boston Celtics basketball team. The city provides a venue for concerts, ice shows, circuses, plays, and other entertainment and sports events. The Fleet Center, a new privately financed, multi-purpose arena in Boston's North Station District constructed by the New Boston Garden Corporation, a subsidiary of Delaware North, owner of the existing Boston Garden/North Station, opened on September 30, 1995.

Boston is an attractive destination for conventions, meetings, and trade-and-gate shows. Currently Boston has three small and medium convention sites: the John B. Hynes Veterans Memorial Convention Center, the World Trade Center and the Bayside Exposition Center. Together, these facilities have a combined full capacity of over one million people per year. In addition, as more fully described in the Official Statement, the Massachusetts Convention Center Authority (MCCA) and the city are developing a new 1.6 million square-foot convention and exhibition center in Boston that will provide facilities suitable for large national conventions. In 2000 there were 300 events—meetings, conventions, and expositions—over the course of the year in greater Boston. Included were 21 citywide conventions; these are defined as events that would each use over 2,000 hotel rooms on the peak night, which usually requires at least three hotels. In

2001 Boston was projected to host 2.79 million convention and meeting visitors and 15 citywide conventions. There were also 64 college commencements in greater Boston scheduled for a six week period in May and June.

## HOTEL MARKET

Boston's favorable hotel market over the period of 1992-2000 stimulated considerable new development. The number of hotel rooms in the city rose from 6,907 in 1980 to 12,136 as of July 1, 1997, an increase of 76%. Between July 1, 1997 and December 1999 eight new hotels and four expansion projects were completed, adding a total of 1,537 rooms. The largest hotel completed in 1998 was the Seaport hotel, with 427 rooms, adjacent to the World Trade Center on the South Boston waterfront. In 1999 three new hotels and one expansion were completed: the Wyndham Boston Hotel, a 362-room renovation of the former Batterymarch building at 89 Broad Street; The Club by Doubletree near the Bayside Expo Center with 212 rooms; the rebuilding of the Airport Hilton in East Boston with 87 net new rooms; and the 38-room expansion of the Bostonian Hotel adjacent to the Faneuil Hall Marketplace. Three additional hotels were completed in 2000, a conversion of 15 Beacon Street into 61 boutique rooms; a conversion of the former Don Bosco High School into The Club by Doubletree with 268 rooms; and the small conversion (reuse) project, 13-room Beacon Hill Hotel. In 2001 two hotels were completed and opened: the Best Western "Roundhouse" with 92 rooms in the South End/Roxbury and the Ritz on the Common, a new 191 luxury suites hotel at Millennium Place, and in early 2002 the Charlesmark Hotel a conversion (reuse) project with 33 rooms opened in the Back Bay..

As of mid-2001, five new hotels representing 891 new rooms, were under construction: Nine Zero (190-rooms) at 90 Tremont Street; Commonwealth Hotel (149-rooms) in Kenmore Square, Embassy Suites (272-rooms) in East Boston; Homewood Suites at Tudor Wharf (168 rooms) and a new boutique hotel (112 rooms) at 155 Portland Street. Applications to construct ten additional hotel projects with a total of 3,966 rooms have been approved by the Boston Redevelopment Authority (BRA) and many more are currently in the approval process, including a 1,200 room convention center hotel to be constructed by Starwood Hotels and Resorts adjacent to the BCEC. With the economic slowdown and the War on Terrorism affecting the travel industry, several of these hotel projects in the approval process have either temporarily suspended action or have announced that

their completion schedules would be pushed farther into the future.

Between 1991 and 2000, average annual occupancy rates grew steadily from 65.4% to 78.6% and average daily room rates rose steadily from \$108.29 to \$200.10. 2001 has brought a more challenging environment for the hospitality industry as a slowing economy combined with the events of September 11<sup>th</sup> to dampen hotel market performance in Boston. Through November of 2001 Boston's hotel occupancy, according to Pinnacle Advisory Group, stood at 72.2% compared with 80.0% for the same eleven months in 2000. Similarly, through November, average daily room rate registered \$184.86 compared with \$200.01 for the same period in 2000.

## TRANSPORTATION

The city is a major national and international air terminus, a seaport and the center of New England's rail, truck and bus service. The city is served by three limited-access interstate highways which connect it to the national highway system: U.S. 90 (the Massachusetts Turnpike), which leads westward from downtown Boston to the New York State border; U.S. 95, the East Coast's principal north-south highway, which connects Boston to Portland, Maine to the north and New York City and Washington, D.C. to the south; and U.S. 93, another north-south highway, that extends from just south of the city to New Hampshire and Maine. The city is also served by two national railroads, Amtrak and Conrail, a regional rail carrier, Boston & Maine, and Bay Colony, a local carrier.

Transportation planning includes both major highway and mass transit programs. Federal transportation legislation has enabled the Massachusetts Bay Transportation Authority (MBTA), which provides commuter rail, subway, local bus and express bus services to 175 cities and towns in eastern Massachusetts, to provide transit alternatives to a population of 2.8 million people in an area of 1,038 square miles. The MBTA, the fourth largest mass transit system in the nation as determined by ridership, currently serves about 1.2 million persons per day.

The capital program of the MBTA (Capital Investment Program) totals approximately \$3.2 billion over the years FY02-FY07, averaging about \$525 million per year. Approximately \$1.8 billion of revenue bonds will be issued to fund MBTA capital expenditures, approximately \$1.2 billion of capital expenditures will be funded through federal grants, and approximately \$110 million of capital expenditures will be funded with

pay-as-you-go capital funding, state reimbursement and other project financing.

The five-year Capital Investment Program consists of four major programmatic areas: 1) reinvestment in the infrastructure (\$1.97 billion); 2) accessibility improvements (\$172 million); 3) enhancement of existing service (\$219 million); and 4) system expansion efforts (\$793 million). Breaking out the Capital Investment Program spending by mode provided by the MBTA is as follows: a) subway (\$1.1 billion); b) commuter rail (\$598 million); c) Silver Line (\$361 million); d) bus (\$386 million; and e) systemwide (\$708 million).

Infrastructure improvements refer to vehicles, track/right-of-way, signals, communication, power, maintenance facilities, stations, facilities, bridges, and fare equipment. The major infrastructure spending will take place on revenue vehicles (\$770 million); station modernization primarily on the Red and Blue lines (\$252 million); rail signaling systems (\$213 million); maintenance facilities including rail car houses and bus garages (\$137 million); track/right-of-way (\$121 million); and fare equipment (\$120 million).

Several specific system enhancement projects follow. Current efforts are devoted towards the North Station Transportation Center, serving the Orange and Green lines, where a subway system enhancement of the Green/Orange transfer station is underway. To date, \$236 million has been spent on this project in Phases one and two while the next phases, three and four, are expected to require a remaining \$97 million until project completion in Fiscal Year 2006. Another system enhancement project is a \$10 million effort to make infrastructure improvements to support light-rail vehicle service along the Arborway corridor. The current plan devotes \$54 million toward parking efforts. The most significant effort is the construction of a new station with over 2,400 space in Woburn, while the majority of the other parking projects are also at commuter rail stations.

Also, several specific system commuter rail expansion projects are briefly noted. Since 1985, the MBTA has pursued large-scale system expansion projects including new commuter rail service to Worcester, Middleborough, Plymouth, and Newburyport. The current plan programs \$473 million toward the expansion of the commuter rail system, 60% of expansion expenditures. The majority of the funding is devoted to the rehabilitation of the Old Colony Greenbush Branch consisting of construction of 17.1 miles of track, 7 stations, a layover facility, a tunnel

through historic Hingham Square, and the purchase of necessary rolling stock. \$43 million is devoted to design and construction to support extension of MBTA services to New Bedford and Fall River. Current efforts include rehabilitation of bridges in New Bedford and Fall River, and design and EIR efforts north and south of Cotley. Other efforts include the completion of projects including the Newburyport Extension, South Salem Station, the Worcester Commuter Rail extension, and the Old Colony rehabilitation on the Middleborough and Plymouth lines.

Finally, the major MBTA subway enhancement project is the Silver Line development. The MBTA is constructing a new line to operate as part of its core downtown transit system. This Silver Line will combine bus rapid transit services along Washington Street (in Downtown, Chinatown, the South End, and Roxbury) and the South Boston Piers Transitway (on the South Boston waterfront) into a single line. There are four efforts currently related to the Silver Line. One is related to Washington Street (a joint project with the Massachusetts Highway Department (MHD) for the design and reconstruction of Washington Street from Dudley Square to Downtown including ten new stations to open in 2002), two projects are related to the South Boston Piers Transitway (a one-mile long tunnel extending from South Station to the pier area with three stations – South Station, Courthouse Station, and World Trade Center Station - to open in 2003), and the remaining project involves conceptual planning and design to eventually connect the two. The new Silver Line will provide connections between residential neighborhoods and job centers in the Financial District and the new South Boston waterfront. Service will also be coordinated with Massport to provide service through the existing Ted Williams Tunnel. Vehicle procurement for Washington Street and the South Boston Piers Transitway portions of the Silver Line are underway. The current five-year spending program for this Silver Line project is \$307.1 million, 40% of the systems expansion effort. The majority of this effort is devoted to the South Boston Piers Transitway.

Since 1991, Amtrak has spent \$1.6 billion towards a multi-year high-speed rail infrastructure project, to upgrade the rail corridor between Boston and New York permitting better ride quality, faster speeds, and greater capacity for rail users. A key component of infrastructure upgrades was electrification of the remaining segment of the Northeast Corridor rail line between New Haven and Boston, which was completed in 2000. Massachusetts Electric Construction Co. and J.F. White, two Boston firms, are major members of the team implementing the electrification work. Amtrak nearly taken full delivery on

a contract to acquire 20 high speed trains and 15 high-horsepower electric locomotives which reduce rail travel time from downtown Boston to downtown New York City to three and one-half hours, which is competitive with air travel. When combined with all other infrastructure improvements, the new high-speed trains will reduce this travel time to three hours. The equipment contract also included construction of three new maintenance facilities servicing the trains and locomotives; one of these facilities, completed in 1999, is located in Boston at Southampton Yard. Bombardier ALSTOM won the contract to build Amtrak's new high-speed equipment, using manufacturing sites in Barre, VT, and Plattsburgh, NY. Amtrak has begun to generate significant revenue from high-speed rail service and, based on ridership and revenue projections, was able to secure private financing for 100% of the cost of the new high-speed trains. Congressional appropriations under the Northeast Corridor Improvement Program pay for infrastructure work and electrification. The fully electrified system was up and running in 2000. In early 2000, Amtrak introduced fully electrified *Acela Regional* service between Boston and New York. The trip on *Acela Regional* between Boston and New York is four hours and fifteen minutes. *Acela Express* offers travelers a three-hour 30-minute trip between the two cities; this service began in December 2000.

The new Boston–Portland (ME) passenger rail service (the “Downeaster”) began December 15, 2001. The 250 passenger train runs four times a day in each direction between North Station and Portland. The trip takes 2 hours and 45 minutes and makes intermediate stops in Haverhill (MA), Exeter, Durham, and Dover (NH), and Saco, Wells, and Old Orchard Beach (ME). Roundtrip fare from Boston to Portland, ME is \$35.

Water transportation has also become a significant factor in transportation with the Boston Harbor. Currently seven operators provide water transit services to approximately 1.5 million riders annually with ambitious plans for future expansion. See “Large Public Sector Projects” for a description of the depression of the Central Artery and the construction of a third tunnel under Boston Harbor, two other significant transportation projects in the city.

## **SEAPORT AND AIRPORT**

The Massachusetts Port Authority (Massport) was created by the state legislature to develop and manage the city's major air and sea transportation centers and the Tobin Memorial Bridge over the Mystic River. Massport is financially independent, and the city is not responsible for any debt or other obligations incurred

by Massport. Heavy use of Boston Logan International Airport (Logan Airport) and the Port of Boston has compelled significant expansion of both facilities. Massport's net investment in its facilities through June 30, 2000 exceeded \$1.88 billion, consisting of \$1.35 billion invested in airports and \$550 million invested in the Tobin Bridge, maritime development and other capital spending.

The Port of Boston serves the six-state New England region and beyond as a natural deep-water berth, and provides access to world ports as well as feeder service several times weekly to Halifax, Canada and the Port of New York. The city's port activity includes handling bulk and general cargo, providing ship repair supply services, offering customs and international trading services, providing storage facilities and other commercial maritime services.

The city's port tonnage fell from the 1950s through the mid 1980s as a result of changes in transportation technology and in the regional economy. In 1990, according to the U.S. Army Corps of Engineers, the Port of Boston ranked as the 21<sup>st</sup> largest American seaport by total tonnage shipped and as the 18<sup>th</sup> largest American seaport by foreign tonnage shipped. During fiscal 2000 the container terminal in Boston handled 83,400 containers.

The Port of Boston is now a major cruise port which in fiscal 2000 hosted ships carrying 167,000 passengers. The cruise port mainly runs from May through October. In 1996, the BRA and Massport produced a Seaport Economic Development Plan for Boston Harbor which provides policies and guidelines for future development planning along Boston's waterfront. The plan is currently being implemented.

In 2000, Logan Airport was served by 44 domestic and 14 international airlines. In fiscal 2000, Logan Airport served a total of 27.3 million passengers. A 1999 report showed that Logan was the most active airport in New England, the 18<sup>th</sup> most active in the United States and the 29<sup>th</sup> most active in the world, according to the Airports Council International (ACI). Logan Airport also plays an important role as a center for processing domestic and international air cargo. According to ACI, in 1999 Logan Airport ranked 20<sup>th</sup> in the nation in total air cargo volume. Between fiscal 1996 and 2000 the total volume of air cargo handled at Logan Airport grew by 18%. In fiscal 2000 total combined cargo and mail volume was over one billion pounds.

In 2000, Massport projected that it would spend about \$2.8 billion during fiscal 1995 through 2005 for ongoing

capital improvements to Hanscom Field, Logan Airport, Tobin Memorial Bridge and the port facilities and for improvements and major maintenance at various Massport properties. Massport currently expects to finance these projects with a combination of bond proceeds, passenger facility charges, federal grants and internally generated funds. The present plan to add a new runway at Logan airport is in preliminary stage of consideration and review and a further description is given in the section on "Large Public Sector Projects."

## **CONSTRUCTION ACTIVITY**

Since 1960 the public and private sectors have carried out a major expansion of capital construction and investment activity. Private commercial development investment has added approximately 30 million square feet of office space to the physical inventory of the city since 1960—eight times the amount built in the previous 35 years.

Table 14 sets forth the estimated potential construction activity in the city from fiscal years 1990-2000, estimated as indicated in the notes to the table. It should be noted that the issuance of a building permit and payment of a fee do not necessarily result in construction activity.

Revenue from building permit fees during fiscal 2001 indicated that the estimate of total potential construction activity was \$3.199 billion. Revenue from building permit fees increased in all but four of the fiscal years between 1991 and 2001. Data from July 1, 2001 through December 31, 2001 (preliminary fiscal 2002) showed projected building permit revenues at an estimated annualized sum of \$21.2 million, resulting in a preliminary fiscal 2001 potential construction estimate of \$2.4 billion.

## **LARGE PUBLIC SECTOR PROJECTS**

Through the year 2004 the Boston metropolitan area will continue to be the site of several major public sector projects. In addition to the BCEC Project, these projects include the depression of the Central Artery, the section of U.S. 93 that runs through downtown Boston, which is the key six-lane elevated interstate highway that carries traffic through the city, and the construction of a four-lane tunnel (the Ted Williams Tunnel) under Boston Harbor (together, the "Transportation Projects"). At present, the Central Artery connects with the Sumner and Callahan Tunnels, two two-lane tunnels under Boston, which link downtown Boston with Logan Airport and points north.

**Table 14. Boston Building Permit Revenues and Estimated Potential Construction Activity Last Ten Fiscal Years, 1992-2001**

	<b>Building Permit Revenues<sup>(1)</sup></b>	<b>Estimated Potential Construction Activity<sup>(2)</sup></b>	<b>Estimated Potential Construction Activity Adjusted For Inflation<sup>(3)</sup></b>
1992	\$9,136,207	\$1,074,847,882	\$1,388,559,000
1993	8,832,324	1,039,096,908	1,292,886,000
1994	9,039,951	1,063,523,647	1,308,633,000
1995	7,629,395	897,575,882	1,073,682,000
1996	11,777,653	1,385,606,235	1,614,547,000
1997	9,199,877	1,082,338,471	1,219,809,000
1998	14,757,703	1,736,200,395	1,916,717,000
1999	11,404,006	1,341,647,713	1,456,470,000
2000	17,922,648	2,108,546,846	2,211,517,000
2001	27,192,000	3,199,040,000	3,199,040,000
Total	\$126,891,603	\$14,928,423,862	\$16,681,859,858
Annual Average 1992-2001	\$12,689,160	\$1,492,842,386	\$1,668,185,986

(1) Building permit revenues in current dollars. Columns may not add due to rounding.

(2) Potential construction activity estimated by dividing permit revenues by 0.85%, which is the midpoint between permit fees calculated at 0.7% of the first \$100,000 estimated value of development cost, and 1% for the remainder of development cost.

Estimated potential construction activity adjusted to January 2001 constant dollars (CPI-U).

Note: Only partial data are available for Fiscal 2002, and are not shown in the table. Based upon building permit revenues from July 1, 2001 through December 31, 2001 (\$10.6 million) the estimated annual construction potential for Fiscal year 2002 would be \$2.4 billion. Since this is based on only six months of data and is subject to major seasonal variation the data are not reliable enough to put in the table.

Source: City of Boston Auditing Department and Boston Redevelopment Authority's Policy Development and Research Department.

The first major milestone accomplished was the Ted Williams Tunnel, completed in late 1995 and now open for limited use until the balance of the Interstate 90 extension under the Fort Point Channel is completed. The second major milestone, the initial Leverett Circle Connector Bridge, was opened a week ahead of schedule in October 1999. The four-lane bridge over the Charles River carries traffic between Leverett Circle in downtown Boston and Interstate 93 in Charlestown. The next major milestone will be met in September 2002 when the extension of Interstate 90 (the Massachusetts Turnpike) will be completed which will run from its current terminus at Interstate 93 under Fort Point Channel to South Boston connecting with the Ted Williams Tunnel. This major interchange in South Boston will provide direct access to development in the area including the new Bcec Project. The Ted Williams Tunnel will be opened to all traffic when the extension is complete, and is expected to carry 88,000 vehicles a day compared to 25,000 vehicles a day currently with traffic restricted primarily to commercial vehicles. Tunnel use is projected to grow to 94,000 vehicles a day in 2002. The remaining schedule has the completion of the Northbound Central Artery in November of 2002, the southbound Central Artery in November of 2003, and total project completion, including demolition of the elevated structure and landscaping in December of 2004. Construction on the development parcels will begin after the Transportation Projects are finished. The Transportation Projects,

which are intended to improve traffic flow within the city, are under the control of the Commonwealth.

In late August 2001, the Authority finalized its annual comprehensive cost and schedule review (CSU Rev. 8) as stipulated in the Project Partnership Agreement with the Commonwealth and Federal Highway Administration. The results of this bottom to top review of costs were incorporated into the Authority's annual finance plan submitted to the Federal Highway Administration on August 31, 2001 (the October 2001 Finance Plan). The Authority estimated total Project costs to be \$14.475 billion, an increase of \$400 million over the October 2000 Finance Plan. The Project and the Commonwealth have identified this additional \$400 million in funding from primarily existing revenue sources: \$175 million from the Transportation Infrastructure Fund (TIF); \$150 million from the proceeds of Commonwealth bonds under existing authority; \$68 million from the sale of Authority real estate; and, \$7 million from the proceeds of Commonwealth bonds issued pursuant to unutilized bond authorizations from other Commonwealth projects.

The TIF was created in 2000 to address the additional cash needs of the Project. Higher than projected interest earnings in the fund (\$50 million) as well as increased borrowing capacity (\$125 million), from higher than projected vehicle registration and license

renewal fees enable the TIF to generate additional funding for the Project. The \$150 million in funding identified from the existing State bond cap will come from the exchange between the Commonwealth and the Project of \$150 million in federal funds the Project cannot use with \$150 million in state bond cap. This exchange can be achieved without impacting the statewide road and bridge program while remaining within the Transportation Projects' \$8.549 billion federal funding cap. The Authority has property that will be actively marketed for sale or lease in fall of 2001 that has an appraised value of \$100 million. Sixty-eight million dollars in proceeds from this transaction will be used to fund Project costs. An additional \$7 million in funding has also been identified in surplus State bond cap. In closing its books in State Fiscal Year 2001, the Commonwealth identified \$7 million in excess State bond cap not utilized by non-transportation agencies. The Executive Office of Administration and Finance has allocated these proceeds to the Project.

The Massachusetts Port Authority has developed a long-range capital program of approximately \$3.0 billion for improvements at its facilities, most of which are located in the city. The capital program includes a major modernization of Logan Airport, currently underway, which will include a new double-decked roadway system, a new 3,150 car parking garage, a new public transit terminal, improved walkways, major terminal renovations, a new 600-room hotel, and a new sign system. This capital program also includes non-Logan improvements and privately financed investments at Massport facilities.

The Massachusetts Water Resources Authority (MWRA), an independent state authority, has recently completed the construction of one of the largest wastewater treatment facilities in the nation. This project, which was undertaken pursuant to a federal district court order, was part of MWRA's capital improvement program with a cost of approximately \$3.8 billion (1999 dollars). The project is intended to bring wastewater discharges in Boston Harbor into compliance with federal and state requirements.

The MWRA is planning to spend approximately \$1.5 billion on water and wastewater system improvements over the next ten years to 2012. The largest expenditures will be for the Walnut Hill Water Treatment Plant, improved water storage facilities, and reductions in combined sewer overflows. Relatively small portions of these improvements are located in Boston proper but they should nonetheless provide major improvements in the system infrastructure that serves the city. Projects are funded through state grants and loans and the issuance by MWRA of

revenue bonds backed by rates and charges paid by the users. Such rates and charges are expected to continue to increase each year, dictated in large part by increased debt service costs in connection with financing its capital program.

The city is not directly responsible for the costs of any of the above-described projects, although the BWSC, which pays approximately 30% of all MWRA rates and charges, is expected to bear a portion of the cost of the MWRA capital program through increased user fees. The city is currently negotiating with the Commonwealth to receive mitigation payments for any city services (such as fire and police) which may be required to support the Transportation Projects. No such services are expected to be required for MWRA projects.

The Boston Housing Authority (BHA) recently completed major revitalization initiatives at two of its public housing developments: Mission Main, in the Mission Hill neighborhood of Boston, and Orchard Park, in Roxbury. The BHA was able to initiate the revitalization of these developments when it was awarded two HOPE VI grants from the U.S. Department of Housing and Urban Development (HUD). The grants, totaling \$80 million, were used to implement a new approach to public housing financing, incorporating innovative partnerships with public and private entities which leveraged additional development funds. The initiatives not only revitalized the BHA sites, but the surrounding neighborhoods as well. Moreover, in September 2001, HUD awarded the BHA a \$35 million HOPE VI grant to redevelop the Maverick Gardens housing development in East Boston. The Maverick Gardens HOPE VI award will be supplemented by other public and private financial sources for a total project cost of \$145 million.

Massport is currently proposing to build a new runway at Logan Airport to enhance the efficiency of operations and to relieve reported flight delays. This proposal is now undergoing environmental review. In the New England region, capital and operating improvements at the five other regional airports have resulted in capacity upgrading and more efficient usage of air traffic operations.

The Convention Center Act authorized the development of the Boston Convention and Exhibition Center (the BCEC Project) on a 60-acre site in South Boston through the joint efforts of the city, the Commonwealth, the BRA, and the MCCA. The 1.6 million square foot facility will include approximately 516,000 square feet of contiguous exhibition space on one level, 160,000 square feet of meeting space and a

41,000 square foot ballroom, as well as banquet and lecture halls. The BRA was authorized by the Convention Center Act to acquire and prepare the site for the BCEC Project. The acquisition of the site is complete, and the required site preparation, including tenant relocation, demolition, and environmental remediation, is also substantially completed. The MCCA is responsible for the design and construction of the BCEC project, and its operation upon completion. The BCEC Project is currently expected to be completed in the spring of 2004. In addition to the BCEC, the MCCA is undertaking the development of a 1,200 room convention center hotel on the northeast corner of the BCEC Project site.

Under the Convention Center Act, all costs of site acquisition and preparation incurred by the BRA for the BCEC Project have been borne by the city up to an initial ceiling of \$157.8 million. All such costs in excess of \$157.8 million and up to \$205 million is being borne by the Commonwealth. If the costs of site acquisition and preparation exceed \$205 million, the Convention Center Act provides that the city and the Commonwealth will share the excess equally up to a maximum of \$50 million (i.e., an additional \$25 million each). All cost of design and construction of the BCEC Project is being funded by the Commonwealth. The MCCA's construction budget for the BCEC is \$607 million. Foundation and structural steel work is proceeding. Contracts have been let for substantially more than half of the estimated construction work. Furthermore, a mutually beneficial guaranteed maximum price (GMP) has been negotiated between the MCCA and the construction manager. The GMP gives the construction manager a deadline that is structured both by financial incentives and penalties, and clearly defines the circumstances under which the financial burden of cost overruns shall be shifted from the MCCA to the construction manager.

Funding for the BRA's portion of the project was authorized by the city in March 1998. Over a three and one-half year period, the BRA has expended \$190.3 million on site acquisition and preparation, with the bulk of the expenditures occurring during fiscal 1999 and fiscal 2000, and with site acquisition the largest cost. As required by the Convention Center Act, the state has reimbursed the BRA for \$32.5 million of this cost. Another \$14.7 million in state funding is available prior to the city sharing in any additional cost. Whether total cost for site acquisition and preparation will exceed \$205 million is primarily dependent on the outcome of eminent domain court cases for those parcels for which a final settlement has not been reached (approximately one-quarter of the site acreage). However, the city estimates that the potential liability of the

Commonwealth and the city for project costs will not exceed the total amount authorized for site acquisition and preparation in the Convention Center Act.

In addition to the BCEC, the MCCA is undertaking the development of a 1,200 room convention center hotel on the northeast corner of the BCEC Project site. After a public bidding process, a team composed of Starwood Hotels and Carpenter & Company was selected in November 1999 to be the operator and developer of the on-site hotel. The developer has signed a development agreement with the MCCA and made a substantial deposit as part of the agreement. While preliminary work on the hotel project, such as design and permitting, has proceeded, construction has been delayed as the developer continues to seek financing for the project.

### **EMPOWERMENT ZONE DESIGNATION**

On January 13, 1999, the city was designated an Empowerment Zone (EZ) by the U.S. Department of Housing and Urban Development. This makes Boston eligible to share in proposed federal grants and tax-exempt bonding authority to finance sweeping revitalization and job creation programs over the following ten years. The ten-year EZ designation brings with it \$130 million in tax-exempt bonding authority for qualified projects and \$100 million in grants. Boston is expected to receive \$10 million per year for ten years. To date \$3 million was approved by the Federal government for year one and \$3.6 million was approved for year two. Goals of the EZ include: job creation, business development, home ownership opportunities, affordable housing creation, transit system improvements, computer technology training, and job training and educational efforts. Over the life of the EZ, millions of dollars of investment is expected to be leveraged locally by organizations, including: public institutions, companies, educational institutions, hospitals, philanthropic groups, utilities, and others. Boston's EZ will also give the city priority for other federal programs. The EZ, wholly within Boston, encompasses 5.8 square miles, running north to south right through the center of the city, including parts of the neighborhoods of South Boston, Downtown, the Seaport District, Chinatown, the South End, Mission Hill, Roxbury, Jamaica Plain, and Dorchester. The EZ contains 57,640 residents (roughly 10% of the city's population), has an unemployment rate of 16.1%, and has 43% of the adult (age 25+) population with less than a high school diploma.

Boston had filed an empowerment zone application in 1994 but instead received Enhanced Enterprise Community (EEC) designation on December 21, 1994

by the Department of Housing and Urban Development. As an EEC, Boston receives Economic Development Initiative (EDI) grants which are to be used only within the EEC and are intended to complement and be used in concert with Section 108 Loan Guarantees. EDI grants may be used to write down interest rates on Section 108 loans and to establish a loan loss reserve. The EDI grant makes the city eligible for matching Section 108 funds which can be used as capital improvement loans for commercial or industrial projects that either produce jobs of which 60% are for low and moderate-income residents, or aid in the prevention or elimination of slums or blight, or urgent community needs.

As part of the EEC designation, the city was awarded \$2.95 million from Title XX Social Service Block Grant (SSBG) funding. SSBG funding is used to conduct human service programs that will help connect residents to jobs. These programs include adult job skills training; adult education, including ESL, GED, ABE; alternative education for "youth at risk"; and expansion of Day Care availability. Finally, EEC designation enables development projects or human service programs impacting the EEC to take advantage of certain tax benefits and priority in other Federal funding programs.

In November 1995, the Boston Empowerment Center (BEC) was created as a mechanism to provide small businesses a comprehensive array of financial and technical assistance to help them start and stay in business. The BEC/One Stop Capital Shop provides information and services in many areas, including business start-up assistance, acquisition, loan packaging assistance, help with business plan development, access to a wide-range of capital resources, as well as assistance with marketing plans, government procurement, international trade, technology transfer, market diversification, and language translation.

Since the designation of Boston as an Enhanced Enterprise Community in 1994, neighborhood development activities have resulted in the addition of approximately 700 permanent jobs to the Empowerment Zone economy. These projects have been supported by \$52.3 million in EEC/EZ financing and have leveraged more than \$23 million in private investment. Commitment to the Empowerment Zone has come from many different sources. The city, community development corporations, Federal and State government, and private investments have all resulted in greater economic strength of the Zone.

EEC and EZ resources through tax-exempt bonds and HUD Section 108 loans/EDI funds, have also facilitated business development financing. Anchor projects totaling over \$40 million include: \$8 million in tax-exempt financing for the Best Western Roundhouse Hotel; \$3 million for Laboure Center in South Boston; \$10 million in tax-exempt bonds for the New Boston Seafood and Pilot Seafood Distribution Facility in the Seaport District; \$3 million to the Henry Miller Manufacturing Company; \$6.2 million for the South End Community Health Center; \$15.5 million for the redevelopment of Dudley Center, four buildings in Dudley Square; \$6.8 million for Grove Hall Mall; \$5 million for CrossTown Center; \$3 million for North Coast Seafood and Commercial Lobster; and \$540,000 for Merengue Restaurant on Blue Hill Avenue. In other financing programs, the Boston Local Development Corporation (BLDC) has provided loans to businesses in the EEC, and private banks have provided leveraged financing. Also, five EEC neighborhood business districts have been designated participants in the Main Streets program, which assists businesses in helping become more competitive.

Finally, achievements in human service initiatives are evident as of Spring of 1999. The majority of Title XX Social Services Block Grant awards was spent on adult basic education courses and job training. In the EEC at large, jobs were created or retained, technical assistance moneys were expended, EEC residents participated in skills training, EEC residents took ESL, GED, and basic education courses, EEC children benefited from day care quality improvement grants, and day care slots were created. Many other human services goals have been met, too numerous to identify, which have benefited the homeless, youth, public housing tenants, child-care services, and alternative education.

Housing development within the EEC has also produced results. The modernization programs for Orchard Park and Mission Main public housing projects were completed. In addition, single family homeowner rehabilitation projects for seniors and through the HOMEWORKS program have begun.

## **OFFICE MARKET AND NEW DEVELOPMENT**

The city currently has approximately 54.1 million square feet of office space. By the fourth quarter of 2001 (December 31<sup>st</sup>) Boston's overall vacancy rate according to CB Richard Ellis was reported to be 8.8%, having risen from 8.0% as of one year before and from 7.4% for the third quarter. Another realty firm,

**Table 15. Boston Office Market—December 31, 2001**

<b>Market</b>	<b>Total (SF)</b>	<b>Total Avail. SF</b>	<b>Total Vacant SF</b>	<b>Available (%)</b>	<b>Vacancy (%)</b>	<b>YTD Absorption*</b>
Financial District	31,625,308	3,899,729	1,634,340	12.3%	5.2%	-2,278,274
Back Bay	12,331,451	1,445,514	596,573	11.7	4.8	578,667
South Boston Waterfront	3,319,386	466,383	289,689	14.1	8.7	101,705
North Station	2,519,742	211,832	167,976	8.4	6.7	-90,103
Charlestown	2,167,928	124,438	53,727	5.7	2.5	-101,438
South Station	2,152,888	186,641	97,986	8.7	4.6	-152,009
Citywide Total	54,116,742	6,334,537	2,840,291	11.7	5.2	-1,941,452

\* Columns may not add due to rounding.

Source: Spaulding and Slye Colliers, Fourth Quarter 2001.

Spaulding & Slye Colliers places the city's office vacancy rate at 5.2% (11.7% when including space to sub-let). There is no accepted standard accounting for office vacancy rates so private realty firms surveys vary based upon the amount of office space covered, geographical coverage, and inclusion of new or old office space. Certainly, given the economic slowdown of 2001 office vacancies did rise substantially. Net absorption (rental) of office space in 2001 was negative 1.9 million square feet.

In 2000, three office projects were completed: the Seaport Center East office tower, a 475,000 square feet building on the South Boston waterfront; the Renaissance Center, a renovation of a 200,000 square-foot office building near the Ruggles Stop on the Orange Line in Roxbury; and, the Landmark Center reuse project in the Fenway which includes 600,000 square feet of office space. So far in 2001 five office projects have opened: 10 St. James at the former Greyhound bus terminal site, a 570,000 square-foot building; 111 Huntington Avenue at the Prudential complex, an 874,000 square-foot tower; 303 Congress Street, a 72,000 square-foot renovation; 326 Cambridge Street, a 70,000 square foot building; and

Independence Wharf, a 14-story 370,000 square foot renovation project.

As of December 2001, five major downtown office projects with 3.1 million square feet of new office space are under construction, and are scheduled for completion in the 2002-2004 time period: 131 Dartmouth Street, a 353,000 square foot tower in the Back Bay; Seaport Center West, a 575,000 square foot tower on the South Boston waterfront; ManuLife Financial, a \$135 million, 14-story, 470,000 square foot building in the South Boston Waterfront area; One Lincoln Center, a 967,000 square foot tower at the former Kingston-Bedford garage site in the financial district; and, 33 Arch Street a 600,000 square foot building and a 800 car garage. In addition, there are several large neighborhood office projects with nearly 1 million square feet of office space on-going: Brighton Landing (headquarters of New Balance) which includes 500,000 square feet of office space; the Cornerstone and the CANA parcels in Charlestown, containing 171,000 square feet of office space; at least four buildings in Dudley Square (Roxbury) which are undergoing a combination of new construction and preservation, including the relocation of the

**Table 16. Comparative Office Vacancy Rates  
20 Largest Downtown Office Markets as of December 31, 2001**

<b>City</b>	<b>Vacancy Rate</b>	<b>City</b>	<b>Vacancy Rate</b>
Washington DC	4.7%	Denver	11.0%
Houston	7.4	Philadelphia	11.4
Manhattan (Midtown).	7.9	Seattle	11.8
San Diego	8.3	Los Angeles	13.7
Baltimore	8.8	San Francisco	14.9
Boston	8.8	Phoenix	15.2
Chicago	10.0	Atlanta	18.3
Oakland	10.2	Kansas City	18.6
Minneapolis-St. Paul	10.3	Detroit	21.1
Manhattan (Downtown)	10.6	Dallas	24.4
		National Average <sup>(1)</sup>	11.0%

(1) National Average is based on 49 U.S. cities (41 downtowns) from the CB Richard Ellis Office Vacancy Index.  
Source: CB Richard Ellis Office Vacancy Index, Fourth Quarter 2001.

**Table 17. Massachusetts, Metropolitan Boston, and Boston Retail Sales, 1992-1997**  
(In thousands, not adjusted for inflation)

	Massachusetts		Metropolitan Boston (1)		City of Boston	
	Retail Sales (2)	Change	Retail Sales (2)	Change	Retail Sales (2)	Change
1992	\$47,663,248		\$27,058,734		\$4,180,888	
1997	\$65,847,179		\$39,400,608		\$5,607,981	
	5-Year Change	38.2%	5-Year Change	45.6%	5-Year Change	34.1%

(1) Metropolitan Boston in this usage is the Boston PMSA as defined in 1992

(2) Total retail sales includes the new census definition of retail sales (NAICS) from the series of Retail trade plus the "foodservices and drinking places" category from the series of Accommodation and Food Services.

Source: 1992 data from the 1992 Economic Census for Retail Trade. 1997 data from the 1997 Economic Census for Retail trade for retail) and for the 1997 Census for Accommodations and Foodservices (for foodservices and drinking places)

Massachusetts Department of Public Health; the Crosstown project in the South End/Roxbury a mixed-use project which is expected to contain a 9-story office building on Melnea Cass Boulevard; One Brigham Circle in Mission Hill; and Midway Street in South Boston.

For completion beyond 2004, several large office projects are in the planning stages: a 1.2 million square-foot tower on top of the South Station air-rights; Two Financial Center, a 200,000 square foot building behind the One Financial Center tower; the Fan Pier project containing 1.3 million square feet of office space; and an 11-story office building developed by Boston Properties next door to the Hynes Convention Center in the Back Bay.

## RETAIL MARKET

As of 1997, the date of the last U.S. Economic Census, Boston was within the ninth largest metropolitan retail market in the nation, consisting of the city plus the Massachusetts metro areas of Lowell, Lawrence, Salem and Brockton. Of the approximately 10 million square feet of retail space in the city, approximately six million square feet are located in downtown Boston and Back Bay. About 2,262 retail establishments were located in the city in 1997 and had estimated total sales of \$5.6 billion according to the U.S. Census of Retail Trade. According to the U.S. Economic Census for 1992 and 1997 sales increased in Massachusetts, Metro. Boston, and the City of Boston. See Table 17 above.

Recent major retail projects in downtown Boston include: TJ Maxx and H&M in the first phase of 33 Arch Street; Eddie Bauer's and Citizen's Bank in the Lafayette Corporate Center in Downtown Crossing; a new CVS at 55 Summer Street; a Walgreen's at Winthrop Square; and a Sports Club/LA and Loew's Boston Common movie theaters at the new Ritz Carlton Towers at Millennium Place. As part of the office and mixed-use projects downtown several new

developments such as One Lincoln Place and Fan Pier will have substantial new retail space. In the Back Bay, projects include: renovation work on a new Ralph Lauren store at 93 Newbury Street, the site of the former Kakas Furriers; an addition to Prudential mall at the 111 Huntington Avenue building; and, an Eastern Mountain Sports Store opened on Boylston Street.

In the neighborhoods, the South Bay Center Mall open 24 hours a day, contains The Home Depot, the first inner-city store for the company, as well as K-Mart, Toys-R-Us, a supermarket and other stores. This center claims to contain some of the highest grossing stores in the nation in an inner-city location. More recently, in the Fenway, the new Landmark Center has been completed, containing roughly 200,000 square feet of retail and theater space. There are now 21 neighborhood business districts operating within The Main Streets Program following the addition of ones in West Roxbury and Jamaica Plain. This program is a public-private initiative of the city established in 1995 to revitalize neighborhood commercial districts through locally established organizations. The program had generated, as of the end of December 2001, 386 net new and expanded businesses, created 2,761 net new jobs, and included 227 storefront improvement projects. Through December 2001, the Main Streets Program has also generated \$638,797 in public sector investment, in the form of physical improvement grants, which has leveraged an additional \$2.02 million in private investment. Also of importance are the supermarket developments that have taken place throughout Boston's neighborhoods—nine new neighborhood supermarkets have opened in the past five years while two have been expanded and a new Shaw's supermarket has begun construction at the Prudential Center. In other neighborhood developments, the Grove Hall Mecca, an inner-city shopping mall has opened as part of a major Blue Hill Avenue redevelopment. In Roxbury and Dorchester major efforts to redevelop retail business districts in Dudley Square and Grove Hall are showing building activity with a super Stop & Shop. A major retail

development in the planning stages is Crosstown commercial complex in the South End, which will have retail and theater space serving the neighborhoods. These are all solid signs of investment in the inner-city.

## **INDUSTRIAL MARKET AND RECENT DEVELOPMENTS**

According to surveys by the Boston Redevelopment Authority (BRA), Boston has just over 25 million square feet of industrial space within the city limits. As of January 2000, according to the BRA, over 5.6 million square feet of industrial space was surveyed and the vacancy rate was found to be 22.5%, with almost 1 million square feet unoccupied. The average rent for quality industrial space was estimated to range from \$2.50 to \$19.00 per square foot (triple net). According to records from the city's Assessing Department, there were 48.3 million square feet of industrial space in 2000, which consisted of manufacturing, warehouse, and research and development.

From 1992–1995, a Cambridge-based biotechnology firm, Genzyme Corporation, constructed an \$85 million biopharmaceutical manufacturing plant in Allston. Genzyme has plans to build further manufacturing, research and development and headquarters facilities on the site during the 2000s.

Certain companies were forced to lay off employees in the mid-1990s because of business strategies and downsizing efforts. For example, Digital Equipment Corporation (DEC) closed its Roxbury plant in late 1993 and Stride Rite Corporation closed its plant in Roxbury in 1997. These plant closings will have eliminated a total of 350 manufacturing jobs, representing about 1.0% of the city's industrial jobs. In 1995, H.P. Hood decided to consolidate its operations in the suburbs and closed its Charlestown Plant.

The city purchased the former DEC building in Roxbury in late December 1994. The facility houses the Boston Technology Development Center (BTDC). The BTDC opened an Innovation Center operated by the Massachusetts Biotech Research Institute (MBRI). The Innovation Center can be thought of as a "super incubator" which includes four major components: a physical incubator with shared conference and reception facilities; a relationship with venture capital funding; a technology transfer office which helps locate technologies with commercial potential; and a comprehensive education and training program. The MBRI incubator space is currently fully occupied with spin-off firms. The BTDC is providing many benefits to the neighborhood and citywide including construction jobs, permanent jobs, education and training programs,

public school seminars, youth education, and neighborhood workforce development programs. Over \$20 million in venture capital funding is supporting the new companies that are housed at the BTDC—\$5 million in Federal funds awarded to the project leveraged these private funds. Full occupancy of BTDC was achieved in 1998 with the tenancy of HiQ Computers, which took the final 30,000 square feet for the assembly and repair of computer systems. In 1999 the Crosstown site was planned to be developed into a shopping center and theater complex. HiQ Computers will be relocated, possibly to BMIP. The Boston Empowerment Center (BEC) office and MBRI have been relocated.

There were seven projects completed in the 1995-1997 period: the Advanced Electronics expansion to 110,000 square feet; the expansion of the Boston Freight Terminal in Marine Industrial Park; the American Engineered Components move from Cambridge to Boston; the Zoom Telephonics building doubling in size to 150,000 square feet; Boston Ship Repair's expanded business in Dry-Dock 3 at BMIP; The Harry Miller Company development of 36,000 square feet of space with assistance in Boston's EEC; and, the completion of the New Boston Seafood Center, housing seven seafood companies in a 70,000 square-foot state-of-the-art facility in the Boston Marine Industrial Park (BMIP).

In 2000 there were three major industrial projects completed on the waterfront in South Boston: the International Cargo Port, a 400,000 square foot warehouse, freight forwarding, and office facility on the South Boston waterfront; North Coast Seafood, a 60,000 square foot seafood processing facility in the BMIP; and the new Boston Seafood Center, a \$20 million, 150,000 square foot facility with seven companies as tenants. Also, Pilot Sea Food has a 60,000 square foot processing plant under construction while Legal Sea Food is planning an additional processing facility.

Other industrial projects are also in motion in 2000 around the city. Mayor Menino announced the Back Streets Initiative, a plan to support and strengthen neighborhood industrial uses. Sprint Corporation recently opened a new 70,000 square foot data center in Fenway. A development of Spire Printing and Graphics Company, of \$13.5 million and 78,000 square feet, has begun in the Savin Hill section of Dorchester and is scheduled for completion in the summer of 2002. The renovation of the J. Baker facility in Hyde Park, to include 400,000 square feet of industrial space for lease, is underway. Cabot, Cabot & Forbes temporarily halted construction of Internet city, a

**Table 18. Median Advertised Asking Monthly Rent in Boston Neighborhoods and the Volume of Advertised Two-Bedroom Apartments for 1999 and 2000**

Neighborhood	Median Rent			Volume of Apartments		
	1999	2000	Percent	1999	2000	Percent
Allston/Brighton	\$1,275	\$1,400	10%	61	267	338%
Back Bay/Beacon Hill	1,800	2,200	22	573	404	(30)
Central	1,800	1,800	0	162	128	(21)
Charlestown	1,500	1,600	7	82	74	(10)
Dorchester	975	1,200	23	22	33	50
East Boston	**	1,100	***	9	15	67
Fenway/Kenmore	1,600	1,600	0	27	29	7
Hyde Park	1,100	1,200	9	11	12	9
Jamaica Plain	1,200	1,300	8	64	85	33
Mattapan	**	**	***	1	3	***
Roslindale	1,100	1,200	9	43	43	0
Roxbury	1,100	1,400	27	12	21	75
South Boston	1,300	1,350	4	88	119	35
South End	1,750	2,200	26	95	135	42
West Roxbury	1,150	1,275	11	41	54	32
Citywide	1,550	1,600	3	1,500	1,422	(5)

\*\* Less than ten sales so data are not deemed to be reliable.

\*\*\* Not meaningful.

Source: City of Boston, Department of Neighborhood Development using the Boston Sunday Globe, from apartment listings for the first Sunday of the month. Apartments that include utilities or parking in the monthly rent are not represented in this survey. March, 2002.

450,000 square feet project, in Allston and is actively pursuing alternate uses including bio-tech manufacturing. According to a recent study, by Lehman Brothers and Cushman & Wakefield, only 25% of the telecommunications space in the Boston area was actually leased and over 1.1 million square feet of the area's 2.8 million square feet was not being used. The Boston area ranked with Los Angeles and Miami as the three cities with the most surplus capacity in the telecommunications sector.

### HOUSING STOCK, HOUSING VALUES, AND DEVELOPMENT

The U.S. Bureau of the Census reported on some characteristics of the city's housing stock in April of 2000. The total of 250,863 units grew by 1,072 from

1990, the date of the previous decennial census. The composition of occupied housing has been changing. The number of occupied rental apartments increased between 1990 and 2000, going from 157,920 to 162,302, a gain of 4,382 or 2.8%. The number of owner-occupied units also increased between 1990 and 2000, going from 70,544 to 77,226, a gain of 6,682 or 9.5%. The percentage of owner to renter occupied units between 1990 and 2000 went from 30.9%/69.1% to 32.2%/67.8%. With the small addition of new units and the large gain in occupied units the number of vacant units dropped from 22,399 in 1990 to 12,407 in 2000 while the vacancy rate for owner and renter housing fell from 2.6% and 7.8%, respectively, in 1990 to 1.0% and 3.0%, respectively, in 2000. As of late 2001, the housing vacancy rate was rising slightly. Condominium units have increased from about 4,500

**Table 19. Greater Boston Annual Median Sales Prices for Existing Homes, 1992-2001**

Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Annual Median	Annual % Change
1992	168,200	173,300	175,100	165,200	171,100	0.6
1993	160,500	175,600	176,900	172,700	173,200	1.2
1994	170,600	181,300	187,300	176,600	179,300	3.5
1995	175,100	179,000	183,200	177,400	179,000	(0.2)
1996	197,300	195,300	195,300	177,100	189,300	13.0
1997	NA	NA	NA	NA	229,000	21.0
1998	NA	NA	NA	NA	258,400	12.8
1999	265,000	294,000	301,000	291,000	290,000	12.2
2000	303,000	330,300	356,000	329,500	314,200	8.3
2001	345,100	356,200	367,300	350,400	356,600	13.5

Note: Data for the quarters of 1997 and 1998 were not available from the National Association of Realtors or the Greater Boston Real Estate Board.

Source: National Association of Realtors and the Greater Boston Real Estate Board.

**Table 20. Median Residential Sales Prices for Boston  
First Quarter 1999 Through Fourth Quarter 2000**

Year	Quarter	Single Family	Two Family	Three Family	Condominium
1999	First	\$160,000	\$180,000	\$170,000	\$166,463
	Second	180,000	185,000	183,000	180,000
	Third	190,000	200,000	199,000	170,000
	Fourth	188,000	217,777	210,000	180,000
2000	First	195,850	213,000	225,000	210,000
	Second	215,250	240,000	237,500	225,000
	Third	221,250	270,000	254,500	225,000
	Fourth	229,000	258,500	267,000	252,250

Source: City of Boston, Department of Neighborhood Development using Banker & Tradesman data, March 2002.

in 1980 to over 33,000 in 1990, representing 13% of the housing stock. No data on 2000 condominium units is yet released. In 2000, public and publicly assisted housing constituted 17% of the city's housing stock.

Within the city, the U.S. Bureau of the Census reported from the Special Survey in 2000 (C2SS) that the median value of a single-family home was \$216,563 in 2000, the median monthly mortgage payment was \$1,312, and the median contract rent in the city was \$875 per month in 2000. The reason these costs appear to be lower than the rent and sales figures in tables below is that the Census numbers track what people with existing housing are paying, not including any subsidies which might be involved (for rental housing) and the owner costs are what existing owners are paying. The tables below show what new owners would pay for sales prices and what new renters would pay in rent.

A 2000 study by the Department of Neighborhood Development showed that the median rent for an apartment in Boston as advertised in the newspapers was \$1,600 per month for a two-bedroom apartment .

After nearly five years of relative stability, 1992-1996, home prices have risen at a fast pace since the first quarter of 1996. The National Association of Realtors reported that the median sale price of existing homes in the Boston metropolitan area was \$314,200 for 2000, an 8.3% increase over the 1999 median sales price. The 2001 price of \$356,600 was 13.5% higher than the price for 2000. Between 1996 and 2001 the median price increased by 88%.

Within the city, residential sales prices increased steadily from the beginning of 1998 through the end of 2000. The median sales price for a single-family home in Boston reached \$229,000 in the fourth quarter of 2000, showing a strong 43% gain over two years, but still affordable, at 66% of the median metropolitan area price. Condominium prices have also increased from \$166,463 in the first quarter of 1999 to \$225,000 in the third quarter of 2000, a 42% rise.

Banker & Tradesman, a local trade journal, reported that during the full year 2001 there were 10.4% less

**Table 21. Annual Residential and Condominium Sales in Boston  
1991-2001**

Year	Single Family Sales	Percent Change	Multi-Fam. Residential Sales (1)	Percent Change	Total Condominium Sales	Percent Change	Residential and Condo Sales (2)	Percent Change
1991	908	2.0%	1,660	(14.9%)	1,995	(8.5)	4,534	(9.1)
1992	1,114	22.7	1,732	4.3	2,479	24.4	5,296	16.8
1993	1,257	12.8	2,129	22.9	2,748	10.9	6,094	15.1
1994	1,602	27.4	2,731	28.3	2,921	6.3	7,180	17.8
1995	1,554	(3.0)	2,775	1.6	2,845	(2.6)	7,110	(1.0)
1996	1,566	0.8	2,875	3.6	3,448	21.2	7,820	10.0
1997	1,623	3.6	3,001	4.4	3,909	13.4	8,460	8.2
1998	1,512	(6.8)	3,046	1.5	4,434	13.4	8,891	5.1
1999	1,573	4.0	3,289	8.0	5,060	14.1	9,849	10.8
2000	1,308	(16.8)	2,956	(10.1)	4,663	(7.8)	8,862	(10.0)
2001	1,260	(3.7)	2,442	(17.4)	4,294	(7.9)	7,996	(10.4)

Does not include single-family homes or condominiums.  
Equals single-family, multiple-family residential sales plus total condominium sales.

Source: Banker and Tradesman, March 2002.

**Table 22. Short Term Trends in Housing Prices**  
**Median Sales Prices and Sales Volume of Single Family Homes**  
**In Boston's Neighborhoods, 1999 and 2000**  
 (Not adjusted for inflation)

Neighborhood	1999 Single Family Price	2000 Single Family Price	Percent Change	1999 Sales Volume	2000 Sales Volume	Percent Change
Allston/Brighton	\$250,000	\$215,350	14%	93	54	(42%)
Back Bay/Beacon Hill	**	**	***	8	8	***
Central	**	**	***	2	3	***
Charlestown	329,500	395,000	20	65	57	(12)
Dorchester	150,000	176,750	18	236	178	(25)
East Boston	115,000	138,500	20	56	46	(18)
Fenway/Kenmore	**	**	***	3	0	***
Hyde Park	156,000	189,000	21	235	185	(21)
Jamaica Plain	292,500	385,000	32	78	77	(1)
Mattapan	135,000	160,000	19	71	76	7
Roslindale	187,500	222,500	19	183	157	(14)
Roxbury	115,000	135,000	17	52	69	11
South Boston	202,000	240,000	19	55	39	(33)
South End	645,000	690,000	7	24	15	(39)
West Roxbury	229,000	265,000	16	323	276	(15)
Citywide	180,000	216,000	20	1,485	1,261	(15)

\*\* Less than ten sales so data are not deemed to be reliable.

\*\*\* Not meaningful.

Note 1: These prices exempt all sales of properties of less than \$25,000 and greater than \$1,000,000 because the low price sales are not considered to be "arms-length" transactions and the high price sales can distort averages..

Note 2: These are not "paired-sales" so the size, quality and type of houses sold vary from year-to-year.

Note 3: Sales volume eliminates those sales mentioned in note 1 and also eliminate sales for properties that were not able to be accurately "geo-coded" for location so actual neighborhood and city wide totals are higher.

Source: City of Boston, Department of Neighborhood Development, March 2002.

total residential sales in the city than there were in the full year 1999 (7,996 versus 8,862). Sales of single-family homes, multi-family houses, and condominiums all fell in 2001 compared with 2000 for the second consecutive year. Also, for full-year 2001, single-family home sales fell by 3.7% while condominium sales dropped by 7.9% over sales for 2000.

Prices and sales volumes for single family homes and for condominiums show strength and remarkable diversity across the neighborhoods of Boston. Areas of the city with the largest numbers of single family home sales included West Roxbury, Dorchester, Hyde Park and Roslindale. Single family prices ranged from \$135,000 in Roxbury to \$690,000 in the South End with the median at \$216,000 and the typical house going for \$265,000 in West Roxbury, the most suburban-style single family neighborhood within the city limits. Sales were down 15% between 1999 and 2000.

Condominium sales volume and prices also showed strength and diversity across the neighborhoods of Boston. The most expensive neighborhoods for condominiums were in the Back Bay/Beacon Hill, Charlestown, South End, and Central (downtown,

including the North End, the West End, and the waterfront) neighborhoods which are the core residential pockets of the city. Four neighborhoods still had "affordable" condominiums with the median price at or below \$115,000. The median citywide condominium price as of year-end 2000 was \$229,000, up 31% from the \$175,000 price of the same period in 1999. Sales volume was down by 4%.

Market-rate housing development has accelerated in 1999 and 2000 when Boston permitted 2,061 and 2,655 units of new and rehabilitated housing, respectively. In 1999, 648 units were considered "affordable". In 1999, 1,413 of the housing units were market rate or luxury units and in 2000 1,643 were market rate units. New affordable housing developments are also underway. Of the 2000 total of 2,655 housing units permitted for new construction or rehabilitation, 1,012 of the units were considered "affordable" for low – and middle-income families.

Downtown and the Back Bay have seen significant residential building in 2000-2001 with several large developments nearing completion and others still in the planning stages. Major residential projects now under construction include: Millennium Place (350 units); 226

**Table 23. Short Term Trends in Housing Prices,  
Median Sales Prices and Sales Volume of Condominiums  
in Boston's Neighborhoods, 1999 and 2000**  
(Not inflation adjusted)

<b>Neighborhood</b>	<b>1999 Condominium Price</b>	<b>2000 Condominium Price</b>	<b>1999 Percent Change</b>	<b>2000 Sales Volume</b>	<b>Sales Volume</b>	<b>Percent Change</b>
Allston/Brighton	\$116,000	\$141,000	22%	742	639	(14%)
Back Bay/Beacon Hill	\$270,000	\$360,000	33%	881	753	(15%)
Central	\$227,750	\$320,000	41%	400	415	4%
Charlestown	\$239,900	\$308,000	28%	351	260	(26%)
Dorchester	\$82,000	\$125,000	52%	184	204	11%
East Boston	\$81,450	\$92,000	13%	58	49	(16%)
Fenway/Kenmore	\$135,000	\$175,000	30%	354	277	(20%)
Hyde Park	\$99,900	\$94,750	(5%)	55	36	(35%)
Jamaica Plain	\$150,800	\$189,250	25%	328	342	4%
Mattapan	\$150,000	\$97,500	(35%)	33	22	(33%)
Roslindale	\$121,000	\$157,500	30%	125	123	(2%)
Roxbury	\$120,000	\$140,000	17%	69	81	17%
South Boston	\$165,000	\$243,000	47%	341	441	29%
South End	\$260,750	\$320,000	23%	630	671	7%
West Roxbury	\$107,500	\$135,000	26%	127	158	24%
Citywide	\$175,000	\$229,000	31%	4,678	4,479	(4%)

- Note 1: These prices exempt all sales of properties of less than \$25,000 and greater than \$1,000,000 because the low price sales are not considered to be "arms-length" transactions and the high price sales can distort averages..
- Note 2: These are not "paired-sales" so the size, quality and type of houses sold vary from year-to-year.
- Note 3: Sales volume eliminates those sales mentioned in note 1 and also eliminate sales for properties that were not able to be accurately "geo-coded" for location so actual neighborhood and city wide totals are higher.
- Source: City of Boston, Department of Neighborhood Development., March 2002..

Causeway Street at North Station (108 total units, with 20 being affordable); Trinity Place/25 Huntington Avenue (\$53 million, 21-stories, 102 units); The Belvedere (11-stories, 65 units); and the Colonnade (20-stories, 99 market rate units. Major new residential projects planned, among others, include: Fan Pier (675 total residential units, with 135 being affordable); Hayward Place (no finalist chosen), Liberty Place (468 total units, with 70 being affordable) on Washington Street; Parcel C in Chinatown (251 total units, with 115 being affordable); and Park Residences (Park Plaza 2 with 220 units). Because of the slowing economy at least two downtown residential developments have been halted or delayed, including: Battery Wharf (100 condos) in the North End and 125 Tremont Street (35 condo units) near Downtown Crossing.

In addition, residential developments are also occurring in Boston's neighborhoods. Some of the larger or most notable projects are summarized here. In Allston-Brighton, the Archdiocese is proposing to redevelop the former St. John of God Hospital site into 84 co-op units, 116 assisted living units, 70 beds for a nursing home, and 24 beds for AIDS patients. Also in Brighton, B'nai Brith is proposing to build an addition with 42 housing units onto its existing Covenant House Elderly Complex. In Roxbury, Nuestra Comunidad plans to convert the former Hotel Dartmouth into 59 units of mixed-income housing including 6 artists lofts; demolition and reconstruction began on a new 236-unit

Academy Homes II; and a demolition-disposition project at 192-194 Humboldt Avenue with 175 units was completed. In Mattapan the BRA approved plans on construction of the 44 affordable unit Talbot-Bernard Homes project while plans are being pursued for Harvard Commons with 45 units at the former Boston State Hospital site. Foley Building with 116 units is also at that site. In East Boston, the Clippership Wharf project with 400 condominiums is in the review process but may be delayed due to the reconstruction of Maverick Station by the MBTA. Also in East Boston, other housing developments are moving forward: 111 affordable units are being built on Meridian Street as part of the Landfall Community Associates Project; plans are moving on 74 units of elderly housing at the former Barnes School on Border Street; the Maverick Square public housing development received a HOPE VI award for reconstruction; and, Roseland Associates is proposing to redevelop Massport's Pier One into 605 residential units among other uses. In the South End, several housing developments are in the works: the South End Health Center opened recently including 39 condos and 17 town houses; Wilkes Passage Lofts with 136 luxury and 19 affordable condos is still in construction; Rollins Square with 184 units (70% affordable) is also in motion; and other projects are moving forward with several hundred housing units. In Dorchester, 13 moderate-income artist studios will be created at the Walter Baker Lofts in Lower Mills while Corcoran-Jennison is proposing to build a 309-unit

apartment complex on Columbia Point. In the Fenway, construction has begun on The Carillion with 31 units; the Susan Bailis Affordable Assisted Living Facility with 82 units is under construction, the BRA approved plans to convert the second floor of the former Buckminster Hotel into 18 apartments, and plans were announced for Brookline and Boylston Street corner. In South Boston, a few developments are in motion: Trammel Crow is pursuing a 565 unit (with 65 affordable units) condo project on D Street and plans are being discussed for 132 units of housing at the former Court Square Press building.

Clearly, the tight housing market of the previous several years has led to the substantial number of housing efforts underway in downtown Boston and in the neighborhoods, with many including “affordable” components.

### **THE LINKAGE PROGRAM**

The city implemented its development linkage program in December 1983, in order to direct some of the benefits of downtown investment to the building of affordable housing in its neighborhoods. Under the program, amended in 1986 and again in 2001, real estate developers seeking approval of large scale commercial or institutional developments are required to enter into agreements obligating them to make “linkage payments” in the amount of \$8.62 per square foot of construction over 100,000 square feet, of which \$1.44 per square foot goes to a job training fund and \$7.18 per square foot goes for affordable housing purposes, as of November 30, 2001.

Linkage payments into the Neighborhood Housing Trust are amortized over a period of either seven or twelve years, depending on the date of the initial agreement. Under Trust policy, current agreements provide for a seven-year payment period. The seven-member Neighborhood Housing Trust (NHT) holds public hearings and approves linkage grants to selected projects, except for the housing creation option, which requires approval by the BRA. Since the inception of the linkage program through June 2000, \$58.2 million has been awarded to various affordable housing projects.

Based on data through 1999, this funding allowed the construction or renovation of 5,979 housing units in 89

projects in the city’s neighborhoods. Affordable housing units for low and moderate-income residents comprise 80% (4,812 units) of this total. Of these 89 housing developments created, linkage funds, for the most part, accounted for fewer than 30% of the total development costs of the projects. Only in one instance did linkage funds almost completely fund the project. Linkage money generally is allocated to fund low and moderate income housing through the renovation of old buildings and schools as well as to assist in the creation of new housing. Projects have included rental units; single room occupancy such as housing for pregnant, homeless women and alcohol recovery programs; condominiums; housing cooperatives and home ownership.

Funds for the Neighborhood Jobs Trust (NJT) come from Jobs’ Linkage Fees of \$1.44 per square foot for every foot in excess of the 100,000 square-foot threshold. This component of Linkage came from the 1986 amendment to the legislation and was followed by the creation of the NJT in 1987. Payments are made in two parts, with one half due at the point a building permit is issued, and the balance due one year later, or upon the issuance of an occupancy permit for the building. Over the 1988-2000 time period \$10.9 million of funds had been committed and \$7.2 million of funds have been awarded resulting in the creation of 84 programs. Services funded under this program include: model program designs for entry-level jobs training, school-to-work transition, family literacy, workplace-based education, private sector involvement in the design and delivery of services, and capacity building in impacted communities. The NJT is particularly interested in supporting new and innovative education and training activities which result in high wage employment, new or non-traditional employment opportunities, and community based projects that respond to specific communities’ documented education and training needs. The NJT is committed to providing appropriate services to the residents of neighborhoods where (or adjacent to where) a given development project is located, while ensuring that residents throughout the city have access to new jobs resulting from development. In addition to the \$7.2 million awarded, approximately \$480,000 has been spent on administration, bringing total expenditures from the NJT to nearly \$7.7 million.