

**INTRODUCTION**

Boston's economy is among the healthiest in the nation. The city is rich in many of the nation's fastest growing industries, has an exceedingly educated workforce and is home to many world-class educational, medical and research institutions. These qualities have all led to the strength of Boston's economy today and will contribute to the city's growth in the future.

The average annual unemployment rate in 1997 was 4.1 percent, the lowest since 1989. Boston's Class A office market vacancy rate was 3.2 percent in December 1997, the best of any city in the country, and a far cry from the high of over 17 percent in 1991.

Boston's hotel market is also one of the nation's best, posting record highs in both average annual occupancy rate (79.6 percent) and average daily room rate (\$161.63) last year. Six new hotels have opened in the past year, nine more are under construction, and up to 12 more are in the approval or proposal process.

Private development investment for fiscal year 1997 was over one billion dollars for the second consecutive year.

Best of all, Boston has nearly regained all the jobs lost since the end of the 1989-1992 recession, and today the city is supporting an estimated 651,000 jobs.

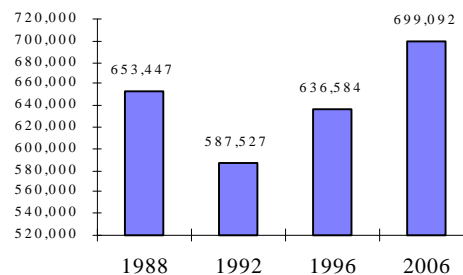
All this is good news for everyone who lives in the city, relies on it for their livelihood, or cares about Boston. Even better news is that all indications point to continued growth in the future.

This report projects the number of jobs the city's economy will generate in the year 2006 and identifies the particular industries in which those jobs will occur. The report also describes some ways that the city has supported and can continue to support its growth industries, and details some of the demands that this growth will make on the city.

**Boston's Projected Growth**

Between 1996 and 2006, the number of jobs in Boston is expected to grow by an estimated 62,508 jobs. This would bring the total number of jobs in Boston to 699,092, easily surpassing the recent high of 653,447 achieved in 1988 (See Figure 1.)<sup>1</sup>

**Figure 1. Job growth in Boston**



**WHERE THE GROWTH WILL BE**

While job growth in Boston is expected to occur in almost every industry by the year 2006, it will not occur uniformly. The BRA has identified five specific industries that are expected to be key to Boston's job growth:

- Professional and Business Services
- Health Care
- Financial Services
- Education
- Hotels

These industries have already accounted for almost all of the city's net job growth since the depth of the recession in 1992, posting a gain of 36,739 jobs or 75 percent of Boston's total net job growth. Currently, they comprise 53 percent of the city's job base. These five industries are projected to contribute 74 percent of the employment expansion between 1996 and 2006, and they will account for 55 percent of the total jobs in Boston by 2006.

Four of these growth industries for Boston - *Professional and Business Services, Health Care, Financial Services and Education* - are also four of the fastest growing industries nationally. They are considered to be among the so-called "knowledge industries" that rely on one of Boston's greatest resources, its intellectual capital.

The fifth growth industry - *Hotels* - has grown in recent years as Boston has become one of the most popular visitor destination cities in the country. In addition to its reputation as being the "Athens of America," Boston is a magnet for tourists and other visitors who come to enjoy the city's many historic, artistic, and recreational venues, to shop in its diverse retail centers, and to eat in its many and varied restaurants.

Finally, there is another industry - *Manufacturing and Operations* - that, while not growing, is holding its own in Boston. Despite the fact that manufacturing employment is decreasing across the country, Boston has been able to sustain this small but important segment of its economy, and Boston will maintain its commitment to helping preserve the presence of Manufacturing and Operations as part of the city's diversified economy.

<sup>1</sup> These projections are based on recent estimates by the U.S. Bureau of Labor Statistics (BLS) for individual industries and on the BLS projected overall growth in the nation's non-farm employment of 1.4 percent annually to the year 2006. The job figures have been determined by using Boston's share of the selected industries (a higher figure than the national average) and the growth of the labor force in New England projected at 0.9 percent annually over the next five years, a rate one third slower than the U.S. average (New England Economic Project, October 1997).

Table 1 shows the distribution of jobs in Boston's growth industries and projections for growth to the year 2006. Professional and Business Services will see the most growth by 2006 with 19,335 new jobs representing 30.9 percent of the total growth in the coming decade. Health Services will grow about half that much, accounting for 9,497 new jobs or 15.2 percent of the total. Financial Services follows with 8,078 new jobs or 12.9 percent of the growth. Hotel jobs in Boston, at 9.2 percent of the new jobs, are

projected to grow faster than the national average because of rapid expansion of the city's hotel supply. Education jobs will account for about 5.7 percent of the growth or more than 3,500 new jobs in the decade

As a result of the projected growth pattern, the distribution of jobs in Boston will look very much the same in 2006 as it does today, but with expanded Services and Financial Services sectors.

Figure 2. Boston's growth industries, 1992-2006



Table 1. Boston's growth industries, 1992-2006

| Industry                  | Number of Jobs |         |         | Job Growth | Growth Rate | % of Job Growth |
|---------------------------|----------------|---------|---------|------------|-------------|-----------------|
|                           | 1992           | 1996    | 2006    | 1996-2006  | 1996-2006   |                 |
| Prof. & Business Services | 86,080         | 104,870 | 124,205 | 19,335     | 1.7%        | 30.9            |
| Health                    | 87,012         | 92,707  | 102,204 | 9,497      | 1.0%        | 15.2            |
| Financial Services*       | 87,027         | 96,174  | 104,252 | 8,078      | 0.8%        | 12.9            |
| Hotel                     | 12,193         | 11,496  | 17,244  | 5,748      | 4.1%        | 9.2             |
| Education                 | 28,818         | 32,622  | 36,214  | 3,592      | 1.1%        | 5.7             |
| Total Growth Industries   | 301,130        | 337,869 | 384,119 | 46,250     | 1.3%        | 74.0            |
| Other Industries**        | 286,397        | 298,715 | 314,973 | 16,258     | 0.5%        | 26.0            |
| Total Boston Industries   | 587,527        | 636,584 | 699,092 | 62,508     | 0.9%        | 100.0           |

\* Includes Finance, Insurance and Real Estate (FIRE)

\*\* Includes Manufacturing; Construction; Transportation, Communication and Public Utilities; Cultural, Social, Non-Profit and Personal Services; and Agriculture and Mining.

Note: Projected local growth rates for each industry are one-half of the national rates estimated by the US Bureau of Labor Statistics due to the constraints of the slower labor force growth expected for Massachusetts. Growth in the hotel industry is based on the planned expansion of Boston's hotel supply, rather than on national average growth.

## A LOOK AT THE GROWTH INDUSTRIES

Boston can expect its key industries to continue their strong growth rate, out-performing the overall job growth and remaining the engines of Boston's economy. Below are descriptions of these industries, along with information on their recent growth and their projected growth through the year 2006.

### Professional and Business Services

The professional and business services sector is not only the largest major industry sector in Boston, but the most varied. This sector includes legal, accounting, engineering, architecture, management, and computer services. Professional and business services jobs tend to be clustered in the city, but serve clients throughout the metropolitan area and beyond.

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*Because it is a "producer services" industry with clients including businesses as well as individuals, professional services complements and depends on the strength of Boston's other industries, even as it supports their growth. Boston's professional service workers also export their services throughout the country and around the world, enhancing the city's economic base and its reputation as a provider of the services that will drive the economy in the coming decades. Professional services firms not only comprise a large share of Boston's jobs, but occupy a large share of Boston's Class A office space.*

In 1996, professional and business services firms employed 105,000 people. Employment in this sector increased 21.8 percent from 1992, rebounding from its decline during the 1988-1992 recession.

Professional and business services in Boston are 1.5 times more concentrated than the national average. This large sector comprises 16.5 percent of Boston's employment base. Nationally, the sector's growth rate will be 2.5 times greater than the nation's overall job growth rate.

Professional and business services within Boston will continue to be a major supplier of services to companies in the city as well as throughout the region and nation. By 2006, employment in the professional and business services industries is projected to grow by over 19,000 new jobs or 18.4 percent. This will account for almost one-third of the total projected job growth for Boston. In 1996 professional and business services employed 16.5 percent of the workers in Boston. That figure is projected to grow to 17.8 percent in the next decade.

### Health Care

Boston is a world-renowned center for health care, medical education, and medical research.

Despite changes in the way health care is delivered nationally, Boston's medical services industry has continued to grow and has proved to be fairly recession-proof partially due to the millions of dollars in research grants received each year from the National Institutes of Health (NIH). In FY 1997, Boston institutions were awarded over \$760 million in funding. The stability of this sector provides a steady source of employment for Boston residents, and continues to bring in outside money, essentially becoming an export industry. A recently announced increase in the amount of NIH funding nationwide could even accelerate job creation in this field. In addition, medical discoveries and the aging of the baby boom generation will increase the demand for health care workers.

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*The health care and medical services industry is a major source of employment. More importantly, employment in this industry exists at various educational, skill and income levels. Although centered in Boston's hospital and health care facilities, the industry generates jobs in areas ranging from construction to retail to research science.*

The health care industry has grown steadily in Boston over the past 20 years. In 1988, the 76,000 jobs in the city's health care industry comprised 11.6 percent of the total labor force. While the rest of Boston's job base declined by 13.4 percent during the 1988-1992 recession, employment in health care still grew by 11,278 jobs, or 14.9 percent. By 1996, employment in this sector had grown to nearly 93,000 to make up 14.6 percent, or one of every seven Boston jobs.

Jobs in health services are projected to grow at double the overall national growth rate nationally. In Boston, where health services are twice as concentrated as they are in the rest of the nation, projections indicate an additional 9,497 new jobs in the next ten years, pushing the industry's share of total employment up slightly to 14.7 percent.

### Financial Services

Boston has always been a center for banking and investment. Today, even as the industry undergoes a restructuring in some areas, it is enjoying even more dramatic growth in others. The emergence of the brokerage industry as the most recent pillar of Boston's economy is the

latest manifestation of the city's historic role as a financial services capital.

The securities and brokerage sector of the financial services industry has shown strong and consistent growth over the last three decades, largely due to the growing popularity of mutual funds. The mutual fund was born in Boston, and today the concentration of securities jobs in Boston is nearly 13 times the national average. Nearly one out of every twelve jobs in the securities industry nationwide is located here.

Boston's securities industry employed over 38,000 people in 1996, an increase of 52.3 percent from 1992

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*The Financial services industry is a particularly welcome addition to a city. While the average annual salary in financial services is high, the industry provides a surprising range of jobs at various income levels, and generates work in related sectors such as printing and business services. Financial services is also an environmentally clean industry, and one that generates jobs for local residents by attracting investment from outside the area.*

and 78.9 percent from 1988. Brokerage services accounted for one-fourth of Boston's job growth between 1992 and 1996, and have played a major role in making Boston's downtown office market among the "hottest" in the U.S.

Nationwide trends of mergers and industry restructuring have been felt here in Boston. Between 1992 and 1996, employment in banking is down 10.7 percent, employment in insurance is down 11.7 percent and real estate employment remains flat. These trends, however, have been offset by strong gains in the securities and brokerage industries.

U.S. employment in security firms is projected to grow at more than double the rate of the national economy average. Although the securities industry will probably not be able to match its phenomenal growth rate of recent years, it is still expected to expand by 16.1 percent between 1996 and 2006, adding 6,157 jobs.

The number of jobs in the banking industry is projected to decline slightly due to mergers and automation, while the insurance and real estate industries are expected to post modest gains. Boston will remain a banking and investment center for both the region and the nation.

#### Education

Boston has long been known as the "Athens of America" due to the presence of its many colleges and universities. Boston is also the birthplace of modern public education, because it was here that Horace Mann began many of the reforms that took hold in America's education system.

Boston's educational institutions are significant employers, employing almost 33,000 people in 1996--5.1 percent of jobs in the city.<sup>2</sup>

Employment in education is up 13.2 percent from 1992 levels, but only up 1.4 percent from 1988.

As in the health care sector, demographics play a large part of the demand for education. The number of college-aged people in the United

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*As important as job growth within the educational services sector is the fact that education fuels additional economic growth. Boston's economy not only benefits from the attraction of students to the city to attend school but also from the retention of students in the city after graduation. The economic impact of the nearly 135,000 students enrolled in Boston's colleges and universities totals \$3.4 billion. Their intellectual capital and entrepreneurial drive contribute substantially to the Boston area economy and are responsible for numerous start-up companies every year. In an increasingly knowledge-based economy, Boston's ability to attract and retain these knowledge workers can only increase the city's competitive advantage in the future. The most rapidly growing occupations are those requiring more education, and a well-educated workforce is the most important element of Boston's growth industries. In fact, Fortune magazine, in naming Boston one of the ten best cities for business in the U.S., wrote, "Few places match the intellectual power of Boston.... A critical mass of local colleges and universities promise to constantly replenish the supply of talent in the local economy."*

States is expected to increase nationally by 14.5 percent by 2006.

Education jobs are three times as concentrated as the national average. Nationally, the education sector's growth rate will increase 1.5 times greater than the nation's overall growth rate. By the year 2006, nearly 3,600 new jobs will

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<sup>2</sup> The Education sector does not count public education jobs such as those in the Boston Public Schools or UMASS Boston, which are instead counted within the overall category of government employees. As a result, public education jobs are not included in the growth projected for this industry.

be created in education in Boston, a rate of 1.1 percent annually.

By that time, jobs in the education sector will comprise over 5.2 percent of the city's jobs. The same demographics driving private education sector growth should also drive additional job growth in public education.

#### Hotels

Since 1829, when the original Tremont House opened on the corner of Tremont and Beacon Streets as one of the pioneer first-class hotels in the country, Boston has supported a strong hotel industry. Boston hotels account for over 30 percent of jobs in the state's hotel industry and over 38 percent of hotel revenues in the

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*Boston's full service hotels generate an average of .87 permanent jobs per room - 75 percent more jobs than the average hotel in the state. These jobs are both full and part-time, and exist at various salary levels. One-quarter of these jobs are classified as "cleaning and building service occupations," and one-third as "food preparation and service occupations." These jobs provide important entry-level opportunities for workers. The hotel industry, recognizing the need to retain good employees, is attempting to provide job training and career ladders. In addition, more than one-fifth of all hotel jobs are in better paying administrative support, administrative, managerial and executive positions.*

state.

All indications are that the current hotel market is the strongest in the city's history. After reaching a low of 65.4 percent in 1991, the hotel occupancy rate reached a new high of 79.6 percent in 1997, one of the best of any city in the nation. Boston's average daily room rate rose from \$108.29 to a record high of \$161.63 over that same period.

Boston's hotels employed about 11,500 people in 1996. This employment level is down slightly from 1992 and down 8 percent from 1988. Employment in this sector is expected to increase as more hotel rooms are built throughout the city. Since July 1997, 827 hotel rooms have been completed and there are currently 2,035 under construction in the city and the BRA estimates that the Boston hotel market could support 6,000 more hotel rooms in addition to those completed and under construction in the next 10 years.

By 2006, the number of hotel rooms in Boston is expected to jump over 50 percent, creating over 5,700 new jobs in the hotel industry.

#### Manufacturing and Operations

Like many older, Northern cities, Boston has seen a decline in its manufacturing employment over the last 50 years. Despite the city's successful conversion to a service economy, Boston retains a smaller but still important manufacturing sector in its economy, as well as food wholesaling and distribution operations. A large printing and publishing industry provides support to the many financial and professional services firms. In addition, the manufacture of technologically advanced materials and goods such as bio-tech, medical devices and electronic components exists in Boston due to the proximity

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*New employment opportunities for workers who would traditionally enter "blue-collar" industries are opening in so-called "back offices" of large service firms, particularly financial services. Given the city's strong financial services and professional services sectors, the blue-collar jobs of the future for Boston residents may be these skilled back-office jobs that can be fairly stable sources of well-paying long-term employment in Boston's economy.*

of medical research and educational institutions.

Manufacturing and associated industries are especially important because, to a greater degree than other sectors, they provide relatively well-paying jobs for those with less of an educational background but who have other skills. Increasingly, however, even manufacturing is requiring a higher level of technological skill to utilize new, computer operated equipment. Access to skilled labor is becoming a major issue in the manufacturing sector.

The number of manufacturing jobs in the city had been steadily decreasing for the last 30 years but has stabilized at approximately 28,500 jobs for the past six years. Boston's manufacturing sector employed 29,000 people in 1996, up slightly from 1992, but a decrease of 16.8 percent from 1988 levels.

Employment in the manufacturing sector is expected to remain steady, despite increased automation and improved productivity limiting employment growth. Looking ahead to the year 2006, Boston may lose fewer than 300 manufacturing jobs, well within the normal annual fluctuation seen in that industry. While the number of manufacturing jobs holds steady, it will drop as a percentage of total jobs, from 4.6 percent in 1997 to 4.1 percent in 2006, as other sectors in Boston's economy continue their rapid growth.



## **DEMANDS CREATED BY GROWTH**

The projected job growth will create demands upon the city; namely for additional office space, new housing, increased transportation infrastructure, and work readiness programs.

### **Office Space**

Based on the employment projections discussed above and the fact that 51 percent of the new jobs will be office based, 800,000 square feet of Class A office space will need to be added to the city's supply each year between 1996 and 2006. Boston needs 1.9 million square feet of downtown Class A space to come on-line immediately to relieve the present vacancy rate of 2.0 percent and allow existing tenants to expand. The BRA is committed to fostering office development that is both suitable and timely by enabling already permitted office developments to move forward quickly; establishing predictable timetables and processes for permitting new office towers to avoid a boom and bust cycle; and finally, working with developers to fulfill their commitments to appropriate benefits packages for impacted neighborhoods.

### **Housing**

More housing will be needed to accommodate the additional workers. Assuming that Boston continues to house 39 percent of the people who work in the city, Boston will need nearly 13,500 net new housing units constructed between 1998 and 2006. Almost 19,000 housing units were constructed between 1980 and 1990, but when demolitions are taken into account, there were only 9,514 net additions to the city's housing stock over that period.

### **Transportation**

Workers living both within and outside of Boston will also place additional demands on the city's roads and public transportation systems. Everyday, 375,000 people from neighboring communities come in to Boston to work, and 86 percent of Boston residents use either public transportation or an automobile to get to work.

### **Education**

Most important of all is education. Just as a suitable transportation system is needed to bring workers from their homes to the workplace, a sound education is necessary to link Boston's residents to the jobs that will be created in the next decade. In the city's knowledge based economy, human capital has become, and will continue to be, Boston's most important asset.

## **NURTURING BOSTON'S STRENGTHS**

The BRA understands the key roles played and important contributions made by these key industries and has targeted these sectors for nurturing and support as Boston enters the 21<sup>st</sup> century. Examples of that public support include:

- The BRA has statutory power to provide tax relief through chapter 121A and also has certain bonding capabilities to assist in financing.
- The city actively supported tax relief for the financial services industry, which was passed by the State Legislature in 1997.
- The city has created a new Office of Business Development which consolidates all of the city's existing business development resources into a one-stop center that sharpens the city's focus on the Boston business community and encourages and promotes opportunities for new and existing businesses.
- The city currently has the ability to use the incentives in Chapter 19, the state's economic development law, and it has also proposed new tax relief for businesses which locate or expand in Boston's Empowerment Zone.
- In its planning function, the BRA plays a major role in zoning and permitting, adopting institutional master plans, and developing long-term plans to channel and control growth such as the planning underway downtown and in the South Boston Seaport District.
- The BRA also owns and operates three industrial parks preserving industrial space for a variety of manufacturing, wholesaling, distribution and marine related businesses.

**Table 2, Employment in Boston, 1992-1996; 2006 projections**

| Industry                                    | 1992           | 1996           | 2006           | Growth Rate* | Percent of Growth |
|---|----------------|----------------|----------------|--------------|-------------------|
| Agriculture & Mining                        | 1,258          | 1,358          | 1,198          | -1.3%        | -0.26%            |
| Construction                                | 10,816         | 12,800         | 13,387         | 0.5%         | 0.94%             |
| Manufacturing                               | 28,223         | 29,069         | 28,779         | -0.1%        | -0.46%            |
| Transport/Communications/Pub. Utilities     | 35,624         | 35,752         | 38,145         | 0.7%         | 3.83%             |
| Wholesale Trade                             | 16,166         | 16,472         | 17,401         | 0.6%         | 1.49%             |
| Retail Trade                                | 56,912         | 62,502         | 65,698         | 0.5%         | 5.11%             |
| <b>FINANCE, INSURANCE &amp; REAL ESTATE</b> | <b>87,027</b>  | <b>96,174</b>  | <b>104,252</b> | <b>0.8%</b>  | <b>12.92%</b>     |
| Banking                                     | 22,601         | 20,178         | 19,778         | -0.2%        | -0.64%            |
| Securities                                  | 25,173         | 38,347         | 44,504         | 1.5%         | 9.85%             |
| Insurance                                   | 26,959         | 23,812         | 25,280         | 0.6%         | 2.35%             |
| Real Estate/Other                           | 12,294         | 13,837         | 14,690         | 0.6%         | 1.36%             |
| <b>SERVICES</b>                             | <b>256,853</b> | <b>286,761</b> | <b>328,718</b> | <b>1.4%</b>  | <b>67.12%</b>     |
| Hotel**                                     | 12,193         | 11,496         | 17,244         | 2.9%         | 9.20%             |
| Health Care                                 | 87,012         | 92,707         | 102,204        | 1.0%         | 15.19%            |
| Educational                                 | 28,818         | 32,622         | 36,214         | 1.1%         | 5.75%             |
| Cultural                                    | 9,340          | 9,773          | 11,231         | 1.4%         | 2.33%             |
| Social Services & Non-profit                | 23,087         | 23,752         | 26,761         | 1.2%         | 4.81%             |
| Professional & Business Services            | 86,080         | 104,870        | 124,205        | 1.7%         | 30.93%            |
| Personal                                    | 10,323         | 11,540         | 12,779         | 1.0%         | 1.98%             |
| Government                                  | 94,647         | 95,696         | 99,594         | 0.4%         | 6.24%             |
| <b>Total</b>                                | <b>587,527</b> | <b>636,584</b> | <b>699,091</b> | <b>0.9%</b>  | <b>-----</b>      |

\*Projected local growth rates for each industry are one-half of the national rates estimated by the Bureau of Labor Statistics due to the constraints of the slower labor force growth expected for Massachusetts.

\*\*Growth in the hotel industry is based on the planned expansion of Boston's hotel supply, rather than on national average growth.

## Boston Redevelopment Authority

City of Boston  
Thomas M. Menino, Mayor

Boston Redevelopment Authority  
Thomas N. O'Brien, Director  
Clarence J. Jones, Chairman  
Consuelo Gonzales-Thornell, Treasurer  
Joseph Nigro, Co-Vice Chairman  
Michael Taylor, Co-Vice Chairman  
John M. Moscardelli, Member  
Harry Collings, Secretary

One City Hall Square  
Boston, MA 02201-1007  
Tel: 617.722.4300

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