

# Envision Our Chicopee: 2040 BASELINE REPORT

June 2020

Prepared for the City of Chicopee Prepared by:





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Note: Much of the data in this report comes from the U.S. Census' American Community Survey 5-year estimates. All estimates have a margin of error at the 90% confidence level and is generally the best Citylevel data available. When more precise local data was available, it has been used, as relevant.

# I. Introduction

Envision Our Chicopee: 2040, Chicopee's First city-wide comprehensive plan, is made up of two volumes: the Baseline Report and the Comprehensive Plan. This document, the Baseline Report, is a snapshot of existing conditions as they relate to neighborhoods, parks, roadways, city services, the local economy, historic and natural assets, and other characteristics that define the quality of life in Chicopee. The report includes inventories and data collected from a variety of local, regional, state, and federal sources. Information was also obtained through City staff interviews, outreach to key stakeholders, and review of existing reports, plans, and other documentation.

The Baseline Report was prepared at the onset of the process. It sets the stage for discussion of issues in the Comprehensive Plan, where policies and actions are established to reach the City's vision for itself for the next 20 years.

# II. Location

Chicopee is part of Hampden County in Western Massachusetts. It is located along the eastern bank of the Connecticut River at the crossroads of Routes 90, 91, 291, and 391. This proximity to major interstates makes it easily accessible to points north in Massachusetts and Vermont (about 20 miles to Northampton, MA and 60 miles to Brattleboro, VT), south in Massachusetts and Connecticut (about 4 miles to Springfield, MA, 30 miles to Hartford, CT, and 70 miles to New Haven, CT), west to Massachusetts and New York (about 40 miles to the Berkshires in MA and 85 miles to Albany, NY), and east to the other major population centers of Massachusetts (about 50 miles to Worcester and 90 miles to Boston).



Chicopee River Falls – Source: Wikipedia

## Map II.1 Chicopee Aerial



# III. Demographics

## Why Demographics Matter

Understanding the make-up of people that live in the community gives the City of Chicopee guidance into future needs for housing, social services, recreation, transportation, and other factors that contribute to a resident's quality of life. Important attributes of a population to consider are age, racial and ethnic background, household composition, income, and special needs. Shifts in these characteristics within Chicopee and the region can give insight into trends and changing preferences.

## How does Chicopee Compare?

It is important not to look at Chicopee in isolation. Throughout this section on Demographics, Chicopee data is compared with data from the Commonwealth of Massachusetts, Hampden County, and the City of Haverhill. Why? This shows us where Chicopee is excelling and where it is falling behind, in several contexts. How Chicopee compares against the Commonwealth as a whole may tell one story. But due to the differences between western and eastern Massachusetts, it is also important to compare Chicopee with its region. Hampden County is diverse, including very urban areas such as Springfield and Holyoke, rural communities such as Blanford and Granville, and every type of city and town in between. Why Haverhill? Haverhill is similar to Chicopee in many ways. They are both <u>Gateway Cities</u>, have similar populations, important industrial economies, and are located near even larger urban centers. Haverhill is a good comparison for Chicopee in a different part of the Commonwealth.



Chicopee Downtown GetDown – Source: City of Chicopee

## Growth

Chicopee's population has grown slowly but steadily since the year 2000. Between 2000 and 2017, the population increased by 1,125 residents, for an overall growth rate of approximately 2.1% (Figure III.1**Error! Reference source not found.**). Chicopee is growing a little slower than Hampden County, which grew by 2.8% over that same time period, and much more slowly than Massachusetts as a whole (6.9%) (Figure III.2). This slower growth in comparison to the Commonwealth is expected to continue. According to MassDOT projections (Socio-Economic Projections for 2020 Regional Transportation Plans), Chicopee is projected to grow 5.2% between the years 2017 and 2040 to a total population of 58,674, a little higher than the 4.5% growth rate for Hampden County. Massachusetts as a whole is expected to grow a much more significant 12.7%. However, there is really no way to predict future population with certainty. If Chicopee is successful in planning for housing and jobs, the reality might be higher. If the economy slumps, it might be lower. These projections give the City a general sense of what to expect.

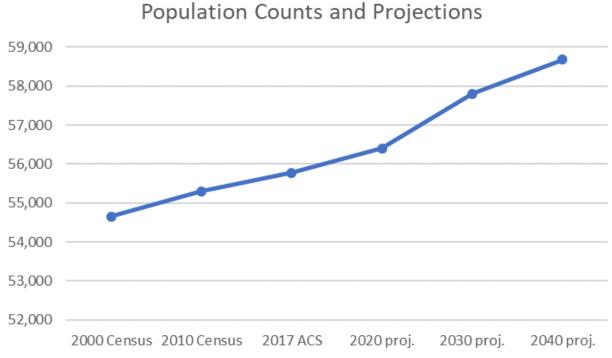
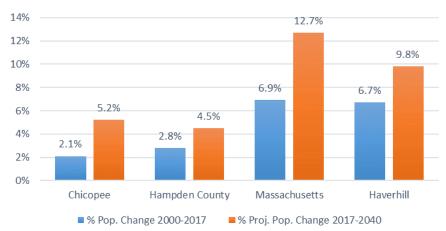


Figure III.1. Population Counts and Projected Growth in Chicopee, 2000 to 2040

Source: 2000 and 2010 US Census, 2017 American Community Survey 5-Year Estimates, MassDOT Population Projections (2018)



#### Figure III.2. Percentage of Population Change (2000-2017) and Projected Growth (2017-2040) in Chicopee, Hampden County, and Massachusetts

Source: 2000 and 2010 US Census, 2017 American Community Survey 5-Year Estimates, MassDOT Population Projections (2018)

## Age

Chicopee's population is slightly older than the comparison populations (Table III.1). However, Massachusetts, Hampden County, and Haverhill are all growing older much faster than Chicopee is. In fact, Census data suggests that Chicopee has grown a bit *younger* since 2010.

			2017	Change
	2000	2010	Estimate	2000-2017
Chicopee	38.7	40.1	39.6	+ 2.3%
Hampden	36.4	38.6	38.7	+ 6.3%
Massachusetts	36.5	39.1	39.4	+ 7.9%
Haverhill	35.5	37.0	38.2	+ 7.6%

#### Table III.1. Median Age in Chicopee, Hampden County, and Massachusetts, 2000 to 2017

Source: 2000 and 2010 US Census, 2017 American Community Survey 5-Year Estimates

Like much of New England, as a percent of Chicopee's population, children have been declining while people in late-middle age (45-64) and seniors (65+) have been increasing. When the population changes like this, it can often mean that school enrollment declines, and fewer working age adults are around to support a growing number of retirees on fixed incomes. This can be a fiscal strain on a city. However, unlike much of New England outside of Massachusetts, the population in Chicopee between the ages of 20 and 34 has been *growing* its share (Table III.2). This trend is occurring at a similar rate in the comparison areas, though Chicopee now has a slightly higher percentage of residents in this age group (22%) than Massachusetts as a whole (21.1%), Hampden County (20.4%), and Haverhill (20.1%). This is probably a positive sign for the City, the region, and the Commonwealth. If the City continues to attract young adults, there could be more young families with children and more working age adults in the next ten years, compared with its neighbors.

			Difference	2017	Difference
	2000	2010	2000-2010	Estimate	2000-2017
Under 5 years	5.5%	5.6%	0.1%	5.2%	-0.3%
5 to 9 years	6.5%	5.4%	-1.1%	5.4%	-1.1%
10 to 14 years	6.4%	5.7%	-0.7%	5.6%	-0.8%
15 to 19 years	6.8%	7.0%	0.2%	6.1%	-0.7%
20 to 24 years	5.9%	6.9%	1.0%	7.1%	1.2%
25 to 34 years	13.2%	13.4%	0.2%	14.9%	1.7%
35 to 44 years	15.6%	12.2%	-3.40%	11.4%	-4.2%
45 to 54 years	13.3%	14.8%	1.5%	13.9%	0.6%
55 to 59 years	5.0%	6.9%	1.9%	6.3%	1.3%
60 to 64 years	4.1%	6.0%	1.9%	6.6%	2.5%
65 to 74 years	8.5%	7.7%	-0.8%	9.7%	1.2%
75 to 84 years	7.2%	5.6%	-1.6%	5.4%	-1.8%
85 years and over	1.9%	2.7%	0.80%	2.4%	0.5%

Table III.2. Change in the Distribution of Population by Age in Chicopee, 2000 to 2017

Source: 2000 and 2010 US Census, 2017 American Community Survey 5-Year Estimates

## Race/Ethnicity

Since 2000, the most notable change has been the increase in people of Hispanic or Latino decent, which has more than doubled (Table III.3). The vast majority of the Hispanic and Latino population (nearly 90%) is of Puerto Rican decent. While a smaller portion of the overall population, people of Black/African American and Asian decent have both more than doubled since 2000 as well. Much of the remainder of the population continues to reflect the long-standing Polish and French-Canadian communities of Chicopee, as well as more recent Russian, Ukrainian, and Arabic-speaking immigrants. This diversity and sense of community among the various ethnic communities of Chicopee continues to be a strength for the City.

Table III.3. Composition of Race and Ethnicity	in Chicopee,	2000 to 2017
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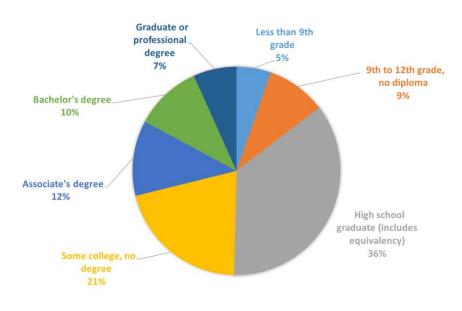
	2000	2010	2017
	2000	2010	Estimate
RACE			
Total Population	54,653	55,298	55,778
One race	98.2%	97.7%	97.4%
White	89.8%	86.8%	86.3%
Black or African American	2.3%	3.7%	4.3%
American Indian and Alaska Native	0.2%	0.4%	0.2%
Asian	0.9%	1.3%	1.8%
Some other race	4.9%	5.5%	4.8%
Two or more races	1.8%	2.3%	2.6%
HISPANIC OR LATINO			
Hispanic or Latino (of any race)	8.8%	14.8%	19.8%
Not Hispanic or Latino	91.2%	85.2%	80.2%

Source: 2000 and 2010 US Census, 2017 American Community Survey 5-Year Estimates

## Education

Chicopee has a relatively low education attainment, with about half of adults having only a high school degree or less (Figure III.3 and Figure III.4) compared with about 35% of adults in Massachusetts, 44.8% in Hampden County, and 39.8% in Haverhill. Only about 17% of Chicopee adults have a bachelor's degree or higher compared with about 42% in Massachusetts, 26.5% in Hampden County, and 29.9% in Haverhill. These education levels can limit the types of businesses interested in locating or expanding in Chicopee, if they feel they cannot find the types of educated employees they need.

However, these numbers have been improving over time (Figure III.4). Since 2000, the portion of adults with a high school degree or higher has increased by over 11 percentage points, and the number with a bachelor's degree or higher has increased by 4.7 percentage points.





Source: 2017 American Community Survey 5-Year Estimates

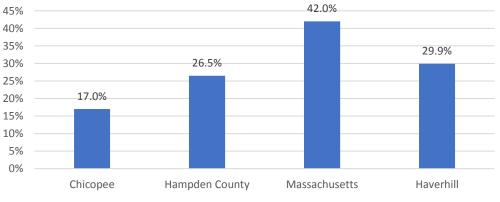


Figure III.4: Percentage of Residents 25 Years and Older with a Bachelor's Degree or Higher, 2017



 Table III.4. Percentage of Chicopee Residents 25 Years and Older Graduating from High School (or Equivalent) or

 Having a Bachelor's Degree or Higher, 2000-2017

	2000	2010	2017
Percent high school graduate or higher	74.9%	80.4%	86.0%
Percent bachelor's degree or higher	12.3%	16.6%	17.0%

Source: 2000 US Census, 2010 and 2017 American Community Survey 5-Year Estimates

## Households Characteristics

## Composition

The number of family households in Chicopee (defined as related individuals living together) continued to decrease between 2000 and 2010, from 61.2% to 58.2% (Table III.5), meaning more people are choosing to live alone or with people who are not related to them. The number of married couple households with children in Chicopee has continued to decline, from 16.2% to 12.8%. As of 2010, nearly half of all households with children have only one parent present. It is interesting to note that single father headed households are among the fastest growing households in the City (though they still make up only 2.5% of all households vs. 8.9% for single mother headed households).

As previously mentioned, the number of children in Chicopee has been declining. This is also reflected in the number of households with children. In 2000, only 28.8% of households had children present. By 2010, that was down to 27.4%. 2017 ACS data suggest that number may now be down to 26%. It is also reflected in enrollment numbers for Chicopee Public Schools, down 5.7% in the past five years (see Sec. XV Public Services & Facilities). However, with the young adult population in Chicopee trending up, there may be a related uptick in young children in the next ten years as these young adults start having families.

	2000	2010	Change 2000-2010
Total households	23,117	23,739	2.7%
Family households	14,139	13,827	-2.2%
With own children under 18 years	6,135	5,790	-5.6%
Married-couple family	9,859	8,868	-10.1%
With own children under 18 years	3,742	3,047	-18.6%
Female householder, no spouse present	3,293	3,713	12.8%
With own children under 18 years	1,929	2,161	12.0%
Male householder, no spouse present	987	1,246	26.2%
With own children under 18 years	464	582	25.4%
Nonfamily households	8,978	9,912	10.4%
Householder living alone	7,560	8,136	7.6%
Householder 65 years and over	3,263	3,106	4.8%
Households with individuals under 18 years	6,660	6,513	-2.2%
Households with individuals 65 years and over	7,052	6,667	-5.5%
Average household size	2.32	2.28	-1.7%
Average family size	2.96	2.94	-0.7%

#### Table III.5. Change in Household Composition in Chicopee, 2000 to 2010

Source: 2000 and 2010 US Census

## Income

Between 2000 and 2017 the median household income in Chicopee increased by an estimated 37% (Table III.6); however, when adjusted using the Consumer Price Index to show 2017 dollars, relative incomes actually *decreased* in Chicopee, Hampden County, and Haverhill. This means that since 2000, even though people's incomes have gone up, it is now harder for the average household to pay for goods and services (Table III.6). Conversely, over the same period, the median household in Massachusetts made more money *and* has more buying power. In this respect, Chicopee and the region around it are falling behind the Commonwealth as a whole.

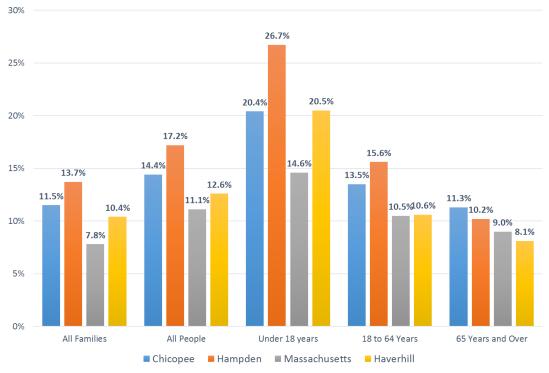
Table III.6. Change in Household Median Income in Chicopee, Hampden Co., Haverhill, and Massachusetts, 2000
to 2017

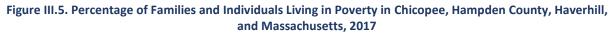
	2000 (1999 dollars)	2000 (2017 dollars*)	2017 Estimate	% Change 2000-2017 (uncorrected dollars)	% Change 2000-2017 (2017 dollars*)
Chicopee	\$35,672	\$52,160	\$48,866	37.0%	-6.3%
Hampden County	\$39,718	\$58,076	\$52,205	31.4%	-10.1%
Haverhill	\$49,833	\$71,691	\$65,926	32.3%	-8.0%
Massachusetts	\$50,502	\$72,653	\$73 <i>,</i> 844	46.2%	1.6%

\* Based on US Bureau of Labor Statistics Consumer Price Index (CPI) inflation calculator Source: 2000 US Census and 2017 American Community Survey 5-Year Estimates

## Poverty

In 2017, the percentage of families and individuals living below the poverty rate in Chicopee continued to be above that of the Commonwealth and Haverhill, but generally below that of Hampden County (Figure III.5). Children are the most impacted age group, with more than one in five children in Chicopee living in poverty. However, other sources of data suggest that childhood poverty is even more severe. For example, the Massachusetts Department of Elementary and Secondary Education in its 2019 Report Card for the Chicopee Public School District finds that over 50% of students are "Economically Disadvantaged" (the metric used to determine eligibility for free/reduced lunch programs). Seniors experience the least poverty of any age group in Chicopee at 11.3%. This is the one category where Chicopee has a higher poverty rate than Hampden County.

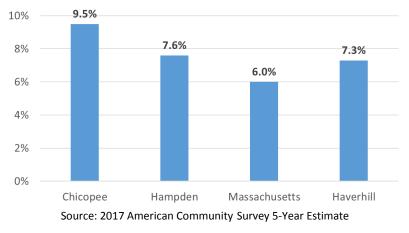




Source: 2017 American Community Survey 5-Year Estimate

## Veterans

Chicopee is proud to be the home of many Veterans and the Westover Air Reserve Base. Veterans make up nearly 10% of Chicopee's adult population, much higher than Hampden County, Haverhill or Massachusetts overall (Figure III.6). Chicopee Veterans come from many generations and have served from World War II to the Gulf Wars to more recent deployments. About 45% of Chicopee Veterans are under the age of 65. Veterans, as a group, tend to fare better in Chicopee than their neighbors overall. Compared with non-Veterans, Veterans in Chicopee have higher median incomes, lower unemployment rates, lower rates of poverty, and better educational attainment (though non-Veterans have a slightly higher chance of being college graduates). This may be a testament to the success of the many local support programs available to Veterans in Chicopee (see the Public Services & Facilities section). The one area where Veterans fare worse than their neighbors is disability status. Nearly 30% of Chicopee Veterans report some sort of disability, way above the 17% reported by local non-Veterans. Continued support for veteran physical and mental health will be important.

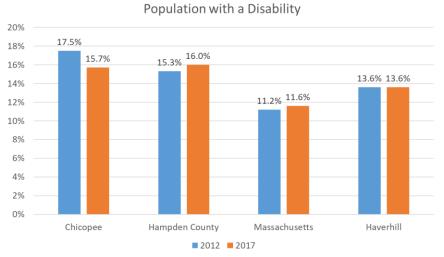


#### Figure III.6. Percentage of Civilians 18+ years who are Veterans in Chicopee, Hampden County, Haverhill, and Massachusetts, 2017

## **People with Disabilities**

Chicopee, Hampden County, and Haverhill all have higher rates of disability than Massachusetts as a whole (Figure III.6). People 65 years and over have the highest disability rates, which not an uncommon situation. However, they are significantly higher in Chicopee than in Massachusetts overall (Figure III.7), emphasizing the continued need for senior services targeted to people with disabilities. One issue of potential concern is the rate of disability among working age adults between 35-64 years old, which is 15.1% in Chicopee compared with 10.4% in Massachusetts (Figure III.7), and even more prevalent in the region, with 16.8% in Hampden County. The most common forms of disability for this age group are cognitive, ambulatory, and those related to independent living. This means more working age adults will have difficulty entering the workforce. It also means that on top of existing City services geared toward seniors with disabilities, there may be a need for services geared more specifically toward middle-aged adults.

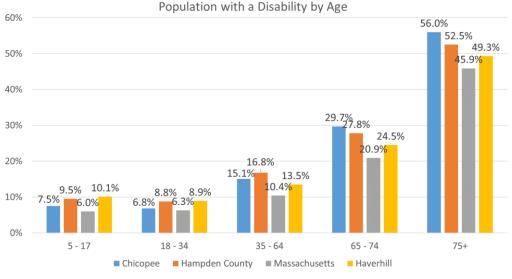
#### Figure III.7. Percentage of civilian noninstitutionalized population with a disability in Chicopee, Hampden County, and Massachusetts, 2017



Source: 2012 and 2017 American Community Survey 5-Year Estimate

Chicopee is more in line with Massachusetts when it comes to people with disabilities under the age of 35. Young people with disabilities is more common in Hampden County as a whole and in Haverhill. In fact, the data shows that overall people with a disability in Chicopee are much less likely to be employed than people with a disability in Massachusetts overall, while people without a disability in Chicopee are employed at about the same rate as people without a disability across the Commonwealth (Figure III.8). This could mean that working age people with a disability in Chicopee are more likely to have disabilities that make it difficult to work, or that they have less access to employment support.





Source: 2017 American Community Survey 5-Year Estimate

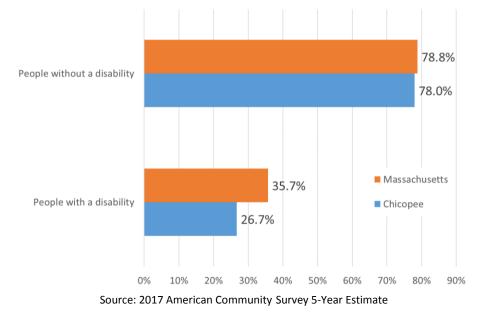


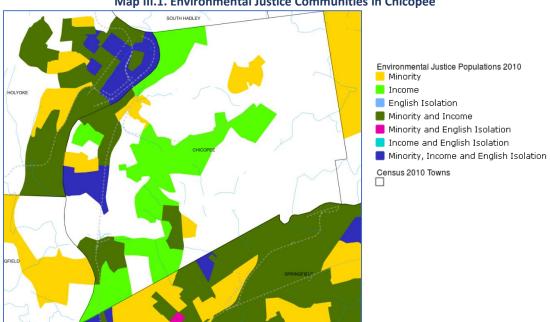
Figure III.9. Employment Rate by Disability Status in Chicopee and Massachusetts, 2017

## **Environmental Justice Communities**

Particular attention should be paid to neighborhoods throughout the City identified as Environmental Justice (EJ) communities, which often suffer environmental inequality. Environmental justice means that everyone in Chicopee should enjoy the benefits of a healthy environment, and no neighborhoods should be stuck with the brunt of environmental problems. The Massachusetts Environmental Justice Policy defines EJ communities as "those segments of the population that ... [are] most at risk of being unaware of or unable to participate in environmental decision-making or to gain access to state environmental resources." They are defined as neighborhoods (U.S. Census Bureau census block groups) that meet one or more of the following criteria:

- Low Income: The median annual household income is at or below 65% of the statewide median income for Massachusetts, or
- Minority: 25% or more of residents are ethnic or racial minorities, or •
- Non-English Speakers: 25% or more of residents are lacking English language proficiency.

In Chicopee, EJ communities are located throughout the City (Map III.1) but are largely clustered in the neighborhoods along the Connecticut River and in the central parts of the City. Areas with two or more EJ conditions are clustered in the former Industrial Villages (Willimansett, Chicopee Center, and Chicopee Falls). Most EJ communities in Chicopee are designated for low income alone, located in swaths of Aldenville and Fairview. Throughout the Comprehensive Plan, the City will engage with EJ communities, making sure that they are well represented, are not unevenly burdened by environmental concerns, and receive an equitable share of environmental benefits, such as new parks, trails, Brownfields cleanup, etc.



Map III.1. Environmental Justice Communities in Chicopee

Source: 2010 MassGIS Environmental Justice Viewer

## IV. Land Use

## Why Land Use Matters

The types of land uses allowed and where they occur influence economic, environmental, and social aspects of a community. Chicopee uses several tools to manage land development. The zoning ordinance regulates where a particular use can happen, its placement within a parcel, and performance standards a development must demonstrate to meet community objectives around environmental quality and social impacts. The Subdivision Regulations ensure standards are met in the subdivision of land and development of new roads, while the Site Plan Regulations regulate the laying out and construction of developable sites.

## Land Management Tools

## **Zoning Ordinance**

Most cities and towns throughout the United States, including Chicopee, use zoning to regulate the use of land within their borders. The Zoning Map divides the City into "districts" or "zones." For example,

Chicopee has numerous "residential zones," "commercial and business zones," and "industrial zones." <u>The City's Zoning Map</u> <u>can be viewed here</u>. <u>The City's online GIS map viewer can be</u> <u>viewed here</u>.

Land Use – what's happening on the ground, including development and natural land cover. Zoning – local regulations that determine what can be built where, how it can be used, and how big it is, among other development standards.

Zoning became common about 100 years ago, primarily as a way to keep people safe. For example, many cities used zoning to ensure that residential neighborhoods were not located too

close to dangerous industrial uses. However, zoning has also been used to enforce racial and economic segregation. For example, in the 1930s, the federal government created the <u>Home Owners' Loan</u> <u>Corporation (HOLC)</u>, which produced Residential Security Maps (commonly known as redlining maps). These maps identified areas that were considered risky for residential home loans, often based on the incomes, race or immigration status of the residents there, as well as the existing building types. In Chicopee, parts of Chicopee Center, Chicopee Falls, and Willimansett were considered "Hazardous" and banks were encouraged to deny home loans. Zoning was often used to reinforce these policies, and even decades later, these are the poorest areas of the City.

Chicopee adopted its zoning ordinance and map in 1940. Over time, zoning has evolved to achieve many different objectives. Chicopee uses its Zoning Ordinance to lessen congestion in the streets; conserve health; secure public safety; provide adequate light and air; prevent overcrowding of buildings and people; meet the housing needs of the people of Chicopee; facilitate the adequate provision of transportation, water supply, drainage, sewerage, schools, parks, open space and other public

requirements; preserve the value of land and buildings, including the conservation of natural resources and the prevention of blight and pollution of the environment; encourage the most appropriate uses in land throughout the City; preserve and increase amenities; and to protect the public against the hazards of flooding and the detrimental use and development of flood-prone areas.

However, the original zoning ordinance has only received one major overhaul in eighty years, and that was in 1978. Further, much of Chicopee's Zoning ordinance is designed to perpetuate mid-century development trends, such as sprawling commercial strip centers, that we now know are discriminatory, expensive, and environmentally flawed. The ordinance is behind the times on issues such as parking requirements, minimum residential lot sizes, and allowances for mixed-uses in the village cores. It is high time for another overhaul to ensure that Chicopee's zoning is meeting the needs and realities of people *today*. This plan can be used to guide any future zoning overhaul.

## How Does Zoning Impact Me?

The Zoning Ordinance impacts different people in different ways. In general, zoning spells out what can be developed in each district and what permits are required. Some other examples include:

**Residents and Homeowners:** Zoning controls how property can be used in residential zoning districts. For instance, zoning may prohibit the operation of a business or the construction of an apartment building in a single-family residential zone, such as Chicopee's Residential A zones.

**Business Owners:** Zoning determines where you can locate your business and how much parking you need. Zoning also regulates how large your sign can be and where it can be placed.

**Developers:** Zoning determines the size and shape of new development and where it can be located. For example, the number of homes that can be built within a subdivision is determined, in part, by the Zoning Ordinance.

**Design and Construction Professionals:** Zoning contains rules related to landscaping, parking, lighting, and building design, as well as the size and shape of new development.

## **Zoning Districts**

The City has a wide range of zoning districts, allowing for various residential, business, commercial, industrial, and mixed-uses. Industrial zones tend to be located adjacent to highways and railroad tracks, along the Chicopee River, and in and around the Westover Air Reserve Base. Business and commercial zones are clustered in Chicopee Center, Chicopee Falls, and Fairview, at the crossroads of the Massachusetts Turnpike (I-90) and Memorial Drive (Route 33), and along strips of roadways such as Memorial Drive, Chicopee Street, Grattan Street, and other scattered streets and sites. A mixed-use zone is located at the entrance to Westover. The remainder of the City is zoned for residential use, ranging from single-family homes to townhouses and apartment buildings.

#### Table IV.1. Zoning Districts by Land Area

Zoning District	Area in Acres	% of Total Area
Residence A	5,943.2	74.0%
Residence B	805.1	10.0%
Residence C	457.9	5.7%
Mixed-Use Overlay District	93.1	1.2%
Central Business District	23.2	0.3%
Commercial A	45.4	0.6%
Commercial A-1	2.9	0.0%
Business A	662	8.2%
TOTAL	8,032.9	100%

Source: City of Chicopee GIS

The City's Zoning Ordinance also includes a number of special zoning districts such as overlay zones. These are designed for several different purposes, from adding special protections to certain areas to allowing or incentivizing redevelopment of properties that might not otherwise be allowed. These additional zoning districts include:

- Chicopee Center 40R Smart Growth Overlay District: The purpose of the Chicopee 40R Smart Growth Overlay District is to provide an opportunity for attractive and livable residential and mixed-use development and redevelopment that supports the commercial revitalization of Chicopee Center.
- Falls Village Housing Development Zone: The Falls Village Housing Development Zone (FVHDZ) is currently under development. Once finalized, it will be presented to the City of Chicopee for adoption and then to the Commonwealth of Massachusetts for approval under the Housing Development Incentive Program. The FVHDZ will provide an incentive for the private sector to invest in one of Chicopee's oldest and most dense city neighborhoods. This neighborhood encompasses the City's largest Brownfield site redevelopment project, which is a significant opportunity to develop new housing options in the historic core of this former industrial village.
- Floodplain Overlay District: The purpose of the Floodplain District is to carefully manage and use land subject to periodic flooding; to protect people and property against the hazards of flooding; and to ensure the City's compliance with federal rules and regulations so that it can continue to participate in the National Flood Insurance Program. All development projects, including public and private utilities and facilities, drainage, and infrastructure, must be designed to minimize and reduce exposure to flood damage.
- Garden Industrial Planned Unit Development (IPUD), Types I and II: These districts provide flexibility in the design and siting of multiple industrial and office buildings on a single site, promoting attractive designs; preservation of open space; efficient use of municipal services; and minimization of the overall impact of development on the immediate environment, while maximizing the use of the site's natural characteristics. Much of the land in and around Westover is zoned as Type I while the Chicopee River Business Park area is zoned as Type II.
- Mill Conversion and Commercial Center Overlay District: The purpose of the Mill Conversion and Commercial Center Overlay District is to promote the economic health and vitality of the City by encouraging the preservation, reuse, and renovation of underutilized or abandoned

industrial properties and commercial centers through mixed-use development that includes industrial, commercial, municipal, and/or residential uses.

- Mixed Use MXD District: The purpose of the Mixed Use MXD District is to provide for large-scale development or redevelopment of at least 50 acres, with a mix of at least three types of uses.
   For example, this could involve an apartment complex located above retail and office uses on the lower floors.
- Senior Housing Overlay Zone: The purpose of the Senior Housing Overlay Zone is to provide residential alternatives for seniors, such as nursing homes, assisted living, and over 55 age-restricted housing. However, this zone has never been applied anywhere in Chicopee, as there are other, easier ways for senior housing to be built.
- West End Housing Development Zone: The West End Housing Development Zone (WEHDZ) is a district created and adopted by the City of Chicopee and approved by the Commonwealth of Massachusetts under the Housing Development Incentive Program. The program aimed toward developers and contractors intending to renovate or construct market-rate housing in multi-family structures. The WEHDZ provides an incentive to the private sector to invest in one of the oldest and most dense neighborhoods of the City. The incentive is uniquely suited to stabilizing this neighborhood in that it is not limited to the development of affordable housing but rather encourages economic diversity within a low-income area.

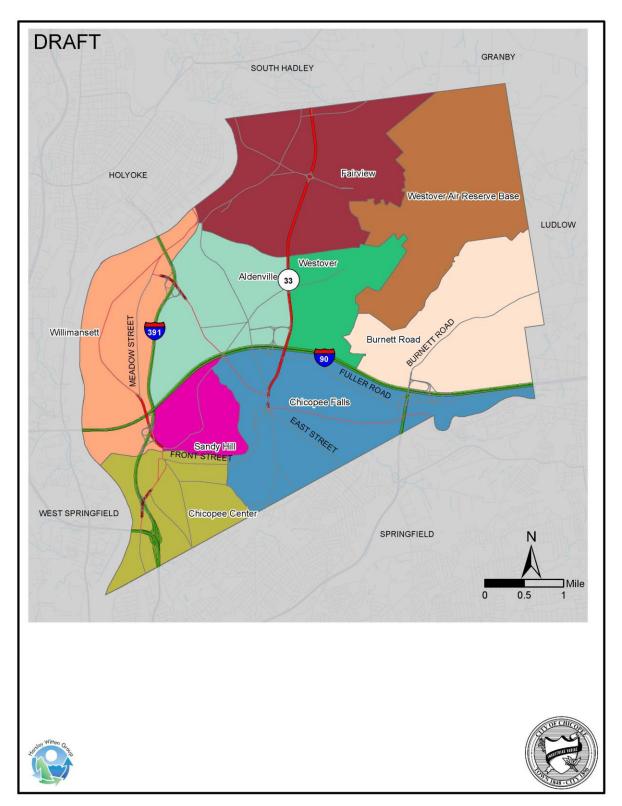
## Subdivision Regulations and Site Plan Regulations

The City's subdivision and site plan regulations, effective as of May 2005, are designed to protect the safety, health, convenience, and welfare of Chicopee residents.

The subdivision regulations control the design and construction of streets in subdivisions to provide adequate access to buildings, and to ensure sanitary conditions in the development (including any parks and open areas) and the orderly recording of land. The regulations make sure that new streets will: be safe and convenient for travel; lessen congestion and opportunities for accidents; be safe in the case of fire, flood, and other emergencies; accommodate underground utility services, street lighting, and other municipal equipment; and to generally make sure that new streets work well with any existing streets.

The site plan regulations control the laying out and construction of developable sites to insure the provision of adequate access to the sites, sanitary conditions on site and (in some cases) parks and open areas, and the orderly recording of land.





# V. Housing

## Why Housing Matters

Providing residents with opportunities to have safe, affordable homes is a cornerstone of the economic and social health in any community. A balance of diverse housing opportunities and adequate supply can build the local labor workforce and support the spectrum of housing needs through a lifetime – an apartment after graduation, a family's first home, or downsizing for empty-nesters or retirees. The type of housing available, its cost, and its condition are important attributes families and individuals evaluate when choosing a place to live.



Ames Privilege Apartments. Source: Wikimedia Commons

## Housing Supply

## **Housing Types**

Chicopee has just under 25,000 housing units, only a marginal increase since 2010 (Table V.1). Just under half of all housing units are single family homes and this number has been decreasing steadily over time as more and more new construction has been of multi-family housing. Construction of multifamily housing since 2010 has been increasing at twice the rate of single-family homes. This generally suggests that Chicopee has been successful in increasing its housing diversity, which is important given the City's demographic changes. As average household size shrinks, there is more of a demand for alternatives to single-family homes. Currently, much of Chicopee's housing alternatives are in smaller buildings of under ten units (Table V.2). The City is home to a smaller percentage of large multi-family buildings (20 unit+) than Massachusetts is as a whole. However, expected conversions of historic mill buildings into multi-family housing are likely to alter this trend.

#### Table V.1. Residential Construction in Chicopee, 2010-2017

Housing Type	Housing Units in 2010	Total Estimated Housing Units 2017	Change 2010 to 2017
Single Family	13,004	12,657	-2.7%
Multi-Family	10,841	11,490	6.0%
Manufactured Housing	614	556	-9.4%
Total Housing	24,459	24,703	1.0%

Source: 2010 and 2017 American Community Survey 5-Year Estimates

	Chicopee	Hampden County	Massachusetts
Total housing units	24,703	193,332	2,864,989
Single Family	46.0%	55.9%	52.2%
Condo/Townhouse	5.2%	3.7%	5.3%
2 units	14.0%	12.9%	10.1%
3 or 4 units	13.8%	8.2%	10.7%
5 to 9 units	8.5%	6.6%	5.8%
10 to 19 units	3.3%	3.3%	4.3%
20 or more units	6.8%	8.0%	10.7%
Mobile home	2.3%	1.3%	0.8%
Boat, RV, van, etc.	0.0%	0.0%	0.0%

#### Table V.2. Percentage of Housing Types in Chicopee, Hampden County, and Massachusetts, 2017

Source: 2017 American Community Survey 5-Year Estimates

By looking at actual City building permits over the past eight years, it is clear that development has been slow, even since recovery from the great recession began in 2012 (Table V.3). Only 248 housing units have been permitted since then, and well over 40% of those have been in multi-family developments approved in just the last two years. Between 2012 and 2016 there was an average of only 15 new housing units per year. The continued conversion of mill buildings into multi-family residential, noted earlier, will be a huge boost to overall housing production for the City.

	Units Constructed							
Housing Type	2012	2013	2014	2015	2016	2017	2018	2019
Single Family	11	9	12	11	15	13	15	25
Duplex	2	2	8	2	0	8	2	2
Three-Family	3	0	0	0	0	0	0	0
Four-Family	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	95	13
Total Housing	16	11	20	13	15	21	112	40

#### Table V.3. Residential Construction Permits in Chicopee, 2012-2019

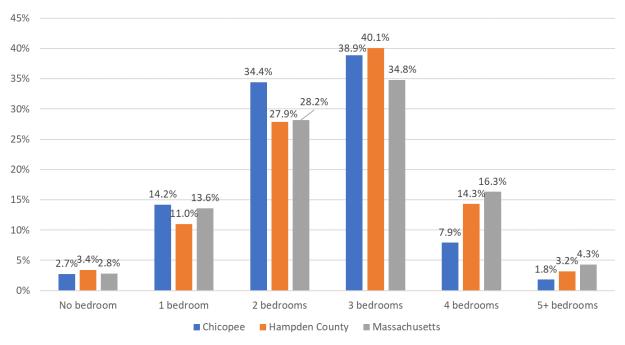
Source: City of Chicopee

## Number of Bedrooms

Given that both household size and families with children continue to shrink in Chicopee, it is valuable to look at the number of bedrooms in existing homes to see if they match the needs of the population

(Figure V.1). In total, just under 17% of homes in Chicopee have one or no bedrooms (for example, onebedroom and studio apartments). While this is fairly standard for Massachusetts, most communities in the Commonwealth are lagging behind in providing housing types that meet current and future expected needs. Many other gateway cities in Massachusetts, however, have at least 20% of homes with one or fewer bedrooms.

The major difference in bedrooms between Chicopee and Massachusetts is that Chicopee has more modestly sized 2- and 3-bedroom homes and fewer larger homes with four or more bedrooms.



#### Figure V.1. Number of Bedrooms in Chicopee and Massachusetts

Source: 2017 American Community Survey 5-Year Estimates

## Age of Housing

The majority of Chicopee's housing (nearly 75%) was built prior to 1970. As shown in Figure V.2, the housing stock in Chicopee is generally older than in Hampden County or Massachusetts as a whole. While this historic housing stock adds to Chicopee's character and charm, it can also lead to public health issues such as lead-based paint, asbestos, indoor air quality issues, and general disrepair. Given the large renter population in Chicopee, these burdens and other costs can often fall on tenants. Chicopee is also building much less new housing than the county or the Commonwealth. The share of homes in Massachusetts built in 2000 or later is three times the share in Chicopee (Figure V.3).

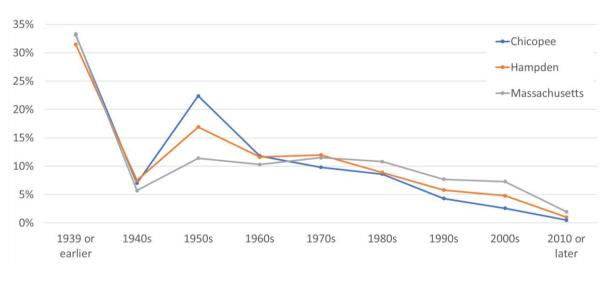
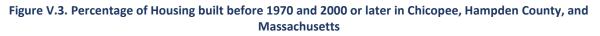
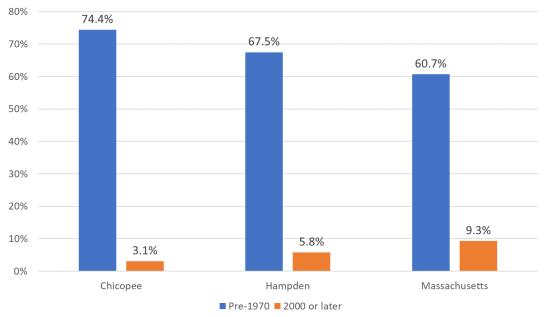


Figure V.2. Year Housing Built in Chicopee, Hampden County, and Massachusetts, 2017







Source: 2017 American Community Survey 5-Year Estimates

Much of Chicopee's housing stock prior to 1940 was built in and around the Industrial Villages, and that is where most of the historic homes in Chicopee can still be found today. Chicopee experienced a significant housing boom after World War II, both because of the pent-up demand for housing after the Great Depression and the war, and the added demand of Westover Air Base. Rates of new housing construction have declined since then, as the City approached build out. Today, new housing construction is far more likely to come from adaptive reuse of existing buildings, infill multi-family development, and the like than from new subdivisions with single-family homes.

## Housing Tenure (Owned vs. Rented)

Most housing in Chicopee is owner-occupied (53.3%), though this percentage has been declining (Figure V.4). This may be due to the increase in multi-family construction in recent years. The percent of vacant housing in Chicopee has been increasing since 2000 but is still less than the vacancy rates for Massachusetts and Hampden County (Figure V.5). Overall, Chicopee has only a slightly lower percentage of owner-occupied households compared with the County and the Commonwealth (Figure V.5).

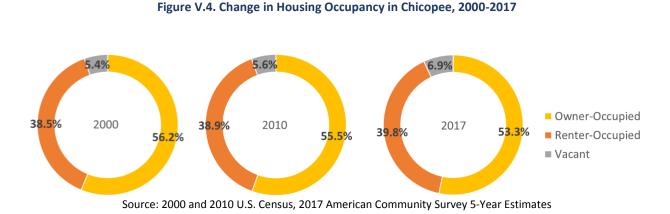
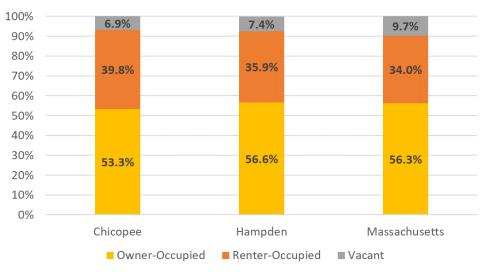


Figure V.5. Housing Occupancy in Chicopee, Hampden County, and Massachusetts, 2017

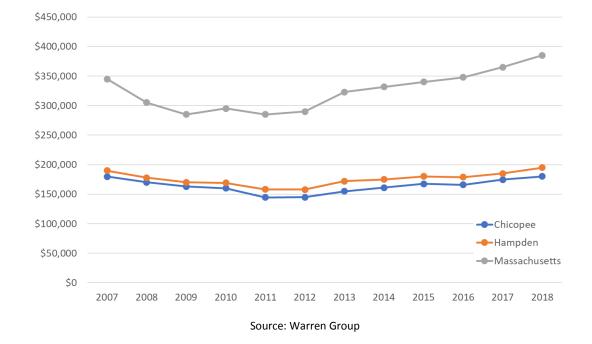


Source: 2017 American Community Survey 5-Year Estimates

## Housing Costs and Affordability

## Home Sales

According to Warren Group sales data, median home sales prices in Chicopee have consistently been lower than those in Massachusetts as a whole, but only slightly lower than Hampden County. In 2018, the median sales price of a single-family home in Chicopee was \$180,000 (Figure V.6). This is on par with the price of \$179,900 met in 2007 prior to the recession. The recession hit prices in Chicopee a little harder than in Hampden County or Massachusetts. Prices dropped nearly 20% in Chicopee from 2007 -2011, but only about 17% in Hampden County overall. And while it has taken all this time for prices in the City and the County to reach pre-recession levels, Massachusetts hit that target two years prior, and the Commonwealth's prices have been going up at a much faster rate since the recession ended, influenced significantly by the very rapid rate of price appreciation in greater Boston. Condo prices have been increasing at a much slower rate in Chicopee and Hampden County than in Massachusetts (Figure V.7). As of 2018, condo prices had yet to reach pre-recession levels, in either the City or the County. This is reflective of the general economy in and around Chicopee and is not necessarily a bad sign. Chicopee's housing prices are more in line with local incomes and what people can afford to pay. Prices are increasing in Chicopee manageably, ideally enough to encourage owners to keep reinvesting in their properties but not enough for people to be priced out. However, prices continue to increase. Home sales in Chicopee recorded by the Warren Group during the first quarter of 2020 suggests a median price of \$185,000 for single-family homes and \$134,000 for condos.





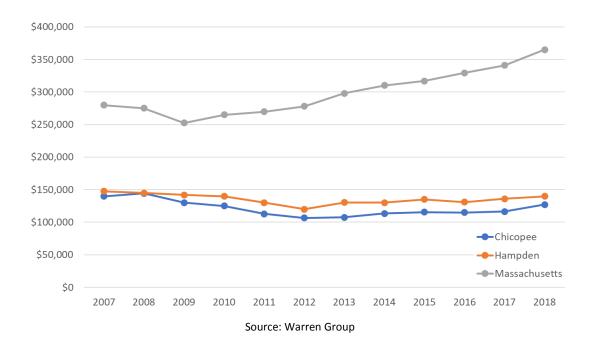


Figure V.7. Median Condo Sales Price: Chicopee, Hampden County, and Massachusetts, 2007-2018

## **Home Rentals**

Average gross rent in Chicopee in 2017 was \$885, significantly below the Massachusetts average but a little higher than the average for Hampden County (Figure V.8). While rents in Chicopee are lower when compared with Massachusetts overall, they have been increasing at a much faster rate. This may suggest a greater demand for rental housing in Chicopee compared to neighboring communities.

Chicopee contracted with a consultant team in 2012 to develop the Chicopee West End Brownfields Area-Wide Plan. While this plan focuses on the West End, it included, among other things, an analysis of the residential rental market in Chicopee. This analysis indeed showed a strong demand for new rental units in Chicopee, especially for younger adults (under 35) with moderate incomes (below \$50,000 per year). If Chicopee wants to continue to maintain and attract younger adults, more rental options of smaller unit size and at rates affordable for people making under \$50,000 a year will be very important.

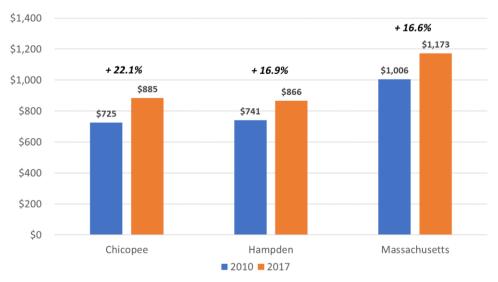
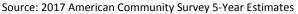


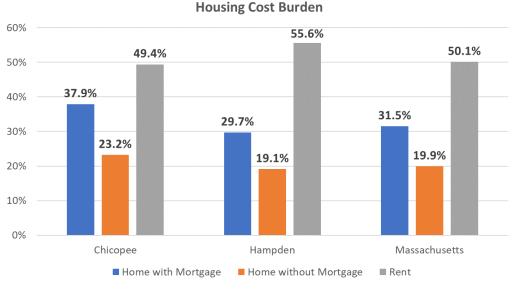
Figure V.8. 2017 Gross Rent for All Units in Chicopee, Hampden County, and Massachusetts



## Cost Burden

One "rule of thumb" indicator of housing affordability measures the percent of income spent on housing. When aggregate housing costs (rent, mortgage, insurance, utilities, fees, real estate taxes, etc.) are more than 30% of a household's income, that household is considered "cost burdened." In 2017, Chicopee had higher cost burdens for homeowners (with and without mortgages) than Hampden County and Massachusetts, but slightly lower cost burdens for renters (Figure V.9). This suggests that even though the cost of housing is much lower in Chicopee than the Commonwealth and a bit lower than the County, incomes are even lower in comparison, and more people have to spend more of their incomes in order to buy and maintain a home. In total, it is estimated that over 3,200 Chicopee homeowners are cost burdened. And while renters are slightly "better off" in Chicopee compared to the County and the Commonwealth, nearly half are paying more than 30% of their incomes on housing (or approximately just under 5,000 households). Rent burdens are a serious concern throughout the Commonwealth, experienced by over 50% of Massachusetts renter households.

#### Figure V.9. Household Costs as a Percent of Household Income in Chicopee, Hampden County, and Massachusetts



Source: 2017 American Community Survey 5-Year Estimates

## Subsidized Housing Inventory

Massachusetts maintains a Subsidized Housing Inventory (SHI) that tracks each municipality's affordable housing stock, including deed restricted and subsidized units. This is an important statewide tool that helps ensure that each municipality in the state is providing its "fair share" of subsidized housing. Under General Law Chapter 40B, in any municipality where less than 10% of units are included on the SHI, a developer can build more densely than the municipal zoning bylaws would permit, if at least 25% (or 20% in certain cases) of the new units are affordable. Chicopee is currently among just 12% of Massachusetts municipalities that have met this 10% goal. However, this may change after the 2020 Census, when the baseline of total housing units will be recalculated. If less than 10% of new homes built since 2010 are eligible for the SHI, the City may dip below the 10% goal.

As of 2019, there are 2,626 units on the SHI in Chicopee, or 10.47% of the City's 2010 housing stock. Of these, nearly all (97.7%) are rentals with only 60 units available for homeownership. *The affordability of* **819 (31.2%) of these units is set to expire by the end of 2030.** While the City has a good chance of maintaining its 10% target after 2020, it will almost certainly lose that status after 2030 if it does not find ways over the next ten years to renew the affordability of most of these units. Further, even if all of these homes are renewed, as new market rate homes are developed, particularly the several hundred new units projected for mill conversion projects such as Cabotville and Lyman Mills, Chicopee could still end up dipping below 10% if *new* SHI units are not developed concurrently. The SHI inventory is critical for providing long-term, high-quality, safe, affordable homes throughout Chicopee, at a price point that remains relatively stable, regardless of fluctuations in the private housing market.

## Homelessness

Homelessness is not always the easiest thing to track. Families and individuals can live on the brink, falling in and out of homelessness over the course of a year. One of the best sources of information on homelessness comes from the Springfield-Hampden County Continuum of Care and its annual "Point-in-Time" count. Most recently held in January 2019, this count is a Hampden County-wide census of the homeless on a single day (or point in time).

Overall, the results of the 2019 count were positive (Figure V.10), in that homelessness in Hampden County has been generally on the decline since 2015, and the vast majority of homeless are being sheltered. As of the 2019 count, less than 2% of homeless individuals were unsheltered, meaning living outdoors, in vehicles, in abandoned buildings, etc. The number of chronically homeless families has decreased significantly since 2015, and the number of chronically homeless individuals has remained steady. All told, there are about 200 chronically homeless individuals in Hampden County – just over 8% of the homeless population. In Chicopee, there are several known spaces where the homeless camp. Tents can be spotted in the woods, along the riverbanks, on the far side of parking lots, within former industrial areas, etc. This number is small enough and these sites knowable enough that every chronically homeless person in the county and in Chicopee can and should be reached out to.

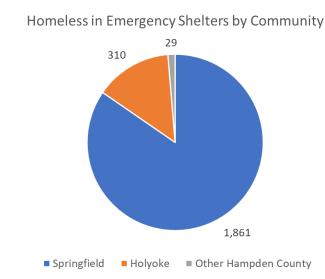


Figure V.10. Number of Homeless Individuals from Communities in Hampden County

Source: 2019 Point-in-Time Count, Springfield-Hampden County Continuum of Care

The Point-in-Time showed that the vast majority of the County's homeless live in Springfield and Holyoke. Those two cities are home to nearly 94% of the County's homeless population. According to the study, there are very few homeless in Chicopee; only 21 were counted in 2019. Of these, 15 were in transitional housing, two were in emergency shelters, and four were unsheltered. Only four individuals in Chicopee were considered to be chronically homeless. This is among the lowest number of chronically homeless individuals in any city in the county, including not only Springfield and Holyoke, but West Springfield and Westfield. One thing the data doesn't tell is the last place of permanent residence for the homeless. One of the reasons Springfield has such a high homeless population is because that's where most of the region's emergency shelter beds are. Springfield and Holyoke have a combined total of 1,825 shelter beds while Chicopee has zero. It is very possible that when residents of Chicopee have unstable housing situations and are forced into homelessness, their next step is to seek out a shelter in Springfield or Holyoke. Based on demographic data, Chicopee has a significant population that tends to be at risk of homelessness, including those with very low-incomes, housing cost burdens, and certain disabilities, including mental illness and drug addiction. While homelessness is relatively rare within Chicopee's borders, the City should continue to be mindful of local residents who are vulnerable to homelessness. Services that prevent homelessness in the first place should continue to be a priority for the City, along with maintaining and expanding the current stock of transitional and permanent supportive housing (124 beds as of 2019).

# VI. Economic Development

## Why Economic Development Matters

Economic development is the source of a community's wealth and well-being. This requires continual investment that enhances its human, built, and natural resources. A community that invests in education and training, housing, infrastructure, and public services sets the stage for its economic success. An economically healthy community supports its employers and maintains the day-to-day services that contribute to the quality of life of its residents.

This economic baseline assessment offers a general outlook on the economic situation in the City of Chicopee by comparing high-level economic indicators to the Springfield Metropolitan Statistical Area (MSA) (Hampden, Hampshire, and Franklin counties), Massachusetts, and the United States as a whole. It provides an evaluation of the City's current economic wellbeing and insight into future trends that could affect the local economy.

## Chicopee's Labor Force

## Jobs and Population

Table VI.1below compares the number of jobs<sup>1</sup> in each geography to the total population in that geography. With a ratio of 0.40 in 2018, the City of Chicopee has fewer jobs than residents based on historical and projected job and population figures. This means that the City has 2.5 residents per job. The MSA, Commonwealth, and nation fare slightly better with ratios closer to, or above, 0.5, indicating that these geographies have approximately two residents for every job. Chicopee's ratio is expected to increase slightly to 0.43 in 2028.

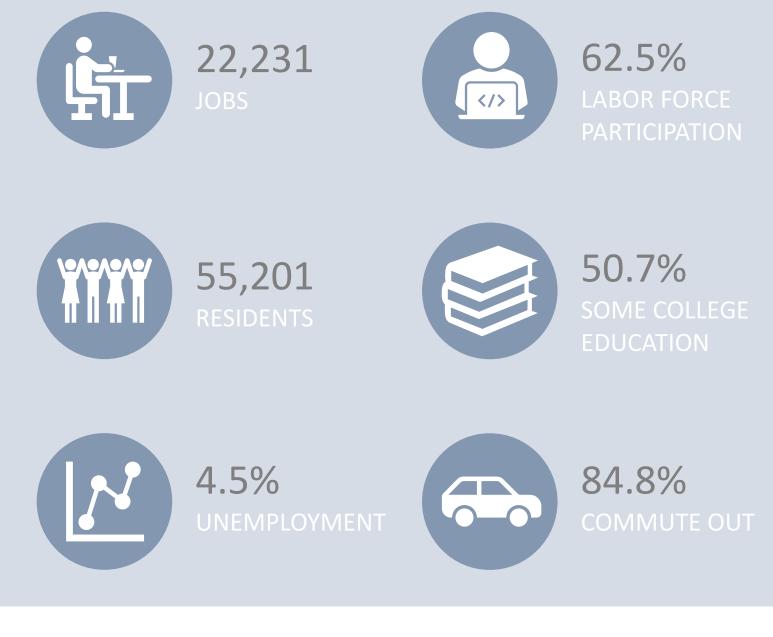
Year	Chicopee	Springfield MSA	Massachusetts	US
2008	0.39	0.47	0.56	0.50
2018	0.40	0.48	0.58	0.50
2028	0.43	0.51	0.60	0.52

## Table VI.1. Jobs per Resident Index

Source: EMSI

<sup>&</sup>lt;sup>1</sup> EMSI includes both full- and part-time jobs in job counts. Both are counted equally and are not adjusted to full-time equivalents.

# Labor Force



There are 2.5 residents for every job in Chicopee. Job growth is slower than the state and the nation, and the unemployment rate is higher. Chicopee's unemployment rate is average relative to neighboring towns.

Most residents commute out of the city for work, and most of the city's workers live outside of Chicopee. Jobs and population over this time period are shown in Table VI.2 and Table VI.3.

#### Table VI.2. Total Jobs by Geography

Year		Chicopee	Springfield MSA	Massachusetts	US
	2008	21,135	323,810	3,616,954	151,745,707
	2018	22,231	340,488	3,981,823	163,329,158
	2028*	23,348	357,090	4,254,941	178,188,762
% Change 2008-2018		5%	5%	10%	8%
Projected % Change 2018-2028		5%	5%	7%	9%

Source: EMSI

\*2028 data is projected.

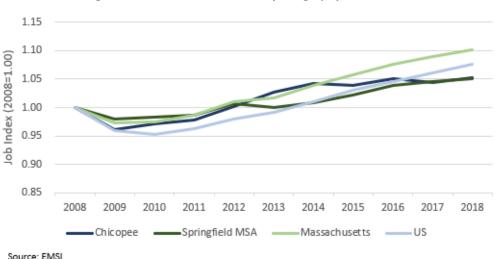
#### Table VI.3. Population by Geography

Year		Chicopee	Springfield MSA	Massachusetts	US
	2008	54,254	691,257	6,468,965	304,093,955
	2018	55,201	703,039	6,897,567	328,038,851
	2028*	54,920	706,694	7,088,925	340,591,282
% Change 2008-2018		2%	2%	7%	4%
Projected % Change 2018-2028		-1%	1%	3%	8%

Source: EMSI

\*2028 data is projected.

Historically, job growth in Chicopee kept pace with the Commonwealth of Massachusetts from 2008 to 2014. Since 2014, job growth in Chicopee has slowed and now lags behind the Commonwealth and nation while remaining similar to the MSA. Interviewees noted that at times existing businesses struggle to attract workers to their businesses and that inventory of available sites for new businesses is shrinking- both of which could contribute to the city's slower pace of job growth.



#### Figure VI.1. Historic Job Growth by Geography, 2008-2018

## Unemployment and Labor Force Participation

To understand how Chicopee's labor force compares to its neighbors, we compared the City's unemployment and labor force participation rates to those of six municipalities that border Chicopee. Figure VI.2 compares 2018 unemployment rates across the seven communities and the Commonwealth. While Chicopee's unemployment rate of 4.5% is higher than that of the Commonwealth, Chicopee is in the middle of its neighboring municipalities.

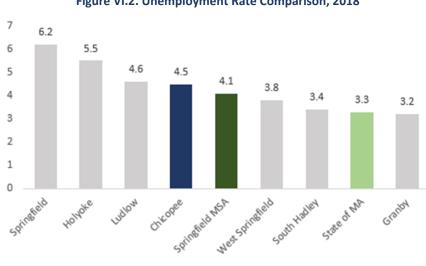
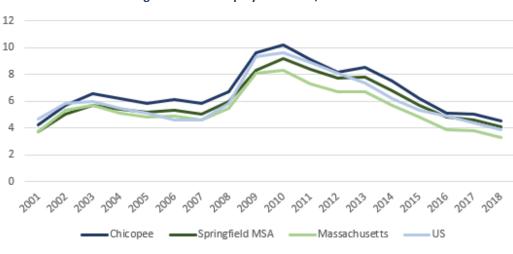


Figure VI.2. Unemployment Rate Comparison, 2018

Historically, Chicopee's unemployment rate has been above that of the MSA, Commonwealth, and nation.





A lower than average share of the City's population is part of the labor force, and a higher than average share of individuals are in groups who choose not to work, such as students, homemakers, and retirees.

Source: Bureau of Labor Statistics

Source: Bureau of Labor Statistics

This is illustrated by Chicopee's labor force participation rate<sup>2</sup> of 62.5%, which is less than the Commonwealth and four of the neighboring municipalities.

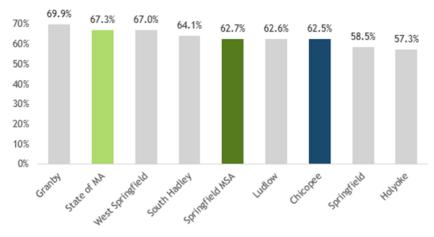


Figure VI.4. Labor Force Participation Rate, 2018

## Education

Over 35% of Chicopee's residents are high school graduates without college credits or degrees, while nearly 32% have some college education, and nearly 19% have a bachelor's degree or higher.

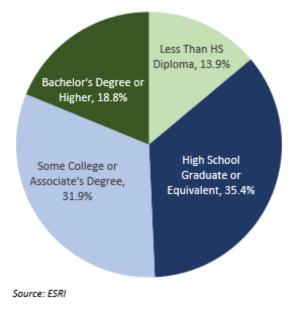


Figure VI.5. Education Attainment of Chicopee's Residents, 2019

<sup>2</sup> The US Census Bureau defines the Labor Force Participation Rate as the proportion of the total 16 years old and over population that is in the labor force. The labor force consists of people classified as employed or unemployed. Unemployed is defined as (1) neither "at work" nor "with a job but not at work" during the reference week, and (2) were actively looking for work during the last 3 weeks, and (3) were available to accept a job.

Source: ACS 2017 5-Year Estimates

A lower percentage of Chicopee's residents (18.8%) hold a bachelor's degree or higher than residents of the MSA (33.6%), Commonwealth (44.1%), and nation (32.5%).

## Table VI.4 . Population by Educational Attainment, 2019

	City of	Springfield		
	Chicopee	MSA	Massachusetts	US
Less Than HS Diploma	13.9%	11.1%	9.0%	11.6%
High School Graduate or Equivalent	35.4%	28.1%	24.1%	27.0%
Some College or Associate's Degree	31.9%	27.2%	22.8%	28.8%
Bachelor's Degree or Higher	18.8%	33.6%	44.1%	32.5%
Total	100%	100%	100%	100%

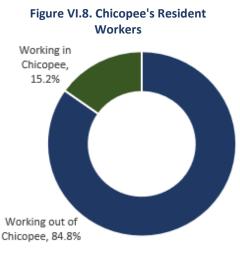
Source: ESRI

## Commuting

Most Chicopee's residents work less than 10 miles from home. See Figure VI.6.

84.8% of resident workers are employed outside of Chicopee, meaning that only 15.2% of resident workers work in Chicopee. Neighboring Springfield is the most common place of employment for Chicopee's residents, with 22.4% of Chicopee's resident workers being employed there. Holyoke (8.3%) and West Springfield (5.7%) are also popular places of employment.

At the same time, the majority of Chicopee's workers (79.2%) live outside of Chicopee. Many workers commute to Chicopee from Springfield (18.5%), Holyoke (5.5%), and Westfield (4%).

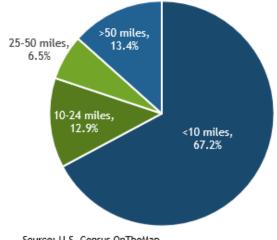


Source: US Census OnTheMap, 2017

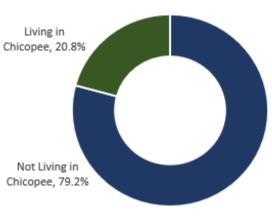
2040

## Envision Our Chicopee · Baseline Report

## Figure VI.6. Chicopee Resident Commuting Distance, 2017



Source: U.S. Census OnTheMap



Source: US Census OnTheMap, 2017

## Figure VI.8. Chicopee's Employees

# Employment



**32%** of jobs in government and health care



SECTORS LOST JOBS IN LAST 5-YEARS



**2%** 5-year job growth



**161** PROJECTED MANUFACTURING JOB LOSSES



**580** Jobs added in Health care



8 EMPLOYERS WITH 250+ EMPLOYEES

Nearly 1/3 of Chicopee's jobs are in Government and Health Care. Retail Trade and Manufacturing are other top sectors. The number of jobs inChicopee increased by2% from 2013-2018.3% growth is expectedfrom 2018-2023.

Health Care has added, and will continue to add, the most jobs to the City's economy. Manufacturing job losses (historic and projected) are dispersed across many subindustries.

## Employment in Chicopee

## Jobs and Earnings

In 2018 nearly a third of Chicopee's jobs were in the Government and Health Care & Social Assistance Sectors (Figure VI.9). Other top sectors include Retail Trade (12% of jobs) and Manufacturing (11% of jobs).

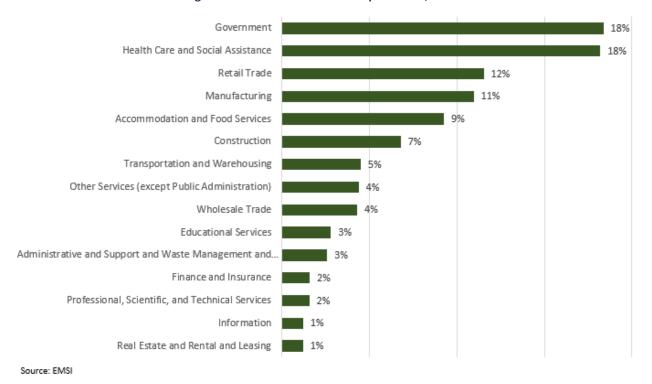
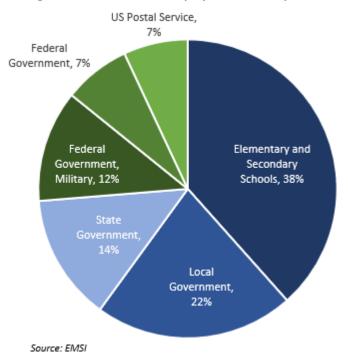


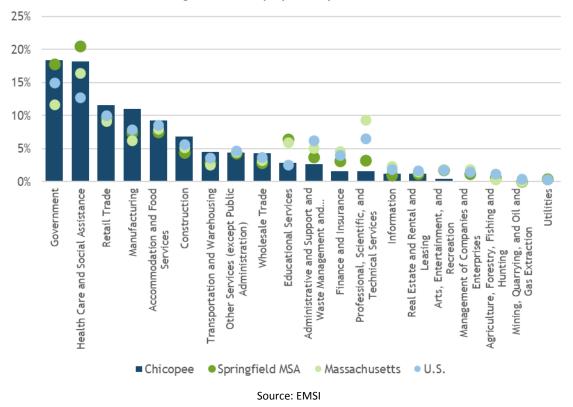
Figure VI.9. Sector Share of Chicopee's Jobs, 2018

Government and Health Care & Social Assistance are also the top sectors for employment in the comparison geographies. Elementary and Secondary Schools account for 38% of employment in Government. Notably, Manufacturing makes up a larger proportion of employment in Chicopee than in the MSA, Commonwealth, and nation. Manufacturing in Chicopee is driven largely by Mechanical Power Transmission Equipment Manufacturing, Sporting and Athletic Goods Manufacturing, Plastics Product Manufacturing, and Commercial Printing.

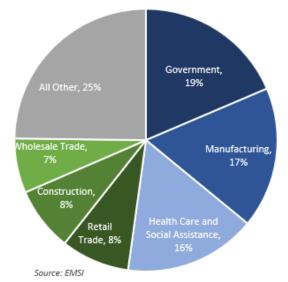






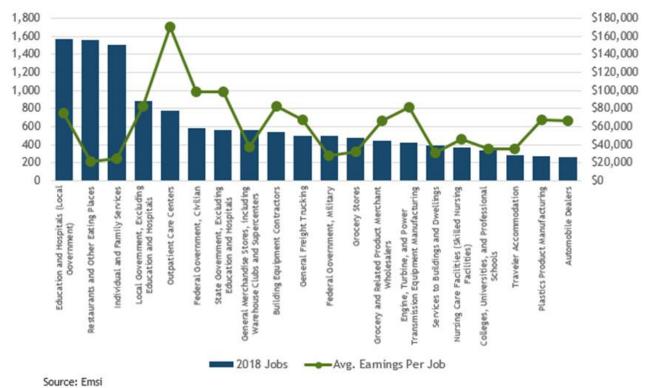


At the 2-digit NAICS level, Government, Manufacturing, and Health Care and Social Assistance are the largest contributors to Chicopee's Gross Regional Product (GRP). These are followed by Retail Trade, Construction, and Wholesale Trade.



#### Figure VI.11. Sector Share of Chicopee GRP, 2018

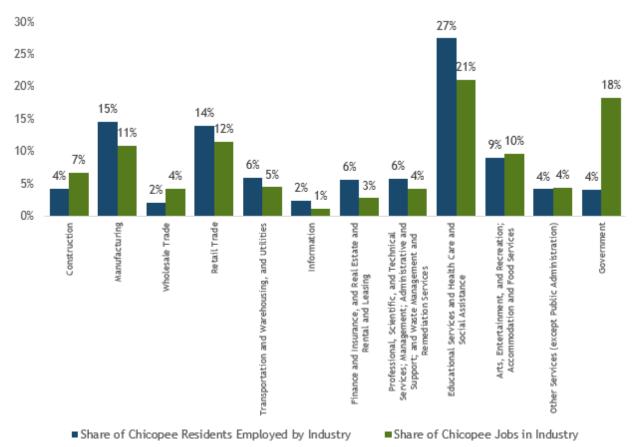
At the more specific 4-digit NAICS level, the industries that are driving employment in Chicopee include Education and Hospitals (Local Government), Restaurants and Other Eating Places, and Individual and Family Services. All of the 1,568 jobs attributed to Education and Hospitals are at Elementary and Secondary Schools. Of the top 20 industries, Outpatient Care Centers have the highest average earnings per job at over \$170,000. Common occupations at Outpatient Care Centers in Chicopee include Registered Nurses, Medical Secretaries, Medical Assistants, and Health Technologists.



#### Figure VI.12. Employment & Earnings, Top 20 4-Digit NAICS, Chicopee

## Local Employers

Figure VI.13 Error! Reference source not found. shows the industry of employment of Chicopee residents compared to jobs located in Chicopee. This data provides insight into how the skills of Chicopee's resident workforce compare to the employment opportunities available in the City. Industries in which a high share of residents' work but represent a comparatively smaller share of the City's employment base are industries for which residents must commute out of Chicopee for job opportunities. Collectively, Educational Services and Health Care and Social Assistance stand out as industries that employ a higher share of Chicopee's residents than the share of jobs in Chicopee (27% vs. 21%).



## Figure VI.13. Industry of Employment of Residents vs. Chicopee Jobs

Likewise, industries with a higher share of jobs than residents must attract workers from out of the City. Government, one of the top industries in Chicopee in terms of employment has more than four times the share of jobs than residents.

Table VI.5 below provides details on the City of Chicopee's largest employers. According to the Massachusetts Office of Labor and Workforce Development, there are 7 establishments that employ at least 250 workers. Most of these employers are in the Government, Manufacturing and Retail sectors. In addition to these, 32 employers have between 100 and 250 employees and 42 employers have between 50 and 99 employees in Chicopee.

#### Table VI.5. Largest Employers in Chicopee, 2018

	Number of		
Company Name	Employees	NAICS	Description
Chicopee City Hall	500-999	9211	Executive, Legislative, and Other General Government
chicopee city hat	300-777	7211	Support
Ethos Energy	500-999	3336	Engine, Turbine, and Power Transmission Equipment
Ethos Energy	300-777	3330	Manufacturing
J Polep Distribution Svc	500-999	4244	Grocery and Related Product Merchant Wholesalers
Callaway Golf Co	250-499	3399	Other Miscellaneous Manufacturing
Cenveo Inc	250-499	4241	Paper and Paper Product Merchant Wholesalers
Valley Opportunity Council	250-499	8139	Business, Professional, Labor, Political, and Similar
valley opportunity council	200-477	0137	Organizations
Walmart Supercenter	250-499	4522	Department Stores

Source: Massachusetts Office of Labor and Workforce Development

## Job Growth

Over the five-year period from 2013 to 2018, the number of jobs in Chicopee increased by 2%. Jobs are projected to increase at a similar rate through 2023, growing by 3%.

## Table VI.6. Five Year Job Change, Historic and Projected, Chicopee

NAICS	Description	2013 Jobs	2018 Jobs	2023 Jobs	2013 - 2018 Change	2013 - 2018 % Change	2023	2023 %
11	Agriculture, Forestry, Fishing and Hunting	0	0	0	0	0%	0	0%
21	Mining, Quarrying, and Oil and Gas Extraction	12	<10	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data
22	Utilities	<10	<10	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data
23	Construction	1,391	1,511	1,620	120	9%	109	7%
31	Manufacturing	2,590	2,437	2,276	(153)	(6%)	(161)	(7%)
42	Wholesale Trade	1,121	960	1,145	(161)	(14%)	185	19%
44	Retail Trade	2,607	2,564	2,565	(43)	(2%)	1	0%
48	Transportation and Warehousing	875	1,004	1,028	129	15%	24	2%
51	Information	419	272	204	(147)	(35%)	(68)	(25%)
52	Finance and Insurance	370	357	350	(13)	(4%)	(7)	(2%)
53	Real Estate and Rental and Leasing	204	271	289	67	33%	18	7%
54	Professional, Scientific, and Technical Services	357	351	351	(6)	(2%)	0	0%
55	Management of Companies and Enterprises	24	26	25	2	8%	(1)	(4%)
56	Administrative and Support and Waste Management and Remediation Services	534	578	604	44	8%	26	4%
61	Educational Services	599	627	667	28	5%	40	6%
62	Health Care and Social Assistance	3,463	4,043	4,655	580	17%	612	15%
71	Arts, Entertainment, and Recreation	55	98	111	43	78%	13	13%
72	Accommodation and Food Services	1,868	2,061	2,153	193	10%	92	4%
81	Other Services (except Public Administration)	964	978	957	14	1%	(21)	(2%)
90	Government	4,235	4,082	3,977	(153)	(4%)	(105)	(3%)
99	Unclassified Industry	0	0	0	0	0%	0	0%
Total		21,698	22,231	22,986	533	2%	755	3%

Source: EMSI

Over the last five years the Health Care; Accommodation and Food Services; Transportation and Warehousing; and Construction sectors added the most jobs to Chicopee. Increases in employment in Services for the Elderly and Persons with Disabilities, Freestanding Ambulatory Surgical and Emergency Centers, and Home Health Care Services drove the large uptick in Health Care employment. Wholesale Trade, Manufacturing, Government, and Information lost the most jobs over this time period.

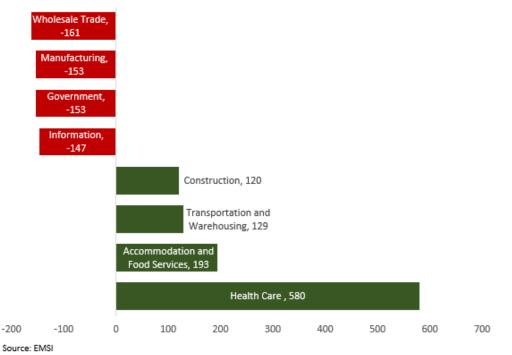
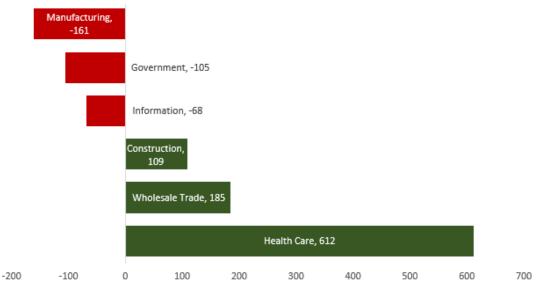


Figure VI.14. Chicopee's Biggest Job Changers, 2013-2018

Over the next five years, through 2023, Health Care is expected to continue to add the most jobs while Manufacturing will lose more jobs. Job losses in Manufacturing are dispersed across a number of more specific industries including Turbine and Turbine Generator Set Units Manufacturing, Electromedical and Electrotherapeutic Apparatus Manufacturing, and Paperboard Container Manufacturing, among others. In other words, the job changes in Manufacturing are not concentrated in a single subindustry but are smaller losses dispersed across multiple subindustries. According to interviewees, the decline in manufacturing could be partially attributed to a generational shift. There is less interest in manufacturing roles amongst new generations entering the workforce which presents a challenge for existing manufacturing businesses to attract and retain talent. At the same time, interviewees noted that Chicopee has received recent interest from businesses that are more in the warehousing and distribution space as a result of its location and the characteristics of available sites. The Transportation and Warehousing industry grew from 2013 and 2018 and is projected to continue to grow in the city.



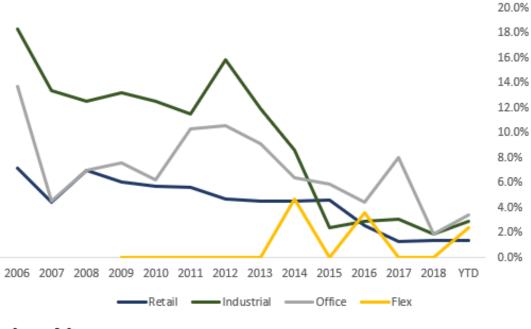
## Figure VI.15. Chicopee's Projected Biggest Job Changers, 2018-2023

Source: EMSI

# **Commercial Vacancies**



Commercial Vacancy Rates, Chicopee



Source: CoStar \*Note: Flex market data is available beginning in 2009.

Chicopee's commercial vacancy rates are at their lowest levels since 2006. Vacancy rates are lower than in the larger Springfield MSA.

## Commercial Vacancies

Commercial vacancy rates, or the percent of total commercial space that is not rented, in Chicopee as tracked by commercial brokerages are low. According to data from CoStar, the 2019 YTD vacancy rate in the retail, industrial, office, and flex<sup>3</sup> real estate markets are all below 3.5% and are lower than vacancy rates in the broader MSA.<sup>4</sup> The charts below summarize the total inventory and the vacancy rates of these four markets. Table VI.7Figure VI.16 provides additional information on the inventory and vacancy of these four commercial markets. It is important to note, however, that these rates do not include many smaller properties or certain properties that are vacant but may not be listed on the market.

		Retail Mar	ket		
			New		
	Inventory -	Inventory -	Inventory		Vacancy
Geography	Buildings	SF	2014-YTD	Vacant SF	Rate
Chicopee	390	3,138,009	23,517	44,721	1.4%
Springfield MSA	3,784	40,400,561	152,038	1,203,906	3.0%
		Industrial M	arket		
			New		
	Inventory -	Inventory -	Inventory		Vacancy
Geography	Buildings	SF	2014-YTD	Vacant SF	Rate
Chicopee	135	7,878,767	0	228,325	2.9%
Springfield MSA	1,293	57,465,096	242,850	2,572,792	4.5%
		Office Ma	rket		
			New		
	Inventory -	Inventory -	Inventory		Vacancy
Geography	Buildings	SF	2014-YTD	Vacant SF	Rate
Chicopee	89	823,418	(3,500)	27,822	3.4%
Springfield MSA	1,258	20,754,218	166,815	1,520,809	7.3%
		Flex Mari	ket 🛛		
			New		
	Inventory -	Inventory -	Inventory		Vacancy
Geography	Buildings	SF	2014-YTD	Vacant SF	Rate
Chicopee	5	187,633	0	4,484	2.4%
Springfield MSA	115	3,940,188	(11,230)	124,682	3.2%

#### Table VI.7. Commercial Vacancy Summary, 2018

Source: CoStar

<sup>&</sup>lt;sup>3</sup> Flex space is defined as a type of building(s) designed to be versatile, which may be used in combination with office, research and development, quasi-retail sales, and including but not limited to industrial, warehouse, and distribution uses. At least half of the rentable area of the building must be used as office space.

<sup>&</sup>lt;sup>4</sup> The Springfield MSA includes Hampshire, Hampden, and Franklin counties.

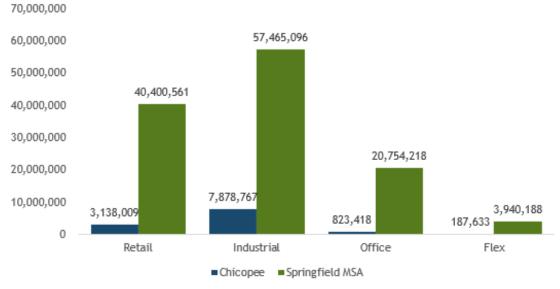


Figure VI.16. Chicopee Commercial Inventory (square feet), 2018

Source: CoStar

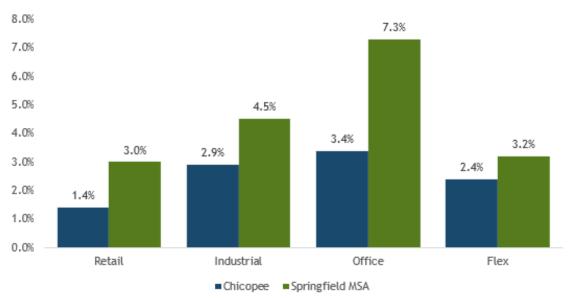


Figure VI.17: Chicopee Commercial Vacancy Rate, 2018

Source: CoStar

With a rate of 1.4%, retail vacancy in Chicopee is at the lowest level since 2006. Compared to the Springfield MSA, retail vacancy rates have trended lower since 2015 (Figure VI.18).



Figure VI.18. Historical Retail Vacancy Rates

The same is true of industrial vacancy, which has shown a slight uptick year to date since reaching its lowest rate in 2018 since 2006 (Figure VI.19).

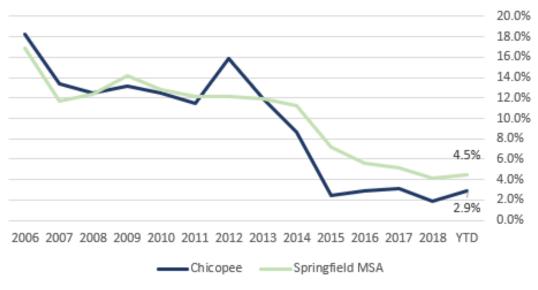
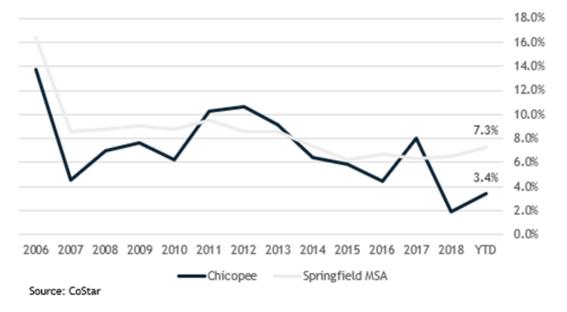


Figure VI.19. Historical Industrial Vacancy Rates

Source: CoStar

With the exception of 2011-2013 and 2017, office vacancy rates have generally trended lower in Chicopee than in the Springfield MSA. This is likely due to the fact that Chicopee represents only just under 4.0% of the MSA's office space square footage inventory. Although vacancy rates in both geographies are higher year to date than in 2018, Chicopee's office vacancy rate remains lower than the MSA (Figure VI.20).



#### Figure VI.20. Historical Office Vacancy Rates

Flex space vacancy rates have consistently been very low in Chicopee. With an inventory of only 5 buildings and no change in square footage since 2009, this is unsurprising. The MSA has not experienced inventory growth in this market either.



#### Figure VI.21. Historical Flex Space Vacancy Rates

## Economic Development Tools

The City of Chicopee has a variety of economic development tools, organizations, and programs at its disposal. Central to these efforts is the City's Department of Community Development which spearheads a variety of projects and administers both the federal Community Development Block Grant Program (CDBG) and HOME Investment Partnership Program funds. The City has also focused on securing funding for the cleanup and development of brownfield sites through EPA programs. Chicopee has received cleanup funding from the EPA for several projects, including a number of buildings in the former Uniroyal Tire Complex in Chicopee Falls and the former Racing Oil Service Station in the West End neighborhood. The City's Planning Department, in conjunction with the Pioneer Valley Planning Commission, has taken an active role in these efforts as they are crucial in moving forward longer-term planning and redevelopment projects for the City. The Uniroyal Ture Complex for example, is part of "River Mills at Chicopee Falls," a redevelopment project that is working towards the creation of an active and passive recreational network that connects a mixed-use community to the Chicopee River.

Additionally, the City of Chicopee is served by the Economic Development Council of Western Massachusetts (EDC), which is a private, nonprofit corporation that provides resources



and information to business operating in or entering the region. Services include:

- Providing access to data, demographics, news, real estate listings and incentives;
- The Home Field Advantage Program, which helps existing companies by identifying and minimizing factors that impede growth;
- Advocating for legislation to aid in economic and workforce development;
- Reviewing major projects, prioritizing projects, and pursing funding;
- Coordinate regional development communications;
- Coordinate biannual Regional Developers Conference; and
- Staff and manage the regional Economic Development Partners, which are more than 25 representatives of local municipalities, universities, utility companies, and economic agencies, including the City of Chicopee.

Similarly, the Westmass Area Development Corporation ("Westmass") is a full-service, private, nonprofit industrial and business development corporation that serves Chicopee's region. Services include conceptual site planning, financing and tax incentives, permit management, closing requirements, and construction and occupancy.



Within Chicopee the Westover Metropolitan Development Corporation, a quasi-public development corporation, was created in 1974 to convert former military property at Westover Air Force Base to civilian use. The corporation has acquired over 1,300 acres and has developed them into 4 industrial

parks and the civilian airport. Over 50 companies in a variety of industries have located in the parks, employing over 3,200 people.

Chicopee also works closely with the Massachusetts Small Business Development Center. This organization provides assistance to small businesses through business advisory services, international trade assistance, and government contracting.



Additionally, Chicopee is a part of MassDevelopment's Transformative Development Initiative (TDI) which seeks to enhance and accelerate redevelopment in districts within Gateway Cities. According to MassDevelopment,



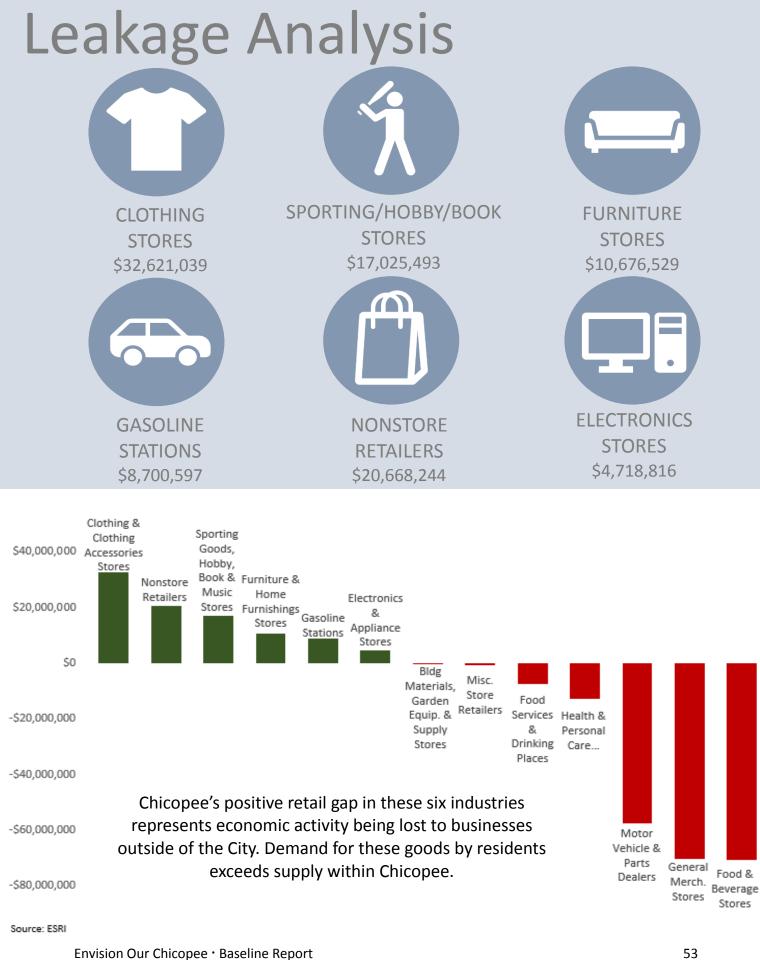
TDI seeks to implement locally initiated, strategic, and catalytic revitalization activities in Massachusetts' Gateway Cities to effect successful redevelopments. In July 2019, an expansion of TDI was announced, which included the selection of a new district in Chicopee. This program is helping Chicopee increase vibrancy in its downtown and is helping to empower the residents and businesses of Chicopee Center to see their potential.

Recent plans completed by Chicopee related to both economic development and the overall planning efforts include:

- Municipal Vulnerability Preparedness (MVP) Plan (2019): The MVP program provides support for cities and towns in Massachusetts to begin the process of planning for climate change resiliency and implementing priority projects. With the completion and approval of its MVP plan, Chicopee became certified as an MVP community and is now eligible for MVP Action grant funding and other opportunities.
- WalkBoston Audit 2018: WalkBoston conducted a walk assessment in Chicopee Center to recommend improvements to the local built environment that improve pedestrian safety. Findings included recommendations to improve crosswalks, sidewalks, and curb ramps, among others.
- Westover Air Reserve Base Joint Land Use Plan Update 2018: The Pioneer Valley Planning Commission conducted this cooperative land-use planning effort to identify existing and potential incompatibilities between activities occurring on the Base and those in the surrounding communities.
- Hazard Mitigation Plan 2017: The City of Chicopee along with the Pioneer Valley Planning Commission undertook the process of pre-disaster planning and mitigation in accordance with requirements for FEMA funding. The result was an updated hazard mitigation plan for the city.
- Green Communities Energy Reduction Plan 2015: The Massachusetts Green Communities Designation and Grant Program provides a roadmap for municipalities that commit to meeting certain criteria including reducing municipal energy use by 20% over five years.
- **Connections the Open Space and Recreation Plan 2015**: This document was developed by residents and City officials to inventory and assess the condition of open space, natural

resources, parks, and other recreation facilities in the Chicopee. A set of goals and objectives were developed to outline a vision for the community relative to its parks and other open spaces.

- Chicopee Landfill Closure Alternatives Project 2015: The Pioneer Valley Planning Commission conducted this study to analyze alternatives and plan for the 2017 closure of the Chicopee landfill. Key findings included strategies for waste reduction in Chicopee.
- West End Brownfields Area Wide Plan 2012: The Pioneer Valley Planning Commission and the City of Chicopee's Community Development Department managed this plan which sought to reinvigorate and spark reinvestment in the West End. The plan presented strategies for accomplishing this by mitigating local environmental conditions at Brownfields and re-branding the area as an attractive, green neighborhood where people can live, work, learn and play.
- RiverMills at Chicopee Falls 2011: The City of Chicopee initiated a process for the development of a signature mixed-use project on the banks of the Chicopee River. This mixed project is intended to reintegrate the site with the surrounding neighborhood and better connect itself with Chicopee Center and Memorial Drive's commercial corridor.
- West End Streetscape Study: The overall aim of this study was to find ways to aid in the transformation of the West End into a neighborhood that is lively and welcoming to all, activated by a mix of businesses, restaurants, and residences. It developed detailed streetscape and public realm recommendations around three key areas of the West End: the downtown core, the Cabot-Center Streets intersection, and the Hampden-Center Streets intersection.



## Leakage Analysis

In a retail leakage analysis, the existing retail sales ("supply") of area businesses are compared to the estimated retail spending of area residents ("demand"). The difference between demand and supply is referred to as the retail gap.<sup>5</sup>

The retail gap can be positive or negative. When the demand (spending) for goods and services is greater than sales, sales are said to "leak out" of the trade area creating a positive retail gap. Conversely, if the supply of goods sold exceeds demand, it is assumed that nonresidents are coming into the area and spending money, creating a negative retail gap (i.e. sales surplus). Chicopee's total retail gap is negative, at nearly -\$245 million. On a whole, the retail gap of the MSA is negative as well. This means that on the aggregate, the supply of goods within Chicopee and the MSA exceed demand by residents, a surplus. Many retail options exist along Memorial Drive in Chicopee, drawing shoppers both from within Chicopee and the neighboring municipalities. The presence of these businesses helps to support the commercial portion of Chicopee's property tax base. This means that on the aggregate, the supply of goods within Chicopee and supply.

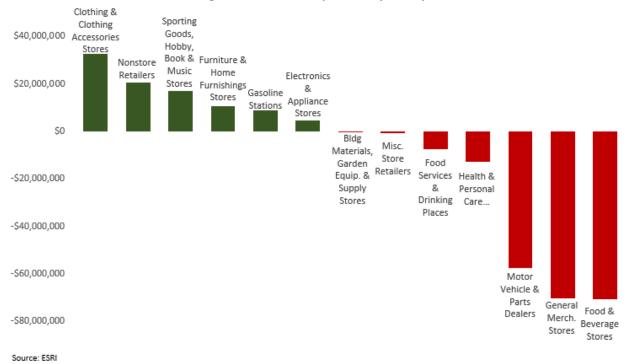
In many cases, sales leakage of specific retail goods presents an opportunity to capture unmet demand in a trade area since a percentage of residential spending occurs outside of the trade area. Table VI.8 summarizes the leakage analysis for Chicopee.

Industry Group	NAICS	Demand	Supply (Retail Sales)	Retail Gap
Motor Vehicle & Parts Dealers	441	\$122,302,154	\$179,939,823	-\$57,637,669
Furniture & Home Furnishings Stores	442	\$17,039,900	\$6,363,371	\$10,676,529
Electronics & Appliance Stores	443	\$24,760,714	\$20,041,898	\$4,718,816
Bldg Materials, Garden Equip. & Supply Stores	444	\$37,196,115	\$37,275,996	-\$79,881
Food & Beverage Stores	445	\$118,955,891	\$189,789,781	-\$70,833,890
Health & Personal Care Stores	446	\$39,365,626	\$52,335,684	-\$12,970,058
Gasoline Stations	447	\$54,531,004	\$45,830,407	\$8,700,597
Clothing & Clothing Accessories Stores	448	\$42,355,792	\$9,734,753	\$32,621,039
Sporting Goods, Hobby, Book & Music Stores	451	\$22,759,144	\$5,733,651	\$17,025,493
General Merchandise Stores	452	\$73,454,074	\$143,845,059	-\$70,390,985
Miscellaneous Store Retailers	453	\$23,572,845	\$24,339,193	-\$766,348
Nonstore Retailers	454	\$23,921,610	\$3,253,366	\$20,668,244
Food Services & Drinking Places	722	\$65,193,688	\$72,834,962	-\$7,641,274
Total		\$1,146,966,082	\$1,391,592,937	-\$244,626,855
Source: ESRI				

## Table VI.8. 2017 Retail Leakage Analysis, Chicopee

Six of the retail industries are experiencing sales leakage. In other words, the demand for these products by Chicopee residents exceeds the supply of these goods in Chicopee. This means that the retail gap for these industries represents economic activity being lost to businesses outside of the City. Clothing and Clothing Accessories Stores have the largest gap, at over \$32.6 million. Other retailers with a gap include sporting goods stores, furniture stores, gasoline stations, and electronics stores (Figure VI.22).

<sup>&</sup>lt;sup>5</sup> Note that existing retail sales are specific to the defined trade area whereas retail spending is an estimate of gross spending by residents living in the trade area regardless of where the retail spending occurs.



## Figure VI.22. Retail Gap Summary, Chicopee

## VII. Transportation & Mobility

## Why Transportation & Mobility Matters

A sustainable transportation network supports multi-mobility options, the local economy, a clean environment, and quality of life for residents. For local businesses, an efficient network minimizes disruption in the delivery of goods and services that support their operations, allows employees to travel safely to work, and ensures customers are able to get to their storefronts. Residents use the network to access employment, health care, education, recreation, and consumer goods. Those with low mobility, such as the disabled, elderly, children, and persons with low incomes, rely on more diverse ways of getting around, and if these options are minimized, their access to opportunities is also reduced.

## Current Trends

Mobility City-wide and to neighboring communities is mainly influenced by Chicopee's roadway network. Although it is possible to travel by foot, bike, car, and bus within Chicopee, the majority of existing transportation infrastructure encourages single occupancy automobiles.<sup>6</sup> The 2020 Regional **Transportation Plan for Pioneer** Valley provides a direction for transportation planning and improvements in the Pioneer Valley through 2040. The plan's outreach process reveals public support for safer roadways, improvements to better accommodate bicycles, and the need to reduce the number of cars on the road in the region (see inset right).



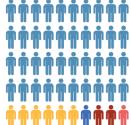
Word cloud generated from input from the Pioneer Valley Regional Transportation Plan

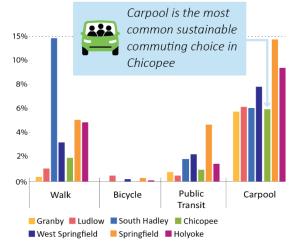
<sup>&</sup>lt;sup>6</sup> Networks of Opportunity: A Citywide Vision for Pedestrian and Bicycle Pathways in Chicopee, Massachusetts, University of Massachusetts Amherst, 2016

## How People Get Around Chicopee Today

Out of every 100 Chicopee residents ...

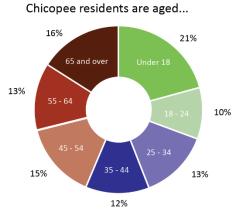
90 drive alone to work 6 carpool 1 takes public transit 2 walk 1 commutes by other means 0 bike





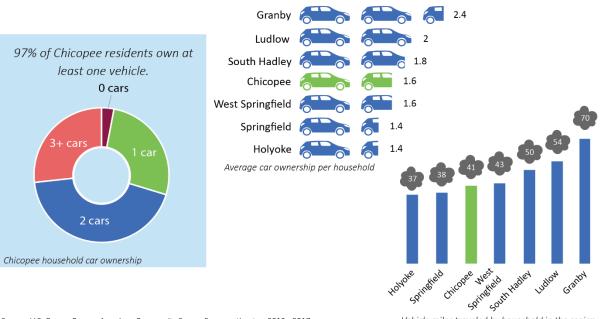
Percentage of residents choosing sustainable commuting modes in Chicopee & surrounding communities

## **Transportation Choice for All Ages**



"8 80" planning believes that planning safe and comfortable facilities for an 8 year old and an 80 year old will result in safe and comfortable public spaces for everyone.

#### How do Chicopee Residents Use Their Cars?



Source: U.S. Census Bureau American Community Survey 5-year estimates, 2013 - 2017

Vehicle miles traveled by household in the region

## Existing travel trends and demographics inform the type of transportation choices that will likely be important to residents of Chicopee.

Currently, driving is the most common form of transportation in Chicopee for both workers and residents, as seen in Figure XIV.1. This is similar to the surrounding region, where driving alone is the most common form of transportation to work; however, several neighboring communities have higher percentages of residents who use sustainable modes such as walking, biking, taking public transit, and carpooling. Carpooling is currently the most common form of sustainable transportation in Chicopee. Increasing the number of people who walk to work may be a worthwhile goal for the City, as neighboring communities such as South Hadley, Springfield, and Holyoke have significantly higher numbers of people who commute by walking. This can be supported by ensuring safe walking and bicycle routes to all of Chicopee's largest employers and employment centers.

Compared to neighboring communities, Chicopee residents own an average number of cars per household (1.6) but travel fewer miles per day. This suggests that residents are traveling shorter

distances in their cars than residents in other communities and may have more ability to switch their commuting routines. Additionally, approximately 30% of Chicopee's population is over 55 years old. This may demonstrate a need to plan for a population that is not driving individual vehicles by increasing transportation choices for transit, shared rides, walking, and biking.

## Roadway Network

Chicopee has approximately 300 miles of local roads and approximately 24 miles of limited access highway.<sup>7</sup> Chicopee's regional transportation and circulation patterns are influenced by its proximity to the cities of Springfield and Worcester, as well as Boston, Hartford, and Albany all located within 90 miles, leading to Chicopee's nickname "The Crossroads of New England." Access to these major cities is provided by Interstate 90, Interstate 291, Interstate



Because I-90 splits the City in an east-west direction, bicycles and pedestrians must travel through underpasses that provide a less safe and comfortable environment, as seen at Memorial Drive (top). The overpasses also limit connectivity between areas, such as Chicopee Center and the Connecticut River at Exchange Street and I-391 (bottom). Photos: McMahon Associates

<sup>&</sup>lt;sup>7</sup> MassGIS Road Inventory File. Massachusetts Department of Transportation Office of Transportation Planning.

91, and Interstate 391. I-90 runs east-west through Chicopee with the junctions of I-291 in the southeast and I-391 near the western edge. These interstate routes provide both constraints and opportunities for the City. The underpasses seen in the inset right can be seen as barriers to local mobility, as they are less safe and comfortable for bicycles and pedestrians in their current state. However, they also facilitate regional access and provide future opportunities for public art and programmable events under a covered area.

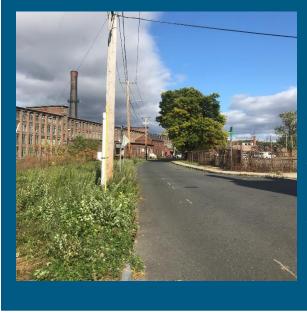
Route 33 (Memorial Drive), Route 141 (Grattan Street/East Main Street), and Route 116 (Chicopee/Center Street) provide access within Chicopee and to neighboring communities. Memorial Drive serves as the main arterial commercial strip, running north-south through the geographic center of the City. Route 116 runs through Chicopee Center, as Center Street, located in the southwest corner of the City and continues into the Willimansett neighborhood. Although Chicopee contains four interstate routes and three state highways within its borders, Chicopee



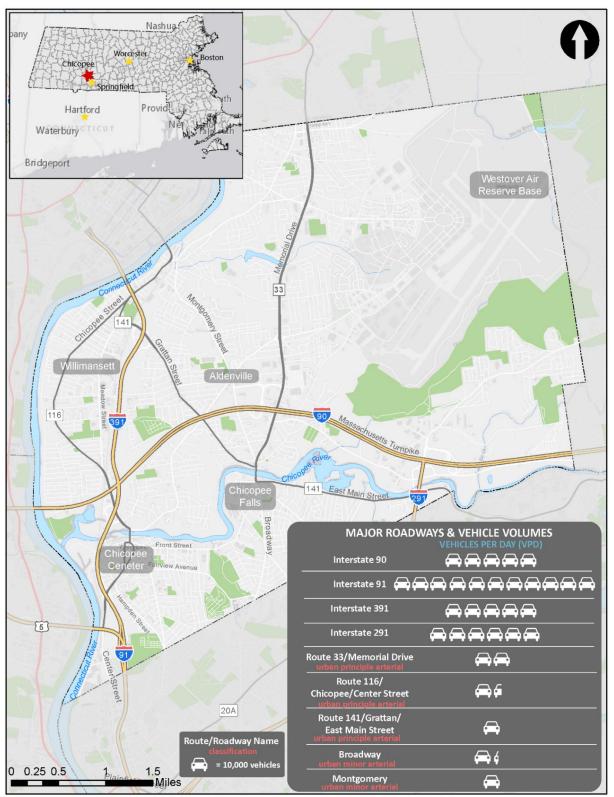
More multimodal conditions are seen in areas of Chicopee Center on Springfield Street approaching Center Street.

Center is comprised of mainly local roads that support a more multimodal environment, as shown in inset right. These local roads provide an opportunity to create gateway corridors to Chicopee's distinct neighborhoods to provide a sense of place and arrival when entering the City.

## A City with Multimodal Opportunity



Chicopee Center is a focal point of adaptive reuse in the City. Brownfield redevelopment, like the Cabotville Complex pictured, will contribute to residential and commercial growth in the center targeted toward young professionals and empty nesters. The development will necessitate new access to the site including an improved multimodal streetscape as these populations will likely demand safe, comfortable walking and biking facilities to Chicopee Center and nearby recreational open space, including the Chicopee River, Connecticut River, and Delta Park.



Map VII.1. Chicopee's Roadway Network and Vehicular Volumes

## **Key Corridors**

## Front Street Corridor – Chicopee Center to Chicopee Falls

Front Street follows the Chicopee River from Chicopee Center east towards Chicopee Falls. In Chicopee Center it ranges from abutting older, underutilized buildings, including residential homes and apartments, as well as larger Brownfield sites, to destinations like City Hall and several schools. East of Chicopee Center there are a mix of residential, retail, and institutional uses including the St. Stanislaus School, Dupont Memorial Middle School, and Chicopee High



School. Generally Front Street has one lane of travel in each direction with sidewalks on at least one side of the street. With a mix of land uses within a small geographic area, PVTA transit service, planned redevelopment of Brownfield sites, as well as the proximity to the proposed Chicopee Canal and RiverWalk, this corridor is an ideal location to improve multimodal safety and mobility.

## Main Street Corridor - Chicopee Falls

The Main Street corridor runs east-west through the northern edge of Chicopee Falls. It houses a mix of suburban strip commercial development with off-street parking lots, with more urban elements like on-street parking, two Pioneer Valley Transportation Authority (PVTA) bus routes, the Center Post Office, and older buildings lining the street edge. This is the result of extensive urban renewal clearing from past decades. Due to the number of businesses along this strip, and planned new development, access management and curbside regulations are key issues. Limiting



and consolidating the number of curb cuts through strategies like shared driveway access to multiple businesses can help the City support multimodal transportation along this corridor. This corridor is also an important location for improving multimodal safety due to its proximity to the proposed Chicopee Canal and RiverWalk.

## Memorial Drive (Rt-33) Corridor

Memorial Drive serves as the main commercial strip for Chicopee, as well as the surrounding region, with a mix of small-scale strip retail and big-box retailers, as well as residential homes in the northern section approaching South Hadley. Big-box retailers, including a Wal-Mart Supercenter, Chicopee Marketplace (a shopping plaza with a number of big-box stores), BJs, Home Depot, Big Y, and Stop & Shop, are likely to drawn regional traffic, while smaller scale retail and residences relay on local

connectivity. Local circulation is limited by suburban sprawl with large parking lots and limited connectivity in between properties. For example, to get from BJs or Big Y to Stop & Shop, a driver must make a U-turn on Memorial Drive, as there is no access in between properties, as seen below. The existing conditions on the corridor completely serve vehicular traffic, though three PVTA bus routes also run on the corridor. Generally, the road is characterized by wide travel lanes and breakdown lanes, guardrails, and a very limited sidewalk network, as documented in the University of Massachusetts Amherst *Memorial Drive Revitalization Report* (2014). This study demonstrates opportunity for reallocating the right-of-way on Memorial Drive to more multimodal uses to provide a Complete Streets environment to encourage modes of travel beyond personal vehicles.



(Right) Lack of vehicular access between properties necessitates indirect travel patterns on Memorial Drive, which can lead to increased congestion and delay.

## Safety

Safety is an important element of transportation because if people do not feel safe using a mode of transportation, they will not use it. It is important to consider safety not just in terms of vehicular crashes, but roadway elements that lead to feelings of safety for walkers and bikers, such as separation from traffic, designated crossings, raised crossings, and enhanced lighting. In order to raise awareness of safety in specific neighborhoods and promote a culture of reduced vehicular speeds, some communities have developed a "Vision Zero" Plan. Vision Zero" acknowledges that many factors contribute to safe mobility -- including roadway design, speeds, behaviors, technology, and policies -- and sets clear goals to achieve the shared goal of zero fatalities and severe injuries."<sup>8</sup> As the graphic in Figure VII.1 shows, safety is directly related vehicle speed, which impacts crash severity.

<sup>&</sup>lt;sup>8</sup> https://visionzeronetwork.org/about/what-is-vision-zero/

Figure VII.1. Safety in Chicopee

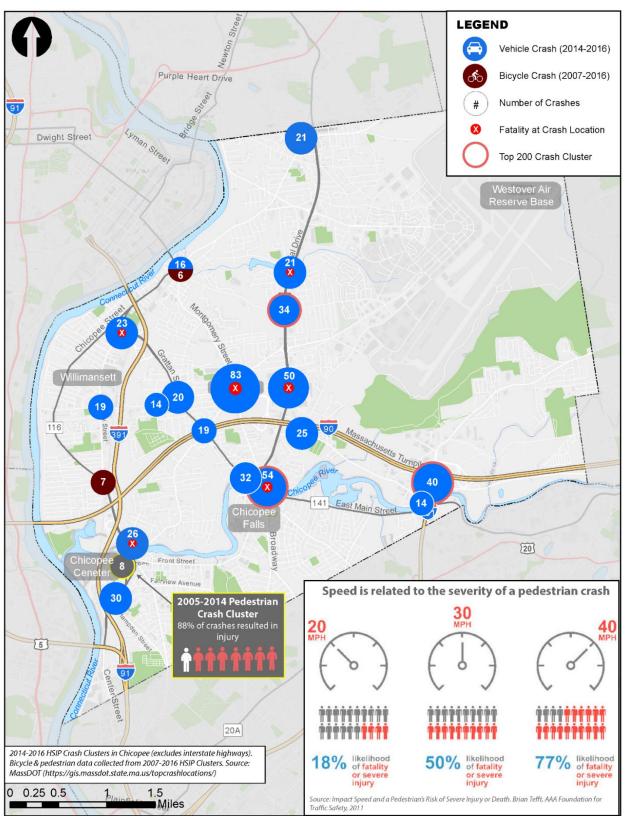


Figure VII.1 maps Highway Safety Improvement Program (HSIP) crash clusters identified by the Massachusetts Department of Transportation (MassDOT) in Chicopee. An HSIP cluster is where the total number of "equivalent property damage only" crashes are within the top 5% in the region. As seen in Figure VII.1:

- There were 20 total crash clusters recorded in the most recent data sets (2014-2016 for vehicles crashes and 2007-2016 for bicycles). There are no pedestrian crash clusters identified during this time period.
- Three of the crash clusters are identified as a "Top 200 Intersection Cluster," illustrating they are locations with some of the highest number of crashes in the Commonwealth.
- Two of the crash clusters involved bicycles.
- Nine fatalities occurred, two of which were part of bicycle crash clusters.
- A crash cluster in Chicopee Center was recorded from 2005-2015, and 7 of the 8 crashes resulted in injury.

The Chicopee Police Department generally sees addressing traffic safety on arterial and secondary roads as the biggest need.<sup>9</sup> Several tactics are currently used by the City to promote and monitor traffic safety, including solar speed signs and traffic recorders. In 2019 the City installed raised pedestrian crossings in high traffic areas to improve pedestrian safety.<sup>10</sup>

 <sup>&</sup>lt;sup>9</sup> Interview with Police Chief William Jebb, conducted on December 11, 2019 by Fabiola Alikpokou
 <sup>10</sup> Email with Ken Parsons, Chicopee Public Schools Transportation Manager, January 7, 2020

## Pedestrian Safety in Chicopee

A Walk Assessment was completed by Walk Boston in September 2018 in Chicopee Center. The focus of the audit was a pedestrian crash cluster identified in 2015 at Exchange Street and Cabot Street. Although distinct locations in **Chicopee Center have improved** sidewalks, streetscapes, and crossings, such as Exchange Street at Cabot Street (right), overall the audit found a need to improve walking conditions through traffic calming, crossing infrastructure (curb extensions, refuge islands, curb ramps), low cost improvements (flex posts, paint, planters), pedestrian signal upgrades and timing changes, and road diets to reduce travel lanes to create a more attractive pedestrian realm. Tying these types of improvements to creating a safer, more walkable environment that is attractive to new residents of Chicopee Center and supports economic development will be an important element of Envision Our Chicopee 2040.



Good pedestrian conditions at Exchange Street at Cabot Street with clear level sidewalks, curb ramps with detectable warning panels, and visible, decorative crosswalks.



Poor pedestrian conditions at Exchange Street at Perkins Street due to lack of accessible curb ramps, unmarked crossings, and poor sidewalk conditions with obstructions.



## Public Transportation

## Local Bus Service

Bus service is available in Chicopee through the Pioneer Valley Transit Authority (PVTA). Four routes serve Chicopee, as outlined in Table VII.1. Fares range from \$0.75 per trip for seniors and the mobility impaired to \$1.50 per trip for adults 13 and older, with daily, weekly, and monthly passes available.<sup>11</sup> The need for a service map that identifies bus stop locations has been highlighted in the *Networks of Opportunity: A Citywide Vision for Pedestrian and Bicycle Pathways in Chicopee (2016)* and *City of Chicopee Open Space and Recreation Plan (2015)*. As seen in Figure VII.2,<sup>12</sup> the PVTA bus routes cover the majority of the City. Having bus service supports providing multimodal infrastructure for walkers and biker so that they may safely and comfortably access bus service. Accessible public transit is vital for those who do not own a car or may be unable to drive, like seniors and children. Additionally, approximately 45% of students enrolled in Chicopee Public Schools take the school bus provided by the school department and would benefit from improved pedestrian access to neighborhood bus stops.<sup>13</sup>

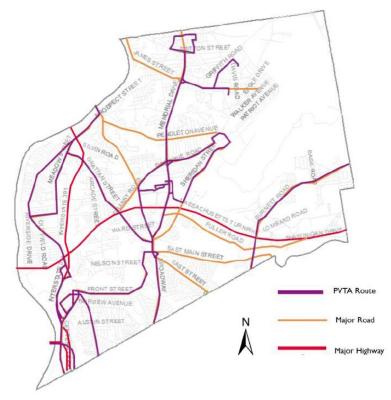
Ρντα			
Route	Service Area	Service Days/Hours	Frequency
G1	Memorial Drive,	Weekday: 6:00 AM – 10:00 PM	20 minutes peak
	Chicopee Center	Saturday: 6:00 AM – 9:30 PM	40 minutes off-peak
		Sunday: 7:00 AM – 8:30 PM	
G3	Chicopee Falls	Weekday: 5:50 AM – 7:45 PM	30 minutes peak
		Saturday: 7:00 AM – 6:35 PM	60 minutes off-peak
		Sunday: 9:00 AM – 5:55 PM	
P21	Willimansett, Chicopee	Weekday 5:15 AM – 9:00 PM	30 minutes peak
	Center	Saturday: 8:15 AM – 9:00 PM	60 minutes off-peak
		Sunday: 8:00 AM – 7:15 PM	
X90	Memorial Drive,	Weekday: 6:15 AM – 9:30 PM	30 minutes peak
	Willimansett,	Saturday: 7:00 AM – 9:30 PM	60 minutes off-peak
	Aldendville, Chicopee	Sunday: 9:15 AM – 5:00 PM	
	Falls		

## Table VII.1. PVTA Transit Service in Chicopee

<sup>&</sup>lt;sup>11</sup> <u>http://www.pvta.com/faresPassesBus.php</u>

<sup>&</sup>lt;sup>12</sup> Map excerpted from Networks of Opportunity: A Citywide Vision for Pedestrian and Bicycle Pathways in Chicopee (2016) <sup>13</sup> Email with Ken Parsons, Chicopee Public Schools Transportation Manager, January 7, 2020. Data as of January 3, 2020.

#### Figure VII.2. PVTA bus routes in Chicopee



There is opportunity to improve bus stop design and accessibility in Chicopee (see below). The majority of PVTA bus stops are designated only with a sign-post, limiting their visibility, and there is generally a lack of accessible infrastructure such as landing areas, clear zones, curb ramps, and marked crosswalks (see below).



Bus stops in Chicopee are mainly designated by a signpost, which limits their visibility, as evidenced by the difficulty in seeing the bus stop sign in the photo below. There is also generally a lack of accessible infrastructure such as landing areas, clear zones, curb ramps, and marked crosswalks at bus stops, like at the stop pictured on Main Street serving Routes G1 and X90.

## Senior Transit/Paratransit Services

With approximately 16% of Chicopee's population over age 65, and 30% over 55, there is a need for specialized transportation services for this group of residents that is less likely to drive and more likely to have mobility challenges.<sup>14</sup> There are several transportation options available for seniors in Chicopee:

- The **RiverMills Senior Center** provides transportation Tuesdays, Wednesdays, and Thursdays to Big Y, Stop & Shop and Walmart. Additional trips can be booked for appointments ranging from doctors to hairdressers upon request. Trips must be booked at least one week in advance via phone, for a fee of \$2.00 round trip. From January to September 2017 there were over 6,300 riders and over 200 miles driven.<sup>15</sup>
- The Valley Opportunity Council provides transportation services for low- and moderate-income residents to help improve quality of life. Transportation services are offered through child care programs for those who live over ½ mile from a program, do not have access to a vehicle, do not have access to public transportation, have a verified disability, or have a work schedule that prevents them from transporting their children. Transportation is also provided through the Senior Companion Program, where companions provide transportation for older adults who are unable to use other transportation services.<sup>16</sup>

## Rail

Currently regional rail is provided by Amtrak, The Vermonter, runs through Chicopee providing service between Hartford, CT and Burlington, VT. The two closest stations for Chicopee residents are Holyoke, just under a mile from the border, and Springfield Union Station, approximately three miles from Chicopee Center. Currently the closest connection to the Massachusetts Bay Transportation Authority (MBTA) system is the commuter rail in Worcester, MA. The Massachusetts Department of Transportation (MassDOT) is undergoing an "East-West Passenger Rail" study to assess alternatives along the Boston-Worcester-Springfield-Pittsfield corridor. The alternatives will examine speed, frequency, and reliability, as well as consider an option for high speed rail. This connection would better tie Chicopee to the Boston area job market, potentially making Chicopee a more attractive place to live for workers while supporting further economic development.

## Walking and Biking

Walking and biking are important modes of travel for connecting local networks in Chicopee. Local networks include connecting people already in Chicopee with the City's open space resources, schools, transit, and village centers. Walkable downtown areas are linked to economic development, as pedestrian activity supports local businesses and restaurants. If visitors to Chicopee Center or Chicopee Falls walk instead of drive between destinations, they are more likely to make additional stops on their way to or from their main destination, further supporting economic development, while reducing vehicle miles traveled. The only on-street marked bicycle lanes in Chicopee are on Granby Road (Route

https://datacommon.mapc.org/browser/datasets/220?max=100&min=50

<sup>&</sup>lt;sup>14</sup> Population by Age (Municipal) by US Census Decennial Census 2010

<sup>&</sup>lt;sup>15</sup> <u>https://www.chicopeema.gov/666/Transportation-Services</u>

<sup>&</sup>lt;sup>16</sup> Valley Opportunity Council 2018 Program Guide, https://www.valleyopp.com/download\_file/force/136/260

116) near its junction with I-391. Several other roadways in northwest Chicopee provide shoulders that may be used for biking. Existing walking and biking facilities are depicted in Map VII.2.

#### Issues for Walkers and Bikers Identified in Previous Reports:

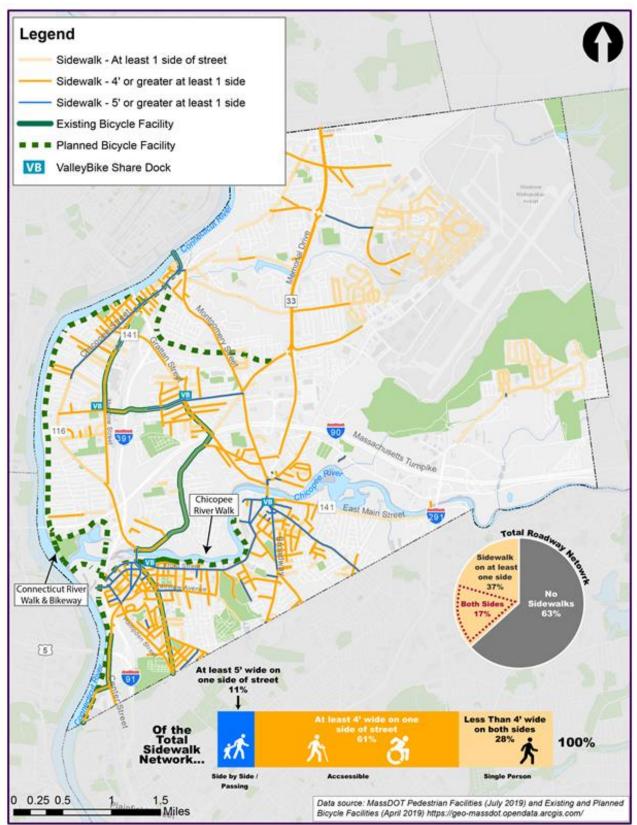
- Lack of traffic calming/wide travel lanes, shoulders, and intersections
- Outdated pedestrian signals and need for timing adjustments
- Lack of accessible curb ramps and marked crossings
- Lack of infrastructure to increase pedestrian visibility like curb extensions and refuge islands
- Lack of wayfinding
- Dominance of surface parking lots
- Lack of streetscape amenities/greenery
- Lack of safe on- and off-street bicycle infrastructure
- Need for links to open space
- Need for safe paths to school for children

#### Street Network

Chicopee has approximately 110 miles of roadway with sidewalks on at least one side of the street (37% of the non-limited access road network).<sup>17</sup> Interstate routes and state highways limit mobility for walkers and bikers, as they have to use bridges and underpasses in areas where there is grade separation. Existing reports including the *Networks of Opportunity: A Citywide Vision for Pedestrian and Bicycle Pathways in Chicopee (2016), Chicopee Walk Assessment (2018),* and the *West End Streetscape Study (2015)* have examined existing walking conditions and issues in Chicopee. Common recurring issues that limit walking and biking in Chicopee are listed in the adjacent text box. Many of these issues are true in both denser village areas as well as arterial corridors like Memorial Drive.

<sup>&</sup>lt;sup>17</sup> MassDOT Pedestrian Facilities GIS data (2019)





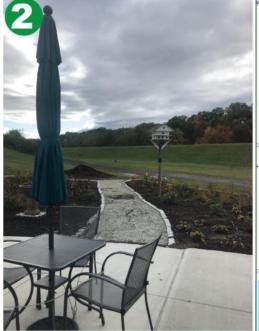
### **Off-Street Facilities**

The Chicopee Canal and RiverWalk is a ¼-mile multi-use path in Chicopee Center along the Chicopee River, as shown in the graphic on the next page. The completed portion is along a former railroad rightof-way extending from City Hall towards Chicopee Falls. Phase I of this system in Chicopee, from Medina Street to Nash field is anticipated to be constructed in Summer/Fall 2020. Other sections (2 and 3 in the graphic) in Chicopee have not been designed as funding has not been allocated to advance these portions. The path will also connect City Hall to the new Cabotville development behind the Front Street corridor. From there the path is connected to Delta Park and eventually across to the Willimansett neighborhood. The anticipated trail head at the RiverMills Senior Center would provide facilities for bikers like water, shelter, and restrooms. Public input completed by the City previously revealed that one of the biggest concerns for residents was increasing connectivity to the Chicopee River. In addition to the Chicopee River Walk is the Connecticut Riverwalk and Bikeway, a proposed regional path including the communities of Agawam, Chicopee, Holyoke, Springfield, and West Springfield. The Connecticut Riverwalk and Bikeway would be a 21-mile pedestrian and bicycle path along the banks of the Connecticut River, of which seven miles would pass through Chicopee. The Riverwalk is designed as a multi-use trail at the bottom of the dike.<sup>18</sup>

<sup>&</sup>lt;sup>18</sup> Chicopee Open Space and Recreation Plan, Department of Planning & Development, Department of Parks and Recreation (2015)



Completed portion of the Chicopee River Walk



Planned extension of the River Walk to River Mills Senior Center





Existing and Proposed Chicopee River Walk and Connecticut River Walk

# Parking

Parking in a village center with a mix of commercial and residential uses plays an important role in the context of Envision Our Chicopee: 2040. Parking management can provide areas like Chicopee Center, Chicopee Falls, Aldenville, and Willimansett with economic, efficiency, and safety benefits. The PVPC sites that cost-effective parking management programs can reduce parking requirements by 20-40%.<sup>19</sup> When parking is managed to ensure there is an appropriate amount, the turnover of cars supports business accessibility, the presence of onstreet parking provides traffic calming to increase pedestrian safety, and the reduction of vehicles searching for parking improves traffic circulation. The most efficient use of parking in a typical downtown area is 85% utilization, as this means it is well utilized while also providing space for those seeking parking. A wellmanaged and designed parking system can also promote pedestrian connectivity and create a sense of place by creating a "park once and walk" environment through streetscape and wayfinding improvements and incorporating access management to reduce the number of curb cuts and conflict points with vehicles.

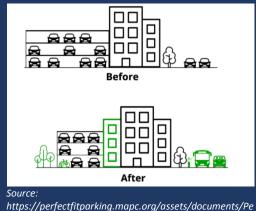
Chicopee Center and Chicopee Falls, two village centers, are currently characterized by individual surface parking lots for each property owner. In 2009, the Pioneer Valley Planning Commission (PVPC) conducted a parking utilization study in Chicopee Center, with the parking supply shown in Table VII.2. The study found that many parking areas fail to reach 50% utilization over the course of a typical day. Although a parking utilization study has

#### **Benefits of Reduced Parking**

Minimizing the amount of parking in a community has multiple benefits, including:

- Less traffic congestion, pollution, and greenhouse gas emissions
- More usable building space, green space, or pedestrian space
- Lower cost of development
- More affordable housing
- Promotion of sustainable transportation options

The Metropolitan Area Planning Council's (MAPC) *Perfect Fit Parking Initiative* found that 30% of the off-street parking provided in the surveyed communities goes unused, and provides further information on the benefits of identifying the appropriate parking needs in a community.



https://perfectfitparking.mapc.org/assets/documents/Pe rfect%20Fit%20Executive%20Summary.pdf

not been conducted in Chicopee Falls, it likely has similar parking trends.

#### Table VII.2. Chicopee Center Parking Supply

Type of Parking	Regulations	Total spaces
On-Street	Unrestricted, 2-hour, 1-hour, 30 minutes	549
Off-Street	Unrestricted, 2-hour	809
Total		1,358

Source: Chicopee Center Parking Study, Pioneer Valley Planning Commission (2009)

<sup>&</sup>lt;sup>19</sup> http://www.pvpc.org/sites/default/files/files/PVPC-Parking%20Bylaws.pdf

The recommendations for the Chicopee Center parking study can likely also apply to Chicopee Falls, as both areas are undergoing redevelopment. Recommendations include that as demand for parking increases as a result of redevelopment, the City consider options for agreements with owners of private parking lots to increase available parking, rather than construct new parking lots. Reserving high demand areas, such as Front Street, Center Street, and Exchange Street (see Figure VII.12) for short term parking, increasing enforcement for time limits, and pricing parking were also raised as potential options to better manage parking. The construction of a new public parking lot behind City Hall may provide an opportunity to implement some of these recommendations. Additionally, wayfinding to/from parking lots in Chicopee Center has also been identified as a need.<sup>20</sup> Further information is provided in the Current Initiatives section.

Parking in more residential neighborhoods, such as Aldenville and Willimansett, is also an important consideration for the Plan. General use public parking has been identified as a need in Aldenville and Willimansett, as the existing parking supplies are mainly limited to associated schools, parks, and public buildings. To not over or under supply parking, it will be important to find a balance for how space is allocated to accommodate different users, both residents and visitors who drive, as well as those who rely on other modes, to ensure access to neighborhood amenities.

# **Current Initiatives**

# **Complete Streets**

Chicopee is currently registered with the MassDOT Complete Streets program. The City can use funding from the program to link transportation improvements with other elements of Envision Our Chicopee 2040, such as Land Use, Housing, and Economic Development. For example, the plan may identify priority locations for senior housing, which may warrant accessibility improvements on sidewalks and at crosswalks, or areas where the City wants to improve multimodal access to help generate economic development.

# Safe Routes to School (SRTS)

Currently 14 schools are registered with the MassDOT Safe Routes to Schools program. As part of the SRTS program, schools participate in bicycle safety and walking events. In 2019, seven schools received bronze level partnership awards for participation in SRTS activities: Barry School, Bellamy Middle School, Chicopee Academy, Dupont Middle School, Lambert-Lavoie School, Stefanik School, and Streiber School.<sup>21</sup>

# Complete Streets for Economic Development

Complete Streets can provide accessible connections between land uses, thus providing greater opportunity for people to access activities that support daily life, recreation and entertainment, and other activities. The more activity an area can generate, the greater the investment. Numerous Complete Streets projects have demonstrated economic benefits through higher property values and increased business revenues.

MassDOT Complete Streets Funding Program Guidance

<sup>&</sup>lt;sup>20</sup> West End Streetscape Study, MassDevelopment & City of Chicopee, Utile (2015)

<sup>&</sup>lt;sup>21</sup> Email with Ken Parsons, Chicopee Public Schools Transportation Manager, January 7, 2020

The 14 participating institutions are listed below:

- Anna E. Barry Elementary School
- Patrick E. Bowe Elementary School
- Herbert V. Bowie Elementary School
- Fairview Elementary School
- Lambert-Lavoie Elementary School
- Sgt. Robert Litwin Elementary School
- John J. Stefanik Elementary School

- Hugh Scott Streiber Elementary
   School
- Kevin Dupont Middle School
- Edward Bellamy Middle School
- Chicopee Academy
- Salter College
- Valley Opportunity Council, Inc.

SRTS program resources can help the City understand specific safety challenges and desires of the neighborhood residents, school children and parents, and inform where special treatments for protected crossings and increased visibility are most needed. Current initiatives involving the program include sidewalk improvements at Streiber Memorial School off Memorial Drive, creating a school zone on Front Street, and traffic calming at the Bowe Elementary School.<sup>22</sup>

## ValleyBike E-Bike Share

ValleyBikes provides shared electric pedal-assist bikes, which can be used to promote short trips in denser areas of the City. ValleyBikes currently operates in the communities of Amherst, Easthampton, Holyoke, Northampton, South Hadley, and Springfield. Chicopee joined the system in 2020. Three stations will be installed in Summer 2020 in Willimansett, Chicopee Center, and Chicopee Falls. Supporting safe and comfortable bicycle facilities for people of all ages and abilities is essential to creating a bicycle culture to reduce vehicular trips and support goals for economic development and environmental sustainability.

## Wayfinding

The City of Chicopee is working with MassDevelopment on the Chicopee TDI District to improve the vibrancy, branding, and wayfinding of Chicopee Center. Through activating vacant buildings, such as the Cabotville Mill complex (also see the Roadway Network section), and building on the work of local institutions, Chicopee Center has the potential to transition into a 24-hour live, work, play urban environment. The Chicopee TDI District exemplifies how transportation improvements can also be used to facilitate placemaking and economic development (See more under Economic Development section).

## Electric Vehicle (EV) Charging

The RiverMills Senior Center, located on Main Street in Chicopee Falls, provides an EV charging station. Providing EV charging stations throughout the City supports the reduction of greenhouse gas emissions and environmental sustainability. (See more under the Energy section).

<sup>&</sup>lt;sup>22</sup> Email with Ken Parsons, Chicopee Public Schools Transportation Manager, January 7, 2020

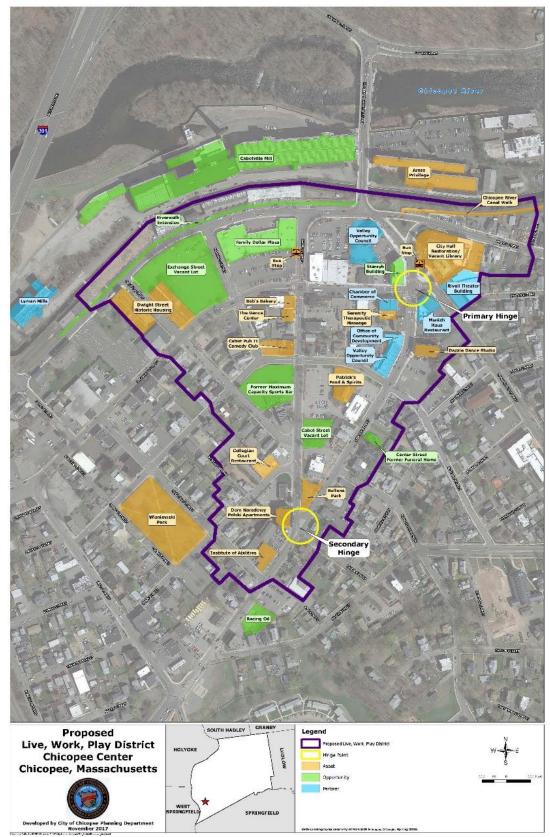


Figure VII.3. Live, Work, Play District at Chicopee Center

# VIII. Natural Resources



Connecticut River. Source: Wikimedia Commons

# Why Natural Resources Matter

Natural resources provide a variety of environmental, health, and public safety benefits. They support wildlife and fish habitat, improve air and water quality, provide spaces for people to recreate or simply interact with nature, minimize flood damage, and connect us to our regional ecological context. Ensuring the maintenance and protection of these resources is beneficial to both the community and the local ecosystem.

# Conservation and Preservation

Conservation lands are important resources for a variety of reasons, including open space, recreation, agriculture, or simply because of their scenic qualities. Such space may provide opportunities for active or passive recreation and may contain forests, farmland, fields, floodplains, wetlands, scenic vistas, or historical sites. These areas are invaluable and irreplaceable resources that bring environmental, social, and economic benefits to a community. As such, it is critical to protect and sustainably manage what conservation land remains for current and future generations.

# **Conservation Commission**

The Chicopee Conservation Commission is a seven-member volunteer board tasked with protecting and preserving the City's natural resources and open space. The commission is granted authority under Chapter 272 Wetlands Protection Ordinance to take actions to protect natural resources.

## Inventory of Conservation Lands

The City of Chicopee has approximately 1,261 acres of conservation and recreational open space. A total of 80% of this land is permanently protected, 14% has limited protection, and 6% has no protection. In comparison, just under 75% of open space and recreation areas in Haverhill (the other Gateway City used in this report to compare with Chicopee) are permanently protected. Lands that are unprotected may be developed and are subject only to zoning restrictions.

Owner	Acres	Level of Protection
Municipal	446	Permanently Protected
State	566	Permanently Protected
	1,012 (80%)	
Municipal	85	Limited Protection
Private	3	Limited Protection
Nonprofit	91	Limited Protection
	179 (14%)	
Private	72 (6%)	No Protection

### Table VIII.1. Inventory of Protected Open Space

Source: MassGIS, September 2019

## Strategies for Preservation

Current tools the City uses to protect the health and quality of natural resources and open space range from local regulations and policies to state programs.

## Local Zoning - Flood Plain Overlay District

The Chicopee Zoning Ordinance is a regulatory tool the City uses to manage development and its potential impacts on natural resources.

The Flood Plain Overlay District is used to ensure sound management and appropriate use of land subject to flooding. It is also used to protect the public health and safety of residents and properties against flooding. The overlay district ensures the City's compliance with the rules and regulations of the <u>Federal Insurance and Mitigation Administration</u> (FIMA), which in turn allows residents living in flood hazard areas to purchase flood insurance at low cost.

The district includes all "special flood hazard areas inundated by 100-year flood" within the City designated as Zones A and AE on the Hampden County Flood Insurance Rate Map (FIRM), issued by the Federal Emergency Management Agency (FEMA) for the administration of the National Flood Insurance Program. The areas in the overlay district are deemed to be vulnerable to seasonal or periodic flooding;

therefore, the use of land in the district is considered to be dangerous to the health and safety of the occupants. Protection is achieved primarily with limitations on allowable uses, and compliance with state and local environmental policies.

## Wetland Regulations

Used to supplement the Wetland Protection Ordinance, Wetland Regulations are enforced by the Chicopee Conservation Commission, providing public review and decision-making processes for activities that impact areas that are protected under the Wetland Protection Ordinance.

## • Wetland and Rivers Protection Act

The Massachusetts Wetlands Protection Act protects important water-related lands such as wetlands, floodplains, riverfront areas, and other areas from possible negative impacts of development. The Chicopee Conservation Commission has authority under this act to oversee and review applications for projects proposed in these areas. The Commonwealth's Rivers Protection Act is administered as part of the Commonwealth's Wetland Protection Act, aiming to help keep water clean, preserve wildlife habitat, and control flooding. The law also establishes the authority of the Commonwealth to protect the natural integrity of rivers and encourage and establish open space along rivers.

## • Chapter 61

The Chapter 61 Tax Program<sup>23</sup> is a special designated tax status that offers a property tax break for landowners willing to commit to keeping some or all their land undeveloped and in use for forestry, agriculture, or recreation for a specified period. Properties may be disqualified from the program if their application is not renewed, they are inappropriately used or developed, or they come under agreement for sale. The City has the right of first refusal to purchase enrolled properties if the sale or development of the property is proposed during the Chapter 61 enrollment period and will be alerted by the Department of Conservation and Recreation in such instances. Currently there are 15 properties (98.3 acres) participating in Chapter 61A (agriculture) and one property (56.6 acres) participating in Chapter 61B (recreation). (Also see Open Space and Recreation)

# • Article 97

To ensure clean water and undeveloped open space, Article 97 of the Amendments to the Massachusetts Constitution provides that property acquired for conservation purposes should be used for conservation purposes only. Currently there are 32 properties in Chicopee with Article 97 protections, accounting for over 991 acres. 28 of these properties are owned by the City of Chicopee, and most of these are managed by the City's Department of Parks and Recreation.

<sup>&</sup>lt;sup>23</sup> <u>https://www.mass.gov/service-details/forest-tax-program-chapter-61</u>

# Rare and Endangered Species

Priority Habitat is the geographical extent of habitat for all Commonwealth-listed plant and animal species. In Chicopee, these habitats are along the Connecticut River and Westover Air Reserve Base. The National Heritage and Endangered Species Program (NHESP) database lists 21 such species observed in Chicopee (Table.VIII.2). The population status of rare animals is defined in the Massachusetts Endangered Species Act (MESA) as:

- **Special Concern Species (SC)** have either experienced a decline that could threaten the species without intervention, or whose populations are so small, localized, or dependent upon specialized habitats that they could become threatened.
- Threatened Species (T) are likely to become endangered in the foreseeable future.
- Endangered Species (E) are in danger of extirpation from Massachusetts.

MESA				Most Recent
Status	Taxinomical Group	Scientific Name	Common Name	Observation
E	Bird	Bartramia longicauda	Upland Sandpiper	2016
E	Butterfly/Moth	Grammia phyllira	Phyllira Tiger Moth	2011
E	Dragonfly/Damselfly	Stylurus amnicola	Riverine Clubtail	2011
E	Fish	Acipenser brevirostrum	Shortnose Sturgeon	1999
E	Mussel	Alasmidonta heterodon	Dwarf Wedgemussel	Historic
E	Mussel	Lampsilis cariosa	Yellow Lampmussel	2015
SC	Amphibian	Ambystoma laterale	Blue-spotted Salamander	2014
SC	Butterfly/Moth	Callophrys irus	Frosted Elfin	2011
SC	Butterfly/Moth	Euchlaena madusaria	Sandplain Euchlaena	2002
SC	Butterfly/Moth	Zanclognatha martha	Pine Barrens Zanclognatha	1994
SC	Fish	Catostomus catostomus	Longnose Sucker	Historic
SC	Mussel	Leptodea ochracea	Tidewater Mucket	2015
SC	Mussel	Ligumia nasuta	Eastern Pondmussel	Historic
SC	Reptile	Glyptemys insculpta	Wood Turtle	Historic
SC	Reptile	Terrapene carolina	Eastern Box Turtle	2009
SC	Vascular Plant	Liatris scariosa var. novae- angliae	New England Blazing Star	1930
SC	Vascular Plant	Lygodium palmatum	Climbing Fern	2010
Т	Amphibian	Scaphiopus holbrookii	Eastern Spadefoot	1866
Т	Bird	Ammodramus savannarum	Grasshopper Sparrow	2016
Т	Bird	Falco peregrinus	Peregrine Falcon	2018
Т	Bird	Pooecetes gramineus	Vesper Sparrow	2012

#### Table.VIII.2. Rare and Endangered Species

Source: National Heritage and Endangered Species Program, Rare Species by Town View

# Soils

Understanding the nature and properties of soils is critical to managing and conserving our natural resources. The USDA Natural Resources Conservation Service (NRCS) studies and inventories soil resources across the country. NRCS soil surveys help communities determine what soils are present,

where they are located, and the best and most appropriate use of land based on soil conditions. NRCS predicts soil behavior for selected land uses and highlights limitations and hazards inherent in the soil and the impact of selected land uses on the environment.

Chicopee's soils are deep, sandy, and well-drained - easily supportive of septic systems. A majority of soils originated from the sand delta that formed when glacial waters flowed down the Chicopee River to Lake Hitchcock. NRCS identified two soil associations that cover a majority of the City's land area: Urban Land-Hadley-Winooski Association (west) and the Urban Land-Hickley-Windsor Association (central-east). These urban land soils indicate the significate buildout and redevelopment of the city's area through time.

Terrace escarpment soils are easily disturbed and found on many steep slopes throughout the City. Such soils erode easily and can be a danger to people and property. Human activity like construction, discharges, and recreational activities can speed the erosion process. Chicopee's Conservation Commission has adopted strict regulations to protect terrace escarpment soils from further impact:<sup>24</sup>

- Prohibit discharge to or across terrace escarpment soils from overland flow from point or nonpoint sources
- Prohibit disturbance of terrace escarpment or similar soil on slopes of 25% or greater

# Water Resources

Water resources in Chicopee include the Connecticut and Chicopee Rivers, which provide the City with a total of about 19 miles of riverfront land. Both rivers offer views, habitat, power generation, and recreational opportunities such as boating, fishing, and informal trails along dikes and natural banks.

# **Chicopee River Watershed**

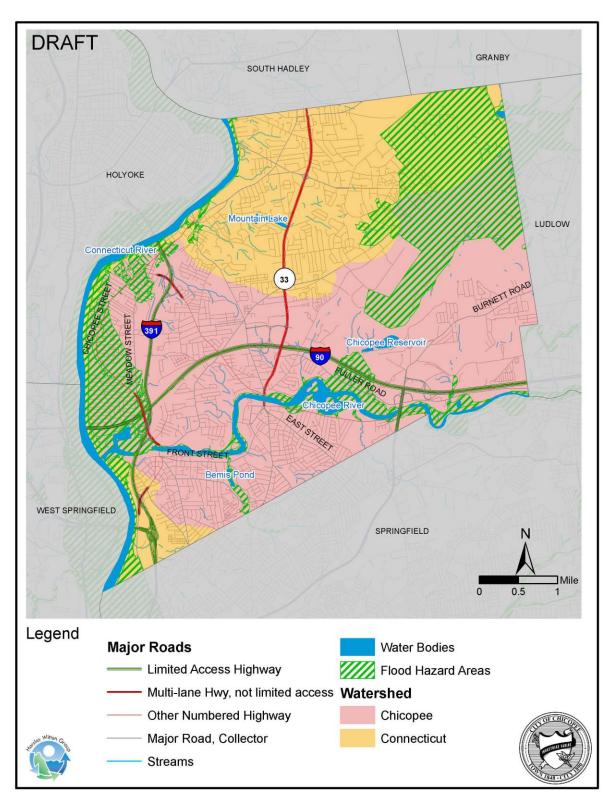
The Chicopee River Watershed is the largest of the 27 major drainage basins in Massachusetts and the largest in the entire Connecticut River basin. The watershed drains more than 720 square miles of central Massachusetts before joining the Connecticut River. It includes all or part of 39 communities in four counties with a combined population of about 200,000.<sup>25</sup> The watershed is comprised of three major river systems: The Swift, Ware, and Quabog Rivers, which come together to form the Chicopee River. The watershed also includes 842 miles of brooks and streams, and 170 lakes, ponds, and reservoirs that collectively cover more than 48 square miles.<sup>26</sup>

Protecting Chicopee's water resources ensures residents have access to clean source water for drinking and recreation. Maintaining the health of the rivers and land throughout the watersheds optimizes Chicopee's water quality and quantity for current and future usage.

<sup>&</sup>lt;sup>24</sup> Wetland Regulations, City of Chicopee

<sup>&</sup>lt;sup>25</sup> Chicopee Open Space and Recreation Plan, 2015

<sup>&</sup>lt;sup>26</sup> https://massachusettspaddler.com/chicopee-river



Map VIII.1. Chicopee Water Bodies and Flood Hazard Areas

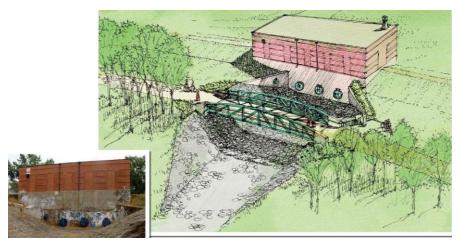
Chicopee residents, along with 47 other communities in greater Boston and MetroWest, depend primarily on water from Quabbin Reservoir, with supplemental water coming to the City from the Ware River.<sup>27</sup>

# Surface Water in Chicopee

### **Connecticut River**

Designated as the only National Blueway and one of four American Heritage Rivers (1998) in the Nation, the Connecticut River is the longest river in New England, flowing southward for 406 miles through four states. The river has 148 tributaries, including four in Chicopee — the Chicopee River, and the Stony, Theroux, and Willimansett Brooks. The purpose of the American Heritage River designation is to bring awareness to the rivers and reward community-based efforts to restore and protect their environmental, economic, cultural, and historical values. As a result of the nomination, an Action Plan comprising of 29 projects was developed including, "riverfront revitalization initiatives, access initiatives for people and for spawning fish, CSO abatement, riverbank erosion abatement and restoration, scenic views promotion in farming areas and watershed-based initiatives to prevent and mitigate non-point source pollution to the river."<sup>28</sup>

The Connecticut River north of Chicopee before reaching the Holyoke Dam was historically heavily polluted due to the concentration of industries located along the river. However, this portion of the river is now used for boating, fishing, swimming, and other forms of water-based recreation. The Connecticut River Bacteria Monitoring Project performs weekly samples from May to September of popular river access spots. South of the dam, despite a reduction of industrial wastes, combined sewer overflows continue to contaminate the water. As a result of regional efforts to address the problem, the "Connecticut River 2020 Strategy" was created to promote coordinated action on river clean up, resource protection, and economic development.



Pedestrian Bridge Concept and Existing Conditions for the Riverwalk and Bikeway. Source: City of Chicopee

<sup>&</sup>lt;sup>27</sup> Your Drinking Water, <u>http://www.mwra.state.ma.us/annual/waterreport/2006results/2006cva.pdf</u>

<sup>&</sup>lt;sup>28</sup> Chicopee Hazard Mitigation Plan, <u>http://www.pvpc.org/sites/default/files/ChicopeeHMP\_Final.pdf</u>

### Chicopee River

The Chicopee River is an 18-mile-long tributary of the Connecticut River. Currently, much of its riverfront is privately owned with no formal public access. Informal access for fishing typically exists upstream of Devitt Bridge and at the Chicopee Falls. The tributaries of the Chicopee River are Bisbee, Poor, Cooley, Fuller, Abbey, Hearthstone, and Girl Scout Brooks.

### Coburn Pond

Located off Coburn Street in Willimansett, Coburn Pond is a shallow one-and-a-half-acre private pond that offers fishing and skating recreation activities for the public. The pond is fed by a small stream that has cut a deep ravine into the Willimansett bluffs from an area off Montgomery Street.

## Pond Lily

Pond Lily was locally designated to support the large swamp located in the northern part of Chicopee. The pond crosses multiple jurisdictions with some parts falling into the Towns of Granby and Ludlow. The pond is vulnerable to contamination from an adjacent landfill in Granby and a junkyard on the Chicopee side, among other concerns. More regular monitoring is needed to track the impacts of these concerns on the pond and surrounding wetlands.

## Roberts Pond (a.k.a. Mountain Lake)

Located in north-central Chicopee, Roberts Pond was constructed by damming the Willimansett Brook as part of a flood control project after devastating floods in the 1930s. In 2005 the dam was breached, and the lake was drawn down by order of the Office of Dam Safety due to high hazard potential. In 2011, a stormwater improvement project was completed at the dam. The privately-owned pond is now reestablishing itself in the former lakebed while the owner decides his next course of action.

### Langewald Pond

Located upstream from Roberts Pond and part of the Willimansett Brook drainage system, Langewald Pond offers no recreation activities as it is almost completely filled with sediment.

## Vernal Pools

Vernal pools are temporary, seasonal pools of water that provide habitat for distinctive plants and animals. They are generally small, shallow ponds characterized by lack of fish and by periods of dryness. Vernal pool habitat is extremely important to a variety of wildlife species for breeding, feeding, and other critical functions.

Vernal pools receive certification by the Natural Heritage and Endangered Species Program (NHESP) according to the Guidelines for the Certification of Vernal Pool Habitat (Massachusetts Division of Fisheries & Wildlife, 2009), and are protected if they fall under the jurisdiction of the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00). Certified vernal pools are also afforded protection under the Commonwealth's Water Quality Certification regulations (401 Program), the state Title 5 regulations, and the Forest Cutting Practices Act regulations.

Chicopee has six Certified Vernal Pools and twenty-two Potential Vernal Pools (identified by NHESP from aerial photography, needing verification on the ground).

# Flood Hazard Areas

While rivers and streams provide valuable water resources, they can be prone to flooding during rain events. Floodplains are low-lying areas along rivers and streams that collect overflow. When periodic flooding occurs in these areas, sediments and nutrients are redistributed, creating rich soil deposits that often support unique plant life. Undeveloped floodplains are important in controlling erosion, buffering against catastrophic flooding, and serving as a significant habitat for wildlife.

The largest amount of floodplain land in Chicopee is upstream from the Chicopee Dam. The area contains two Brownfields. The mouth of the Chicopee River, commonly referred to as Delta Park, has the second largest. The flood plain of the Connecticut River is a narrow band that follows the City's western border in the Willimansett neighborhood. The river's natural floodplain is developed with residential, commercial, and industrial properties.



Flood plain of the Connecticut River from the I-90 bridge looking north. Source: Google Maps

# Management of Public Water Supply

The Massachusetts Water Resources Authority (MWRA) supplies drinking water from the Quabbin Reservoir to three Chicopee Valley Aqueduct communities: Chicopee, Wilbraham, and South Hadley. The Water Department then maintains and preserves the water for the City. Additional supply can come from MWRA and the Ware River as needed. The drinking water is treated at the Brutsch Water Treatment Facility before it enters the Chicopee Valley Aqueduct. The 2018 Water Quality Report estimates a daily supply of about 10 million gallons of water to the three communities, and water quality in Chicopee is consistently high, with low to absent levels of dissolved metals such as lead, copper, and iron.<sup>29</sup>

### Aquifer Recharge

Most of Chicopee's land is part of an aquifer recharge area with potential for groundwater supply, although Chicopee does not supply water through any public well system. Groundwater can be found in the beds of sand and gravel that underlie the Chicopee River. Groundwater extraction is not performed due to the cost.

In the Massachusetts Year 2016 Integrated List of Waters, six waterbodies in Chicopee were listed as category 5 shown in Table VIII.3. The categorization indicates the water to be impaired or threatened for one or more uses and requiring a TMDL.

Waterbody	Category	Location of Impairment	Source of Impairment
Abbey Brook	5	Headwaters west of Saint James Avenue, Springfield through Bemis Pond (formerly reported as segment MA36011) to mouth at confluence with the Chicopee River, Chicopee.	Escherichia coli, Total Suspended Solids (TSS)
Chicopee Brook	5	Headwaters, east of Peaked Mountain, Monson (through Chicopee Brook Pond, formerly segment MA36031) to mouth at the confluence with Quaboag River, Monson.	Escherichia coli
Chicopee River	5	Source, confluence of Ware River and Quaboag River, Palmer, Wilbraham Pumping Station, & Chicopee Falls Dam (NATID)	Escherichia coli, Fecal Coliform
Quaboag Pond	5	Brookfield/East Brookfield.	(Eurasian Water Milfoil, Myriophyllum spicatum*) Excess Algal Growth. Mercury in Fish Tissue Phosphorus (Total)
Quaboag River	5	Warren WWTP discharge (NPDES: MA0101567), Route 67 bridge, Route 32 bridge, Palmer/Monson to mouth at confluence with Ware River	Escherichia coli, Fecal Coliform

#### Table VIII.3. Impaired Waters in Chicopee, MA

Source: Massachusetts Year 2016 Integrated List of Waters

<sup>&</sup>lt;sup>29</sup> <u>http://www.chicopeema.gov/DocumentCenter/View/9040/Chicopee-Valley-Aqueduct-Communties-MWRA-2018-Drinking-Water-Test-Results</u>

# IX. Open Space and Recreation

# Why Open Space and Recreation Matter

Recreational resources provide a variety of ways for everyone in the community to be healthy, happy, and active. They provide spaces for people to exercise, gather with their friends and neighbors or just have fun. Parks are vitally important public spaces where everyone is welcome. Open Space and recreation lands are important to Chicopee residents in many ways. A significant percentage of Chicopee's land area is already developed, so protecting remaining open space is particularly critical. As a small city, Chicopee has to be especially aware of maintaining and protecting its remaining open spaces and park land to sustain the social, environmental, and economic benefits these resources provide to the public.



Sarah Jane Sherman Park. Source: City of Chicopee

# Definitions

**Open space** is broadly defined as public and privately-owned undeveloped lands, which are important resources for a variety of reasons including conservation (ecological or natural features), recreation, or agriculture, or simply because of their scenic qualities and their contribution to the overall character of a community. Such space may provide opportunities for active or passive recreation and may contain forests, farmland, old fields, floodplains, wetlands, scenic vistas, or historical sites. They may also provide storage/ assist with stormwater management and provide habitat.

**Recreational resources** are more straightforward and include facilities that offer recreational opportunities like sports fields, multi-purpose fields, courts, rinks, playgrounds, splash pads, pools, paths, and indoor facilities.

# Benefits of Open Space and Recreation

**Social benefits** – Open space and recreation lands contribute to our quality of life as opportunities to connect with nature, actively or passively enjoy the outdoors, function as travel ways for walking and biking, and create community among people who are enjoying the same resources.

**Environmental benefits** – Natural areas left in or restored to their natural state contribute to biodiversity, improved water quality and infiltration, and cleaner air.

**Economic benefits** – Quality open space and recreational areas boost property values,<sup>30</sup> which in turn increases municipal tax revenues. They also attract users who participate in organized programming through fees paid directly to the City. These users may also stop by a local store to buy provisions before visiting an area or end the day in a local restaurant after visiting a local park.

# Chicopee 2015 Open Space and Recreation Plan

Chicopee's 2015 Open Space and Recreation Plan<sup>31</sup> (OSRP) outlines the City's policies and strategies to protect and enhance its open space and recreational resources. The OSRP inventories the City's natural environment and recreational facilities, outlines environmental challenges, and summarizes community, resource protection, and management needs. It includes a seven-year action plan with priorities, responsible parties, collaborators, and resources needed for implementation. It serves as a valuable resource for the City and for the development of the Comprehensive Plan. This baseline chapter highlights key data and findings from the 2015 OSRP.

# Inventory of Open Space and Recreational Resources

# **Open Space Resources**

Chicopee has just over 3,300 acres of open space (22% of the City's total land area), ranging from large tracts to small neighborhood parcels. Of that 22%, less than 10% has some level of protection. This speaks to a need to prioritize the protection of remaining open space to address the open space, conservation, and recreational goals of the community.

<sup>31</sup> Chicopee Open Space and Recreation Plan (2015). Available at

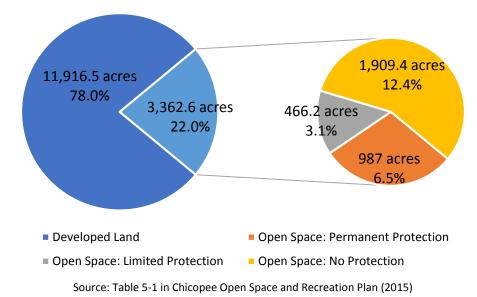
<sup>&</sup>lt;sup>30</sup> The Trust for Public Land. *The Return on Investment in Parks and Open Space in Massachusetts*. (September 2013). Available at <u>http://communitypreservation.org/TPL-MA-ROI.pdf</u>.

https://chicopeema.gov/DocumentCenter/View/3018/Chicopee2015OSRP?bidId=.

#### Table IX.1. Summary of Open Space in Chicopee

		Number of	
Level of Protection/Ownership		Parcels	Acres
Permanently Protected			
Municipal		26	424.6
State		4	562.4
Nonprofit/Trust		0	0
Private/Conservation Restriction		0	0
	Subtotal	30	987.0
Limited Protection			
Chapter 61A		15	98.3
Chapter 61B		1	56.6
Other		47	311.3
	Subtotal	63	466.2
Total acres with some level of protection		93	1,453.2

Source: Table 5-1 in Chicopee Open Space and Recreation Plan (2015)



#### Figure IX.1. Open Space in Chicopee and Level of Protection



Map IX.1. Open Space and Recreation Resources

### Riverwalks

There are two walking and biking paths being developed in Chicopee. The Chicopee Canal and RiverWalk, part of the RiverMills redevelopment, repurposes an old rail line as a walking and biking trail. It follows the Chicopee River and is being developed in two phases. Phase I, completed in 2012, extends from the City center to Grape Street. Phase II will extend the RiverWalk along Grape Street and end at the former Uniroyal Property. Phase III will take the trail from the Uniroyal Property to a planned trailhead at RiverMills Senior Center. When completed, the Chicopee Canal and RiverWalk will reach the Deady Bridge and connect two of Chicopee's oldest neighborhoods via a scenic and protected pathway.

The Connecticut Riverwalk and Bikeway is a regional effort of Agawam, Chicopee, Holyoke, Springfield, West Springfield, and the Pioneer Valley Planning Commission. It is a 21-mile pedestrian and bicycle path planned along the banks of the Connecticut River. With the goals of revitalizing the riverfront and improving the quality of life for residents, this plan promotes numerous user types (strolling, jogging, biking, roller blading, etc.), provides overlooks and rest stops, and connects each community to the river and each other. Chicopee has approximately seven miles of Riverwalk (referred to as the Connecticut Riverwalk and Bikeway North) in the planning stages. The Connecticut Riverwalk North is located between the Chicopee River and the City-owned Connecticut River flood control levee extending from the Medina Street boat ramp to Nash Field, an overall distance of approximately 2.4 miles. The proposed alignment begins at the Medina Street boat ramp and parking lot, passes under the Massachusetts Turnpike, over a storm drain discharge channel associated with Paderewski Street pumping stations, then passes by or under two service bridges that provide access to the Jones Ferry Pumping Station discharge gates before terminating at Nash Field.

Additional walking and biking connections are proposed to and through a new park. The City proposes to remediate and develop two former industrial properties at the confluence of the Connecticut and Chicopee rivers into Delta Park. In 2015, an environmental and historic analysis of the sites and visioning process created a conceptual plan of the new park. It will provide many recreational amenities close to downtown Chicopee, including walking paths, interpretive signage about the history of the site, picnic areas, and canoe and kayak launches. Important habitat and ecosystems will be restored to enhance wildlife. An important feature of Delta Park will be a multi-use path that connects the park to the Connecticut Riverwalk and Bikeway and the Canalwalk. In the longer term, there are opportunities to extend the Connecticut Riverwalk south from the Delta Park area and into Springfield. While there are no current plans for this segment, it should not be forgotten, as it can play a vital role not only in recreation, but also potentially in accessing employment opportunities in Springfield.

### Commonwealth-owned Resources

The Commonwealth of Massachusetts owns and maintains several facilities in Chicopee.

• Chicopee Memorial State Park: 574 acres of contiguous recreational land in the City. It is accessible year-round and open for public use for a fee during the warmer months. The site has

hilly, wooded terrain with a 24-acre lake fed by Cooley Brook and its marshland headwaters. The park offers extensive opportunities for picnicking, bicycling, cross-county skiing, hiking, fishing, ice-skating, swimming, and sunbathing. It is well maintained and provides handicapped restroom and parking facilities.

- Sarah Jane Sherman State Pool: Is adjacent to the City-owned Sarah Jane Sherman Park, and offers seasonal outdoor swimming and lessons, lockers, restrooms, and showers.
- Median Street Boat Ramp: 22 acres of riverfront with a concrete ramp, parking, and informal trails along the Chicopee River, serving as the trailhead for the Connecticut River Bike Path.
- Syrek Street Boat Launch (Berchulski Fisherman Access): 2.2 acres with a concrete ramp and parking

## Other Public Land

The City owns 118 acres of land at the confluence of the Chicopee and Connecticut rivers, of which 96 acres are used for flood control. This area includes 17 acres locally known as Delta Park, which is zoned and used for industrial purposes. The remaining acres are the former Hampden Power Steam Plant, which was demolished and has a number of environmental problems, though cleanup is underway. The site includes natural assets with informal trails and wildlife habitat. Access to the property is currently restricted.

# Recreational Resources and Programming

## **City Parks**

The Chicopee Parks and Recreation Department oversees the programming and maintenance of the City's parks (listed in Table IX.2).

## Table IX.2. City Parks, Cemeteries, and Memorials in Chicopee

Name	Acres
CEMETERIES	
East Street Cemetery	2.5
Fairview Cemetery	40.0
Maple Grove Cemetery	5.0
Ira Bullen's Veteran's Memorial Park	0.1
Vietnam Veteran Memorial Park	1.0
Total Acreage of Cemeteries	48.6
PARKS	
Lucy Wisniowski Memorial Park	1.7
Aldenville Commons	1.0
Atwater Park	24.0
Bellamy Park	18.9
Bowe "Field of Dreams" Park	14.5
Dana Park	4.3
Fairview Memorial Park	4.2
Garrity Grove Park	12.3

Name	Acres
Ike Alpert Park	4.5
Lincoln Grove	8.0
Mandalay Road Mini-Park	3.0
Massachusetts Turnpike Area	0.3
Nash Field	6.4
Preston Park	17.5
Ray Ash Memorial Park	11.4
Rivers Park	16.7
Roger A. Laplante Parks and Recreation Office	1.5
Sarah Jane Sherman Park	15.0
Sheridan Street Playground	0.6
Szetela Park	6.5
Frank J. Szot Park	69.7
Westover Gate Park	7.1
Williams Family Park	15.0
Total Acres of Parks	264.1
SCHOOL FACILITIES	
Bowe School Field	7.1
Litwin School Field	8.0
Stefanik School	14.0
Total Acres of School Facilities	29.1

City parks offer a wide range of facilities and amenities, including splash pads and wading pools, pools, multipurpose fields, baseball fields, basketball courts, playgrounds, ice rinks, walking trails, and picnic and seating areas, among many others.

The Department also oversees its administrative office building and land beneath the Massachusetts Turnpike at the intersection of Grattan Street and Granby Road, and is responsible for the maintenance and upkeep of the City's three cemeteries: East Street Cemetery, Fairview Cemetery, and Maple Grove Cemetery.

## School Department

There are nine school properties that offer recreational opportunities, five of which are maintained by the Department of Parks and Recreation, as noted above. The City School Department manages the remaining four properties, including Chicopee Comprehensive High School and Chicopee High School.

### Chicopee Country Club

The Chicopee Country Club is an 18-hole municipal golf course managed by the Chicopee Golf Commission. It is located on 130 acres adjunct to the Chicopee Memorial State Park.

## **Recreational Programming**

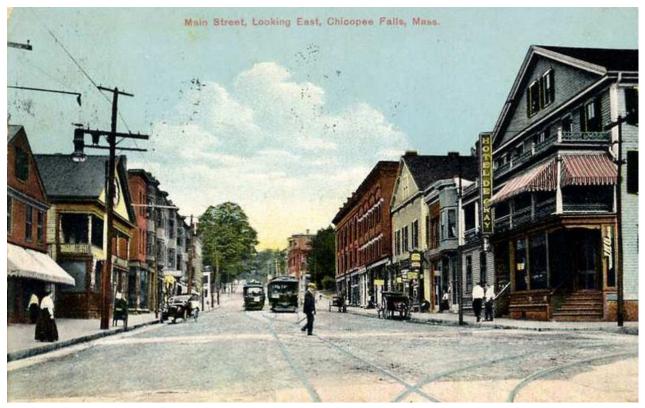
The City Parks and Recreation Department organizes a broad range of programming and events for residents of all ages. These include organized sports for both adults and youth as well as instructional programming such as swimming lessons, martial arts, and yoga. For school-aged children during winter, spring, and summer vacations, the Department offers camps, lessons, and other programming. One popular offering is OPEE Summer Adventures, offering arts and crafts, singing, music, drama, dance, field trips, special performances and more. In the summer, concerts are organized at the Aldenville Commons in coordination and co-sponsorship with the Chicopee Cultural Council and the Viola Klaus Concert Fund, and there is an annual Independence Day firework display at Szot Park.

The Department also manages the Chicopee Community Garden at Lincoln Grove Park. Plots are available to residents for a fee. Participating gardeners are expected to contribute to the upkeep and maintenance of the community garden through volunteering.

# X. Historic and Cultural Resources

# Why Historic and Cultural Resources Matter

The types of land uses allowed and where they occur influence economic, environmental, and social aspects of a community. Chicopee uses several tools to manage land development. The zoning ordinance regulates where a particular use can happen, its placement within a parcel, and performance standards a development must demonstrate to meet community objectives around environmental quality and social impacts. The subdivision regulations ensure standards are met in the subdivision of land and development of new roads, while the Site Plan Regulations regulate the laying out and construction of developable sites.



Historic Chicopee Falls Postcard. Source: City of Chicopee

# History

The first European settlement in what is now known as Chicopee occurred in the 1630s. William Pynchon from Roxbury was noted to be one of the first settlers, when he purchased land from the Pequot Indian tribe on the east side of the Connecticut River, establishing Springfield. As settlers moved into Springfield, the North Springfield district was formed, which corresponds with present-day Chicopee. The City's location at the confluence of the Connecticut and Chicopee Rivers was well suited

for farming, and the natural trails helped facilitate early transportation in the area. The Chicopee areas was divided into two districts: Chikkuppy River's Mouth (Chicopee Center) and Skipmuck (Chicopee Falls). A third district, Willimansett, was established in 1641 when William Pynchon expanded his area by purchasing land north of the Chicopee River. Seven of Chicopee's twelve neighborhoods today are "descendants" of original villages from the 17<sup>th</sup> to 19<sup>th</sup> centuries.

The Connecticut and Chicopee Rivers played an instrumental role in the development of the City, providing transportation and a source of power for the early mills. The first industrial enterprise was a sawmill that also functioned as a corn mill and blacksmith built along the river in 1687. The town also evolved as an agricultural community due to it is prime soils and proximity to Springfield's marketplace. Springfield quickly developed into the commercial, religious, and residential hub of the region. To gain more control of their economy and community, Chicopee started distancing itself from Springfield. The first move came when Chicopee residents decided to build their own parish on the north side of the Chicopee River. Despite Springfield's objection to any separation, the petition was granted on June 30, 1751.

In the 1820s, Chicopee started shifting from an agricultural identify to a more industrial one, focusing on textile mills. Chicopee Falls served as a source of power for these mills, and Chicopee soon became the second-largest textile mill operation in the Commonwealth. In 1848, Chicopee became its own town when it formally separated from Springfield. The population was 7,861, and already Chicopee had its own highways, newspapers, schools, churches, and established industries. Chicopee's location between two large manufacturing centers, Springfield and Holyoke, influenced rapid population growth. By 1890 the Town of Chicopee was reincorporated as a city.

The City of Chicopee continued to flourish throughout the 1900s. In the 1930s, the City's reputation as an industrial force, plus an availability of open land, earned it the location of Westover Field, which is now known as Westover Air Reserve Base. Westover is the nearest U.S. logistics base to Europe (about one hour closer by air than any other base on the mainland United States), making it critical for operations in Europe, including the Berlin air drops of World War II. Today, it has the longest runway in all of New England and the third-longest military runway on the east coast.

# Historic Resources

# **Registered Historic Sites**

Today, many of Chicopee's early developments can be found in one of its four historic districts, including mills and related mill housing in the Dwight Mills and Cabotville Commons Historic Districts. Housing constructed by some notable families can be found in the Springfield and Church Street Historic Districts. All of Chicopee's historic structures are rich assets the City should continue to maintain and preserve for future generations.

Of the four historic districts in Chicopee, three are designated as State and Federal Register Districts and one is designated as a State Register District only.

- Cabotville Common Historic District (State and Federal Register)
- Church Street Historic District (State Register)
- Dwight Manufacturing Company Housing District (State and Federal Register)
- Springfield Street Historic District (State and Federal Register)

Also in the community are nine structures designated on the National Register of Historic Places:

•

• Al's Diner

• Thomas C. Page House

Edward Bellamy House

- Ames Manufacturing Company
- Carreau Block
- Chapin School

- Valentine School
- Polish National Home
- Chicopee City Hall

## Historic Resources Inventory

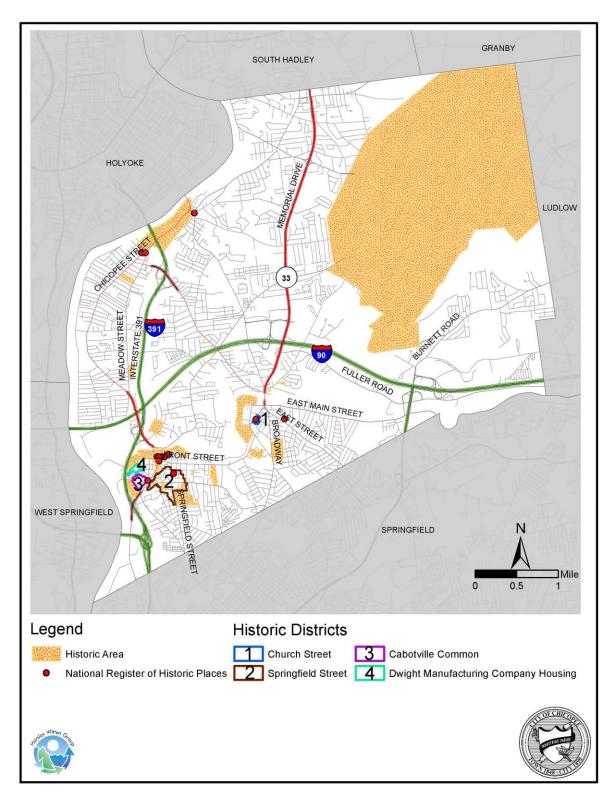
The City of Chicopee recognizes 29 other sites, streetscapes, and areas identified in Table X.1 as having historic or cultural significance. With two exceptions, these structures do not have any official historic designation. The Ames Manufacturing Company structures are listed on both the State and Federal Register of Historical Places. Diners of Massachusetts is listed on the State Register of Historic Places.

#### Table X.1: Historic Sites and Areas

Chicopee Center	Chicopee Falls	Willimansett
Ames Manufacturing Company	Arlington Streetscape	Charpentier Boulevard Streetscape
Bonneville Avenue Streetscape	Chicopee Manufacturing Company	Diners of Massachusetts
Chapman Streetscape	Ellerton Street Area	Lucretia Avenue Streetscape
Church of the Holy Name of Jesus	Emmet Streetscape	North Willimansett
Complex	Fisk Rubber Company Complex	Perkins, B. F. and Sons Company
Dwight Manufacturing Company	Lincoln Grove	Roy, J. G Hallahan Lumber
Dwight Manufacturing Company	Sheridan Streetscape	Company Westover Air Reserve
Housing	Washington - Arlington Streets	Base
Elms College	Area	
Exchange Street - Market Square		
Area	Westover/Burnett Road	
Gilmore Streetscape	Chicopee Memorial State Park	
Grant - Gaylord Streets Area	Westover Air Reserve Base	
Orchard Street Three-Deckers		
School Streetscape		
West - Kimball Streets Area		

Source: MassGIS

#### Map X.1: Chicopee Historic Resources



# Preservation and Management Tools

# **Zoning Ordinance**

Zoning is a tool used by the City to protect structures of historical importance in the community. There are provisions in Chicopee's city ordinance protecting architectural features and establishing a process of demolition review.

# **Historical Commission**

The City has a municipal Historical Commission consisting of five members appointed by the Mayor who oversee preservation, protection, and development of the historical and archeological assets of the City.

The Commission makes recommendations to the City Council (which then makes recommendations to the Massachusetts Historical Commission) about certifying historical and archeological landmarks. The Historic Commission does not have any authority to prevent alterations or demolitions.

## **Historic District Commissions**

The Historic District Commissions each consist of five community members appointed by the Mayor and confirmed by the City Council. The commissions control and regulate the exterior architectural features of buildings within the districts, including any demolition or construction within the districts.

While the commissions technically exist, seats are currently vacant, and the commissions are not active.

# Local Cultural and Arts Resources

# **Chicopee Cultural Council**

The Chicopee Cultural Council's mission is to advance excellence and access to the arts, humanities, and interpretive sciences. Through grants to artists, arts organizations, independent council projects, volunteerism, and community input, the Council aims to support local artists and enhance meaningful cultural experiences for the entire community. The Council strives towards good stewardship of the community by contributing to its economic vitality by leveraging the power of the arts, culture, and creativity to serve a broader agenda for change, growth, and transformation. The Council is involved in the Lights on Arts and Culture Days arts event, the Fantastical Fall Festival celebration of culture and heritage in Chicopee, and the City's Transformative Development Initiative (TDI) in partnership with MassDevelopment.

## Edward Bellamy Memorial Association

The Edward Bellamy Memorial Association (EBMA) is a nonprofit volunteer-based organization that was founded in 1972 to promote the literary legacy of 19th-century utopian novelist Edward Bellamy. The Association purchased the Edward Bellamy House in 1974 and listed it as a National Historic Landmark. To this day, it remains Chicopee's only National Historic Landmark. With the assistance of Historic New England, the house was revitalized in the 1980s, and today the Association operates part of the house as a museum. EBMA has been collecting and making available historical material relating to Edward Bellamy and the history of Chicopee. The Association is looking to revitalize the Bellamy house to better engage the community by expanding exhibits and programs, eventually functioning as a house museum. Currently, the house is in need of significant repairs and restoration, and there is a dire need for funding to preserve this community asset for future generations.

# **Chicopee Historical Society**

The Chicopee Historical Society is a volunteer-based organization that was founded in the late 1980s to promote Chicopee's history. For many years, the Society operated out of the Edward Bellamy House and under the same leadership. As a result, many residents do not differentiate between the Edward Bellamy Memorial Association and the Chicopee Historical Society.

The Society is currently working to establish its own identity and purpose in the City by relocating its meeting from the Bellamy House to the public library, separating historical materials, and filing the proper paperwork with the government to be officially recognized.

Looking ahead, the Chicopee Historical Society hopes to develop a museum for the City, be recognized as a separate entity from the Bellamy House and the Library and build strong collaborations within the City.

## Local Arts & Cultural Organizations

There are many organizations outside of City government that support the arts and bring cultural experiences to Chicopee. In fact, too many to be listed! Dozens of churches provide not only religious services, but enrich the community with music, art, and performances. Fraternal organizations provide activities for their members, families, and the public at large. And multiple organizations representing the wide array of cultural and ethnic communities in the City host festivals, parades, and other events throughout the year.

These local organizations play a huge role in the community and culture of Chicopee, grounding long time residents and providing a welcome network for newcomers.

# Why Climate Change and Sustainability Matter

Maintaining quality of life for residents into the future requires consideration not only of day-to-day conditions, but of the operations of the City's government, economy, utilities and infrastructure, food systems, natural systems, and social resources leading up to, during, and following significant disruptions. While *sustainability* is the capacity of a system to maintain conditions over a long period of time, *resiliency* is the capacity of a system to restore and improve upon its initial conditions following a disruption. As Chicopee continues to grow and evolve, it is important to incorporate both resiliency and sustainability into the City's planning and development processes to better prepare the City for climate change and natural hazard events. Climate change impacts must be incorporated into the City's Hazard Mitigation Plan, and climate projections should be explicitly considered in the planning and design of critical facilities and infrastructure.

Sustainability encompasses the need to utilize resources and produce waste and pollution at levels that can be supported by natural systems over generations. Sustainability typically implies implementation of climate change mitigation measures that will slow, limit, or completely avoid human-caused climate change. Climate resiliency, on the other hand, refers to a community's capacity to prepare for, withstand or absorb, recover from, and adapt to natural hazards that are predicted to worsen with climate change.

Hazard mitigation is one key aspect of a comprehensive climate resiliency strategy. Natural hazard mitigation aims to minimize or eliminate the impacts of hazards such as more frequent or more severe storms. For example, maintenance of Chicopee's flood control system helps prevent severe storms from causing flooding.

# **Resiliency Themes**

Resiliency themes have been identified through review of climate change, hazard mitigation, and resiliency science, as well as review of the outcomes of a stakeholder workshop on climate vulnerability and resiliency conducted in 2019 through the Massachusetts Municipal Vulnerability Preparedness (MVP) Program.

# Climate Change and Climate Hazards

The Northeast Climate Adaptation Science Center (NE CASC) at University of Massachusetts Amherst has developed Massachusetts-specific climate change projections that predict the following changes over time in Chicopee:

- More overall precipitation in Chicopee, as well as more intense precipitation events.
- More precipitation in the Chicopee River watershed upstream from Chicopee.

- Warmer average, maximum, and minimum temperatures in Chicopee.
- More severe droughts in Chicopee.
- More severe storms in Chicopee, including severe precipitation and high wind events.

## **Riverine Flooding**

The Chicopee River and the Connecticut River are the primary sources of riverine flood risk in Chicopee, and extensive flood control systems, completed in 1942, are already in place on each. Maintenance of these systems is a continuous, ongoing, costly effort. Over time, continued development within the watersheds of each river will mean increased impervious surfaces and increasing flood magnitudes; this will be compounded by increasing overall precipitation and severe storm intensity. These factors will increase the risk of the flood control systems being overwhelmed and failing.



Historic Flooding, Willimansett. Source: City of Chicopee

## Urban Flooding

Intense precipitation events can cause flooding in streets and other areas away from permanent water bodies and mapped hazard zones. Such flooding occurs where drainage infrastructure is improperly designed, inadequately sized, or poorly maintained. Increasing precipitation amounts due to climate change and increased runoff due to impervious surface expansion will render historically adequate drainage systems insufficient, increasing the amount of urban flooding the City experiences. As part of the MVP program through the Massachusetts Executive Office of Energy and Environmental Affairs and developed by NA CASC, the following climate change projections for precipitation have been developed for the Chicopee and Connecticut Basins, as Chicopee falls within both basins (Table XI.1).

Climate Parameter	Baseline (1971-2000) (inches)	Mid-Century (2050s) (inches)	End of Century (2090s) (inches)
Total Precipitation (inches):	(incries)	(inches)	(inches)
Annual			
Chicopee Basin	46.6	47.7 – 52.6	48.0 - 54.3
Connecticut Basin	46.4	46.7 - 52.6	48.1 - 54.7
Winter			
Chicopee Basin	10.6	10.6 - 13.0	11.2 – 14.6
Connecticut Basin	10.3	10.3 – 12.9	11.0 - 14.1
Spring		-	
Chicopee Basin	11.9	11.9 - 13.7	12.0 - 14.6
Connecticut Basin	12.1	12.4 - 14.2	12.6 - 15.0
Summer			
Chicopee Basin	12.0	12.2 - 14.0	10.8 - 14.1
Connecticut Basin	12.0	11.8 - 14.41	11.0 - 13.9
Fall			
Chicopee Basin	11.0	11.0 - 13.8	10.5 – 13.6
Connecticut Basin	11.9	10.6 - 13.6	10.2 - 13.4
Annual Days with Precipitation over 1 inch			
Chicopee Basin	6.5	7.2 – 8.6	7.2 – 10.6
Connecticut Basin	6.5	7.0 - 8.7	7.2 – 10.9
Annual Days with Precipitation Over 2 inches			
Chicopee Basin	1	1	1
Connecticut Basin	1	1	1
Annual Days with Precipitation Over 4 inches			
Chicopee Basin	0	0	0
Connecticut Basin	0	0	0
Annual Consecutive Dry Days			
Chicopee Basin	15.6	14.5 – 13.6	15.1 – 18.4
Connecticut Basin	16.4	16 – 17.2	16 - 18.8

### Table XI.1 Precipitation Projections

Source: Northeast Climate Science Center, 2018. Massachusetts Climate Change Projections. University of MA Amherst. Published by MA Executive Office of Energy and Environmental Affairs.

## High Wind

High winds can cause power outages and blocked roads by downing tree limbs and power lines, can lift objects to create dangerous airborne debris, and can directly damage property and injure people. Wind can cause damage across the entire community, regardless of location. High winds are associated with nor'easters, summer thunderstorms, hurricanes and tropical storms, tornadoes, or significant weather fronts. Since severe storms are predicted to increase in intensity and frequency, the hazard posed by high winds associated with those storms will increase as well.

### Temperature

Climate change is leading to higher average temperatures, warmer winters, and more extremely hot days in New England. Additionally, while the overall trend is an increase in temperatures, disruption to historic weather patterns can in certain cases create unusually cold temperatures locally in the short term.

Both extreme low and extreme high temperatures can cause negative health impacts or death. Extreme heat can be particularly dangerous in New England, where many homes are not equipped with air conditioning or other effective cooling options. The need for safe, accessible cooling centers will increase as summer temperatures rise. Extreme temperatures can also affect city infrastructure, straining the electric grid, weakening roads and pipes, and affecting the management of water and wastewater. They can also strain the regional food system, both in terms of growing seasons and distribution, and alter natural habitats and native species migration. NA CASC has developed the following climate change projections for temperature for the Chicopee and Connecticut Basins (Table XI.2).

	Baseline (1971-2000)	Mid-Century	End of Century
Climate Parameter	(1971-2000)	(2050s)	(2090s)
Average Annual Temperature (°F)			
Chicopee Basin	46.2	49.2 – 52.6	50.2 - 58.0
Connecticut Basin	47.0	50.0 - 53.4	51.0 - 58.0
Maximum Annual Temperature (°F)			
Chicopee Basin	57.4	60.1 - 63.9	61.0 - 68.4
Connecticut Basin	58.5	61.2 - 65.1	62.1 - 66.5
Minimum Annual Temperature (°F)			
Chicopee Basin	34.9	38.2 – 41.5	39.3 – 45.8
Connecticut Basin	35.5	38.9 – 42.1	39.9 – 45.9
Annual Days with Max Temp over 90°F			
Chicopee Basin	3.3	11 – 32	15 – 71
Connecticut Basin	6.4	16.3 - 41.8	21.0 - 82.4
Annual Days with Min Temp below 32°F			
Chicopee Basin	161.8	142.5 - 124.1	138.4 – 99.3
Connecticut Basin	158.6	140.0 - 121.3	135.7 – 98.8
Annual Heating Degree-Days (Base 65°F)			
Chicopee Basin	7,263	6,435 – 5,535	6,174 - 4,610
Connecticut Basin	7.038	6,230 – 5,342	5,977 – 4,475
Annual Cooling Degree-Days (Base 65°F)			
Chicopee Basin	375	643 - 1,073	736 – 1,801
Connecticut Basin	459	732 – 1,209	839 – 1,964

### Table XI.2. Temperature Projections

Source: Northeast Climate Science Center, 2018. Massachusetts Climate Change Projections. University of MA Amherst. Published by MA Executive Office of Energy and Environmental Affairs.

## Natural Resource Resiliency

The natural systems of Chicopee, including its rivers, parks, and urban forest, present a valuable opportunity to increase sustainability by preserving natural resources, and to increase resiliency by protecting areas with natural hazard risks as natural or recreational areas.

### The Urban Forest

Urban trees improve air quality, increase public health and mitigate the extreme temperatures of both summer and winter. The urban forest also provides a vital layer of storm water management, helping to slow, spread and sink water into the soil, attenuating the "peak" flow of a rain event. Additionally, trees contribute to our urban experience, impacting neighborhood vitality and economic development, especially in our urban centers. The urban forest is threatened by severe wind and snow events, invasive species, ecosystem shift due to climate change, development pressure, and municipal budget constraints.

The City maintains and implements a Tree Management Plan, completed in 2014. The inventory recorded a total of 8,915 planting sites and 5,805 individual trees along public streets and in specified parks and public properties. The overall condition of the inventoried tree population is rated as Fair. Maintenance needs recommended during the inventory primarily included planting and pruning, but also tree/stump removal. One genus, Acer (maple), constitutes a large percentage of the street tree inventory (41%). Trees in Chicopee tend to be quite mature, with fewer young, established or maturing trees. The City is working to plant a greater diversity of younger trees to improve biodiversity and reduce mass tree die offs due to age and disease.

Planting trees is necessary to increase canopy cover and to replace trees lost to natural mortality (expected to be 1–3% per year) and other threats. The Tree Management Plan recommends planting at least 116 trees of a variety of species each year to offset these losses and increase the tree canopy. Citywide tree planting focuses on creating canopy in areas that promote economic growth (such as business districts), in parking lots and near buildings with insufficient shade and where there are gaps in the existing canopy. Chicopee is an active participant in the Commonwealth's Greening the Gateway Cities program. This program, concentrated in Environmental Justice neighborhoods, targets areas within Gateway Cities like Chicopee that have lower tree canopy, older housing stock, higher wind speeds, and a larger renter population.

## Parks and Open Space

Chicopee's parks and open spaces provide recreational value and ecosystem services and minimize hazard risks both by retaining and infiltrating runoff or floodwaters and by preventing development in potentially at-risk areas.

### **Rivers**

The Connecticut and Chicopee Rivers and Abbey, Cooley, Fuller, and Williamansett Brooks are valuable natural and recreational resources to Chicopee. With flood protection systems in place along the Connecticut and Chicopee Rivers, nearby neighborhoods are protected from most riverine flood events; however, appropriately severe conditions could lead to flooding both from those two large rivers as well as their smaller tributaries. Climate change increases the likelihood of such an event occurring in a given year.

### **Resiliency of Vulnerable Populations**

The City of Chicopee, like all large communities, include populations that are more exposed to and less prepared for natural hazards, and less able to access public assistance during disaster recovery. These include the City's homeless population, individuals and families with low incomes, individuals who are homebound or those with mobility limitations, individuals with mental-health issues or those with intellectual disabilities, immigrants and non-native English-speakers, and members of groups that are marginalized based on race, ethnicity, or religion. Members of these populations are more likely to be disparately impacted by climate change and natural hazards.

#### Resiliency of Transportation Infrastructure

A number of major and local roadways run through Chicopee, many of which currently experience flooding from overwhelmed drainage systems or may be vulnerable to washouts. Loss of transportation routes due to climate change hazards has direct cost implications (for repair and maintenance) and secondary cost implications (due to business interruptions and increased travel times), as well as public health implications (if loss of evacuation routes/access delays emergency responders). Damage to roadways may also lead to damage to underground utilities.

#### Resiliency of Utility Infrastructure

As the City grows, so will the demand on various infrastructural components, such as wastewater, electrical supply, fiber optic lines, drinking water, and roadways (lifeline systems). Resilient infrastructure will ultimately lead to a resilient community and population. Examples of increasing infrastructure resiliency may include:

- Inserting redundancies into utility sources and distribution networks
- Supporting local electricity generation (such as installation of solar panel or development of microgrids)
- "Hardening" utility distribution systems (such as by burying power lines)
- Implementing "smart" tree management protocols (such as the University of Connecticut Stormwise forest vegetation management program; <a href="https://stormwise.uconn.edu">https://stormwise.uconn.edu</a>)
- Mapping and maintaining secondary access routes in case primary routes are compromised during a storm
- Continuing to separate the City's remaining Combined Sewer Overflow systems
- Maintaining and enhancing the City's flood control infrastructure
- Expanding the use and proper maintenance of green infrastructure

### Resiliency of Historic and Cultural Resources

Reuse of existing historic buildings contributes to resiliency by diminishing the economic, social, and environmental costs associated with new construction. Historic resources present a unique set of vulnerabilities in the face of climate-related hazards. Their age often means that a degree of degradation has occurred, potentially putting the buildings at a higher risk of being damaged during an extreme event. These historic buildings were constructed before the development and adoption of many building codes and zoning regulations, so they may be located in risk zones and built in ways that make them more susceptible to hazards than a new building. Historic buildings initially sited in areas with relatively low hazard exposure may be at a higher risk today due to changes in land use and development, landscape, and climate. Finally, implementing adaptation measures on these buildings can be complicated by requirements or desires to maintain their historic characters.

Building hazard resiliency into cultural and historic resources may include:

- Assessments to identify resources at risk from climate-related hazards and prioritize resiliency efforts
- Design guidelines to help property owners implement resiliency measures while maintaining the historic character of their resource
- Identification of incentive programs, such as grants or tax breaks, that can help historic property owners take needed actions
- Strengthening local historic district commissions or other historic preservation groups to coordinate preservation and protection efforts

# XII. Planning for Food Access

# Why Planning for Food Access Matters

Resident choices about food spending and diet are often influenced by the accessibility and affordability of food retailers - travel time and mode to shopping, availability of healthy food offerings, and costs. Some residents, especially those with low income, may face greater barriers in accessing healthy and affordable food retailers, which can negatively affect food security, diet and health and overall quality of life.



Farm to School Program. Source: ChicopeeFRESH

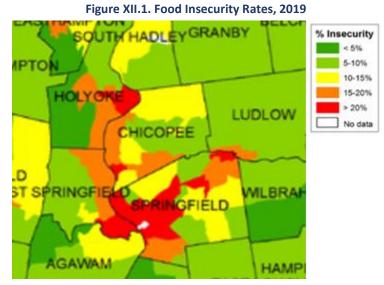
# Food Insecurity and Food Deserts

Food insecurity as a measure of inadequate or uncertain access to food, including healthy food, is typically estimated according to social and economic characteristics such as income. The food insecurity rate in Hampden County is 12% overall and 18.8% among children.<sup>32</sup> Chicopee has a range of food insecurity rates from 5 to 10% up to over 20% in some areas.

<sup>&</sup>lt;sup>32</sup> Community Health Needs Assessment 2016, Baystate Medical Center.

Hampden County also includes food deserts – areas where grocery stores and other alternatives to purchase healthy foods are difficult to access for people without a personal vehicle or where public transportation is limited. Chicopee has several areas identified as food deserts (see Figure XII.1.).

Connections... The Open Space & Recreation Plan for the City of Chicopee, MA (April 30, 2015) includes the issue of food security as a city-wide concern. The need for neighborhood-scale community gardens ranked as the third highest priority among survey respondents (30.5%), and 88.2% of respondents said the availability of locally grown produce or other food products was very or somewhat important to them. The majority (73.8%) said they support the development of neighborhood community gardens. This issue was also raised at the neighborhood meetings.



Source: Community Health Needs Assessment 2019, Baystate Medical Center.





Source: Community Health Needs Assessment 2019, Baystate Medical Center.

Goal 5 from this plan includes actions targeted towards urban agriculture and food security needs for the future. Chicopee has made progress on this goal over the past five years, including:

- A community garden was established at Lincoln Grove during summer 2016, with the garden's first full growing season occurring in 2017. An additional community garden is currently being planned and designed at Rivers Park in Willimansett. Construction is anticipated in 2021 as part of a PARC grant from the Commonwealth of Massachusetts.
- The City continues to search for opportunities to expand, or find a new, permanent, or more prominent location for the farmers market maintained by the Valley Opportunity Council since 2015.
- The City is considering adoption of a right-to-farm bylaw, but no progress has been made to date.

- The City continues to work with agricultural landowners on strategies to permanently protect working farms and farmland including agricultural preservation restrictions.
- The City is considering forming an Agricultural Commission, but no progress has been made to date.

# Fresh Food Venues

Proximity to food outlets (e.g. supermarkets, convenience stores and cultural markets) in a neighborhood is just one factor in healthy food options, such as availability of fresh fruit and vegetables. Most households also consider costs, quality of choices, and the diversity of what is available.

One way to better understand this was to develop a comprehensive inventory of places where Chicopee residents can purchase fresh food, followed by access (transportation mode) to these commercial locations. Although there are a number of area markets/grocery stores throughout the City, the majority are centered in and around the Memorial Drive commercial corridor. Most of these are accessible via public transportation, however, not without challenges of lengthy travel times and transit transfers. Further, while this cluster of supermarkets is physically close to many residential homes, walking to and around the Memorial Drive Corridor is at best unpleasant, and at worst downright dangerous. Complementing this inventory are the food insecurity rates and prevalence of food deserts identified by the Baystate Medical Center in their *Community Health Needs Assessment* (2019).

Chicopee also offers alternatives to access fresh food such as a seasonal farmer's market (Valley Opportunity Council) and community garden (Chicopee Parks and Recreation Department). Both are accessible via public transportation routes and are dedicated to supporting fair, competitive prices and financial assistance programs.

#### Area Markets/Grocery Stores

The following are area grocery stores, their addresses, and the Pioneer Valley Trust Authority (PVTA) bus line they are on (if any).

SUPERMARKETS	
Aldi Supermarket	Big Y World Class Market
505 Memorial Drive	650 Memorial Drive
G1 – Chicopee/Sumner-Allen/Canon Circle	G1 – Chicopee/Sumner-Allen/Canon Circle
Price Rite of Chicopee	Stop & Shop
1600 Memorial Drive	672 Memorial Drive
X90 – Inner Crosstown	G1 – Chicopee/Sumner-Allen/Canon Circle
Walmart	
591 Memorial Drive	
G1 – Chicopee/Sumner-Allen/Canon Circle	

#### Table XII.1 Markets and Groceries in Chicopee

SMALLER GROCERY STORES/MARKETS		
First Oriental Grocery	Fruit Fair	
147 Broadway Street	398 Front Street	
X90 – Inner Crosstown	G1 – Chicopee/Sumner-Allen/Canon Circle	
McKinstry Market Garden		
753 Montgomery Street		
CONVENIENCE MARTS		
Kwik Food Mart, Inc	Sunoco Sams Food Store	
447 Springfield Street	1031 Chicopee Street	
P21 – Holyoke/Springfield via Chicopee	P21 – Holyoke/Springfield via Chicopee	
Ultra Food Mart		
197 Grove Street		
G1 – Chicopee/Sumner-Allen/Canon Circle		

### Chicopee Farmer's Market

The Chicopee Farmers' Market gives local farmers and small vendors the opportunity to sell their fresh and locally grown products such as plants, vegetables, fruits, jams, baked goods, maple syrup, honey, and herbs. The Market is dedicated to providing healthy products from local vendors at accessible prices in a place where the community gathers.

The Valley Opportunity Council consistently offers seasonal incentives to get residents to the market and works with farmers and vendors to foster a healthy, friendly, non-competitive environment. The Healthy Incentives Program (HIP) is very hit or miss, dependent upon funding availability. WestMass ElderCare offers Senior Farmer's Market coupons based on specific income criteria. Women, Infants and Children (WIC) Farmer's Market coupons are automatically distributed annually to WIC recipients (10 \$2.50 coupons through the RiverMills Senior Center). Challenges include creating awareness of the Market, getting residents to the Market, and expanding days and hours of operation to make it more accessible to working families.

Additional resources offered at the Market include free gardening advice, nutritional services and access to all Valley Opportunity Council's services.

- Open July September, 10:00 AM 2:00 PM on Wednesdays
- Accepts Cash, SNAP/EBT benefits, HIP (Healthy Incentives Program), Senior Farmer's Market Coupons, WIC Farmers' Market Coupons, Credit/Debit Cards
- Location: 767 Chicopee St.
- P21 Holyoke/Springfield via Chicopee bus route

#### Chicopee Community Garden

The Parks and Recreation Department manage the Chicopee Community Garden at Lincoln Grove Park, accessed by the Inner Crosstown line on PVTA (Route X90). Twenty 6x12-feet lots are available to residents on a first come, first serve basis. Membership is \$25 for the season and financial assistance is

available. Membership includes access to water and storage shed with tools and seeds. Members are expected to volunteer and maintain the larger community garden space.

# Food Assistance

Chicopee has several supplemental food and nutrition programs available to residents throughout the year. They are managed by several community organizations and supported by the City.

### **Programs for Youth**

The Chicopee Summer Lunch Program, Chicopee WIC and ChicopeeFRESH are programs targeted towards providing healthy food to Chicopee youth.

### Chicopee Summer Lunch Program

This program, operated through the Valley Opportunity Council, is Federally funded with oversight from the Massachusetts Department of Elementary and Secondary Education. It provides free lunches to Chicopee residents ages 18 and under when school is not in session. Lunches are often provided in conjunction with public educational and recreational activities at various schools and parks throughout Chicopee. Private and nonprofit youth organizations may also take advantage of the program, either attending meals at parks and schools or paying a small fee to pick up meals and deliver them to their own facilities (such as the Boys & Girls Club).

In 2019, 26,258 lunches were distributed over the course of the summer, demonstrating a very significant need. The program operators see continued funding as being the most significant challenge for the future. They are also aware of the issues caused by more extreme summer temperatures, and the need to provide hydration, shade, and cooling areas for children during the summer.

### 2019 Summer Lunch Sites included:

Cabot Manor: 106 Stonina Drive Dana Park: 263 Newbury Street Ray Ash Park: 687 Arcade Street Sarah Jane Park: 21 Vivian Street Szot Park: 687 Front Street

Chicopee Comp High School: 617 Montgomery Street Lincoln Grove Park: 224 Broadway Street Rivers Park: 17 Chicopee Street Senecal Meeting House: Meeting House Road Wisniowski Park: 14 Spruce Street

## Chicopee WIC (Women, Infants and Children Nutrition Program)

A nutrition program that provides healthy foods, nutrition education, breastfeeding support and referrals to healthcare and other services free of charge to qualified Massachusetts families. WIC serves low- to moderate-income people in critical stages of growth and development.

Offers:

- Personalized nutrition education and counseling, including breastfeeding support
- WIC card to redeem at participating grocery stores and pharmacies for nutritious foods and infant formula/baby foods
- Referrals to other healthcare and social service agencies

Eligibility:

- Must reside in Massachusetts
- Household income at or below 185% of the federal poverty level (ranges from \$22,311 for a one-person household and up to \$45,510 for a four-person household)
- A woman who is pregnant or breastfeeding
- Parent, grandparent, foster parent or other legal guardian of a child under five years of age
- If you receive Traditional Aid to Families with Dependent Children (TAFDC), Supplemental Nutrition Assistance Program (SNAP) or MassHealth (Medicaid), you are automatically eligible
- Foster children under age 5 are automatically eligible

### ChicopeeFRESH

ChicopeeFRESH is Chicopee Public Schools' farm-to-school program which provides every student in the district access to locally sourced, nutritious meals and experiential learning opportunities in the classroom and school gardens. The program aims to achieve food security in the community, support the New England food economy, and empower students to develop healthy/positive relationships with food through:

- **Procurement**: local foods (grown/processed within New England and/or within 250 miles of Chicopee) are purchased, promoted, and served in cafeterias or as a snack or taste test.
- Education: students participate in education activities related to agriculture, food, health or nutrition, such as classroom lessons, family events at the Chicopee Public Library, etc. UMass provides nutrition education to elementary schools (four lessons each year for all grade levels) and FoodCorps service members provide additional nutrition and food lessons at their focus schools (Stefanik, Bowe, Lambert-Lavoie, Litwin).
- **School Gardens**: students engage in hands-on learning through gardening (see more details below).

Locally sourced food now accounts for about 15% of the school system's food budget (not including fluid milk), which amounts to roughly \$313,500. Every school in the district participates, with district-wide menus featuring "farm fresh" meals at least once a week. Each elementary school participates in a cafeteria "taste test" four times a year, allowing students to get a taste of produce locally harvested that month.

Nine schools have some sort of gardening program. Six elementary schools (Bowe, Bowie, Streiber, Stefanik, Lambert-Lavoie, and Litwin) participate in "Salad and Harvest Days" seed to fork events. Dupont Middle School is home to a greenhouse. Chicopee Comp has a greenhouse and horticulture shop, and Chicopee High is working on a courtyard garden. Nutrition education across the district is managed by FoodCorps, a national nonprofit dedicated to expanding access to and education on healthy foods, in cooperation with the University of Massachusetts Extension. Several schools also have their own cooking and gardening clubs.

The school system expects several challenges in the coming years to maintain and grow this program. Lack of teacher participation can be a challenge. If teachers aren't personally invested in the program, it may not reach their students. Further, maintaining garden infrastructure takes time and knowledge, and can easily fall into disrepair without regular attention. An increased emphasis on standardized tests can put pressure on "non-essential" programs like ChicopeeFRESH. Threats to the National School Lunch Program are always a concern, as is funding in general. Further, the FoodCorps is a major source of support. If that support ever goes away, more dedicated school district staff would be needed to maintain these programs.

#### Programs and Resources for Adults and Families

A number of food assistance agencies/programs are available throughout Hampden County.

- Chicopee Food Assistance (Chicopee)
   www.chicopeema.gov/798/Food-Assistance
- The Food Bank of Western Massachusetts (Chicopee) www.foodbankwma.org/get-help/mobile-food-bank/
- Lorraine's Soup Kitchen and Pantry (Chicopee)
   413-592-9528 <u>www.lorrainessoupkitchen.com</u>
- Department of Transitional Assistance (Food Stamps) (Springfield) 413-552-5400 <u>www.mass.gov/dta</u>
- The Gray House (Springfield) 413-734-6696 <u>http://grayhouse.org/food-pantry/</u>
- Kate's Kitchen (Holyoke)
   413-532-0233 <u>www.provministries.org/locations/kates-kitchen/</u>
- Loaves and Fishes Kitchen (Springfield) 413-731-5668 www.openpantry.org
- Margaret's Pantry (Holyoke)
   413-538-8026 www.provministries.org/locations/margarets-pantry/
- **Open Pantry's Emergency Food Pantry** (Springfield) 413-737-5353 www.openpantry.org
- Springfield (Forest Park) Farmers Market (Springfield) www.farmersmarketatforestpark.com/

# Agriculture in Chicopee

Agriculture in very limited in Chicopee, but there are a few important agricultural businesses operating within the City today.

**McKinstry Farm** is the largest and most notable farm in the City. It currently operates on many acres of land throughout the Pioneer Valley but is headquartered in Chicopee at 753 Montgomery Street. The Chicopee farm has both active farmland and McKinstry's Market Garden, which sells fresh, local produce including corn, tomatoes, strawberries, and a variety of other fruits and vegetables, as well as flowers,

starter plants, and more. The McKinstry family has been farming in Chicopee since colonial times, and their farm today is an important part of the City's economy, history, and culture.

**LaFlamme's Garden Center** at 863 Montgomery Street is the "sister" store to Dickinson Farm & Greenhouse in Granby. LaFlamme's is a local source for annuals, perennials, succulents, grasses, potting soil, and all sorts of gardening supplies.

Otherwise, agriculture in Chicopee today is generally limited to home gardens and small farm stands. Commercial scale agriculture is likely to remain uncommon in Chicopee.

# XIII. Energy

# Why Energy Matters

Energy impacts nearly all aspects of our daily lives. We depend on energy to travel; to heat and cool our buildings; and to power everything from streetlights, to smartphones, and medical equipment. Today, as the environmental and financial costs of energy rise, the need to produce and consume energy responsibly is clear. The thoughtful development of energy policies will provide a multitude of benefits to us all. Finding ways to rely less on fossil fuels and more on renewable energy sources can help improve air quality and related public health issues over time. The same is true when we use energy more efficiently. Clean energy is also a growing sector in the Nation's and Commonwealth's economy and presents an opportunity for local jobs. The City is fortunate to have Chicopee Electric Light as its municipal electricity provider, allowing Chicopee to take a more direct and proactive role in its energy future.

Energy requires a tremendous amount of infrastructure for both supply and distribution. Traditional sources of energy and existing rates of consumption are not sustainable for the environment or for the economy. Burning fossil fuels has harmful impacts on the environment and the decreasing supply is increasing costs. Communities across the globe are responding by modifying operations, with an emphasis on energy conservation and efficiency, renewable energy sources, and fuel-efficient vehicles, lowering the cost of municipal services while also reducing environmental impacts.

Chicopee's actions can benefit the City as well as the world. It is important to keep the local, regional, and global perspective in mind when thinking about energy issues in Chicopee. Energy planning is relevant to the City's operations but also to residents and businesses living and operating within Chicopee. Envision Our Chicopee 2040 will consider strategies to reduce consumption as well as the sources of energy, generation, and distribution within the City, security and reliability, and the impact on the local and regional economy.

It is important to view energy as a subset of every aspect of Envision Our Chicopee 2040 since energy strategies will help to ensure sustainable development practices are used, housing is energy efficient, businesses can reduce energy costs and operate efficiently, and efficient transportation options are available.

# Chicopee's Progress

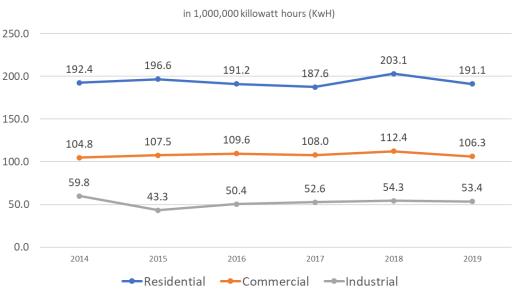
The City has implemented several measures to reduce energy costs, diversify energy generation, and reduce greenhouse gas emissions related to municipal operations. For example, it recently successfully sought grant funding to convert all streetlights to more efficient LED lamps. This baseline provides an overview of municipal energy projects and programs currently being employed by the City.

#### **Chicopee Electric Light**

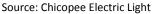
Chicopee Electric Light (CEL) was established as a municipal utility in 1896 by community leaders who wished to free the community from the grip of a private utility company. The underlying reason was unsatisfactory service. For nearly 125 years, CEL has been a major asset for the City. The utility is dedicated to providing reliable, high quality services to the community at the lowest cost, consistent with ensuring resources for proper system maintenance, modernization, and meeting demands for future expansion.

CEL tracks the monthly use of energy across all its customers. While CEL does not compare its metrics to other Municipal Light Plants in Massachusetts, it is interesting to see how local energy use has changed over time.

As seen in Figure XIII.1, in spite of some slight fluctuations from year to year, trends in energy use in the private residential, commercial, and industrial sectors has been relatively flat since 2014. There has not been a clear trend up or down. The total energy used among these sectors is down 1.7% from 2014 but up 1.0% from 2015.







CEL is in the midst of adding a second utility to its offerings: Crossroads Fiber. This service, for both businesses and residents, will provide fast, reliable, and fairly priced 100% fiber Internet service. Fiber is not vulnerable to many of the factors that impact cable Internet and is therefore a more reliable service. Further, initial estimates assume speeds up to ten times faster than any of the existing services available in Chicopee. CEL has divided the City into several dozen "fiberhoods." Crossroads Fiber service will be rolled out across these areas over time. As of May 2020, five "fiberhoods" are connected to the service, five are under construction and one is accepting applications. All residents are encouraged to sign up for more information at <u>https://www.crossroadsfiber.net/</u>.



Source: Chicopee Electric Light

#### Green Communities Designation

In February 2017, Chicopee was designated a Green Community by the Green Communities Division of the Massachusetts Department of Energy Resources (DOER). Once a community has been designated as a Green Community, the Division provides technical assistance and financial support to improve energy efficiency and increase the use of renewable energy in public buildings, vehicles, facilities and schools. For example, Chicopee has already received a grant to implement energy conservation measures, lighting, lighting controls, and building management systems in municipal buildings, including City Hall and the City Hall Annex.

Chicopee had to meet the five criteria for Green Communities in order to be designated:

- Criterion 1: As-of-right siting in designated locations for renewable/alternative energy generation, research and development, or manufacturing facilities.
- Criterion 2: Expedited application and permit process for as-of-right energy facilities.
- Criterion 3: Energy use baseline and plan to reduce energy use by twenty percent (20%) within five (5) years.

- Criterion 4: Purchasing only fuel-efficient vehicles.
- Criterion 5: Adopt the Board of Building Regulations and Standards Energy Stretch Code for new construction.

#### Green Communities Progress

The Green Communities Program requires an annual report for municipalities to retain their certification. This is also helpful in that it provides an incentive for the City to keep moving forward with sustainable practices. Below are some of the highlights from Chicopee's latest annual report.

- Siting and Use of Renewable Energy
  - Two solar fields have been approved one on former Navy Housing and the other on a capped landfill.
  - Chicopee Electric Light (CEL) does not purchase Renewable Energy Certificates (RECs) and is therefore unable to refer to their non-carbon emitting energy sources as "renewable energy." Rather, they are referred to as "clean energy." CEL purchases "clean energy" from facilities generating power through solar, hydro, wind, and methane, and owns the hydro facility in Chicopee Falls. In 2015, 20% of CELs energy use came from "clean energy" sources. In 2017, the percent of "clean energy" grew to comprise 27.4%, of which 54% came from "clean energy" generated in Chicopee from its five (5) solar projects, Chicopee Hydro, and methane from a former landfill.
- Energy Use Reduction
  - CEL has updated all street and traffic lights with LED units, replacing outdated and inefficient lights. However, many "walk" signals remain outdated and inefficient.
  - City Hall and the City Hall Annex are currently under renovation and will have much more energy efficient heating and cooling systems, lighting, and windows. This is estimated to result in a reduction in annual natural gas consumption of 17,352 therms, or the equivalent of \$6,100 per year.
  - Annual municipal energy use has already dropped over 20% since 2015, as reported by the City below (Table XIII.1). Totals do not reflect weather normalization.

	Baseline MMBTU	2018 MMBTU	% Change
Buildings	127,000	100,386	-21.0%
Open Space	1,047	421	-59.8%
Street & Traffic Lights	13,911	6,294	-54.8%
Vehicles	31,689	22,659	-28.5%
Water/Sewer	18,286	13,627	-25.5%
Other	5,781	16,747	+189.7%
Total	197,714	160,134	-19.0%

#### Table XIII.1. Annual Municipal Energy Use

Source: City of Chicopee 2018 Green Communities Report

- Fuel Efficient Vehicle Policies
  - Four vehicles now have idle-reduction technology and three street sweepers now have anti-idling mechanisms.
  - The City installed two duel electric vehicle charging stations with a 4-car capacity at the RiverMills Senior Center.
  - The ten new "non-exempt" vehicles purchased by the City have a combined miles per gallon rating of 22.4.
- Stretch Code Compliance
  - The City has met no resistance from the development community in complying with the energy stretch code.

### **Municipal Energy Audit**

To begin reducing energy consumption it is essential to understand how much energy Chicopee currently uses. In 2014, the City contracted with Siemens Industry, Inc. to conduct an energy audit of municipal buildings to determine the energy consumption of its operations and assess opportunities to increase efficiency measures. In total, 49 buildings were audited, including schools, fire and police, water and flood control facilities, parks and recreation, libraries, golf course facilities, and other municipal buildings

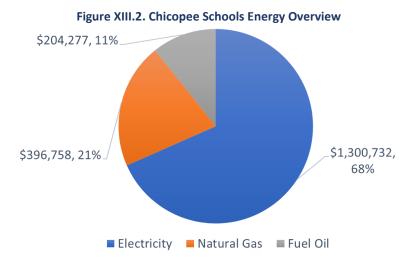
#### **Energy Utilization Index (EUI)**

A more useful metric is the Energy Utilization Index (EUI), used to rate buildings on their efficiency. The unit for this metric is kBTU/ft<sup>2</sup> (1,000 British Thermal Units per square foot), which converts all electric energy, natural gas energy, and fuel oil energy into a common unit of energy. By converting all energy into a single unit, the City can compare how much energy is used per square foot of similar facilities. The average EUI for all school buildings in 55.

such as City Hall. Siemens identified an estimated annual energy savings of \$620,000, not including any potential operational and maintenance savings. This amounted to about 25% of existing utility costs.

#### Schools

At the time of the audit, the City of Chicopee was spending just over \$1.9 million each fiscal year on electricity and heating fuels for the School Department. Having this baseline is important so that the City can track improvements over time.

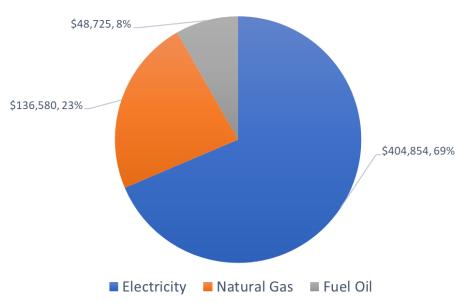


#### Table XIII.2. EUI by School Type

	Elementary Schools	Middle Schools	High Schools
EUI	63	44	58
Source: Siemens Industry. Energy Audit, 2014.			

#### Municipal Buildings

At the time of the audit, the City of Chicopee was spending approximately \$590,000 each fiscal year on electricity and heating fuels for other municipal buildings. The Siemens report did not calculate EUI for non-school municipal buildings.



#### Figure XIII.3. Chicopee Municipal Energy Overview

#### Next Steps

The audit includes an inventory of all energy related systems in each of the 49 buildings, which should be a useful point of reference for the City moving forward. Siemens recommended the following types of energy saving upgrades:

All Facilities

All Schools

Table XIII.3. Facility Improvement Measures		
Type of Measure	Buildings Affected	
Lighting Retrofit and Lighting Controls	All Facilities	
Boiler Replacements	TBD	
Premium Efficiency Water Pump Motors	All Facilities	
Variable Frequency Drivers	All Facilities	
Pipe Insulation	TBD	
Thermostatic Radiator Control Valves	City Hall	
Energy Management System Optimization	All Facilities	

#### Table XIII.3. Facility Improvement Measures

Photovoltaic (PV) Solar System Installation

Building Envelope Improvements

Type of Measure	Buildings Affected
Rainwater Harvesting	All Facilities
Solar Thermal System	Chicopee High School
Solar Thermal System Pool Heating	Chicopee and Chicopee Comp High Schools
Solar Thermal System Natatorium	Chicopee and Chicopee Comp High Schools
Dehumidification	
Biological Wastewater Treatment Process	Water Pollution Control Plant
100% Liquid Oxygen Biological Wastewater	Water Pollution Control Plant
Treatment Process	

Source: Siemens Industry. Energy Audit, 2014.

Siemens recommended a follow up "Investment Grade Audit" that would allow the City to enter a contract with Siemens to cover the expenses for many of these energy savings measures based on projected long-term savings. While the City has chosen not to enter into such a contract with Siemens, it could choose to contract with another Energy Services Company (ESCO) or start tackling these measures through the City budget and other funding sources such as loans and grants.

Implementing the recommended energy use reduction measures would not only represent long-term financial savings for the City but would have a positive impact on the environment. Siemens estimates that annual reductions would be the equivalent of . . .



10.5 Acres of forest preserved from deforestation



7.8 Railcars of coal not consumed



274.8 Cars off the road for a year

# Promoting

### Energy Efficiency in Chicopee

Chicopee faces some challenges to increase efficiency in privately owned buildings. There are challenges around successful adoption of energy efficiency measures that need to be considered. While hard data is lacking, several conditions in Chicopee would suggest the following assumptions:

- There is a limited supply of large blocks of open space that could be used for renewable energy projects.
- There is predominantly older housing stock that was not built to today's standards of efficiency.
- Many residential buildings are renter occupied which makes it difficult to coordinate and convince building owners to do upgrades such as installing solar panels or retrofitting buildings for increased efficiency.

# Public Resources

Massachusetts offers a number of programs designed to support energy efficiency and renewable energy upgrades to buildings. From single-family homes, to commercial and industrial structures, to municipally owned buildings, programs are available to aid in financing and provide support. Energy efficiency upgrades can come at a wide variety of costs. Some efforts, like replacing light bulbs with new higher efficiency models, come at a nominal cost. However, when a property owner faces higher cost improvements such as upgrades to heating and cooling systems, or the installation of renewable energy systems, the cost of those improvements can at times become prohibitive. The programs discussed below each provide opportunities to assist property owners in securing the knowledge and funding necessary to lower their energy costs and reduce environmental impacts.

### Public Resources for Energy Efficiency & Renewable Energy

#### Local Resources

Locally, Chicopee Electric Light (CEL) offers incentives to customers looking to make their homes or buildings more energy efficient. CEL's Home Energy Loss Prevention Services (HELPS) program offers customers energy education, home energy audits, assistance with home energy improvements, and ENERGY STAR appliance rebates. The number of homes served per year by the HELPS program can vary widely depending on factors like the economy, weather, and even media alerts about energy use. Homes served directly by receiving rebates on projects/appliances, and free energy audits, typically number 250-450 per year. According to CEL, since 2015, the HELPS program has saved a total of 607 MW of power – an average of over 120 MW each year.

In terms of renewable energy, CEL's Go Solar Program is a participant in the Massachusetts Municipal Light Plant Solar Program. Through this program, CEL and the Massachusetts Department of Energy Resources (DOER) offer rebates to support the installation of residential solar generation. According to CEL, since 2015, the Go Solar program has saved a total of 6,910 MW of power – an impressive average of 1,382 MW each year! More information can be found at <u>https://www.celd.com/go-solar.</u>

#### Massachusetts Resources

Massachusetts has at least 30 different energy efficiency and renewable energy financial incentives potentially available to the City of Chicopee and/or local property owners and businesses. These incentives include loans, rebates, and grants, as well as tax credits, incentives, exemptions, and deductions.

Commonwealth agencies with information regarding these resources and more include:

- Massachusetts Department of Energy Resources (DOER):
   <a href="https://www.mass.gov/orgs/massachusetts-department-of-energy-resources">https://www.mass.gov/orgs/massachusetts-department-of-energy-resources</a>
- Massachusetts Clean Energy Center (MassCec): <u>https://www.masscec.com/about-masscec</u>

Massachusetts offers some of the best energy rebates and incentives in the country. DOER has compiled a clearinghouse of these rebates and incentives called the Commonwealth Energy Tool for Savings (energyCENTS). This tool provides a single-entry point to all the energy saving opportunities available to Massachusetts residents, businesses, and institutions, including rebates, loans and financing for electric vehicles, appliances, home energy assessments, solar electricity, and much more. Just answer some

basic questions about your home or your business, and a list of everything you may be eligible for will be filtered for you: <u>http://public.dep.state.ma.us/Doer/mesa/#/home.</u>

# **Electric Charging Stations**

The number of plug-in electric cars on American roads grows every year, and with them comes the need for more places to charge them.

## Types of Charging

In order to plan for electric vehicles, it is important to understand the difference between the three types of charging currently common in the United States.

**Level 1 (120-volt):** A conventional three-prong plug that goes into any properly grounded wall socket, with a connector for the car's charging port on the other end and a box of electronic circuitry between them. This is the slowest type of charging, although for plug-in hybrids with smaller battery packs, it may be enough to recharge in a few hours to overnight.

**Level 2 (240-volt):** Most dedicated home and public charging stations operate at 240 Volts, with their cables again connecting to the standard charging port on a car. Generally, owners of battery-electric cars will require a Level 2 home charging station to provide overnight recharges.

**DC Fast Charging:** DC fast charging uses direct current (DC) and is very high-powered. It is only practical at dedicated public sites, given the higher cost for a utility to install dedicated high-power lines. There are three different kinds of DC quick charging:

- CHAdeMO: Used by many Japanese and Korean car makers.
- **CCS (Combined Charging Standard)**: All U.S. makers, except Tesla, and all German makers use this standard.
- **Tesla Supercharger**: Tesla has gone its own way and created a dedicated network of fastcharging stations that can only be used by Tesla owners.

## Where to Charge in Chicopee

For owners of electric and plug-in hybrid vehicles in Chicopee, the following are the charging options available today.

**Home**: Across the country, most recharging is done at home and overnight. This is when electricity is usually cheapest. Many battery-electric car owners will install a charging station in their garage or carport. For plug-in hybrids, many owners just stick with the 120-volt charging cords described above.

**Work**: Charging at work is growing in popularity. It's a good way for corporations to cut their carbon footprint, it's not that expensive to install, and it's a nice employee perk--whether or not the company or landlord charges a fee for it.

**Public Sites**: Finally, there are thousands of public charging stations throughout the U.S. and Canada, and the number grows each week. Virtually all public sites offer Level 2 charging, with a few providing DC fast-charging as well - increasingly with both CHAdeMO and CCS cables. Some public charging is free, while other sites impose a fee, using several different networks that generally require membership up front.

According to the website PlugShare (<u>www.plugshare.com</u>) there are currently four charging stations within the City that are open to the public, with at least one other (at the Rumbleseat Bar) the City is aware of.

- RiverMills Senior Center at 5 West Main Street 2 7kW J-1772 plugs
- Residence Inn by Marriott at 500 Memorial Drive 2 8kW Tesla plugs
- Chicopee Marketplace at 591 Memorial Drive 4 150-350kW CCS/SAE plugs and 1 50kW CHAdeMO plug
- Curry Nissan at 765 Memorial Drive 1 7kW J-1772 plug and 1 50kW CHAdeMO plug
- Rumbleseat Bar at 482 Springfield Street 1 8kW Tesla plug

The following communities also have charging stations that Chicopee residents could take advantage of West Springfield (12 stations), Springfield (7 stations), Holyoke and Westfield (5 stations), and Wilbraham and Palmer (2 stations).

# XIV. Public Health & Social Services

# Why Public Health & Social Services Matter

Many of the early milestones in community planning (e.g. zoning regulations and infrastructure design) were a direct response to public health concerns. Today, we are experiencing a return to 'place-making' in the traditional sense, with an emphasis on public health in an attempt to improve our personal health, wellness and overall quality of life.

'Health' can mean many things to different people. Although genetics and healthcare can influence an individual's health, it is the social, economic, behavioral and physical factors that determine the majority of one's overall health. Recognizing these factors as 'determinants of health', and understanding the policies, institutions and systems that drive them has led to municipalities expanding their health and social services offerings to better support residents.

The connection between healthy communities and healthy people is the key to improving one's health, well-being, and overall quality of life. Environmental health is a key component of any comprehensive public health system. Environmental factors have the greatest impact on people whose health status is already at risk, including: exposure to hazardous substances in the air (poor ambient air quality), water, soil and food; natural and technological hazards; climate change;



Source: City of Chicopee

# Access to Quality Healthcare in Chicopee

The Baystate Medical Center's 2019 Community Health Needs Assessment provides a great deal of information on the current state of healthcare in Hampden County, including the City of Chicopee. All the information in this section is derived from that assessment. Unfortunately, Hampden County residents continue to experience barriers that make it difficult to access affordable, quality care as it relates to the social, economic, and health care systems in the community.

### Insurance/Health Care Related Challenges

Residents' ability to navigate what health insurance will cover and understand medical care systems were identified as barriers in Chicopee. Regardless of high rates of health insurance coverage (97% of Hampden County residents are covered by health insurance), residents identified high cost of copays, deductibles, tests, and medications as primary barriers. In addition, understanding what is/is not covered and constant changes in coverage were also cited as barriers.

#### Limited Availability of Providers

Hampden County residents identified challenges accessing health care due to a shortage of providers. Many reported using 'Minute Clinics' because providers were not accepting new patients or they could not get an appointment with their provider. Access to psychiatrists, dental providers, mental health and addiction services were also identified as in shortage. Hampden County has 1,400 people for every primary care physician, as compared to a ratio of 960:1 for the state.

Chicopee is home to a number of nursing/retirement homes, rehabilitation centers, assisted living facilities, urgent care centers and home health care providers, further identified below.

Free/Income-Based Health Clinics

- Chicopee Health Center (505 Front St.)
- MedExpress Urgent Care (1505 Memorial Drive)

#### COVID-19 Pandemic

At the writing of this report, the world is dealing with the COVID-19 pandemic, a situation that poses a serious public health risk in Chicopee and across the globe. While it is too early to say what the impacts of this health crisis will be, it is important to note here that there will likely be many long-term effects not only on public health, but where we live and how we travel, socialize, and shop.

The risk posed by COVID-19 depends greatly on characteristics of the virus, including how easily it spreads between people; the severity of resulting illness; and the medical or other measures currently available to control the impact of the virus (vaccines or medications) and their relative success. As there are not yet vaccines or treatments for COVID-19, nonpharmaceutical interventions are the most important response strategy, such as social distancing and good hand hygiene.

Different parts of the country are experiencing different levels of COVID-19 activity, with the United States still in the acceleration phase of the pandemic, particularly in rural America. The duration and severity of each phase can vary depending on the characteristics of the virus and the public health response at the time. The complete clinical picture of COVID-19 is not fully known. Reported illnesses have ranged from very mild (including some people with no reported symptoms) to severe, including illness resulting in death.

To date, infection rates have been lower in Chicopee and other parts of western Massachusetts compared with greater Boston and other hot spots. Home Health Care Agencies

- Porchlight VNA/Home Care (2024 Westover Road
- Medical Resources Home Health (450 Memorial Drive)

Nursing/Rehabilitation/Retirement Centers

- Chicopee Rehabilitation/Nursing Center (44 New Lombard Road)
- The Arbors Assisted Living in Chicopee (929 Memorial Drive)
- Willimansett Center West (546 Chicopee Street)
- St. Hyacinth Senior Friars (110 Cyman Drive)
- River Mills Assisted Living at Chicopee Falls (7 RiverMills Drive)

#### Need for Culturally Sensitive Care

Both public health leaders and resident stakeholders cited the need for increased training, experience and sensitivity for health care and social service providers to a variety of different cultures including race and ethnicity, mental health and substance use disorders, senior citizens, transgender patients, exoffenders, the homeless, and disabled adults and children.

#### Lack of Transportation

Limited access to transportation was cited as a barrier to medical care and treatment, other appointments, obtaining medication, work and work-related activities.

#### Lack of Care Coordination

Improved care coordination continues as a need in the community, including coordinated care between providers managing co-morbid substance use and mental health disorders, better communication when a person is released from a facility/institution, and hospitals to coordinate with local community health centers when hospitalization is required.

### Health Literacy/Language Barriers

Navigating the health care system, including understanding health information, types of services and how to access them, and how to advocate for oneself were all identified as needs (more bilingual providers, translators and translation of health-related materials/information).

# Overall Health of Chicopee Residents

#### Chronic Health Conditions

Chronic health conditions (ones that persist for a long period of time) continue to be a prioritized health need for Chicopee residents, with high rates of chronic health conditions and associated morbidity, including obesity, diabetes, cardiovascular disease and asthma.

#### Obesity

Obesity continues as a national epidemic affecting chronic illnesses such as cancer, heart disease, and diabetes, but also mental health and wellness. Obesity rates among children remain high across

Hampden County, with rates observed at 23% in Chicopee.<sup>33</sup> While obesity rates for adults in Chicopee are not available, the rate for Hampden County is 29% vs. 24% for Massachusetts overall.

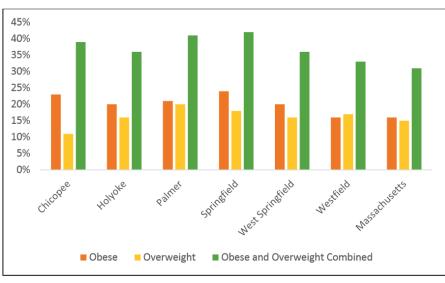
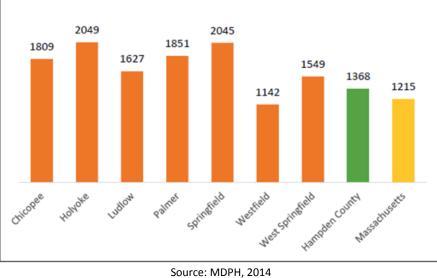


Figure XIV.1: Percentage of Childhood Obesity and Overweight in Select Communities

#### Cardiovascular Disease

Includes coronary heart disease, chest pain (angina), heart attack (myocardial infarction), and stroke. Cardiovascular disease is the number one cause of death in Hampden County, along with cancer. Cardiovascular disease hospitalization rates for Chicopee (1,809) were higher than both Hampden County (1,368) and Massachusetts (1,215) in 2014 (Figure XIV.2).



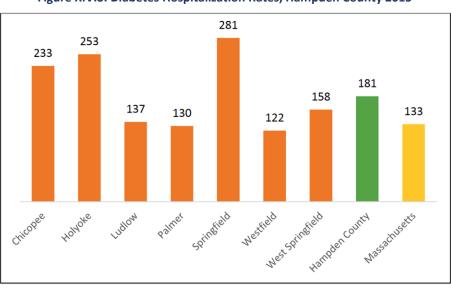


<sup>&</sup>lt;sup>33</sup> Community Health Needs Assessment 2019, Bay State Medical Center, page 60.

Source: MDPH, 2017

#### Diabetes

One of the leading causes of death and disability across the U.S., diabetes is also a strong risk factor for cardiovascular disease. Diabetes hospitalization rates in Chicopee (233) were double or nearly double the statewide rate (133) (Figure XIV.3). Rates among Latinos and African Americans (vulnerable populations) were particularly high in Chicopee with rates six times higher than the statewide rate, as well as four times higher than Caucasians in Chicopee.<sup>34</sup>





#### Mental Health and Substance Use

Mental health and substance use were ranked among the top three urgent health needs across Hampden County, including the need for:

- Increased education across all sectors to reduce the stigma associated with mental health and substance use
- Increased access to treatment, and the need for long term care
- Increased integration between the treatment of mental health and substance use disorders
- The impact of mental health conditions and substance use of families
- Increased training for physicians to address mental health and substance use concerns in the primary care setting<sup>35</sup>

#### Mental Health

As an indicator of health overall, mental health issues also contribute to physical health and well-being, often surfacing as depression (the most common type of mental illness) and co-occurring with substance use disorders. Hospitalization rates for mental health disorders were almost double that in Hampden

Source: MDPH, 2015

<sup>&</sup>lt;sup>34</sup> Ibid, page 63.

<sup>&</sup>lt;sup>35</sup> Ibid, page 53.

County (1,550) in 2014 than the Commonwealth (854), with Chicopee (2,008) slightly higher than the Commonwealth average (Figure XIV.4).

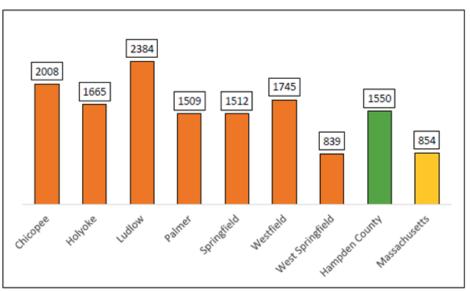


Figure XIV.4. Mental Health Disorder Hospitalization Rates, Hampden County 2014

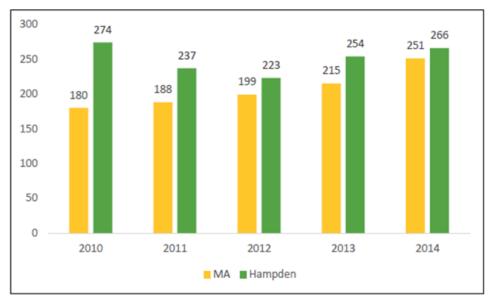
Source: MDPH, 2014. Age-adjusted per 100,000

### Substance Use/Disorder

High rates of substance use such as tobacco, alcohol, and drugs also continue to be a prioritized health need for the community. Approximately 18% of Hampden County residents smoke tobacco, higher than the Commonwealth average (14%)<sup>36</sup>. However, the 2019 Tobacco Control Law signed by Governor Baker made Massachusetts the first state to permanently ban retail use of all flavored tobacco (including flavored chewing tobacco and snuff), including menthol cigarettes (sales to cease on June 1, 2020) and vape products.

Substance use disorders stem from the recurrent use of drugs and/or alcohol that surface as health and social problems. Genetics, age at first exposure, and a history of trauma are risk factors for substance use disorders. Substance use emergency room visits rose from a rate in 2012 of 223 per 100,000 to 266 in 2014 (similar to the rate in Massachusetts overall: 251) (Figure XIV.5).

<sup>&</sup>lt;sup>36</sup> Ibid, page 55.





#### **Opioid Use/Disorder**

Opioid use disorder has quickly emerged as a public health crisis in the Commonwealth as well as across the country. In the U.S., from 2002 to 2013 there was an almost three-fold increase in opioid-related deaths. Overdose fatalities in Hampden County (12.7 fatalities per 100,000) were higher than compared to the Commonwealth (10.7 per 100,000). During this time, opioid overdose-related threats were mostly attributed to heroin, pharmaceutical opioids, and fentanyl use, in addition to the use of a combination of drugs including cocaine, methadone, antidepressants, antipsychotics, benzodiazepines, stimulants, and muscle relaxants<sup>37</sup>

Key informant interviews, substance use treatment specialists, and health care providers/administrators identified the need for the following:

- Increased institutional support to promote harm-reduction approaches, such as Narcan, to reduce morbidity and mortality that occur as a result of opioid overdose
- More education and awareness of substance use issues overall
- More collaboration among community agencies working on substance use prevention and education efforts<sup>38</sup>

In addition, the same individuals identified the need for the following:

Source: MDPH, 2010-2014

<sup>&</sup>lt;sup>37</sup> Hampshire Hope, March 7, 2016. Presentation data cited from Office of the Northwestern District Attorney, Massachusetts State Police, 2015.

<sup>&</sup>lt;sup>38</sup> Ibid, page 35.

- More access to long-term medication-assisted treatment (MAT) programming
- Continued focus on therapeutic, in addition to pharmaceutical, treatment of substance use disorders
- More provider and patient education to reduce the stigma to ensure individuals and families get the care and support they need
- More integration between the treatment of mental health and substance use disorders
- Consideration of the impact of substance use on families
- More support and prevention education for youth, particularly those with histories of trauma<sup>39</sup>

# Environmental Exposure

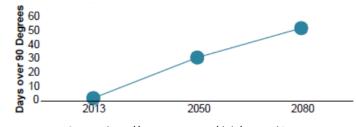
The Massachusetts Department of Public Health Environmental Public Health Tracking program has assembled profiles to provide a snapshot of environmental health for all Massachusetts communities. Profiles can be used to gather data, guide public health actions, identify high-risk groups, shape policy decisions, or simply inform the curious. The word 'environment' produces images of the outdoors, yet, in the field of environmental public health, it also includes the built spaces such as our homes, neighborhoods, schools and workplaces – all of which contribute to our health.

### **Climate Change**

Massachusetts is already experiencing the effects of climate change, from hotter summers to rising sea levels. These effects will have consequences for the health of many people across Massachusetts. With evidence suggesting that effects of climate change will be most directly felt at the local level, the Commonwealth is working with local health partners to prepare for the health threats and challenges posed by a changing climate in their community.

**One predicted impact of climate change is an increase in the number of days over 90 degrees.** More days of extreme heat increase the number of residents at risk for experiencing heat stress, which may include fatigue, cramps, dehydration and heat stroke or even death. Extreme heat can also be a burden on energy systems, leading to loss of power for air conditioning and medical facilities. Over the next century, climate models project that Chicopee may experience at least two to three times more days





Source: http://www.mass.gov/dph/matracking

<sup>&</sup>lt;sup>39</sup> Ibid, page 36.

Studies of the health impacts during extreme heat events found that older adults, especially those living alone, are most vulnerable. 5.1 % of Chicopee's population are age 65 and over, and living alone in the community, Figure XIV.7 below.

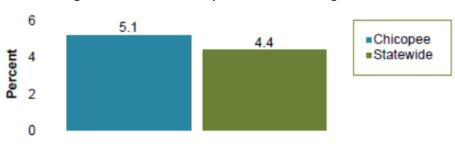


Figure XIV.7. Percent of Population Over 65 living Alone

#### Source: http://www.mass.gov/dph/matracking

#### Air Quality

The air we breathe and the water we drink can sometimes be impacted by pollutants, which may come from historical sources, accidental releases, manufacturing processes, or even regular activities like driving a car. Commonwealth and federal government agencies are responsible for setting standards and guidelines for environmental pollutants, ensuring that monitoring of those pollutants takes place, and taking action if there is a violation. The degree to which a person in Chicopee might be impacted by an environmental hazard is highly variable and depends on many factors. Age and individual health status might play a role, as well as the length of time of exposure to the hazard and the amount of the hazard present.

Exposure to air pollution can contribute to heart or lung illnesses, particularly for people at-risk because of preexisting heart or lung disease. Air pollution can aggravate asthma or other respiratory ailments (a very significant health issue in Chicopee – see below), or trigger heart attacks. The U.S. Environmental Protection Agency establishes limits on air pollution levels to protect public health, including the health of at-risk populations. These limits, called National Ambient Air Quality Standards (NAAQS), apply to widespread pollutants including ozone<sup>40</sup> and fine particles.<sup>41</sup> Currently, the air quality measures are available for counties with monitoring stations, which are maintained by the Massachusetts Department of Environmental Protection. Shown in Figure XIV.8**Error! Reference source not found.**, EPHT reports that over a four-year period (2013 to 2017), Hampden County experienced 17 days where the ozone exceeded NAAQS standards, most occurring in 2016.

<sup>&</sup>lt;sup>40</sup> Ozone is a colorless gas. This measure reflects the number of days in a year that ozone concentrations exceeded the NAAQS over an 8-hour period.

<sup>&</sup>lt;sup>41</sup> Fine particulate matter or PM2.5 refers to a mixture of extremely small airborne particles. PM2.5 is displayed here as the percent of monitored days when concentrations were above the NAAQS over a 24-hour period.

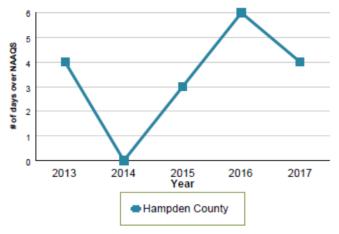
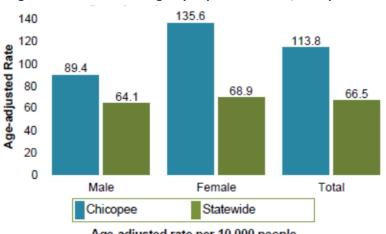


Figure XIV.8. Number of Days 8-Hour Ozone Level Exceeded NAAQS, Hampden County

Source: http://www.mass.gov/dph/matracking

#### Asthma

Asthma attacks can be triggered by environmental pollutants and asthmagens like cigarette smoke and is exacerbated by extreme heat and the COVID-19 virus. The Springfield Metropolitan District was identified as the most challenging place to live with asthma in the U.S., according to the Asthma and Allergy Foundation's 2018 Asthma Capital Rankings, based on prevalence of asthma, emergency department visits, mortality, and presence of risk factors.<sup>42</sup> This illness is more common in children than adults and is increasing in prevalence. Asthma hospitalization is tracked for people of all ages who visit the emergency department of a hospital for an asthma-related reason. Hospitalization data are presented in age-adjusted rates per 10,000 people. The EPHT reports that the age-adjusted rate of asthma emergency visits for Chicopee in 2012 was 113.8 per 10,000, compared to 66.5 across the Commonwealth (Figure XIV.9).





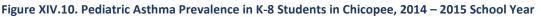
Age-adjusted rate per 10,000 people

Source: http://www.mass.gov/dph/matracking

<sup>&</sup>lt;sup>42</sup> Community Health Needs Assessment 2019, Bay State Medical Center, page 64.

Asthma prevalence in Massachusetts is also tracked among children from the time they enter kindergarten (K) through the 8th grade. Prevalence is expressed as a percentage of all children enrolled in these grades. In Chicopee, for the 2014-2015 school year, the rate was 17.9% for K-8 students, compared to 12.1% across the Commonwealth (Figure XIV.10). This is an increase from the 2009 – 2010 school year, when the Chicopee rate was 15.6%.







Source: http://www.mass.gov/dph/matracking

# Chicopee Municipal Services

Today, residents depend on their community to provide a broader range of social services and programming, particularly for the elderly, disabled, and low/moderate income residents. The number and type of community services and facilities offered can facilitate a range of opportunities available to residents which can directly impact their health, well-being, and overall quality of life.

#### Chicopee Health Department

The Chicopee Health Department oversees a variety of public health programs and activities that enhance the wellbeing of residents. The Department assesses the health status of the community and develops policies and plans to meet identified public health needs. Its responsibility includes assuring compliance with Public Health Laws and the Health Codes of Chicopee and the Commonwealth of Massachusetts. The Department collaborates with community partners to:

- Educate the community to prevent or mitigate chronic diseases, injuries, and disabilities
- Protect against environmental hazards that threaten the health and safety of Chicopee residents
- Promote the health and development of infants and children
- Prepare for a public health emergency

The Department also services the City by responding to food-borne illness complaints, testing for tuberculosis and childhood lead poisoning, and providing safe sharps disposal.

The Health Department is seeing an increase in homelessness, mental health issues, and opioid addiction. Looking ahead, the Health Department hopes to increase partnerships, staffing (including a Social Worker), and training on mental health, opioid, and homelessness issues to better serve the City.

### Programs

In general, the Health Department has been shifting its focus away from alcohol abuse and more toward opioid abuse, homelessness, and "vaping" (particularly among teenagers). Chicopee has been partnering with Springfield and Northampton on strategies for combatting opioid abuse and has partnered with the Chicopee Boys & Girls Club on similar efforts.

One of the Department's most ambitious public health programs is the Alcohol & Drug Awareness Prevention Team (ADAPT). Established in 2016, ADAPT is a comprehensive program for drug abuse education and prevention, aimed at stemming problems with drugs and alcohol in the community before they start. Through extensive engagement with the public, the Department decided that ADAPT's primary focus would be outreach to school aged children, including speaking programs at schools, health fairs, and other curricula. The ADAPT framework is a way to get information out into the community on any number of issues, as topics of concern change and evolve.

ADAPT also coordinates with Chicopee's two public high schools on Project Purple, a national antisubstance abuse initiative of the Herren Project, a nonprofit foundation dedicated to helping those struggling with substance abuse and addiction.

The Chicopee Health Department has experienced a significant increase in opioid abuse, homelessness and mental health issues. Several community needs were identified, including:

- More training for staff around critical topics
- More partnerships with other communities/agencies working on similar issues (the City is partnering with Tapestry Health outreach program, conducting needle exchange, outreach to the homeless, and HIV testing)
- More staff are needed to cover the wide range of topics (a social worker and part-time staff would be welcomed)
- More opioid data is needed
- Assistance is needed bringing vacant homes up to code

## Chicopee Board of Health

The Chicopee Board of Health is a three-member committee appointed by the Chicopee City Council. Responsibilities include developing, implementing, and enforcing health policies regarding disease prevention and control, health and environmental protection, and the promotion of a healthy community.

Services include access to resources (<u>https://www.chicopeema.gov/quicklinks.aspx?CID=46</u>):

- Centers for Disease Control and Prevention
- Food and Drug Administration (1999 Food Code)
- Food and Drug Administration Recalls and Safety Alerts
- Make Smoking History
- State Sanitary Code Chapter X Minimum Standards for Food Establishments

### Chicopee Veteran's Services

The Chicopee Veteran's Department is responsible for the following services to Veteran's and their surviving family members:

- Veteran's Administration
  - Pension and compensation claims
  - Survivor's benefit claims
  - Healthcare applications
  - Death benefit claims
  - Chapter 115 benefits (Massachusetts program that provides financial aid for food, shelter/housing, clothing, and medical care to veterans and their dependents who have limited incomes)
- Commonwealth of Massachusetts website/resources
  - State Historical Records Advisory Board (SHRAB) coordination/preservation of 40
     Veteran's monuments (structures, monuments and parks), and creation of a new post-9/11 memorial park for Western MA.
- Veteran's records, or to request a copy of Discharge or DD214
  - Access to military records
- Blue Star Families
- Official website of the Treasurer and Receiver General of MA
- Corporation for National and Community Service
  - o Utilizes nonprofits and Eagle Scout projects for critical research

A Special Projects staff person would enable the Department to focus on additional programming/ services outside of their daily responsibilities, including updating the Veteran's database. The City's current database includes approximately 3,300 Veterans, however, the most recent Census reports just over 5,500. The Department has no way of closing the gap on the missing 2,200 Veterans, unless they (or their families) come forward which typically occurs at time of burial. There are approximately 8,000 Veterans buried in 11 cemeteries across the City, with no method to monitor newly laid-to-rest Veterans, or to accurately locate these sites for observance dates (70% accuracy currently). The Department is working with the City's GIS Specialist to develop a GIS mapping system/inventory for flagging and recording purposes.

#### **Senior Services**

#### Council on Aging

The City of Chicopee established the Council on Aging (COA) in 1958 to serve aging residents. Today, the board consists of 15 members who work on behalf of Chicopee residents 55 years or older to identify their needs, inform the community and City officials, and work to fill those needs. COA also monitors Commonwealth and federal legislation for funding, programming, and information to improve programming for older residents.

The duties of the Council on Aging are to:

- Identify the needs of older adults 55 years or older and their younger spouses residing in the City
- Educate the community and City officials
- Enlist the support and participation of all citizens concerning those needs
- Design, promote, and implement services to fill those needs

#### **RiverMills Senior Center**

The RiverMills Senior Center provides services to residents 60 years or older, their spouses, and those providing care to older persons. Services include a wellness health center, which allows older residents to have access to free health checks, activities, and one-on-one consultations. The Center also provides transportation services, which is made possible by 15 volunteer drivers giving about 11,000 rides per year. Also available are community services, recreation, and lifelong learning programs and opportunities.

The Senior Center is committed to assisting and improving the quality of life for Chicopee's older adults in the following areas:

Community service	Good health maintenance	Lifelong learning
Mobility	Recreation	Related informational services

#### Services

The Council also coordinates existing services in the City and promotes and supports other programs which are designed to assist older adults in the community. The Council identifies funding sources, applies for appropriate grants, and administers grant-funded programs. The Senior Center is open Monday – Friday (closed weekends) during business hours, and open late Tuesdays only.

Services include:

- Arthritis Foundation Exercise Program
- **Brain Fitness**
- Dance Instruction
- Health Programs and Screenings
- Mah Jongg
- Monthly Birthday Party
- **Recreational Activities**
- Shuffleboard
- Sudoku and more -Brain Gym
- Travel Club
- Walking Club

Support Groups include:

- Alzheimer's Caregivers Support Group
- Grandparents as Parents
- Veteran's Benefits Counseling
- - support)

- **Book Club** •
- **Computer Instruction** •
- Gift Shop ٠
- Library services •
- Medical Equipment Loan • Program
- Pool table, puzzles, and card games
- SHINE (Health Insurance Assistance) provided by WestMass ElderCare, Inc.
- Speakers on a variety of topics
- **Transportation Services**
- Volunteer Opportunities ٠
- Writing Group
  - Cancer Support Group
  - Memory Café of • Chicopee

Although the RiverMills Senior Center is just under five years old, programs and services are already at capacity. The Council identified the following future needs:

- Facility is at capacity (400 seniors) currently
- Senior Lunch Program/Meals on Wheels are at capacity currently
- Transportation services are at capacity currently
- Future needs (based on full capacity currently) are a concern •

Demand for services is likely to increase as Chicopee's senior population increases, and there will likely be a need to expand hours and services provided.

### Age & Dementia Friendly Communities Initiative: Chicopee, Holyoke & South Hadley

This project was designed to help participating communities plan to meet the needs of their aging populations through collaboration and economies of scale, dependent upon individual capacity and requirements of funding sources.

- Bright Spot Therapy Dogs, Inc
- Living Again (Bereavement
- Veteran's Voice

Exercise Groups Hot lunches - 5 days a

Bingo

cards

•

Classes in beading,

Fitness Center and

painting, drawing, and

- week Massage
- Ping Pong •
  - S.A.L.T. Council
- Social and Cultural Events •
- Tax Preparation Assistance
- Veterans Programs

# Wellness Health Center

The initiative utilized 'eight domains of livability' developed by the World Health Organization (WHO) to assess participating communities' ability to support an aging population, which includes elements of the physical and social environments that are key to whether people can remain healthy, independent, and autonomous as they age.

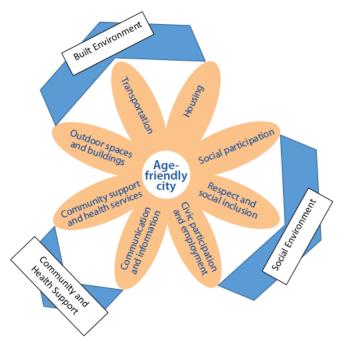


Figure XIV.11: 8 Domains of Livability

Source: World Health Organization

As populations age, communities face increasing numbers of people diagnosed with Alzheimer's or other forms of dementia. It is important that communities understand how to recognize symptoms and work with people who have dementia, enabling them to remain in the community and engage and thrive. Chicopee is committed to assisting the following sectors be dementia informed in order to create a dementia friendly community:<sup>43</sup>

- 1. **Transportation, Housing and Public Spaces (local government)** Infrastructure that makes communities more livable for people with dementia and their caregivers
- 2. **Businesses** Dementia supportive customer service, environments and polices that support employee caregivers
- 3. Legal and Advance Planning Services Legal services that help vulnerable clients express their wishes early and avoid problems such as unpaid expenses
- 4. **Banks and Financial services** Dementia friendly practices that help maintain clients' independence while protecting them from problems
- 5. **Neighbors and Community Members** Raising awareness to help neighbors and community members understand and support people living with dementia

<sup>43</sup> https://www.dfamerica.org/what-is-dfa

- 6. **Independent Living** Home-based services available to maximize independence and promote autonomy and a high quality of life
- 7. **Communities of Faith** Faith communities use dementia friendly practices to provide a welcoming, compassionate environment and spiritual connection
- Care throughout the Continuum Early diagnosis of dementia and ongoing medical care; patient education; and connecting patients and their caregivers with community resources that promote quality of life
- 9. **Memory Loss Supports and Services** A spectrum of settings and services needed by people with dementia from long-term care facilities and assisted and independent living residences, to home care, adult day services, and hospice care.
- 10. Emergency Planning and First Response Community planning and family preparation considers safety, security, and needs of people with dementia in disaster planning and emergency response.

The eight domains of an Age Friendly Community intersect with the ten Dementia Friendly Sectors. It is important for communities to plan for people with dementia while preparing for more livable communities, as data indicates that the numbers of people with dementia will continue to rise as the population ages.<sup>44</sup>

One of the most productive ways that the three communities in the Age Friendly Communities Initiative can collaborate is in the sharing of information and services. Services such as translation, home health care, transportation, and educational or social programs may not be provided in every community. Partnering with neighbors will allow Chicopee to provide an even broader range of services more economically and efficiently.

Other recommended actions specific to Chicopee include, but are not limited to: adopting a Complete Streets policy; setting up training for emergency response, senior care workers, municipal employees, etc. on the unique needs of older adults; updating the City website regularly and design for accessibility, including visual or physical impairments and multiple languages; identify and reach out to socially isolated individuals; develop cooperative programs between public and private service providers;

# Chicopee Social Services

### Senior Companion Program

The Senior Companion Program through Valley Opportunity Council (VOC) matches frail Chicopee elders with older adult volunteers who keep the elderly company, assist with medical appointments or errands, or provide respite to a family member.

 <sup>&</sup>lt;sup>44</sup> Age & Dementia Friendly Communities Initiative: Chicopee, Holyoke & South Hadley, Draft Final Report Part A,
 9/6/19

#### S.H.I.N.E. Program (Serving the Health Insurance Needs of Elders)

S.H.I.N.E. Counselors are available to answer questions about Medicare and other health insurance issues Mondays, Wednesdays, and Fridays. Appointments are required and can be made in person at RiverMills or by calling the office.

#### Low Income Home Energy Assistance Program

Fuel Assistance (also known as the Low-Income Home Energy Assistance Program) helps eligible households challenged by the high cost of home heating fuel pay a portion of their winter heating bills. This program provides assistance through a fixed benefit amount for the cost of the primary source of heat, which includes, but is not limited to:

• Oil

KeroseneWood

Coal

- Electricity
- Natural Gas
- Propane

# Heating Emergency Assistance Retrofit Task Weatherization Assistance Program (HEARTWAP)

Heating System Repair (also known as the Heating Emergency Assistance Retrofit Task Weatherization Assistance Program, or HEARTWAP) provides heating system repair and replacement services to eligible low-income households.

Throughout the heating season, the program primarily helps eligible homeowners pay to repair or replace defective or unsafe heating systems on an emergency basis. If sufficient funds are available after the heating season, HEARTWAP will perform maintenance work (clean and tune) and replace heating systems that are in poor condition and beyond repair. Information can be obtained by calling the office or visiting: <u>https://www.valleyopp.com/energy-assistance/fuel-assistance</u>.

Funds are also available for asbestos abatement only as needed to enable heating system repairs or replacements to be safely completed. Some additional funds are available for chimney liners. There is a maximum amount of money that may be applied to any of these services; therefore, the program may not be able to cover the entire cost. The budget for these programs and the number of households able to be served fluctuate from year to year.

#### River Valley Counseling Center

The River Valley Counseling Center (RVCC) is a multifaceted community-based mental health agency that serves people throughout the Pioneer Valley. RVCC has a growing presence in Chicopee with a location in downtown as well as a counselor in each of the Chicopee schools.

RVCC offers therapy options for individuals, family, and group counseling. The agency is staffed with:

- Psychiatrists
- Advance Practice Registered Nurses
- Psychologists
- Nurse Practitioners

- Licensed Mental Health Clinicians
- HIV/AIDS Case Managers

- Licensed Clinical Social Workers
- Housing Advocates

In recent years, demand for services has increased, especially mental health and emotional support services. In three years, RVCC has doubled the size of its clinic, occupying two buildings in downtown Chicopee. The agency is focusing heavily on tacking mental health and emotional issues early on by working with students and young people throughout Chicopee.

### **Regional Resources**

#### Springfield Coalition for Opioid Overdose Prevention (SCOOP)

Led by the City of Springfield's Department of Health and Human Services, and serving the communities of Springfield, Chicopee, and Holyoke, East Longmeadow, SCOOP provides opioid abuse prevention education to youth, caretakers, and community members; with the goals of minimizing harmful consequences; increasing publicly available treatment sources; and educating, engaging and advocating for recovery support services.

#### Hampden County Addiction Task Force (HCAT)

The Hampden County Addiction Task Force (HCAT) is a collaboration of community resources, law enforcement (local and state), health care institutions, service providers, schools and community coalitions, and individuals and families whose goal is to focus on a county-wide approach to address drug addiction, overdose and prevention. Current objectives include:

- To develop a real-time overdose surveillance and analytic (ROSA) system that can provide weekly reports and/or formatted data to approved stakeholders in a secure platform.
- To study and assess the necessary treatment capacity needed county wide
- To develop standardize messaging for addiction and addiction related issues
- To provide a forum for law enforcement, health care institutions, service providers, schools and community coalitions to share best practices in prevention and education
- To leverage existing assets in seeking out new funding opportunities county wide for addiction prevention and treatment.

# XV. Public Services & Facilities

# Why Public Services & Facilities Matter

The City of Chicopee provides a broad range of services to protect the health, safety, and welfare of the community. The level at which these services are delivered is influenced by changes in population, development, environmental factors, and economic conditions. Evaluating service capacity in conjunction with an anticipated change in community needs can help the City determine strategic infrastructure and program investments in the near and long-term.



Dupont Middle School. Source: City of Chicopee

# Public Infrastructure

### **Department of Public Works**

The Chicopee Department of Public Works (DPW) is headquartered on Baskin Drive. It operates with several employees in the Director's Office who carry out the department's responsibilities along with the office and labor staff of the Department's various divisions. Within DPW, there are six divisions: Administrative, Engineering, Parks and Recreation, Public Services, Public Utilities, and Central Maintenance. DPW preserves, maintains, and improves the City's infrastructure, including:

- Cemeteries
- Parks
- Signs
- Storm drainsSewers
- TreesStreets
- Sidewalks
- Traffic signals

DPW oversees the City's curbside trash and recycling program. Residents can also use a drop center to dispose of construction debris and bulk items. Twice a year DPW holds a hazardous waste drop-off day for residents.

Some divisions and subdivisions of DPW play roles of particular interest to this plan, including:

#### **Engineering Department**

The Engineering Department is headquartered on Baskin Drive and oversees maintenance and construction of the City's infrastructure, including streets, common sewers, storm drains, sidewalks, bridges, culverts, and underground conduits. Engineering also makes all descriptions, estimates, levels, measurements, plans, profiles, and surveys of these structures.

#### Parks and Recreation Department

The Parks and Recreation Department is headquartered on Front Street. Its mission is "to promote a healthy lifestyle by promoting participation and utilization of recreation facilities for youth and adult residents in the community." For more on the role of the Parks and Recreation Department and an inventory of its resources in the City, see the Open Space & Recreation section.

The Department's current facility was last updated in the 1990s. While there is adequate space for staff, there is limited space for storage and programming. The existing facility is only adequate for a small indoor program. Otherwise, it relies on other facilities, such as schools and the Senior Center for space. The Department also has limited space for storage. In an interview, Department staff noted that supplies are stored wherever there is space at various facilities across the City. It would be more efficient and effective to be able to store all Department supplies in one place. Currently, equipment is stored haphazardly where there is space.

Through the Parks and Recreation Department, Chicopee residents can participate in a variety of organized adult sports and programs, from volleyball to yoga to Korean Martial Arts. Diverse sports and activity programming are also available for youth of all ages, including summer camps. The Department is looking for ways to introduce more passive recreation opportunities, including the planned Connecticut and Chicopee Bikeways and Riverwalks.

Vandalism is a problem in many parks. The Department is considering a combination of surveillance cameras and Crime Prevention Through Environmental Design (CPTED) – using site design to make sure facilities are visible, safe, secure, and welcoming. They also hope to increase programs in underutilized,

vandalism-prone parks in order to get more people in these spaces. Hopefully, the more people there are, the less vandalism that will take place.

Looking ahead, the Parks and Recreation Department developed an informal plan to update facilities over the next 5-6 years, like the Stadium at Szot Park, which was built in the 1940s.

#### Water Department

The Water Department provides the residents and businesses of Chicopee with safe drinking water and fire protection. The Department maintains the City's water distribution system, including fire hydrants, pumping stations, storage tanks, treatment/monitoring facilities, and underground piping. The Massachusetts Water Resources Authority supplies drinking water via the Quabbin Reservoir to three Chicopee Valley Aqueduct communities: Chicopee, Wilbraham, and parts of South Hadley.

#### Water Pollution Control Division

The Water Pollution Control Division is located on Medina Street and is part of the Public Utilities Division. The division seeks to protect the rivers and streams that are in or near the City of Chicopee by maintaining the City's combined sewer and stormwater drainage system (including all public sewer and storm drainage pipelines and treatment plant), monitoring industrial wastewater, preventing stormwater pollution, and treating the collected sewage.

#### Integrated Water Resources Management Planning

The City is developing an Integrated Water Resources Management Plan (IWRMP) to measure the success of completed Combined Sewer Overflow (CSO) reduction projects. The objective of the IWRMP is to replace aging facilities and prioritize projects that have the greatest social, economic, and environmental benefits.

#### **Building Department**

The Building Department consists of four divisions— Buildings, Electrical, Gas, and Plumbing. The current office was renovated three years ago; however, there's little room for growth.

The Department's employees oversee all building permits and inspection activities. The overall responsibility of the Department is to:

- Inspect buildings and structures for safety and compliance with all applicable laws and codes
- Issue building permits, certificates of inspection, and certificates of occupancy
- Review building plans for local zoning compliance and also code compliance

Inspectors in the Department oversee all construction and renovations to ensure projects meet all current applicable building, electrical, gas, and plumbing codes. Based on interviews with Department staff, the Department could use a full-time administrative employee, another building inspector, and a couple of zoning enforcement officers as enforcement demand is increasing in the City.

The City recently developed a new Digital Permitting system to allow residents to apply and pay online for permits, and view signoffs. The system is also used to send alerts to other Department Heads when a joint review is needed.

# Emergency Response

Emergency preparedness and response services in Chicopee are provided by the Chicopee Police Department, Fire Department, and Emergency Management Department.

### **Police Department**

There are three police stations in the City with the Headquarters located on Church Street. The Department consists of 12 divisions.

- Crime Prevention
- Firearms Licenses
- Investigations / Detective Division
- Professional Standards
- Public Records Officer
- Training Division

- Evidence Room
- Information Technology Office
- Narcotics Unit
- Public Information Officer
- Traffic Division
- Emergencies (via 911)

In addition to protecting and servicing residents in the City, the Police Department also provides preventive education to students and residents. They work to maintain a good relationship with the community by being involved with the Boys and Girls Club, the Junior Police Academy, as well as being present at every public school in the City. Starting in January 2020, the Police Department instituted a "C3" policing unit in Chicopee Center. The name stands for Counter Criminal Continuum, and the program encourages officers to form friendships with people in the neighborhoods and use those relationships to identify criminal activity and connect people who need help with services. In addition to the C3 effort, police have a downtown walking beat around the clock. While officers rotate in and out for the walking beats, the same three C3 officers will be a constant presence downtown so they can build relationships with the community.

To enhance its service to the City, the Police Department emphasized the need to hire and retain qualified police officers.

### **Fire Department**

The Chicopee Fire Department's mission is to provide efficient and effective fire protection and emergency medical services. There are six fire stations and the Department's headquarters on Church Street.

- Station 1 80 Church Street, built in 1976
- Station 4 654 Burnett Road, built in 1965
- Station 7 739 Grattan Street, built in 1927
- Station 3 96 Cabot Street, built in 1922
- Station 5 580 Chicopee Street, built in 1957
- Station 8 900 James Street, built in 2002

While the current facilities are adequate for firefighters, they are not adequate for new apparatus. Due to the age of many of the stations they do not have the height to fit new equipment. Three of the six stations have been recently updated. Station 3 and Station 5 have the greatest need for renovations, including removal of underground storage tanks and repaying of parking lots.

There were 5,940 fire calls in 2019.

With just two ambulances, the Department responded to 7,170 emergency medical calls in 2019. With new housing opportunities opening in the City, and in particular senior housing and assisted living, emergency medical calls are expected to increase. The Department is seeing an increase in calls related to opioid use and is working closely with Hampden County to mitigate this. In addition to its fire and medical services, the Department provides public fire and life safety education to the public, with the goal of preventing fires and medical emergencies before they happen.

#### **Emergency Management Department**

The Emergency Management Department has one employee who is responsible for managing and preparing the City of Chicopee in case of an emergency. The Department is working on revamping the Community Emergency Response Team (CERT) for additional assistance. CERT is a group of volunteers that assist during disasters. The volunteers help with the opening of shelters and community events to educate and prepare residents.

# Education

### **Public Schools**

The Chicopee Public School District has 15 public schools, including one pre-kindergarten, nine elementary schools, two middle schools, and three high schools.

Elementary and Pre-K		
Barry (K-5)	Belcher (K-2)	Bowe (K-5)
Bowie (K-5)	Fairview (K-5)	Lambert-Lavoie (K-5)
Litwin (K-5)	Stefanik (K-5)	Streiber (K-5)
Szetela (Pre-K)		
Middle and High School		
Bellamy Middle (6-8)	Dupont Middle (6-8)	
Chicopee Comp (9-12)	Chicopee High (9-12)	
Chicopee Academy (6-12)		

School enrollment, shown in Figure XV.1, has decreased about 5.7% over the past five school years. In the 2018-2019 school year, the total enrollment was 7,392, which is the lowest school enrollment since 1995.<sup>45</sup>

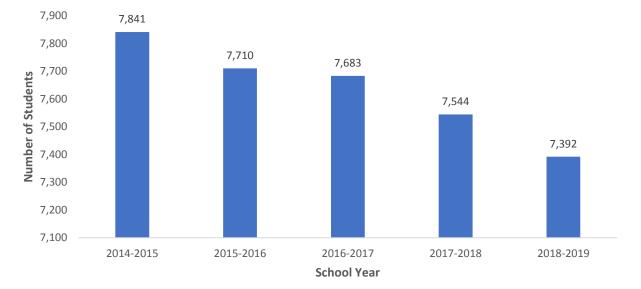


Figure XV.1: Chicopee Public School District Enrollment

Source: Massachusetts Depart of Elementary and Secondary Education

### **Charter Schools**

Other education options available in Chicopee include three publicly funded but privately-operated charter schools. The Hampden Charter School of Science East and the Hampden Charter School of Science West provide a college preparatory-focused education to grades 6 to 12. The Paulo Freire Social Justice Charter School focuses on academic excellence and social justice awareness for grades 9 to 12.

# Chicopee Public Library

The Chicopee Public Library has been servicing its patrons since 1853. The City's two libraries are located at 449 Front and 402 Britton streets. The main library branch on Front Street was built in 2004 and is in good condition. The second Library on Britton is in a Chicopee Housing Authority property and is therefore maintained by the Housing Authority. The Libraries offer a wide range of materials and services to the community, such as:

- Print and online resources
- Adult and children's programming
- Reference assistance
- Computer classes

<sup>&</sup>lt;sup>45</sup> http://profiles.doe.mass.edu/profiles/student.aspx?orgcode=00610000&orgtypecode=5&&fycode=1995

- Meeting room facilities
- Outreach services
- One-on-one assistance

The Library also has 'Booker' the Bookmobile that makes weekly stops around the City. Booker was created in 2015 and is regularly parked at City events, local parks, the Senior Center, the Valley Opportunity Council, Farmers Market, Boys & Girls Club, etc. It allows residents to check out and request materials, register for a library card, use technology, and more. With the assistance of the Bookmobile, the Library registers about 100 new members every month.

The Library also collaborates with local entities in the City on various activities and different topics. One of the current initiatives focuses on food and healthy eating. The Library is partnering with public schools and the Chicopee Fresh initiative to host programs related to making better eating choices. In addition to local collaboration, the Chicopee Library is part of the C/W MARS (Central/Western Massachusetts Automated Resource Sharing, Inc.) Consortium which helps with staff training, interlibrary loans, shared costs for circulation, and more.

# Public Health & Social Services

See the Public Health & Social Services section.

# **Electric Services**

The Chicopee Electric Light (CEL) was established as a municipal utility in 1896. It is overseen by four board members to provide reliable and high-quality services to the community at the lowest cost. CEL is in the process of adding fast and reliable internet service to residents through a program called Crossroads Fiber. See the 'Energy' section for further information.