Boston's People and Economy

INTRODUCTION

Boston was first incorporated as a town in 1630 and then as a city in 1822, making it one of the oldest cities in the United States. The City has evolved into a center for innovation and entrepreneurship as well as for social and political change. Boston has become the economic engine and cultural hub of New England.

As the seat of Suffolk County, the capital city of Massachusetts, and the region's hub, Boston is home to approximately 654 thousand residents, many world-renowned institutions of higher education, some of the world's finest inpatient hospitals, numerous successful corporations, and many professional sports teams and cultural organizations. Tens of millions of people typically visit Boston each year to take in its historic sites, diverse neighborhoods, and attend cultural or sporting events, and functions in one of Boston's convention centers.

The outbreak of COVID-19 in early 2020 required restrictive public health interventions that caused severe economic disruptions in Boston and across the world. Caseloads have diminished but a new challenge in the form of high inflation has appeared. With the expiration of the federal Public Health Emergency related to COVID-19 in May 2023, Boston is poised to emerge from the pandemic more resilient and equitable than ever before.

Boston, Massachusetts Quick Facts Government

| Government | | |
|---|----------------------|--|
| Founded | Sept. 17, 1630 | |
| State (capital) | Massachusetts | |
| County (seat) | Suffolk | |
| Government Type | Strong Mayor-Council | |
| Mayoral Term (years) | 4 | |
| Councilor Term (years) | 2 | |
| District Councilors | 9 | |
| At-Large Councilors | 4 | |
| U.S. House Reps. (MA) | 9 | |
| Electoral Votes (MA) People | 11 | |
| Population (2021) | 654,281 | |
| % of State | 9.4% | |
| % Growth (from 2010) | 5.9% | |
| % Non-white/Hispanic | 56.0% | |
| % White/non-Hispanic | 44.0% | |
| Median age (years) Geography | 33.0 | |
| Neighborhoods | 23 | |
| Land area (Sq. miles) | 48.4 | |
| Water area (Sq. miles) | 41.2 | |
| Density (Pop./Sq. mile) | 13,518 | |
| Public road mileage | 936.4 | |
| Ft. above sea-level Boston Firsts | 141.0 | |
| Public park (Bos. Common) | 1634 | |
| Public school (Boston Latin) | 1635 | |
| Public library | 1653 | |
| Telephone | 1875 | |
| Subway (in the U.S.) | 1897 | |
| World Series | 1903 | |
| Mutual Fund | 1924 | |
| Community Health Center | 1965 | |
| | | |

BOSTON'S GROWING AND CHANGING POPULATION

The City of Boston ranks as the 24th largest city by population in the United States. According to the 2021 U.S. Census Population Estimates, Boston's population is 654,281. The 5.9% growth between 2010 and 2021 is twenty percent faster than the growth rate experienced from 2000 to 2010.

Boston is the center of the 11th largest Metropolitan Statistical Area (MSA) in the nation at 4.9 million people in 2021.

Over the thirty years between 1950 and 1980 Boston's population declined 30% from 801,444 to 562,994. This decline is attributed to a national trend of suburbanization following World War II. Since 1980, however, Boston's population has stabilized and grown. The 2010 U.S. Census recorded the city's population at 617,594, representing a nearly 5% increase over its 2000 population and a nearly 10% increase over 1980. The 2020 U.S. Census recorded Boston's population at 675,647, a 9.4% increase over 2010. Following the COVID-19 pandemic, cities around the world experienced population shifts away from dense urban cores. Boston was no exception, losing Boston lost 21,366 residents, a 3.1% decrease from 2020.

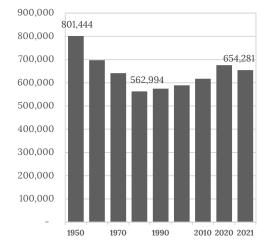


Figure 1 - Boston's Population 1950-2020 Census, 2021 ACS Estimate

The demographic makeup of the city has also changed. In 1950, the share of white residents was 95%, while non-White residents accounted for 5% of the City's population. Boston became a majorityminority city in 2000. As of 2021, 56.0% of Boston's residents are Hispanic/Latino and/or non-White.

Data from the Census Bureau's American Community Survey (ACS) shows that Boston is a relatively young city. The median age in Boston is 33, due to the large number of students and young professionals living and working in the City. More than one out of every three persons in Boston is between the ages of 18 and 34 years old (38%). People ages 35 to 54 years old comprise 23% of the population and people ages 55 to 64 years old comprise 10%. Senior citizens ages 65 and above make up 12% of the City's population, an age group that has been growing in line with national trends relating to the aging of the baby boomer generation.

Household trends have also followed population changes over the past twenty years. From 2000 to 2021 households increased by 13.5% to 271,941. Of these households, 34.7% are owner-occupied, an increase from 32.2% in 2000.

BOSTON'S JOBS, LABOR FORCE, AND INCOME

Boston ranks among the highest concentrations of employment in the U.S. and supplies an estimated 95% of the jobs in Suffolk County. In 2021, there were approximately 827 thousand payroll and non-payroll jobs in Boston.

About 383,000 residents were employed at the start of 2020. However, between February and April 2020, that number fell by 83,000.

Prior to the COVID-19 pandemic, the unemployment rate had been decreasing for both Massachusetts and Boston, with both hovering around 3% in 2019. However, the prolonged shutdown in Massachusetts due to the spread of the virus in the state caused the state unemployment rate to reach 17.1% in April 2020, or 594 thousand unemployed residents, the highest rate in the country. In May, the rate began dropping, reaching 6.0% in June 2021, and 3.7% in June 2022. Boston's unemployment rate peaked at 16.1% in June 2020; fell to 6.2% in June 2021 and 3.5% in June 2022. Citywide 14,110 residents were counted as unemployed. Even as unemployment rates have fallen across the city and state they remain stubbornly high for communities of color; for instance, in 2021 the average estimated unemployment rate for Black/African-American Massachusetts residents (9.1%) and Hispanic/Latino residents (10.1%) was nearly double the rate for White residents (5.1%).

Figure 2 shows the average annual National, Massachusetts and Boston Metro Area Unemployment rates since 2002. During and following recessions, unemployment rates increase dramatically. Nationally, the highest annual rate occurred in 2010, averaging 9.6%, following the Great Recession. In Massachusetts and Boston, the 2020 COVID recession caused the highest annual average, with 9.5% and 9.0%, respectively.



Figure 2 - National, Massachusetts, and Boston Metro Unemployment Rates, 2002-2022, Federal Reserve Economic Data

Higher education, health care, and financial services play a major role in Boston's economy. Since the Great Recession, Boston's job growth was positive across most industries but the majority of job gains were concentrated in health care and social assistance, professional and technical services, and education. As of 2021, the health care and social assistance industry employs the largest number of people in Boston, 18.5% of total jobs. Educational services is also an area of specialization for Boston (8.1% of total jobs). Combined, the concentration of education and health services jobs in Boston is 1.6 times the national average.

Boston hosts dozens of universities, colleges, and community colleges, with a combined enrollment of over 150,000 students annually. Included among the city's colleges and universities are some of the most prestigious educational institutions in the country, namely, Boston College, Boston University, Northeastern University and Harvard University.

These institutions of higher education have a major effect on the Boston's economy. Because many of these students remain in Boston after graduation, the city's educational institutions are a major source of highly-skilled professionals for Boston's workforce.

As the COVID-19 pandemic surged throughout the country higher education institutions faced uncertain futures as most campus activities, including in-person learning were suspended. The National Center for Education Statistics estimates that total enrollment at Boston higher education institutions fell by 2.7% from Fall 2019 to Fall 2020 before rebounding 5.8% in Fall 2021. In that time, the percentage of students receiving fulltime or part-time remote learning increased 71%. More than one-third of students in Fall 2021 had at least one virtual course. Despite the rise of remote coursework and distance education, real estate development by Boston's medical and higher education institutions has continued to grow. In 2021, the Boston Planning and Development Agency (BPDA) approved 1.28 million new square feet of institutional development across the city and in 2022 an additional 350,000 square feet were approved. These new projects include a new mixed-use research campus for Harvard University, and over 200,000 square feet of senior care and affordable housing.

Many of the nation's finest research and teaching hospitals are located in Boston, including Massachusetts General Hospital, Brigham and Women's Hospital, Beth Israel Deaconess Hospital, Boston Medical Center, Tufts Medical Center, and Boston Children's Hospital. In total, there are 22 inpatient hospitals in the city with a combined 6,110 beds. Furthermore, Boston is home to the medical and dental schools of Harvard University, Tufts University, and Boston University.

According to the commercial real estate firm CBRE, the Boston-Cambridge area hosts the largest Life Sciences cluster in the nation, as defined by size, growth and concentration of employment, laboratory inventory, National Institute of Health (NIH) awards, and venture capital funding. Boston's life science industry benefits from skilled labor force availability, leading universities in basic academic science fields, innovative research and development districts, proximity to major research hospitals, and strategic presence of venture capital resources.

Several of the country's leading financial services firms are located in Boston, including Fidelity Investments, John Hancock/Manulife Financial, State Street Corporation, and Wellington Management. Table 2 provides a summary of total estimate jobs in the City of Boston for the year 2021 broken down by industry.

Boston Employment by Industry - 2021

| Doston Employment | sy maustry | 2021 |
|---|------------|---------|
| Industry | 2021 | Percent |
| Health Care and Social Assistance Professional, | 152,936 | 18.5% |
| Scientific, and Technical Services | 116,365 | 14.1% |
| Finance and Insurance | 102,050 | 12.3% |
| Government | 74,665 | 9.0% |
| Educational Services | 66,981 | 8.1% |
| Accommodation and Food Services | 42,764 | 5.2% |
| Real Estate and Rental and Leasing | 39,592 | 4.8% |
| Administrative and Waste Services | 38,225 | 4.6% |
| Retail Trade | 37,575 | 4.5% |
| Transportation and Warehousing Other Services, | 33,727 | 4.1% |
| excluding Public Admin. | 29,229 | 3.5% |
| Information | 26,410 | 3.2% |
| Construction Arts, | 21,605 | 2.6% |
| Entertainment, and Recreation | 14,487 | 1.8% |
| Wholesale Trade Management of | 10,851 | 1.3% |
| Companies and Enterprises | 8,960 | 1.1% |
| Manufacturing | 8,267 | 1.0% |
| Utilities | 2,031 | 0.2% |
| Natural Resources and Mining | 247 | 0.0% |
| Total Jobs | 826,967 | 100% |

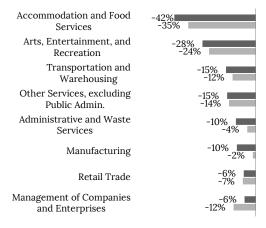
Table 2

Source: U.S. Bureau of Economic Analysis,

Massachusetts Executive Office of Labor and Workforce Development (EOLWD), BPDA Research Division Analysis.

The BPDA estimates that the total number of jobs located in Boston increased from 803,792 in 2020 to 826,967 in 2021, or a gain of approximately 23,000 payroll jobs (2.9%). Despite this gain, total payroll jobs are still more than 24,000 payroll jobs below 2019 levels. During the COVID-19 pandemic, Boston shed nearly 50,000 payroll jobs. This decrease is much greater than the 15,000 average annual jobs lost in Boston between 2001 and 2004 or the 17,500 jobs lost in 2009.

Industries that rely on the physical proximity of workers and customers suffered disproportionate job losses. Figure 3 illustrates the most impacted industries from the COVID-19 pandemic based on the percentage of jobs lost. Accommodation and Food Services suffered the highest number of jobs lost as well as the highest percentage, dropping from 65,645 jobs in 2019 to 38,061 in 2020 – more than 27,000 jobs lost, or 42%. Arts, Entertainment and Recreation lost 5,258 jobs, or 30%. As the economy recovers, these industries are expected to rebound.



■2020 ■2021

Figure 3 Percentage Job Loss by Industry, 2020 and 2021, BPDA Research Division Analysis

When examining the types of jobs held by Boston residents, it is clear the city's resident labor force has undergone a significant transformation. Of the 266,505 Boston residents working in 1970, 45% held blue-collar jobs and 55% held white-collar jobs. 2021, of the 392,960 Boston residents in the labor force, those holding blue-collar jobs fell to 27% and those employed in white-collar occupations rose to 73%. The changing needs of a service-based economy have resulted in a bettereducated and more highly skilled workforce. In 2021, 88% of the adults in Boston had finished high school, compared to 53% in 1970. In 2021, 48% of adults in Boston had completed a bachelor's degree or higher compared to only 10% in 1970 and 36% in 2000.

Boston's well-educated workforce also translates to comparatively high household incomes and wages. Per capita personal income in Metro Boston was \$88,718 in 2020, up 24% from 2010 and 34% from 2000 in real terms. Compared to the United States average, per capita income in Boston is 44% higher. The average annual wage and salary disbursement per job in Suffolk County was \$127,342 in 2020. Beginning in 1990, wages in Suffolk County began to grow faster than the state and the nation. In 2020, the average annual wage per job in Suffolk County was 38% higher than the average Massachusetts wage and 76% higher than the national average wage.

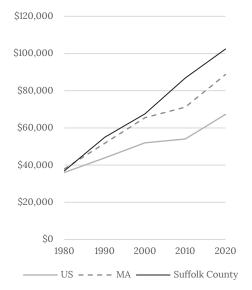


Figure 4 –Average Annual Wages in the U.S., Massachusetts, and Suffolk County, 1980-2020, 2022 dollars, BPDA Research Division Analysis

ECONOMIC ACTIVITY IN THE CITY OF BOSTON

Transportation

A key to any city's economic health is its ability to transport residents, workers, visitors, and goods efficiently and safely to their intended destinations, whether in the city, throughout the region, or beyond.

Local Transportation

According to 2021 American Community Survey data, 33% of households in Boston did not have a vehicle and 31% of Boston resident workers commuted to work without a car. Roughly 1 in 5 residents commute via public transportation.

Boston's public transportation system reaches into every neighborhood of the city whether by trolley, subway, bus, or commuter train. The MBTA provides commuter rail, subway, local and express bus services, and water ferry service to 176 cities and towns in eastern Massachusetts, offering public transit to a population of roughly 4.89 million people over 3,200 square miles. Prior to the COVID-19 pandemic, the MBTA served about 1.2 million passengers every weekday. Average weekday trips dropped to 140,000 in April 2020 before beginning to rebound slowly. Average weekday trips increased from 513,000 in 2021 to 681,000 in 2022. Despite this recovery, average monthly ridership is still more than 500,000 weekday trips below 2019 levels. Figure 5 illustrates the average weekday trips by month for 2019-2022.

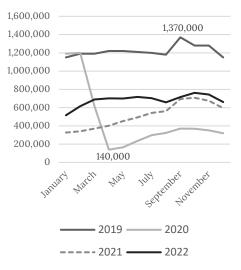


Figure 5 MBTA Average Weekday Trips by Month, 2019-2022

Mass transit ridership is an important indicator of progress towards economic recovery and social revitalization in Boston and as such its performance is monitored closely.

National and International Travel

Boston's Logan International Airport is the most active airport in New England. Due to the COVID-19 pandemic and the travel restrictions which followed, the total number of passengers dropped from over 42.5 million in 2019 to about 12.6 million in 2020, a 70% decrease. Flight operations and total passengers have increased steadily since 2020, increasing to 22.7 million in 2021 and 26.1 million in 2022. Despite this recovery, total passengers transiting to and from Logan are still 15% below 2019 levels. Total number of flights, domestic and international, followed a similar trajectory, decreasing 52% between 2019 and 2020 and then growing 83% between 2020 and 2022. Flights were still off 2019 levels by 11% in 2022.

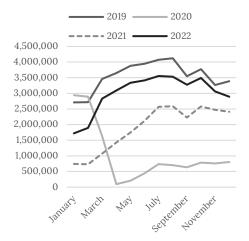


Figure 6 Total Air Passengers at Logan Airport by Month, 2019-2022, Massport Airport Statistics

Tourism and Culture

Boston entertains many types of visitors each year: those seeking historical sites, museums, sporting events, restaurants, theatre, and/or business conventions. According to the Greater Boston Convention and Visitors Bureau, an estimated 22.7 million people visited Boston in 2019. Of those, an estimated 2.9 million were international visitors to Greater Boston. Travel to Boston declined dramatically in the spring of 2020 and has since picked up gradually. Throughout 2022 these trends continued and have neared pre-pandemic levels. By December 2022, visits to Boston were 98% of December 2019 totals.

Prior to the pandemic, Boston was an attractive destination for conventions, meetings, and trade shows. The Boston Convention and Exhibition Center (BCEC), located on a 60-acre site in South Boston, contains 516,000 square feet of contiguous exhibition space designed to accommodate larger conventions. This facility, along with new hotel projects in the city, has given a significant boost to the local economy. In 2019, the Boston Convention and Exhibition Center, along with the John B. Hynes Memorial Convention Center, hosted 336 events, totaling 832,243 attendees. Both convention centers served other purposes over the last few years; the BCEC was converted to the Boston Hope field hospital in April and May of 2020 and Hynes became a vaccination site in Spring 2021. Since their reopening to regular events, both centers have hosted a combined 68 events and 128,814 attendees in 2021. Convention center attendance was approximately 523,000 in 2022, 37% lower than prepandemic levels.

The Boston area is home to five major professional sports teams: The Boston Red Sox baseball team plays at historic Fenway Park, and the Boston Bruins hockey team and the Boston Celtics basketball team play at the TD Garden. The New England Patriots football and Revolution soccer teams play at Gillette Stadium in nearby Foxborough, MA.

The New England Aquarium, Museum of Fine Arts, Isabella Stewart Gardener Museum, Institute of Contemporary Art, and many other cultural attractions bring in thousands of tourists each year. The city is also home to venues for concerts, ice shows, circuses and other entertainment performances as well as street festivals and parades in its neighborhoods and parks.

Hotels

Tourism is a large Boston industry that supported approximately 43,000 Accommodation and Food Services jobs in 2021, 5.2% of Boston's total jobs. The hotel industry provided 6,130 direct jobs in Boston in 2021, down from 11,609 in 2018, representing about 1% of Boston's total payroll jobs..

As of January 2023, Boston had 94 hotels with a total of 24,117 rooms in establishments with fifty or more rooms. This is a substantial increase in supply from 18,363 rooms a decade ago. The average daily rate in 2022 was \$282, \$49 more than in 2021. Much of this was in response to demand due to eased travel restrictions and consumer optimism in the economy.

According to the Pinnacle Perspective Monthly Report, the average occupancy rate of hotels in Boston was 79.5% from 2009 through 2019. Due to COVID-19 and the state's stay-at-home advisory, the occupancy rate dropped from 72.7% in February 2020 to 5.3% in April 2020. Similarly, revenue per available room fell by more than 80% percent. Occupancy has since rebounded gradually, up to 47% in 2021 and 70% in 2022. Likewise, revenue per available room has increased from \$48 in 2020 to \$198 in 2022.

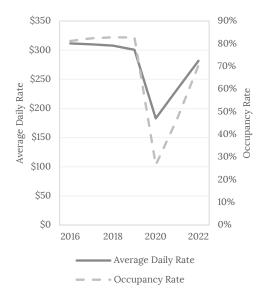


Figure 7 Boston Average Daily Rate and Room Occupancy, 2016-2022, Pinnacle Advisory Group and BPDA Research Division

Consumer Spending

From a baseline in January 2020, overall consumer spending by Boston residents, which includes both online and in-person transactions, fell by 17% in March and by April was down 41% in the midst of the COVID-19 shutdown (See Figure 8). With the shutdown of gyms, restaurants, and other personal service businesses, Bostonians who maintained their jobs shifted their spending patterns to other sectors of the economy. For residents who lost their jobs or a significant portion of their income, lack of financial resources became a driving factor behind consumer spending decisions.

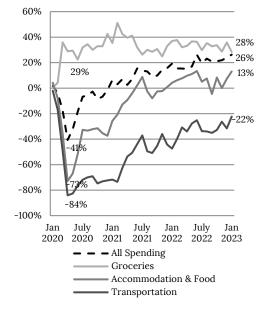


Figure 8 Percent Change in Consumer Spending, January 2020-January 2023, Opportunity Insights Economic Tracker

The COVID-19 recession was the shortest on record, officially lasting just two months and ending in May 2020. In the aggregate consumer spending was quick to rebound, returning close to January 2020 levels by July 2020. By January 2021, overall consumer spending was 13% higher than the immediate pre-pandemic period and has continued an uneven climb into 2022. By January 2023, overall consumer spending was 26% higher than January 2020.

Spending patterns for different categories of goods and services have not fared equally. For example, Boston spending on *Groceries* was elevated throughout the pandemic, as people chose to eat at home more often. Since January 2021, spending on groceries has been relatively flat, between 30 and 40 percent higher than January 2020. Meanwhile, spending on *Transportation* fell 84% below January 2020 in April 2020. It then increased slightly in the following months. Despite sustained economic recovery since that point spending on transportation remained more than 20% below January 2020 levels in January 2023.

Reduced consumer demand due to the pandemic impacted Boston businesses. Small business revenue in Boston fell by 64% between January and April 2020 and averaged more than 50% below January 2020 levels into 2021. The pace of recovery quickened in 2021, with the gap between pre-pandemic and current revenues shrinking by 1.5% per month on average. By February 2022, the month of the last data collection, small business revenues in Boston were still 33% below their January 2020 average. Compared to businesses statewide, the gap was only -3%. In recognition of the economic hardship faced by city small businesses, the city allocated more than \$12 million in ARPA funds in 2021 to help local businesses weather the negative economic effects of the pandemic.

REAL ESTATE

The COVID-19 pandemic altered the pace of development in Boston as construction activity was paused in the spring of 2020 and development review activities had to be restructured and shifted online due to public health considerations. Despite the disruption, the development pipeline in Boston has proven resilient. With the end of the COVID-19 health emergency declaration, high inflation and interest rates present a new challenge to monitor closely.

Housing

The housing market is a spur for many industries and serves as a barometer of economic health overall.

In the years immediately preceding the COVID-19 pandemic, the Boston Planning and Development Agency approved approximately 11.1 million square feet of new development each year. Despite the disruption to the construction industry and supply chains worldwide during the pandemic, more than more than 30 million square feet of new development was approved between 2020 and 2021. Approvals slowed from these historic highs to 9.1 million square feet in 2022, about 17% below the pre-pandemic average. A multitude of factors likely contributes to this decrease, including: higher interest rates, materials and labor prices, and the existing backlog of projects.

Residential development represents more than half of all approved development in recent years. Since 2020, nearly 20,000 new residential units have been approved with 6,300, or 32%, income restricted.

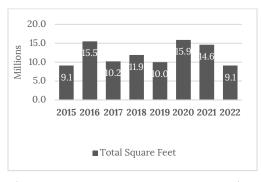


Figure 9 Total Square Feet Approved, 2015-2022, in millions, BPDA Research Division

Across Boston's housing stock nearly two thirds of occupied units in Boston are classified as rentals. The pandemic had unequal effects on rental rates across the city. Neighborhoods closer to Boston's downtown core like the North End, Beacon Hill, and the South Boston Waterfront, experienced modest declines in rental rates between 2020 and 2021. Meanwhile neighborhoods further away like Mattapan and Hyde Park experienced rate increases. Citywide, monthly rental rates increased slightly, 1.5%. Rental rates in 2022 saw a much more robust increase across all neighborhoods with average monthly rents increasing in all neighborhoods. From 2021

to 2022 the average monthly rent in Boston increased from \$2,534 to \$2,895, or 14.3%.

Homeowners also experienced value increases. Between 2020 and 2021 Banker & Tradesman data indicated that single family home prices increased by 8.4%. In 2022, the median value of a single-family home in Boston reached \$761,000, a 4.0% increase from 2021. In 2022, sales volumes were 6.6% below the annual average over the last decade. Despite slower turnover, and higher interest rates, single family home prices remained high.

Office Market

As of the fourth quarter of 2022, Boston contained 67.5 million square feet of office space. Downtown, which includes the Financial District, remains Boston's largest commercial office market with nearly 38 million square feet of office space, followed by Back Bay with over 12 million square feet, and the South Boston Waterfront with almost 10 million square feet.

Prior to the COVID-19 pandemic, Boston experienced job growth in industries such as professional and scientific services, and finance and insurance, which require commercial office space. This employment growth drove an increase in demand for office space in Boston. During the pandemic, many office workers began working from home and a substantial share have yet to return to work in-person. Census estimates in 2021 suggest that 30% of Bostonians work from home, a six fold increase from 2019.

As existing leases have expired and new office developments hit the market, reduced demand has led to increasing vacancy rates in the commercial office market, reaching 8.4% in the South Boston Waterfront and over 13% in Downtown as of the fourth quarter of 2022. Average commercial vacancy stood at 11.2% citywide. Increased vacancy and reduced demand also explain the slowdown in commercial development by the BPDA board. Only 100,000 square feet of office development was approved by the BPDA board in 2021 and 400,000 square feet of office development was approved in 2022.

Life Science and Technology Industry

Life science and biomedical research companies' demand has shown to be resilient during the pandemic, unlike traditional office tenants. The Greater Boston lab and life science market has continued to rank first across the nation in JLL annual reports since 2012. Boston's life science market has both absorbed spillover demand from Cambridge and independently attracted new companies.

So great is the demand for lab space in Boston that some previously approved projects are pivoting from office to lab and research and development (R&D) uses. For example, 321 Harrison, previously approved and under construction as an office project, returned to the BPDA Board in July 2021 proposing to change the primary use of its square footage to lab space. A total of 220,000 square feet of lab space will be added to the South End project.

Other neighborhoods have also absorbed demand for laboratory space. In 2022, the BPDA board approved development projects in Allston, Brighton, and Downtown.