City of Quincy

Transforming Quincy

A Holistic Assessment of the Economic Contributions of the Quincy Center Urban Revitalization District Project

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EXECUTIVE SUMMARY

Construction activities in Quincy Center supported an estimated 2,545 jobs in Quincy, 3,835 jobs in Norfolk County, and 4,227 jobs statewide.

The Quincy Center Urban Revitalization District Project (URDP), one of the largest ongoing urban renewal projects in the state, is a significant contributor of jobs, labor income, and economic output. Since the formation of the URDP in 2007, more than $425.2 million dollars in public and private funds have been expended or are anticipated to be expended to support public infrastructure improvements, building renovations, and building construction.

Construction activities related to these expenditures directly supported an estimated 2,344 full-time equivalent (FTE) jobs. When the indirect and induced impacts are added, construction activities in Quincy Center supported an estimated 2,545 jobs in Quincy, 3,835 jobs in Norfolk County, and 4,227 jobs statewide (see Figure 1). Importantly, these results do not account for the impact of future potential development in Quincy Center, which will include additional public infrastructure improvements and the potential development of more than a million square feet of commercial and residential space.

Figure 1
Total Economic Contributions of Completed and Approved Construction Activities in Quincy Center, 2005-2018

City of Quincy	Norfolk County	Massachusetts
FTE Jobs: 2,545	FTE Jobs: 3,835	FTE Jobs: 4,227
Labor Income ($mil): $209.4	Labor Income ($mil): $294.9	Labor Income ($mil): $327.0
Output ($mil): $447.8	Output ($mil): $662.0	Output ($mil): $754.3

The vision for Quincy Center is largely being achieved through significant public infrastructure investments, which in turn are leveraging private development.

The Vision for Quincy Center

The economic contributions to date are a result of a years-long planning process that addressed a lack of public and private investment in Quincy Center. Central to this process is the *Urban Revitalization Development Plan*, *An Urban Renewal Plan for the Quincy Center Urban Revitalization District,* which was released in 2007 and established the policy and regulatory process for the area's redevelopment. The twenty-year plan seeks to reverse the fortunes of Quincy Center by establishing the Quincy Center Urban Revitalization District (URD), a 55-acre urban renewal area within Quincy Center, with the overarching goal to "revitalize Quincy Center and attract high quality residential and commercial development."

The project employs fundamental urban renewal principles related to zoning, finance, and development and is largely being driven by significant public infrastructure investments, which in turn leverage private development. While updating the area's subterranean and aboveground public infrastructure has created inconveniences for

Quincy residents, businesses, and visitors, the City's vision cannot be fully realized without literally laying the groundwork for future development. In addition, each public infrastructure project is an important component in creating a cohesive sense of place necessary to achieve the city's overall vision for Quincy Center. This is particularly true of the cultural, religious, educational, and public institutions that holistically define downtown as the cultural and civic center of the city. Adopting this comprehensive vision for downtown guides development in a way that creates a cohesive urban corridor, as opposed to a piecemeal strategy that has failed many downtown areas nationwide.

More than $103 million in bonds and state and federal grants funded the public infrastructure work in Quincy Center from 2004 through 2018.

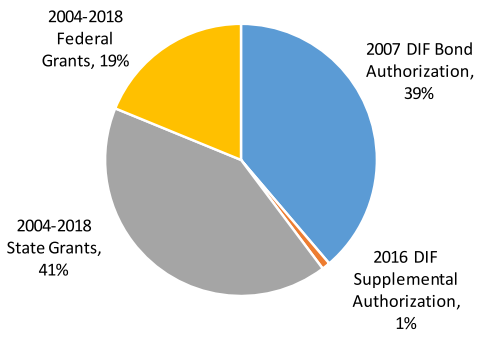
Funding the Projects

The public infrastructure improvements in Quincy Center were primarily funded through federal and state grants. In addition, the City utilized the state's authorization of a District Improvement Financing (DIF) program. Through the DIF program, future tax growth revenue from new development funds bonds that support public improvement projects in Quincy Center. More than $103 million in bonds and state and federal grants funded the public infrastructure work in Quincy Center between 2004 and 2018. Forty percent of this amount ($41 million) came from DIF, while state grants accounted for 41 percent of the total and federal grants accounted for 19 percent of the total (see Figure 2).

Importantly, incremental tax revenues in the DIF have increased at a rate that exceeds the debt service on the bonds,[1] and as a consequence of the infrastructure improvements and since the institution of the DIF, four private developments have been developed with two additional developments under construction. These projects will add 382 new housing units to the downtown, more than 10,000 square feet of retail space, and nearly 30,000 square feet of commercial/office space.

Incremental tax revenues in the DIF have increased at a rate that exceeds the debt service on the bonds.

Figure 2
Quincy Center Public Financing 2004–2018



Source: City of Quincy

[1] RKG Associates, Inc. (15 May 2017). *Quincy Center District Improvement Financing: Phase II Bond Authorization.*

Sustained Impacts

The redevelopment of Quincy Center will annually generate new economic activity that continues after construction ends.

Apart from the significant economic contributions from construction activities, the redevelopment of Quincy Center will also annually generate new economic activity that continues after construction ends. These activities include spending from new residential tenants who move to Quincy Center, spending from additional office workers, and impacts from new building operations.

New Resident Spending: New residents to Quincy Center will spend at least a portion of their income locally. In Quincy, this spending will support an estimated 25 FTE jobs, $1.4 million in labor income, and $15.1 million in economic output annually. These annual impacts can be expected to increase as new residences are constructed as the build-out of Quincy Center continues.

Office Worker Spending: Annual economic activity will also occur in Quincy Center as a result of the spending of office workers employed in new commercial and retail spaces (e.g., coffee houses, restaurants, dry cleaners). These types of impacts, while not readily quantifiable, can already be seen in some of Quincy Center's local restaurants and retail outlets, although construction activities to some degree have limited customer traffic.

Building Operations: New structures will require maintenance, repair, custodial, utility, and property management services, with spending on these activities directly supporting some level of local employment. While reliable estimates of these economic activities cannot be calculated at this time due to the lack of development details on undeveloped parcels, employment sectors expected to gain from these activities include jobs in management, real estate, landscaping, building trades, and other business and professional services.

Other Economic Activities

Other economic activities have occurred as a result of new development in Quincy Center, including increased property tax payments, and additional excise taxes, room and meals taxes, and visitor spending.

Property Tax Payments: Assessed values in the DIF increased by 43 percent (+$181,530,000) from FY06 through FY17, while total *taxable* assessed values increased by 46 percent (+$136,934,000) over this period.[2] The total incremental property tax revenues collected by the city as a result was $2,442,371 in FY17.[3,4]

[2] The DIF was established in 2006.

[3] RKG Associates, Inc. (15 May 2017). *Quincy Center District Improvement Financing: Phase II Bond Authorization.*

[4] The tax increment, calculated by the local Assessor, is the tax on the added value of new construction.

Importantly, this increase is primarily the result of the natural appreciation of buildings and land values in Quincy Center and not the value from new development that came online after FY17, which includes Clivedon Place, 22 Mechanic, 111 Washington Street, West of Chestnut, and the soon to open Nova Residences and Chestnut Place. These projects will significantly add to the property tax base, as will potential future commercial and residential properties that have yet to be developed on the Hancock, Ross, and MBTA parcels.

Automobile Excise Taxes: Additional automobile excise taxes will be collected by the city as a result of new households locating in Quincy Center. It is estimated that the city will annually collect an additional $73,000 in excise taxes from new residential developments opened or under construction in Quincy Center. This amount will increase as new residences are constructed.

Additional Meals and Room Taxes: Additional meals and room taxes may be collected by the city as a result of the opening of new retail outlets in Quincy Center as well as additional room taxes from a proposed hotel, however, a reliable estimate cannot be made at this stage of Quincy Center's development.

Visitor Spending: Additional spending by tourists and visitors who would not normally visit the area but are attracted to the area's improved amenities will support additional economic activity. Estimating this additional spend is challenging and outside the scope of this project.

Net New Income Taxes Collected By State: It is estimated that approximately $750,000 in state income tax will be remitted to the state from out-of-state households who move to recently developed or under construction Quincy Center residences. Again, this value will rise as new residences are constructed.

There is still significant work remaining to realize the full vision for Quincy Center, particularly considering that the city is only halfway through the twenty-year urban renewal plan.

Achieving the Full Vision

There is still significant work remaining to realize the full vision for Quincy Center, particularly considering that the city is only halfway through the twenty-year urban renewal plan. Public infrastructure improvements continue with the redevelopment of the Hancock Lot area, which will include the construction of a parking garage that will anchor two large, private, mixed-use developments, as well as improvements to the surrounding area. The city is also beginning to focus on redeveloping the Ross Garage area and the MBTA station. FoxRock Properties, the real estate company chosen by the city to redevelop the Ross site, recently submitted a mixed-use project to the Planning Board for site approval that would include 200,000 square feet of space for medical offices, a 140-room hotel and 110 workforce housing apartments.[5] Federal, state, and private sources of funding will also support the continued development of the MBTA station. Identified

[5] Tiernan, Erin. (2018, December). Hotel, Housing, Medical Offices in the Works for Quincy Center. The Patriot Ledger. Retrieved from http://www.patriotledger.com/news/20181217/developer-proposes-hotel-housing-medical-offices-in-works-for-quincy-center.

as the Quincy Center Intermodal Station, this project is a critical element of the city's vision for Quincy Center by enhancing connections from Quincy to the MBTA network and destinations throughout the Greater Boston region.

Ultimately, the full impact of Quincy Center's redevelopment on the City of Quincy is yet to be realized. At a minimum, many of the major public infrastructure improvements are complete or nearing completion and the center of the district should soon be returning to a more normal pace as construction barrels and fences are replaced with new open spaces, improved transportation and pedestrian corridors, and revitalized buildings. Perhaps most importantly, it is hoped that the area will provide a new sense of optimism for Quincy Center and the City of Quincy as a whole.

LIST OF ACRONYMS

Abbreviation	Meaning
BAN	Bond Anticipation Notes
DHCD	Department of Housing and Community Development
DIF	District Improvement Financing
FTEs	Full-Time Equivalents
I-Cubed	Infrastructure Investment Incentive Program
IMPLAN	Economic Impact Analysis for Planning
LDA	New Quincy Center Land Disposition Agreement
LEHD	Longitudinal Employer-Household Dynamics
MAPC	Metropolitan Area Planning Council
MBTA	Massachusetts Bay Transportation Authority
PCD	Planning and Community Development
QCEW	Quarterly Census of Employment and Wages
QCRP	Quincy Center Revitalization Project
TIF	Tax Increment Financing
URDP	Urban Revitalization and Development Plan
URD	Urban Revitalization District

INTRODUCTION

The Quincy Center project is one of the largest urban revitalization efforts in Massachusetts.

Quincy Center, the core of one of America's most historic cities, is undergoing a major revitalization that is transforming the city's downtown into a vibrant high-density district with a mix of new residences, rejuvenated areas of commerce, and expanded public spaces. At the heart of the Quincy Center Revitalization Project (QCRP) is the Quincy Center Urban Renewal District (URD), which encompasses approximately 55 acres in the 113-acre Quincy Center area. This phased, multi-year project is one of the largest ongoing urban renaissance efforts in Massachusetts and strives to transform Quincy Center into an economic engine that renews downtown and supports additional investment throughout the city.

Quincy Center's revitalization is largely being achieved through investments in public infrastructure and place-making, which in turn leverage private development. Since 2012, more than $166 million in public infrastructure improvements in Quincy Center has leveraged over $171 million in private investment in completed or under construction projects. Major public infrastructure projects include the Concourse Roadway redevelopment, subsurface utility repair and replacement through the district, various public building renovations, the relocation of Town Brook, and the demolition of Ross Garage. Also included is the Adams Green Transportation Improvement Project, which paved the way for the creation of the Hancock Adams Common, a contiguous urban park space that ties together the district's transportation, historical, and architectural assets.

There is still significant work remaining to realize the full vision for Quincy Center. Public infrastructure improvements continue with the ongoing construction of the Hancock-Adams Green, a park that will provide the civic framework for Quincy Center. The Massachusetts Bay Transportation Authority's (MBTA) Quincy Center station is also being redeveloped to include a redesigned station, residences, and commercial and office space. Attention has also turned to redeveloping the Hancock Lot and Ross Garage areas. The Hancock Lot redevelopment will include the construction of a parking garage that will anchor two large, private, mixed-use developments, as well as improvements to the surrounding area. The redevelopment of the Ross Garage area will include the potential private development of more than a million square feet of commercial space as well as the replacement of the Burgin Parkway Bridge that will improve access to that area. Work is at least partly underway for most of these projects.

REPORT SCOPE

This report presents a comprehensive analysis of the individual and collective, local and regional economic benefits of the projects being developed in the Quincy Center, including spillover effects into adjacent neighborhoods. The report includes an analysis of the construction impacts of the projects as well as the resulting sustained economic impacts. However, effectively telling the story of the evolution of Quincy Center and "connecting the dots" between the numerous projects requires more than simply an econometric assessment. To place these projects and their economic impacts in their appropriate context, the report presents a detailed narrative documenting and describing

the history, key milestones, and the local and strategic context for the ways in which these projects have and will shape Quincy. Ultimately, this report aims to help the city's leaders and key stakeholders to better understand the goals and trade-offs that have been associated with the decisions made to date, and the role that the redevelopment plays in the city's larger vision for the downtown area and the city as a whole.

The study includes nine sections. Section I provides a demographic and economic overview of Quincy. Section II describes the urban renewal planning concepts that underpin the legal and logistical framework of the QCRP. Section III describes the various project elements and funding sources. Section IV presents a contextual historical timeline of the project. Section V presents the economic contributions of construction activities in terms of the number of jobs, labor income, and value of economic output. Section VI presents the impact of the sustained annual operations impacts that are generated from new economic activities in Quincy Center.

Section VII discusses other economic contributions of the project, including property tax revenues accrued to the city. Section VIII presents a quasi-experimental "differences in differences" regression approach to estimate the extent to which the economic impacts experienced in Quincy Center resulted in spillover effects that raised neighboring property values more than what would have occurred just due to larger economic trends. Section IX discusses the implications of the project in the context of how it is shaping Quincy for the future. A detailed methodology of the economic impact calculations is included in Appendix A.

1 QUINCY, MASSACHUSETTS DEMOGRAPHIC AND ECONOMIC CONTEXT

Quincy is a city of commuters, with 85 percent of employed residents commuting to workplaces located outside of the city limits daily.

Situated approximately 10 miles from the center of Boston, Quincy is a transit-rich city of 94,053[6] residents that is located within the Greater-Boston region (see Figure 3).[7] The city is strategically located within the Interstate 93 corridor and has abundant access to multiple transportation networks; major highways, buses, the commuter rail, the subway, and a commuter boat all connect to Quincy, making it easy for workers, visitors, and others to travel to and from the city. Indeed, Quincy is a city of commuters, with 85 percent of employed residents commuting to workplaces located outside of the city limits daily, and 84 percent of jobs located in the city filled by people who live elsewhere.[8] Despite its many public transportation options, the majority of Quincy residents drive to work, though the number of commuters who drive is expected to decline somewhat once the ongoing redevelopment of Quincy's MBTA stations is complete and as new transit-oriented housing developments come on line.

Figure 3

Rising tax receipts along with rising property values make it clear that Quincy's homeowners are benefitting from the wealth created by increased equity in their homes.

Housing production in Quincy has kept pace with the state average, and median housing prices have nearly recovered to pre-recession values. Rising assessed property values have led to higher property tax revenues, but this trend has been partiality counterbalanced by a decrease in the residential property tax rate.[9] Unsurprisingly, as property values have been rising in Quincy, between 2003 and 2018, the tax bill for the average single-family home increased 32.9 percent.[10] Notably, property taxes tend to increase over time even in communities that do not experience rising property values,

[6] Massachusetts Population Estimates Program, UMass Donahue Institute, 2016.

[7] A Community Snapshot infographic is included in Appendix B.

[8] U.S. Census Bureau LEHD Origin-Destination Employment Statistics (LODES.

[9] The commercial tax rate has also been declining since 2014.

[10] Inflation adjusted to 2018.

since normally the cost of municipal services rise over time due to inflation. Rising tax receipts along with rising property values make it clear that Quincy's homeowners are benefitting from the wealth created by increased equity in their homes, unlike their less fortunate neighbors in other urban communities, where the costs of local government (and local tax rates) continue to rise even as local property remain stagnant.

1.1 POPULATION GROWTH LAGS BEHIND STATEWIDE AVERAGE

Quincy's population is rising steadily, although the rate of population growth in the City of Presidents has lagged both the state as a whole and the Greater Boston region. Between 1990 and 2016, Quincy's population grew by 10.6 percent, compared to 13.4 percent for the state and 14.2 percent for Metro Boston (See Table 1).

Quincy's population is growing, but not as fast as the state population or the Greater Boston population.

Table 1
Total Population, Massachusetts, Boston, and Quincy, 1990–2016

	1990	2000	2010	2016	% Change 1990–2016
Massachusetts	6,016,425	6,349,113	6,564,943	6,823,721	13.4%
Metro Boston Region	4,056,947	4,306,692	4,457,728	4,631,507	14.2%
Quincy	84,985	88,025	92,455	94,053	10.6%

Source: Metro Boston Population and Housing Demand Projections, 1990–2016; Donahue Institute City and Town Annual Population Estimates, 1990–2016

The Metropolitan Area Planning Council (MAPC) predicts that between 2010 and 2030, Quincy's population will increase in the range of 10.5 percent (status quo estimate) and 15.8 percent in their "high growth" scenario (see Table 2).[11] Given the significant amount of new housing in development, Quincy's future growth may be closer to MAPC's higher growth scenario than the city's underlying demographic fundamentals suggest. For example, from 2014 to 2017, 547 new housing units were built in Quincy Center. An additional 710 housing units have been developed just outside of Quincy Center recently, including 398 units at Avalon Quincy. Furthermore, a 598-unit rental home and apartment complex is slated for the former Quincy Medical Center site.

Table 2
Quincy and Metro Boston
Population Projections, 2010-2030

	Quincy	Metro Boston
Status Quo	10.5%	5.1%
Strong Region	15.8%	9.6%

Source: MAPC Provisional Municipal Forecasts and Regional Projections, Status Quo (SQ) and Stronger Region (SR) Scenarios, 1990–2030

[11] Metropolitan Area Planning Council. See https://www.mapc.org/learn/data/ for more information.

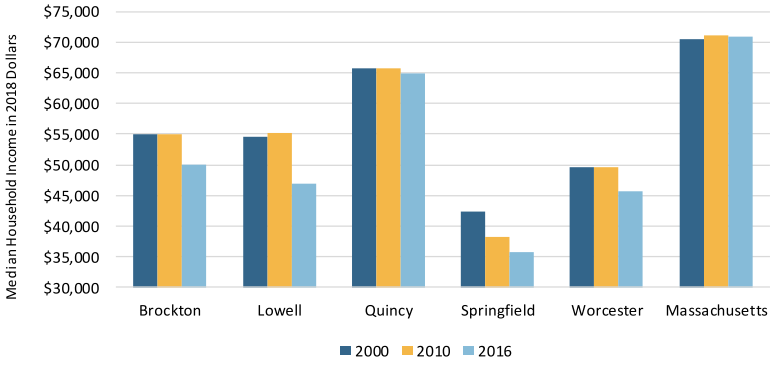
1.2 INCOME LEVELS ARE JUST UNDER STATEWIDE AVERAGES

Median household income in Quincy is slightly lower than the state average, but higher than similar Gateway Cities.

Median household income in Quincy is slightly lower than the state average, at $64,890 compared to $70,954. In addition, real incomes (after adjusting for inflation) have declined slightly. While real median household income in Massachusetts grew by an anemic 0.8 percent, or $566, between 2000 and 2016, Quincy's median household income decreased by 1.2 percent, or an estimated $786, within the same period (see Figure 4). Median income levels in similar Gateway Cities declined at a greater rate in comparison to Quincy.

Although the median household income in Quincy is lower than that of the state, Quincy is home to a smaller share of families that earn less than the federal poverty level. In 2016, 7.6 percent of families in Quincy had incomes below the federal poverty level, compared to 8.0 percent for the state as a whole.

Figure 4
Inflation Adjusted Median Household Income (2016 dollars), Massachusetts, Quincy, and Gateway Cities, 2000–2016



Source: 2000 Summary File,
American Community Survey 5-Year Estimates
2006–2010 and 2012–2016; Author's Calculations

1.3 QUINCY REMAINS A COMMUTING CITY

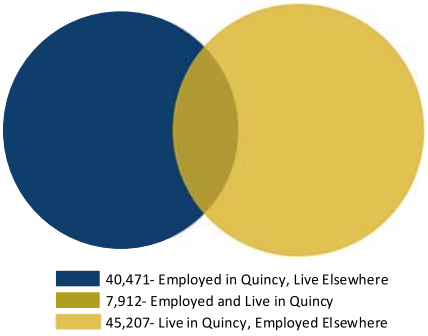
Current and future commercial development in Quincy Center, particularly in the areas of financial services and healthcare, may raise the income profile of jobs located in Quincy.

A large volume of workers travel to and from Quincy on a daily basis. Among the 48,383 people who work in Quincy, 83.6 percent (40,471) start their commutes from locations outside the city. Meanwhile, among Quincy's 53,119 employed residents, 85.1 percent (45,207) make their way to jobs outside the city each workday. The remaining 7,912 people both live and work in the region (see Figure 5).

As a group, residents who are employed outside the city earn higher wages than workers commuting into the city, and residents who live and work in Quincy earn the least of any group. This suggests that Quincy exports its most skilled workers, while importing lower-skilled, lower-wage workers. Current and future commercial development in Quincy Center, particularly in the areas of financial services and healthcare, may raise the income profile of jobs located in Quincy. However, the presence of MBTA's Red Line will continue to make Quincy an attractive bedroom community for commuters.

The presence of MBTA's Red Line continues to make Quincy an attractive community for commuters.

Figure 5
Inflow/Outflow Job Counts



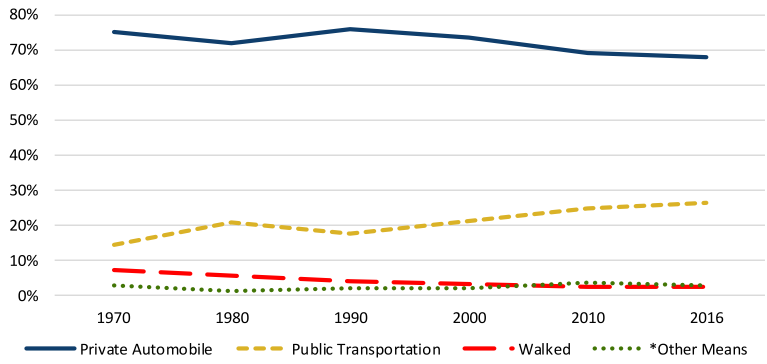
Source: U.S. Census Bureau LEHD Origin-Destination Employment Statistics (LODES); Inflow/Outflow Analysis, All Jobs, 2015

1.4 AUTOS REMAIN THE COMMUTING CHOICE FOR QUINCY RESIDENTS

Most Quincy residents who commute do so by automobile. However, the percentage has declined over time, as the share of commuters using public transportation has almost doubled over the past 40 years (see Figure 6). This trend is likely to continue as more transit-oriented residential development comes on line and once the redevelopment of the intermodal Quincy Center MBTA station is complete.

Most Quincy residents who commute do so by automobile, although this percentage has been declining.

Figure 6
Journey to Work, 1970-2016



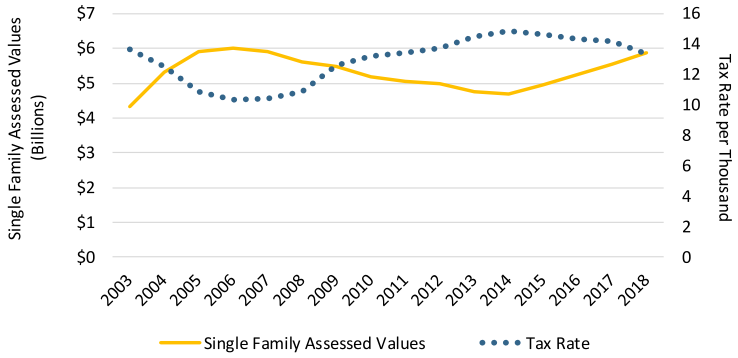
Source: IPUMS-USA, University of Minnesota, www.ipums.org, 1970–2016
*Taxicab, motorcycle, bicycle, work at home, or other means

1.5 ASSESSED VALUES ON THE RISE AS THE TAX RATE FALLS

Assessed housing values are rising, while the tax rate is declining.

During the housing downturn, the assessed values of single-family homes in Quincy fell, as they did across the region and the nation. As a response to the decline in values, property tax rates increased, a step that was required in order to maintain sufficient revenues to cover the cost of municipal services during the recession. Conversely, during the recovery phase, as assessed values of single-family homes rose, property tax rates declined as the larger tax base allowed for sufficient revenues to be generated at a lower tax rate. Figure 7 illustrates the relationship between assessed property values and tax rates during the downturn and recovery phases.

Figure 7
Single-Family Assessed Values
Versus Tax Rate, 2003–2014

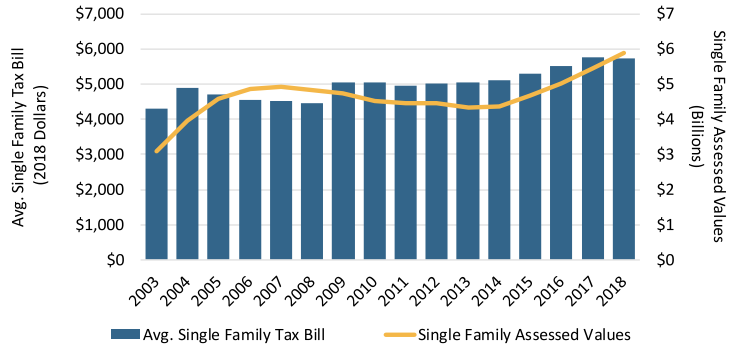


Source: Massachusetts Department of Revenue Municipal Finance Trends Dashboard
Assessed values inflation adjusted to 2018 dollars

While higher property tax bills may present financial challenges for some homeowners, home value appreciation is a major source of wealth creation.

From 2003 to 2018, the average property tax bill for a single-family home in Quincy rose, by 32.9 percent. The change is primarily due to increasing property values, which have appreciated by 36.3 percent (in 2018 dollars) since 2003 (see Figure 8). Quincy's tax rate has been consistently lower than in other Gateway Cities since 2010 (see Figure 9).

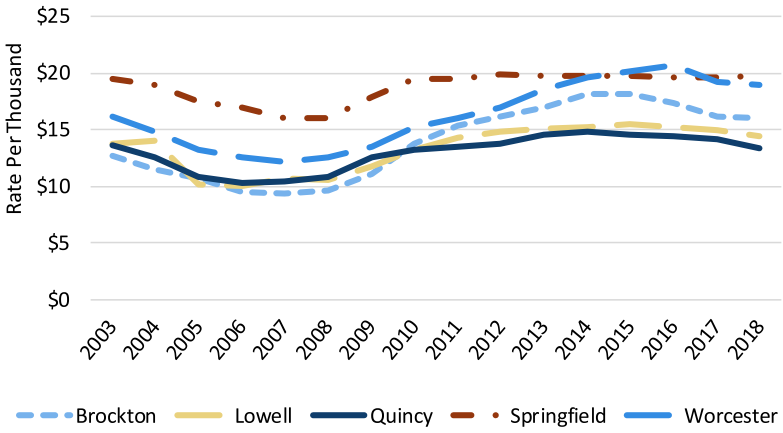
Figure 8
Average Single Family Tax Bill Versus
Assessed Values, Quincy, 2003–2018



Source: Massachusetts Department of Revenue Municipal Finance Trends Dashboard
Assessed values inflation adjusted to 2018 dollars

Quincy's tax rate has been consistently lower than in other Gateway Cities.

Figure 9
Residential Tax Rate, Quincy and Peer Communities, 2003–2018



Source: Massachusetts Department of Revenue Municipal Finance Trends Dashboard
All assessed values have been adjusted for inflation and reflect 2018 dollars

1.6 TOTAL TAX LEVY RISING

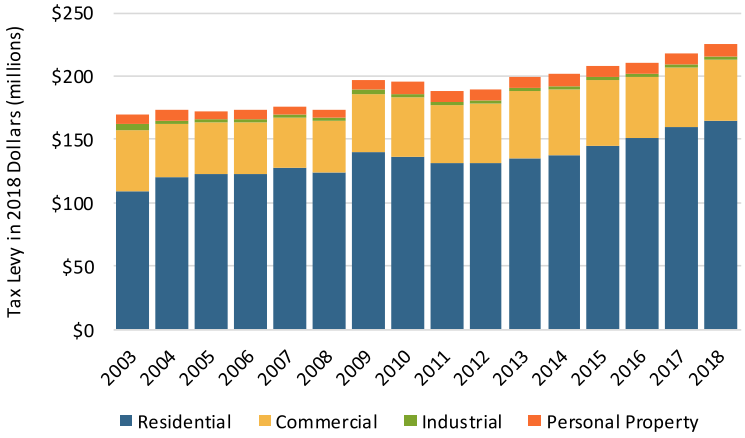
Rising tax receipts along with rising property values make it clear that Quincy's homeowners are benefitting from the wealth created by increased equity in their homes.

As a result of increasing property values, the city's total tax levy increased by 33.4 percent from 2003 to 2018 (see Figure 10). For most people, higher property taxes are a result of considerable appreciation in what is typically their largest financial asset – their home. While higher property tax bills may present financial challenges for some homeowners, home value appreciation is a major source of wealth creation. Notably, the city's Board of Assessors administers tax assistance programs for various eligible taxpayers.[12]

It is worth noting that, due to inflation and other factors, the cost of providing municipal services tends to increase over time. In a stagnant property value environment, taxpayers see their property taxes rise without an associated increase in the value of their home in response to these inflationary pressures. In a rising property value environment, homeowners receive the benefit of increasing home equity, which helps to offset the burden of rising municipal service costs. Communities that have not experienced a similar appreciation in housing values have had to contend with rising tax rates, higher tax bills, and none of the equity enhancing benefits that have been experienced by Quincy's homeowners in recent years.

[12] More information on the program and eligibility can be found at https://www.quincyma.gov/govt/depts/assessors/tax_assistance_programs.htm.

Figure 10
Inflation-Adjusted (2018) Tax Levy by Class, Quincy, 2003–2018



Source: Massachusetts Department of Revenue Municipal Finance Trends Dashboard

1.7 HOUSING PRODUCTION HAS KEPT PACE WITH THE STATE AVERAGE

Housing production in Quincy has kept pace with the state average

Despite slower population growth, housing production has kept pace with the state average, although it is well understood that housing production at the state level is insufficient to meet demand. In 2016, Quincy had a total of 42,409 housing units. The number of housing units in Massachusetts and Quincy increased at the same rate (9.7%) from 2000 to 2016. Notably, this growth is much faster than housing unit growth within similar Gateway Cities (see Table 3).

Table 3
Total Housing Units by Year Built,
Massachusetts and Quincy, 2000–2016

	2000	2010	2016	% Change (2000–2016)
Brockton	33,316	34,585	34,791	4.4%
Lowell	38,772	40,931	41,258	6.4%
Quincy	38,651	42,156	42,409	9.7%
Springfield	59,142	61,377	61,851	4.6%
Worcester	71,331	75,562	76,173	6.8%
Massachusetts	2,589,059	2,796,471	2,836,658	9.7%

Source: Census Bureau's American Community Survey 5-Year Estimates 2006–2010 and 2012–2016; 2000 Summary File; Author's Calculations

1.8 REAL ESTATE PRICES HAVE NOT QUITE RECOVERED FROM THE RECESSION

Quincy home sales and median sales prices still lag behind pre-recession values.

As of 2017, both the annual number of home sales and median sales prices still lag behind their pre-recession levels. A combined total of 1,406 homes in Quincy, including single-family, multi-family, and condos, were sold in 2017, compared to 1,740 sales in 2005 (See Figure 11). Quincy's median sales prices have been increasing steadily since the housing downturn reached its nadir locally in 2011. However, in 2017, the median sales price for a Quincy single-family home was $415,000, 5.9 percent less than in 2004 when the median sales price was $441,190 (see Figure 12). While median sales prices have not fully recovered, they are higher in Quincy than in most similar Gateway Cities or Massachusetts as a whole (Figure 13).

While median sales prices have not fully recovered, they are higher in Quincy than in most similar Gateway Cities or Massachusetts as a whole.

Figure 11
Number of Sales, Quincy, 1987–2017

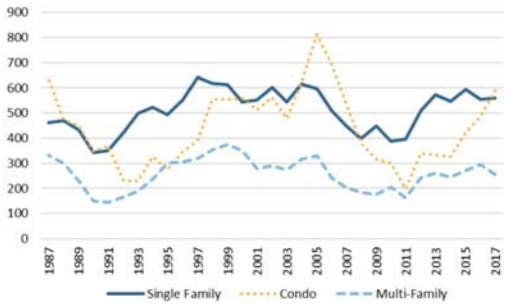
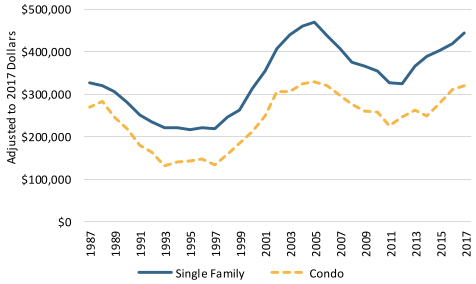
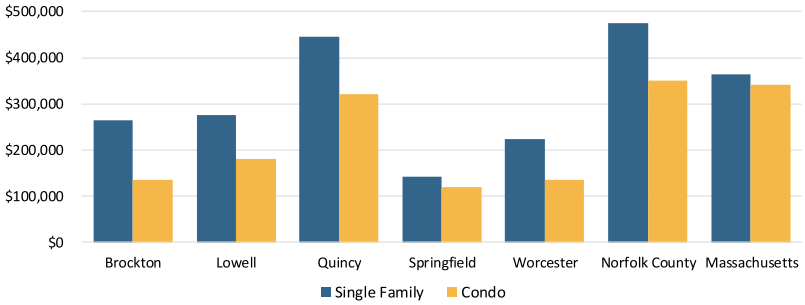


Figure 12
Median Sales Price, Single-Family Homes & Condos, Quincy, 1998–2017



Source: The Warren Group Town Stats,
Median Sales Price Adjusted for Inflation (2017 dollars).

Figure 13
Median Sales Price, Gateway Cities, Norfolk County, Massachusetts, 2017



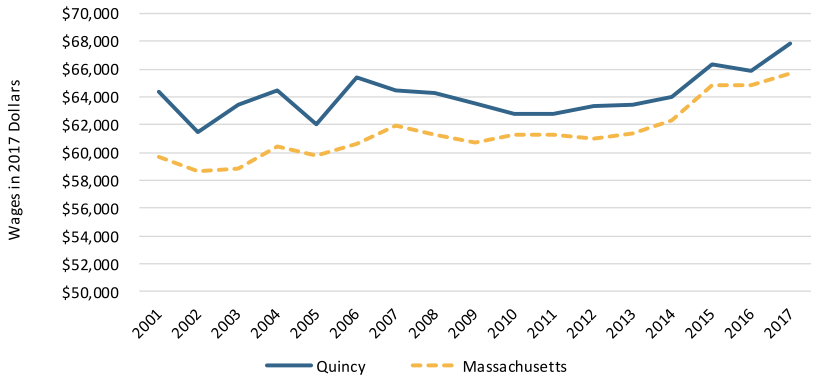
Source: The Warren Group Town Stats

1.9 ANNUAL WAGES OF JOBS IN QUINCY ARE HIGHER THAN THE STATE AND RISING

Inflated adjusted wages in Quincy are higher than the state as a whole. Quincy's average inflation-adjusted wages increased roughly 6 percent between 2001 and 2017, while Massachusetts' wages increased 10 percent over this period (Figure 14).[13]

Inflated adjusted wages in Quincy are higher than the state as a whole and are rising.

Figure 14
Inflation Adjusted Wages, Quincy and Massachusetts, 2001–2017



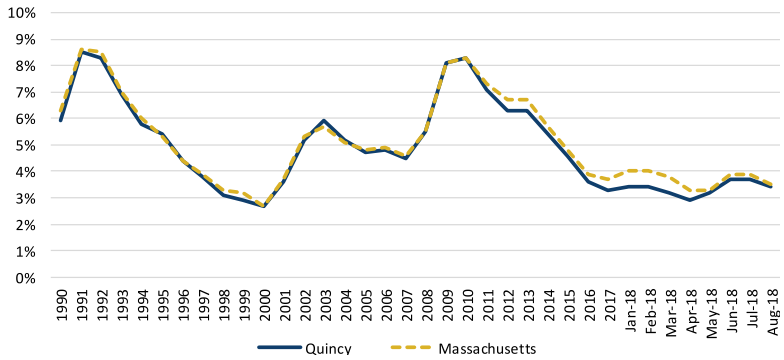
Source: EMSI (based on QCEW data), 2001–2017; Includes self-employed workers.

1.10 UNEMPLOYMENT RATES DECREASING SINCE RECESSION

Quincy's unemployment rates have recovered from pre-recession levels and closely tracked the state unemployment rate throughout the business cycle (see Figure 15).

Quincy's unemployment rates have recovered from prerecession levels and closely tracked the state unemployment rate throughout the business cycle.

Figure 15
Unemployment Rates, Quincy and Massachusetts, 1990–August 2018



Source: Executive Office of Labor and Workforce Development (EOLWD), 1990–August 2018

[13] This data measures the wages of jobs located in Quincy and not the wages of Quincy residents.

2 PRINCIPLES OF URBAN RENEWAL

The Quincy Center revitalization project employs several planning and funding concepts that underpin the legal and logistical framework of the project. Overall, the redevelopment project employs fundamental urban renewal principles related to zoning, finance, and development to achieve this goal. This section highlights some of the regulatory mechanisms and processes that were essential to project implementation.

2.1 MASSACHUSETTS URBAN RENEWAL PROGRAM

The Urban Renewal Program provides tools for communities to redevelop deteriorated and blighted areas.

The Massachusetts Legislature established the Urban Renewal Program to assist communities in the revitalization of decadent, substandard, or blighted open areas using a range of public actions.[14] These activities are governed under Massachusetts General Laws Chapter 121B. The program, administered by the Massachusetts Department of Housing and Community Development (DHCD), provides tools for communities to redevelop deteriorated and blighted areas to promote sound growth and to attract and support private investment within designated areas. Activities that a city may carry out under the Urban Renewal designation include:[15]

- Preparing and implementing Urban Renewal Plans,
- Carrying out planning studies,
- Establishing rehabilitation and design standards,
- Acquiring real estate, including acquisition by eminent domain,
- Demolishing and/or rehabilitating structures,
- Undertaking site preparation and environmental remediation,
- Assembling and disposing of land for private development,
- Relocating displaced businesses and residents,
- Issuing bonds and borrowing money, and
- Receiving grants and loans.

The urban renewal tool is particularly useful when the municipality and/or private sector are unable or unwilling to redevelop these areas. Importantly, redevelopment within Urban Renewal Areas must be undertaken in accordance with an urban renewal and redevelopment plan and subsequent approval by DHCD. In order to designate a project area as an Urban Renewal Area, a community is required to make a finding in its plan that the Project Area is either substandard, decadent, or blighted.

2.2 THE QUINCY CENTER URBAN RENEWAL DISTRICT

In 1972, the Massachusetts Legislature under Chapter 898 authorized Quincy's Department of Planning and Community Development (PCD) to act as the City's

[14] Massachusetts General Laws Chapter 121A authorizes Urban Redevelopment Corporations to undertake these actions.

[15] For more on the program visit https://www.mass.gov/service-details/urban-renewal-ur.

redevelopment authority.[16] Under Chapter 898, PCD is authorized to "recommend to the Mayor and City Council which areas of the city meet the criteria for being decadent, substandard, or blighted open areas; to prepare plans for the clearance, conservation and rehabilitation of decadent, substandard or blighted open areas; and to prepare, seek approval of, and thereafter enforce urban renewal plans within the limits of the City of Quincy."[17]

The guiding principles of the urban renewal area are established in the Quincy Center District Urban Revitalization and Development Plan (URDP): An Urban Renewal Plan for the Quincy Center Urban Revitalization District.

Under 121B, PCD designated approximately 55 acres in the 113-acre Quincy Center area as an Urban Renewal Area in 2007. The guiding principles of the Urban Renewal Area are established in PCD's *Quincy Center District Urban Revitalization and Development Plan (URDP): An Urban Renewal Plan for the Quincy Center Urban Revitalization District.* The URDP identifies several policy and regulatory initiatives that include new zoning, adoption of a District Improvement Financing Plan (DIF), and the designation of a portion of the Quincy Center District as an Urban Renewal Area. The URDP analysis concluded that "the Project Area constitutes a decadent area;" that "with little exception, no significant private investment has occurred in most of the properties for over fifty years;" and "ordinary operations of private enterprise, acting alone, are unlikely to reverse these trends."[18] The DHCD concluded in 2007 that Quincy Center met the eligibility requirements of the Urban Renewal Program, leading to the approval of the URDP and the subsequent official formation of the Quincy Center Urban Revitalization District (URD) (see Figure 16).

Figure 16
Quincy Center and the
Quincy Center Urban Revitalization District

Source: Public Policy Center.

[16] While this allows PCD to act on behalf of the city to carry our urban renewal activities, the department does not have the independent power to acquire property by eminent domain, which must be undertaken by the city.

[17] City of Quincy, Massachusetts. (7 May 2007). *Quincy Center District Urban Revitalization and Development Plan: An Urban Renewal Plan for the Quincy Center Urban Revitalization District.*

[18] Ibid.

2.3 A WORKING PLAN

Quincy Center's revitalization is multifaceted and subject to unanticipated challenges. Reflecting the need for flexibility, the URDP is a working document that has been amended four times since its adoption in 2007. The four amendments to the URDP are:

The URDP is a working document that has been amended four times since its adoption in 2007.

1. *URDP Amendment #1*: Names Street-Works (Hancock-Adams, LLC) as the Master Developer in the URD to coordinate redevelopment activities, with the support of PCD. The amendment also introduces a streamlined permitting process, encourages a shared parking approach to new development, and unlocks the use of Massachusetts General Laws Chapter 121A financing.
2. *URDP Amendment #2*: Establishes a formal redevelopment agreement with Street-Works through the "New Quincy Center Land Disposition Agreement" (LDA).
3. *URDP Amendment #3*: Expands the URD boundary to include the Quincy Center MBTA Station while also focusing attention on future redevelopment of the Hancock Lot Area and Ross Garage Area.
4. *URD Amendment #4:* Designates the City of Quincy as the Master Developer for the two city parcels identified for redevelopment in the URDP. The amendment also updates the URDP to include the redevelopment program for the city-owned 5-acre Hancock Parking Lot.

3 PROJECT ELEMENTS AND FUNDING

As noted, Quincy Center is among the largest ongoing urban revitalization efforts in Massachusetts. Significant public infrastructure improvements have been completed and are already paying dividends by attracting new private development to the district. Public infrastructure improvements are continuing, as are the prospects for continued private investment.

3.1 COMPLETED PUBLIC INFRASTRUCTURE PROJECTS: 2004–2018

Significant public infrastructure improvements have been completed and they are already paying dividends by attracting new private development to the district.

Completed public infrastructure projects are highlighted in Table 4, including new infrastructure, new buildings, and renovations to existing buildings. The majority of the projects are centered on the redevelopment of Adams Green, which will create a contiguous urban park space that is intended to better connect transportation, historical, and architectural assets. The total investment for these projects totals over $116.2 million, which includes hard costs, such as actual construction, and soft costs such as, design, legal, and related expenses. A brief description of each project follows the table.

Table 4
Completed Public Infrastructure Projects: 2004–2018

Project Name	Investment	Type of Project
Adams Academy Restoration	$85,000	Public Building
Bethany Church Restoration	$260,000	Cultural Facility
City Hall Restoration	$13,000,000	Public Building
Coddington School Renovation	$11,000,000	Educational Facility
Concourse Phase II – Hancock Street Crossing	$30,000,000	Infrastructure
Concourse Phase III – McGrath Highway	$6,700,000	Infrastructure
Faxon Field Track	$1,000,000	Public Facility
Hancock Adams Green Park	$20,900,000	Public Facility
Hancock-Adams Common Roadway Improvement Project	$13,500,000	Trans/Infrastructure
Hancock Cemetery Improvements	$702,000	Historic Facility
Quincy High School Park	$1,500,000	Public Facility
Quincy Center MBTA Station	$1,028,300	Trans/Infrastructure
Ross Garage Demolition	$5,800,000	Public Facility
Thomas Crane Library Rehabilitation	$152,300	Public Facility
Town Brook Relocation	$10,328,624	Infrastructure
United First Parish Church Renovation	$255,000	Cultural Facility
Total	$116,211,224	

Source: City of Quincy.

Adams Academy Window Preservation: The Adams Academy is a historic edifice of great importance in the City of Quincy and to the Downtown. Boasting National Historic Landmark status, the building marks the Northerly gateway to the new Downtown and Hancock-Adams Common. This project sought to repair, replace, paint and perform asbestos abatement in window glazing and caulking to ensure the preservation of the character of this historic building for the benefit of current and future generations. As part of the Hancock Adams Common project, the City performed subsurface utility upgrades at the site, updated the landscaping with new plantings, and rededicated the monument to John Hancock who was born at the location prior to the Academy being built.

Bethany Church Restoration: In 2013, a lightning strike hit the bell tower damaging one of the four pinnacles of the historic Gothic Revival church building built in 1927. Community Preservation Act funds were used to make repairs to the bell tower, along with replacing a gargoyle damaged during a prior lightning strike.

City Hall Restoration: The original 1844 Greek-revival edifice constructed with Quincy granite underwent a complete renovation within the guidelines of the historic district commission to ensure a restoration befitting the structure's status on the National Register of Historic Places. The two-year transformation brought the building into the 21st century, implementing state-of-the-art technology and new utilities, redesigned "Great Hall" harkening back to the original design of the City Council's chambers, creation of additional meeting space for boards and commissions and public hearings, and a museum, while maintaining the architectural magnificence of the Solomon Willard exterior design.

Coddington School Renovation: The Coddington School was designed in 1909 by well-known Boston architect Charles Brigham, who also designed Boston's Museum of Fine Arts. Prior to its renovation, the building was the home of Quincy Junior College. The goal of the restoration and renovation was to provide new space for a number of City of Quincy departments, primarily the administration arm of Quincy Public Schools as well as the Quincy Planning Department and the Department of Information & Technology.

The scope of work included restoration of exterior masonry, new slate roof, copper gutters, new galvanized metal fascia, soffits, and dentils to match the original, new windows, new interior office and meeting spaces, new mechanical, electrical, plumbing and fire suppression systems, new utility services to the building, new landscaping, site paving, and exterior lighting.

Concourse Phase II – Hancock Street Crossing: Concourse Phase II – Hancock Street Crossing proved to be the most impactful segment of the roadway project. Nine private properties were taken by the City, with tenants being relocated and buildings demolished in order to create right-of-way. The City was successful in securing American Recovery and Reinvestment Assistance Funds (ARRA) for roadway construction performed under the direction of MassDOT. During a ceremony on October 2, 2011, the completed roadway was named the Walter Hannon Parkway and opened for use.

Concourse Phase III – McGrath Hwy: Concourse Phase III - McGrath Highway project involved the full reconstruction of the existing four-lane roadway and included the relocation of overhead utilities to a new underground system along with other subsurface utility improvements. Landscaped median strips were also added to enhance this emerging east-west corridor.

Faxon Field Track: Named for Henry M. Faxon, who bequeathed this land to the people of the city of Quincy in 1919, this property includes a basketball court, children's playground equipment, a football practice field, regulation sized track and field facility, two softball fields, and five lighted tennis courts. Adjacent to Quincy High School, parking lots are located on Coddington Street and Russell Park.

Hancock-Adams Common Roadway Improvement Project: The City advanced the Hancock-Adams Common from preliminary concept to reality by first focusing its efforts on how to close Hancock Street. Using Federal Highway funding, Quincy worked with MassDOT and its civil engineering firm to realign north and south traffic patterns behind the United First Parish that resulted in a major intersection upgrade at Coddington Street-Washington Street-Temple Street. Major intersection upgrades also occurred at Hancock Street-Granite Street- Chestnut Street, and a new intersection was added at the vehicular entrance to the Quincy Center MBTA Station entrance off of Hancock Street. Several pedestrian/bicycle enhancements were incorporated into the roadway improvements including wider sidewalks, new and enhanced pedestrian crossings, and bicycle markings. In addition to the roadway improvements, all of the subsurface utility systems in the project area were upgraded.

Hancock-Adams Common Park: The Hancock-Adams Common is the new centerpiece for Quincy Center as revitalization of its historic downtown continues. Where a four-lane roadway used to move cars through the downtown as quickly as possible, one can now find a world-class park to spend time with friends and family, discover the importance of this nation's Founding Fathers that once called Quincy home, or visit City Hall and access a public transit station with connections to both the commuter rail and light rail MBTA network.

Hancock Cemetery Improvements: In 2014, the City created a Historic Hancock Cemetery improvement plan that has allowed for the restoration of the historic burial grounds. Gravestones have been cleaned, tombs have been restored, and historic iron fencing has been restored. Additional fencing and a new walking path with wayfinding elements are still in the planning stages.

Quincy High School "Educator's Green": The new Quincy High School was constructed adjacent to the old high school building. A feasibility analysis was performed on the old building, but it was deemed too costly to preserve the structure. As a result, a new park was constructed in its place and incorporated into the new high school campus. A ten foot granite monument depicting an apple to honor the educators of Quincy was dedicated in 2016.

Quincy Center MBTA Station: In July of 2012, the MBTA closed the Quincy Center Station garage for parking, citing structural issues. The station's train platforms and the bus service remain in operation. In 2016, the City expanded the Urban Renewal District boundary to include the MBTA station, and the following year the MBTA chose a designated developer who has proposed a mixed-use redevelopment concept with housing, office, and retail elements. The MBTA began demolition of the derelict garage in 2018 and the City looks forward to engaging with the development team in the near future.

Ross Garage Demolition: The Ross Garage Demolition project is an example of the predevelopment activities the city is undertaking to unlock the development potential in Quincy Center. The 40+ year old structure reached the end of its service life and needed to be taken down. The City was able to advance several subsurface utility improvements at the former garage site then paved it over to so it could continue as a surface parking lot on an interim basis until new redevelopment occurs.

Thomas Crane Library Rehabilitation: The Thomas Crane Public Library was built in four stages: the original building (1882) by architect HH Richardson; an additional ell with stack space and stained glass (1908) by William Martin Aiken in Richardson's style; a major expansion (1939) by architects Paul A. and Carroll Coletti, with stone carvings by sculptor Joseph A. Coletti of Quincy; and a recent addition (2001) by Boston architects Childs, Bertman, and Tseckares, which doubled the size of the library. H.H. Richardson considered this library among his most successful civic buildings, and Harper's Weekly called it "the best village library in the United States."[19] In recent years, the City has advanced several measures to preserve and enhance the library experience. Lighting fixtures and doors were repaired in the original library wing along with repairs to the stained-glass windows. The basement of the original library was also restored to serve the community as a bookstore run by library volunteers.

Town Brook Relocation: As redevelopment opportunities began to emerge in Quincy Center, it became clear that the existing Town Brook Culvert system running under the downtown would be unable to support new development and would in fact hamper the City's ability to unlock the development potential of the Hancock Lot and Ross Garage. The degree of difficulty for this effort was significant; how does one replace an existing underground culvert that runs under buildings? Utilizing Concourse right-of-way takings, the City designed and constructed the Town Brook Relocation project under Hancock Street along the Walter Hannon Parkway. The brook daylights at the intersection with Mechanic Street where a series of environmental engineering elements were incorporated into the culvert aimed at supporting smelt spawning in the area. Two new pocket parks were constructed in this area for public enjoyment.

[19] Breish, K. (2003). *Henry Hobson Richardson and the Small Public Library in America: A Study in Typology.* MIT Press.

United First Parish Church Renovation: In 2011, the United First Parish Church congregation launched a rehabilitation of the historic church building's belfry. As part of the effort, the City approved funding to replace and reactivate the bell along with repairs to the existing clock. Later, the City performed drainage and accessibility improvements at the church during the Hancock-Adams Common construction to ensure the church grounds would become a feature of the new park and continue to serve as the final resting place of two presidents.

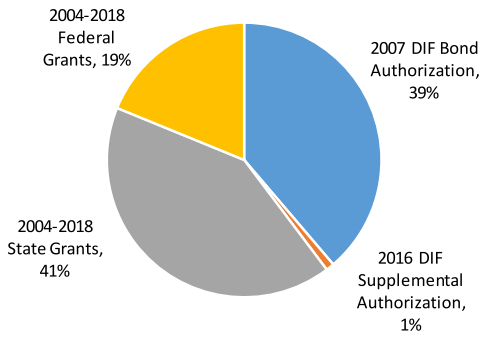
Community Preservation Act funds have been dedicated to the purpose of conducting a feasibility study and, subsequent to the study, a project is ongoing to improve accessibility to the Presidential crypts. The goals of the project include creating a historically and architecturally appropriate exterior handicap access ramp from the new Hancock-Adams Common to the main level lobby of the church, as well as constructing an elevator to provide public handicap access from the lobby to the lower level location of the Adams crypts, with associated crypt maintenance and upgrades.

3.2 FUNDING PUBLIC INFRASTRUCTURE IMPROVEMENTS

More than $103 million in bonds and state and federal grants were used to fund the public infrastructure work in Quincy Center between 2004 and 2018.[20] Forty percent of this amount ($41 million) has come from District Improvement Financing (DIF), while state grants accounted for 41 percent of the total, and federal grants accounted for 19 percent of the total (see Figure 17).[21]

More than $103 million in bonds and state and federal grants funded the public infrastructure work in Quincy Center from 2004 through 2018.

Figure 17
Quincy Center Public Financing 2004–2018



Source: City of Quincy

The funding from the state's first DIF Plan established a 113-acre DIF District in Quincy that encompasses the URD (see Figure 18). DIF financing enables the city to issue bonds in support of public infrastructure improvements, the debt service for which is funded by the future incremental tax growth of the subsequent private developments in the

[20] Smaller sources include Community Preservation Act, city bonds, and private donations.
[21] A detailed description of each of these funding sources is included in Appendix C.

district.[22] The creation of the DIF District was vital to the city's revitalization strategy because it established a funding mechanism necessary to secure other state and federal funding. The Phase I DIF financial strategy was informed by PCD's *Quincy Center District, District Improvement Financing (DIF): Development and Invested Revenue Plan,* which assesses Quincy Center's development potential over a 30-year period.

Incremental tax revenues in the DIF have increased at a rate that exceeds the debt service on the bonds.

The $40 million Phase I DIF bond funded several critical infrastructure improvements that included the Walter Hannon Parkway (Concourse Roadway Project), relocation of the Town Brook, demolition of the Ross Garage, the Hancock Adams Common Transportation Improvement Project, utility work, and other design, legal, and engineering services.[23] Importantly, incremental tax revenues in the DIF have increased at a rate that exceeds the debt service on the bonds, and as a consequence of the infrastructure improvements and since the institution of the DIF, several private mixed-use developments have been constructed.[24]

Figure 18
Quincy Center and the
Quincy Center Urban Revitalization District

Source: Public Policy Center.

[22] This is different from Tax Increment Financing, or TIF, by which landowners may be granted property tax exemptions of up to 100 percent of the tax increment.

[23] A critical feature of DIF financing is Bond Anticipation Notes (BANs), which are interest only short-term bonds that are paid over the first few years of the full 30-year DIF term. While BANs eventually roll over to traditional bonds (in which both interest and principal are paid), the interest only feature of the BANs allows the city to make lower debt service payments to fund public infrastructure improvements, with the anticipation that future tax increments derived from leveraged private development are sufficient to pay the debt service on the bonds once the four to five year BAN period has ended.

[24] RKG Associates, Inc. (15 May 2017). *Quincy Center District Improvement Financing: Phase II Bond Authorization.*

3.3 COMPLETED AND UNDER CONSTRUCTION PRIVATE DEVELOPMENTS

Public infrastructure improvements helped to leverage six private developments in Quincy Center, which have a total construction value of more than $171 million.[25] In all, these projects will add 382 new housing units to the downtown, more than 10,000 square feet of retail space, and nearly 30,000 square feet of commercial/office space (see Table 5).

Table 5
Completed Private Infrastructure Projects

Project Name	Investment	Type of Project
Cliveden Place	$20,000,000	Housing
22 Mechanic	$10,000,000	Housing
111 Washington Street	$6,500,000	Commercial/Office
West of Chestnut	$56,000,000	Housing
Nova Residences (under construction)	$40,000,000	Housing
Chestnut Place (under construction)	$38,838,915	Housing/Commercial

Source. City of Quincy.

3.4 FUTURE PUBLIC INFRASTRUCTURE IMPROVEMENTS

A significant amount of work will continue in Quincy Center in the coming years, including the redevelopment of the Hancock Lot and Ross Garage areas and the redevelopment of the MBTA station into a mixed-use facility (see Table 6). Work is at least partly underway for most of these projects. Importantly, these projects do not include the potential private development of more than a million square feet in the Ross Garage area, additional private development in the Hancock Lot area, and the potential redevelopment of the Star Market site.

Public infrastructure improvements helped to leverage six private developments in Quincy Center, which have a total construction value of over $171 million.

Table 6
Planned Public Infrastructure Projects to Support
Redevelopment of Hancock Lot and MBTA Station

Project Name	*Investment	Type of Project
1500 Hancock Public Improvements	$5,110,000	Infrastructure
Burgin Parkway Bridge	$15,000,000	Trans/Infrastructure
Cottage Ave & Hancock Street Public Improvements	$3,700,000	Trans/Infrastructure
Hancock Adams Green Subsurface Utilities	$825,600	Infrastructure
Hancock Garage	$39,562,500	Public Facility
Hancock Lot Public Improvements	$6,500,000	Public Facility
Quincy Center MBTA Zone	$42,000,000	Trans/Infrastructure
Ross Garage Zone	$25,000,000	Public Infrastructure, Private Development

Source: City of Quincy.

[25] Two of these projects are currently under construction.

These projects will be financed through a variety of sources, including an $80 million DIF Phase II bill approved by the Quincy City Council in June 2017. The DIF funding will support infrastructure work currently underway in the Hancock Lot area, the beginning stages of the Ross Garage area development, and the redevelopment of the MBTA station. Nearly $70 million in other city bonds and state and federal funds will also be used to finance these projects (see Table 7).[26]

Table 7
Quincy Center Public Financing 2017–Current

Funding Source	Amount
2017 DIF-2 Bond Authorization	$80,000,000
Hancock-Adams Green Phase III Hotel-Motel Bond	$15,700,000
2012 State I-Cubed Preliminary Approval (Extension June 2019)[27]	$40,000,000
2017/2018 MassWorks Grant	$2,000,000
2018 MassDOT Bridge Program (estimate)	$7,000,000
2015 Mass Cultural Facilities Grant	$190,000
2016 U.S. DOT Bus/Busway Grant	$4,273,771
Total:	$149,163,771

Source: City of Quincy

[26] A portion of the work in the Ross Garage area will be financed by the developer.

[27] The Infrastructure Investment Incentive Program ("I-Cubed") is an public-private partnership funding innovation created to spur economic development and job growth in the Commonwealth through support for large-scale private real estate development projects.

4 HISTORICAL AND ECONOMIC CONTEXT OF THE QUINCY CENTER PROJECT

Often called the "City of Presidents," Quincy is a historically rich city that is the birthplace of two U.S. presidents: John Adams and John Quincy Adams. Settled in 1625, Quincy was officially incorporated as its own town in 1792, taking its name from Colonel John Quincy, and incorporated as a city in 1888. Quincy is home to numerous historic sites and buildings, including the Adams National Historical Park, which includes the farmhouse where both presidents were born; the Thomas Crane Public Library, a National Historic Landmark; the United First Parish Church, where John Adams and John Quincy Adams are entombed; and the birthplace of John Hancock.

Quincy has been well connected via transportation infrastructure for much of its history.

Quincy has been well connected via transportation infrastructure for much of its history, with the country's first commercial railroad created to ship Quincy granite around the world. Passenger rail came to Quincy in 1845 in the form of the Old Colony Line, which operated until 1959. New industries, primarily in the metal trades, began to locate along the railroad. New residential communities were developed to provide housing for workers in those industries, although many of Quincy's new residents were Boston commuters. This pattern would continue into and throughout the 1900s, with the city's growing population representing a mix of local workers and commuters.[28]

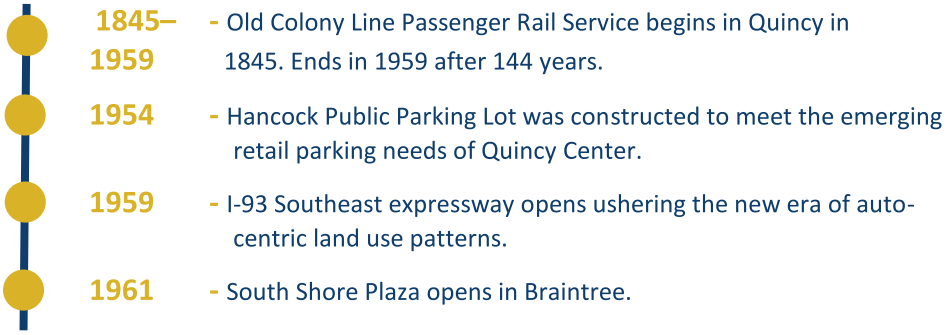
Quincy is similar to other Massachusetts Gateway Cities that struggled throughout the second half of the 20th century with the structural shocks of de-industrialization.

In many ways, Quincy is similar to other Massachusetts Gateway Cities that struggled throughout the second half of the 20th century with the structural shocks of de-industrialization and the transition to a post-industrial economy. Once home to major granite quarries and a vibrant shipbuilding and maritime economy centered around the Fore River Shipyard and Squantum Victory Yard, these traditional industries fell out of prominence in the 1960s and Quincy's economic growth stagnated. During the same period, Quincy's retail dominance as "Shoppers Town USA" began to decline as the state's suburbs grew and shopping and strip malls followed. This problem was exacerbated with the construction of the I-93 Southeast expressway in 1959, which ushered in a new era of auto-centric land use patterns.

The opening of the South Shore Plaza in Braintree in 1961, one of the first highway-dependent retail destinations in the region, heightened the competitive retail landscape. Worsening this problem was the continued decline in manufacturing jobs in the area, which led to even fewer dollars being spent locally and a subsequent shift in private investment from urban centers to developing suburban communities.

[28] Quincy Historical Society. *A Capsule History of Quincy.* Fall 1992.

Figure 19
Early Development Timeline



The Quincy Center MBTA station opened in 1971 and the North Quincy and Wollaston stations opened around the same period. While these stations made Quincy more attractive to Boston commuters, they also afforded commuters access to jobs in Boston from even more distant suburban communities, exacerbating suburban sprawl. In addition, these improvements to a degree made Quincy Center a less important asset to the day-to-day lives of Quincy's residents, who could often find the same amenities in their own neighborhoods or more easily shop, dine, and be entertained in neighboring communities that were increasingly easier to reach by train or automobile.

In an effort to address the economic decline in Quincy Center, the city commissioned the Quincy Center Development Plan in 1973.

In an effort to address the economic decline in Quincy Center, the city commissioned the *Quincy Center Development Plan in 1973,* which presented potential marketing opportunities for retail, office, and residential development and an evaluation of potential development sites and rehabilitation districts. While these efforts did not lead to any immediate gains in the economic health of Quincy Center, they did lay the foundation for future redevelopment efforts.

Transportation infrastructure investments on the South Shore continued when the MBTA began operation of commuter rail service to twenty-two communities along the Route 3 corridor in 1997, with a stop at the Quincy Center station. Some private development did occur in Quincy Center in the 1980s, including the construction of Quincy Center Plaza in 1982, a new 10-story office building at 1385 Hancock Street (now the Stop & Shop Headquarters) and an adjoining parking garage, both funded with assistance from the city in the form of a 121A tax agreement.[29]

The Quincy Adams Station, Quincy's fourth MBTA station, opened in 1984 and the Burgin Parkway Extension opened a year later, providing Quincy Center with a direct link to the interstate highway at the Braintree interchange. These transportation improvements further cemented Quincy as a less expensive alternative for Boston commuters. However, while transportation improvements enhanced connections between Quincy and its

[29] Massachusetts General Laws Chapter 121A authorizes the exemption of 121A developments from real and personal property taxes, betterments, and special assessments, and establishes procedures for negotiating an alternative tax payment on these developments.

neighbors, it was a double-edged sword that precipitated the economic stagnation of Quincy Center.

Figure 20
Development Timeline 1970 to 1990

Progress in Quincy Center was hindered by several factors, including an aging infrastructure, a congested road network, poor pedestrian access, and an overall decline in the downtown's appearance.

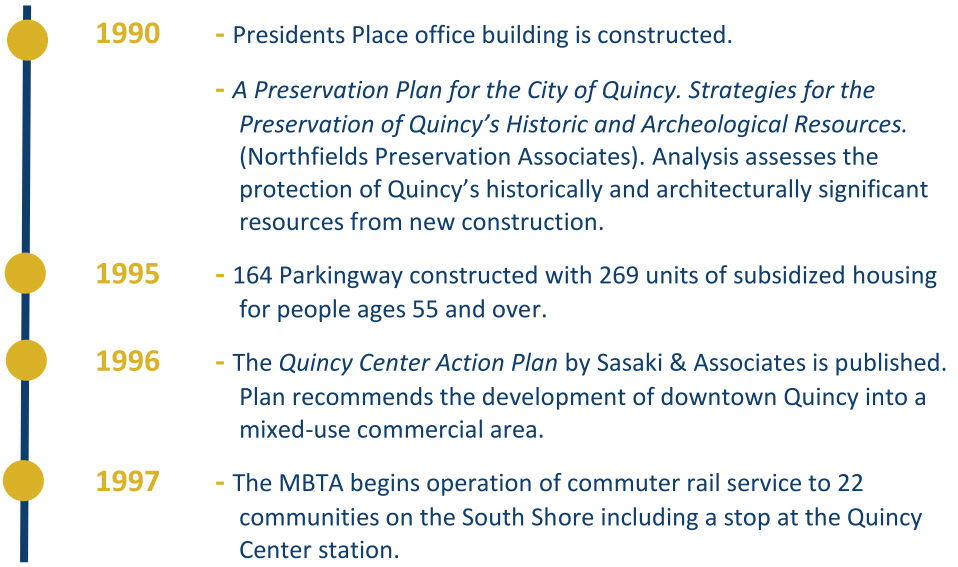
Quincy Center continued to attract some businesses and professionals throughout the 1990s with its comparatively low cost of living, convenient location, transportation access, and other amenities. However, progress was hindered by several factors, including an aging infrastructure, a congested road network, poor pedestrian access, and an overall decline in the downtown's appearance.[30] Despite the opening of the Presidents Place office building in 1990 (with assistance from the city through an urban renewal plan that included eminent domain land takings to create the developable site), Quincy Center continued to languish.

[30] City of Quincy, Massachusetts. (7 May 2007). *Quincy Center District Urban Revitalization and Development Plan: An Urban Renewal Plan for the Quincy Center Urban Revitalization District.*

Quincy Center's redevelopment was revisited again in 1996 with the *Quincy Center Action Plan*, which provided a blueprint and implementation strategy to "guide, manage, and encourage the continuing development of Quincy Center as a vibrant, mixed-use urban district and commercial center for the City of Quincy and the South Shore."[31] While this effort fell short of stemming the erosion of Quincy Center, it provided the foundation upon which future efforts would build, including several recommendations that are still important for the city's redevelopment: providing a better pedestrian environment, redevelopment of the Hancock Parking Lot, and preservation of historic resources.[32]

The Quincy Center Action Plan provided the foundation from which future efforts would build.

Figure 21
Development Timeline 1990s



Efforts focusing on downtown revitalization continued into the next century with the formation of the Quincy Downtown Redevelopment Committee in 2003. At roughly the same time, the city engaged Goody Clancy & Associates to facilitate public workshops in order to solicit residents' visions for downtown. Several themes emerged as recommendations from the workshops, including that the city "build on historic and other assets to reinvigorate downtown; foster a lively mixed-use district (add more housing, commercial, and retail uses); create a vibrant public realm (encourage active streets by adding signature parks and expanded retail opportunities); organize more special events; encourage transit use and strengthen pedestrian connections; resolve parking and traffic issues; work with businesses to make physical improvements; support new entertainment spaces (add a visitor center, arts theater, or cultural center); address environmental issues; and create new zoning to promote implementation of the community's vision."[33]

[31] Sasaki & Associates. 1996. *Quincy Center Action Plan.*

[32] Ibid.

[33] Goody Clancy; Byrne McKinney & Associates. (August 2006). *Quincy Downtown Vision, Framework and Strategy.*

Informed by this process, the Quincy City Council adopted a new zoning ordinance creating two new zoning districts that "allow for mixed-use development by-right, which encourages first floor retail, higher density development on larger lots with increased height limits (10-15 stories), and more flexible parking and setback requirements." Importantly, the ordinance establishes the Planning Board as the Special Permit Granting Authority, "ensuring a coordinated and comprehensive review for all projects."[34] The new zoning was followed by the adoption of the *Quincy Center District Design Guidelines* in 2005 to ensure that the new zoning regulations were implemented with fidelity. This, in turn, was followed by the release of the *Quincy Downtown Vision, Framework and Strategy* in 2006, which serves as the city's most recent comprehensive Master Plan. This document represents a culmination of a public process initiated by Goody Clancy & Associates in 2003 and identifies six initiatives to revitalize Downtown Quincy: 1) protect and enhance the urban fabric, 2) develop a district improvement financing (DIF) plan, 3) improve public infrastructure, 4) improve downtown transportation and parking facilities, 5) support strategic redevelopment opportunities, and 6) enhance Quincy Center Gateways.[35]

The City's Urban Revitalization Development Plan, An Urban Renewal Plan for the Quincy Center Urban Revitalization District guides Quincy Center's development today.

The various analyses and efforts up to this point led to the primary document that guides Quincy Center's development today: *Urban Revitalization Development Plan*, *An Urban Renewal Plan for the Quincy Center Urban Revitalization District,* which was released in 2007 and established the policy and regulatory process for the redevelopment of Quincy Center. The report noted that, at the time, almost 34 percent of the land downtown was either vacant or used for parking, and 80 percent of the buildings were over 40 years old "discouraging the relocation of new commercial uses to Quincy Center." The plan also noted "challenges in vehicular and pedestrian circulation" and "heavy congestion and an intricate confusing road network dissuade shoppers and tourists," along with poor "pedestrian connectivity." Ultimately, the report concludes that the area lacks a sense of place essential to creating a "vibrant mixed-used downtown."[36]

The 2007 Plan sought to change this dynamic by establishing the Quincy Center Urban Revitalization District, a 55-acre urban renewal area that represented a portion of the Quincy Center District, with the overarching goal to "revitalize Quincy Center and attract high quality residential and commercial development.[37] These initial urban renewal activities would primarily be funded through federal and state grants along with utilizing the state's 2004 authorization of a DIF financing program, by which future tax growth revenue from new development would fund public improvement projects in Quincy Center. Several amendments to the URDP followed. Amendment 1 named Street-Works as master developer of the project, introduced a streamlined permitting process, encouraged a shared parking approach to new development, and unlocked the use of

[34] City of Quincy, Massachusetts. (7 May 2007). Quincy Center District Urban Revitalization and Development Plan: An Urban Renewal Plan for the Quincy Center Urban Revitalization District.

[35] Ibid.

[36] Ibid.

[37] Ibid.

M.G.L. Ch. 121A financing. With Amendment 2, the City entered into a formal redevelopment agreement with Street-Works (Hancock-Adams, LLC) through the "New Quincy Center Land Disposition Agreement" (LDA).

The new Adams Hancock Green Park will become the civic cultural hub of Quincy Center.

Figure 22
Development Timeline 2002–2011

2002 - Paul Harold Bridge opens providing Quincy Center with a secondary vehicular access point off Burgin Parkway.

2003 - Quincy Downtown Redevelopment Committee formed.

2004/05 - Public workshops conducted by Goody Clancy & Associates to engage residents to solicit their visions for downtown.

2005 - Public workshops lead to the adoption of the *Quincy Center District Design Guidelines* by Goody Clancy & Associates. New zoning aimed to attract new transit-oriented mixed-use development.

- *Downtown Quincy Parking Study* by Rizzo Associates is released.

2006 - The *Quincy Downtown Framework and Strategy* is released as the culmination of a public process begun by Goody Clancy & Associates in 2003.

2007 - *Quincy Center District, Urban Revitalization & Development Plan Report* by PCD is published, leading to the official formation of the Quincy Center Urban Revitalization District (URD).

- District Improvement Financing plan is adopted: *Quincy Center District, District Improvement Financing (DIF): Development and Invested Revenue Plan* by PCD. Plan enables City to utilize new real estate taxes and parking revenues generated from QCRP to support municipal bonds for public infrastructure costs.

2009 - *URDP Amendment #1* approved by DHCD; Street-Works and City of Quincy reach an agreement, a $1.6 billion public-private partnership that names Street-Works the Master Developer in the URD.

2010 - *URDP Amendment #2* approved by DHCD; Quincy enters into Land Disposition Agreement with Street-Works.

2011 - Bill approved by Massachusetts Legislature establishing the legal and procedural mechanisms for the implementation of the Quincy Center redevelopment plan.

After years of design, analysis, and permitting, actual development in the URD began in 2012 with the undertaking of several significant public infrastructure improvements. These include the Walter Hannon Parkway (Concourse Roadway project), relocation of the Town Brook, demolition of the Ross Garage, and the Hancock Adams Common Transportation Improvement project, which diverted an existing four-lane roadway. In addition to improving trafficking patterns, upgrading sidewalks and intersections, improving bicycle and pedestrian access, and enhancing the streetscape, the Hancock

Adams Common Transportation Improvement Project opened a swath of land for the development of the new Adams Hancock Green Park, which will become the civic and cultural hub of Quincy Center.

The Street-Works New Quincy Center LDA was terminated in 2014, with the city retaining Redgate Real Estate Advisors to perform a market analysis of Quincy Center's redevelopment potential and reaffirm the City's approach to revitalization. During this time, local company Quincy Mutual Group stepped forward with the first private redevelopment project. The West of Chestnut redevelopment project turned a surface parking lot and single-story commercial buildings into a new mixed-use development containing 165 residences and new first-floor retail space on top of a lower level of parking. In addition to West of Chestnut project, Galvcon and Heritage Companies, both of Quincy, came forward with development proposals for the new Cliveden Place, a 56-unit condominium project, and a new 32-unit apartment building on Mechanic Street. All three projects were strong signals that the private market has a positive outlook on Quincy Center. Despite the significant amount of work already underway in the URD to this point, URDP Amendment 3 expanded the district to include the Quincy Center MBTA Station, where a mixed-use development is planned that will include an intermodal transportation center, apartments, and commercial and office space.

Figure 23
Development Timeline 2012 to 2015

2012

- Development in the URD begins with major public infrastructure projects, including the Concourse Roadway Project, Town Brook Relocation Project, and Adams Green Transportation Improvement Project.
- MBTA announces the closure of the Quincy Center Station parking garage due to structural concerns.
- *Hancock Cemetery Master Conservation Plan.* Halvorson Design Partnership.

2014

- Partnership with Street-Works is severed. City retains Redgate Real Estate Advisors and Quincy Mutual Group to revise the URD Master Plan and keep the project moving forward.

2015

- Private development begins with construction of West of Chestnut (165 residences & retail) and Cliveden Place (56 condos & retail)
- Three new construction projects for Quincy Center announced: a 15-story luxury apartment building, a condo complex, and a hotel.

The expansion of Ross Way will create an alternate north-south access way parallel to Hancock Street.

In June 2016, the block of Hancock Street between the City Hall buildings and the Church of the Presidents closed permanently to make way for construction of the Hancock Adams Common Park. During this period, city leaders approved Amendment 4 to the URDP, which closed the book on Street-Works as Master Developer and installed the City of Quincy acting as the role for the two city parcels identified for redevelopment in the URDP. Amendment 4 also updated the URDP to include the redevelopment program for the city-owned 5-acre Hancock Parking Lot that would include the siting and construction of a new 700+ space public parking garage and two new mixed-use redevelopment projects. There are two additional sites identified in the Hancock Lot that will be developed at a future date once the new parking garage is operational. The 5-acre city-owned Ross Garage site continues to be identified for development, and a more detailed redevelopment program will be incorporated in a future URDP amendment once private development interest is analyzed.

Importantly, Amendment 4 was instrumental in restating the city's goals and objectives for the undeveloped parcels so that the city's vision for the Ross and Hancock areas was made clear to potential developers. Public Investment in updating the aged subsurface utility infrastructure remains a primary URDP effort to unlock the redevelopment potential. The amendment also identifies public actions "necessary to make the Quincy Center URD a more pedestrian friendly area, with streetscape improvements, new open space elements, and traffic-calming measures at key intersections."[38]

To support future public improvements, an $80 million Phase II Bond Authorization was passed by Quincy City Council in June 2017 to support infrastructure work in and around the Hancock Lot.

To support these public improvements, an $80 million Phase II Bond Authorization was passed by Quincy City Council in June 2017 to support infrastructure work in and around the Hancock Lot. Actual redevelopment of the Hancock Lot began the following year with city approval for the first wave of development: two large mixed-use developments and a new parking garage. The projects included Chestnut Place, a 15-story, 124-unit apartment complex, and Nova Residences, a seven-story, 171-unit apartment complex. In addition, the 22 Mechanic apartment complex located just outside the Hancock Lot zone opened in the summer of 2017.

While there is much work to be completed in the Hancock Lot area, the city is beginning to focus on redeveloping the Ross Garage area and the MBTA station. The development of the Ross Garage Area is anticipated to add 327 residential units, about 96,000 square feet of retail/commercial uses, 300,000 square feet of office space, 90 hotel rooms, and one or more parking garages with more than 1,000 new parking spaces. In addition, access to the area will be improved with the expansion of Ross Way, which currently serves the garage, to create an alternate north-south access way parallel to Hancock Street.[39] Federal, state, and private sources of funding will also support the continued development of the MBTA station. Identified in Amendment 4 as the Quincy Center

[38] City of Quincy, Massachusetts. (27 June 2016). *Quincy Center District Urban Revitalization and Development Plan: An Urban Renewal Plan for the Quincy Center Urban Revitalization District. Amendment 4.*

[39] Ibid.

Intermodal Station, this project becomes a critical element of the city's vision for Quincy Center by enhancing connections from Quincy to the MBTA network and destinations throughout the Greater Boston region.[40]

Figure 24
Development Timeline 2016 and 2017

2016

- Ground broken on 111 Washington Street, a new 30,000 square-foot office building.
- DHCD approves *Amendment #3,* expanding the URD boundary to include Quincy Center MBTA Station.
- The block of Hancock Street between the City Hall buildings and the Church of the Presidents closes permanently, making way for the Hancock Adams Common Park.
- Demolition of Ross Garage begins.
- DHCD approves *Amendment #4,* designating the City of Quincy the Master Developer for the Hancock Lot and Ross Garage areas. The amendment also describes the redevelopment strategy that is being prepared for the area including the Quincy Center MBTA station.

2017

- The city approves a Land Development Agreement (LDA) for the first wave of development on the Hancock lot: Chestnut Place, a 15-story, 124-unit apartment complex, Nova Residences, a seven-story, 171-unit apartment complex, and a 700+ space parking garage.
- Construction begins on the main stage of the Hancock Adams Green.
- LBC Boston's Nova Residences receives approval from the Planning Board and construction begins soon after.
- The Chestnut Place project receives final local approval from the Planning Board.
- The $80 million DIF Phase II Bond Authorization is passed by the City Council to support infrastructure work in and around the Hancock lot.
- The 22 Mechanic apartment complex opens (34 residences).
- The City Council approves request for the MBTA to enter into a development agreement with developers.

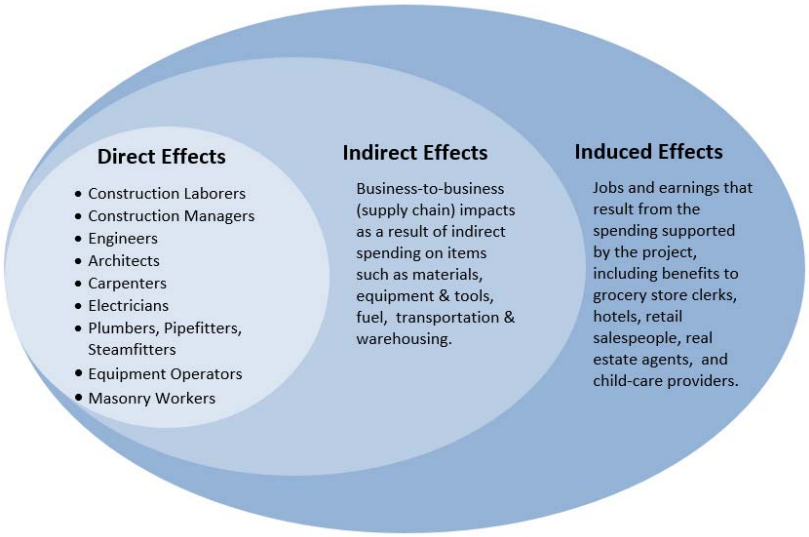
[40] Ibid.

5 ECONOMIC IMPACT OF CONSTRUCTION ACTIVITIES IN QUINCY CENTER

Construction projects undertaken in Quincy Center since the adoption of the URDP contribute economic benefits to Quincy, Norfolk County, and Massachusetts in terms of jobs, labor income, and economic output. These benefits can be estimated using IMPLAN, a standard input-output model that tracks how spending associated with an industry flows through an economy. For example, purchases made by a construction company from its suppliers circulate through the economy and support additional spending and job creation. That is, the original expenditures and job creation are multiplied. Measuring these ripple effects provides a fuller picture of the economic contributions of construction activities in Quincy Center. These economic effects are expressed as direct effects, indirect effects, and induced effects (see Figure 25).

- Direct effects are the result of spending within the study geography and include expenditures on items such as wages, supplies, raw materials, and operating expenses.
- Indirect effects result from the suppliers of the construction projects purchasing goods and services because of the direct spending on the project. Because these impacts measure interactions among businesses, they are often referred to as supply chain effects.
- Induced effects result from the spending of employees directly involved in construction projects, as well as the spending of employees of the suppliers within the region. These induced effects are often referred to as consumption-driven effects.

Figure 25
Examples of Direct, Indirect, and Induced Impacts



How Impacts Are Reported

Economic impacts are normally calculated separately for the construction and operations phases of a project, since the economic impacts of construction and other capital expenditures are inherently limited in duration, lasting only as long as construction and related capital purchases are taking place. Conversely, the operations phase generates economic impacts that continue as long as a facility remains in existence (operations phase impacts are included in the following section).[41] Note that construction impacts represent new economic activity in a region, since these impacts would not exist without construction activity. Notably, while a construction project may span multiple years, IMPLAN results are reported for the project as a whole regardless of the timeframe, while operational impacts are reported and recur annually.

Impacts are reported for three measures:

Jobs: IMPLAN reports the actual number of workers on the project, which includes both full-time and part-time workers who may be on the project for several years, one-year, or less. The authors converted these job figures to full-time equivalents (FTEs) using IMPLAN's conversion tables, which define an FTE as one person working full time for one year (2,080 hours). Thus, two half-time employees would equal one FTE. All job impacts reported in this analysis are FTEs.

Labor Income: Labor income equals all forms of employment income, including employee compensation (wages and benefits) and proprietor income, although the vast majority of labor income documents in this report represents employee compensation.

Economic Output: Output is defined as the value of industry production. For manufacturers this would equal sales plus/minus changes in inventory. For service sector production, output equals sales. For retail and wholesale trade, output equals gross margin (not gross sales).

The number of construction projects in the URD is considerable. For presentation purposes, the results are provided for all projects combined and then presented for three sub-categories that make up the total:

1. Completed infrastructure, buildings, and major renovation projects;
2. Completed private developments and private developments currently under construction;
3. Anticipated public infrastructure improvements.

[41] More about the economic impact analysis methodology can be found in Appendix D.

Placemaking and the Importance of Project Synergy

Presenting a comprehensive vision for downtown provided the catalyst to move these projects forward in a way that creates a cohesive urban corridor, as opposed to a piecemeal strategy that has failed many downtown areas nationwide.

The construction impact analysis includes both new construction, rehabilitation, and renovation projects that occurred within Quincy Center since the adoption of the URDP. This includes the below-ground work, which in some cases replaces 19th century infrastructure with new systems that are essential to support visible, above-ground improvements. While updating the public infrastructure resulted in dug-up streets, challenging traffic patterns, and a difficult pedestrian environment, the city's vision for Quincy Center could not be achieved without these improvements.

While some of the above-ground projects are relatively small and others very large, each is an important contributor to creating a cohesive sense of place necessary to achieve the city's overall vision for Quincy Center. This is particularly true of the cultural, religious, educational, and public institutions that holistically define downtown as the cultural and civic center of the city and encourage people to live, work, shop, and play in Quincy Center. This placemaking vision aligns with the 2007 Quincy Center DIF Plan, which defines the goal of the Quincy Center redevelopment program as to "build a place of celebration and community: a downtown district that blends old and new, historic and current styles, conveying the district's diverse quality and character."[42] While it may be the case that some of these projects would have been undertaken without the adoption of the URD and the Quincy Center DIF Plan, presenting a comprehensive vision for downtown provided the catalyst to move these projects forward in a way that creates a cohesive urban corridor, as opposed to a piecemeal strategy that has failed many downtown areas nationwide.

[42] City of Quincy, Massachusetts. (7 May 2007). *Quincy Center District, District Improvement Financing (DIF): Development and Invested Revenue Plan*.

5.1 TOTAL ECONOMIC CONTRIBUTIONS OF CONSTRUCTION PROJECTS IN QUINCY CENTER

Since 2005, more than $425 million in public and private funds have been invested or will be invested in Quincy Center. This amount is expected to grow significantly as work continues in the district.

Since the adoption of the URDP in 2007, more than $425.2 million dollars in public and private funds have been expended or will be expended for new construction or building renovations in Quincy Center. This includes $116.2 million in completed publicly funded projects, $171.3 million in completed or under construction private development, and $137.7 in anticipated publicly funded projects (see Table 8).[43]

Table 8
Public and Private Investments in Quincy Center

Type	Expenditure
Completed Publicly Funded Projects	$116,211,224
Private Completed/Under Construction	$171,338,915
Publicly Funded Anticipated[44]	$137,698,100
Total:	$425,248,239

Source: City of Quincy.

Direct, Indirect, and Induced Impacts

URDP-related construction activities undertaken or approved in Quincy Center directly supported an estimated 2,344 jobs, $196.1 million in labor income, and nearly $414.4 million in economic output in Norfolk County.

URDP-related construction activities undertaken or approved in Quincy Center were a significant driver of jobs, labor income, and economic output for the local, county, and statewide economies. These activities directly supported an estimated 2,344 jobs, $196.1 million in labor income, and $414.4 million in economic output in Norfolk County (see Table 9).[45] When the indirect and induced impacts are added, construction activities in Quincy Center supported:

[43] Construction activities include new infrastructure, new buildings, and renovation/rehabilitation to existing buildings. These expenditures include hard costs such as actual construction and soft costs such as design and legal services. They do not include costs for land acquisition or borrowing, since these are simply transfers of assets and not new spending injected into the economy. The total estimated construction costs also include some permits and fees incurred in developing these projects, but do not include expenditures made during the planning phase on consultant analyses and services. The analysis also does not include the considerable amount of time spent by City of Quincy staff during all phases of the project. The total impact would be higher if all these costs were included.

[44] The anticipated public infrastructure projects have dedicated funding sources and are primarily centered on the redevelopment of the Hancock Lot and Ross Garage, and the redevelopment of the MBTA station, with work at least partly underway for most of these projects. Importantly, anticipated projects do not include the potential private development of more than a million square feet of commercial development in the Ross Garage area, additional private development in the Hancock Lot area, the redevelopment of the Star Market site, or other potential development.

[45] Direct construction impacts all occurred within Quincy, thus the direct impacts are the same for each of the three reported geographic regions.

Jobs: 3,835 jobs in Norfolk County, 2,545 jobs in Quincy, and 4,227 jobs statewide.

Labor Income: $294.9 million in labor income in Norfolk County, $209.4 million in labor income in Quincy, and $327.0 million in labor income statewide.

Economic Output: $662.0 million in economic output in Norfolk County, $447.8 million in economic output in Quincy, and $754.3 million in economic output statewide.

Table 9[46]
Economic Contributions of Completed and Approved Construction Activities in Quincy Center

	Norfolk County	*Quincy Share	Massachusetts
FTE Jobs			
Direct	2,344	2,344	2,344
Indirect	595	80	724
Induced	896	121	1,159
Total	3,835	2,545	4,227
Labor Income ($mil)			
Direct	$196.1	$196.1	$196.2
Indirect	$43.7	$5.9	$53.8
Induced	$55.1	$7.4	$77.0
Total	$294.9	$209.4	$327.0
Output			
**Direct	$414.4	$414.4	$414.4
Indirect	$102.5	$13.8	$136.5
Induced	$145.1	$19.6	$203.4
Total	$662.0	$447.8	$754.3

Source: Implan; Public Policy Center.
*The geography for the IMPLAN model is Norfolk County. Quincy's share of the impacts was estimated based on the ratio of the city's total QCEW employment of the County total (indirect impacts) or on the ratio of the city's population of the county total (induced impacts), which are 13.45% and 13.51% respectively.[47]
**Direct output is reported in 2018 dollars and therefore does not equal the actual amount of direct expenditures reported in the previous table (i.e. $425.2 million) due to inflation.

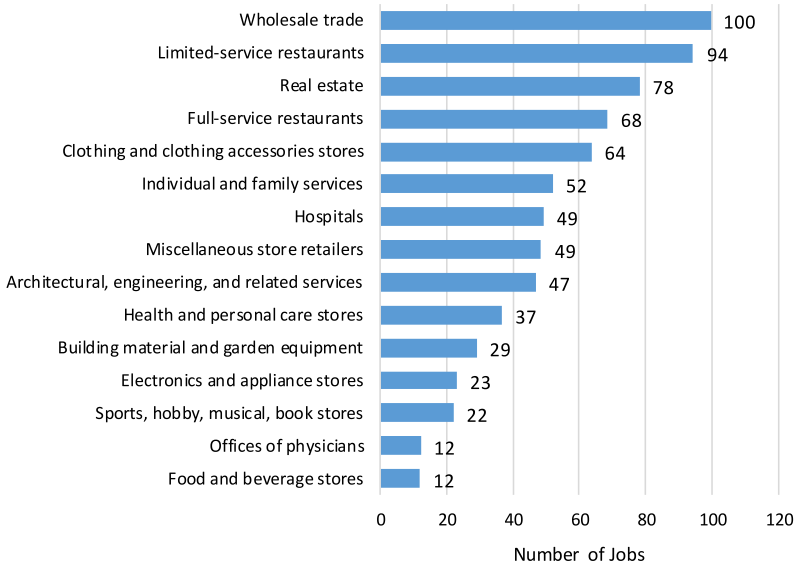
[46] All dollar figures in Section 5 are inflation-adjusted to 2018.

[47] Longitudinal Employer-Household Dynamics (LEHD) commuting data from the U.S. Census shows that 15.1 percent of Quincy residents of working age also reside in Quincy, which is further confirmation that the QCEW and population ratios are plausible metrics for calculating Quincy's share of the impacts.

Top Industries Affected By Direct Construction Expenditures

Direct construction expenditures are a major source of employment for many different sectors in Norfolk County's economy as a result of supplier (indirect) and induced (consumption) impacts. Figure 26 lists the top 15 sectors influenced by direct construction expenditures.

Figure 26
Top Fifteen Indirect and Induced
Employment Impacts by Industry



Source: IMPLAN; Public Policy Center.

State and Local Tax Revenues Generated From Construction in Quincy Center

Public infrastructure construction in Quincy Center is a significant generator of local and state tax revenue, which include those generated by direct construction expenditures and those generated through the economic activities created in other areas of the economy through indirect and induced impacts. Many of these taxes, particularly at the state and local levels, directly support local communities by providing resources to support important local needs including education, public safety, and infrastructure.

The IMPLAN model estimates that the amount paid in state and local taxes as a result of the construction of public infrastructure projects in Quincy Center is $23.1 million (see Table 10). This includes an estimated $8.9 million in Massachusetts personal income tax payments, $4.1 million in sales taxes, and $7.1 million in property taxes.

Table 10
Estimated State and Local Tax Impacts as a Result of
Public Infrastructure Construction in Quincy Center

Tax		Amount
Personal Income taxes	$	8,917,585
Other Personal Taxes	$	1,007,728
*Payroll taxes	$	125,682
Sales taxes	$	4,129,888
Property taxes	$	7,081,579
Corporate taxes	$	1,150,881
Fees, fines, & other taxes	$	689,590
Total	$	23,102,933

*Includes both employee and employer paid payroll taxes.
Amounts do not include costs of permits and fees paid to the City of Quincy.
IMPLAN does not calculate local tax revenues exclusively;
local tax impacts are aggregated with state impacts.
Source: IMPLAN; Public Policy Center.

5.2 COMPLETED PUBLICLY FUNDED PROJECTS

This section estimates the economic contributions of completed publicly funded projects, including new infrastructure, new buildings, and renovations to existing buildings.[48] Direct construction expenditures for these projects totals nearly $243 million, which includes hard costs such as actual construction and soft costs such as those for design, legal, and related expenses.

Construction expenditures for completed publicly funded projects directly supported an estimated 544 jobs, $46.2 million in labor income, and nearly $99.5 million in economic output in Norfolk County.

Direct, Indirect, and Induced Impacts

Publicly funded construction activities undertaken or approved in Quincy Center were a significant driver of jobs, labor income, and economic output for the local, county, and statewide economies. These activities directly supported an estimated 544 jobs, $46.2 million in labor income, and $99.5 million in economic output in Norfolk County (see Table 11).[49] When the indirect and induced impacts are added, construction activities in Quincy Center supported:

Jobs: 876 jobs in Norfolk County, 588 jobs in Quincy, and 963 jobs statewide.

Labor Income: $69.1 million in labor income in Norfolk County, $49.2 million in labor income in Quincy, and $76.2 million in labor income statewide.

Economic Output: $158.4 million in economic output in Norfolk County, $107.5 million in economic output in Quincy, and $178.8 million in economic output statewide.

[48] See Section 3 for more detail about specific projects.

[49] Direct construction impacts all occurred within Quincy, thus the direct impacts are the same for each of the three reported geographic regions.

Table 11
Economic Contributions from Construction Activities,
Completed Public Infrastructure, Rehabilitation, & Renovation Projects

	Norfolk County	*Quincy Share	Massachusetts
FTE Jobs			
Direct	544	544	544
Indirect	122	16	148
Induced	210	28	271
Total	876	588	963
Labor Income ($mil)			
Direct	$46.2	$46.2	$46.2
Indirect	$10.0	$1.3	$12.0
Induced	$12.9	$1.7	$18.0
Total	$69.1	$49.2	$76.2
Output ($mil)			
**Direct	$99.5	$99.5	$99.5
Indirect	$24.9	$3.4	$31.8
Induced	$34.0	$4.6	$47.5
Total	$158.4	$107.5	$178.8

Source: IMPLAN; Public Policy Center.
*The geography for the IMPLAN model is Norfolk County. Quincy's share of the impacts was estimated based on the ratio of the city's total QCEW employment of the County total (indirect impacts) or on the ratio of the city's population of the county total (induced impacts).
**Direct output is reported in 2018 dollars and therefore does not equal the actual amount of direct expenditures (i.e. $243 million) due to inflation.

5.3 COMPLETED AND UNDER CONSTRUCTION PRIVATE DEVELOPMENTS

The public infrastructure projects from the previous section helped to leverage six private developments in Quincy Center, which have a total construction value of over $171 million.[50] Direct construction expenditures for these projects totals nearly $39 million.

Direct, Indirect, and Induced Impacts

Construction expenditures related to private development in Quincy Center directly supported an estimated 931 direct jobs, $77.6 million in labor income, and $172 million in economic output in Norfolk County (2018 dollars) (see Table 12).[51] When the indirect and induced impacts are added, construction activities in Quincy Center supported:

[50] Two of these projects are currently under construction.

[51] Direct construction impacts all occurred within Quincy, thus the direct impact are the same for each of the three reported geographic regions.

Jobs: 1,617 jobs in Norfolk County, 1,024 jobs in Quincy, and 1,848 jobs statewide.

Labor Income: $121.3 million in labor income in Norfolk County, $83.5 million in labor income in Quincy, and $135.4 million in labor income statewide.

Economic Output: $278.6 million in economic output in Norfolk County, $186.4 million in economic output in Quincy, and $320.6 million in economic output statewide.

Construction expenditures related to private development in Quincy Center directly supported an estimated 931 direct jobs, $77.6 million in labor income, and $172 million in economic output in Norfolk County.

Table 12
Economic Contributions from Construction Activities:
Completed & Under Construction Private Development

	Norfolk County	Quincy Share*	Massachusetts
FTE Jobs			
Direct	931	931	931
Indirect	318	43	385
Induced	368	50	480
Total	1,617	1,024	1,848
Labor Income ($mil)			
Direct	$77.6	$77.6	$77.6
Indirect	$21.0	$2.8	$25.9
Induced	$22.7	$3.1	$31.9
Total	$121.3	$83.5	$135.4
Output ($mil)			
**Direct	$172.0	$172.0	$172.0
Indirect	$47.0	$6.3	$64.3
Induced	$59.6	$8.1	$84.3
Total	$278.6	$186.4	$320.6

Source: IMPLAN; Public Policy Center.
*The geography for the IMPLAN model is Norfolk County. Quincy's share of the impacts was estimated based on the ratio of the city's total QCEW employment of the county total (indirect impacts) or on the ratio of the city's population of the county total (induced impacts).
**Direct output is reported in 2018 dollars and therefore does not equal the actual amount of direct expenditures (i.e. $171 million) due to inflation

5.4 ANTICIPATED PUBLICLY FUNDED PROJECTS

A significant amount of work will continue in Quincy Center in the coming years, primarily centered on the redevelopment of the Hancock Lot and Ross Garage areas, as well as redevelopment of the MBTA station into a mixed-use facility (see Table 13). These projects will be financed through a variety of sources, including an $80 million DIF bond authorization and nearly $70 million in other city bonds and state and federal funds (see Table 13).[52] Work is at least partly underway for most of these projects.

Table 13
Planned Public Infrastructure Projects to Support
Redevelopment of Hancock Lot and MBTA Station

Project Name	*Investment	Source of Funding	Type of Project
1500 Hancock Public Improvements	$5,110,000	DIF2	Infrastructure
Burgin Parkway Bridge	$15,000,000	DIF2	Trans/Infrastructure
Cottage Ave & Hancock Street Public Improvements	$3,700,000	DIF2	Trans/Infrastructure
Hancock Adams Green Subsurface Utilities	$825,600	DIF2	Infrastructure
Hancock Garage	$39,562,500	DIF2	Public Facility
Hancock Lot Public Improvements	$6,500,000	DIF2	Public Facility
Quincy Center MBTA Zone	$42,000,000	State/ Federal	Transportation/Infrastructure
Ross Garage Zone	$25,000,000	City-DIF, State, and Developer	Public Infrastructure, Private Development

Source: City of Quincy

Direct, Indirect, and Induced Impacts

Construction expenditures related to anticipated development in Quincy Center directly supported an estimated 869 direct jobs, $72.2 million in labor income, and $143 million in output in Norfolk County (2018 dollars) (see Table 14).[53] When the indirect and induced impacts are added, construction activities in Quincy Center supported:

Jobs: 1,342 jobs in Norfolk County, 933 jobs in Quincy, and 1,468 jobs statewide.

Labor Income: $104.5 million in labor income in Norfolk County, $76.6 million in labor income in Quincy, and $115.1 million in labor income statewide.

[52] A portion of the work in the Ross Garage area will be financed by the developer.

[53] Direct construction impacts all occurred within Quincy, thus the direct impact are the same for each of the three reported geographic regions.

Economic Output: $225.0 million in economic output in Norfolk County, $154.0 million in economic output in Quincy, and $255.0 million in economic output statewide.

Construction expenditures related to anticipated development in Quincy Center directly supported an estimated 869 direct jobs, $72.2 million in labor income, and $143 million in output.

Table 14
Economic Contributions from Anticipated Publicly Funded Projects

	Norfolk County	*Quincy Share	Massachusetts
FTE Jobs			
Direct	869	869	869
Indirect	155	21	191
Induced	318	43	408
Total	1,342	933	1,468
Labor Income ($mil)			
Direct	$72.2	$72.2	$72.2
Indirect	$12.8	$1.7	$15.8
Induced	$19.5	$2.6	$27.1
Total	$104.5	$76.6	$115.1
Output ($mil)			
**Direct	$143.0	$143.0	$143.0
Indirect	$30.7	$4.1	$40.5
Induced	$51.4	$6.9	$71.6
Total	$225.0	$154.0	$255.0

Source: IMPLAN; Public Policy Center.
*The geography for the IMPLAN model is Norfolk County. Quincy's share of the impacts was estimated based on the ratio of the city's total QCEW employment of the County total (indirect impacts) or on the ratio of the city's population of the county total (induced impacts).
**Direct output is reported in 2018 dollars and therefore does not equal the actual amount of direct expenditures (i.e. $138 million) due to inflation.

6 ANNUAL SUSTAINED IMPACTS

The redevelopment of Quincy Center will also generate new economic activity that continues after construction ends. These activities include spending from new residential tenants and office workers as well as impacts from new building operations.[54] For example, many of the private developments in Quincy Center are mixed-use, with retail and commercial activity on the ground floor and residences above, as is the case with West of Chestnut, which includes 165 residential units and four commercial establishments on the ground floor. The residents of the building provide "built-in customers" who support the ground floor businesses as well as other local establishments. The retail components of mixed-use developments also create what are sometimes referred to as "third-places," that is, locations outside the home and workplace that become a center of community life.[55] Third places may include parks and public buildings such as libraries, but also local businesses such as coffee houses, barbershops, and nail salons, which become an important component in creating a sense of place for an area.

The retail components of mixed-use developments can create what are sometimes referred to as "third-places," that is, locations outside the home and workplace that become a center of community life.

6.1 POTENTIAL IMPACTS OF RESIDENT SPENDING

Our assessment of the impact of the spending of new residents of Quincy who reside in these new residential developments is based on new economic activity as opposed to spending that is merely transferred from one area of the city or county to another. Residents who move to Quincy Center from other areas of the city or county do not represent a new injection of money into the local economy. Accordingly, disposable income was reduced in proportion to the percentage of people who moved into a new unit in Norfolk County in the past year from a location outside the county (60%).[56] A 5 percent vacancy rate was also assumed, resulting in a conservative estimate of net new spending in the area.

The disposable income expenditure patterns of Quincy Center's new residents was modeled using IMPLAN, which apportions household spending to patterns specific to the region of analysis (in this case Norfolk County). The estimated expenditure totals and household income brackets were calculated based on the mix of units in each of the new residences, including the number of bedrooms and the lease or purchase price. There are 559 residences that have been constructed or are under construction in Quincy Center since 2017. Based on the cost of each unit or the monthly rents, these households are

[54] The operations analysis applies the same development assumptions from the previous section and includes only projects that have been constructed or are under construction. Thus, the redevelopment of the Ross Garage site, additional mixed-use buildings on the Hancock Lot, redevelopment of the Star Market site, and the redevelopment of the MBTA station are not included, since these projects are still in the early development stages and project details are not available.

[55] Oldenburg, Ra. (1989). *The great good place: cafés, coffee shops, community centers, beauty parlors, general stores, bars, hangouts, and how they get you through the day*, New York: Paragon House.

[56] Source: ACS 2012-2016 5-Year estimates Table S0701.

expected to have higher than average earnings, with 34 of the households having incomes between $75K and $100K, and 525 households having incomes between $100K and $150K.[57]

It is estimated that new households moving to Quincy Center who earn between $75K and $100K will have a total of $947K in disposable income, while households with incomes between $100K and $150K will have a total of $31.5 million in disposable income (see Table 15). Note that only a portion of this income will be spent in Quincy.

The IMPLAN model estimates that disposable income purchases by Quincy Center residents who are new to the county will annually support 186 FTE jobs, $10.2 million in labor income, and $26.9 million in economic output in Norfolk County.

Table 15
Estimated Total Disposable Income

Household Income Bracket	New Households	Total Disposable Income
$75K-$100K	20	$947,166
$100K-$150K	315	$31,455,109

The IMPLAN model estimates that disposable income purchases by Quincy Center residents who are new to the county will annually support 186 FTE jobs, $10.2 million in labor income, and $26.9 million in economic output in Norfolk County. In Quincy, this spending will support an estimated 25 FTE jobs, $1.4 million in labor income, and $15.1 million in economic output, while also supporting 96 FTE jobs, $5.7 million in labor income, and $15.1 million in economic output statewide (see Table 16).[58] These annual impacts can be expected to increase as new units come online and once the final build-out of Quincy Center is complete.

Table 16
Annual Economic Contributions from New Resident Spending

	Norfolk County	*Quincy Share	Massachusetts
FTE Jobs	186	25	96
Labor Income	$10,206,494	$1,378,897	$5,731,818
Economic Output	$26,927,675	$3,637,929	$15,145,254

*The geography for the IMPLAN model is Norfolk County. Quincy's share of the impacts was estimated based on the ratio of the city's population of the county total.

[57] Median household income in Quincy is $64,890 (ACS 2012-2016 5-Year estimate).

[58] The impacts for Massachusetts are lower than for Norfolk County because the number of new households to Massachusetts (25.2%) is lower than the number of new households to Norfolk County (60.0%).

6.2 POTENTIAL IMPACTS OF NEW COMMERCIAL ACTIVITY

Similar to the economic activity of new resident spending highlighted in the previous section, annual economic activity will also occur in Quincy Center as a result of the spending of office workers employed in new commercial and retail spaces (e.g., coffee, lunch, dry cleaning). Annual economic benefits will also result from activities related to building operations, which include services such as maintenance, repairs, custodial, utilities, and property management.

Spending of Office Workers

Most of the new retail and commercial parcels in Quincy Center have yet to be developed. This includes more than one million square feet in commercial development on the Ross Garage site, additional mixed-use buildings on the Hancock Lot, redevelopment of the Star Market site, and the redevelopment of the MBTA station. Development details for these properties are still in the emergent stages, and estimating the economic activity or economic impact of potential workers is dependent on a variety of unknown factors.

Businesses within and outside Quincy Center will benefit from the spending of Quincy Center's office workers.

While development details are not available at this time, the annual economic activity of Quincy Center's workers will not be trivial once the area's entire build-out is complete. For example, if one assumes that a million square feet of office space is developed and that, on average, a 100,000-square-foot building supports one employee per 250 square feet, a 100,000-square-foot office building will house approximately 400 employees, while a million square feet of commercial space will support about 4,000 employees.[59] These employees will spend a portion of their incomes locally, whether it be takeout from a local restaurant, fuel for one's car, or milk and coffee from a convenience store, and businesses within and outside Quincy Center will benefit from this new economic activity. These types of impacts, while not readily quantifiable, can already be seen in some of Quincy Center's local restaurants and retail outlets, although construction activities to some degree have limited customer traffic.

Potential Impacts of Building Operations

New structures will require maintenance, repair, custodial, utility, and property management services, with spending on these activities directly supporting local employment. Local purchases on items such as office supplies, furniture, and various building materials required to keep an office building operational will also support local businesses. While reliable estimates of these economic activities cannot be calculated at this time due to the lack of development details, employment sectors expected to gain from these activities include jobs in management, real estate, landscaping, building trades, and other business and professional services.

[59] Adapted from the *Three Rivers Model*. See https://www.ccim.com/cire-magazine/articles/estimating-economic-impact/?gmSsoPc=1.

7 OTHER ECONOMIC CONTRIBUTIONS ACCRUED TO THE CITY AND STATE

The Quincy Center Revitalization Project will generate additional economic activity and revenue beyond just new resident spending and commercial operations. Revenue includes additional property tax payments to the city that result from new development and rising real estate values, collections of excise taxes from new vehicles, net new income tax payments to the state, and additional room and meals taxes.

7.1 PROPERTY TAX PAYMENTS TO CITY

Quincy can expect additional property tax revenue from both new development in Quincy Center and rising values of existing real estate due to new improvements throughout the DIF zone. This includes rising real estate values in adjacent neighborhoods that spillover as a result of development in the district. RKG Associates, Inc., which conducted the financial analysis for the Phase I DIF and Phase II DIF bond authorizations, concluded that assessed values in the DIF increased by 43 percent (+$181,530,000) from FY06 through FY17, while total taxable assessed values increased by 46 percent (+$136,934,000) over this period.[60] The total incremental property tax revenues collected by the city as a result was $2,442,371 in FY17.[61] As noted earlier, RKG concludes that incremental tax revenues in the DIF have increased at a rate that exceeds the debt service on the bonds.[62]

Importantly, the increase in assessed values and incremental tax revenue is primarily the result of the natural appreciation of buildings and land values in Quincy Center and not the value from new private development. Clivedon Place, 22 Mechanic, 111 Washington Street, and West of Chestnut came online after FY17, and the soon to open Nova Residences and Chestnut Place were still in their early construction phases. These projects will significantly add to the property tax base in FY18, as will potential future commercial and residential properties that have yet to be developed on the Hancock, Ross, and MBTA parcels.

7.2 MUNICIPAL REVENUE COLLECTED FROM VEHICLE EXCISE TAXES

Massachusetts cities and towns collect excise taxes for each vehicle registered in their community.[63] There will be an increase in the excise taxes collected by the city as a result of new households locating in Quincy Center. Applying the latest data on the number of vehicles per household (1.25 passenger vehicles per Quincy household in 2014)[64] and 2014 data on actual excise tax collections per vehicle ($174.3 in 2014),[65] we estimate that

[60] The DIF was established in 2006.

[61] RKG Associates, Inc. (15 May 2017). *Quincy Center District Improvement Financing: Phase II Bond Authorization.* Values are not inflation-adjusted.

[62] Ibid.

[63] The excise rate is $25 per $1,000 of one's vehicle's value.

[64] Metropolitan Area Planning Council, Massachusetts Vehicle Census, 2014.

[65] Massachusetts Municipal Databank, 2014.

the city will annually collect an additional $73,000 in excise taxes. This amount will of course rise as new residences are constructed.[66]

7.3 NET NEW INCOME TAXES COLLECTED BY THE STATE

It is estimated that approximately 140 new households have moved or will soon move to Quincy Center from out-of-state to reside in newly constructed housing. Net new state income tax paid by residents who reside in Quincy Center's recently constructed developments can be estimated using a micro-simulation model. The income tax rate paid by Massachusetts households was calculated using an "effective tax rate" approach, which uses the state income tax paid as a percent of gross income. These rates were estimated using Northeastern University Professor Alan Clayton-Matthews' state income tax micro-simulator.[67] It is estimated that about $750,000 in state income tax will be remitted to the state from households who move to recently developed or under construction Quincy Center residences from out-of-state.

7.4 OTHER BENEFITS

Other additional economic activities that may occur in Quincy Center are not easily measured. These include additional sales taxes accrued to the state as a result of higher level of business activity, additional spending by tourists and visitors who would not normally visit the area but are attracted to the area's improved amenities, and additional meals and room taxes collected by the city and state.

Additional Meals and Room Taxes: Additional meals and room taxes may be collected by the city as a result of the opening of new retail outlets in Quincy Center as well as additional room taxes from a proposed hotel, however, a reliable estimate cannot be made at this stage of Quincy Center's development.

Visitor Spending: Additional spending by tourists and visitors who would not normally visit the area but are attracted to the area's improved amenities will support additional economic activity. Estimating this additional spend is challenging and outside the scope of this project.

[66] As a whole, Quincy collected $10.1 million in vehicle excise taxes in 2016 (latest available data).

[67] The microsimulation approach involves using the actual official state income tax form and calculating the total tax paid for a variety of hypothetical tax filers that represent the range of possible responses in the Massachusetts population. The results are weighted to make the final results representative of the total population. The tax form used is for tax year 2017 and the demographic data are drawn from the 2016 American Community Survey Public Use Microdata Sample.

8 DIFFERENCES-IN-DIFFERENCES ANALYSIS

The PPC conducted a quasi-experimental "difference-in-differences" (DD) regression approach to estimate the extent to which property value increases experienced in Quincy Center could be reasonably attributed to DIF-related development and redevelopment activity rather than larger economic trends. DD regression is a standard approach to this problem. For example, in research by Ellen et al. (2001)[68], a DD approach was used to estimate the economic spillovers from subsidized construction of owner-occupied housing in New York City. This enabled the authors to measure the extent to which the new construction increased or decreased the value of surrounding properties relative to what would have happened in the absence of the new construction.

Simply comparing the pre- and post-construction property values is insufficient because it ignores many other influences, such as the state of the economy, which could have contributed to this change. To control for other factors, we selected a control group of properties outside of the DIF zone that had a similar trajectory (but not necessarily the same actual values) prior to the redevelopment. Thus, we have two differences: the difference over time in the DIF zone and the difference in over time in the control group area of the city. The difference between these two differences (hence the name "difference-in-differences") should yield the effect of the redevelopment, minus other factors that could have increased or decreased property values. In other words, the analysis permits us to examine whether or not the observed economic impacts would have occurred in the absence of some or all of these projects, essentially by comparing to what is effectively a counterfactual scenario.[69]

In mathematical terms, the most basic DD estimator (not controlling for other known factors), is as follows:

Change in DIF Zone (Time 2 – Time 1) = effect of the DIF + other factors

Change in Control Group (Time 2 – Time 1) = other factors

Change in DIF Zone – Change in Control Group = effect of the DIF + other factors – other factors = effect of the DIF

8.1 ASSUMPTIONS

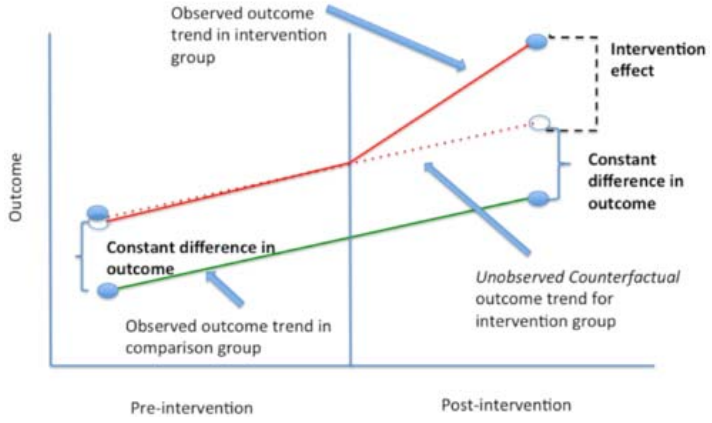
The most important assumption of the differences-in-differences approach is the parallel trends assumption, also known as the parallel worlds assumption. Under this assumption, what happens in the control group is what would have happened in Quincy Center in the absence of the redevelopment efforts. Note that this does not require treatment and control property values to be identical prior to redevelopment. However, it does require

[68] Ellen, I. G., Schill, M. H., Susin, S. and Schwartz, A. E. *"Building Homes, Reviving Neighbourhoods: Spillovers from Subsidized Construction of Owner-Occupied Housing in New York City"*, Journal of Housing Research 12, 2 (2001), 185-216.

[69] The model specification and model results can be found in Appendix D.

that the rate of change would have been the same in the absence of the redevelopment effort. A graphical representation of the parallel trends assumption is presented in Figure 27.

Figure 27
Graphical Representation of Difference-in-Differences Estimation and the Parallel Trends Assumption



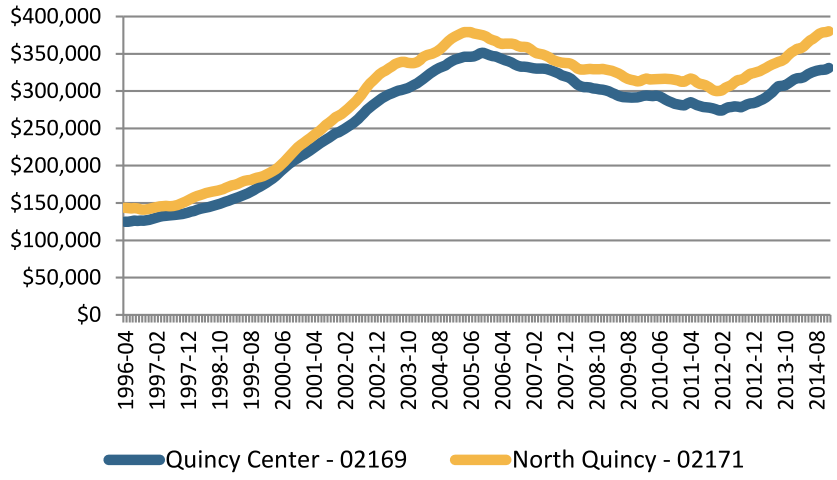
Source: Columbia University Mailman School of Public Health

North Quincy experienced a similar economic trajectory to Quincy Center prior to the various development and redevelopment efforts.

8.2 COMPARISON GEOGRAPHY

Given the importance of the parallel trends assumption for yielding accurate estimates, one crucial part of any DD analysis is carefully selecting the control area. North Quincy was selected as a comparison area, since that area of Quincy experienced a similar economic trajectory to the Center prior to the commencement of the various development and redevelopment efforts. An analysis of housing values at the ZIP code level suggests that North Quincy is a reasonable control group because the parallel worlds assumption likely holds true. Figure 28, which displays the median housing values in the ZIP codes containing Quincy Center and North Quincy, shows the two areas for the most part, moving in parallel. This suggests that they are equally affected by the macroeconomic trends for which we would like to control.

Figure 28
Median Housing Value, Quincy Center and North Quincy Zip Codes, 1996 – 2014



Source: Zillow ZHVI

8.3 DATA

In order to arrive at an objective, reproducible definition of North Quincy and Quincy Center, the PPC defined these regions as the parcels within a half-mile radius of the North Quincy and Quincy Center MBTA stations, respectively. This definition includes the entirety of the DIF zone as well as surrounding parcels, where we would expect the "spillover effects" of the new construction to be experienced. Assessment data and GIS shapefiles were obtained from the Quincy Assessor's Office in order to extract the correct parcel assessments for each area.

Setting an accurate "PRE" time period is not entirely straightforward since the creation of the DIF zone occurred in FY 2007 but actual construction did not begin until FY 2012. The DD model was run two ways, setting either FY 2005 or FY 2012 as the "PRE" time period.[70]

FY 2018, which is the latest year of assessments at the time this study was conducted, was taken as the "POST" period. These are for FY 2018. However, in reality, not all DIF-related construction has been completed to date. To capture some of the anticipated construction, the model was run with both just the FY 2018 values and with the anticipated value of the new construction substituted, as predicted by RKG Associates, Inc.[71]

[70] The city's fiscal year runs July 1 through June 30.

[71] RKG Associates, Inc. *Quincy Center District Improvement Financing: Phase II Bond Authorization*. May 15, 2017.

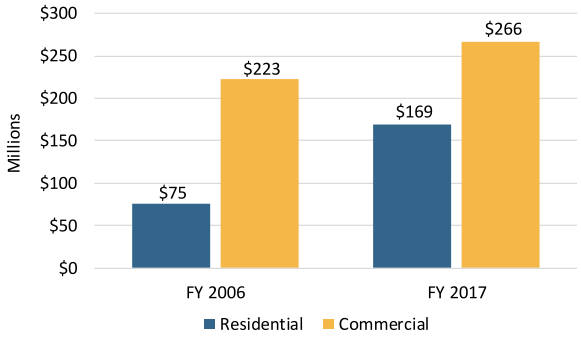
8.4 INTERPRETATION

The results of the DD analysis suggest that while property values in Quincy Center are rising, it is too early to notice any sizeable spillover effects. In other words, the model suggests that the DIF-related activity has not raised the property values of neighboring property beyond what might ordinarily be expected. Indeed, the DIF-related construction is not yet complete and spillover effects emanating from the new investment may take several years post-construction to materialize. In addition, much of the DIF-related construction created disruptions that may have put a temporary damper on other new economic activities.

The property values in the DIF zone have increased from $298 million in 2006 to $435 million in 2017.

However, the fact remains that property values in the DIF zone have increased substantially, from $298 million in 2006 to $435 million in 2017 (see Figure 29). There are many reasons to believe that the spillover effects from these investments will eventually materialize and property values will continue to rise as the projects in the pipeline are completed. For now, however, DIF-related property value increases appear to be isolated to the individual parcels that are associated with the DIF and have not yet spread to neighboring parcels.

Figure 29
DIF Assessment Values, FY 2006 and FY 2017



Source: RKG Associates, Inc.[72]

[72] RKG Associates, Inc. *Quincy Center District Improvement Financing: Phase II Bond Authorization*. May 15, 2017.

9 IMPLICATIONS AND CONCLUSIONS

The Quincy Center Revitalization Project is reinventing the heart of the City of Presidents. While there is much work yet to be accomplished, the evidence is clear that rerouting of major roads, replacement of outdated subsurface infrastructure, renovation of historic buildings, and creation of green spaces is beginning to leverage new private investment in the area. Perhaps most importantly, the project has begun to restore and enhance Quincy Center's reputation as a cultural, civic, and social hub of the city.

The work in Quincy Center has not been without challenges. Residents and visitors to the area have endured what is essentially a multi-year large-scale construction project. This has made life temporarily difficult for local motorists and pedestrians. Limited parking options, and the closing of the MBTA station during some of the construction period, have presented challenges to local business owners and for people living and doing business in the district. While the completion of the initial phases of the revitalization can be expected to provide some relief to these issues, the sheer size and complexity of the ongoing redevelopment project means that parking and traffic issues will continue, and that the promise of new retail and commercial development opportunities, including spillover effects to adjacent neighborhoods, will take time to fully materialize.

Citywide, rising property values are benefitting homeowners through the wealth created by increasing equity in their homes. However, rising property values are accompanied by higher tax bills for most homeowners, placing financial pressure on some residents, particularly those on fixed incomes. These challenges mirror those faced in other communities across the Commonwealth. However, in many cases across the state, rising tax bills are the result of rising tax rates rather than rising property values, without the benefit of the positive wealth effect associated with increasing home equity.

Rising home prices are partly a result of a larger economic trend throughout the Greater Boston region, where the growth in relatively high-wage jobs and the limited availability of attractive housing options have driven prices ever higher, especially in areas with convenient access to commuter rail or subway lines. Accordingly, the need for additional affordable housing is a common challenge faced by communities throughout the region. While it is difficult to predict the degree to which macroeconomic and environmental forces will affect Quincy's housing market over the long-term, Quincy's proximity to Boston and accessible public transportation networks will continue to make Quincy a desirable place to reside for the foreseeable future.

Consequently, Quincy will be challenged in the future to maintain a diverse portfolio of housing stock to meet its growing and changing population. *The Quincy Housing Production Plan*, authored by the City's Department of Planning and Community Development, offers suggestions to address Quincy's housing challenges, including creating opportunities to develop a diverse and affordable housing stock to meet the needs of a changing community.

Notably, it is too early to observe any sizeable spillover effects in terms of property values at this point in Quincy Center's redevelopment. To date, new development has not raised the property values of neighboring property beyond what might ordinarily be expected due to the current business cycle. Thus, at least at this point in the redevelopment process, larger macroeconomic trends are the primary factor in Quincy's rising property values, as opposed to new projects coming online in Quincy Center. Going forward, the spillover effects from the work in Quincy Center are expected to be more pronounced as the project reaches final build-out, more residences are added, and the disruption associated with the construction activity abates. Further, new tax revenues will result from the availability of new commercial properties and the growth of commercial and residential property values in and around Quincy Center. This increased revenue could be used to reduce the tax burden of homeowners in other areas of the city and invest in more affordable housing options.

At this point, the Quincy Center Revitalization Project is a work in progress, particularly considering that the city is only halfway through the twenty-year urban renewal plan. To date, the Project has supported hundreds of construction jobs and is beginning to generate significant amounts of new annual economic activity in the district. While not as visible as a new high rise building or public park, the significant amount of work completed below ground has literally established a foundation for future economic development above, where renovated public and historic buildings frame the new open spaces and provide a gateway to the civic, cultural, and commercial center of the city.

Notably, much of this public infrastructure would have eventually needed replacement regardless of whether or not these activities were part of a comprehensive plan. Undertaking this work on a holistic basis and designating a portion of Quincy Center as an urban renewal area allowed the city to develop a comprehensive vision for downtown that avoided a fragmented development process guided primarily through zoning rules and market incentives rather than a cohesive strategy. The designation of the QCRP also allowed the city to fund most of the public improvements with state and federal grants, as well as DIF bonds.

Work remains to be done and the overall vision for Quincy Center has yet be fully realized. Thus, the ultimate final impact of the project, in terms of the local impact on the economy and on the quality of life for Quincy residents, remains to be seen. Without question, residents and business owners have dealt with many challenges throughout this process, with the promise that the final results will be worth the wait. Ultimately, the QCRP's return on investment for businesses and residents is a long-term venture that has yet to fully pay a full dividend. In the words of our sixth President John Quincy Adams, "Courage and perseverance have a magical talisman, before which difficulties disappear and obstacles vanish into air." His advice is well worth heeding.

APPENDIX A – ECONOMIC IMPACT METHODOLOGY

The Public Policy Center conducted a detailed and comprehensive analysis of the individual and collective local and regional economic benefits of the projects being developed in the Quincy Center.

Implan

The economic impacts are specified using IMPLAN (IMpact Analysis for PLANning), which is an input-output database and model that traces a project's purchases of goods, services, and labor through an economic area. The IMPLAN modeling system utilizes the U.S. Bureau of Economic Analysis' Input-Output Benchmarks with other data to construct quantitative models of trade flow relationships between businesses and between businesses and final consumers. From this data, one can examine the effects of a change in one or several economic activities to predict its effect on a specific state, regional, or local economy (impact analysis).

The Public Policy Center constructed input-output models in IMPLAN for the state of Massachusetts and Norfolk County Massachusetts. The data inputs used in the model vary depending on the project years(s) they are expended. Model outputs are reported in 2018 dollars. The latest available IMPLAN dataset is for 2016.

This analysis reports both the direct number of FTE job years and the number of individual jobs (i.e. workers):

FTE Job Years: Refers to the years of full-time equivalent (FTE) employment created by the wind farm project, including wage and salary employees and self-employed persons. One FTE is the equivalent of one person working full time for 1 year (2,080 hours), thus two half-time employees would equal one FTE. Similarly, a full-time person working five years on the project would equal five FTE job years.[73]

Jobs: The actual number of workers on the project, which includes both full-time and part-time workers who may be on the project for several years, one-year, or less.

Geography

The primary unit of analysis is Norfolk County. However, given the city is interested in understanding the impact of the aforementioned developments on the City of Quincy proper as well as the larger regional economy, additional steps were taken to develop a credible estimate of the economic impact of these developments on the local community. Quincy's share of the impacts was estimated based on the ratio of the city's total QCEW employment of the County total (indirect impacts) or on the ratio of the city's population of the county total (induced impacts), which are 13.5 percent and 13.5 percent respectively. Longitudinal Employer-Household Dynamics (LEHD) commuting data from the U.S. Census shows that 15.1 percent of Quincy residents of working age also reside in Quincy, which is further confirmation that the QCEW and population ratios are plausible metrics for calculating Quincy's share of the impacts.

[73] O&M FTEs are calculated for one year only, except where otherwise noted, even though these jobs are expected to exist for the entire 25-year operations phase of the project.

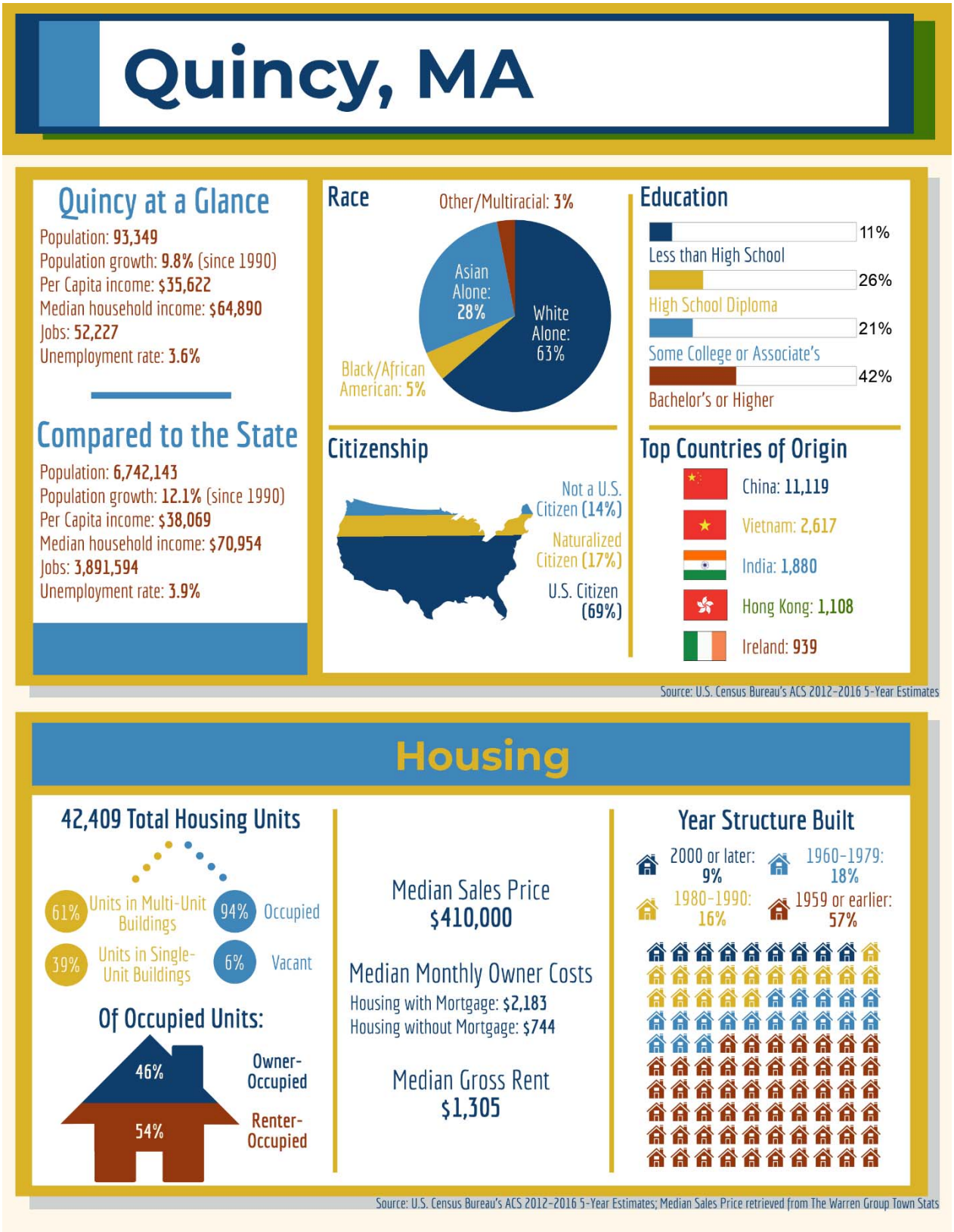
Construction Impacts

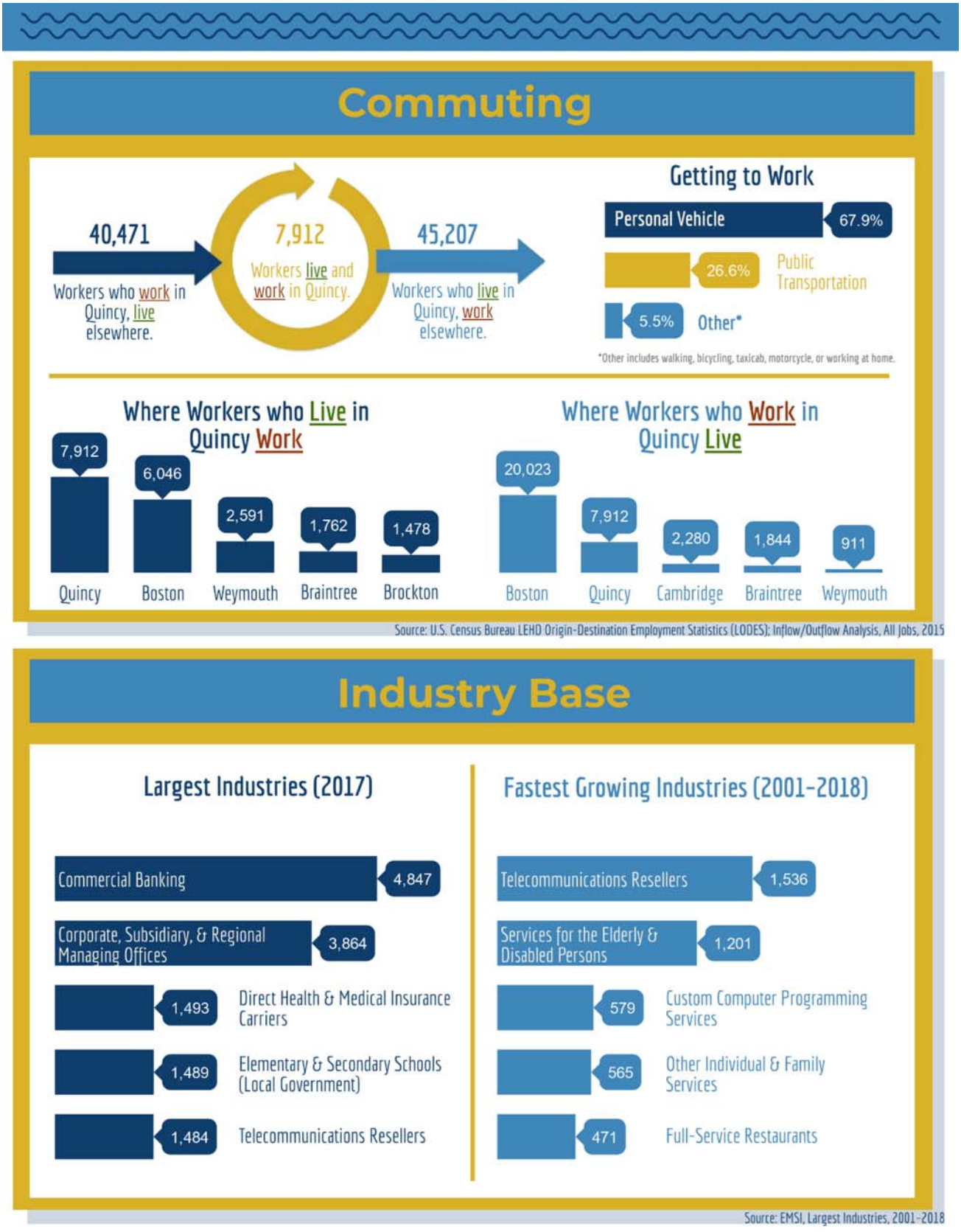
IMPLAN works by applying a change in demand or production to 1 of 536 industry sectors. The PPC developed a customized IMPLAN model built from the bottom up that assigns detailed direct expenditure data to specific industry IMPLAN codes based on expenditure amounts provided by the City of Quincy. In some cases, detailed expenditures were provided rather than the total construction budget amount. For economic impact purposes, it is assumed that construction is purchased from local contractors who then purchase goods and services from inside and outside the economic target area according to average for the industry.

Annual Sustained Impacts

The redevelopment of Quincy Center will also generate new economic activity that continues after construction ends. These activities include spending from new residential tenants and office workers as well as impacts from new building operations. Our assessment of the impact of the spending of new residents of Quincy who reside in these new residential developments is based on new economic activity as opposed to spending that is merely transferred from one area of the city or county to another. The disposable income expenditure patterns of Quincy Center's new residents was modeled using IMPLAN, which apportions household spending to patterns specific to the region of analysis (in this case Norfolk County). The estimated expenditure totals and household income brackets were calculated based on the mix of units in each of the new residences, including the number of bedrooms and the lease or purchase price.

APPENDIX B – QUINCY COMMUNITY SNAPSHOT




Commuting
40,471
Workers who work in Quincy, live elsewhere.
7,912
Workers live and work in Quincy.
45,207
Workers who live in Quincy, work elsewhere.
Getting to Work
Personal Vehicle
67.9%
26.6%
Public Transportation
5.5%
Other*
*Other includes walking, bicycling, taxicab, motorcycle, or working at home.
Where Workers who Live in Quincy Work
7,912
Quincy
6,046
Boston
2,591
Weymouth
1,762
Braintree
1,478
Brockton
Where Workers who Work in Quincy Live
20,023
Boston
7,912
Quincy
2,280
Cambridge
1,844
Braintree
911
Weymouth
Source: U.S. Census Bureau LEHD Origin-Destination Employment Statistics (LODES); Inflow/Outflow Analysis, All Jobs, 2015
Industry Base
Largest Industries (2017)
Commercial Banking
4,847
Corporate, Subsidiary, & Regional Managing Offices
3,864
1,493
Direct Health & Medical Insurance Carriers
1,489
Elementary & Secondary Schools (Local Government)
1,484
Telecommunications Resellers
Fastest Growing Industries (2001-2018)
Telecommunications Resellers
1,536
Services for the Elderly & Disabled Persons
1,201
579
Custom Computer Programming Services
565
Other Individual & Family Services
471
Full-Service Restaurants
Source: EMSI, Largest Industries, 2001-2018

APPENDIX C – STATE AND FEDERAL FUNDING SOURCES

STATE FUNDING SOURCES

As noted, much of the public infrastructure improvements in Quincy Center were funded through various state grants. The table below provides a summary of these grants followed by a description of the funding sources.

State Grants 2004–2017

Year	Activity	Status	Amount	Source
2004	Planning Charrettes & Quincy Center District Design Guidelines	Completed	$30,000	Smart Growth Technical Assistance Planning Dept. Grant
2005	Downtown Parking Inventory and Analysis	Completed	$27,000	Priority Development Fund (PDF) Planning Dept. Grant
2008	Quincy Center Historic Building Survey Update	Completed	$9,000	Mass Historic Commission - Building Survey Planning Dept. Grant
2005	Concourse Phase III Roadway (McGrath) - Engineering/Design	Completed	$469,324	Public Works Economic Development DPW Grant
2005	Concourse Phase III Roadway (McGrath) - Construction	Completed	$1,530,675	Public Works Economic Development DPW Grant
2007	Various Downtown Public Infrastructure Engineering and Construction Activities	Completed	$5,000,000	Economic Stimulus Appropriation for Quincy Center Revitalization
2009	Adams Green Preliminary Design	Completed	$50,000	Transit Orientated Development (TOD) Planning Dept. Grant
2013-2017	Adams Green - Traffic Improvement Project - Public Works Construction & Signalization	Completed	$1,342,212	EOEEA Gateway Cities Park
2012-2013	Adams Green Park - Design	Completed	$1,000,000	EOEEA Gateway Cities Park
2012	Town Brook - Construction	Completed	$5,000,000	State Supplemental Budget -Quincy Stimulus Appropriation
2012	Town Brook - Construction	Completed	$5,100,000	MassWorks Infrastructure Grant
2012-2014	Burgin Parkway Access Bridge - Construction	Underway	$11,000,000	MassDOT Bridge Program
2015-2018	Hancock Cemetery Restoration	Completed	$33,000	Mass Historical Commission- Preservation Grant
2016-2018	Hancock Cemetery Tomb Restoration	Underway	$190,000	Mass Cultural Facilities Grant
2016	Adams Green Park Infrastructure	Underway	$4,200,000	EOEEA Gateway Cities Park
2016-2017	Ross Garage Demo/Surface Lot	Underway	$5,800,000	EOHED MassWorks
2016-2018	MassDOT: MBTA Station	Award Letter	NA	MassDOT
2017-2018	Ross Development Area: Drainage Improvements	Completed	$2,000,000	MassWorks Infrastructure Grant
	TOTALS		**$42,781,212**	

Source: City of Quincy.

Description of State Funding Sources

- Executive Office of Energy and Environmental Gateway Cities Park Program: Funds the creation and restoration of parks and recreational facilities in underserved urban neighborhoods.
- Executive Office of Housing and Economic Development MassWorks: Provides funds for municipalities and other eligible public entities to support and accelerate housing and job growth in the Commonwealth.
- Massachusetts Cultural Facilities Grant: Supports projects that create jobs in construction and cultural tourism; expands access and education in the arts, humanities, and sciences; and improves the quality of life in cities and towns across the Commonwealth.
- Massachusetts Historical Commission Survey and Planning Grant: Supports the preservation of properties, landscapes, and sites (cultural resources) listed in the State Register of Historic Places.
- Massachusetts Historical Commission Preservation Grant: Supports the preservation of properties, landscapes, and sites (cultural resources) listed in the State Register of Historic Places.
- MassDOT Bridge Program: Supports the reduction in the number of structurally deficient bridges in the state.
- MassWorks Infrastructure Program: Provides capital funds for municipalities and other eligible public entities to complete public infrastructure projects that support and accelerate housing and job growth.
- MassHousing Priority Development Fund: Aims to increase the supply of affordable and mixed-income rental housing.
- Public Works Economic Development DPW Grant: Supports public infrastructure funding to generate economic development and job creation.
- Executive Office of Energy and Environmental Affairs Smart Growth Technical Assistance Grant: supports efforts to plan, regulate (zone), and act to conserve and develop land consistent with the Massachusetts' Sustainable Development Principles.
- State Supplemental Budget - Quincy Stimulus Appropriation for Quincy Center Revitalization: State budget appropriation.
- Executive Office of Energy and Environmental Affairs Transit Orientated Development (TOD): Creates mixed-use, higher density communities that encourage people to live, work and shop near transit services and decrease their dependence on driving.

FEDERAL GRANTS

Public infrastructure improvements in Quincy Center were also funded through a variety of federal grants. The table below provides a summary of these grants followed by a description of the funding sources.

Federal Grants 2004–2017

Year	Activity	Status	Amount	Source
2009	Concourse Phase II Roadway (Hancock St)-Right-of-Way Demolition	Completed	$2,000,000	American Recovery Reinvestment Act (ARRA)
2009	Concourse Phase II Roadway (Hancock St) - Construction	Completed	$6,000,000	American Recovery Reinvestment Act (ARRA)
2010-2012	Adams Green - Traffic Improvement Project - Design	Completed	$800,000	2004 Federal Trans. Earmark (originally Concourse Phase II)
2013-2017	Adams Green - Traffic Improvement Project - Public works construction & Signalization	Completed	$5,368,850	2004 Federal Trans. Earmark (originally Concourse Phase II)
2011	Transportation Improvements @ MBTA Station - Adams Green	Underway	$978,300	Transportation Community System Preservation (TCSP)
2016-2018	MassDOT: MBTA Station	Award Letter	$4,273,771	U.S. DOT Bus/Bus Facilities
		Total:	**$19,420,921**	

Source: City of Quincy.

- American Recovery Reinvestment Act (ARRA): A stimulus package enacted in 2009 to preserve and create jobs as a response to the Great Recession. Existing jobs and create new ones as soon as possible.
- 2004 Federal Transportation Earmark (originally Concourse Phase II): An earmark inserted into a federal discretionary spending appropriations bill.
- Transportation Community System Preservation (TCSP) Program: Provides funding for a comprehensive initiative including planning grants, implementation grants, and research to investigate and address the relationships among transportation, community, and system preservation plans and practices and identify private sector-based initiatives to improve those relationships.
- U.S. DOT Bus and Bus Facilities Infrastructure Investment Program: Makes federal resources available to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities including technological changes or innovations to modify low or no emission vehicles or facilities.

APPENDIX D – DIFFERENCES-IN-DIFFERENCES ANALYSIS: MODEL SPECIFICATION AND MODEL RESULTS

MODEL SPECIFICATION

The equation used to specify the DD regression is as follows:

$$\ln(y_{i,n,t}) = \beta_0 + \beta_1 DIF_{i,n,t} + \beta_2 POST_{i,n,t} + \delta\,(DIF * POST)_{i,n,t} + \beta_3 POL_{i,n,t} + \epsilon_{i,n,t}$$

In this equation, y is the property values for parcel *i*, in neighborhood *n*, at time *t*. DIF is a dummy variable indicating whether or not a parcel *i* is in the DIF zone and POST indicates whether or not time *t* is from before or after the construction period. The interaction term *DIF * POST* only equals one for observations from the DIF zone after the construction period. Thus, δ is the DD estimator, and provides the differential property values in the DIF zone compared to North Quincy and the baseline data. Since properties values are highly skewed, the natural log was taken in order to conform to the normality assumption required for linear regression.

We also include a vector of exogenous variables that took effect during the DIF-related construction period, marked here as *POL*. Most of the factors that one would normally control for as regression terms either are captured by the DD framework or are part-and-parcel of the redevelopment effects (e.g. changes in the population). The first difference allows us to adjust for baseline differences between the two areas and the second difference allows us to adjust for broader economic trends and market forces. Therefore, controlling for these factors would cause us to either over-specify the model or would bias the estimation of the DIF effects. However, we include a set of variables in the model that represent changes within each of the areas that occurred between time one and time two. In this case, we included for parcel size in acres and property type classification codes, such as residential and commercial. This allows us to control for changes in property values attributable to change in the lot size as well as differences in the mix of the types of properties.

MODEL RESULTS

The results are presented here with the pre period set to 2012 and the anticipated value of the new construction substituted in place of the FY 2018 values. However, the results were very similar regardless of which property values were used.

The variables *DIF, POST, Acres,* and *Use Code* all strongly associated with differences in the assessed property values. When looking at the property uses, it is important to note that there are also multi-use parcels in the study areas, but these are taken by the model as the "base case" against which other uses are compared. The F-statistic (p-value = 0.000) indicates than the model as a whole is better than just representing the data with the average. However, the R-squared value (0.190) indicates that there is lot of variability left over in the data that is not accounted for by the model. This could include things that contribute to the value of the improvements on the property, such as the square footage of the building or the number of housing units.

Results

	Estimate	Standard Error	t-value	p-value
(Intercept)	13.2850	0.0658	201.846	0.000
Quincy Center	0.2074	0.0223	9.298	0.000
Post	0.0766	0.0181	4.233	0.000
Land (Acres)	0.0705	0.0055	12.703	0.000
Residential	-0.5586	0.0651	-8.581	0.000
Commercial	0.0389	0.0696	0.56	0.576
Industrial	-1.0492	0.1695	-6.191	0.000
Exempt	0.5716	0.0759	7.531	0.000
DD Estimator	-0.2956	0.0281	-10.525	0.000

The results indicate that the average value of properties around the Quincy Center station are higher than around the North Quincy station and that average values for both areas grew over time. However, average property values in Quincy Center did not grow as quickly in North Quincy, growing by about 74 percent of the rate of North Quincy.

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