

WORCESTER FOR EVERYONE

A REGIONAL HOUSING AND ECONOMIC STUDY OUTLINING LOCAL OPPORTUNITY

PHASE 1 : BEST PRACTICES

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EXECUTIVE SUMMARY

Worcester's resurgence is dramatic; The metro region is the state's second-fastest growing economy, increasing by 9 percent between 2012 and 2017. The city's population has increased by 14 percent since 1980, far higher than similar cities in the Commonwealth and Worcester's affordable housing and business-friendly regulatory environment are key competitive advantages. These achievements are the result of a concerted effort and long-term cooperation between the city, the Worcester Regional Chamber of Commerce, Worcester Business Development Corporation, Massachusetts Biomedical Initiatives, healthcare institutions, private businesses, universities, and community-based organizations.

Population responds to policies. If Worcester's investments in its local economy and efforts to improve its residents' standard of living continue, the city could see an 8 percent growth in population (14,757 people) by 2030. The highest growth will be in the working-age population between 25 and 64.

Since 1990, most of the population growth in Worcester has been in its

urban core, where the median age is 30, the median income \$40,000, and, in some neighborhoods, 40 percent of the population lives below the poverty line. In addition, nearly 38,000 non-college students live below the federal poverty level. A balanced and inclusive economy can provide the growth to lift these people out of poverty.

If unaddressed, housing challenges such as undersupply and substandard units could stall Worcester's economic growth. The demand for rental units is outstripping its supply, placing upward pressure on rents. A thoughtful housing strategy is at the heart of Worcester's economic future.

A conservative estimate points to \$1 to \$1.5 billion untapped housing market in Worcester. Two types of housing customers are underserved in Worcester: commuters and lower-income households. Nearly 70 percent of employees who work in Worcester live outside the city and commute in every day. Only 1 percent of people who work downtown also live there. Forty percent of Worcester's full-time workers earn between \$25,000 and \$50,000 per year. But only one-third of

households in that income range are home owners. The proposed life-stage approach is a simple way of looking at housing needs. A range of opportunities exist, from rehabilitation to locally implementing breakthrough technologies in construction. Market-based solutions are required to produce enough affordable homes without relying on finite housing subsidies.

To capitalize on these opportunities, five challenges lie ahead: lowering construction costs, designing incentives for employees to live in Worcester, removing financing barriers for first-time, lower-income homebuyers, creating a conducive regulatory environment to implement breakthrough construction technologies, and investing in workforce housing construction. This report presents best practices examining how similar communities overcame these challenges.

The number of vacant and abandoned lots in the city has more than doubled since the 2008 recession. Data-driven processes to strategic rehabilitation and code enforcement of derelict properties and vacant lots have proven to be successful in several cities facing similar challenges. The communities showcased in these best practices succeeded in their efforts because they combined a data-driven process with thoughtful regulatory design and community collaboration.

Homeownership creates a vested interest in a community and, for most Americans, homeownership is the only path to asset building and a way out of persistent poverty. Financing a first-time home purchase is a barrier for many lower-income full-time workers. Once purchased, creating a “safety net” program to prevent foreclosure due to illness or job loss is key to increase and maintain home ownership among middle-and lower-income residents, a majority of the population in Worcester. Employers offering home buying assistance to their employees as part of an “enlightened self-interest” policy is another best-practice highlighted in this report.

In working toward a vision of a vibrant and walkable 18-hour downtown, it also important to rethink a downtown's function. In a post-Amazon world, downtown can be a place for experiences and interactions rather than a retail hub. This report presents practices that have proven successful in other cities' placemaking efforts to reinvent their downtown in the new economy.

The best practices presented in this report hope to inspire both government programs and business solutions in Worcester. The city's and the region's long-term success depends on a balanced and inclusive growth strategy.

INTRODUCTION

Worcester's population growth is significantly higher than comparable cities in New England. Its population has increased by 14 percent since 1980, mostly within its urban core. The median age in the urban core is 30, a life-stage when a person typically decides to settle down, creating a long-term commitment from a younger cohort who will grow with the community. Nearly \$2.5 billion in public-private investment is catalyzing positive change across the city, resulting in remarkable transformation. A decade of efforts by the Worcester Regional Chamber of Commerce, the City of Worcester, Worcester Business Development Corporation, Massachusetts Biomedical Initiatives, healthcare institutions, private businesses, universities, and community-based organizations is coming to fruition as Worcester takes its first steps in rebuilding its downtown, a significant achievement.

What opportunities and challenges lie ahead? This report hopes to guide Worcester's next steps by providing best practices from across the country, examining successes of other communities who have addressed similar challenges.

There is a \$1.5 billion untapped housing market for innovative entrepreneurs in the Heart of the Commonwealth. There are a range of business opportunities in Worcester, from new construction and rehabilitation to locally implementing breakthrough technologies in housing. Innovations in Worcester can be applied to other Gateway Cities, where the target housing market is worth \$30 billion. Working together, businesses, the city, and community-based organizations can forge Worcester's unique path toward a vibrant and walkable 18-hour downtown, a resilient urban core, and a balanced and inclusive economy that supports all life-stages and income groups.

This report is divided into three sections: "Understand" examines the baseline trends in Worcester's demographic and economy, and presents a population forecast for 2030. "Focus" makes a case for why and where to strategically focus efforts. It also highlights business opportunities in the housing market at the heart of Worcester and the commonwealth. The third part, "Act," presents best practices from communities that have successfully addressed the same challenges facing Worcester. These best practices are grouped into five issue areas: increasing homeownership, improving housing

quality, reinventing the downtown in a post-Amazon world, building community assets, and the need for a united regional economic vision.

The three-pronged approach of:

1. Financing home purchase through Employer-Assisted Housing, Lease-to-Purchase financing, and foreclosure prevention;
2. Reducing the cost of construction through new technologies, supporting zoning and permitting reforms, strategic rehabilitation, and designing for Worcester's preference for no-frills housing, and;
3. Improving walkable access to work, school and recreation across the city.

These best practices can help Worcester successfully face its challenges and capitalize on the unmet demand for market-rate housing that is affordable for all income levels. By adopting these ideas, Worcester's regrowth and resurgence will create a strong base for Worcester and the region to thrive in the decades ahead.

UNDERSTAND

WORCESTER'S RESURGENT POPULATION

A metric for a community's health is in the growth of its resident population. A community that invests in policies that create a vibrant place can expect its population to grow by attracting more people to live, work and play there. Particularly, investments in housing and job creation play a critical role in changes in the working-age residents in any community.

An assessment of the changes in population gives both the policy makers and businesses an overview of the residents they serve and changes that they can expect. In this section, we will look at the long-term trends in Worcester's population, changes in demographic groups, and forecast changes in demographics until 2030. We strongly advise interpreting the forecast as a general guidance for policy makers rather than a predetermined outcome, as population responds to policy.

Worcester's population growth is significantly higher than comparable cities in New England. Like many post-industrial cities, Worcester's population peaked in the 1950's, followed by a decline.

Worcester lost nearly 20 percent of its population between 1950 and 1980. Starting from the 1960s, people began moving to the suburbs. In the city, Interstate 290 was built right through the center of Worcester, dividing the remaining community at the urban core. In the 1970s, factory closures became more common, and by the 1980s, most industrial sites had been converted to other uses or abandoned. A familiar process of housing deterioration, tax delinquency, and property abandonment set in.

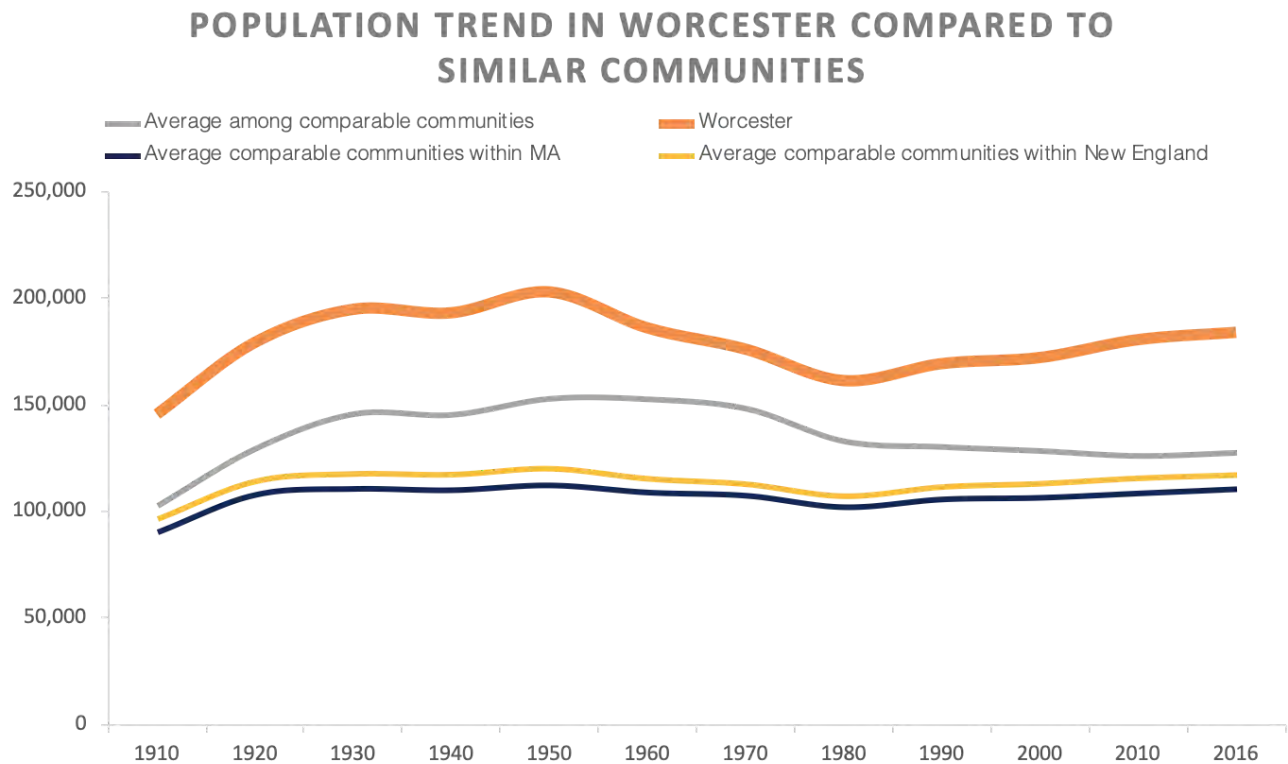
The trend in population growth since the 1980s shows a resurgent Worcester compared to its peers. Comparable cities from across the nation lost on average 4 percent of their population between 1980 and 2016. In contrast, Worcester's population grew by 14 percent during the same period (Figure 1). One could try to explain Worcester's regrowth as part of New England's or Massachusetts' overall growth, but that does not fully account for the phenomenon.

Between 1980 and 2016, growth in a comparable city in Massachusetts averaged only 8 percent, and a comparable New England city grew by 9 percent. The additional 6 percent growth in Worcester compared to similar Massachusetts cities makes Worcester's population resurgence particularly remarkable. It is worth noting this statistic has policy implications, particularly if we consider where within the city the population increased.

Worcester's population growth since the 1980s has happened in two different parts of Worcester. During the 1980s, most households moving to Worcester chose the western part of the city,

WORCESTER'S POPULATION GREW 14 PERCENT SINCE 1980, 6 PERCENT MORE THAN AN AVERAGE GATEWAY CITY

Figure 1



Source: U.S. Census Bureau Bureau and SGE's calculations

such as the Westwood hills and North Worcester neighborhoods. This geographical pattern changed after 1990. As Figure 2 shows, since 1990, most growth happened in the urban core and east. The geographic variation in growth has important implications for the city's housing and economic policy as demographic and income

levels are different between the west and north neighborhoods compared to the east, south and urban core.

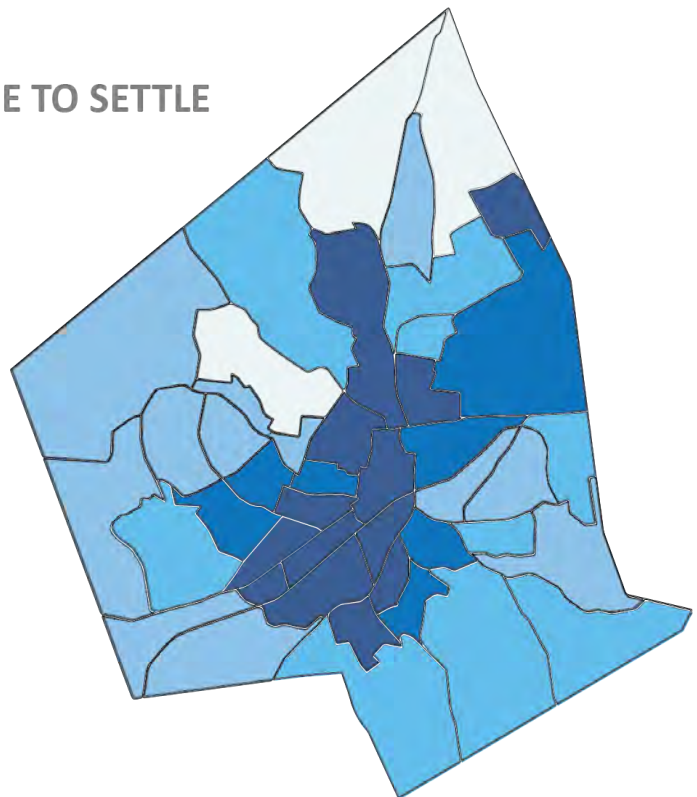
MOST GROWTH AFTER 1990 HAS BEEN IN THE URBAN CORE

Figure 2

WHERE NEW HOUSEHOLDS CHOSE TO SETTLE IN THE CITY OF WORCESTER SINCE 1990

Percent of New Households
since 1990 by Neighborhood

- 93% or more
- 87% - 92%
- 82% - 86%
- 76% - 81%
- 75% or less



Source: U.S. Census Bureau

REVIVING WORCESTER'S ECONOMY - A CITY REDEFINED

Beginning with the renovation and expansion of the DCU Center in the late 1990s, Worcester has attracted over \$2.5 billion in public-private investment on a range of projects across the city. In downtown alone, nearly \$1 billion, mostly in private investment, has been catalyzed. These efforts are drawing people back to the urban core and are reflected in the numbers: Worcester's metro region is the second fastest-growing economy among the five metro regions in the state. Between 2012 and 2017, the city grew by 9 percent versus the 11 percent seen during the same period in the Boston-metro area. In that time, wages grew 22 percent between 2012 and 2017. This progress is attracting more businesses and has reduced crime to the lowest level in 30 years, improving the standard of living in the city.

By leveraging its central geographic location, including the recent expansion of its airport, Worcester is growing into a transportation hub for New England.

The highlight of the revitalization effort is the start of the public-private partnership to repurpose the 27 acres of land occupied by the defunct mall in the heart of the city. Once the site of a mall, it is now Unum headquarters

bringing with it \$70 million in investment and 615 jobs. St. Vincent Cancer and Wellness Center represents an additional \$30 million in investments and the City Square project added 370 market-rate housing units downtown. In total, 800 new market-rate units are being added in the Junction Shops, The Edge at Union Station, and 145 Front st. at City Square developments.

In partnership with Worcester Polytechnic Institute, the city redeveloped an 11-acre site to build a life sciences and bioengineering center and two hotels, adding capacity to the existing hospitality industry and strengthening the city's specialization in biotech. The 2021 arrival of the Red Sox Triple - A affiliate is already attracting further investment to the city.

Worcester's 61 parks are a community asset that enhance the quality of life for residents regardless of their age or income. Worcester's investment of more than \$50 million toward updating park amenities, in addition to investments in streetscaping and infrastructure represents a long-term investment in the well-being of its residents.

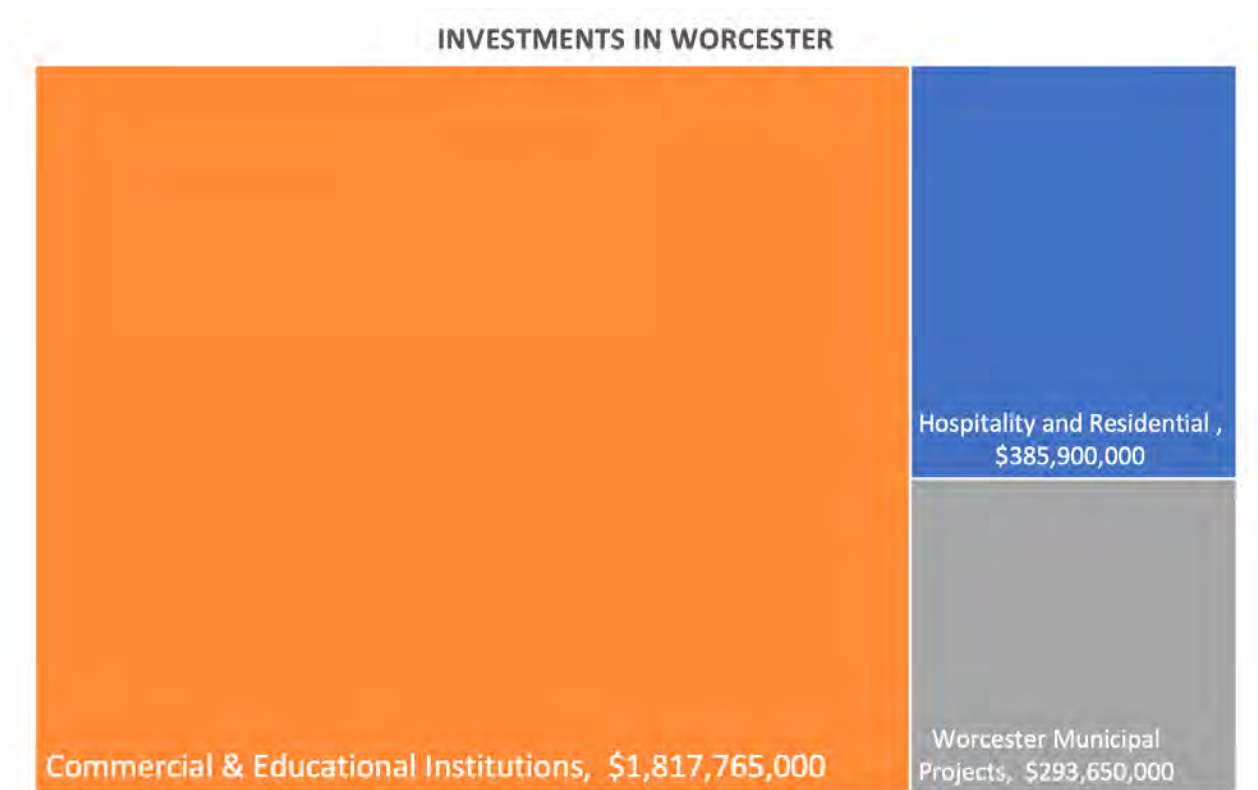
There is a strong demand for a lively urban environment that suburban communities don't offer. An 18-hour downtown offers vibrancy beyond normal work hours while retaining the community's affordability. In working toward a vision of a lively and walkable 18-hour downtown, Worcester will become more attractive to residents preferring an urban lifestyle while its already strong residential neighborhoods cater to families.

Worcester's affordable housing and business-friendly regulatory environment are key competitive advantages of the city. The above achievements are the result of concerted efforts and cooperation between the city, the Worcester Regional Chamber of Commerce, private businesses, Worcester Business Development Corporation, Massachusetts Biomedical Initiatives, healthcare institutions, private businesses, universities, and community-based organizations.

What opportunities and challenges lie ahead? If unaddressed, housing challenges such as under supply and substandard units could stall Worcester's economic growth. The demand for rental units is outstripping its supply, placing upward pressure on rents. A thoughtful housing strategy is

at the heart of Worcester's economic future. The best practices presented in this report hope to inspire both government programs and business solutions in the city. Worcester's and the region's long-term success depends on a balanced and inclusive growth strategy.

Figure 3

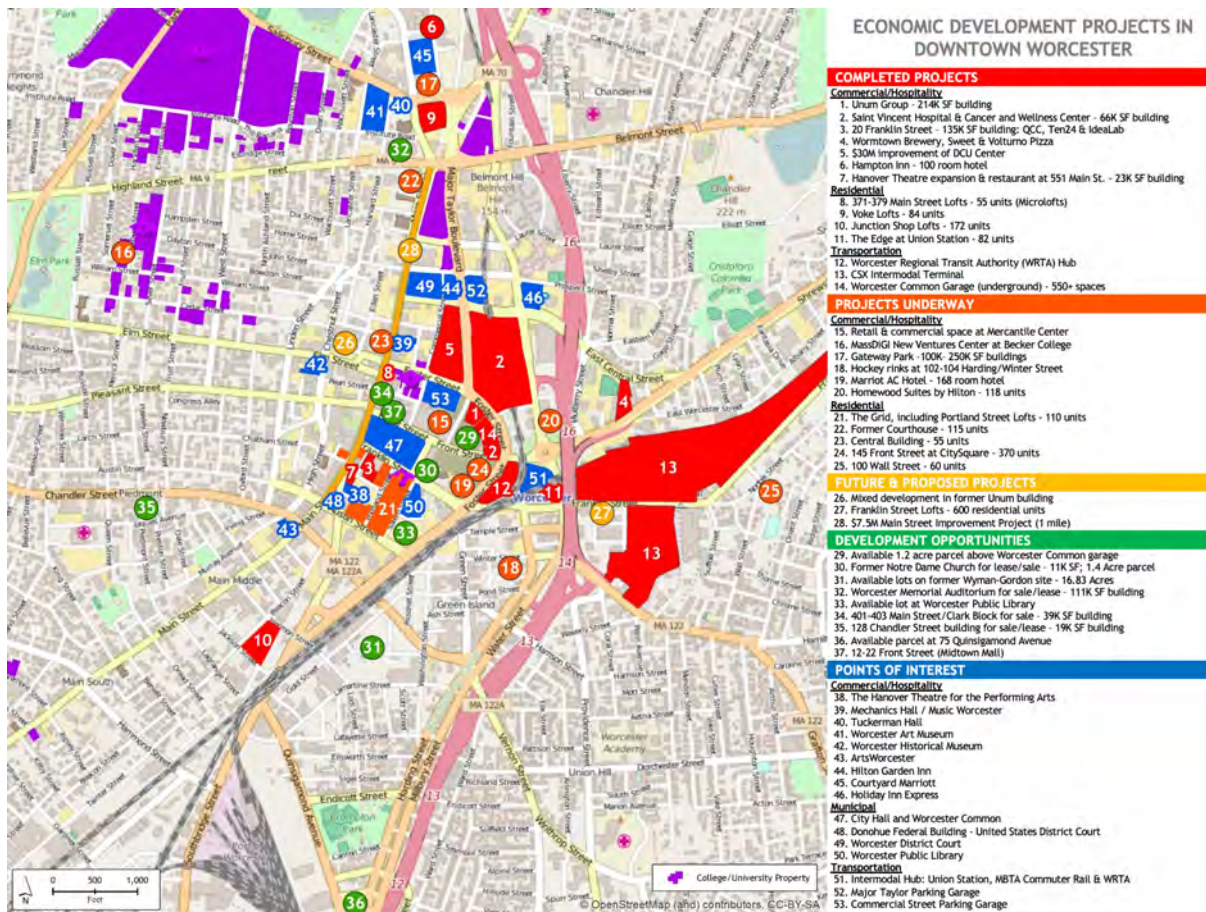


Source: SGE's calculations based on data from WRCC

Figure 4

Economic Development Projects in Downtown Worcester

AN UPDATED MAP CURRENTLY BEING PREPARED



Source: Worcester Regional Chamber of Commerce

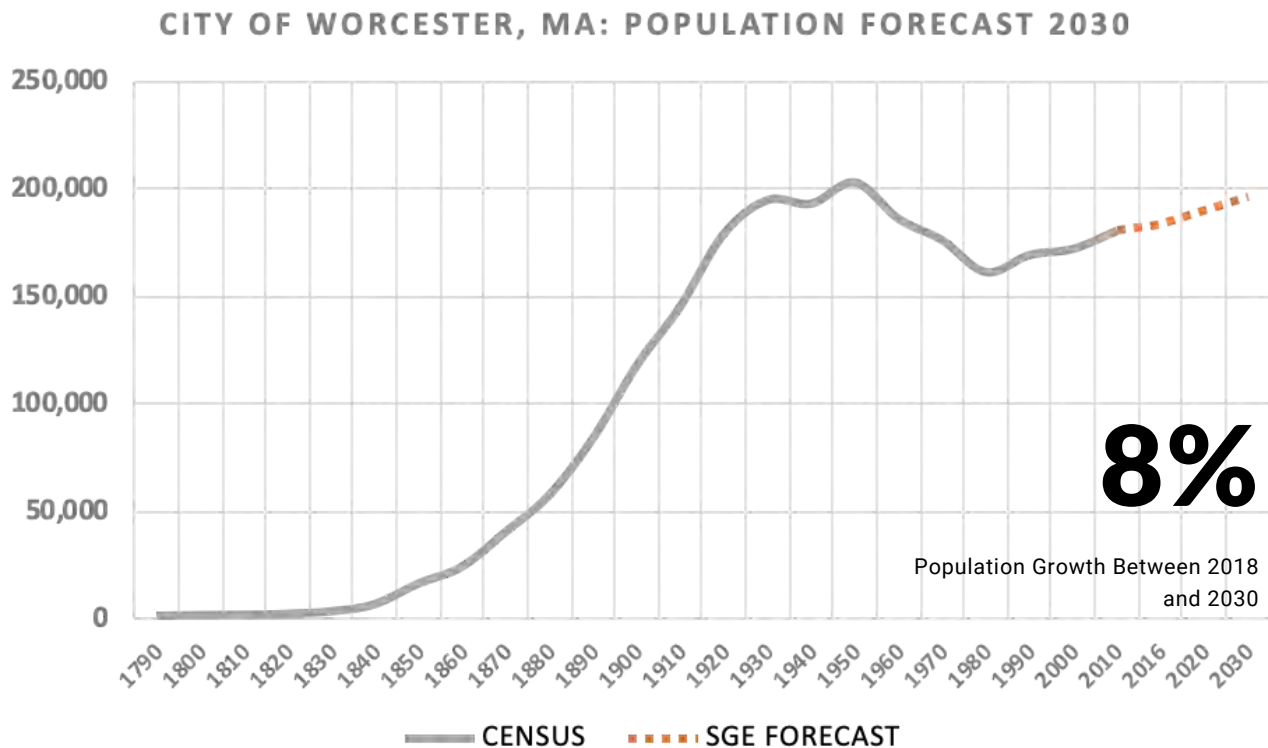
WORCESTER'S POPULATION IN 2030

Worcester's current population is 185,677, a 2.6 percent increase compared to its 2010 Census Bureau estimate. This translates into 4,600 more residents. We forecast Worcester's population to grow to 195,802 by 2030. This is an increase of 8 percent or 14,757 people over the next 12 years. SGE's approach is different from traditional demographic forecasting methods. Our custom models emphasize economic variables. Population responds to policies, but like any forecast, our model's output is

also based on a number of assumptions about past trends continuing into the near future. Innovative policies in housing, job creation and improvement in the quality of life in Worcester could lead to a better-than-expected increase in population. The converse case is possible if policies reverse or stall.

DEMOGRAPHY IS NOT DESTINY; POPULATION RESPONDS TO POLICIES

Figure 5



Source: SGE's forecast

Assuming trends in fertility and mortality rates continue and the City of Worcester continues its investment in economic development, housing development, employment growth, and investment in public amenities that improve the quality of life, we expect growth in the share of working-age residents between the ages of 25 and 64. This demographic is expected to grow by 17,826 by 2030, a 19 percent expansion compared to 2010.

Presently, almost 70 percent of people working in Worcester commute from surrounding towns. The fact that most Worcester employees choose to live outside Worcester speaks to housing and quality of life issues. As the quality of life in the city continues to improve in tandem with job creation, investment in housing for all life-stages, and availability of housing at diverse price points, are expected to accelerate growth in Worcester's working-age population.

Our model shows a reduction of 1,831 high school and college-age residents (15-24 years), following a trend throughout the U.S.

Studies at the national level forecast the number of 18 year olds is expected to decline precipitously starting in 2026, as a result of childbearing decisions during the Great Recession of 2008. This will affect enrollments at colleges and universities. A sizable negative economic impact is likely to be felt by college towns. While a separate study is needed to estimate the economic impact of reduced enrollment on Worcester's economy, we do know students and faculty contribute significantly to the local economy. The period of stagnation in college enrollment is projected to run from 2013 through 2032. In Worcester, 13 percent of the population (24,000) are college students, so stagnation at the national level is likely to affect Worcester's college population.

**THE 2008 RECESSION HAS
IMPACTED PEOPLE'S
CHILDBEARING DECISIONS,
AFFECTING FUTURE
COLLEGE ENROLLMENTS**

The other factor in the forecasted decline in college enrollment is the disruption of the college education business model. According to Harvard Business School research, 50 percent of U.S colleges and universities are likely to close or merge with other institutions in the next 10 to 15 years. The effect will be mostly felt by smaller institutions with smaller endowments and cost overruns. While we do not know how this industry-level change will affect colleges in Worcester, collaborating with local colleges and universities in their recruitment efforts and helping plan for a possible decline in the number of students will benefit students, institutions and the Worcester community. One way to help colleges recruit more students is through stabilizing neighborhoods around their campuses.

As baby boomers get older, Worcester needs to think about elder life-stage housing. Housing needs for elders vary from smaller units to assisted living units. We expect a small decline (2,761) in the share of residents between 65 and 84 based on mortality rates, but that could change with advances in medical science or improvements to the healthcare system and quality of life in Worcester[1]. We expect the share of residents over the age of 85 to slightly increase by 1,230 by 2030.

WORCESTER NEEDS TO THINK ABOUT HOUSING FOR ITS ELDER POPULATION

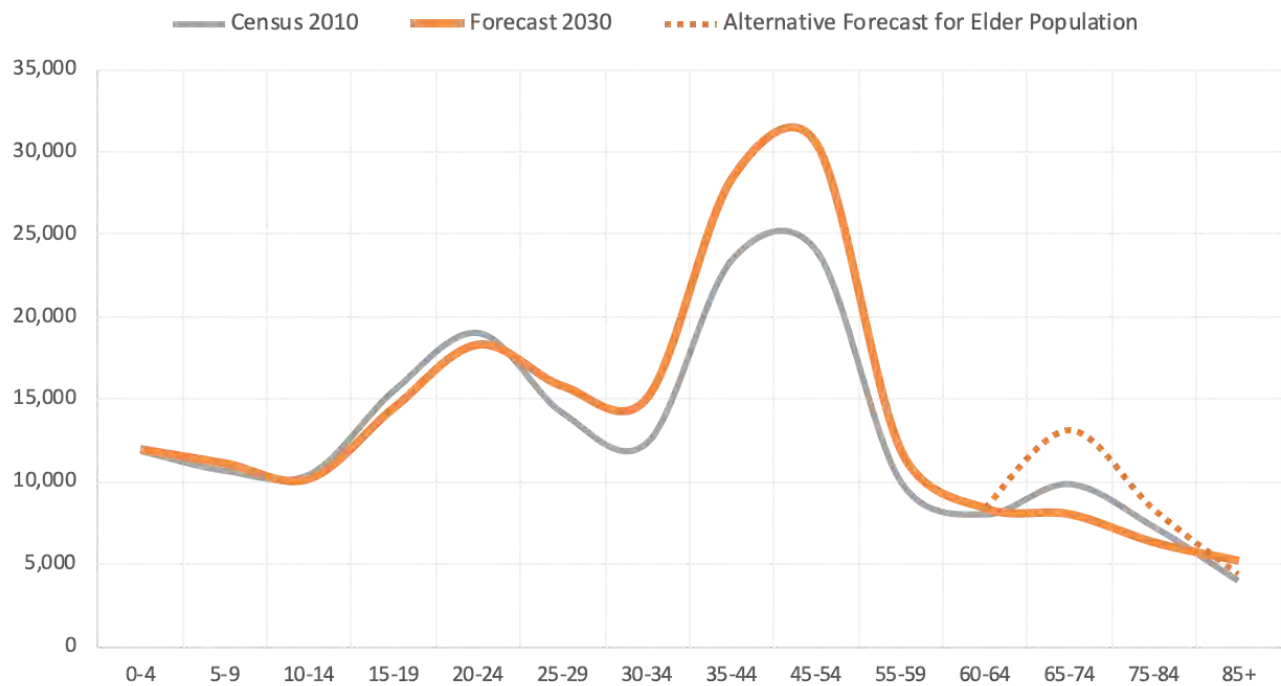
[1] Earlier this year, U.S. Census Bureau started recalculating mortality rates separately for foreign-born immigrants. Given the increasing share of foreign-born immigrants in Worcester, the mortality rate might not follow past trends. Therefore, it is possible that the population between 65 and 84 could increase instead of decrease. Under this alternative scenario, we expect the population within the age group of 65 and 84 to increase by 4,368 by 2030 compared to 2010. This would push the overall population of Worcester to 202,101.

Again, it is important to remember that population levels respond to policies, and this forecast is meant as general guidance, not a predetermined outcome. We recommend that this model be updated in the future when additional data becomes available, particularly after the 2020 Census Bureau.

BY 2030, THERE WILL BE A 19 PERCENT INCREASE IN RESIDENTS BETWEEN THE AGES OF 25 AND 64

Figure 6

EXPECTED CHANGES IN THE COMPOSITION OF WORCESTER'S POPULATION



Source: U.S. Census Bureau and SGE's forecast

FOCUS

TARGET ECONOMIC & HOUSING POLICIES TOWARD THE URBAN CORE

Worcester is outperforming similar post-industrial communities in many respects, particularly in producing large numbers of market-rate and government-subsidized affordable homes. However, given the issue of concentrated poverty and the working class increasingly being pushed out from the Boston Metro area into cities like Worcester, a different approach is needed to prevent the mistakes of larger metro regions across the country. This will require a strategic focus and innovative solutions.

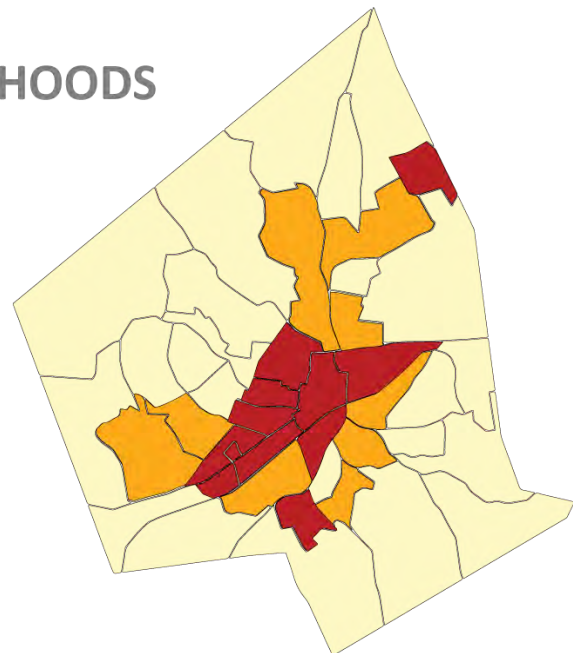
An important measure of the economic health of a community is its success in lifting people out of poverty. Nearly 21 percent (38,000) of Worcester's residents live below the federal poverty level (this number does not include college students) [2]. Residents below the federal poverty level are geographically concentrated in the urban core, visible in Figure 5.

Figure 5

LOWER-INCOME NEIGHBORHOODS IN THE CITY OF WORCESTER 2013-2017

Percent of the population
below the poverty line

- 20% or less
- 20% - 33%
- more than 33%



Source: U.S. Census Bureau

[2] Poverty level varies by family size. In 2017 for a single person the poverty level is \$12,600 or less in total annual income; for a family of two adults and two children the poverty level is \$24,600.

As discussed in earlier sections, the depopulation of the urban core during the 1960s and 1970s and the subsequent deterioration of housing stock is an ongoing problem for Worcester. Persistent poverty and substandard housing [3] quality are correlated. As housing costs rise across Massachusetts, people in poverty have had to resort to living in substandard housing.

In Worcester, the problem of poor housing quality extends beyond the urban core to the southern and eastern parts of the city. Figure 6 displays a map of substandard housing units in Worcester. The darkest census tracts have at least 33 percent substandard housing.

Figure 6

SUBSTANDARD HOUSING IN THE CITY OF WORCESTER 2013-2017

Percent of housing units
with substandard
conditions

15% or less

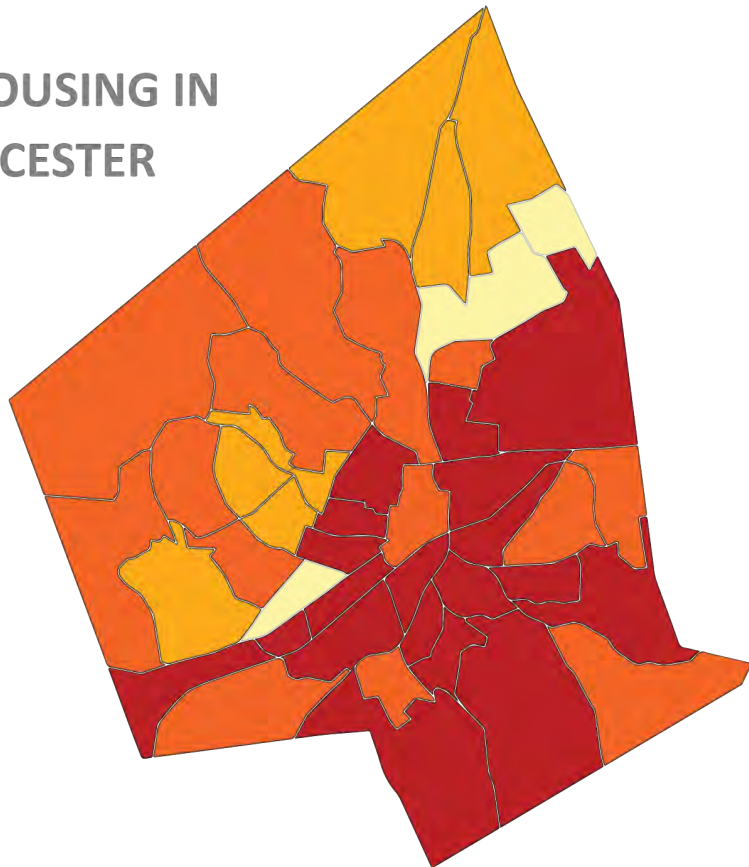
16% - 20%

21% - 25%

26% - 33%

more than 33%

Source: U.S. Census Bureau



[3] Substandard housing is defined as lacking proper plumbing or proper kitchen facilities and ownership or rental costs exceeding 30% of the annual household income.

WHAT IS HAPPENING IN WORCESTER'S URBAN CORE?

Across Massachusetts, 727,311 people lived below the federal poverty level in 2017. Between 2010 and 2017, despite sustained growth in the economy and a historically-low unemployment rate, 70,697 more people were added to those already below the poverty level. Recent research by MassINC [4], identified the increasing concentration of extreme poverty in Gateway Cities as a major challenge. The report found two-thirds of neighborhoods with poverty rates greater than 40 percent are located in just nine Gateway Cities, including Worcester.

The same report notes that poverty is increasing in Worcester. In 2000, only three Census Bureau tracts had a poverty rate over 40 percent; this grew to seven Census Bureau tracts by 2017. To craft solutions at both the state and local levels, it is crucial to examine the underlying processes that lead to this situation. For the purpose of local economic policy, it is important to distinguish between an increase in poverty among existing Worcester residents and an increasing number of residents already in poverty moving to Worcester's urban core. Between 2000 and 2017, the city's population increased by 13,000, all of it at the

urban core. There, seven Census tracts have a poverty rate more than 40 percent. The number of people within those seven Census tracts are 11,000 as of 2017 (representing 29 percent of the 38,000 people below the poverty level in the entire city). Between 2013 and 2017, among the 10 Census tracts, including Green Island and the South and Main South neighborhoods, the number of residents at or below the poverty level increased by 26 percent (3,200) as a result of low-income residents moving to Worcester from outside the city. Among those 3,200, 55 percent moved from other parts of Worcester County, 19 percent moved from other counties within Massachusetts, 12 percent from other states, and the remaining 14 percent from abroad. This in-migration means an increasing number of people in poverty are moving to Worcester to find a better life.

**WORCESTER'S
POPULATION HAS
INCREASED BY 13,000,
ALL OF IT IN THE URBAN
CORE**

[4] "Building Communities of Promise and Possibility State and Local Blueprints for Comprehensive Neighborhood Stabilization" Ben Forman and Alan Mallach, Mass Inc 2019

SEVEN CENSUS TRACTS IN THE URBAN CORE HAVE A 40 PERCENT POVERTY RATE

Among all migrants to Worcester coming from other counties in Massachusetts, the largest net migration is from Middlesex County, which includes the cities of Cambridge, Somerville, Malden, Waltham, Lowell, Everett, Burlington, and Framingham.

Between 2008 and 2016, 3,100 Middlesex County residents migrated to Worcester County. Most of these migrants are in low-paying service jobs.

WORCESTER IS ATTRACTIVE TO THOSE DISPLACED BY RISING HOUSING COSTS IN THE BOSTON METRO REGION

This examination of poverty data reveals that people already in poverty are migrating into Worcester, rather than the standard interpretation that more current residents are descending into poverty.

The attraction to Worcester is not surprising, given the median home value is about half of the median value of a home in Middlesex County. Worcester is also attractive to those displaced by rising housing costs in the Boston Metro region. A growing economy in Worcester is also attracting job seekers. Migration data also shows that Worcester County is attracting people from Springfield and Franklin counties.

As will be shown in a later section, a lack of investment in subsidized housing in Worcester's surrounding communities has concentrated poverty in Worcester.

To best serve the public, housing policies need to consider the income level and life-stage of residents in the urban core of Worcester. The income of residents presently living in the urban core is below \$40,000, and half of these residents make less than \$25,000 annually. One study found that even

THE MEDIAN AGE IN WORCESTER'S URBAN CORE IS 30

a 23-minute daily commute is equivalent to a 19 percent pay cut. For those already in the lower-income bracket, it is reasonable to expect that despite the substandard housing quality at Worcester's urban core, living in a dense area in walkable distance from jobs and amenities reduces the need for a car, significantly lowers the cost of housing, brings residents in poverty closer to social services and increases their potential of finding employment.

With a median age of 30, in terms of life-stage and demographics, the urban core of Worcester is predominantly young. Worcester needs more housing to accommodate the increasing number of people choosing to live by themselves or with a roommate^[5]. Aside from being lower-income, younger demographics also have the burden of student debt.

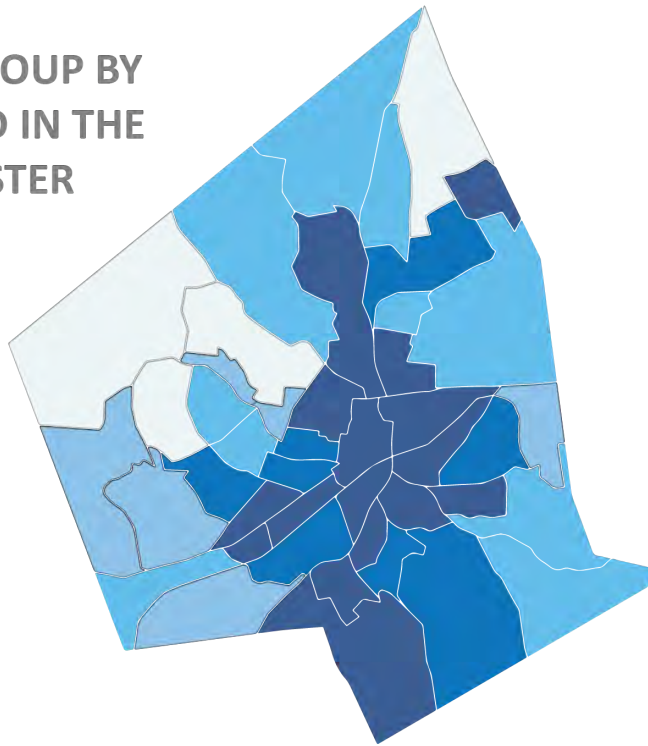
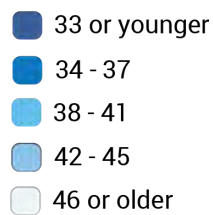
Average student debt in Massachusetts is \$39,000 (The Boston Globe, March 2019). According to a 2017 Federal Reserve study, a \$1,000 increase in student loan debt lowers the homeownership rate by about 1.5 percentage points for public four-year college-goers during their mid 20s, equivalent to an average delay of 2.5 months in attaining homeownership. The combination of lower salaries and student debt makes it difficult for many young professionals to attain even the first rung of the ladder toward the American dream of homeownership and a middle-class life.

Focusing on improving the urban core of Worcester means primarily crafting solutions tailored to younger and lower-income groups. For most communities, it is important to attract this group, as they are entering the life-stage when a person typically decides to settle down. This brings the community a long-term commitment from a younger cohort who will grow with the community, and creates a stronger consumer base for homes, adds to the local economy, and generates more municipal tax income.

[5] Living alone or with a roommate transcends across age groups. As of 2017, 25,000 are living alone and another 16,000 are living with a roommate in Worcester. Together, these two lifestyles and life-stages add up to 22 percent of the total population. Since, income of these 41,000 residents varies considerably, Worcester's urban core also needs housing at diverse price points, including higher-end apartments.

Figure 7

**MEDIAN AGE GROUP BY
NEIGHBORHOOD IN THE
CITY OF WORCESTER
2013-2017**



Source: U.S. Census Bureau

A similar story is emerging at the urban core of other New England Gateway Cities. The increase in lower-income residents choosing the urban core of Gateway Cities indicates that they function as an affordable place where the poor and displaced can hope to reach the American Dream of home ownership and a stable middle-class life. For future policy, this means that Gateway Cities like Worcester are not only tasked with alleviating poverty at the urban core, but also keeping it affordable while also growing robustly and having a thriving downtown.

**HOUSING POLICIES
NEED TO CONSIDER
RESIDENTS' LIFE-STAGE,
LIFESTYLE, AND INCOME
LEVEL**

**WORCESTER'S CHALLENGE
IS TO RESTORE THE
AMERICAN DREAM AT THE
HEART OF THE
COMMONWEALTH**

CONVENTIONAL SOLUTIONS ARE NOT ENOUGH

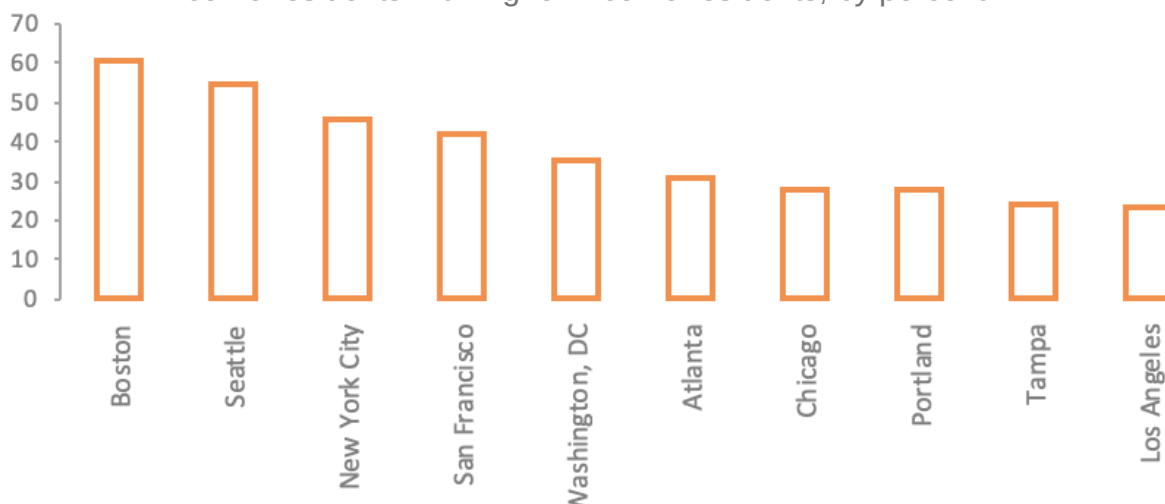
Conventional housing solutions come in two categories: adding to or improving buildings in a neighborhood and offering programs to help qualified people in poverty escape their poor neighborhood. Either approach to revitalize the urban core of cities skirts the problem by effectively replacing lower-income households with higher-income households instead of lifting lower-income households out of poverty.

The failure of conventional revitalization efforts can be seen in many large metro areas. One way to measure the replacement of low-income residents with higher-income residents is to track the change in median home value in a Census Bureau tract over time.

A Federal Reserve Bank of Cleveland study looked at changes in the home values at the urban core of the 55 largest cities in the country. The study finds that among the top 10 metro regions in the country, nearly 40 percent of the Census tracts in urban cores went from being in the bottom half of the metropolitan area's distribution of home prices to the top half between 2000 and 2007. Four cities saw this happen in a significant number of neighborhoods: Boston (61 percent), Seattle (55 percent), New York (46 percent), and San Francisco (42 percent). In Boston, the gentrifying neighborhoods represent about a fourth of the entire city's population.

Figure 8

Proportion of the city's low-price tracts that replaced lower-income residents with higher-income residents, by percent



Source: Based on data from the Federal Reserve Bank of Cleveland

A 2017 study by Tufts University and Southwest Boston Community Development Corporation calculated a risk index for displacement of low-income residents. They found nearly 40 percent of Boston's Census block groups to be at a high risk of displacement, mostly in Roxbury. Areas with higher proportions of people who lack a bachelor's degree and people of color highly correlate to the areas that score high on the risk index[6].

An understandable response from communities toward unthoughtful development that results in a higher costs of living has been in the form of social protests and a political backlash. Furthermore, research shows that income and social diversity is key to economic resilience. In pursuing policies that result in a homogenous urban core, communities become less vibrant and less resilient to economic changes.

**GROWTH IS NEEDED TO
HELP ALLEVIATE POVERTY,
BUT UNBALANCED GROWTH
DISPLACES PEOPLE
INSTEAD OF HELPING THEM**

How did this happen? Conventional solutions fail in this respect because of the prosperity paradox. Growth is needed to help alleviate poverty, but unbalanced growth displaces the poor instead of helping them. Investment in new construction with high-end amenities increases the surrounding property values too. This can increase wealth for those property owners near a big investment area without having to invest themselves. However, this pushes up the cost of ownership and rent for those already living in poverty in properties close to new development. This secondary effect on the cost of living eventually pushes people out of their community.

Other types of conventional policies offer help to select individuals or families in a low-income community. Policies such as housing vouchers create a "brain drain," and break up the community. Ultimately, neither type of conventional economic development policy actually lifts people out of poverty and creates a robust local economy.

[6] Corrison et al, Analyzing Risk of Displacement & Affordable Housing Opportunities in Southwest Boston, 2017. Tufts University and Southwest Boston Community Development Corporation

Attracting private investments to kick-start a collapsed real estate market at the urban core is a difficult and crucial step in the revitalization process. A revitalized local economy can create jobs and add new tax revenues that could help those in poverty. However, multiple factors such as the rising cost of construction, customer expectations about the size and finish, the cost of rehabilitation of existing homes, and difficulties finding financing options for low-income homebuyers makes newly-developed homes out the reach of households living below the poverty line.

Low-income households are often not the target of newly-developed homes unless this project is subsidized. Given limited government resources, subsidized housing units will not be enough to provide for all low-income households at the urban core. In the city of Worcester, as of 2017, nearly 38,000 residents live below the federal poverty level.

Investments intended to energize the slumped economy at the urban core instead increase the cost of living and push residents out of a developing neighborhood, making the effort to bring growth to the community counter-productive. The following sections discuss a different approach to economic development and housing, one that is inclusive and balanced.

SUBSIDIES ARE NOT A SCALABLE SOLUTION

Conventional thinking says a majority of housing units can only be affordable through subsidies. However, given the limits to government funding, depending on subsidies alone is unsustainable.

As of 2019, this study estimates a demand for 3,000 additional workforce housing units in the City of Worcester. At the typical subsidy level of \$150,000 per housing unit, meeting this demand for 3,000 units in Worcester alone would require over 60% of the state's 2019 housing expenditures. The demand for workforce units will likely increase, as we forecast a 20 percent growth in Worcester's workforce by 2030.

Massachusetts spent \$500 million towards various housing programs and subsidies in 2019, 40 percent more than in 2010. As of the 2017 U.S. Census, over 900,000 households in Massachusetts, including 30,000 in the City of Worcester, are cost-burdened. In addition, a 2019 Boston Federal Reserve study found subsidies for more than 9,000 Extremely Low Income (ELI) occupied affordable housing units across the state will expire in 2025. The state must add 76,464 subsidized units by 2035 to match the expected population growth, a yearly average of 4,024. Given the limits to government funding, complementary approaches are necessary to address the housing affordability crisis. This report suggests innovative best practices to produce affordable units at market-rate.

WORCESTER'S RENTAL HOUSING MARKET

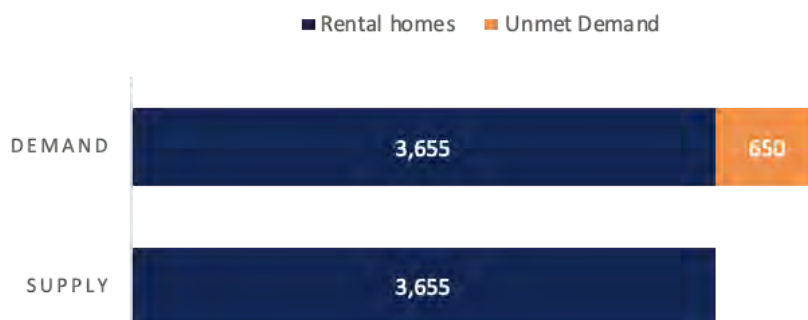
Worcester's demand for rental housing outstrips its supply, putting upward pressure on rents. In the face of growing demand between 2010 and 2017, the number of rental units increased by only 3,655, while the number of owned homes decreased by 3,304 units. The homeownership rate in Worcester is 42 percent, much lower than the Massachusetts rate at 62 percent and the national homeownership rate at 64 percent.

Since 2010, the number of homeowners in Worcester has decreased by 7 percent or 5,777, while the number of renters has increased by 12 percent to 9,611. The loss of homes from the 2008 bubble and consequent rise in renters is a national trend reflected in Worcester. Further compounding the problem, the population has increased by 2 percent (3,847)

since 2010 adding to the pressure on the limited number of rental units in the city. As discussed earlier, most people moving to Worcester are lower-income and prefer to rent, therefore adding to the growing demand for rental homes. This increasing demand for a limited supply results in higher rents. Median gross rent, including the cost of utilities, rose from \$861 in 2010 to \$1,051 in 2017. While it is tempting to attribute the increase in rents to new high-end apartments downtown, only 426 units with a monthly rent of more than \$2,000 have been added to the market since 2010. This is roughly 1 percent of the city's rental stock and therefore not a major source of rising rents in Worcester.

Figure 9

SUPPLY OF RENTAL HOMES COMPARED TO MARKET DEMAND 2010-2017



Source: U.S. Census Bureau and SGE's calculations. Note: Estimate of under supplied rental units is based on existing number of occupants per unit. Since a significant share of Worcester's homes have unhealthy number of occupants per bedroom, we consider the above estimate to be conservative.

The actual pressure on rent comes from Worcester's limited supply of rental units. Recent research [7] from Princeton University and the Massachusetts Institute of Technology finds that despite a lower property tax burden, landlords in poor neighborhoods still charge high rents exploiting lower-income residents. The research paper attributes this exploitative behavior to some landlords operating in a depressed market hedging their position by raising rents on all tenants. Worcester has a substantial number of substandard rental units while at the same time facing rising rents. Due to this behavior, increased demand, and a supply shortfall, Worcester is likely to experience upward pressure on rents.

**WORCESTER HAS A
SUBSTANTIAL AMOUNT OF
SUBSTANDARD RENTAL
HOUSING, DESPITE FACING
RISING RENTS**

There was an estimated 650-unit shortfall in rental units in the Worcester market between 2010 and 2017. Increasing the number of homes available for rent at diverse price points will ease the pressure on this rising trend. In the long run, fixing the broken pathways that prevent renters from becoming homeowners will be a sustainable solution to reverse the damage from the housing bubble.

**THERE WAS AN
ESTIMATED 650-UNIT
SHORTFALL IN RENTAL
UNITS BETWEEN 2010
AND 2017**

[7]Desmond, Matthew and Wilmers, Nathan. 2019. Do the Poor Pay More for Housing? Exploitation Profit, and Risk in Rental Markets. American Journal of Sociology. Vol 124 (4).

BUSINESS OPPORTUNITIES FOR INNOVATIVE ENTREPRENEURS

Private investment is vital to revive the collapsed housing market at the urban core of Worcester. The key questions to guide investment and growth are what type of housing and how much of each type is needed to achieve the goal of a thriving and inclusive Worcester. A conservative estimate points toward a \$1 to \$1.5 billion untapped housing market in Worcester. This section describes this potential market and innovations necessary to capitalize on the unfulfilled housing demand.

Despite a strong demand for housing across Massachusetts, the housing supply hasn't kept up, as evidenced by a 77 percent increase in home prices since 2000. Compared to long-term trends, the city of Worcester is under producing approximately 1,900 homes every year, despite a healthy price growth of 11 percent since 2010. Quite simply, Worcester needs to build more homes.

For the investment to be successful, it is important to understand the customer base. Two types of customers are underserved in Worcester: commuters and lower-income households. Nearly 70 percent of employees who work in Worcester live outside the city. Currently, 70,674 employees from various Worcester businesses commute into the city every day.

The top five towns Worcester employees commute from are: Shrewsbury, Holden, Auburn, Leicester and Milbury. More Shrewsbury residents work in Worcester than anywhere else, including Shrewsbury itself. In total, 3,682 workers from Shrewsbury commute into Worcester. Sixty-three percent of these commuters are full-time employees of the UMass Memorial Medical center and UMass Medical School, earning a median wage of \$70,000.

A vibrant downtown active for 18 hours a day will be an asset to the entire city. To achieve this goal, Worcester needs to increase the number of people living downtown. Currently, 31,473 people commute into the downtown area every, while only 1 percent (329) both live and work in the area. After 5:00 pm, the heart of the city empties.

**THERE IS A
\$1 TO \$1.5 BILLION
UNTAPPED HOUSING
MARKET IN WORCESTER**

Figure 10:

WHAT SHARE OF EMPLOYEES LIVE IN WORCESTER?

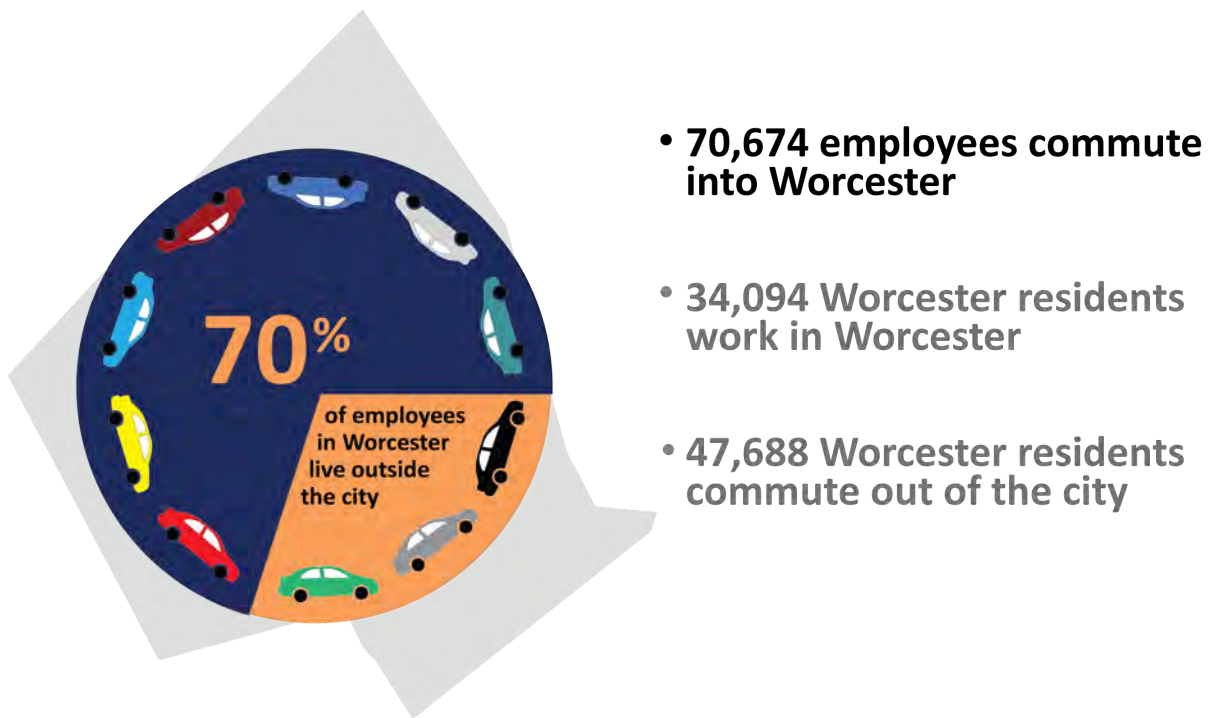
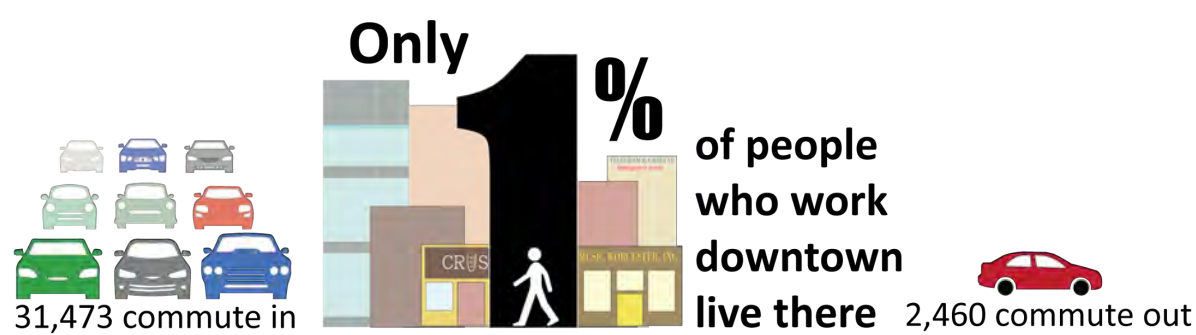


Figure 11:

WHAT SHARE OF EMPLOYEES IN WORCESTER LIVE DOWNTOWN?



A RANGE OF BUSINESS OPPORTUNITIES EXIST IN WORCESTER



**HIGHER-AMENITY HOMES FOR A SMALL NUMBER OF
HIGHER-INCOME PROFESSIONALS DOWNTOWN**



**HELP EMPTY-NESTERS DOWNSIZE WITHOUT
DOWNGRADING**



**OPPORTUNITY FOR REHABILITATION OF SUBSTANDARD
HOUSING**



PROVIDE EMPLOYEE HOUSING



**SPARK INNOVATIVE SOLUTIONS FOR LOW-INCOME HOME
BUYERS**

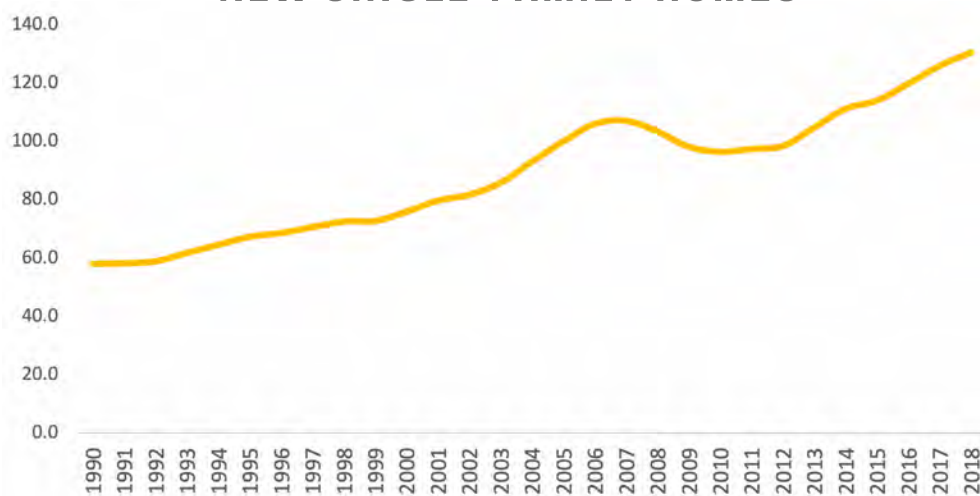
Given the economic, physical, and psychological costs of commuting for employees and the corresponding economic costs to employers, it is in the interest of businesses in Worcester to offer their employees the choice of living near their job. Understanding the housing needs of commuters and providing housing for them is an untapped need. A survey of Worcester employee housing needs will appear in Phase II of this study, and will examine what employees are looking for in a community and what is keeping them from calling Worcester home. The following sections will discuss best practices in encouraging employees to live closer to their job.

Worcester's population has grown steadily, concentrated in the urban core since 1990. These residents have a median income of \$40,000 a year. A metric of success for any community is its homeownership rate, especially among lower-income residents. Among those earning less than \$35,000 per year in Worcester, only 19 percent own their homes. This is laudable compared to Massachusetts: the state-wide level is only 13 percent among the same group. Despite Worcester's relative success in homeownership, the city has higher-than-average concentrated poverty, so a greater homeownership target is needed.

Lower-income residents of the urban core make up Worcester's other underserved market. The growth in

Figure 12

RIISING CONSTRUCTION COSTS OF NEW SINGLE-FAMILY HOMES



Source: U.S. Census Bureau, Constant quality price index, adjusted for inflation

The city of Philadelphia, Pennsylvania stands out in terms of best practices for increasing homeownership among its lower income population. Thirty-one percent of Philadelphia's residents earning less than \$35,000 per year are homeowners, compared to 21 percent statewide. Both figures are much higher than those of Worcester and Massachusetts as a whole. Increasing homeownership among lower-income groups creates vested interest in a community. For most Americans, homeownership is the only path to asset building and a way out of generational persistent poverty.

Forty percent (23,000) of Worcester's full time workers earn between \$25,000 and \$50,000 per year. Only one-third of households in that income range are homeowners. While the remaining two thirds, or 11,000 households, are renters. Regional employment projections indicate most new jobs created will be in the pay range of \$38,000 to \$54,000. Traditional development practices would dismiss this potential market, but serving this population can be profitable while also reducing poverty.

To capitalize on the opportunity in this underserved market, it is important to understand incorrect assumptions about housing for lower-income customers. In common practice, affordable units are built using government subsidies to decrease price points for lower-income

customers. This approach can create an adversarial relationship between developers and the community. More importantly, the number of affordable units created through this conventional process, while raising Worcester above the state-mandated 10 percent affordability threshold, doesn't capitalize on the untapped demand in the housing market.

**INCREASING HOMEOWNERSHIP
CREATES VESTED INTEREST IN A
COMMUNITY.**

**FOR MOST AMERICANS,
HOMEOWNERSHIP IS THE ONLY
PATH TO ASSET BUILDING AND A
WAY OUT OF GENERATIONAL
PERSISTENT POVERTY.**

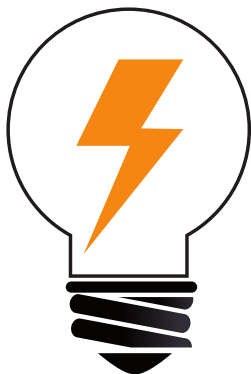
Compared to the low volume and high margin of luxury condos, the market for middle- and lower-income homes is a high-volume and low-margin business. In some markets, even producing higher-end units has become expensive due to construction costs, labor costs (aging labor in the construction industry is a major concern), regulatory costs, and zoning restrictions. Nationally, a house in 2018 will cost 30 percent more than the equivalent house in 2005. This speaks to the fact that additional costs are not exclusively due to higher-end amenities customers demand.

With the cooperation of local governments, regulatory costs and zoning issues can also be resolved. A smart developer, willing to adapt these strategies, will lead the market and have the first-mover advantage. The following sections will present strategies that other communities used to address each of these challenges. Worcester's untapped workforce housing market is worth an estimated \$1 to \$1.5 billion; in Massachusetts as a whole, the housing market approaches \$30 billion.

With thoughtful design around the needs of the target customer, it is possible to lower the cost of construction.

Figure 13

FIVE INNOVATION CHALLENGES TO CAPITALIZE ON WORCESTER'S OPPORTUNITIES



- 1. Lowering construction costs**
- 2. Incentivizing employees to live in Worcester**
- 3. Financing low-income home buyers**
- 4. Eliminating regulatory and zoning burdens**
- 5. Designing a home that meet customer's needs and nothing more**

Figure 14

ILLUSTRATION OF PROFIT MODEL OF WORKFORCE VERSUS HIGH-END HOUSING



Figure 15

INCOME DISTRIBUTION AMONG HOUSEHOLDS IN WORCESTER 2013-2017



Source: U.S. Census Bureau

ACT

WHAT A BALANCED AND INCLUSIVE APPROACH LOOKS LIKE IN WORCESTER: A LIFE-STAGE MODEL

Worcester's long-term success depends on a balanced and inclusive growth strategy. A thoughtful housing strategy is at the heart of the revival of Worcester's urban core. This is necessary to catalyze private investment; create a vibrant 18-hour, 365-day downtown with walkable amenities; support local businesses to attract, retain, and grow talent; reinvent the commercial function of the downtown in a post-Amazon retail market; and most importantly, offer homes for all life-stage, lifestyle and income levels while lifting lower-income residents out of poverty and enabling them to stay in their community.

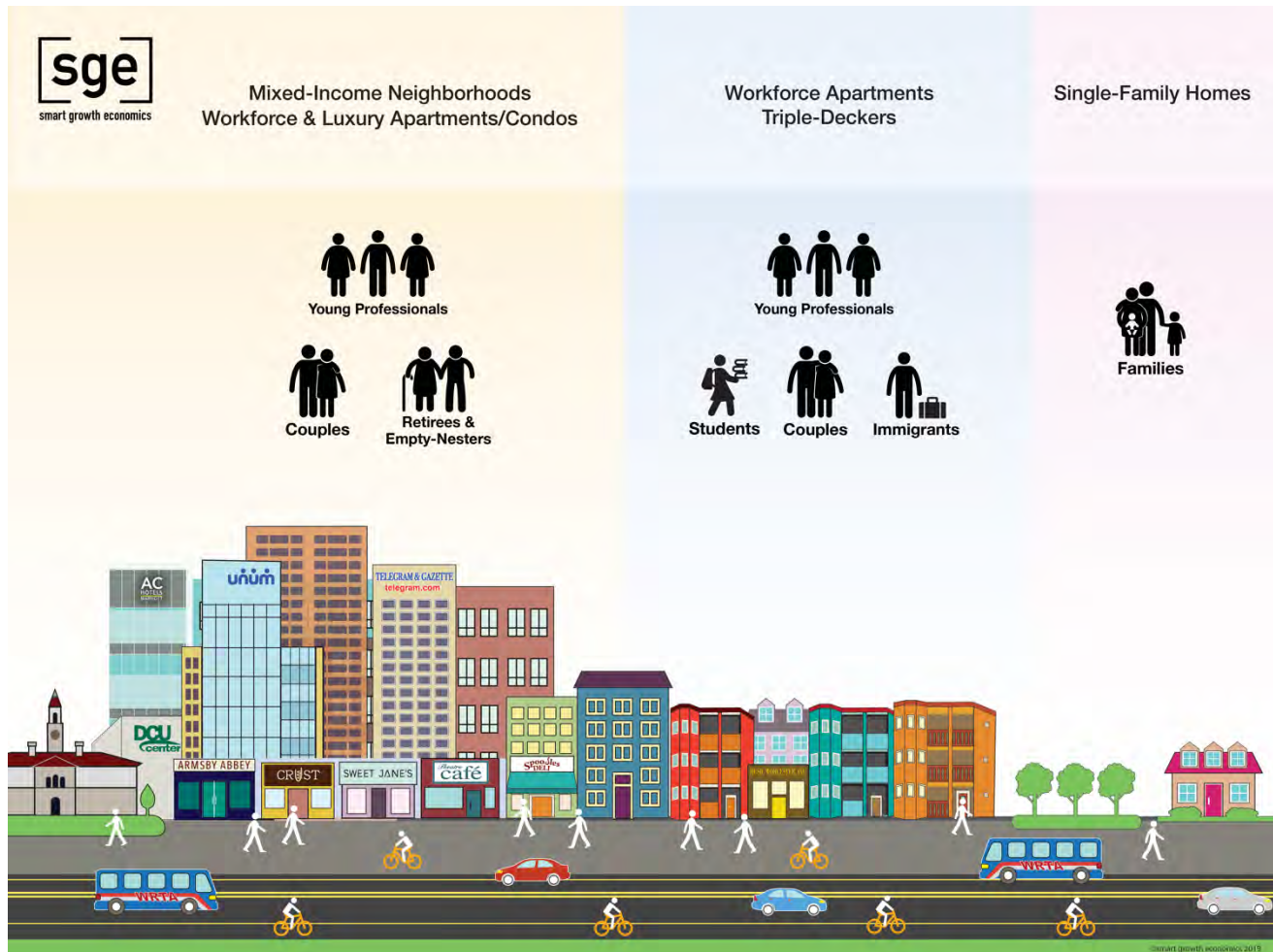
The proposed approach is a simple way of looking at housing needs. At the core of these issues is how a person's housing needs change over a lifetime. Over the normal course of life, people's income and lifestyle preferences change and play an important part in their choice of housing. While age is a strong indicator, preferences and income are also important in assessing the housing need of a person. For instance, some empty-nesters might want to downsize without downgrading

and might choose an urban life downtown, overlapping with the preferences of a young professional who might also be able to afford and prefer a life downtown. Given the concentration of lower-income workers, along with college students and immigrants at the urban core of Worcester, there is a strong untapped demand for market-rate workforce housing. In understanding the composition of preferences, affordability, and age groups, Worcester can tailor its policies and foster conditions for the private sector to produce appropriate types and number of housing units with the aim of creating an inclusive community that works for everyone. In discussing strategies and best practices in the following sections, we highlight examples where complex housing problems have been overcome by collaboration among public, private, and nonprofit players.

AT THE CORE OF THINKING ABOUT THESE ISSUES IS HOW PEOPLE'S HOUSING NEEDS CHANGE OVER A LIFETIME

LIFE-STAGE HOUSING

A BALANCED AND INCLUSIVE GROWTH STRATEGY



Attract investment and revitalize downtown, remove blight and create an 18-hour, thriving, walkable downtown

Lift low-income people out of poverty, while helping them stay in their community

Build on an already strong single-family market outside the core

Families only represent 48 percent of Worcester's households. The remaining majority can be grouped into couples, roommates, students, and those living alone. To design housing policies toward meeting their needs, we must understand the preference overlap across ages. For instance, 9 percent of Worcester's residents live with a roommate. The stereotype is that this type of lifestyle only appears among a younger demographic, while in reality, 40 percent of residents living with roommates in Worcester are adults over 35 years, and 6 percent are over 65.

Fourteen percent of Worcester's residents live alone. While this living situation is predominant among those above 35 years, 18 percent of those living alone in Worcester are 34 or younger. As discussed in the demographic forecast, Worcester can expect to see an increase of 4,700 people in its senior population. To accommodate this demand, housing units will need to incorporate accessibility options and elder care. Though some seniors and young professionals at higher income brackets would prefer to live downtown, seniors might have different needs in their housing design.

Income levels of residents at the urban core of Worcester are an important guide in designing housing solutions.

In 2017, median income among families was \$61,000, and non-family households (roommates and singles) had a median income of only \$31,000. Couples had the highest and fastest growing incomes at \$80,000. There are a small number of younger professionals in Worcester whose income is higher than the median, and lower-income couples also exist.

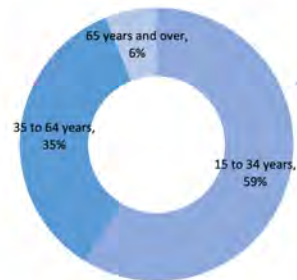
Current employment projections indicate that most jobs created in Worcester will be in the range of \$39,000 to \$54,000. Thirteen percent of Worcester's population is college students, and not all young professionals are in a position to pay for high-end apartments. Worcester is also a gateway for immigrants (local and international), who often seek lower-cost homes.

In the following sections, we propose five strategies for balanced and inclusive growth in Worcester, focusing on improving the urban core of the city, toward a thriving walkable community.

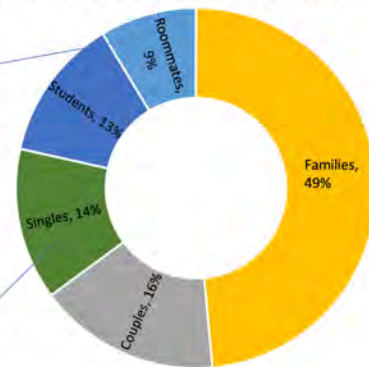
Figure 16

COMPOSITION OF THE POPULATION BY LIFE-STAGES 2017

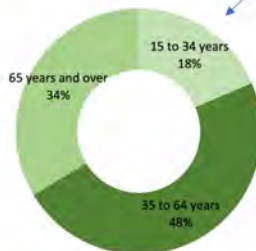
LIVING WITH ROOMMATES



COMPOSITION OF WORCESTER'S LIFE-STAGES

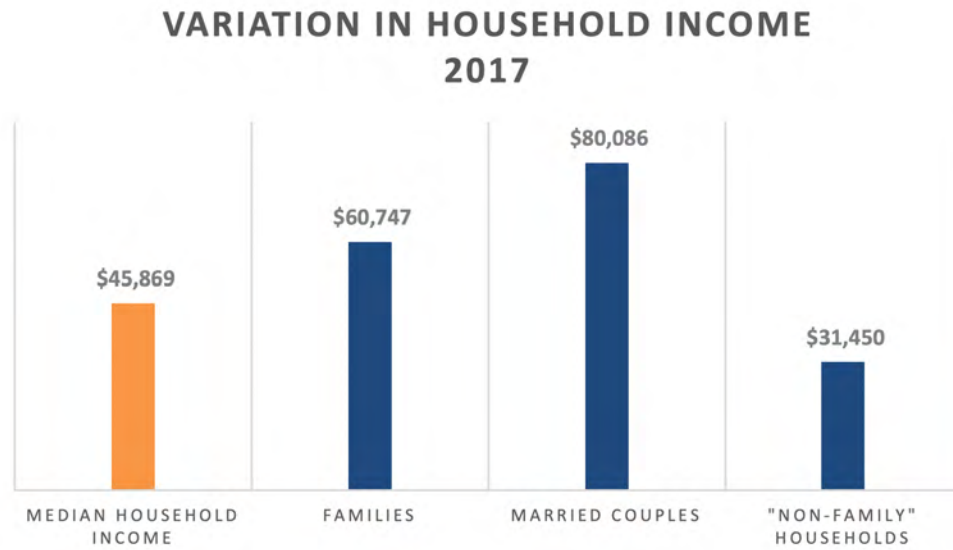


LIVING ALONE



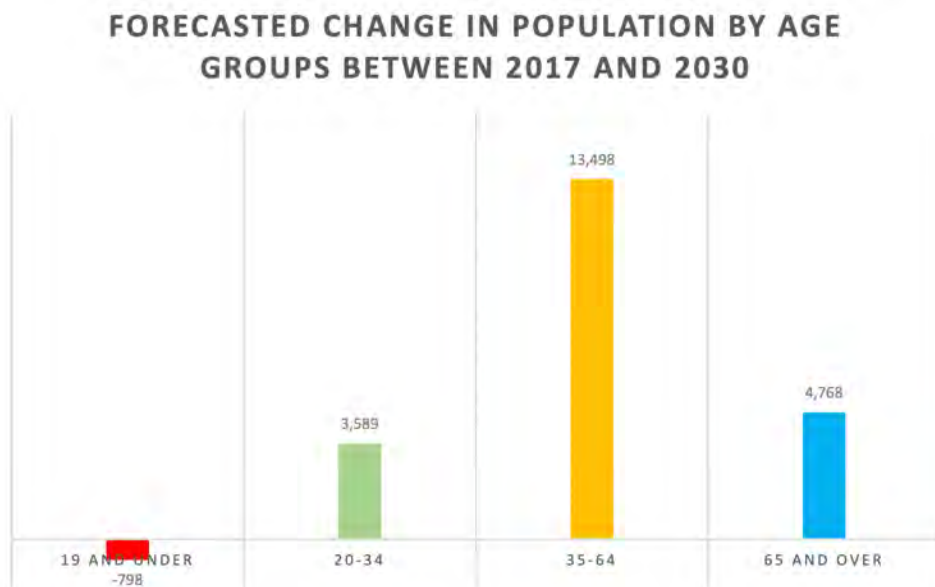
Source: U.S. Census Bureau 2013-2017

Figure 17



Source: U.S. Census Bureau and SGE'S forecast

Figure 18



Source: U.S. Census Bureau and SGE'S forecast

INCREASING HOMEOWNERSHIP IN WORCESTER

Worcester must produce more housing targeted toward employees and lower-income residents. Homeownership creates a vested interest in a community and, for most Americans, homeownership is the only path to asset building and a way out of persistent poverty. Increasing homeownership helps residents, the city, and the private sector. Two facts worth reiterating are that 70 percent of employees in Worcester live outside the city, and of those employees living within the city, 11,000 of them work full-time, earn \$25,000 to \$50,000 per year, and are renters.

Two key barriers to producing homes for lower- and middle-income households are the cost of construction and financing the home's purchase. As discussed earlier, the cost of construction has increased by 30 percent since 2005, even after accounting for housing quality changes. In this section, we will look at how various communities have successfully increased homeownership among lower- and middle-income groups through innovative methods.

These best practices range from new construction technologies, home design innovations, financing middle-income first-time buyers, data-driven rehabilitation of substandard or abandoned homes, and employer-assisted housing.

AFFORDABILITY BY DESIGN – BUILDING A \$100,000 HOME

When it comes to increasing access to homeownership, reducing material and labor costs can make a substantial difference. Like Worcester, the City of Philadelphia also experienced a loss of population since 1950. As a result, there is an abundance of blighted properties and vacant land in the city.

To convert the blight into opportunity, the city launched an initiative to create a \$100,000 home (purely the cost of construction). Homes in this program were designed in response to the unsustainable and dated approach to housing design that prioritizes home size. Instead, these homes were designed for functionality and economy. Each home is just 1,000 square feet, roughly one-third the size of an average house, but thoughtfully designed to meet the needs of a first-time home buyer.

HOMES DESIGNED FOR FUNCTIONALITY OVER SIZE

While reducing costs where possible, home designers added value where it was most needed in the kitchen, bathroom, and stairway. By using off-the-shelf fixtures and plywood, the project demonstrates how to lower the cost of housing materials without affecting residents' quality of life.

By keeping the exterior design to a simple four-corner box with a flat façade, energy-efficient doors and windows, and solar panels for hot water, the home is energy-efficient, reducing the cost of heating. Such homes are more affordable at market rate for first-time home-buying families.

While the San Francisco Bay area is a poster child for housing crises, it also offers some best practices in producing workforce housing for single persons. There, innovative companies are offering market-rate housing to serve as low-cost rental units for young professionals who prefer to live downtown. Two other rapidly-growing markets, Seattle and Austin, have also successfully adopted modular housing in their communities. These homes cost less because they are designed for a downtown, car-free environment; designed with a small footprint but still meet the functional needs of residents; and use modular construction technology.

THE MOST IMPORTANT AMENITY OFFERED IS THE AFFORDABLE PRICE

Modular construction benefits from economy of scale for material and labor, manufactured off-site, and quickly assembled at their final location. Prefabricated infill units can be assembled for as little as 60 percent of the cost of a normal building.

Depending on the city, a parking space can cost roughly \$60,000. Using that space to add more housing units downtown saves on cost and reinforces a walkable lifestyle. The most popular units in these developments are three-bedroom units at 600 square feet. Contrary to expectation, the market prefers low-cost apartments designed for functionality over size.

Other types of modular downtown housing are 160 square feet "micro-units." These very small apartments intended for one occupant have a private bath and kitchenette, and use off-the-shelf material purchased at scale and assembled on an industrial assembly line to significantly lower assembly costs.

Even in San Francisco, where the land cost is several times that of Worcester, the rental price for these efficiencies is roughly \$1,200 per month. A similar development in Worcester could rent for \$500-\$600 per month, half the median rent in the city.

In designing these types of homes, affordability for the workforce is the most important amenity. Features like a gym, work space, and dog care are not included in the building's design to keep the costs down for all residents. Installing basic workforce housing downtown can create opportunities for new gyms, workspaces, and dog care businesses, allowing residents who want those amenities to access these services within walking distance of their homes, encouraging walkability and smart growth.

STRATEGIC REHABILITATION – DATA DRIVEN PROCESS

The number of vacant or abandoned units in Worcester has more than doubled since the housing bubble. In 2000, there were 1,316 vacant properties; this grew to 3,740 by 2006 and 3,127 in 2017, representing a 140 percent increase in vacant or abandoned properties over 17 years. Vacant buildings and lots can reduce the value of surrounding properties by as much as 20 percent. The rehabilitation of properties not only removes blight from a neighborhood, but can also improve the value of surrounding properties.

THE NUMBER OF VACANT OR ABANDONED UNITS IN THE CITY HAS MORE THAN DOUBLED SINCE THE HOUSING BUBBLE

This increases the overall property tax revenue and can fund neighborhood improvement programs to create a positive feedback loop by reducing neighborhood crime rates, adding workforce-accessible market-rate housing, and strengthening the fabric of those communities. Three cities have been successful with a data-driven approach: Baltimore, Maryland; St. Petersburg, Florida; and the neighborhood of Slavic Village in Cleveland, Ohio.

Like Worcester, Baltimore has experienced a significant decline in population since 1950. This left the city with 16,000 vacant homes and 7,000 vacant lots. The city unsuccessfully tried a number of programs to address blight. For one project in the 1970s, the city bought and resold abandoned homes to homebuyers for a DIY restoration. Lacking expertise in home rehabilitation and finance, most buyers were unable to renovate the houses, rendering the program unsuccessful. In 2010, Mayor Stephanie Rawlings Blake made it a policy priority to address vacancy in Baltimore and work toward the goal of "10,000 new households in 10 years."

To achieve this goal, Baltimore launched the “Vacant-2- Value” program which successfully rehabilitated 2,500 vacant properties, initiated the sale of 1,277 abandoned homes, issued over 700 citations for building code violations, streamlined the property disposition process, gave \$10,000 grants to 117 households, and demolished 1,700 blighted properties. The program converted 900 of the demolished homes into community gardens in collaboration with a community land bank. The city sold 90 percent of its own vacant properties to private developers and catalyzed \$21.4 million in private investment. Partially due to this effort, 9 percent more residential permits were issued in targeted neighborhoods compared to the rest of the city.

Baltimore’s program was successful because of their data-driven approach to channeling their efforts. They created a framework for aggregating and applying the data and an analytical tool to compare conditions across neighborhoods. This resulted in a “neighborhood typology,” that categorized the city’s residential markets as competitive, emerging, stable, transitional and distressed, which the city used to target its investments.

BY AGGREGATING AND APPLYING THE DATA AND USING AN ANALYTICAL TOOL TO COMPARE CONDITIONS ACROSS NEIGHBORHOODS, BALTIMORE TARGETED DISTRESSED NEIGHBORHOODS ADJACENT TO STRONGER MARKETS

The city particularly targeted distressed neighborhoods adjacent to stronger markets to leverage private investment and create a positive feedback loop in the market.

Other innovations that contributed to the success of Baltimore’s efforts were the city’s receivership program which was streamlined and processed through a designated office and court. The city also hosted bi-weekly workshops to teach the public how to buy vacant properties and rehabilitate them. To avoid the trap of DIY home makeovers, no one buyer is allowed to take possession without counseling and full financing in place.

Independent studies of the program show that roughly two years after rehabilitations and sales in targeted neighborhoods property values started rebounding.

While Baltimore's program is a good model for Worcester, the program could be improved to make it even more beneficial for Worcester. Nearly twice as many houses on Baltimore's list of completed homes are investor-owned (64 percent, or 1,011) compared to owner-occupied (34 percent, or 537). A key problem is lack of financing. Banks won't lend to homebuyers to rehabilitate a vacant shell; therefore few homebuyers who intend to occupy the properties have successfully bought homes through Baltimore's program. The following section discusses a financing program that could be combined with a strategic rehabilitation program to increase owner-occupied housing.

St. Petersburg, FL targets abandoned homes and vacant lots owned by absentee landlords for renovation into affordable homes for lower-income residents. In 2014, the city became the first in Florida to use the judicial system to wrestle neglected properties away from absentee landlords. At the time, the city had 800 abandoned properties with a combined \$4 million in liens and unpaid assessments. In addition to this outstanding tax revenue, city must bear is the cost of policing and cleaning vacant properties.

ST. PETERSBURG TARGETS ABANDONED HOMES AND VACANT LOTS OWNED BY ABSENTEE LANDLORDS FOR RENOVATION INTO WORKFORCE-ACCESSIBLE HOMES.

Through this program the city sold these homes to non-profit affordable housing developers or auctioned them. This process brings down the cost of land for a developer, bringing a home a step closer to being affordable at the market rate. For properties St. Petersburg believed were at risk for speculation, the city bought the property and leased it to nonprofits to construct new affordable homes.

Overall, the city cut the number of boarded and vacant homes by more than 75 percent since the program was launched in 2014. As of March 2019, only 187 abandoned properties remain to be rehabilitated in the city, down from 741 at the beginning of 2015. In total, the city invested \$750,000 into the program, but generated \$2.1 million in revenue in liens and assessments collected at the auction.

Identifying vacant and abandoned properties and tracking them over time is an important part of their program's success. Underlying said success is a data-driven process. The Codes Compliance Assistance Department, works to educate property owners and enforce city codes, zoning issues, housing, and vegetation and maintenance standards. These services include property maintenance, yard maintenance, rental unit inspections, condemnation, securing and demolition of unsafe structures, and maintaining a foreclosure registry. This department works with the county assessor's office using an up-to-date database about the condition of properties in the city.

IDENTIFYING VACANT AND ABANDONED PROPERTIES AND TRACKING THEM OVER TIME IS AN IMPORTANT PART OF THE PROGRAM'S SUCCESS

KEY TO THE PROGRAM'S SUCCESS WAS STRATEGICALLY TARGETING PROPERTY CLUSTERS TO ACHIEVE HOLISTIC CHANGE AT A LARGE SCALE

Like St. Petersburg, Cleveland, Ohio also suffered during the 2008 housing bubble, leading to significant foreclosures. In the Slavic Village neighborhood, an innovative program converts vacant residential structures into opportunities for first-time homebuyers of modest income. A collaboration between lenders, for-profit, and nonprofit groups created the Slavic Village Recovery Project. This organization rebuilt blighted but structurally-sound homes within the Cleveland neighborhood. Key to the program's success was strategically targeting property clusters to achieve holistic change on a large scale. This was possible using a careful analysis of data and on-the-ground intelligence. Unlike many urban housing initiatives, the Slavic Village project does not rely on public funds, but it combines private investment and public services.

FINANCING FIRST-TIME HOME PURCHASES – A LEASE-TO-PURCHASE PROGRAM

The model of leasing a home as a stepping stone to buying it is not new. But, a thoughtful implementation differentiates successful programs from the rest. This section presents two cases of best practices in financing home purchases for modest-income first-time homebuyers that have been implemented successfully. Both of these programs involve a mission-driven developer, community-based organization, or a private corporation that purchases or develops a property and structures a long-term lease for a prospective buyer. Long-term, lease-to-purchase programs utilizing the Low-Income Housing Tax Credit (LIHTC) have been successful [7]. The lease can vary in length from three to 15 years, and ends with an opportunity for the tenant to purchase the property.

A successful lease-to-purchase program has been implemented in the Mechanicsville neighborhood in Atlanta, Georgia. There, 74 new and refurbished homes developed in partnership with Atlanta Economic Development Corporation, and private housing developers Columbia Residential and Brock Built Homes, received over 1,500 applications for a 15-year lease-to-purchase opportunity.

THOUGHTFUL IMPLEMENTATION DISTINGUISHES SUCCESSFUL PROGRAMS FROM THE REST

To keep up with demand, the Atlanta Neighborhood Development Partnership (ANDP) – a mission-driven nonprofit property developer, was formed through the merger of the Atlanta Chamber of Commerce’s Housing Resource Center and Atlanta Economic Development Corporation’s Neighborhood Development Department in 1991. In total, ANDP has developed, partnered with, or financed more than 11,000 units of affordable and mixed-income housing in Metro Atlanta more than 11,000 units of affordable and mixed-income housing in Metro Atlanta.

THE COLLABORATION BETWEEN THE ATLANTA CHAMBER OF COMMERCE AND ATLANTA ECONOMIC DEVELOPMENT CORPORATION IN CREATING A NONPROFIT PROPERTY DEVELOPER WAS A KEY TO THEIR SUCCESS

[7] LIHTC is a dollar-for-dollar tax credit from the United States government for affordable rental housing investments

Cleveland Housing Network started their lease-to-purchase program in 1987, offering first-time homebuyers with income below 60 percent AMI the option to purchase their home after 15 years of renting. Since then, this program has developed over 2,189 homes, and as a result, nearly 900 families have become homeowners. Eighty to 90 percent of the program participants successfully transition from leasing to owning, and among those who purchased, 99 percent still live in their own homes.

What makes the program successful is the design of the lease-to-purchase program and their understanding of the finances of modest-income families. For these families, a large upfront down payment and subsequent large maintenance expenses (e.g. replacing the roof) are major road blocks to becoming and remaining a home owner. Cleveland Housing Network's lease-purchase program is designed using the "Equivalency Principle" – where lease payments are structured at rates to mirror future mortgage payments. Rents gradually include many ownership costs such as property taxes, so even though the final purchase price is approximately 50 percent of market value, during the rental period the rents will be higher than comparable units.

The contract terms prepare renters over a 15-year period to become future owners and the program also provides

financial literacy education. Because of gradual rent increases and the long-term commitment, tenants take good care of the property and are invested in the community. By helping purchase properties in emerging neighborhoods, Worcester can help low-income residents "lock-in" affordability, helping them avoid rent appreciation shocks.

One of the potential downsides of any lease-to-purchase program comes from poorly-designed lease-to-purchase agreements. Programs shorter than five years may be not long enough for low-income buyers to build sufficient credit scores, while 15-year programs have been more successful. In poorly-designed programs, if a tenant misses a payment or two due to a hardship, job loss, or illness, their entire investment could vanish. With a traditional mortgage, the amount of equity the owner has earned remains the same. Given that risk, it is important to provide both legal protection and financial literacy to prospective homebuyers. Both of the highlighted best practices involve a nonprofit organization vested in the community, working in collaboration with the state, community development corporations, and private housing developers.

PROGRAMS SHORTER THAN FIVE YEARS MAY BE NOT LONG ENOUGH FOR LOWER-INCOME BUYERS TO BUILD SUFFICIENT CREDIT SCORES

As mentioned in the previous section, combining a rehabilitation program such as Baltimore's "Vacant-2-Value" with Cleveland Housing Network's lease-purchase program could help Worcester convert more than 3,000 vacant properties, particularly near developing neighborhoods, into homes for many first-time homebuyers with modest incomes.

EMPLOYER-ASSISTED HOUSING

In their "enlightened self-interest," employers are increasingly investing in their employees' home ownership. These employee incentive programs increase staff satisfaction while also improving an employer's bottom line. Employers benefit from increased workforce stability, reduced commute times that improve morale and decrease tardiness and absenteeism, revitalization of neighborhoods near an employer's facility. Such a policy rewards long-term workers and is a growing competitive strategy. Employer assistance toward housing can come in many forms: home buyer assistance, rental assistance, homeownership education and counseling, new construction in neighborhoods near their facilities, or renovation of substandard homes around the employer's location. These tools help employers attract and retain talent in a competitive labor market,

EMPLOYERS ARE INCREASINGLY INVESTING IN THEIR EMPLOYEES' HOME OWNERSHIPS IN THEIR "ENLIGHTENED SELF-INTEREST"

particularly when Massachusetts is faced with a severe housing shortage and home prices spiraling up by 77 percent since 2000.

The most stressful part of anyone's day is their commute. Seventy percent of employees in Worcester commute in from outside the city. In order to realize the vision of a vibrant and walkable 18-hour, 365-day downtown, Worcester must work with employers to offer employees a reason to live in Worcester in addition to working there. As Worcester's businesses grow, employees who live in the city add their earnings to the local economy through housing and purchasing goods and services. This generates more local jobs, creating a virtuous economic cycle.

Worcester's own Clark University offers a case study in incentivizing employees to live close by while helping redevelop the Main South neighborhood. Clark provides full-time employees a monetary incentive of \$5,000 toward closing costs when purchasing a home around the university's neighborhood. If the employee either leaves Clark or sells the property within five years, the employee must return the proportional amount at \$1,000 per year. So far, 31 staff and faculty members have benefited from the program.

This home-purchase incentive program is part of a larger program, which includes tuition-free college for students from the neighborhood and financial incentives for refurbishing the exterior parts of an employee's home. Clark also collaborates with the Main South Community Development Corporation to rehabilitate homes and assist low-income residents to purchase their first homes. Through these efforts, Clark has played a transformational role in the Main South neighborhood, and is a great example for other employers in the city to develop similar programs.

The University of Chicago and University of Chicago Medical Center in Chicago, Illinois, launched its program in 2007 to help employees become homeowners and target investment in neighborhoods around the university. Eligible employees receive an interest-free loan of \$7,500 toward a down payment and closing costs when they purchase a home in a targeted neighborhood.

A total of 158 employees have benefited from the program. The university and its medical centers have invested a total of \$1.2 million into the program. The program's success is also attributable to a successful collaboration with neighborhood housing services in Chicago, the local planning council, the city government, and private lenders.

WORCESTER'S CLARK UNIVERSITY OFFERS A GREAT CASE STUDY IN INCENTIVIZING EMPLOYEES

For-profit companies are increasingly investing in employer-assisted housing as part of their competitive strategy. The following prominent companies offer some form of housing assistance to their employees.

AFLAC Inc, located in Columbus, Georgia, collaborates with Neighbor Works Columbus, a private community-based nonprofit organization, to offer AFLAC's more than 4,400 Columbus employees a \$1,000 grant to use toward the purchase of their first home. If the employee decides to buy in targeted neighborhoods, the grant offered by the company increases to \$5,000. The grant comes in the form of down payment and closing costs assistance and financial counseling.

The program was launched in 2002, with more than 200 employees participating to-date. By 2007, Fortune magazine named AFLAC as one of the "100 Best Companies to Work For" for the ninth straight year. The program also boosted employee retention: in its internal survey, 72 percent of employees attributed the decision to remain with the company because of its housing assistance program.

THE PROGRAM PROVIDES EMPLOYEES WITH FORGIVABLE LOANS THAT CAN BE USED TOWARD DOWN PAYMENT AND CLOSING COSTS

Citizens Financial Group, Inc. headquartered in Providence, Rhode Island, launched its home buyer assistance program in 2002. Their program provides employees with forgivable loans that can be used toward down payment and closing costs. The loans vary by neighborhood, from \$5,000 to \$8,000. An employee who chooses to purchase a primary home in an "emerging community" under the federal Community Reinvestment Act is eligible for \$8,000 loan forgiveness over five years. Between 2002 and 2007, 188 Citizens employees purchased homes in emerging communities, and the company has committed to \$17 million in forgivable loans through the program.

TOP 25 EMPLOYERS IN WORCESTER

Local Rank	Name	Industry	Number of Employees (Central MA/Worcester)	Downtown Presence
1	Umass Memorial Medical Center	Healthcare	12,906	No
2	Umass Medical School	Higher Education	4,400	Yes
3	Worcester Public Schools	Public Administration	4,391	Yes
4	Saint Vincent Hospital	Healthcare	2,450	Yes
5	Hanover Insurance Group	Insurance	1,900	No
6	Saint-Gobain	Manufacturing	1,652	No
7	Worcester Polytechnic Institute (WPI)	Higher Education	1,283	No
8	Seven Hills Foundation	Social Service Agency	1,236	No
9	Community Healthlink (Owned by Umass)	Social Service Agency	1,200	No
10	Quinsigamond Community College	Higher Education	1,107	Yes
11	College of the Holy Cross	Higher Education	1,047	No
12	Spectrum Health Services	Rehabilitation Facility	1,000	Yes
13	AbbVie Inc.	Pharmaceuticals	900	No
14	Bank of America	Bank	850	Yes
15	Fallon Health Inc.	Healthcare	804	Yes
16	Polar Beverages	Manufacturing	700	No
17	Clark University	Higher Education	695	No
18	YMCA Central Massachusetts	Nonprofit- Community Based Organization	664	No
19	UNUM	Insurance	615	Yes
20	VNA Care	Home Health Care	605	No
21	Worcester State University	Higher Education	563	Yes
22	The Bridge of Central Massachusetts	Human Services Agency	550	No
23	YOU Inc.	Social Service Agency	538	No
24	Assumption College	Higher Education	534	No
25	MSG Staffing Inc.	Home Health Care	500	No

Source: Worcester Regional Chamber of Commerce 2019

Note: Currently, over 15,000 employees from the top 25 employers work downtown.

IMPROVE HOUSING QUALITY AND PREVENT FORECLOSURE LOSS

Worcester County leads the state in foreclosure sales. In 2015 and 2016, 25 percent of all foreclosure sales in the state happened in Worcester County. Between 2008 and 2018, the City of Worcester had 2,325 foreclosure sales. The lingering effect from the housing crisis in Worcester is reduced ownership; the number of owner-occupied housing units fell by 10 percent, or 3,304 units between 2010 and 2017.

Not only does foreclosure impact a family's life, it also disrupts the fabric of the neighborhood. Preventing the loss of homes through foreclosure is an important part of a family and a community becoming socially and economically resilient. The challenge is to prevent homeowners from losing their homes, especially due to circumstances beyond their control, such as illness or job loss.

Worcester's substandard housing stock also represents a challenge. In Worcester, 43 percent of households live in substandard housing. A substandard unit has at least one physical deficiency, or costs more than 30 percent of a household's annual income to own or rent. Physical deficiencies may include the lack of proper kitchen, dysfunctional plumbing. This situation is partly explained by the fact that 80 percent of the housing

stock was built prior to 1980. This situation is worse for renters than owners; 51 percent of renters live in substandard housing units, compared to 31 percent for owners. Currently, the demand for rental homes outstrips the supply, forcing more people to rent substandard homes at a higher cost. In Worcester's urban core, a growing number of low-income renters are competing for a shrinking number of low-rent units. Adding more housing creates competition in the rental market, and will help contain rent cost increases. Since no one aspires to live in substandard housing, the issue comes down to financial incentives and code violations.

The goal is to retain affordability and bring housing quality up to code. The urban core can be improved through a combination of increasing the supply of rental units, employer-assisted financial incentives, and code enforcement. In this section, we will look at some best practices in data-driven code enforcement, employer-assisted home maintenance incentives, and state-level foreclosure prevention programs.

43 PERCENT OF WORCESTER HOUSEHOLDS LIVE IN SUBSTANDARD HOUSING

Rehabilitation of a blighted property can add 20 percent to the property value of its neighbors. An important financial incentive for landlords to upkeep their properties is appreciation of their property's value. The proposed balanced approach includes higher-end developments, employer-assisted housing programs, and housing for modest-income residents. It also includes rehabilitation programs, discussed in the earlier sections, to help lift the collapsed housing market in Worcester's urban core.

As Worcester's economy continues to grow, economic development policies should focus on increasing the number of jobs downtown to boost the income of residents at the urban core and enable them to purchase their first home. This will reduce the current pressure on the rental market and create an economic cycle in which renters can eventually become owners. Low-cost modular housing can make homes affordable for lower-income residents at market rates. Combined with the previously mentioned programs, these best practices can help home owners avoid foreclosure, and incentivize landlords to maintain the quality of their rental units.

A STATE LEVEL FORECLOSURE PREVENTION PROGRAM - PENNSYLVANIA

The Commonwealth of Pennsylvania created the Home Emergency Mortgage Assistance Program (HEMAP) in 1983 in response to a recession and the unemployment rate climbing to 12.7 percent. The program protects Pennsylvanians who are unable to make their mortgage payments and are in danger of losing their homes due to circumstances beyond their control. HEMAP funds are loaned to eligible borrowers, both to bring delinquent loans current and to assist borrowers in making monthly mortgage payments for up to two years (or three years when the Pennsylvania unemployment rate exceeds 6.5 percent). The program is administered by the Pennsylvania Housing Finance Agency, and funded by state appropriations and the repayment of existing HEMAP loans.

THE PROGRAM HELPED BUILD PHILADELPHIA'S ECONOMIC RESILIENCY, PREVENTING \$480 MILLION IN FINANCIAL IMPACT FROM FORECLOSURES

During the housing foreclosure crises of 2008-2010, HEMAP saved more than 6,100 homeowners from foreclosure, between 4.6 percent and 5.1 percent of all homes in foreclosure in the state. The program helped build Pennsylvania's economic resiliency, preventing \$480 million in financial impact from foreclosures. The City of Philadelphia particularly benefited from the program; its foreclosure rates during the crises remained lower than both national and the state's rates.

Since the program began, HEMAP has helped more than 46,000 families in Pennsylvania. The program's success has been praised by Harvard University's Kennedy School of Government, the Federal Reserve Bank of New York, and Moody's Financial Services as an effective foreclosure prevention measure.

**21 PERCENT OF
PENNSYLVANIA'S
LOWER-INCOME RESIDENTS
ARE HOMEOWNERS, VERSUS
MASSACHUSETTS' 13 PERCENT**

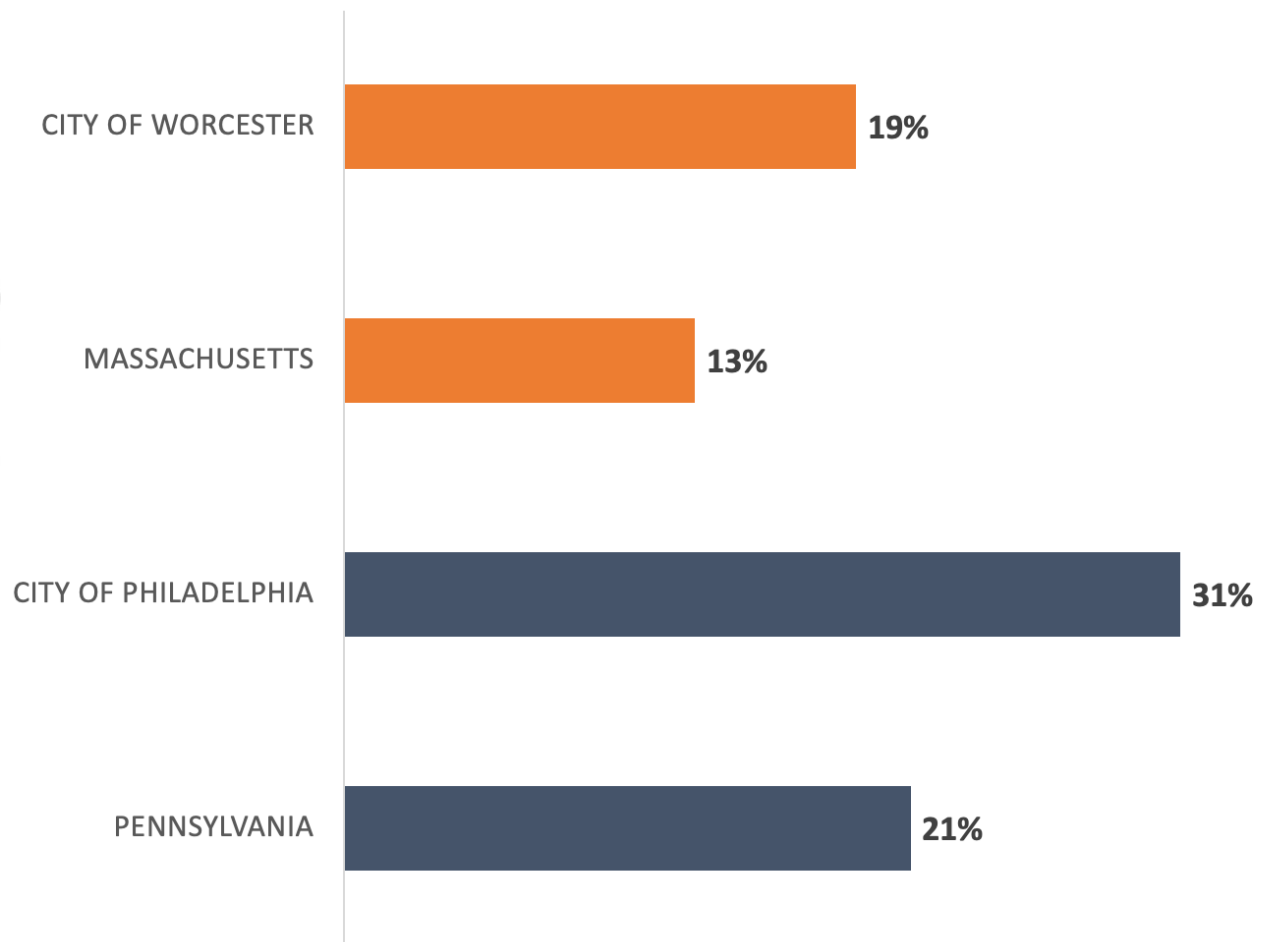
HEMAP work by ensuring that applicants meet certain criteria. When reviewing an application, HEMAP loan officers consider many factors, but program eligibility requires:

- Applicants must live in the home
- The applicant's mortgage can't be more than 24 months, or \$60,000 delinquent
- Applicant must be suffering financial hardship due to circumstances beyond their control, such as job loss, reductions in pay, or a serious medical condition
- Applicant must have a reasonable prospect of resuming full mortgage payments within 24 months. This may require documentation that shows a likely improvement in future financial circumstances

As result of this innovative home-loss prevention program, Pennsylvania has one of the highest shares of homeownership among households making less than \$35,000 per year. The City of Philadelphia has the second-highest homeownership among the same income group in the country. In Philadelphia, 31 percent of households earning less than \$35,000 own their homes, compared to 19 percent in Worcester. The Commonwealth of Massachusetts' lower-income home ownership is only 13 percent, versus Pennsylvania's 21 percent.

Figure 19

**SHARE OF HOMEOWNERSHIP BY
HOUSEHOLDS EARNING LESS THAN \$35,000**



Source: U.S. Census Bureau

HOME MAINTENANCE PROGRAM – WORCESTER, MASSACHUSETTS

Clark University also has a successful best practice in its neighborhood improvement program. The university offers employees in the target neighborhood who already own their home a financial incentive to maintain their property. Under this program, an employee can request up to \$5,000 to rehabilitate their property's exterior, subject to the proportional rebate program and agreement to live in the property for five years.

In partnership with University Park School, Clark also offers a tuition waiver to students from its surrounding neighborhood. An in-depth, peer-reviewed study published by the university found the value of homes in the neighborhood and home ownership rates have increased at higher rate than comparable area within the city. Clark's home maintenance incentive is a great example for other employers in the city to offer similar programs.

**TOGETHER, CLARK UNIVERSITY
AND MSCDC HAVE RENOVATED
MORE THAN 220 HOUSING UNITS,
AND ADDED AN ADDITIONAL 80
HOUSING UNITS IN THE AREA**

Figure 20

University Park Partnership



Source: Clark University

DATA-DRIVEN CODE ENFORCEMENT PROGRAM – SYRACUSE, NEW YORK AND YOUNGSTOWN, OHIO

Syracuse shares many characteristics with Worcester. It was formerly a manufacturing hub, lost population after 1950, and is now a resurgent city whose economy is primarily driven by its university, health care, and medical research. Like Worcester, Syracuse also prides itself as an immigrant community and faces similar challenges with substandard properties. The city launched an innovative code enforcement program to bring its properties up to standard, offering Worcester a successful template to do the same.

In November 2017, the Tenant-Owner-Proactive (TOP) was launched as a pilot program and expanded city-wide in 2019. The city code inspectors are assigned to specific areas where they check for health and safety violations such as heat and water shutoffs, infestations, or chipping lead paint. Inspectors are engaging with tenants and property owners across the community, establishing relationships with people in their assigned neighborhood.

The innovative features of the program are that as code inspectors walked their neighborhoods, they assigned each block a score card and tracked its

performance, and the new software system allowed inspectors to access property data on tax delinquency, occupancy, water meter status, and code violation history from their tablet to identify properties and to proactively check for issues. Inspectors also meet with people and organizations in their neighborhood, and reach out to their neighborhood's immigrant population through teaching English Learning Classes.

The program achieved 18.2 percent higher compliance than that of other housing inspectors who do not have access to these new strategies and tools.

Like Worcester, Youngstown is another former industrial town now facing the challenge of blight and poorly-maintained properties not up-to-code. In response to the housing crises of 2008, the City of Youngstown, in collaboration with the Raymond John Wean Foundation, created a multifaceted neighborhood development organization to catalyze strategic neighborhood reinvestment throughout the city

SYRACUSE CODE INSPECTORS WALKED THEIR NEIGHBORHOODS, ASSIGNED EACH BLOCK A SCORE CARD, AND TRACKED ITS PERFORMANCE OVER TIME

Named the Youngstown Neighborhood Development Corporation (YNDC), it has been instrumental in significant improvement across the city. YNDC worked with the city to help enforce code and demolish more than 1,600 derelict properties, and launched the “Paint Youngstown” program which repaired or rehabilitated 108 homes. The program also bought and renovated 41 vacant housing units, installed eight works of public art, mowed 22,000 lawns on vacant homes, and created a “community toolshed” for no-cost tool rental to residents.

The constantly-evolving nature of communities makes it difficult for a municipality to have an accurate and comprehensive picture of property and neighborhood conditions. To address that, Youngstown created a dynamic database that updates and evolves with the community. A special code enforcement docket in municipal court was created to expedite the process. The city adopted an administrative order program modeled after a successful program in nearby Akron, Ohio. The primary policy goal was to handle simple housing code violation cases such as messy yards and peeling paint.

In addition to code enforcement, Youngstown also engaged in neighborhood branding efforts. In the Idora neighborhood, the city replaced old street signs with new signs that include the neighborhood logo, re-boarded all marketable vacant houses, installed neighborhood entry signs, created high impact murals in a partnership with residents, and marketed the neighborhood as a viable community.

The recent proposal by Worcester's city council to register rental properties is a potential first step toward implementing a data-driven code enforcement program that has been successful in other cities.

DOWNTOWN IN A POST-AMAZON WORLD

In the last 30 years, the population has returned to Worcester's urban core, but the downtown hasn't regained its vibrancy. Two major obstacles are retail disruption due to online shopping, and the ongoing perception of crime at the urban core.

The previous sections discussed housing in downtown. This section will review best practices in changing this perception through creative placemaking, fostering an artists community, and reinventing the retail function of the downtown in a post-Amazon world.

DOWNTOWN AS AN EXPERIENCE

There are three causes for the demise of America's storefronts: increased online shopping, the nationwide overbuilding of malls, and that Americans are shifting their spending from objects to experiences with friends. The overcapacity in retail space is undergoing correction. Remaining retailers are trying innovative experiments to compete with online vendors. The innovation is based on two facts: as a result of the digital revolution, competing on costs is a losing battle for the brick and mortar stores; and people are shifting their

demand from commodities to experiences when it comes to downtown businesses. There will always be a demand for grocery and convenience stores, but downtowns will no longer be simply retail hubs.

Unique experiences are the main "product" customers demand from their downtown in the post-Amazon world. This means local independent businesses must offer a unique combination of experiences. National chains do not evoke a sense of unique identity. Yet, owners of local independent stores live, work and play in Worcester, thereby reinvesting in their community. Recent research of higher-income earners between 25 and 45 years shows that health, wellness, and unique dining experiences are where most spending occurs. Like housing, a balance of stores that cater to different income groups, lifestyles, and life-stages are a key aspect to Worcester's downtown revival strategy.

THERE WILL ALWAYS BE A DEMAND FOR GROCERY AND CONVENIENCE STORES, BUT DOWNTOWNS WILL NO LONGER BE SIMPLY RETAIL HUBS.

Additionally, an 18-hour downtown means residents need more work space. Five common ways to creatively use public spaces downtown are public green spaces, coworking spaces, business incubators, performance arts spaces, and creative business venues. To achieve the goal of inclusive development and increase homeownership, Worcester needs more entrepreneurs. Business incubators and accelerators can assist with this goal by providing networks, business education, and access to capital for entrepreneurs.

Currently, Massachusetts has just one women-and minority-focused incubator and accelerator (Fi-Lab in Dorchester). Worcester has the opportunity to lead the state in the expansion of such targeted incubators.

Initiative for a Competitive Inner City (ICIC) offers some best practices for business incubators focused on serving women and minorities:

- Expand recruitment networks through diverse leaders and partners
- Create diverse selection committees and adjust selection processes
- Intentionally design programs for women and minority entrepreneurs
- Create an inclusive culture

Given the challenges faced by Worcester, the city needs a balance of for-profit and social-minded entrepreneurs. A good example of local academic institutions fostering social minded entrepreneurs is Becker College. It is one of a handful of higher education institutions in the world and the first in the United States, to establish an officially-sanctioned Yunus Social Business Centre (the new business model advocated by Nobel Peace Prize Winner, Muhammad Yunus). The model of business education taught here is financially self-sustaining like a for-profit business, but aims to address social challenges like a nonprofit.

The college presently partners with 16 other organizations, primarily nonprofits, to champion social businesses in Worcester. Students from the college are offered training and support to start their own social businesses. The college offers a great example for other higher education institutions in the city to encourage, train, and support students to start social-minded businesses in Worcester.

**WORCESTER HAS THE
OPPORTUNITY TO LEAD THE
STATE IN THE EXPANSION OF
TARGETED INCUBATORS**

As mentioned in earlier sections, each of Worcester's neighborhoods should aim for a unique identity, tied together with a city-wide unifying theme. For instance, the city of Nashville in Tennessee is the "Music City," with a popular country music scene and festival as part of its economic development strategy. Portland, Oregon brands itself with the tag line "Keep Portland Weird," and incorporates this concept to promote its offbeat population and creative businesses.

SAFETY - CRIME IS DOWN BUT PERCEPTION HASN'T CHANGED

Despite its crime rate falling for over 30 years, Worcester's downtown is still perceived as unsafe. In the past three decades, Worcester's crime rate has been trending downward in all categories. Since 1985, property crime has decreased by 52 percent, theft by 40 percent, and burglary by 64 percent. While Worcester isn't crime-free, it is safer today than any time in the past three decades.

Research on the topic finds that often people misinterpret the appearance of poverty, such as poorly-maintained homes, trash on streets, and empty storefronts with a prevalence of crime. The urban core of Worcester has a substantial amount of run-down housing and concentrated poverty, explaining the perceived safety issue. Providing incentives to homeowners to maintain their property, and data-driven code enforcement like that in Syracuse, can help change this perception. In combination, creative place-making strategies can spotlight.

Worcester's cultural diversity at the urban core as an asset, substantially improving the downtown's perception, creating jobs, and expanding business opportunities.

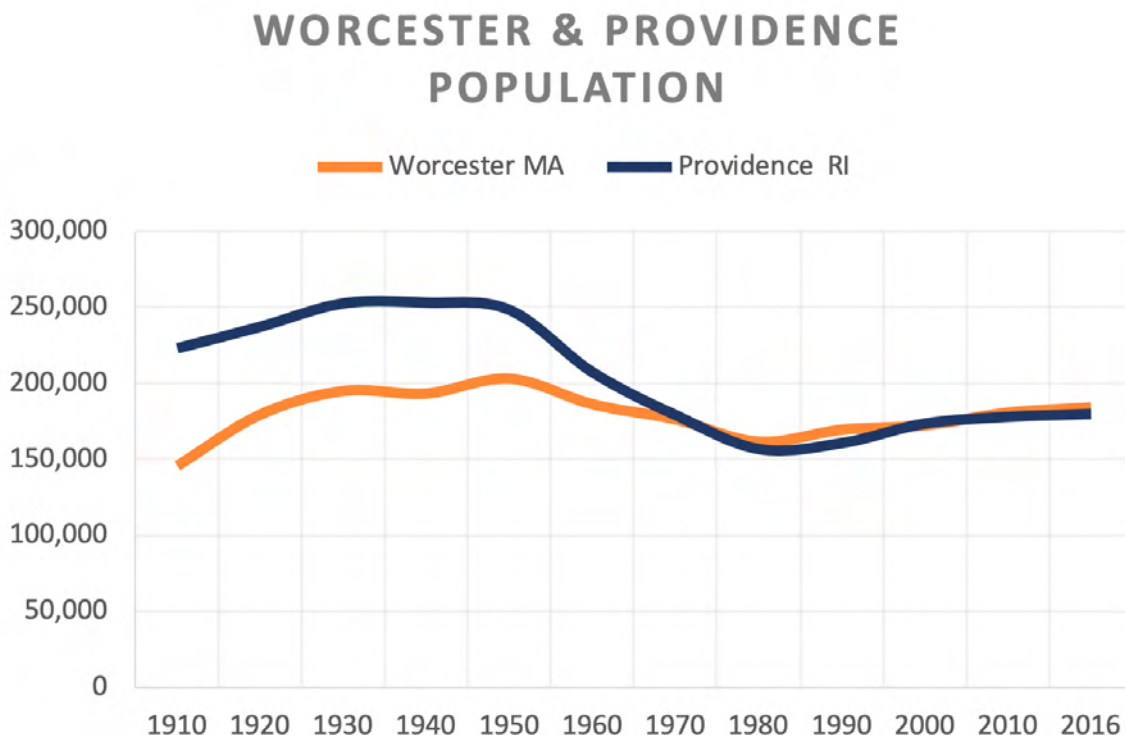
WORCESTER ISN'T CRIME-FREE, BUT WORCESTER IS SAFER TODAY THAN ANY TIME IN THE PAST THREE DECADES

PLACE-MAKING STRATEGIES: FESTIVALS AT THE HEART OF THE COMMONWEALTH

One of the best returns on investment for a community are festivals. Like Worcester, Providence, Rhode Island experienced an exodus from its urban core during the 1960s and 1970s. Since 1980, as in Worcester, Providence's population has grown and is fueling a vibrant downtown. One of the important strategies contributing to Providence's liveliness as city is the annual WaterFire festival.

WaterFire began when a local nonprofit commissioned an artist to create an installation for an alternative New Year's Eve celebration in 1994. The success of this installation has been converted to a summer and fall event every year. Water Fire attracts 1.1 million people to downtown Providence each season, has an annual impact of \$114.3 million from visitor spending, and has created 1,294 jobs (U.S. Army Corp, 2012).

Figure 21



Source: U.S. Census Bureau

The simplicity of WaterFire’s design is the secret of its success. The installation is not confined to an indoor space exclusively for paying customers. It is dozens of metal baskets anchored in the Providence River and set ablaze, combined with recorded music and gondola rides along the river. Though simple in its design, the open festival invites visitors to walk through the heart of the city and enjoy special menus at local restaurants, and retail businesses benefit from the increased foot traffic. Adding to the atmosphere are street performers, and local artists selling their wares.

The success of WaterFire as a placemaking strategy is a result of Providence choosing a long-term investment strategy in its identity and revitalization. It took years of effort by the city to clean the Providence River and build a Riverwalk before WaterFire grew to its current size. The effort has clearly paid off; the money and employment it generates represents a massive, ongoing benefit for the city.

Other cities across the country are investing in festivals as well. The Austin, Texas music festival has a \$1.7 billion economic impact, and creates or sustains 18,511 jobs.

PROVIDENCE’S PLACEMAKING SUCCESS IS A RESULT OF CHOOSING A LONG-TERM INVESTMENT STRATEGY IN IDENTITY AND REVITALIZATION

Nashville, Tennessee, has its world-renowned country music festival, which contributes \$5.5 billion to the local economy, \$9.7 billion to the Nashville metropolitan statistical area, and more than \$3.2 billion from labor income annually. Loveland, Colorado, uses its annual Fire and Ice Festival to grow the brand of “America’s Sweetheart City.” The event, featuring downtown snow sculptures and fireworks, coincides with Valentine’s Day and attracted 24,000 people in 2016 making it one of the largest events of its kind in the country.

Festivals succeed when they build on a location’s core community and brand. With its rich history as an immigrant community, a commercial hub with innovative businesses, public investment in culture, and intellectual energy, Worcester has a wealth of historical assets from which to choose from in designing festivals and events that reflect its unique identity.

CREATING A DOWNTOWN ART COMMUNITY - NEW BEDFORD, MA

Arts and culture are essential to making places and communities healthy, connected, and vibrant. Arts and culture enrich lives by providing opportunities for people from different walks of life to socialize, learn, and play, and can address some of the safety perception issues at the heart of Worcester. New Bedford is a fellow Gateway City that offers a successful demonstration of fostering an artist community in otherwise vacant spaces in the city center. Part of this effort has been programming events around “arts downtown.”

The City of New Bedford partnered with University of Massachusetts Dartmouth’s college of visual and performing arts to locate an arts incubator anchoring the creative economy in their downtown. The public investment of \$50 million repurposed a former New Bedford Dry Goods store that was abandoned, and included market-rate rental housing in adjacent buildings. This catalyzed \$80 million in private sector investments. Presently, the City of New Bedford is the seventh most artistic city in United States in terms of artists per capita (The Atlantic - City Lab, 2011).

In the fall of 2018, New Bedford’s Mayor Jon Mitchell released the city’s first-ever strategic Arts & Culture Plan with a vision toward fostering a creative community as an engaged and powerful partner to inspire social, economic, and cultural growth within the city. The strategy leverages half the revenue from the city’s lodging tax toward professional coordination of its plan. As part of the plan, the city offers grants, designates cultural districts, creates events and festivals, and conducts fundraising and capital improvement planning. The strategic arts and culture plan is part of the city’s overall revitalization effort, which has resulted in a significant economic turnaround.

Setting up the Business Improvement District represents a first step for Worcester toward leveraging the power of creative place-making and art and culture to add vibrancy to the Heart of the Commonwealth. In addition to bringing tourism revenue, this approach helps local employers attract and retain talent, and enhances the quality of life for existing Worcester residents.

COMMUNITY BUILDING THROUGH COMMUNITY ASSETS - PITTSBURGH & BALTIMORE

Converting vacant lots to community assets empowers low-income residents to actively revitalize their own communities. The number of vacant or abandoned units in the city of Worcester has more than doubled since the housing bubble. In 2000, there were 1,316 vacant properties, increasing to 3,127 by 2017. Vacant buildings and lots can significantly reduce the value of the surrounding occupied properties by as much as 20 percent. Some derelict buildings and vacant lots can be converted or used for new housing. But as discussed in a previous section, sometimes the abandoned buildings must be demolished and the vacant lot repurposed.

There are an array of options for repurposing vacant land: land banking, green infrastructure development, urban agriculture, and community greening. In concert with housing strategies discussed earlier, these efforts create valuable amenities for Worcester's residents in fostering neighborhood interaction, adding value to nearby properties, providing ecosystem benefits, increasing groundwater recharge, reducing heat island effects, and remediating polluted soils.

This section offers some best practices to repurpose vacant land while fostering community building, and strengthening the urban core's sense of place.

The City of Pittsburgh offers a successful example in designing a streamlined process in repurposing vacant lots. Like other post-industrial cities, Pittsburgh has lost 55 percent of its population since 1950, due to changes in the industrial economy and suburbanization. The city has successfully adapted its local economy toward technology, health care, biomedical technology, finance, and education. One of the lasting effects of this population decline is the prevalence of vacant lots throughout the city. Today, there are more than 27,000 vacant lots in the city of Pittsburgh, a quarter of which are owned by the city. Maintaining these vacant lots costs the city \$6 million each year.

PITTSBURGH OFFERS A SUCCESSFUL EXAMPLE OF A STREAMLINED PROCESS TO REPURPOSE VACANT LOTS

The program to repurpose these vacant lots started with creating an accurate database and mapping each lot's location. In 2015, the city started a program called "Adopt-A-Lot" by amending a local ordinance to allow temporary leasing by individuals and groups for approved gardening activities. As part of this program, an online map was created for nonprofits and individuals to learn about available lots, with a separate, parallel process for commercial use.

Residents interested in repurposing vacant lots into gardens could submit a form online. If approved, they were granted a lease to create an edible or flower garden. Residents desiring the lot for small-scale commercial agriculture, such as growing produce for a farmer's market, paid a small application fee and followed additional rules. So far, more than 100 lots have been adopted.

The City of Baltimore faces a similar situation and developed their own program in 2008. Modeled after Detroit's Garden Resource Program Collaborative, Baltimore's Community Greening Resource Network (CGRN) provides gardening resources and materials to the community through coordinating the efforts of multiple partner organizations.

These groups support urban gardeners by providing education, funding, tools, plants, and seeds to participants. To encourage the initiative, the State of Maryland updated its tax code to allow for tax credits for urban agriculture, and Baltimore enacted new legislation to give urban farmers 90 percent off their property taxes as long as the parcel is used for urban agriculture for at least five years, among other requirements. The city government tied this program to other efforts to combat childhood obesity among low-income residents, as edible community gardens increase access to healthy food. Within two years of launching the program, community garden membership has increased by 40 percent.

With its growing population, Worcester's housing market could absorb a significant share of currently-vacant lots. Where suitable, transforming empty lots into community assets like gardens or green space creates a sense of place and the type of amenities that can make housing into attractive homes. People working together toward a common goal, neighbors getting to know each other better, and people given an opportunity to develop a healthy hobby raises spirits in a community.

BEYOND A BEDROOM COMMUNITY – COLLABORATING FOR A STRONG REGIONAL ECONOMY

Southern Worcester County's 2018 Comprehensive Economic Development Strategy report lays out plans for setting up a regional economic development district. This means the member towns coordinate on infrastructure investments, brownfield remediation, establishment of a centralized databank of available business locations, address skill gaps among local workers and training programs, and create a conducive regulatory environment for investment and growth. Members also collaborate to compile a comprehensive listing of state and municipal incentive programs and policies, incubator spaces, and programs to foster entrepreneurial spirit and start-up companies.

This section underscores the importance of the current effort toward regional coordination and presents benefits from similar regional cooperation efforts that Worcester economic development district (WEDD) might consider in its efforts toward regional economic thinking.

WEDD needs a united economic vision, if its residents aspire to be more than a bedroom community for the Boston-Metro area. Currently, a majority of workers (82,000) , living in Worcester and the neighboring surrounding towns commute east toward the Boston-Metro area. In the City of Worcester alone, 60 percent, or 48,000 residents make the daily drive east. Skyrocketing home prices in the Boston-Metro area is impeding its economic growth, and more residents who would otherwise have lived closer now commute from further towns. If the current trend continues unabated, the Worcester-Metro region will become a bedroom community to Boston.

As mentioned earlier, 70 percent of people employed in Worcester don't live in the city. Simultaneously, the majority of Worcester residents don't work in the city. This mismatch between jobs and homes means longer commutes and a lower standard of living for residents.

Being a bedroom community is not without cost for a municipality. Commuting residents earn more than non-commuting local residents, which increases the cost of regional housing and can result in displacement. Unless restricted to downtown, an influx of commuters will increase the sprawl of residential growth without industrial growth to match. Studies find such residential developments cost the city 13 cents more than every dollar it collects to provide public services. Additionally, more new residents in sprawl areas further compounds the issue of long commutes and traffic congestion.

If the vision for the City of Worcester is to create a thriving community where residents, live, work, and play locally; a holistic development strategy must include business development, job creation, infrastructure investment, and housing production.

A regional approach begins with Worcester's urban core. For a thriving 18-hour, 365-day downtown, the city needs to be not only an employment cluster, but also a place to live and play. To achieve this, the concentrated poverty in the city's urban core must be seen as a regional challenge. The entire region will benefit from a thriving downtown in Worcester. For example, increasing

job creation in the center of Worcester creates job opportunities for residents in nearby towns who would otherwise commute to Boston. A stronger customer base benefits businesses in surrounding towns. The Greater Worcester region's economic future depends on how well its towns can work collaboratively toward a common economic vision.

Coordinating business development policies can benefit the entire region. Nationally, development subsidies and uncoordinated tax policies have led to jobs moving away from a region's poorest towns and neighborhoods to locations that require a car, an investment low-income families cannot afford. There are many variables in a business location decision. By coordinating their fiscal policies, site preparation and business development efforts member communities in the Worcester region can grow together and create net new jobs in the region.

A longer-term economic strategy is engaging in regional coordination to develop "industry clusters." While conventional economic development strategies focus on attracting businesses through lower taxes and other subsidies, this newer approach

recognizes the importance of cluster development. An industrial cluster is created by working together to attract not a single company, but several businesses that benefit from each other's proximity.

Businesses in a cluster are less likely to move away because of benefits from proximity with other businesses, an innovative environment, and access to talent. Creating these clusters requires regional coordination and investment. To avoid overreliance on any one cluster, as happened with autos Detroit, WEDD could promote clusters for different businesses and industries

In fostering business clusters, WEDD should consider a business' willingness to locate in Worcester's urban core and employ current residents of lower-income groups, as well as its capacity to contract with local small businesses. The Center on Wisconsin Strategy, a university-based think tank, collaborated with the Wisconsin Regional Training Partnership to convince employers in the metal working industry, which employed 60,000 workers, to increase their investment in retraining workers, thereby positioning the metalworks industrial cluster for improved competitiveness and higher wages.

HOUSING MARKETS ARE REGIONAL, AND SO SHOULD HOUSING POLICIES

To maintain a vibrant regional economy, towns in the Greater Worcester region need to coordinate their affordable housing policies. Among its immediate surrounding towns, the City of Worcester has 60% of the total housing units yet it carries 80% of the region's subsidized housing inventory. While the City of Worcester exceeds the 10% Subsidized Housing Inventory (SHI) threshold by 2,500 subsidized units, the towns surrounding Worcester have a collective deficit of 2,500 units in their affordable housing production. For a vibrant regional economy, each member of the Worcester region needs to invest their fair share in subsidized housing. Because it hosts a disproportionate number of subsidized housing units, Worcester has a larger share of impoverished residents than the surrounding towns. This disproportionally burdens the city's social services. Concentrated poverty leads to adverse outcomes for the poor retrenching them into further poverty.

As of 2017, only the City of Worcester meets the state-mandated 10% subsidized housing minimum, with 13.41% of all housing units in the city counted as subsidized on Massachusetts' Subsidized Housing Inventory. All of the surrounding towns fail to meet this threshold, with some

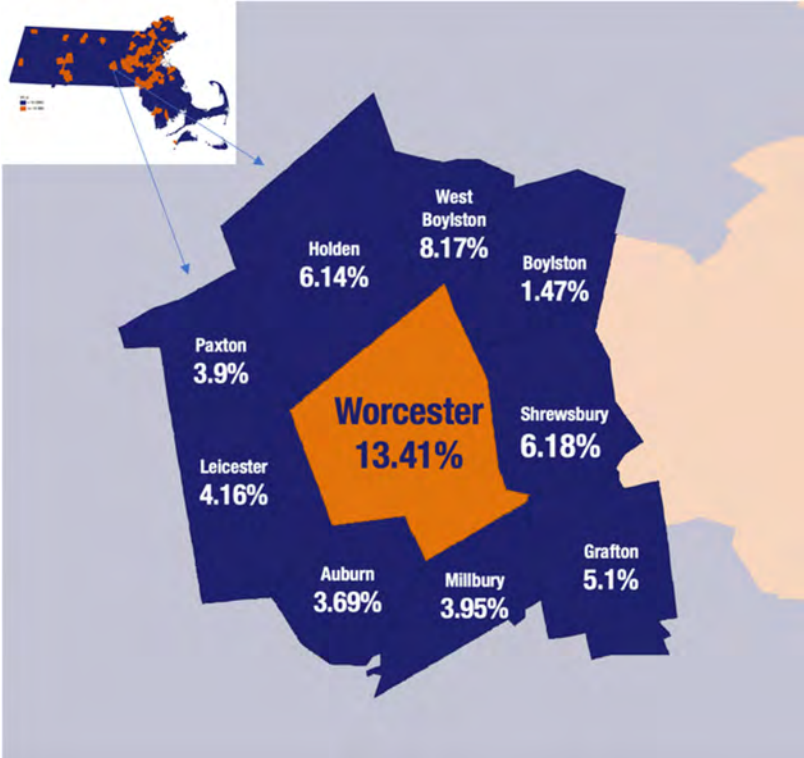
having as few as 1.47% of their units subsidized. Section 40B of Massachusetts General Law mandates all cities and towns in Massachusetts have at least 10% of their housing units be used for affordable housing, with the goal allowing working families and seniors to remain in their homes and communities. As of 2017, only 22% towns in Massachusetts met this threshold. This widespread issue requires every community to invest its fair share.

AMONG ITS IMMEDIATE SURROUNDING TOWNS, THE CITY OF WORCESTER HAS 60% OF THE TOTAL HOUSING UNITS YET IT CARRIES 80% OF THE REGION'S SUBSIDIZED HOUSING INVENTORY.

Lack of a regional housing strategy also bogs the workforce in traffic congestion and has negative consequences for the regional economy. According to a 2019 Congestion in the Commonwealth Report to the Governor of Massachusetts, the Route 9 section through Worcester and Shrewsbury is one of the most consistently congested corridors in the state, with travel time doubling during peak hours. For Interstate 290 Westbound traveling through downtown Worcester, peak travel times have increased by nearly 60% between 2013 and 2018.

As discussed earlier, most Worcester employees don't live in the city, while most residents in the City work elsewhere. Coordinating housing policies and fairly distributing SHI reduces commute times, reduces Worcester's concentrated poverty, matches local employers' needs with local workers, and ameliorates other negative consequences associated with greater Worcester region's current growth pattern.

Figure 22
SUBSIDIZED HOUSING UNITS FOR WORCESTER'S SURROUNDING TOWNS, AS PERCENTAGE OF TOTAL HOUSING UNITS



Source: SGE'S calculations based on DHCD data

Figure 23

**AFFORDABLE HOUSING PRODUCTION NEEDED
TO REACH THE STATE MANDATED
10% SHI BASELINE**

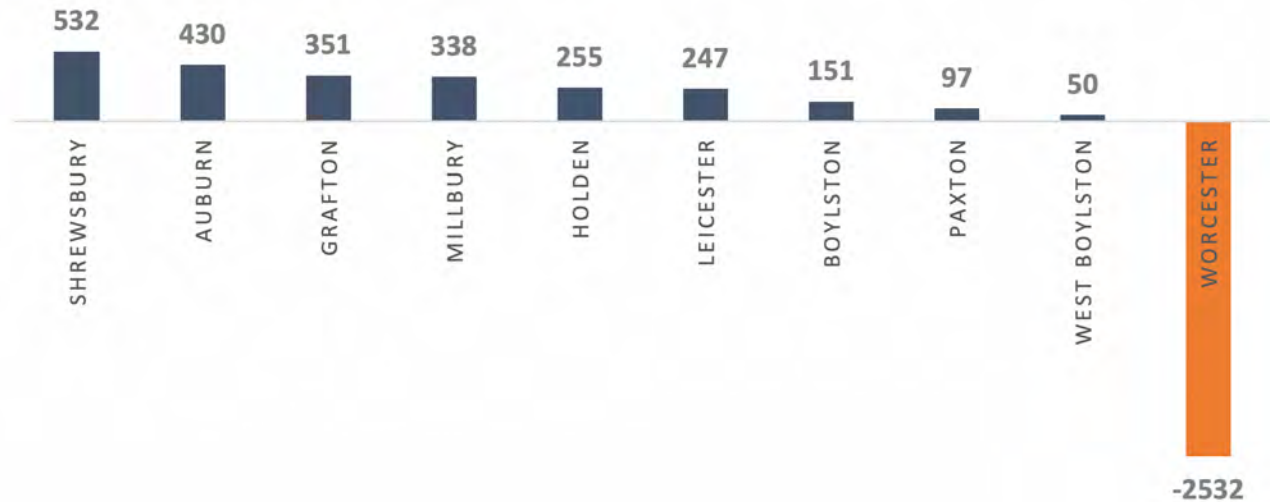
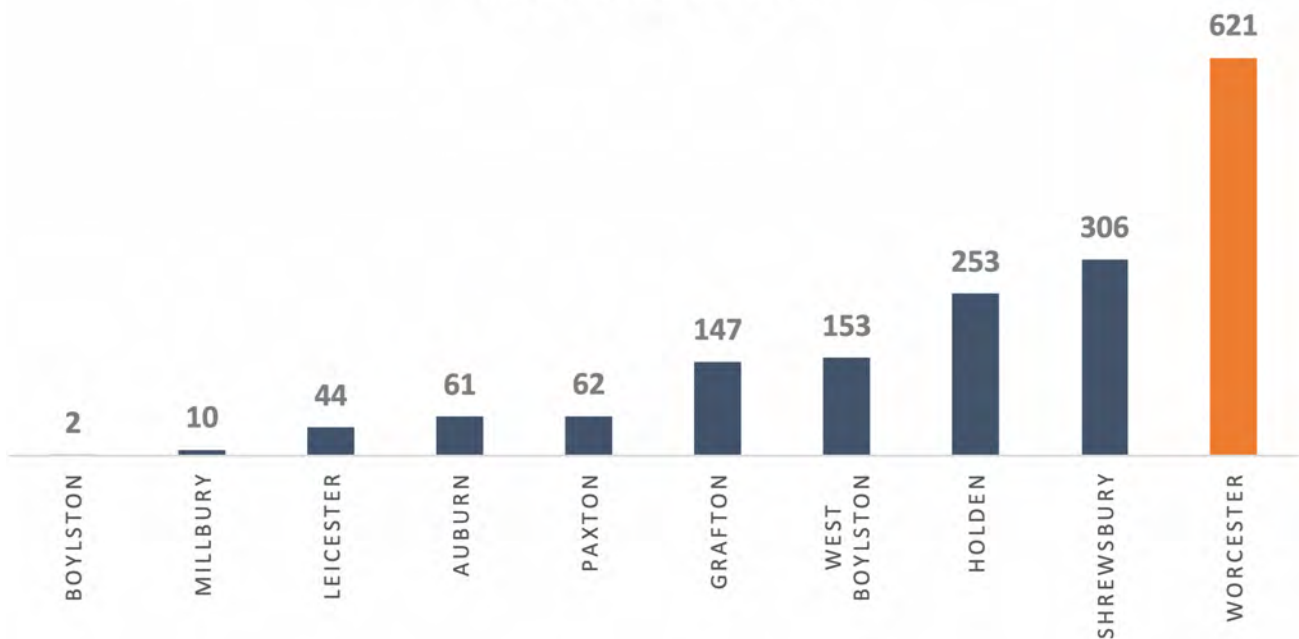


Figure 24

**SUBSIDIZED HOUSING INVENTORY
ADDED 2002-2017**



In 2018, the City of Worcester appointed a Task Force for Sustaining Housing First Solutions to address the complex social issue of adult chronic homelessness. Continued work by the leaders is essential to help the city make progress on this important issue.

The current study seeks to help these efforts in three ways:

1. This housing study provides solutions to increase home ownership and prevent foreclosure in Worcester, particularly among low-income residents, so displacement-vulnerable populations can remain in their communities.
2. This study provides best practices to increase the supply of rental housing at affordable market rates, lowering the housing cost burden for the most vulnerable.
3. Finally, the study calls for all towns in the greater Worcester region to cooperate in creating a regional housing production plan, investing their fair share in subsidized housing, producing more affordable units, and tackling homelessness and poverty.

Sustaining regional growth requires Worcester and surrounding towns to coordinate their housing policies, particularly in a more balanced distribution of affordable housing units. Collaboration on a regional scale can benefit the wider community, without infringing on each town's local autonomy. First steps towards regional cooperation could include:

1. Create a regional housing plan with specific targets through collaboration between several towns' planning departments. Each town would commit to creating affordable housing. This plan would encourage each town to commit by sharing the outcomes of each jurisdiction on an annual or biennial basis.
2. Building on the City of Worcester's efforts through the Task Force for Sustaining Housing First Solutions, a regional compact to end homelessness through coordinating the efforts of private- and public-sector organizations across the region.
3. Create a common zoning language to help standardize ordinances about accessory dwelling units (ADUs), form-based codes, or parking requirements.

CONCLUSION

Worcester and similar post-industrial cities share the problem of a collapsed housing market in their urban core. Attracting private investment to kick-start this collapsed real estate market is a difficult and crucial first step in the revitalization process. Worcester's achievement in coordinating public-private investments and private businesses to invest in its downtown is commendable.

A combination of affordable rent for lower-income groups, a thriving local economy, and spiraling housing prices in the Boston-Metro region are contributing to the remarkable population resurgence in the urban core of Worcester. However, the city now faces a decision about its housing future. Worcester could follow the conventional path that most large metro areas, including Boston, have taken in housing and economic development by exclusively building new housing downtown to attract high-income residents. Given limited government resources, subsidies alone will not be sufficient to provide housing for all current low-income households at the urban core. This conventional path also misses a large business opportunity.

Worcester can make its own way by combining growth in higher-end development with efforts to increase homeownership among middle- and lower-income residents, creating

balanced and inclusive growth. Strategies that harness market-based solutions can reduce the reliance on subsidies to produce enough affordable homes. Best practices presented in this report should inspire both government action and business innovations in Worcester.

To successfully move forward, Worcester-region's businesses, government, and community-based organizations need to work collaboratively toward a united vision. A lively, walkable downtown and a mixed-income community for all life-stages will lead Worcester toward a more resilient and vibrant future.

This report takes a bird's-eye view of the strategic decisions ahead for Worcester and the greater Worcester-Metro region by offering best practices from other cities that have faced similar issues. To find effective solutions, it is vital to combine best practices with preferences and concerns about housing and neighborhoods of Worcester residents. Phase II of this project will identify the housing needs of Worcester's residents, particularly employees, through a city-wide survey, producing a comprehensive view of the city's concerns and preferences with regards to housing, neighborhoods, and the downtown.

MAHESH RAMACHANDRAN, PH.D.

Co-Founder & CEO

mahesh@smartgrowtheconomics.com
smartgrowtheconomics.com

ASHLEY HOWARD, MA + MBA

Co-Founder & Information Designer

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