

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 675 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 disruption in Boston and across the world. Additional waves driven by viral variants have continued to pose challenges, but city government along with federal, state, non-profit, and private sector partners have mobilized to manage the health crisis, address the immediate needs of residents, and drive economic recovery. As a result, Boston is poised to emerge from the pandemic stronger, more equitable, and more resilient than ever before.

Boston, Massachusetts Quick Facts

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) | 11 |

People

| | |
|----------------------|---------|
| Population (2020) | 675,647 |
| % of State | 9.6% |
| % Growth (from 2010) | 9.4% |
| % Non-white/Hispanic | 55.4% |
| % White/non-Hispanic | 44.6% |
| Median age (years) | 32.4 |

Geography

| | |
|-------------------------|--------|
| Neighborhoods | 23 |
| Land area (Sq. miles) | 48.4 |
| Water area (Sq. miles) | 41.2 |
| Density (Pop./Sq. mile) | 13,960 |
| Public road mileage | 936.4 |
| Ft. above sea-level | 141.0 |

Boston Firsts

| | |
|------------------------------|------|
| 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 |

Table 1

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 2020 U.S. Census, Boston's population is 675,647. The 9.4% growth between 2010 and 2020 is nearly double the growth rate experienced from 2000 to 2010.

Boston is the center of the 10th largest Metropolitan Statistical Area (MSA) in the nation at 4.9 million people in 2020.

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 post-war national trend of suburbanization. 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 gives Boston's population as 675,647, a 9.4% increase over 2010.

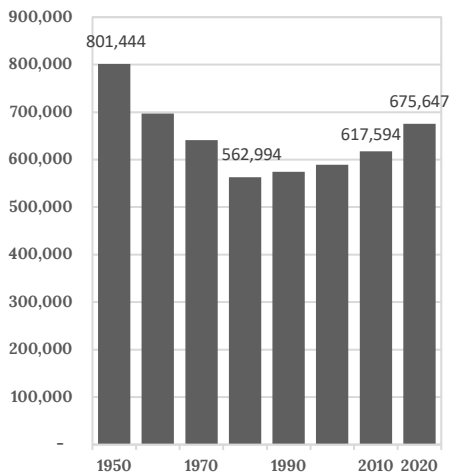


Figure 1 - Boston's Population 1950-2020 Census

With this growth in population has come a change in demographics. In 1950, the share of white residents was 95%, while non-White residents accounted for 5% of the City's population. Boston became a

majority-minority city in 2000. As of 2020, 55.4% of Boston's residents are 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 32.4, 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 (39%). 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.

Along with population growth, the number of households in Boston has also grown, reaching 279,495 in 2020. Household size fell slightly from 2.3 persons in 2010 to 2.25 persons in 2020.

BOSTON'S JOBS, LABOR FORCE, AND INCOME

Boston ranks among the highest concentrations of employment in the U.S. and supplies an estimated 96% of the jobs in Suffolk County. In 2020, there were approximately 792 thousand payroll jobs in Boston.

Nearly 400,000 residents were employed at the start of 2020. However, between February and April 2020, that number fell by 83,536, while unemployed residents increased by 43,157.

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, or 225 thousand unemployed residents, and falling still further to 4.8% by January 2022. Boston's unemployment rate peaked at 16.1% in June 2020, fell to 7.6% in December 2020, and registered at 4.4% in January 2022. Even as unemployment rates have fallen citywide they remain stubbornly high for communities of color; for instance, in October 2021 the estimated unemployment rate for Black/African-American residents was nearly three times as high (9.2%), and the rate for Hispanic/Latino residents twice as high (6.2%), as the rate for White residents (3.1%).

Figure 2 shows the National, Massachusetts and Boston Metro Area Unemployment rates since 2001. 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 8.6%, respectively.

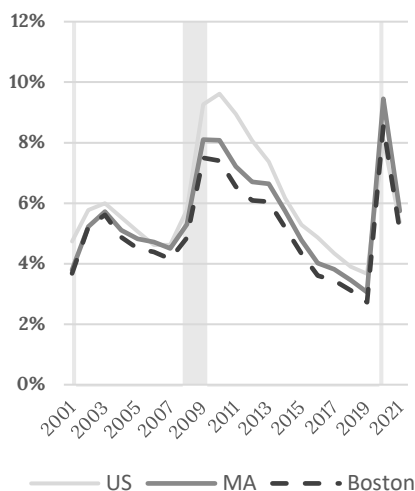


Figure 2 - National, Massachusetts, and Boston Metro Unemployment Rates, 2001-2021, Federal Reserve Economic Data

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 was mostly concentrated in health care and social assistance, professional and technical services, and education. As of 2020, the health care and social assistance industry employs the largest number of people in Boston, 18.6% of total jobs. Educational services is an area of specialization for Boston (8.2% of total jobs), with an employment share three times the national average.

Boston hosts dozens of universities, colleges, and community colleges, with a combined enrollment of nearly 140,000 students annually. Included among the city's colleges and universities are some of the finest educational institutions in the country, including 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, and with many institutions shifting to remote and hybrid learning, enrollment figures declined. The National Student Clearinghouse estimates that undergraduate enrollment fell by 3.6% from Fall 2019 to Fall 2020 and a further 3.1% between Fall 2020 and Fall 2021. Meanwhile, graduate enrollment first increased from 3.6% in Fall 2020 relative to Fall 2019 and then declined slightly by 0.4% in Fall 2021.

In 2020, the Boston Planning and Development Agency (BPDA) approved 1.1 million new square feet of institutional development across the city and in 2021 an additional 1.28 million square feet were approved. These new projects primarily came from a new campus for Benjamin

Franklin Institute of Technology, as well as major medical institutions.

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, as well as community-based health centers. In total, there are 22 inpatient hospitals in the city with a combined 6,110 beds as of January 2022. 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 2020 broken down by industry.

Boston Employment by Industry – 2020

| Industry | 2020 | Percent |
|--|----------------|----------------|
| Health Care and Social Assistance | 147,471 | 18.6% |
| Professional, Scientific, and Technical Services | 114,178 | 14.4% |
| Finance and Insurance | 94,205 | 11.9% |
| Government | 75,051 | 9.5% |
| Educational Services | 65,355 | 8.2% |
| Accommodation and Food Services | 38,055 | 4.8% |
| Real Estate and Rental and Leasing | 36,471 | 4.6% |
| Retail Trade | 36,056 | 4.6% |
| Administrative and Waste Services | 35,989 | 4.5% |
| Transportation and Warehousing | 33,057 | 4.2% |
| Other Services, excluding Public Admin. | 29,603 | 3.7% |
| Information | 23,055 | 2.9% |
| Construction | 20,438 | 2.6% |
| Arts, Entertainment, and Recreation | 13,373 | 1.7% |
| Wholesale Trade | 11,255 | 1.4% |
| Management of Companies and Enterprises | 9,136 | 1.2% |
| Manufacturing | 7,485 | 0.9% |
| Utilities | 1,883 | 0.2% |
| Natural Resources and Mining | 303 | 0.0% |
| Total Jobs | 792,419 | 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 fell from 851,468 in 2019 to 792,419 in 2020, or a loss of approximately 59,000 payroll jobs (6.9%). 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 physical proximity suffered disproportionate job losses. Figure 3 illustrates the percentage of jobs lost in industries where 10% or more of jobs were 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 38,055 in 2020 – more than 27,000 jobs lost, or 42%. Arts, Entertainment and Recreation lost 5,716 jobs, or 30%. As the economy recovers, these industries are expected to rebound.

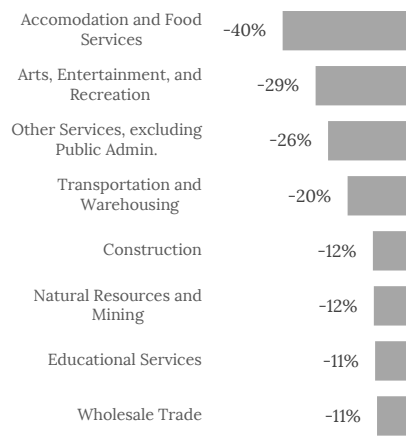


Figure 3 Percentage Job Loss by Industry, 2020, BPDA Research Division Analysis

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. In 2019, of the 406,937 Boston residents working, those holding blue-collar jobs fell to 29% and those employed in white-collar occupations rose to 71%. The changing needs of a service-based economy have resulted in a better-educated and more highly skilled workforce. In 2019, 89% of the adults in Boston had finished high school, compared to 53% in 1970. In 2019, 52% of adults in Boston had completed college education, compared to only 10% in 1970 and 36% in 2000.

Along with Boston’s well-educated workforce comes comparatively high household incomes and wages. In 2020, per capita personal income in Metro Boston was \$72,123, up 24% from 2010 and 58% from 2000 in real terms. Since 1990, per

capita income in Metro Boston has consistently been more than 25% greater than per capita income in the United States, 44% greater in 2020. The average annual wage and salary disbursement per job in Suffolk County was \$117,665 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.

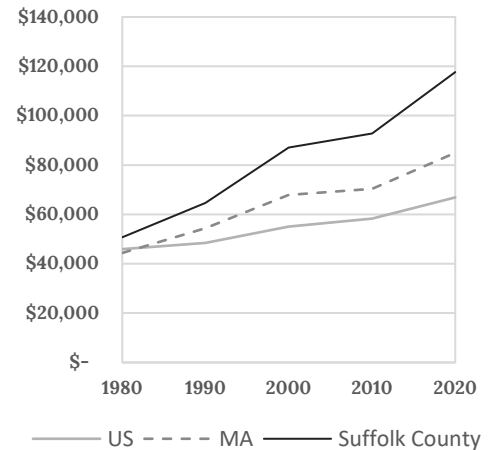


Figure 4 –Average Annual Wages in the U.S., Massachusetts, and Suffolk County, 1980–2020

Source: Bureau of Economic Analysis, 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 or throughout the region.

Local Transportation

According to 5-year 2016–2020 American Community Survey data, 36% of households in Boston did not have a vehicle and 56% of Boston resident workers commuted to work without a car.

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 175 cities and towns in eastern Massachusetts, offering public transit to a population of roughly 4.9 million people in an area of 3,244 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, reaching 670,000 by September 2021. Figure 5 illustrates the average weekday trips by month for 2019-2021.

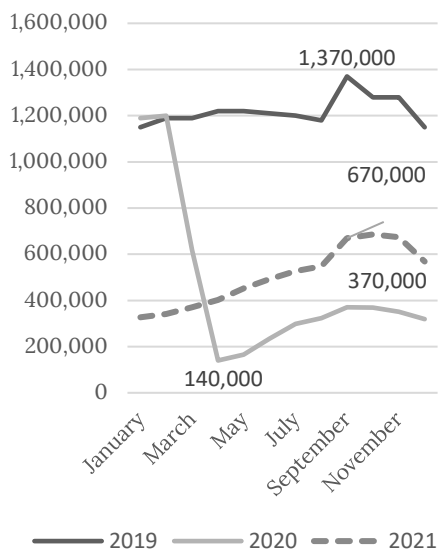


Figure 5 MBTA Average Weekday Trip by Month, 2019-2021

Mass transit ridership is an important indicator of progress towards economic recovery and social revitalization in Boston and as such will be watched 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. While total passengers rose in 2020 to about 22.7 million, this was still 47% below 2019 levels. Total number of flights, domestic and international, followed a similar trajectory, decreasing 52% between 2019 and 2020 and then growing 29% between 2020 and 2021. Flights were off 2019 levels by 38% in 2021.

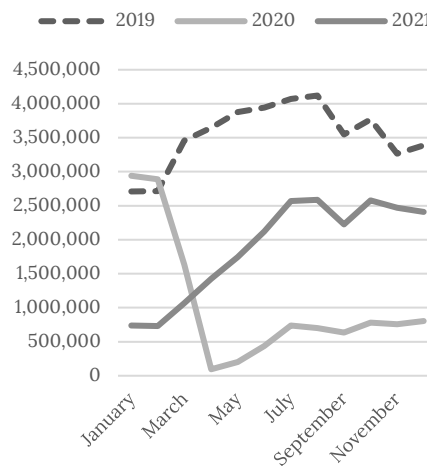


Figure 6 Total Air Passengers at Logan Airport by Month, 2019-2021, Massport Airport Statistics

Tourism and Culture

Boston entertains many types of visitors each year: those seeking historical sites, museums, sporting events, restaurants, theatre 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. Domestic visitors to Boston were at around 80% of 2019 levels in October 2021 before a setback due to the Omicron variant wave.

Prior to the pandemic, Boston was an attractive destination for conventions, meetings, and gate 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, with an aggregate of 832,243 attendees, generating 800,000 hotel room nights and \$870 million in economic impact. The COVID-19 pandemic forced the cancellation of conventions and events. Both convention centers served other purposes over the last two 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.

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 Gardner Museum, Institute of Contemporary Art, and many other attractions bring in thousands of tourists each year. The city also provides 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 38,000 *Accommodation and Food Services* jobs in 2020, 4.8% of Boston's total payroll jobs. The hotel industry provided 6,098 direct jobs in Boston in 2020, down from 11,609 in 2018, representing about 1% of Boston's total payroll jobs. These significant shares exposed the City to high rates of unemployment, due to the direct hit the industry has suffered due to COVID-19.

As of January 2022, Boston had 95 hotels with a total of 24,300 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 2021 was \$216. Much of this was in response to demand resulting from the construction of the Boston Convention and Exhibition Center (BCEC). The BCEC and the smaller Hynes Convention Center produce considerable demand for hotel nights.

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. Overall, the lodging market in Boston and Cambridge's occupancy rate dropped to less than 27% in 2020, driving revenue per available room down more than 80% percent, according to the Pinnacle Advisory Group. The rate rebounded somewhat in 2021, but at about 47% stood at only a little more than half of the 2019 rate.

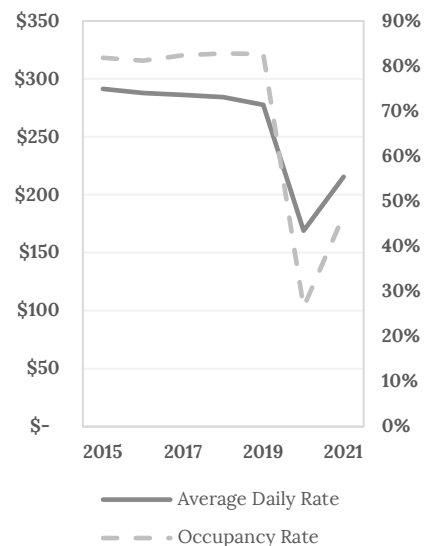


Figure 7 Boston Average Daily Rate and Room Occupancy, 2015-2021, Pinnacle Advisory Group and BPDA Research Division

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). Boston residents who maintained their jobs during the pandemic still had income to spend, but may have shifted their spending patterns in light of the public health risks (for example limiting restaurant dining). However, 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.

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 to January 2020 levels by July 2020. By January 2021, overall consumer spending was 17% higher than the immediate pre-pandemic period and has continued an uneven climb into 2022.

Spending patterns for different categories of goods and services have diverged. For example, Boston spending on *Groceries* was elevated throughout the pandemic, as people chose to eat at home more often. On March 18, 2020, grocery spending peaked at 73% above January levels and averaged at least 40% above January 2020 levels from July 2020 to May 2021.

Spending in the *Accommodation & Food* category fell by 73% in April, increasing gradually over the spring as the stay-at-home advisory and other COVID related regulations were relaxed, averaging 32% less than January 2020 levels during the months of July–September 2020. In January 2021, Accommodation & Food spending was still 23% below the pre-pandemic baseline and would not return to January 2020 levels until June 2021.

Meanwhile, spending on *Transportation* crashed to 83% below January 2020 in April

2020. It then increased slightly in the following months, but despite sustained economic recovery since that point spending on transportation remained more than 20% below baseline in January 2022.

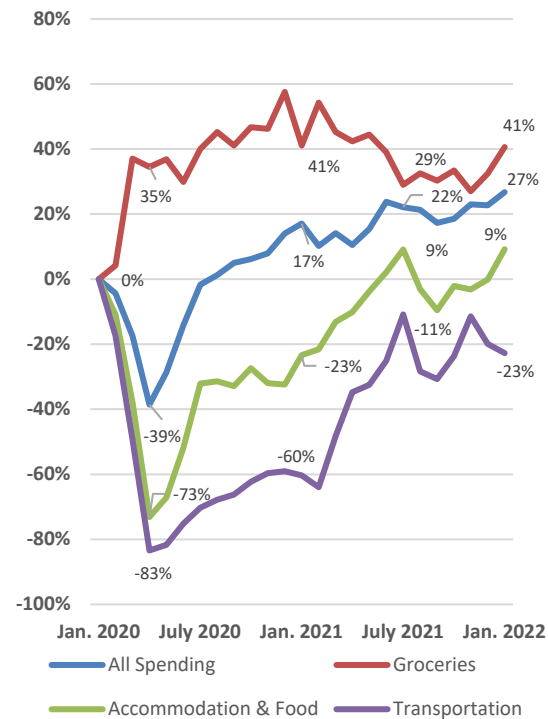


Figure 8 Percent Change in Consumer Spending, January 2020–January 2022, Opportunity Insights Economic Tracker

Reduced consumer demand due to the pandemic has impacted Boston businesses. Small business revenue in Boston fell by 67% between January and April 2020 and averaged more than 50% below January 2020 levels into 2021. Small businesses in the *Leisure and Hospitality* sector were hit particularly hard, dropping to 86% below the baseline in April. Likewise, revenue for small businesses in the *Education & Health Services* sector fell a cumulative 79% by May 2020 and continued to struggle into 2021 and beyond. Boston is not unique in this regard as statewide small business revenue remained 7% below pre-pandemic levels as of mid-January 2022.

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 moved online due to public health considerations. Since that time, concerns about the impact of the COVID-19 crisis on the real estate market have lingered, but the development pipeline in Boston has proven resilient.

Housing

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

Despite initial setbacks during the spring and summer of 2020, the BPDA Board approved 15.9 million square feet of new development by the end of the year. The BPDA Board was active again in 2021, approving 14.6 million square feet of development: 7.1 million square feet of residential space and 7.5 million square feet of non-residential space.

The 7.1 million residential square feet approved in 2021 translate to over 6,666 new residential units, of which 2,366 are income-restricted, a larger share than in recent years.

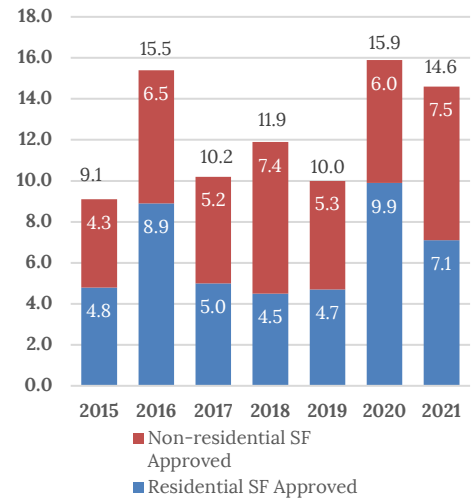


Figure 9 Total Square Feet Approved by Residential and Non-Residential, 2015-2021, in millions, BPDA Research Division

Vacancy rates in residential buildings with five or more units climbed from 5.0% in 2019 to 9.2% in 2020 before dropping to 3.3% in 2021, according to BPDA Research Division analysis of CoStar data. The pandemic affected demand for rentals, with rents falling 4.3% in real terms in between 2020 and 2021. In the fourth quarter of 2021, rents began to increase with the return of college students and continued economic recovery. For those seeking to become homeowners, the median sale price for a single-family home in Boston reached \$745,000 in 2021 per data provided by Banker & Tradesman and the Department of Neighborhood Development, a 5.6% increase in real terms over 2020.

Office Market

Prior to the COVID-19 pandemic, Boston experienced job growth in industries such as professional and scientific services, 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.

As of the third quarter of 2021, there were about 67 million square feet of office space in Boston. Downtown, which includes the Financial District, remains Boston's largest commercial office market with over 47 million square feet of office space, followed by Back Bay with in excess of 12 million square feet, and the South Boston Waterfront with almost 10 million square feet.

As existing leases have expired and new office developments come on line, reduced demand has led to increasing vacancy rates in the commercial office market, reaching 13.5% in the South Boston Waterfront and nearly 15% in Downtown as of the third quarter of 2021. The citywide office real estate vacancy was just below 14%. Reduced demand also explains why only 0.1 million square feet of office development was approved by the BPDA Board in 2021.

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 report since 2012. Boston's life science market has both absorbed spillover from Cambridge and independently attracted new companies.

So great is the demand for lab space in Boston that some previously approved projects are pivoting 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.