

Building for the Future:

*Foundations for a Springfield
Comprehensive Growth Strategy*



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ABOUT MASSINC

Massachusetts Institute for a New Commonwealth (MassINC) is a non-partisan think tank and civic organization focused on putting the American Dream within the reach of everyone in Massachusetts. MassINC uses three distinct tools – research, journalism, and civic engagement – to fulfill its mission, each characterized by accurate data, careful analysis, and unbiased conclusions. MassINC sees its role not as an advocacy organization, but as a new kind of think tank, rigorously non-partisan, whose outcomes are measured by the influence of its products in helping to guide advocates and civic and policy leaders toward decisions consistent with MassINC’s mission, and in helping to engage citizens in understanding and seeking to influence policies that affect their lives.

ABOUT UMASS DARTMOUTH URBAN INITIATIVE

Chancellor Jean F. MacCormack formed The Urban Initiative at UMass Dartmouth in 2007 to advance efforts on behalf of communities throughout the Commonwealth working to transition from manufacturing to today’s knowledge-based economy. In addition to helping develop a new urban agenda at the state level – an agenda that fulfills the promise of these cities – the Urban Initiative is also working locally to promote economic, social and political development. The program engages elected leaders, issues research reports, hosts events and conferences, provides technical assistance and training to policy leaders, and offers new opportunities for civic participation.

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CONTENTS

Preface	5
Executive Summary	7
I. Laying the Foundation	10
II. Residents and a Framework for Growth	19
1. Family	19
2. Education	21
3. Work	24
4. Community	29
III. Businesses and a Framework for Growth	34
1. Economic Base	34
2. Traded Clusters	39
3. Innovation	40
4. Local Markets	46
IV. Building on Assets and Opportunities	49
1. Assets	49
2. Promising Trends	51
3. Strategy	54

PREFACE

When MassINC and the UMass Dartmouth Urban Initiative partnered together on this project a year ago to assist the City of Springfield with a long-term growth strategy, the national economy was still strong and Massachusetts was also doing well. From our work on Gateway Cities across the state, we understood that urban communities like Springfield were not fully engaged in the Commonwealth's new Knowledge Economy, but there was real promise that economic growth would soon reach these vital core cities.

The hard economic times we now confront challenge our optimistic assessment. This downturn offers a frank reminder of our break with an American economy rooted in production – an economy that created broadly shared wealth, the world's largest middle class, and great industrious cities like Springfield. While manufacturing decline may have been largely unavoidable, as the data presented in this report make plain, our failure to rebuild productive central cities has been, without question, a regrettable mistake.

Fortunately, Springfield and cities like it are now part of a national conversation about renewal and reinvestment. Economists foresee metropolitan areas with strong urban cores generating future growth in the American economy. Productive cities bring people together from diverse backgrounds, particularly young innovators with new ways of looking at the world. This mix of ideas fosters a creative environment that gives life to new products and services, fuelling regional economic growth in today's Knowledge Economy.

While these qualities give cities advantages as places of innovation, the American economy has transformed faster than older industrial communities have been able to respond. Like Springfield, most cities throughout the Northeast and Midwest have had difficulty adjusting to economic restructuring. Even though the Knowledge Economy offers these cities new opportunities, this report describes how large barriers left by manufacturing decline prevent private markets from recognizing and capturing their potential.

These challenges are very real and we should not minimize their significance, but too often cities that face these obstacles undervalue their own true economic potential. The handful of cities that have hurdled these barriers are different. They have had confidence to tackle challenges head-on with a vision for a stronger future. Equally important, they are located in states and regions that made conscious decisions to reinvest in their urban cores, reshaping them for the New Economy.

Time is running out for places that lack this conviction and initiative. As the recent failures of Detroit automakers make clear, when you fall behind the competition in this global economy, there is little opportunity to regroup. Cities and their regions face similar competitive pressures. More and more are developing sophisticated partnerships with their states and regions to rebuild. This creates real urgency, not only for Springfield but the entire Pioneer Valley, which will need a strong core city to remain competitive.

Solid long-term strategic planning is critical to any effort to envision the future of Springfield. Fortunately, the city has set important precedents with the recent Urban Land Institute strategy and the Regional Employment Board's workforce development plan. The Pioneer Valley's *Plan for Progress* and the state's recently completed *Regional Economic Development Framework* also provide important strategic direction. Springfield is now ready for a comprehensive strategy that integrates all of this work and provides a framework for real action and investment in the city.

To prepare this plan, Springfield residents and stakeholders will require information and a thorough understanding of what is essential for success. With reliable data, the community can make informed decisions when it comes to the highest level questions a comprehensive growth strategy must answer. These include:

- What type of industries can generate growth?
- How should Springfield attract, retain, and build them? And equally critical,
- How will Springfield ensure that growth is inclusive, with all city residents contributing and benefiting?

Building for the Future provides data along with independent and objective analysis to help answer these questions. While we offer our impressions of these data and what they mean throughout this report, we encourage residents and community leaders to reinterpret the data and challenge our findings. Our hope is that the information presented will foster constructive dialogue, leading Springfield residents and stakeholders toward a strategy that represents a common vision and collective commitment to long-term growth.

EXECUTIVE SUMMARY

Springfield has enormous assets, but like other midsize cities throughout the Northeast and Midwest, it struggles to get past decades of disinvestment brought on by manufacturing decline and suburbanization. To rebuild and reposition for the Knowledge Economy, communities like Springfield need long-term strategies – plans that address challenges and leverage opportunities by channeling resources and energy with patient yet persistent focus.

Building for the Future, authored jointly by MassINC and the University of Massachusetts Urban Initiative, analyzes the city’s social and economic conditions as they relate to future growth and development. To provide useful context, in addition to comparing Springfield with national averages, we contrast the city with 16 peer cities. The peer cities are similarly sized communities located in the Northeast and Midwest, regions where the same fundamental forces, such as higher labor costs, cooler climates, and a shortage of developable urban land, limit growth.

We hope to inform a communitywide dialogue around long-term strategies with this report, which offers a rich array of data and the following findings:

1. Springfield – like most midsize cities, throughout the Northeast and Midwest – has struggled for decades against adverse social, economic, and political trends. The loss of manufacturers, along with the movement of people and jobs out to the suburbs and off to faster growing regions in the South and West, sparked a prolonged cycle of disinvestment in older industrial cities. To respond to this challenge, these communities needed support from higher levels of government. Unfortunately, for several decades, state and federal policies did more to hinder than to help.

- **For midsize cities in the Northeast and Midwest, these forces led to decline.** Communi-

ties in New England and the heavy manufacturing Great Lakes states were particularly hard hit. Between 1980 and 2000, Bridgeport lost a third of its jobs. In Flint, population dropped by a quarter over these two decades. With few exceptions, midsize cities in the Northeast and Midwest experienced significant decline. Above all, peer city comparisons demonstrate that the challenges Springfield faces are primarily the result of these dominant external forces, not bad decisions made by local residents or their leaders.

- **Despite these adverse trends, Springfield has been able to maintain its presence as both a population center and a regional economic hub.** Between 1980 and 2000, Springfield’s population held steady at 152,000 residents; and jobs with city employers declined by less than 6 percent to just below 77,000 positions. With more than a quarter of all Pioneer Valley jobs, Springfield is still by far the region’s largest employer. The city is also an increasingly critical contributor to the Pioneer Valley’s future workforce; Springfield Public Schools educate nearly a quarter of the region’s K-12 students.

2. While Springfield has a relatively strong economic base that continues to provide good jobs, the city’s residents struggle to gain the skills necessary for work with family-sustaining wages. This disconnect undermines Springfield’s families, its future workforce, and its economic growth.

- **Jobs in Springfield pay 17 percent more than jobs in the region, but the income earned by Springfield households is 32 percent lower than the regional median.** While this disparity is common for older industrial cities, it is particularly strong in Springfield, where the percentage of residents with both high school

and college degrees falls well below the average for residents of midsize Northeastern and Midwestern peer cities. Springfield residents still hold approximately 43 percent of jobs located in the city, but they fill significantly fewer positions in higher-paying industries like health care (37 percent) and finance (24 percent), which require advanced education.

- **The difficulty Springfield residents encounter getting jobs that offer family-sustaining pay contributes to a growing cycle of poverty.** While the national poverty rate has held steady over the last several decades at 13 percent, peer city poverty rates have steadily risen, from 15 percent in 1980 to 22 percent in 2007. In Springfield, poverty has grown even faster. Currently, a quarter of all residents are poor, and more than a fifth of the city's population lives in a neighborhood where poverty is highly concentrated (more than 40 percent of residents are poor). Poverty undermines family structure and makes it more difficult for future generations to build the skills and experience necessary for success.
- **Relative to their peers in other older industrial cities, Springfield's younger generations are at risk.** A closer look at the city's young residents demonstrates the impact of growing up in these economically challenging settings. Among peer cities in the Northeast and Midwest, Springfield's youngest residents (ages 18 to 24) have the lowest level of high school degree completion. Without adequate education, these young workers have difficulty finding jobs. Springfield residents ages 20 to 44 had exceptionally high unemployment rates (14 percent) even prior to the current downturn. High unemployment discourages the city's young residents; many have given up on finding work at a time when job experience is critical to their career development. The labor

force participation rate for Springfield residents ages 20 to 44 is 10 percentage points below the national average. Among peer cities, only Flint has a larger percentage of young workers not participating in the labor force.

- **The stigma of decline, combined with racial and ethnic inequality, make it harder for the community to come together around a common purpose.** Throughout the Northeast and Midwest, decline in older industrial cities causes residents to lose faith in their neighbors, leaders, and institutions. Divisions created by racial and ethnic inequality in these cities often compound these feelings, making it even more difficult for residents to organize collaboratively for renewal. Inequality in Springfield is particularly sharp. Springfield's Latino households earn less than half the household income of white residents. While the income disparity between the city's African-American and white residents is not as large, African-American residents in Springfield are still more than twice as likely as white residents to live in poverty.

3. **To compete in the future, Springfield and communities throughout the Pioneer Valley must build a stronger metropolitan economy.** With nearly half of all city residents now working in suburban jobs, the strength of the regional economy has direct consequences for the city. But equally important, the region needs a strong, productive core city to remain competitive in the new Knowledge Economy. Compared with the regions of the 16 peer cities, Greater Springfield appears less innovative and less attractive to skilled young professionals, two strong indications that the city's challenges are impacting regional productivity.

- **The Pioneer Valley is not fostering enough innovation to keep the economy growing.** Compared with other peer city regions, Greater

Springfield has a lower share of employment in Knowledge Economy industries and relatively low patent activity. Data also show the region has lower value-added manufacturing, and lacks fast growing firms. Without innovation, regions have difficulty keeping pace in the New Economy. Between 1998 and 2006, in industry clusters in which the Pioneer Valley had a competitive strength, for every new job created, nine were lost. While new emerging clusters in medical devices and analytical instruments have developed from regional precision manufacturing strengths, job growth in these industries has not been sufficient to replace jobs lost in mature declining sectors.

- **Greater Springfield is having difficulty attracting and retaining the skilled young professionals both the city and its region need to remain economically competitive.** Census data show that for each unmarried resident with a bachelor's degree that entered the Pioneer Valley between 1995 and 2000, 2.3 left, a higher rate of outmigration than for all of the peer regions with the exception of Syracuse and Lansing. The loss of young residents is contributing to an aging region. In Greater Springfield, 42 percent of the labor force is over age 45, compared with just 31 percent nationally. A vibrant core city is essential to attracting and retaining the skilled young professionals the Pioneer Valley needs to grow strong New Economy industries.

4. Changing social, economic, and political trends provide new possibilities if Springfield and its partners can pursue growth with strategic vision and coordinated action.

- **External forces that once led to challenges for older cities are now shifting in their favor.** Adverse social, economic, and political trends combined to slow Springfield's growth. Improvements in each of these areas

provide new opportunities. Baby Boomers are returning to walkable cities, and young couples are delaying marriage and remaining in cities longer. The Innovation Economy places a premium on dense urban locations with a proven track record for spawning creative new ideas. With growing recognition that cities are critical to their regions, political coalitions are forming between urban areas and their suburbs. Renewed interest in cities and these broader alliances are beginning to translate into new tools that cities can brandish to spur reinvestment.

- **Springfield can leverage its many assets.** The city has exceptional connections with access to an international airport, interstate highways moving in all directions, and both passenger and freight rail. These strong connections are a necessity for industries serving today's global markets. Springfield also has solid institutions – located in both the city and within the wider region – to help build the civic capacity required to patiently and strategically work to foster long-term growth. Equally important, the city has enormous cultural diversity and history, which can make for a vibrant and attractive community.
- **Springfield is ready for a long-term plan.** The major restructuring in global markets underway will increase the competitive position of communities that act strategically to emerge stronger from these extraordinary times. Fortunately, Springfield is well positioned for this work. In recent years, the city has completed specific strategies around real estate and downtown development, workforce, and children and families. These plans have set important precedents for coordinated and strategic action. With the information provided in this report, Springfield is well prepared for a comprehensive long-term growth strategy.

I. LAYING THE FOUNDATION

Springfield has reached a crossroads. The community must define what it will be in a new economic age, where fierce global competition breeds both uncertainty and opportunity. Throughout the country, cities are organizing to compete in this new environment. They are focused on preparing residents to serve as workers, managers, and innovators. At the same time, they are positioning themselves to attract enterprises seeking out productive business climates and access to new markets.

This report presents data on Springfield's

social and economic setting – information the community will need to make informed decisions about its future – in the context of 16 of these cities, communities in the Northeast and Midwest with population within 25 percent of Springfield's. Comparisons to similarly sized communities located in these regions are useful because these cities face familiar economic development challenges, such as higher labor costs, cooler climates, and a shortage of developable land. After taking a closer look at the data, it is also clear that, like Springfield, most of these peer communities must tackle much larger social and economic barriers to growth.

This first section builds a foundation for dialogue around Springfield's future by revisiting the dynamics that led to these unique challenges, and demonstrating why Springfield and cities like it urgently need new approaches to confront them. This is a useful place to begin for several reasons. First, the common experience of these cities shows that the challenges Springfield and its peers face were spurred largely by broad social, economic, and political forces they had no power to control. Demonstrating that Springfield is not to blame will help give the community confidence in its ability to create a more prosperous future, while building a case for more engagement from outside partners. Second, this peer city context illustrates that the problems Springfield must solve are not just hard in and of themselves; they also make it tough for residents in cities like Springfield to work collaboratively to find answers. Acknowledging this point is an important step in helping the community come together to organize for collective action.

ABOUT THE PEER CITIES

Throughout this report we present social and economic data in the context of 16 peer cities - communities in the Northeast and Midwest with population within 25 percent of Springfield's. By limiting the selection to cities in the Northeast and Midwest, contrasts are made with communities where the same fundamental forces such as higher labor costs, cooler climates, and developed urban form have limited growth.

This analysis is designed to give Springfield additional perspective as the community contemplates the city's past, present, and future. The peer cities draw attention to areas where Springfield performs well, and areas where the community lags.

While a few peer cities can claim significant structural differences that set them apart - for example, Stamford is a component of the greater New York City metropolis - as the data demonstrate, these midsize communities grapple with similar issues to a remarkable degree. To read more about the peer cities and their individual attributes, visit springfield.massinc.org.



Common Challenges

All midsize cities in the Northeast and Midwest endured several difficult decades as manufacturing jobs disappeared and residents moved out-

ward to suburban communities. These two trends – deindustrialization and suburbanization – have had serious consequences for cities like Springfield. In addition to displacing workers, departing manufacturers left behind contaminated factories. The movement of families to the suburbs destabilized housing markets, leading to abandonment and blight. The loss of both residents and businesses undermined these urban economies in other fundamental ways. For instance, in these changing times, very few of the small neighborhood retailers, restaurants, and theaters could withstand the competitive pressures created by new suburban malls and big box stores. Over time, Springfield and the peer cities lost the small businesses that gave life to downtown and neighborhood commercial districts.

Instead of helping these productive communities rebuild, state and federal policies aggravated the problem: highways funneling growth to suburbs tore through them; unsuccessful urban renewal projects altered their human scale; federally backed redlining choked off private invest-

Table 1:

Change in Population and Employment

RANK	POPULATION GROWTH (1980 - 2007)		EMPLOYMENT GROWTH (1980 - 2000)	
	1	Sioux Falls, SD	86.3%	Sioux Falls, SD
2	Springfield, MO	16.3%	Springfield, MO	63.7%
3	Stamford, CT	15.6%	Stamford, CT	25.3%
4	Cedar Rapids, IA	14.7%	Cedar Rapids, IA	22.6%
5	Rockford, IL	12.1%	Evansville, IN	22.5%
6	Providence, RI	10.0%	Topeka, KS	14.4%
7	Worcester, MA	7.5%	Rockford, IL	13.5%
8	Topeka, KS	6.4%	Worcester, MA	-4.5%
9	Springfield, MA	-1.6%	Springfield, MA	-5.6%
10	New Haven, CT	-1.7%	New Haven, CT	-9.0%
11	Bridgeport, CT	-4.1%	Providence, RI	-10.4%
12	Hartford, CT	-8.7%	Lansing, MI	-10.9%
13	Evansville, IN	-10.9%	Syracuse, NY	-14.7%
14	Lansing, MI	-11.9%	Hartford, CT	-16.2%
15	Syracuse, NY	-18.2%	Dayton, OH	-21.0%
16	Dayton, OH	-23.6%	Bridgeport, CT	-34.0%
17	Flint, MI	-28.2%	Flint, MI	-43.3%
	Peer Average	3.5%	Peer Average	4.5%

Source: U.S. Census Bureau and U.S. Department of Housing and Urban Development

ABOUT THE DATA

The data presented in this report are derived from several sources. Foremost among them is the relatively new American Community Survey (ACS). The Census Bureau began publishing annual ACS estimates for all cities with more than 100,000 residents in 2005. In the past, assembling timely information for areas smaller than states was challenging. The ACS provides a useful new tool for examining social and economic trends at the city level. These comprehensive data cover everything from employment and educational attainment to income and poverty.

Most of the figures in this report draw from ACS tables created by the Census Bureau from 2007 surveys. In order to supply accurate answers to more specific questions, such as the ages of workers within a particular Springfield industry, MassINC

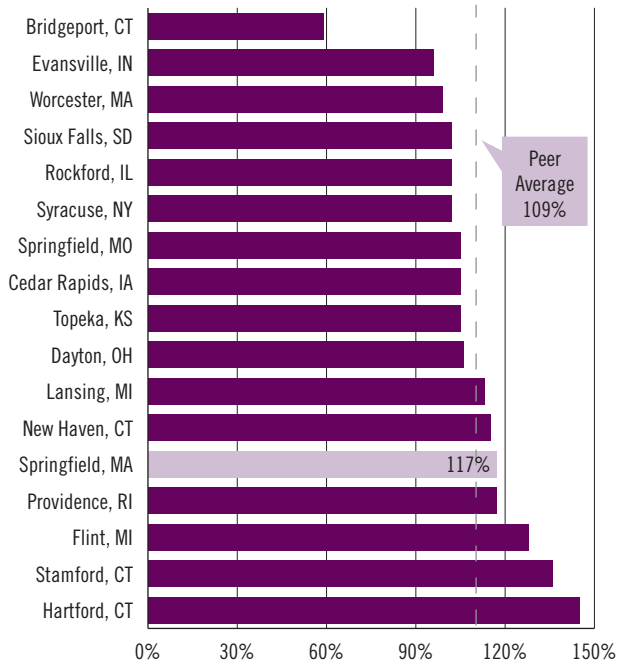
has combined and tabulated several years (2005 – 2007) of raw ACS estimates from the Public Use Microdata Sample (PUMS).

Data on jobs and industry concentrations come mostly from the Covered Employment and Wages Program, often referred to as ES-202. The Bureau of Labor Statistics (BLS) tabulates these estimates from state unemployment insurance records. ES-202 data reflect both full and part-time work. Not included in these totals are members of the armed forces, self-employed workers, business owners, and domestic workers. Historical employment and industry data come from special decennial Census “Place of Work” tables produced by the US Department of Housing and Urban Development and contained within their *State of the Cities Data System*.

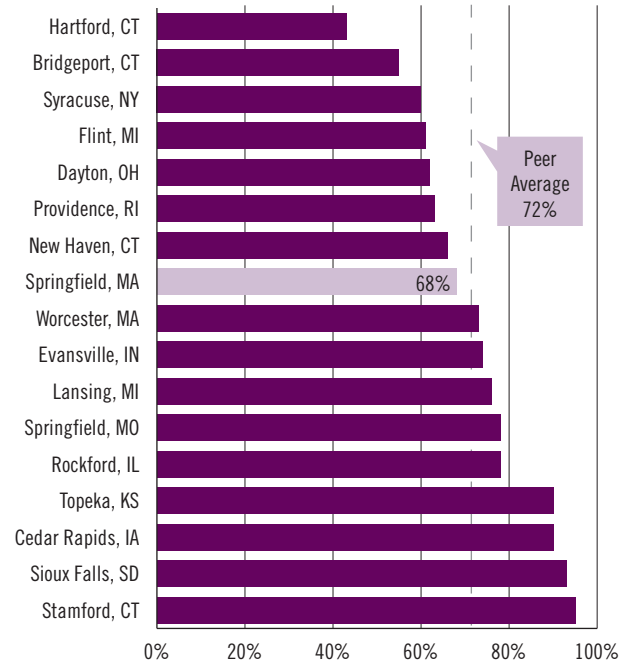
Figure 1:

City Pay Per Job and Median Household Income Relative to Region

CITY PAY PER JOB AS A PERCENT OF REGION'S



CITY MEDIAN HOUSEHOLD INCOME AS A PERCENT OF REGION'S



Source: U.S. Census Bureau and U.S. Department of Housing and Urban Development

ment; and public housing projects concentrated poor families in declining neighborhoods.

While this brief summary does not cover all of the complexities associated with four decades of urban decline, the loss of manufacturing jobs, residents, and local businesses, coupled with adverse public policies, have doubtlessly left a set of challenges that are difficult to remedy.

Despite these challenges, Springfield has maintained its presence as both a population center and a regional economic hub. For some midsize cities in the Northeast and Midwest, these unfavorable trends led to broad-based decline. Places like Flint, which lost more than a quarter of its population, and Bridgeport, where more than a third of all jobs disappeared, are no longer the employment and population centers they once were.

Relative to these communities, Springfield has weathered the hard times (Table 1). The city's population has fallen by just 1.6 percent (2,381

residents) since 1980. While comparable employment figures are not available for this full period, Census estimates show that between 1980 and 2000, two decades during which Springfield lost more than 11,000 manufacturing jobs, employment within the city contracted by just 5.6 percent (4,500 jobs).

Springfield – like Worcester, Providence, and a number of other peer cities – has replaced lost jobs and attracted new residents. While by no means are these cities back to full strength, their people and significant economic presence give them a real foundation to build from.

The greatest challenge for Springfield and the peers now is that city residents are not working in the many well-paying jobs city businesses offer. Disparity between pay provided by city jobs and income earned by city families illustrates this disconnect. On average, jobs located in the 16 peer cities pay 9 percent more than jobs in

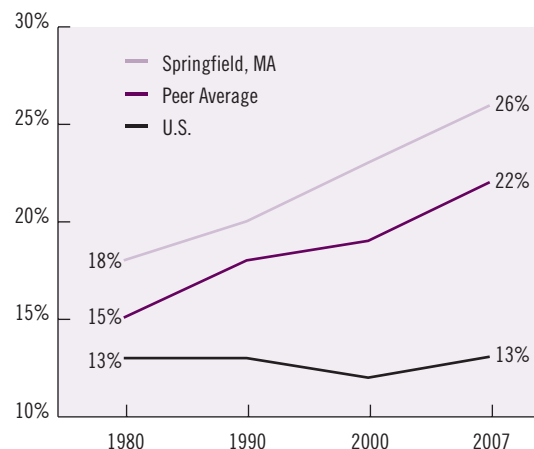
their regions, but city households earn just 72 percent of regional median income (Figure 1).

In Springfield, this gap is a bit larger. Positions in the city actually pay 17 percent more than the regional average, while Springfield households earn just 68 percent of regional median income. Large gaps like these are common throughout New England. Inequality between city wages and family income is particularly striking in Hartford, where jobs pay 145 percent of the regional average, and households earn just 43 percent of the regional median.

Economic restructuring makes it difficult for less skilled workers to find jobs with family sustaining wages. A number of factors account for why city residents have a hard time getting better paying work. Among them, low educational attainment clearly has a very significant role. Whereas in past decades, the many manufacturing workers who lived in these industrial cities could earn wages to support a middle class family with a high school degree, today this is far from guaranteed. The scarcity of good jobs for lower-skilled workers has made it particularly challenging for immigrants, who have historically migrated to these cities in search of economic opportunity. Pay provided by the lower-skilled jobs available in today's service-based economy is simply inadequate to support families. As a result, these new arrivals have more difficulty finding jobs that allow them to move their families up the rungs of the economic ladder. In Springfield and throughout the peer cities, many families simply lack the basic economic stability future generations need to gain the education required for success in the New Economy.

The growing pool of workers unprepared for jobs in the New Economy contributes significantly to high concentrations of poverty in Springfield and many of the peer cities. While poverty in the US held steady at 13 percent between 1980 and 2007, the average peer city poverty rate rose 7 percentage points, from 15 percent to 22 percent

Figure 2:
Poverty Rate (1980-2007)



Source: U.S. Census Bureau

(Figure 2). Springfield's poverty rate climbed at an even faster pace over this period, increasing 8 percentage points, from 18 to 26 percent.¹ And five peer cities – nearly a third of the comparison group – have higher poverty rates than Springfield.

While the failure to prepare workers for the New Economy is just one root cause of growing poverty (see text box), the concern now is that concentrating poor families in high-poverty neighborhoods breaks down community relations and norms in ways that lead to a cycle of growing and persistent poverty. Joblessness, welfare dependency, single parenting, crime, substance abuse, and high school dropout rates rise as neighborhood poverty increases above a certain threshold.² Researchers generally place this threshold at 40 percent. Many of the peer cities have a number of neighborhoods with poverty rates over 40 percent. However, among all of the peers, only Syracuse has more high-poverty neighborhoods than Springfield; and Springfield actually has the largest share of residents living in high-poverty neighborhoods (Table 2).

The legacies of deindustrialization and suburbanization make recovery extremely challenging for midsize older industrial cities in the Northeast and Midwest. Concentrated poverty is

Table 2:

Residents in High Poverty Neighborhoods (2000)

CITY	HIGH POVERTY NEIGHBORHOODS (CENSUS TRACTS)	PERCENT OF POPULATION IN HIGH POVERTY NEIGHBORHOODS
Syracuse, NY	12	17%
Springfield, MA	11	22%
Flint, MI	9	16%
Hartford, CT	8	10%
Providence, RI	8	10%
Dayton, OH	8	7%
Lansing, MI	5	19%
Worcester, MA	5	8%
New Haven, CT	3	9%
Bridgeport, CT	3	8%
Rockford, IL	2	9%
Springfield, MO	2	4%
Cedar Rapids, IA	0	0%
Evansville, IN	0	0%
Sioux Falls, SD	0	0%
Stamford, CT	0	0%
Topeka, KS	0	0%
Avg	4.5	8%

Source: Brookings Institution

clearly a significant barrier to economic development for Springfield and many of the peer cities. This challenge alone would be difficult for any midsize city to tackle. But these communities also must overcome deeply embedded issues associated with racial and ethnic inequality and the psychological wounds of decline.

Older industrial cities in the Northeast and Midwest are diverse communities. Attracted by good-paying manufacturing jobs, cities like Springfield were destinations for African-Americans migrating from the South, as well as immigrants from overseas. Unfortunately, industrial decline accelerated not long after these groups arrived, leading to high levels of inequality.

Inequality is a particular challenge for Springfield. Across the peer cities, on average,

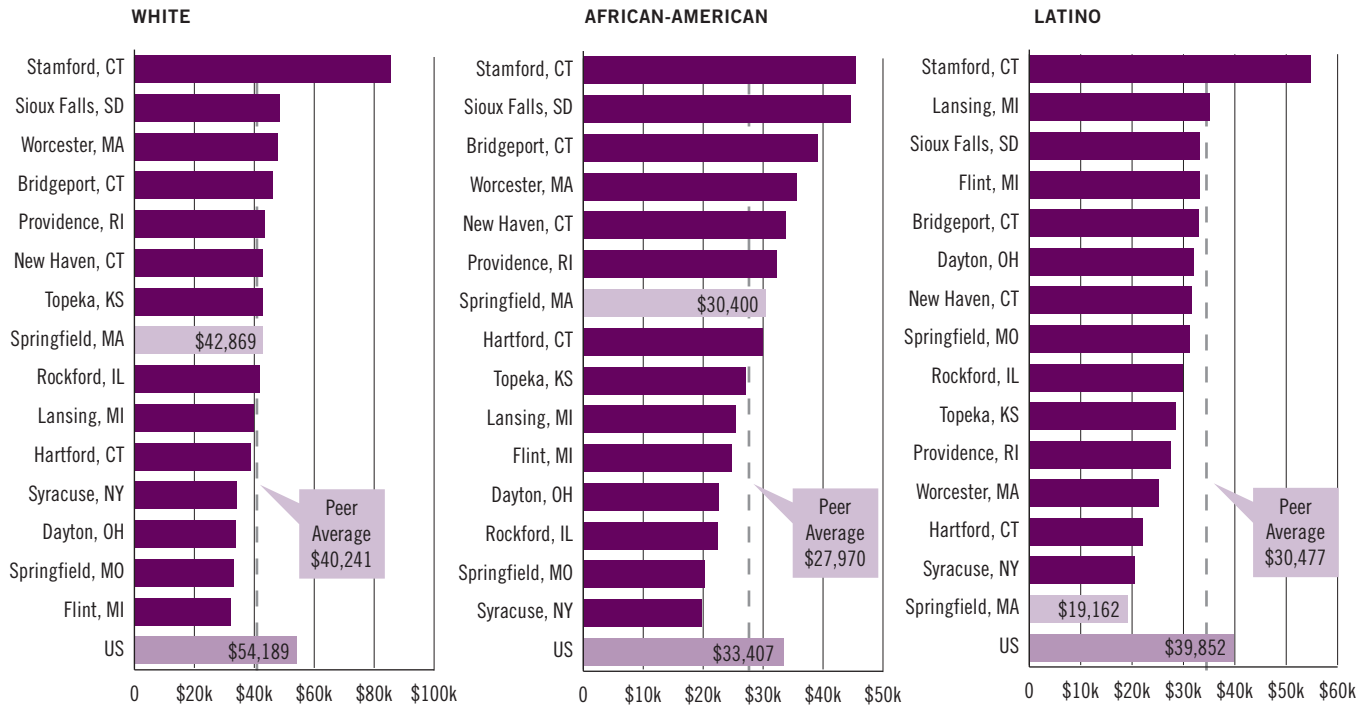
Latinos and African-Americans earn just 76 percent and 70 percent of white households, respectively (Figure 3). For Springfield’s Latino population, arriving just as the city’s manufacturing sector began to shed jobs, inequality is particularly stark. Springfield’s Latinos earn significantly less than Latinos in any of the 16 peer cities, less than half the income of Latinos nationally, and less than half the income of Springfield’s white residents. While the city’s African-Americans earn more than African-American in other peer cities on average, their income is still just 71 percent of white households in Springfield. These high levels of inequality take away from diversity’s potential advantages by making it harder for residents to work together toward the common good.

This is particularly true in older industrial cities, where decline has caused residents to lose faith in their neighbors, leaders, and institutions. A number of scholars have described this process. In *Steeltown USA*, for instance, Sherry Linkon and John Russo recount the history of devastating manufacturing job loss in Youngstown, Ohio, and the years of paralysis that resulted. Youngstown is emblematic of many manufacturing cities that were once dominant centers of their regional economies. In these communities, residents went from being proud of the accomplishments of their cities to seeing abandonment, arson, violent crime, and corruption take root. Over time, many internalized the blame and lost confidence in the community. Negative media portrayals and labels reinforced their pessimism, making it much more difficult for residents to work together effectively to promote redevelopment.³

For Springfield and older industrial cities across the Northeast and Midwest, removing the barrier to community created by racial and ethnic inequality must be seen as an essential component of revitalization, receiving the same priority as equally critical efforts to reduce poverty, increase educational attainment, and connect young residents to work.

Figure 3a:

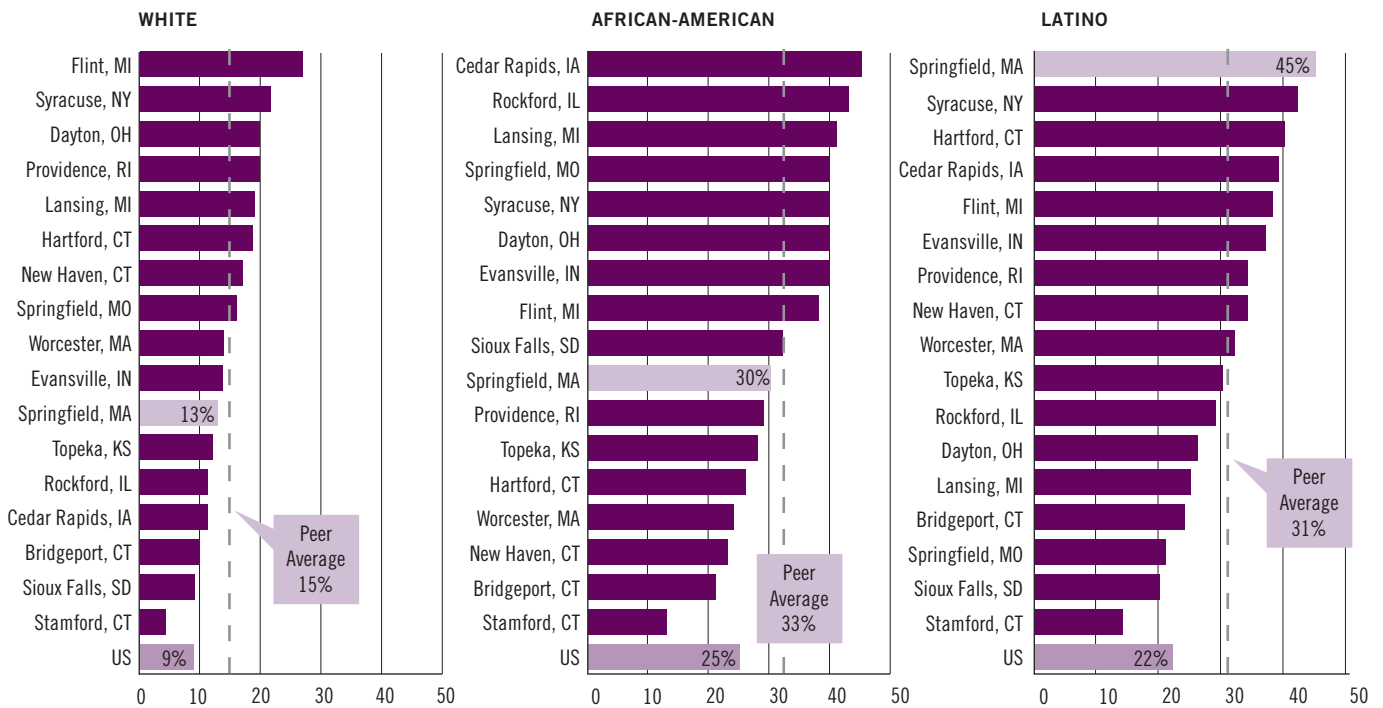
Median Household Income (2005-2007)



Source: U.S. Census Bureau

Figure 3b:

Poverty Rate (2005-2007)



Source: U.S. Census Bureau

Reaching a Crossroads

While Springfield and the peer cities have travelled a common road for the last several decades, the future will likely look very different for these communities. They all reached mid-size city status because they succeeded in various forms of manufacturing. And they all suffered as manufacturing declined. In the future, some will effectively leverage their assets to transition to new forms of enterprise, while others, unfortunately, will lose more ground.

To move forward, Springfield and its stakeholders must recognize that the city has assets, and that changing social, economic, and political trends provide new possibilities, if the community and its partners come together to pursue

growth with strategic vision and coordinated action. Some of the economic, social, and political forces that created challenges for midsize cities like Springfield are becoming more favorable and offer prospects for a brighter future: The Innovation Economy makes strong cities central places where knowledge workers thrive; many young adults and older empty nesters now favor cities for their cultural amenities and walkable neighborhoods; and political coalitions are forming to advance urban policies that give cities tools for economic growth.

New tools are critical. For decades, older industrial cities in the Northeast and Midwest attempted to address the challenges of manufacturing decline and suburbanization, and their aftermath, without the means to do this complex work. They lacked professional staff, resources to hire outside consultants, and, most importantly, mechanisms to finance redevelopment. Fortunately, cities like Springfield are becoming more sophisticated, and new sources of community development finance are available. But these resource streams have not been scaled to the point where they flow predictably to the cities that need them. Despite optimism among advocates for stronger urban policy, current federal deficits jeopardize necessary increases in funding from Washington. An action plan can help Springfield attract more of the limited funding available by demonstrating that the city is strategically organized to maximize resources from both the state and federal government, as well as locally from public and private partners in the region.

Involvement from the region is critical for both Springfield and its suburbs. To provide good jobs in the future, the Pioneer Valley needs a stronger Springfield. Vibrant cities help regions keep young educated workers and attract others. In today's Knowledge Economy, these educated workers drive economic growth. And core cities contribute to success in other ways as well. Productivity increases with density because dis-

WHY HAS POVERTY CONCENTRATED IN OLDER CITIES?

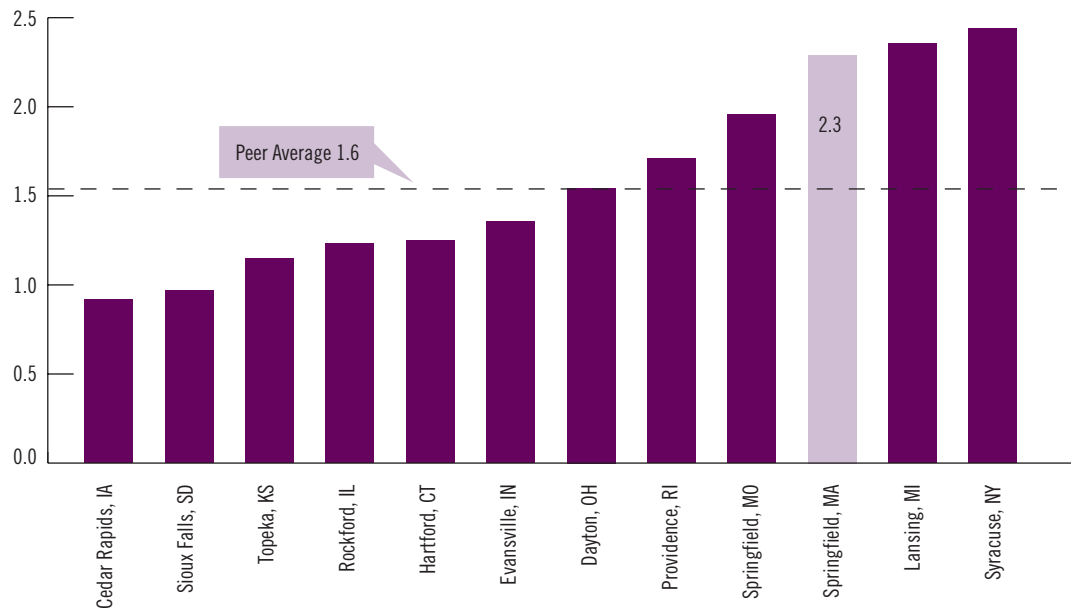
The concentration of poverty in older cities is often associated with manufacturing job loss, which made middle class wages harder to find for lower-skilled workers. While this was an important factor, the way in which suburbanization occurred is equally relevant.

Growing suburbs had fiscal incentives to zone out private development affordable for lower-income households. At the same time, subsidized housing continued to go up in disproportionately poor and minority urban neighborhoods. With few exceptions, these public housing projects did not receive sufficient management and upkeep, and their deteriorating conditions created an additional stress on older urban neighborhoods where they were located. As home prices became further depressed, the very low-cost housing available in these cities drew more poor families. Meanwhile, fair housing laws dramatically reduced racial discrimination, which for the first time allowed many middle class minority populations to pursue suburban living.⁴

The poorest residents were left behind in cities. Concentrating very low-income families in high-poverty neighborhoods contributed to a breakdown in community relations and norms in ways that led to a cycle of growing and persistent poverty.

Figure 4:

Ratio of Outmigrants to Inmigrants for the Young (25-39), Single, and College Educated (1995-2000)



Source: U.S. Census Bureau

INNOVATION, KNOWLEDGE, NEW ECONOMY: WHO BENEFITS?

When it comes to jobs, much emphasis in recent times has been placed on the Innovation, Knowledge, or New Economy - terms we use interchangeably in this report. As MassINC has noted in previous research, in Massachusetts and elsewhere, the transition to the New Economy has led to widening disparities in income and wealth. Gaps are growing for two reasons:

- 1) Innovative companies have concentrated in areas with advanced research institutions; and
- 2) Jobs in knowledge-intensive industries require high levels of education and training.

Given these concerns, how can efforts to better position Springfield for the Innovation Economy benefit the community and its lower-skilled residents?

First, by acknowledging the New Economy's shortcomings, the community and its partners can work more intentionally to address them. For example, by helping businesses develop workforce training programs, or targeting high-technology companies that rely on more routine work with jobs for lower-skilled workers, the city can navigate a more even course to the New Economy. Second, to the extent that some knowledge-intensive employers in the region offer few jobs directly for low-skilled workers, Springfield can still find creative ways to maximize the opportunities in secondary industries that serve these companies and their workers. Finally, Springfield's long-term strategies must reflect the skills of the city's future workforce. The requirements of the New Economy create great urgency for Springfield and its partners to take unprecedented steps to upgrade the skills of future workers.

EMERGING FROM AN ERA OF DECLINE

Midsized cities like Springfield have long served as centers of their regional economies, home to essential institutions like hospitals, colleges, and banks. Up until the last few decades, however, manufacturing drove these industrious urban economies. Then factories, like Springfield's American Bosch, began closing in the 1960s, as jobs moved South, West, and overseas. To compete against these lower cost locations, companies in the Northeast and Midwest turned to technology. At a minimum, this meant cities lost some jobs as employees were replaced with machines. Frequently manufacturers also needed larger plants to accommodate this new equipment, and these facilities required tracts of undeveloped land only available outside of cities; even when factories remained within their region, like Springfield's Milton Bradley, core cities lost thousands of jobs.

In 1980, the earliest year we have comparable data, manufacturing still represented a quarter of all peer city jobs; by 2004, the share of employment in the sector had fallen to just 11 percent. Springfield's manufacturing base followed a similar trajectory – industrial employment fell from 24 percent to 10 percent of the city's total over the 24 year period.

For midsized cities in the Northeast and Midwest, manufacturing decline signaled the end of an era in which these cities played a commanding role in their regional economies. Deindustrialization was particularly challenging because it occurred at a time when cities were already struggling to keep families from moving to the suburbs. Suburbanization spurred even greater job loss, as local businesses and retailers followed workers outward to office parks and indoor malls.

Ultimately, the movement of people and jobs from core cities led to widespread disinvestment. Businesses and banks were extremely hesitant to invest in urban economies they believed would continue to unwind. Without capital to support these cities, this became a self-fulfilling prophesy, and both commercial and residential markets slowly deteriorated. In recent years, this dynamic has begun to change. Entrepreneurial investors are finding opportunities in undervalued cities. And some cities are making the transition from this long period of decline toward a new era of renewal. While the challenges the current downturn creates make continued progress tenuous, with strong leadership, clear vision, and broad-based cooperation, these cities can move forward and emerge stronger and more prosperous.

tances are shorter and transportation more efficient. Density also fosters innovation by increasing interactions and knowledge sharing among workers. Perhaps most importantly, educated, productive, and efficient regions are successful in the New Economy because they adapt quickly to rapidly changing economic needs.

Metro areas that had success over the last two decades – places like Austin, Denver, and Seattle – revitalized their core cities. To be sure, these larger regions had more resources and often higher priority with federal agencies. But they also had a vision for economic growth in the New Economy, and leaders willing to work collaboratively.

The Pioneer Valley urgently needs Springfield to serve as a stronger urban core. Compared with peer city regions, Greater Springfield appears less innovative, less connected to the global economy, and less productive. And despite the 14 colleges that give the Pioneer Valley an unprecedented base of young educated residents, Greater Springfield is losing young professional residents at a faster pace than are other Northeastern and Midwestern regions (Figure 4). The economic case for retaining these young workers with a talent for innovation is clear, but it is also important to consider the social entrepreneurship young leaders offer. Springfield needs their energy and optimism to propose new approaches to complex social challenges.

At this crossroads, a Springfield strategy is critical for the city and its residents, the Pioneer Valley, and the Commonwealth. In the pages that follow, we provide a detailed analysis of Springfield's social and economic setting to help inform a comprehensive strategy. We believe the data make a strong case for looking at growth from the perspective of both community development and economic development. Integrating these related disciplines is essential to achieving a growth strategy that is inclusive, sustainable, and effective – a strategy that Springfield residents can pursue with common vision and coordinated action – the most essential prerequisite for success.

II. RESIDENTS AND A FRAMEWORK FOR GROWTH

Springfield’s residents are key drivers of long-term economic growth. They own many local businesses, they make up a large part of the workforce, and they provide important political leadership.

To be successful, Springfield residents require strong families, quality education, connections to work, and a supportive community. Challenges in each of these areas contribute to a disconnect between the economic opportunities available in Springfield and the difficulties city residents have realizing them. Like other older industrial cities in the Northeast and Midwest, Springfield consistently falls below national averages in these four areas. However, on measures that are particularly critical to economic growth – factors relating to the well-being of future generations – Springfield substantially underperforms these peer cities.

While cities are both residential and economic areas – and they must balance the needs of residents against the needs of businesses – investments in their people are vital. The data

presented in this section make a strong case for increasing focus on programs and services that support Springfield youth and families.

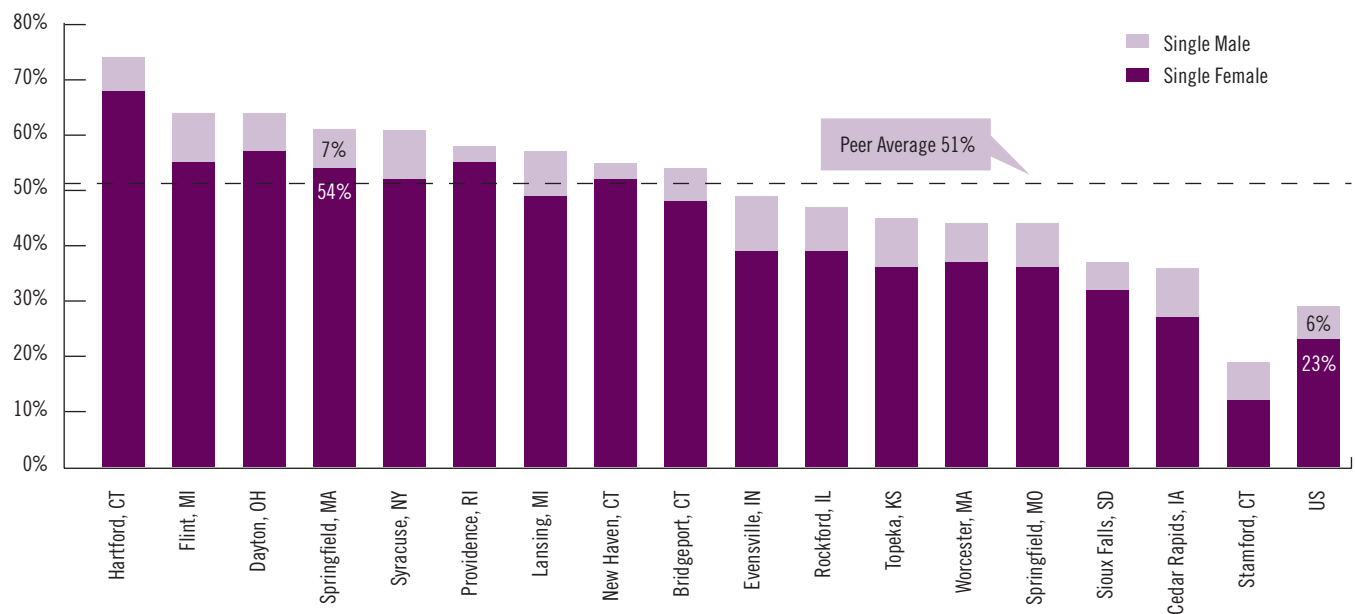
1. Family

Signs that families in older industrial cities like Springfield are under stress have been present for decades. Researchers trace these pressures back to manufacturing decline, which made jobs with decent wages harder to find, particularly for men. Antipoverty programs with financial incentives that undermine marriage have also had a destabilizing effect on families. A closer look at three critical indicators of family well-being – single parenting, teen pregnancy, and child poverty – highlights an imperative to strengthen families in both Springfield and the peer cities.

More than 60 percent of Springfield’s families are led by single parents. Approximately 54 percent of families are headed by single women and 7 percent by single men. While single par-

Figure 5:

Percent of Families Headed by Single Parents (2007)



Source: U.S. Census Bureau

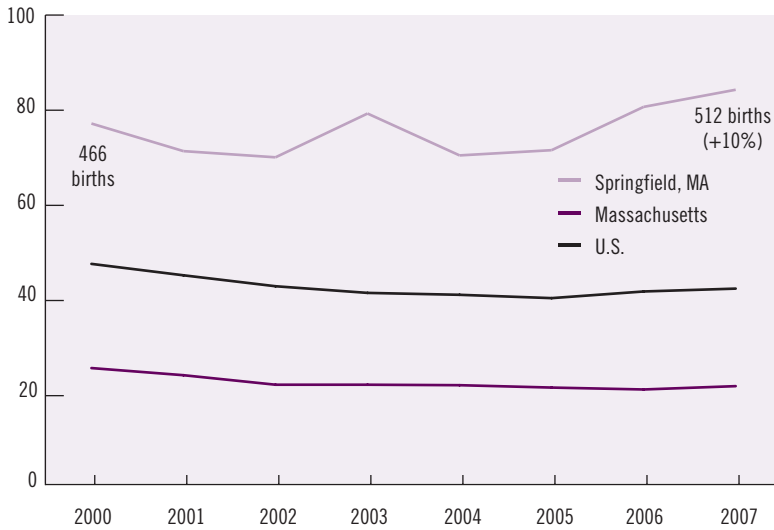
enting is increasingly common throughout the nation and in cities in particular, the share of Springfield families led by single parents is a full 10 percentage points above the peer average, and more than double the national average. Only

three peer cities have a higher proportion of families led by single parents (Figure 5).

Springfield's single parents are increasingly teens. More than 500 children were born to teen parents in 2007 – one out of every five births to Springfield mothers. Records from the Massachusetts Department of Public Health show that 94 percent of these teens were unmarried. And Springfield's teen pregnancy rate has been steadily on the rise, up by approximately 10 percent since 2000. Nearly 8.5 percent of Springfield's teen girls now give birth each year. The city's teen pregnancy rate, the second highest rate in the state, is more than four times higher than the Massachusetts average, which has declined over the last decade along with the national teen pregnancy rate (Figure 6).

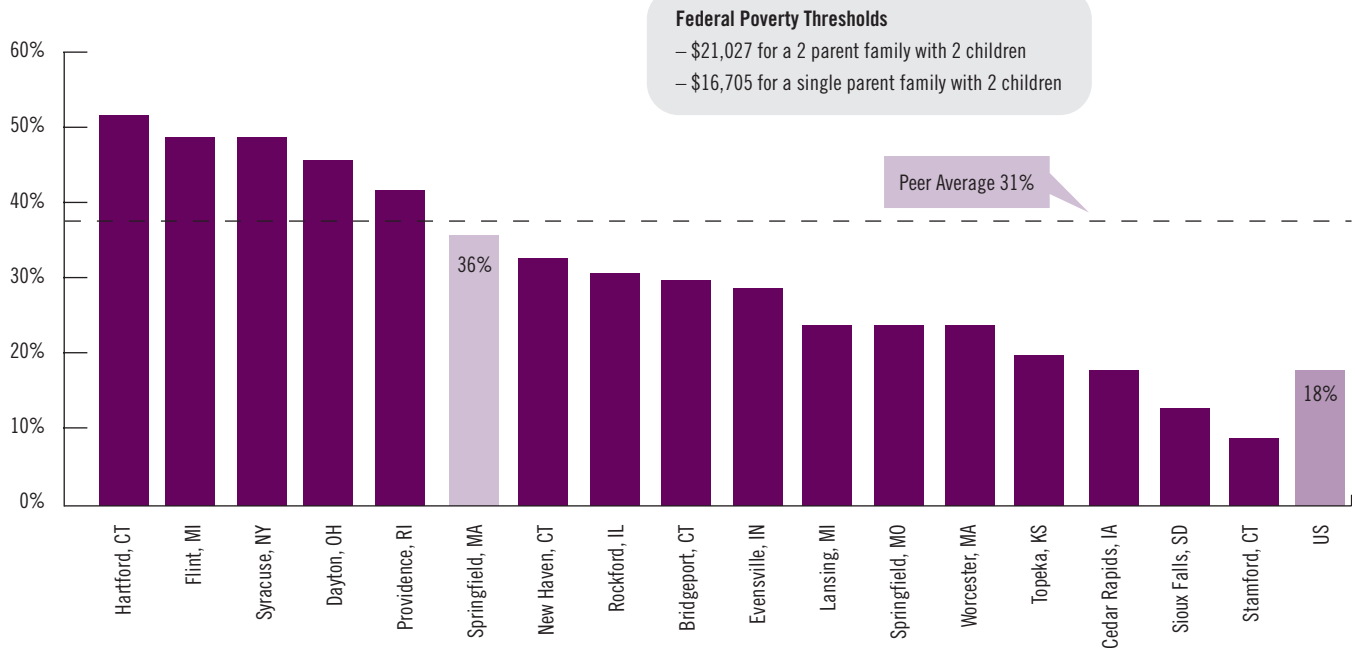
One out of three Springfield children lives in poverty. Family poverty is particularly hard on Springfield's children – more than a third (36 percent) live in households with income below poverty (Figure 7). This crisis is not unique to Springfield. Five peer cities have significantly

Figure 6:
Births Per 1,000 Teen Girls Age 15-19 (2000-2007)



Source: Massachusetts Department of Public Health

Figure 7:
Child Poverty Rate (2007)



Source: U.S. Census Bureau

higher rates of child poverty. In Hartford, poverty injures more than half of all children.

What makes family critical?

- *Single parenting has both immediate and long-term costs.* With just one worker, income is reduced by half, and families are much more vulnerable when the sole breadwinner loses their job. Single parents also earn lower wages because child care responsibilities mean they must work fewer hours. Studies show that even after controlling for the effects of limited income, children from single-parent households are less likely to complete high school and go on to college, which significantly reduces the wages they will earn as adults.⁵
- *Teen parenting has consequences for both parents and children.* Because teen parents often must disrupt their own education and career development, over their lifetimes they earn lower wages and build less wealth. Studies also show that after adjusting for other related factors, such as income and parental education, children born to teen parents are at much higher risk of dropout, unemployment, early parenthood, and violent offending.⁶
- *Poverty damages a child's economic future.* Poor nutrition in families with a limited food budget disrupts cognitive development. Families who are poor also move frequently, severing friendships essential to adolescent development. These moves require children to change schools, which interrupts education, causing lower-income students to fall behind their peers. Toxins in substandard housing lead to asthma and other chronic conditions, which often mean children lose additional time in the classroom. Statistics show that all the traumas associated with poverty ultimately have severe consequences: Poor children are more than twice as likely as non-poor children to drop out of school and to be disconnected from school and employment in early adulthood.⁷

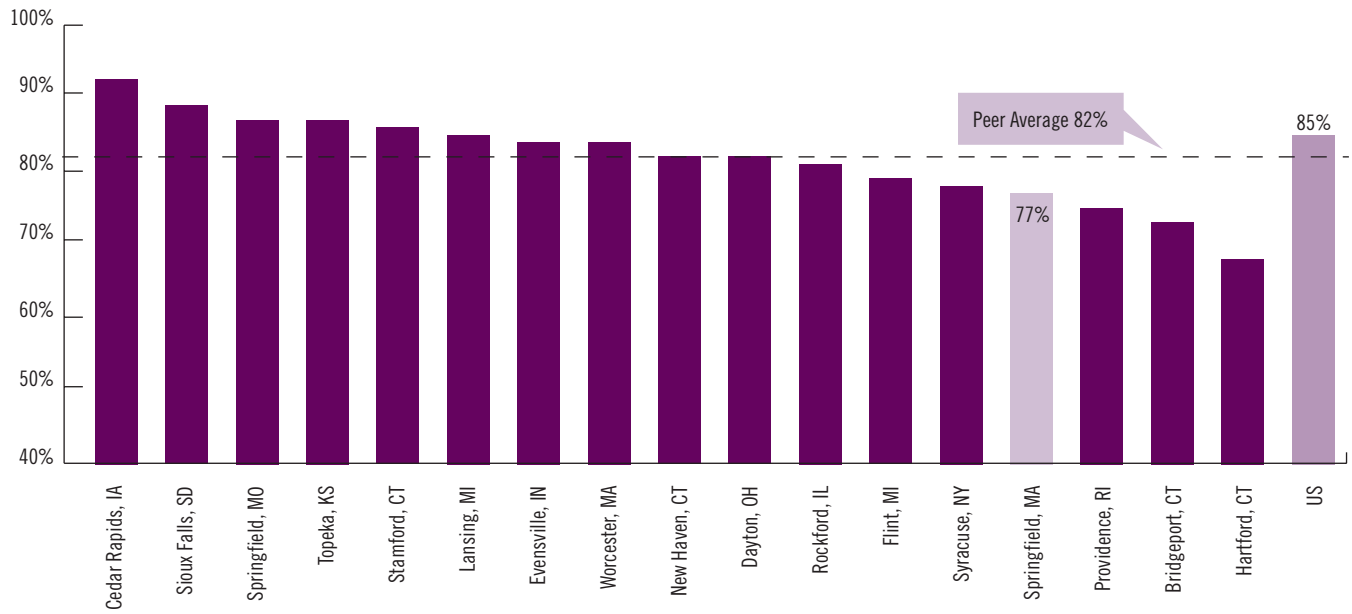
2. Education

Clearly, family has important implications for how well students perform in school, and schooling is increasingly essential to economic success, for both individuals and the cities and regions where they live. It is difficult to raise levels of educational attainment anywhere, but this work is especially challenging in older industrial cities. In the past, manufacturing jobs often did not require more than a high school degree, and residents of older industrial cities like Springfield still tend to have lower levels of educational attainment.⁸ The success a child has in school is closely tied to the educational achievement of their parents, which makes it harder for cities with lower educational attainment to make gains. Given the critical connection between education and work in today's economy, Springfield must find ways to help students succeed. Unfortunately, peer comparisons plainly show that, relative to other cities in the Northeast and Midwest, Springfield is having greater difficulty increasing the level of schooling acquired by young residents.

Many Springfield residents lack high school degrees. Only 77 percent of residents age 25 and over have received a high school degree or GED, a figure significantly lower than the average across peer cities (82 percent) and well below national levels (85 percent). Only three peers – Bridgeport, Hartford, and Providence – have lower levels of high school attainment (Figure 8). To a certain extent, these figures understate the true challenge Springfield workers face finding jobs with decent wages. Studies show a surprisingly high number of adult high school graduates in Massachusetts struggle with basic literacy skills.⁹ This is just one reason why employers now view a college degree as the entry level credential for most good-paying jobs.

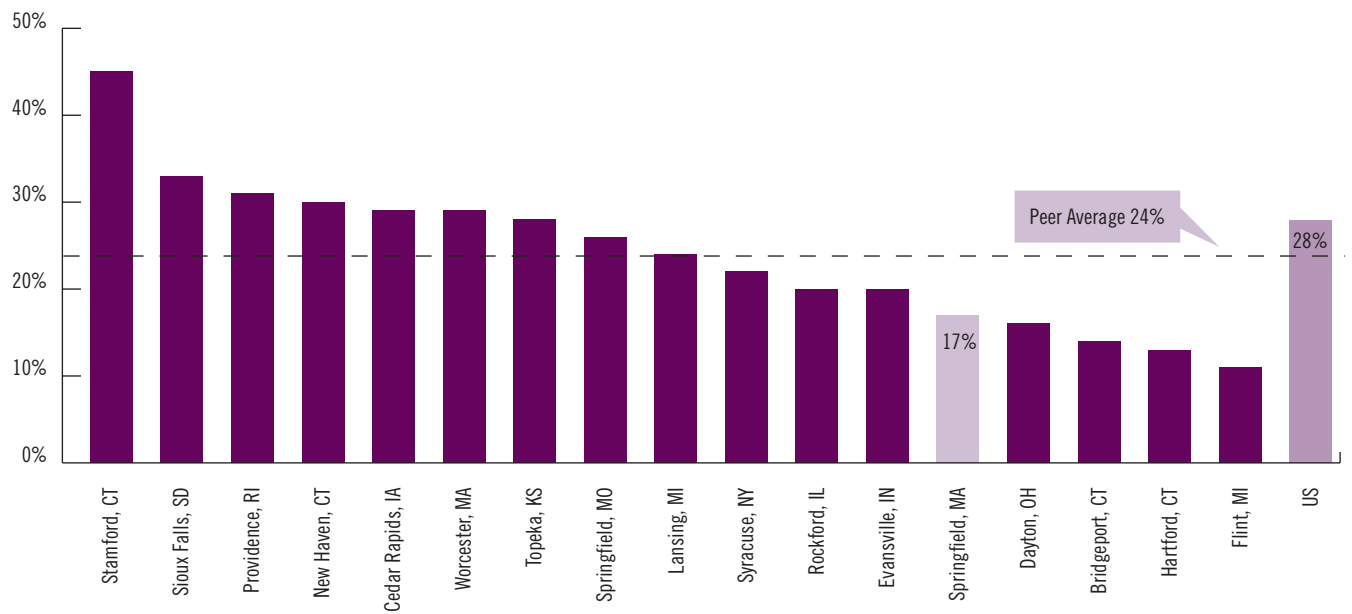
Most Springfield residents lack college degrees. Less than one-fifth (17 percent) of Springfield's residents age 25 and over have a bachelor's degree, 7 percentage points below the peer aver-

Figure 8:
High School Degrees, Percent of Population Age 25 and Over (2007)



Source: U.S. Census Bureau

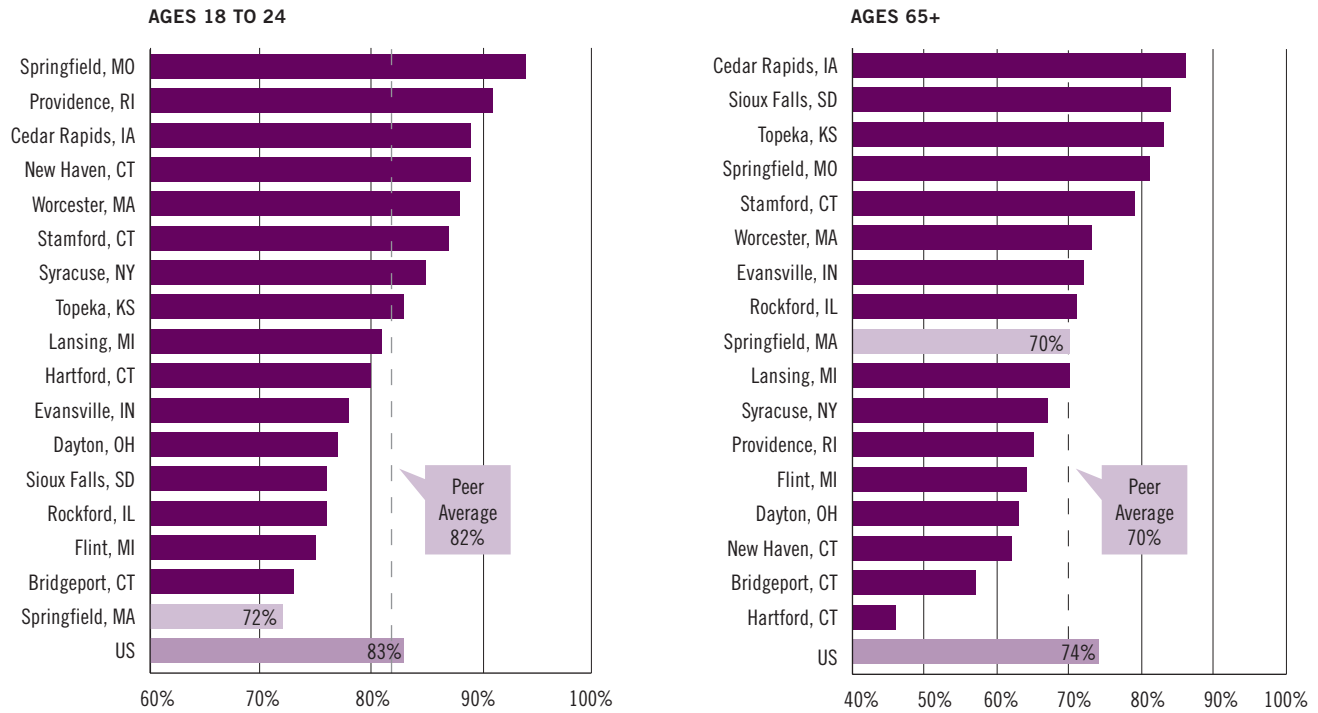
Figure 9:
Bachelor's Degrees, Percent of Population Age 25 and Over (2007)



Source: U.S. Census Bureau

Figure 10a:

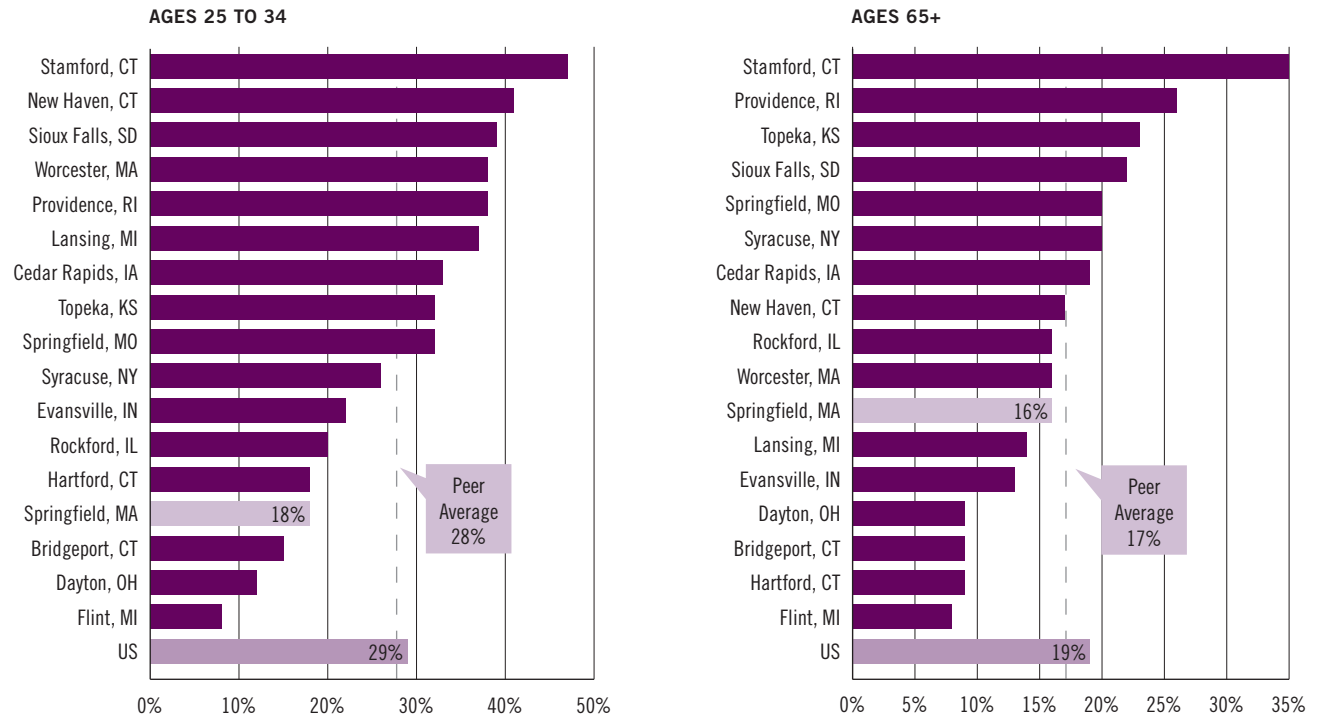
Percent of Residents with High School Degree by Age (2007)



Source: U.S. Census Bureau

Figure 10b:

Percent of Residents with Bachelor's Degree by Age (2007)



Source: U.S. Census Bureau

age, and more than 10 percentage points behind college degree attainment nationally (Figure 9). Only four peer cities – Bridgeport, Dayton, Flint, and Hartford – rank lower than Springfield on this measure. In a state where nearly 38 percent of residents have bachelor’s degrees, low levels of college education sharpen the relative disadvantage for Springfield residents competing for jobs.

Springfield’s younger generations are not keeping pace with young residents in other cities. This is most evident when measured by educational attainment at the high school level. With just 72 percent of residents ages 18 to 24 holding high school degrees, Springfield ranks last among peer cities for this age group. In contrast, Springfield residents over age 65 place right in the middle of the peer city residents over age 65 on high school completion (Figure 10). In other New England cities, young residents have made large strides. In Hartford and Providence, for example, the youngest generations rank significantly higher than the oldest on high school degrees.

And while Springfield’s oldest generation also lags on college education (ranked 11th), the youngest (ages 25 to 34) is behind even further (ranked 14th). Even more troubling, Springfield is not following the longstanding trend nationally of each generation receiving more education than the previous one. Residents with bachelor’s degrees make up 20 percent of the city’s 45 to 64 year olds and 16 percent of residents over age 65. But just 14 percent of residents ages 35 to 44 have college degrees.

Racial and ethnic disparities in educational attainment are large. Just 57 percent of Springfield’s Latino residents have high school diplomas, compared with 76 percent of African-Americans and 84 percent of whites. At the college level, attainment gaps are equally large – only 9 percent of Latino residents have completed a bachelor’s degree versus 15 percent of African-Americans and 23 percent of whites (Figure 11). These differences

are fairly similar to racial and ethnic gaps in educational attainment both nationally and throughout the peer cities. Studies suggest that inequality in parental income and education can explain much of the disparity; however, discrimination and other factors may also play a significant role.¹⁰

What makes education critical?

- *Knowledge is critical in the New Economy.* Springfield’s residents will increasingly face an economy in which the competition for work is global and jobs with good pay require complex skills. Developing the creative thinking and logical reasoning necessary for success requires formal education beyond a high school degree.
- *Dominant trends will continue to be adverse for less-skilled workers.* A few decades ago Springfield’s residents could reach the middle class without post-secondary education. With machines performing more and more of our work, and jobs dependent on physical labor disappearing or moving overseas, this is no longer guaranteed. Between 1979 and 2005, wages for people with a college degree rose by 22 percent, while pay for workers with a high school degree stood still, and for those without one, pay fell by 16 percent.¹¹

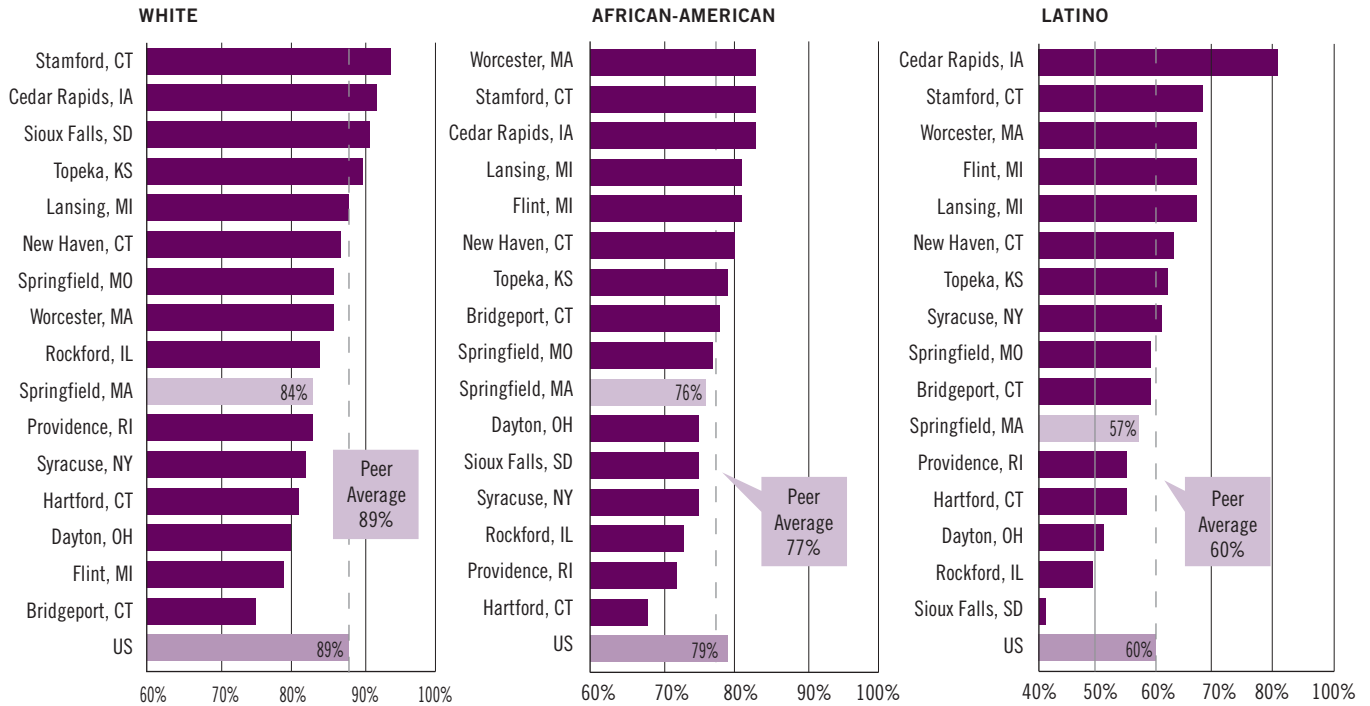
3. Work

Jobs in Springfield increasingly require degrees. With limited education, Springfield residents have difficulty getting work essential to their economic security. Connecting the city’s future generations to jobs with opportunity for career advancement is especially critical to Springfield’s long-term economic growth. Comparisons to residents of other peer cities show that Springfield’s youngest workers are not participating and gaining the work experience necessary for future success.

Jobs in Springfield that offer good pay require education. In the city’s financial services firms, for instance, employees with bachelor’s degrees

Figure 11a:

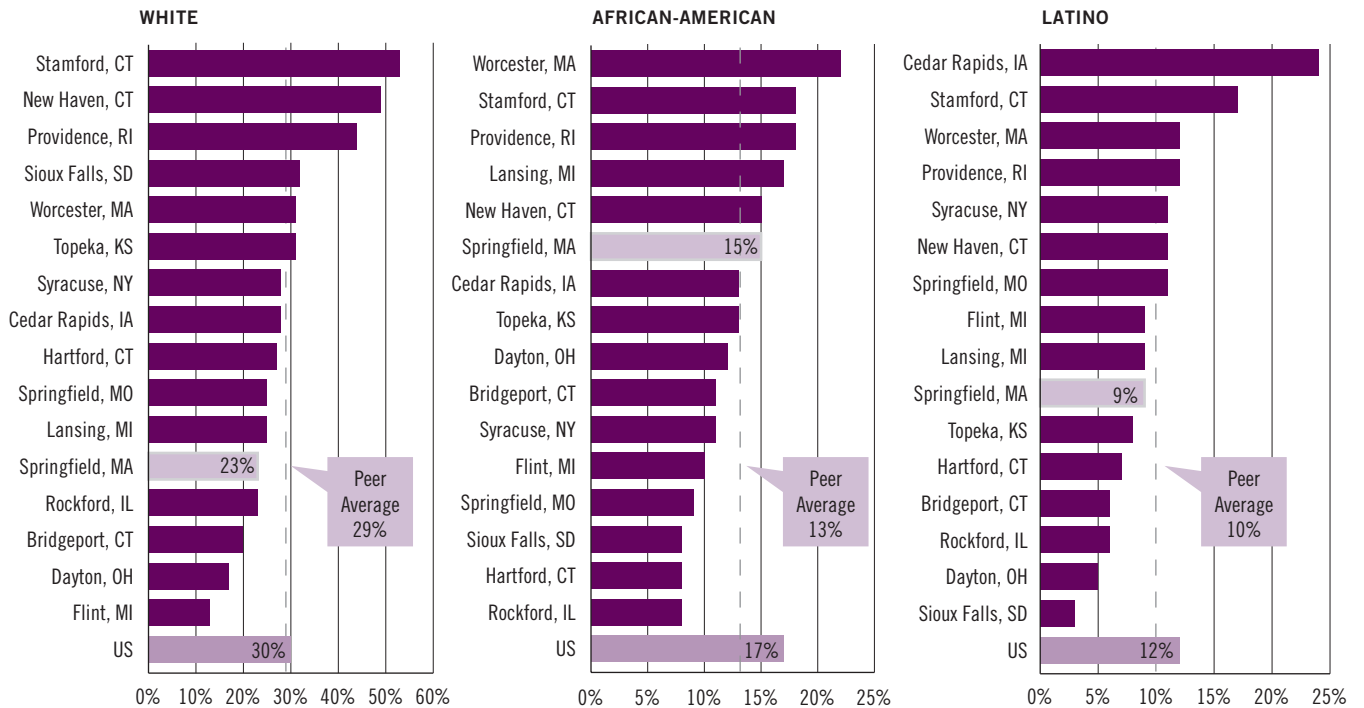
Percent of Population with High School Degree by Race/Ethnicity (2005-2007)



Source: U.S. Census Bureau

Figure 11b:

Percent of Population with Bachelor's Degree by Race/Ethnicity (2005-2007)



Source: U.S. Census Bureau

Figure 12:

Percent of Springfield Workers by Educational Attainment (2005-2007)

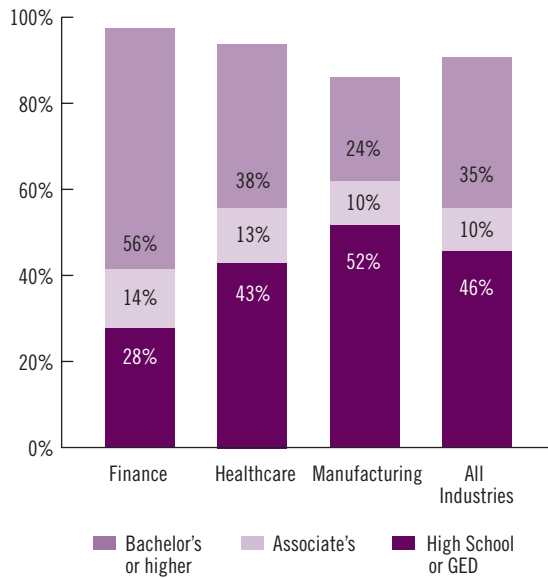
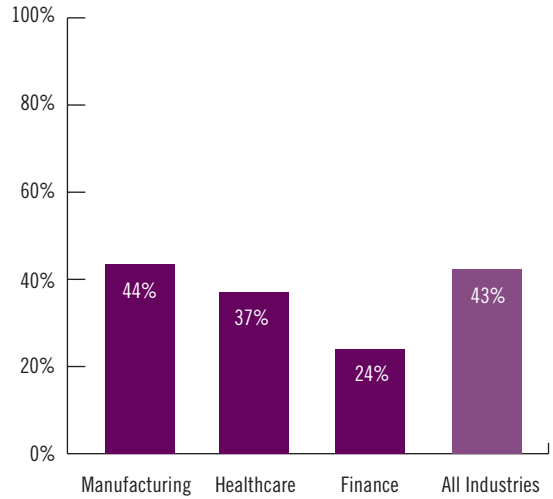


Figure 13:

Percent of Jobs Filled by Springfield Residents (2005-2007)



Source: MassINC's analysis of American Community Survey Public Use Microdata Sample

make up more than half of those employed (56 percent), two-thirds have an associate's degree or higher, and nearly everyone (98 percent) has completed high school. Likewise, more than a third of the city's health care workers (38 percent) hold bachelor's degrees, half carry an associate's degree or higher, and fully 94 percent have completed high school (Figure 12).

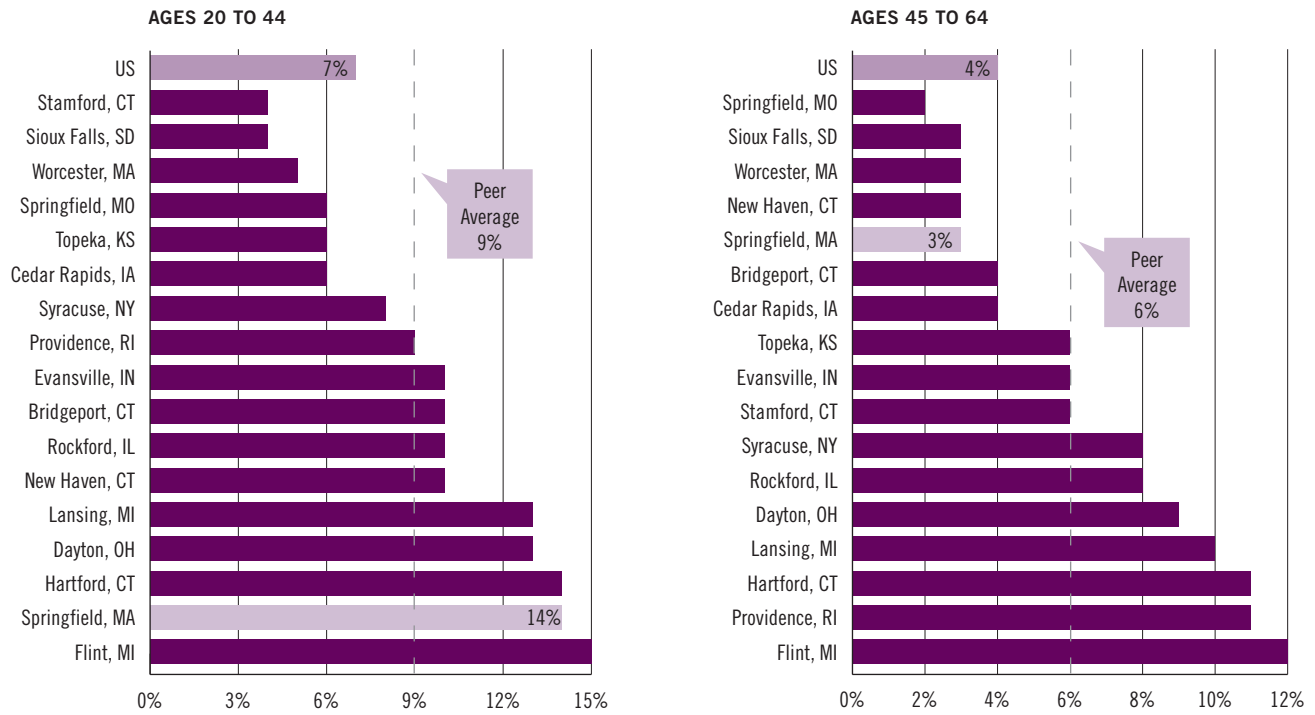
Springfield residents are underrepresented in the city's key industries. City residents make up just 37 percent of health care workers in Springfield, and less than a quarter of those employed in financial services (Figure 13). Relative to peer cities, Springfield residents are at a particular disadvantage competing against suburban workers. Nearly a third (31 percent) of the region's suburban residents have college degrees – 4 percentage points above the national average. Only five of the peer city regions had higher suburban educational attainment at the college level. These educational disparities are clearly an important factor in explaining the underrepresentation of Springfield residents in the city's high-wage industries.

Springfield's younger workers struggle with unemployment. While significantly higher than unemployment nationally, just before the current downturn, Springfield had only a slightly higher percentage of residents out of work than the peer average. The unemployment rate for the city overall, however, hides a clear distinction between young workers and those with more years of experience – 14 percent of residents ages 20 to 44 are unemployed, compared with just 3 percent of workers ages 45 to 64. A close look at Figure 14 reveals that this large disparity is uncommon among peer cities. Providence youth have lower unemployment rates relative to older workers. And in places where jobs are particularly scarce – cities like Flint and Dayton – unemployment runs high for both older and younger workers alike.

An alarmingly high percentage of Springfield's young residents are not participating in the labor force. Springfield's labor force participation rate among those ages 20 to 44 – the percentage of residents employed or actively looking for

Figure 14:

Unemployment Rate by Age Group (2007)



Source: U.S. Census Bureau

Figure 15:

Labor Force Participation, Residents Age 20 to 44 (2007)

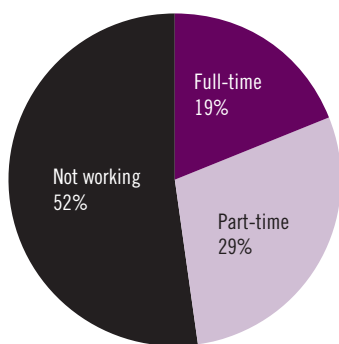


Source: U.S. Census Bureau

work – is the lowest among peer cities with the exception of Flint (Figure 15). For these younger workers, labor force participation is 8 percentage points below the peer city average, and a full 10 percentage points below the national rate.

The challenges Springfield residents face finding good jobs ultimately mean that many families struggle economically. Nearly half (48 percent) of all Springfield families with income below poverty are headed by adults who work.

Figure 16:
Springfield Families with Income Below Poverty by Employment Status (2007)



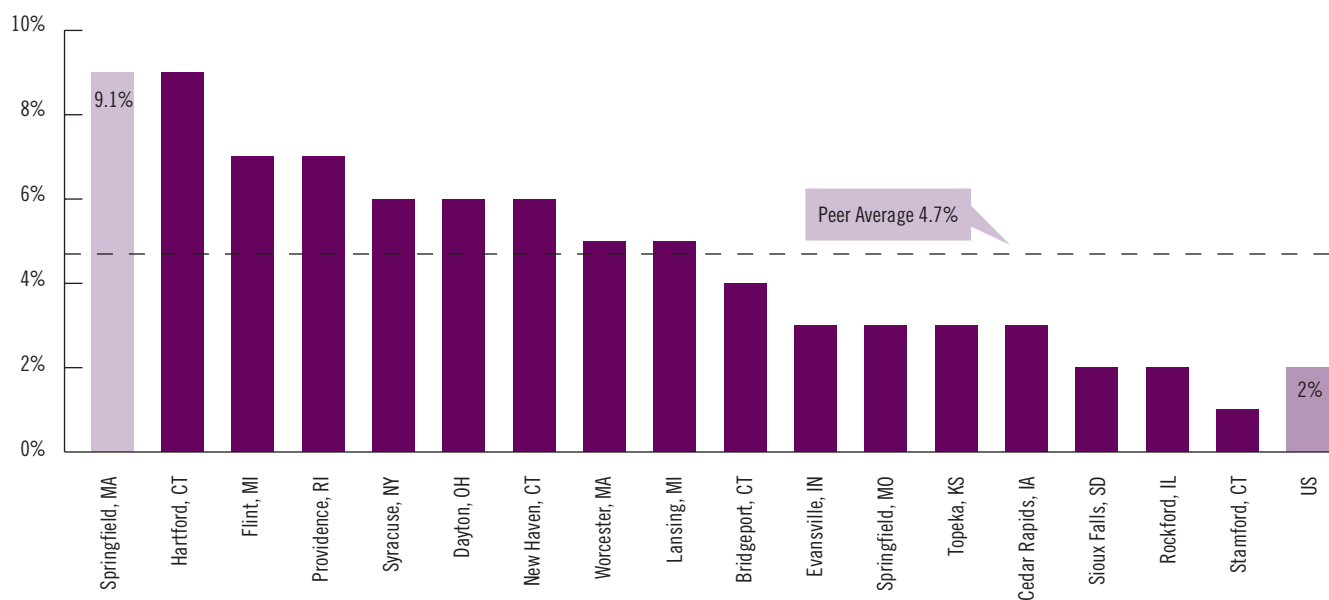
Source: U.S. Census Bureau

One in five poor families is led by an adult holding a full-time job and still earning income below the federal poverty threshold (Figure 16). Many families who have trouble finding work rely on some form of public support. Over 9 percent of Springfield households received public assistance income in 2007, a share nearly twice the peer average and larger than in any of the 16 comparison cities (Figure 17).

What makes work critical?

- *A parent's job impacts their child.* Youth with working parents tend to do better in school and have higher self-esteem. By modeling workplace norms, a working parent can instill these expectations in a child. However, the opposite is true when a parent has an undesirable job, or is constantly in and out of work. Parents who face excessive workplace stress have less energy for healthy interactions with their children, and job turnover is destabilizing, particularly when it leads to frequent moves that sever relationships with a stu-

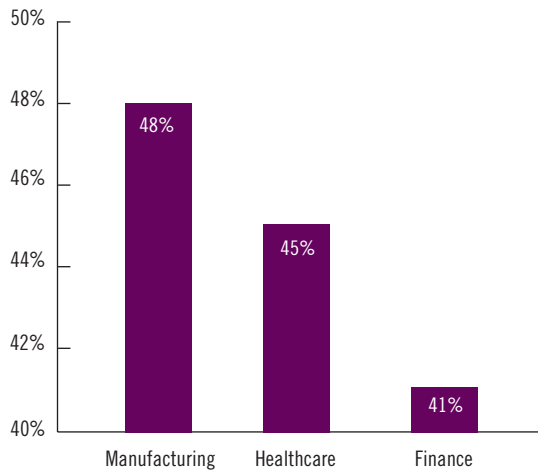
Figure 17:
Percent of Households with Public Assistance Income (2007)



Source: U.S. Census Bureau

Figure 18:

Percent of Jobs Filled by Workers Over Age 45 (2005-2007)



Source: MassINC's analysis of American Community Survey Public Use Microdata Sample

dent's friends and teachers. Children raised by single mothers who have intermittent and stressful employment tend to do less well in school and have lower self-esteem.¹²

- *For young workers, unemployment interferes with career development at a crucial stage.* Early workforce experience is critical to the career decisions youth make, including choices about additional training and education. Studies show that young people who have difficulty finding work have weaker labor force participation and earn lower wages as adults.¹³
- *Springfield needs a new generation of workers to take the place of retirees.* The number of workers that will retire over the next 20 years, those over age 45 today, represent sizeable shares in the city's key industries. In finance, workers over 45 represent 41 percent of the workforce. An even higher proportion of health care (45 percent) and manufacturing workers (48 percent) are over age 45. The aging health care workforce is a particular concern given the industry's size and the number of positions that will need to be filled as experienced workers reach retirement (Figure 18).

4. Community

The three previous topics – education, family and work – relate to individuals, which make them relatively easy to describe. Community, the fourth vital factor for resident success, is much less tangible, but equally crucial. People living together in a community have common social, economic, and political interests. When they work together to advance these mutual concerns, everyone benefits, which is what makes strong communities more than the sum of their parts.

Building community requires civic participation. Residents must engage in local affairs, by volunteering, joining neighborhood organizations, contacting local leaders, or voting. Whether residents participate or not is determined by direct factors, such as how long they remain in their homes before moving to another location, as well as more subtle things, like how often neighbors socialize to get to know one another and develop trust.

Research suggests that these forms of civic engagement essential to community have been on the decline nationally for decades. Irregular work schedules, childcare responsibilities, and declining wages have made it even harder for lower-income residents of older industrial cities to participate in community life.¹⁴ While we do not have the survey data required to measure community and civic participation across Springfield and the peer cities directly, it is essential to consider this topic given community's fundamental contribution to long-term growth. Moreover, what we do know from related research suggests Springfield must overcome some particularly significant community-building obstacles.

While Springfield's diversity enriches the community, it may make it harder to engage residents, particularly when diversity is associated with high levels of racial and ethnic inequality. Springfield is a very diverse city. No single racial or ethnic group represents a majority of residents. Without question, the city draws much of its

vibrancy from the many different peoples contributing to its neighborhoods. However, studies show that diversity may also make it more difficult for inclusive cities like Springfield to bring residents together to work toward a common good.¹⁵

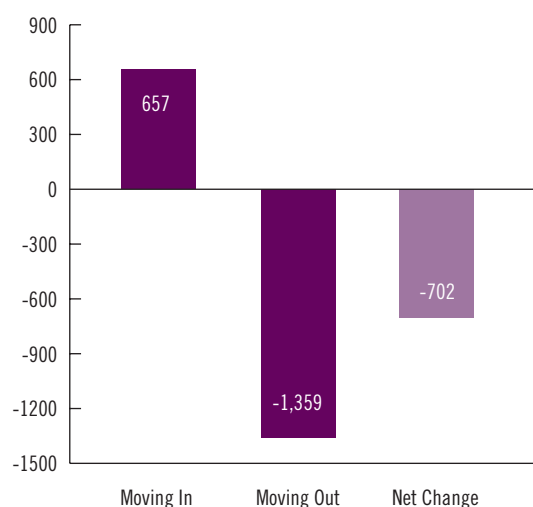
This is especially true when diversity is associated with high levels of inequality, which, as noted previously, is common in Springfield and throughout the peer cities.¹⁶ In communities with large income disparities, residents often do not see each other as facing a shared fate, which makes them less likely to work together to advance mutual interests. This dynamic can even extend out beyond cities to their entire regions. Evidence suggests support for a range of public services, from education to transportation, is lower in regions with high levels of segregation and racial and ethnic income inequality.¹⁷

Inequality in income also results in unequal rates of participation. This is often a consequence of economics. Homeownership, for instance, is tied directly to community engagement, in large part because homeowners are sensitive about property values. In Springfield, 68 percent of white households own their homes versus 40 percent of African-Americans and just 25 percent of Latinos.

Springfield lacks college educated residents essential to community capacity. As noted previously, only 17 percent of Springfield residents have bachelor's degrees. Migration data also show that in recent years, the flow of college educated residents leaving the city has outnumbered those arriving by a ratio of 2 to 1 (Figure 19). Studies show that educated residents are more likely to participate in community. This is due in part to more accommodating work schedules, but additionally, educated residents often feel more comfortable engaging in exchanges with the professionals (principals, lawyers, developers, politicians) who often lead discussions on neighborhood issues.¹⁸

Figure 19:

Annual Migration of Residents with College Degrees (2005-2007)



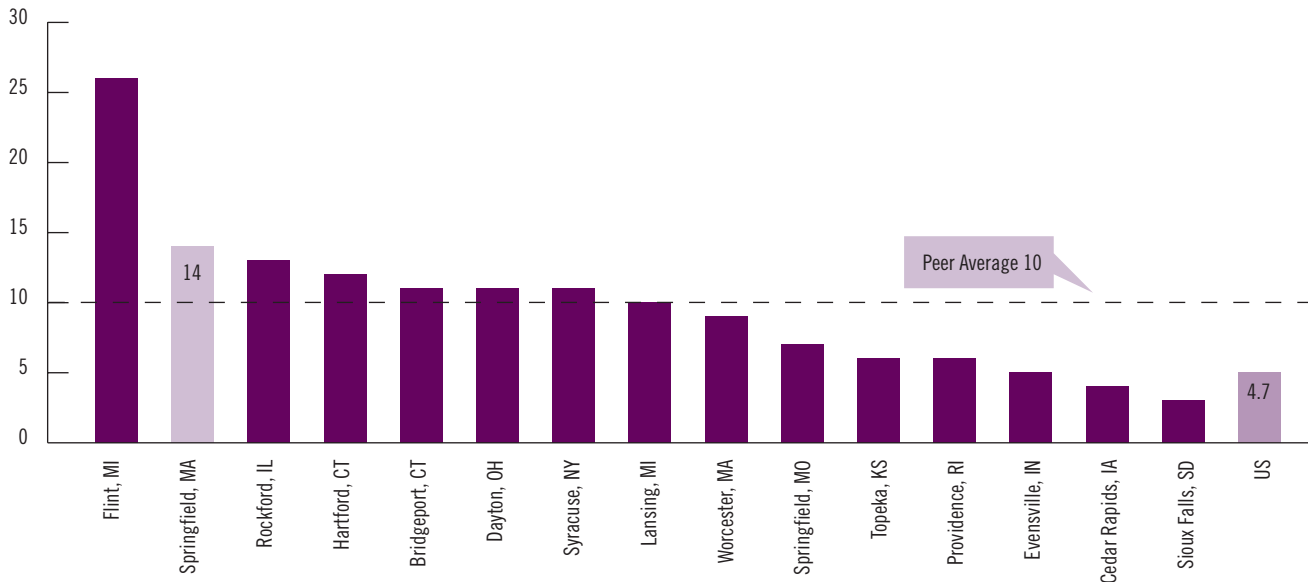
Source: MassINC's analysis of American Community Survey Public Use Microdata Sample

Violent crime in Springfield suppresses civic engagement. For 2006 and 2007, Springfield's violent crime rate was about a third higher than the peer city average and triple national rates (Figure 20). Crime reduces civic participation by isolating people and making them fearful to venture out and interact. More importantly, it also has a corrosive effect on trust. The ability of residents to work together with others that they don't know well is dependent on whether they have confidence in their neighbors. This makes trust the single most important predictor of productive community engagement.¹⁹

Negative media portrayals increase fear and cause residents to lose faith in the community. Like most American cities that struggle with crime, television news outlets in Springfield may have a tendency to dwell on crime in their reporting. Viewing local television news tends to increase fear and concern about crime above levels that the actual incidence of crime would justify. Even when the subject is not crime, the news media often presents a biased view of older cities.

Figure 20:

Violent Crimes Per 1,000 Residents (2006-2007)



Source: FBI Uniform Crime Reports

For instance, Forbes magazine recently labeled Springfield one of “America’s fastest dying cities.” Even though this distinction is contrary to evidence, as noted previously, labels like these have negative effects on community identity.²⁰

What makes community critical?

- *Community is essential to individual well-being.* Research consistently shows that community has a measurable impact on how well youth perform in school, how healthy they are, and the likelihood they will engage in criminal activity.²¹
- *Community is tied to economic growth.* Cities where citizens participate in bettering the public good grow faster.²²
- *Community ties residents to the city and its neighborhoods.* Research shows that neighborhoods where residents have greater attachment to the community are more stable over time.²³ By engaging residents and encouraging them to participate in community life, cities can help create healthy neighborhoods.

Building for the Future of Springfield’s Residents

This review of family, education, work, and community – four factors critical to the economic success of residents – points to serious challenges for Springfield. Figure 21 provides a better sense of the task ahead proportionate to other cities by combining key indicators presented in this section in two indexes: one describing current conditions and a second looking at the future based on measures relating to the city’s younger residents.²⁴ Springfield currently outperforms just two cities, and in the future only three. Clearly this makes a statement about the urgent need for action. However, framing the challenge ahead for Springfield is a delicate balance. The city ranks relatively low, but it is certainly not alone; nearly all of the peers fall well below national averages. In most of these older industrial cities, concerted effort will be needed to ensure the future economic well-being of residents.

Table 3 provides more perspective on what will be required to make real gains for Springfield

Figure 21:
Index of Key Indicators

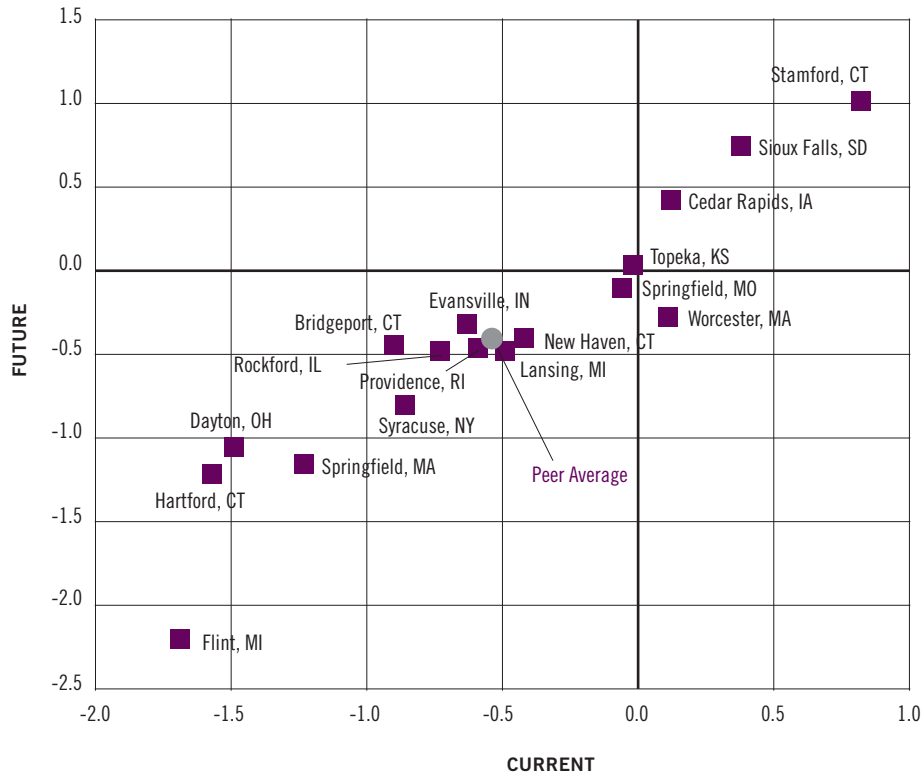


Table 3:
Key Indicator Benchmarks

MEASURE	WHAT ARE THE RATES?			HOW MANY SPRINGFIELD RESIDENTS IS THIS?	HOW MANY MORE (FEWER) SPRINGFIELD RESIDENTS TO GET TO THE:	
	SPRINGFIELD	PEER AVERAGE	US		PEER AVERAGE	US
CURRENT						
Poverty	26%	22%	13%	38,734	(6,273)	(19,243)
Unemployment	7%	6%	5%	4,591	(397)	(1,574)
Public Assistance Income	9%	5%	2%	5,065	(2,456)	(3,872)
College Degrees	17%	24%	28%	15,330	6,114	9,038
Labor Force Participation	57%	64%	65%	65,906	7,821	8,396
FUTURE						
Child Poverty	36%	31%	18%	7,084	(1,024)	(3,565)
Single Parent Families	61%	51%	29%	17,837	(3,603)	(11,415)
College Degrees (25-34)	18%	28%	29%	6,636	3,840	4,213
Unemployment (20-44)	14%	9%	7%	5,467	(1,900)	(2,947)

on the critical measures displayed in this graph. For instance, to reduce poverty to the peer average, Springfield must bring more than 6,000 residents out of poverty; reaching the national rate of 13 percent would require an effort that moves nearly 20,000 residents over the poverty threshold. Few cities have accomplished gains of this magnitude. Reaching these goals will require unprecedented commitment along with openness to innovative new approaches to the city's social challenges.

By incorporating these new strategies in a comprehensive long-term growth plan, Springfield can clearly identify what it hopes to accomplish, and how this work will get done. Over time,

a clear strategy can also help the community assess which components are effective and which components need rethinking. As Springfield and its partners begin to dialogue about what will contribute to a successful strategy, these important questions will need consideration:

- How have we worked to address these issues in the past? Where have we been successful? Where haven't we been and why?
- Which local, state and federal policies are helping us? Which policies are hurting? How do we advance a legislative agenda?
- What are the key performance metrics? What are reasonable goals? What milestones can we establish to chart our progress?

III. BUSINESSES AND A FRAMEWORK FOR GROWTH

Businesses are vital to Springfield's economic future. Beyond providing jobs, companies make social and physical investments in the city – investments that pay dividends to both businesses and residents. While companies respond to market forces, which limit the city's ability to shape them, over the long term, the community can foster business activity with well-executed economic development strategies.

These economic development strategies come in many forms. Before Springfield explores different approaches, it is essential to have a thorough understanding of current trends in both the local and regional economies, and how they combine to influence the city's future growth. An understanding of economic trends that goes beyond numbers of jobs is essential. In this section, we provide a deeper view by examining Springfield's business setting from four angles:

the economic base, traded clusters, innovation, and local markets.

From these different vantage points, Springfield and the Pioneer Valley make up a single economic engine with interlocking parts. The data highlight an imperative for coordinating local and regional growth strategies, recognizing Springfield's vital role in a competitive Pioneer Valley economy.

1. Economic Base

Economic base refers to industries that serve external markets. These sectors are the engines of the local economy because they are not bound by local demand. Base industries can reach out and provide products and services to growing markets, bringing some of the gains from this growth back to Springfield. In contemplating a long-term strategy, the city must consider its own economic base in addition to regional economic base industries, which drive the larger metropolitan economy (see text box). Manufacturing decline has clearly eroded an important component of Springfield's economic base, and the wider Pioneer Valley remains vulnerable to continued manufacturing decline. While other industries are compensating, the city's economic base has grown less diversified.

Springfield's economic base is sustained by higher education, health care, finance, and manufacturing. We know this anecdotally, but location quotients (LQ), which measure how concentrated Springfield's employment is in a particular industry versus the share of employment in that sector in the overall US economy, offer additional confirmation and provide a yardstick for measuring the relative strength of these four sectors. If the city's LQ in an industry is higher than one, there is proportionately more employment in that sector. These extra jobs are most likely providing products and services to consumers out-

GEOGRAPHY

We use the terms *Greater Springfield*, *the region*, and *Pioneer Valley* interchangeably to refer to the cities and towns (including the City of Springfield) located in Franklin, Hampshire, and Hampden counties. Combined, these three counties make up the Springfield Metropolitan Statistical Area (MSA), which is defined by the Office of Management and Budget based on commuting patterns and other criteria. Publicly available data provided by the Census Bureau, the Bureau of Labor Statistics, and the Bureau of Economic Analysis all conform to this geography.

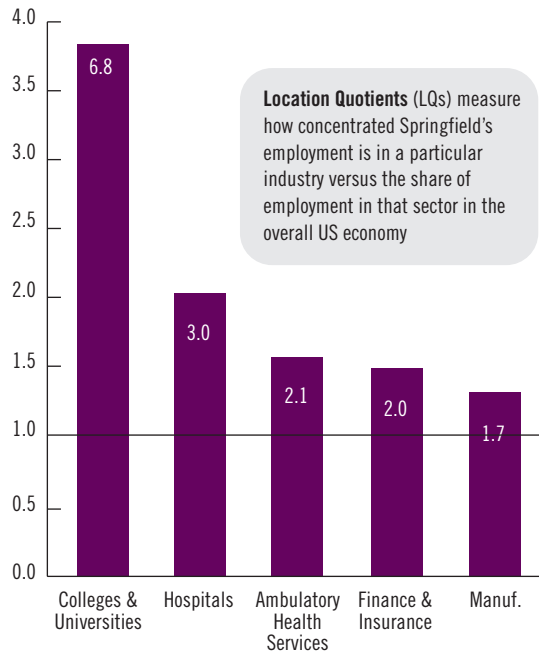


side of the local market.

Looking at Figure 22, proportionately colleges account for nearly four times more jobs in Springfield, and hospitals more than three; ambulatory health (doctors' offices and outpatient centers) and finance are nearly twice as concentrated in Springfield than in the national economy. The city no longer has real strength in manufacturing, but manufacturing is by definition part of the economic base because the vast majority of goods produced locally get shipped to external markets.

Even among the peer cities, which are all regional service centers, Springfield's successes in finance and health care stand out. And while the city's manufacturing LQ is low, it is clear from these data that, for the most part, midsize cities in the Northeast and Midwest are no longer major locations of industrial production (Table 4).

Figure 22:
Location Quotients (2007)



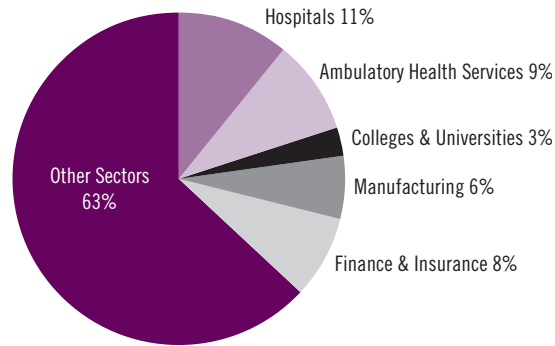
Source: Massachusetts Department of Labor and Workforce Development

Table 4:

Concentrations in Regional Industries (Location Quotients)

RANK	AMBULATORY HEALTHCARE (2002)		FINANCE & INSURANCE (2004)		MANUFACTURING (2004)	
1	Springfield, MA	1.86	Hartford, CT	6.47	Flint, MI	2.44
2	Worcester, MA	1.81	Stamford, CT	2.81	Rockford, IL	1.73
3	Bridgeport, CT	1.59	Sioux Falls, SD	2.33	Cedar Rapids, IA	1.38
4	New Haven, CT	1.31	Springfield, MA	2.11	Lansing, MI	1.37
5	Rockford, IL	1.24	Topeka, KS	1.43	Dayton, OH	1.27
6	Evansville, IN	1.22	Cedar Rapids, IA	1.42	Evansville, IN	1.09
7	Topeka, KS	1.20	Bridgeport, CT	1.32	Bridgeport, CT	1.04
8	Syracuse, NY	1.11	Worcester, MA	1.30	Springfield, MO	0.87
9	Springfield, MO	1.10	Syracuse, NY	1.21	Sioux Falls, SD	0.79
10	Providence, RI	1.02	Providence, RI	1.21	Worcester, MA	0.77
11	Sioux Falls, SD	0.97	Evansville, IN	1.02	Syracuse, NY	0.74
12	Flint, MI	0.92	Springfield, MO	1.00	Topeka, KS	0.70
13	Hartford, CT	0.92	Rockford, IL	0.94	Springfield, MA	0.62
14	Dayton, OH	0.83	Lansing, MI	0.80	Providence, RI	0.56
15	Cedar Rapids, IA	0.76	Flint, MI	0.79	New Haven, CT	0.39
16	Stamford, CT	0.52	New Haven, CT	0.67	Stamford, CT	0.27
17	Lansing, MI	-	Dayton, OH	0.65	Hartford, CT	0.12
	Peer Average	1.15	Peer Average	1.62	Peer Average	0.95

Figure 23:
Employment Shares by Industry (2007)



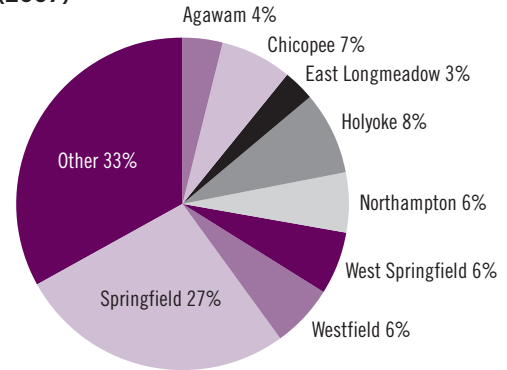
Source: Massachusetts Department of Labor and Workforce Development

The city is increasingly reliant on health care and finance. A fifth of all Springfield jobs are in health care, and these positions represent more than half of all the jobs provided by the four industries key to the city's economic base. Jobs in finance make up less than 10 percent of the city's total employment but account for nearly a quarter of all jobs in these economic base industries, and more than a third of the economic activity generated by the four sectors as measured by total payroll.

The two other main components of Springfield's economic base are comparatively much smaller. Manufacturers in the city now provide less than 5,000 jobs, and the five colleges, which have the strongest LQ, actually represent just 3 percent of the city's total employment (Figure 23).

Overdependence on health care and finance could jeopardize long-term growth. Without question, the growing health care industry is vital to Springfield. Hospitals provide good jobs with career ladders, which help residents with lower levels of education connect to employment and steadily gain skills and experience. However, in terms of long-term growth, dependence on health care decreases the diversity of the city's economic base, increasing Springfield's exposure should there be a slowdown in the industry. Similarly, Springfield's financial strengths are largely associated with a single firm. While the presence of

Figure 24:
Percent of Pioneer Valley Employment by Community (2007)



Source: Massachusetts Department of Labor and Workforce Development

a Fortune 100 company gives important significance to the city, relying heavily on one business for economic activity can create a systemic risk.

Springfield is by far the Pioneer Valley's largest employment center, yet from an economic base perspective, the wider region is critical to the city's economic growth and vitality. As shown in Figure 24, the city accounts for just one quarter of Pioneer Valley jobs, and nearly half of all Springfield residents work for suburban employers (Figure 25). This makes the larger regional economy central to Springfield's economic growth.

In a healthy metropolitan economy, suburban companies that contribute to the regional economic base also drive many providers of business services located in the central city. For example, when a local manufacturer located in the suburbs draws wealth into the region, a small commercial bank they work with in the city also benefits. In this sense, in thinking about economic base, analysis at the regional level is critical.²⁵

Greater Springfield's competitive strengths are in higher education, and four areas of manufacturing: plastics, fabricated metal, printing, and machinery. Combined, the region's 14 colleges clearly make the Pioneer Valley a dominant center for university learning. And Greater Springfield is also well known for its manufacturing heritage, tracing back centuries to the federal

BUILDING AN ECONOMIC BASE

From Springfield's perspective, economic activity associated with customers outside of the city contributes to the economic base, whether it involves a Springfield manufacturer fashioning parts for a company in Germany or a Springfield hospital treating a patient from Ludlow. From the region's perspective, products shipped to Germany contribute to the regional economic base, but serving a patient from Ludlow does not bring new wealth to the Pioneer Valley.

Should Springfield place more emphasis on industries that contribute to the regional economic base?

To the extent that Springfield businesses serve customers from the Pioneer Valley, they still bring new dollars to the city economy above and beyond what local residents can support. First and foremost, sustaining and growing companies that draw economic activity into the city is essential, even if the dollars are from within the region.

However, cities and towns in the Pioneer Valley are very tightly connected. Together they form essentially one labor market, with workers commuting between them. Residents also spend their wages at various commercial centers within the region. Adding to the city's economic base with companies that draw new wealth from outside the region will help Springfield stimulate the entire metropolitan economy. By strengthening the regional economy, Springfield businesses serving markets beyond the Pioneer Valley have a larger economic impact for the city than companies that rely on wealth already present in the regional economy.

Springfield must also play a strong role helping the region attract, retain, and grow its economic base, by working to bring companies to the city that will serve markets beyond the region, but also by contributing to economic development efforts that support communities outside of the city. In today's healthiest metropolitan economies, cities have large numbers of reverse commuters, with residents leaving the city to work in economic base industries located in the suburbs. These workers bring the wages earned back to their neighborhoods. As the regional economic base grows, Springfield companies will also benefit from the secondary activity created, producing components of the product and providing other supportive services, or simply by providing opportunities for those associated with these businesses to spend money in the city.

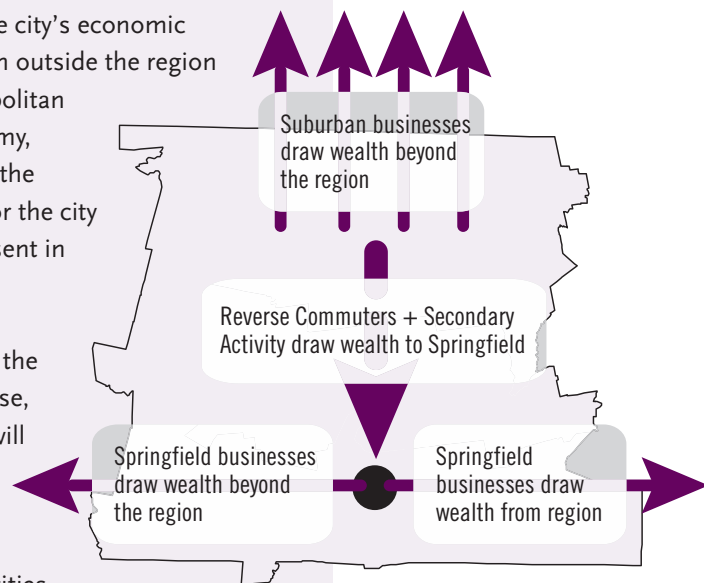
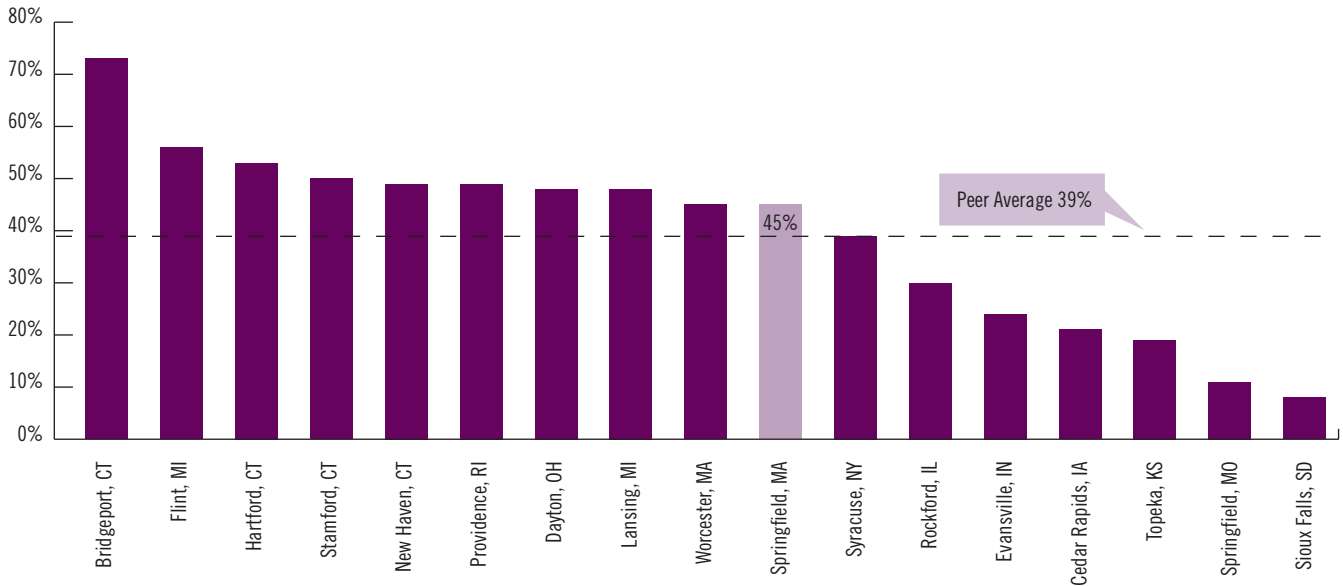


Figure 25:

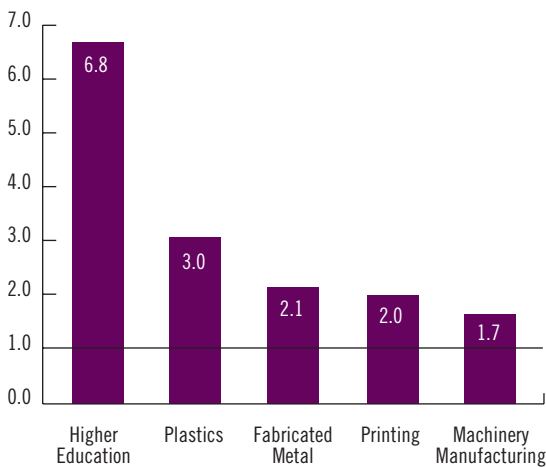
Percent of Springfield Residents Commuting to the Suburbs (2007)



Source: U.S. Census Bureau

Figure 26:

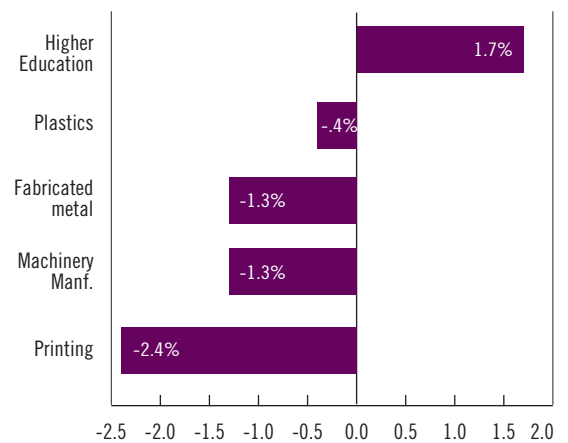
Location Quotients (2007)



Source: Massachusetts Department of Labor and Workforce Development

Figure 27:

Average Annual Growth Forecasts for US Industries (2006-2016)



Source: U.S. Bureau of Labor Statistics

armory and the Holyoke mills (Figure 26).

Greater Springfield manufacturers have struggled in recent years. Between 2001 and 2007, employment in the region’s manufacturing industries fell sharply. Altogether, more than 8,000 jobs

were lost, a 21 percent decline. These losses were less severe than decline statewide (-24 percent), but steeper than the drop in manufacturing employment nationally (-16 percent). Pioneer Valley manufacturers still provide over 31,000 jobs, more than

10 percent of total regional employment.

Many of the region’s manufacturers remain vulnerable to foreign competition. Forecasts predict additional contraction in Greater Springfield’s core manufacturing industries (Figure 27). However, these national predictions are based on an assumption that US manufacturers producing high value-added products with advanced technologies will fare better, while employers who rely on less skilled workers will have difficulty competing against locations where labor is less costly.²⁶

Viewed through this lens, the health of the region’s manufacturing base depends on whether manufacturing is productive, high value-added, and integrated with the global economy (if manufacturers serve foreign markets, it offers a strong indication that they are competitive producers). Figure 28 assesses the region’s manufacturing outlook from these different perspectives. With production a third lower than the national average, the Pioneer Valley ranks ahead of only Flint on per capita gross metropolitan product, a broad productivity measure that includes all forms of regional economic activity, goods as well as services. On both value-added per production worker and exports per capita, just three peer regions fall below Greater Springfield. These data suggest, relative to other regions, the future of manufacturing in the Pioneer Valley is uncertain.

What makes the economic base critical?

- *The economic base generates growth.* Industries that make up the economic base produce economic growth by serving external markets, which are not restricted by the city or region’s population.
- *A strong economic base supports more activity in local markets.* As jobs are added to the economic base, they bring additional wealth to the city and region, which can in turn support local businesses engaged in providing products and services to the local market. This “economic base multiplier” leads to increases

in the quality of life for city residents.

- *The economic base insulates against an economic downturn.* Businesses that rely primarily on external markets provide diversification, protecting the local economy from economic downturns.

2. Traded Clusters

Traded clusters are by definition a component of the economic base, but these are unique industries that tend to concentrate geographically to take advantage of institutions, suppliers, and pools of skilled labor. Examples include film in Hollywood, country music in Nashville, biotechnology in Cambridge, and tool and die manufacturing in the Pioneer Valley.

By serving as the center of activity for an industry, places with traded clusters attract businesses. This makes them critical to economic development efforts. However, traded clusters

Table 5:

Pioneer Valley Industry Clusters

CLUSTER	LQ	JOBS	CHANGE, 98-06
Medical Devices	1.2	1,042	543%
Analytical Instruments	1.2	1,600	29%
Education and Knowledge Creation	2.1	13,975	10%
Building Fixtures, Equipment, and Services	1.5	2,240	5%
Power Generation and Transmission	1.9	810	1%
Aerospace Engines	9.0	1,760	-9%
Processed Food	1.1	3,309	-9%
Metal Manufacturing	2.0	5,133	-10%
Communications Equipment	1.5	834	-19%
Forest Products	2.6	2,340	-25%
Sporting, Recreational, and Children’s Goods	13.1	2,560	-30%
Plastics	1.6	2,755	-33%
Production Technology	1.3	1,785	-36%
Publishing and Printing	1.5	3,250	-49%
Leather and Related Products	3.0	840	-56%
Financial Services	1.3	7,345	-65%

Source: MassINC’s analysis of data from the Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

rarely concentrate in a single city. Most clusters spread out across a metropolitan area, which means growing competitive clusters requires a regional orientation. While the Pioneer Valley has strengths in a number of traded clusters, most are mature and declining. As a core part of the city's strategy, Springfield must explore ways to join with regional partners to grow traded clusters.

Greater Springfield has strengths in a number of traded clusters. Michael Porter and the Institute for Strategy and Competitiveness at the Harvard Business School have identified 41 industries in the US economy that tend to concentrate geographically. Measured by location quotients, out of these 41, the region has strengths in 16 clusters (Table 5).

Many of the Pioneer Valley's traded clusters are now mature and declining. Clusters have life cycles. In the early stages of an industry, companies concentrate to solve problems together and to take advantage of access to specialized workers and suppliers. As products develop, businesses can find the parts and labor they require, and concentration is less of an advantage. Eleven of the region's 16 clusters lost employment between 1998 and 2006, which suggests they have reached maturity. On average, these declining clusters lost nearly a third (31 percent) of their jobs over this period. Many of these established clusters are rapidly declining in an increasingly difficult economy for manufacturers.

Legacy industries have spawned new emerging clusters in analytical instruments and medical devices. Companies like Blackstone Medical in Springfield, which fabricates surgical products, emerged directly from precision machine shops that previously supplied parts for other industries. Microtest Laboratories in Agawam and Texcel in East Longmeadow represent new enterprises that benefit from the region's skilled precision manufacturing workforce. Between 1998 and 2006, employment in companies that produce medical devices increased by more than 500 percent;

already the cluster accounts for more than 1,000 jobs. Over this period, employment with producers of analytical instruments, another emerging cluster that provides more than 1,600 jobs, also grew at a very healthy pace (29 percent).

Job creation in emerging clusters has not made up for job loss in declining clusters. Together the region's 11 declining clusters lost more than 23,000 jobs between 1998 and 2006. Emerging clusters generated just 2,600 new positions during this time period. For every job the Pioneer Valley gained in traded clusters, nine were lost.

What makes traded clusters critical?

- *Clusters increase regional productivity.* Geographically concentrating businesses in related industries helps establish networks of suppliers and pools of skilled labor. Bringing all this together in one place also fosters interaction and learning. These networks and the collaboration they facilitate increase the performance of companies in the industry cluster and, by extension, the productivity of the region where they locate.²⁷
- *Traded clusters provide a competitive advantage.* Businesses that want to compete in industries that cluster geographically are drawn to the areas where they are located. As an economic development strategy, cities and regions can help support and advance traded clusters with workforce initiatives, network building, and marketing initiatives. In contrast with alternative approaches to economic development, such as enticing firms with financial incentives, many experts consider cluster-based efforts a more effective and efficient use of public resources.

3. Innovation

Regions rely on innovation to refresh and diversify the economic base and spawn new traded clusters. A number of factors contribute to a region's capacity for innovation. Local culture and

Figure 28a:

Value Added per Production Worker (2002)

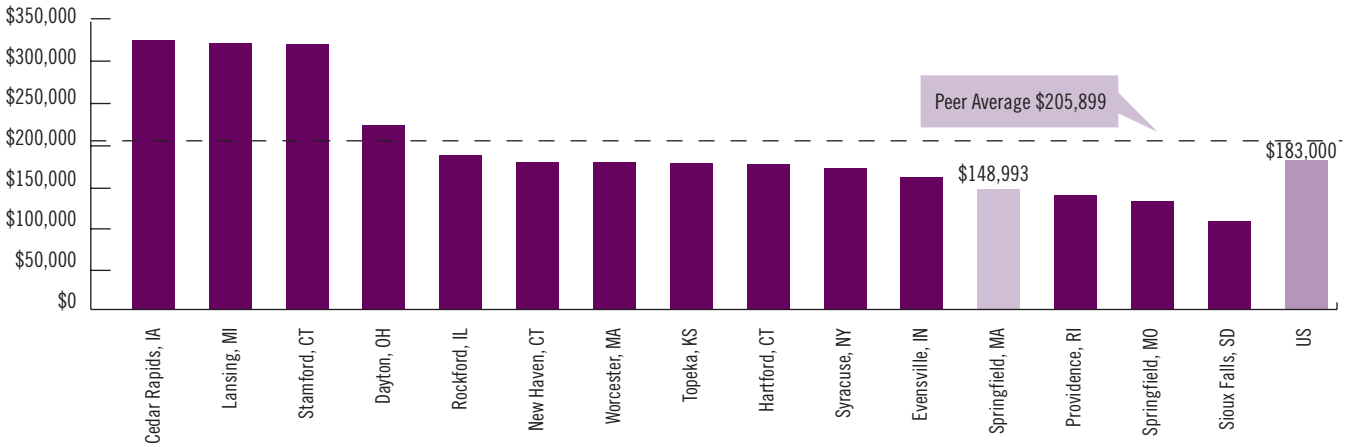


Figure 28b:

Per Capita Exports (2006)

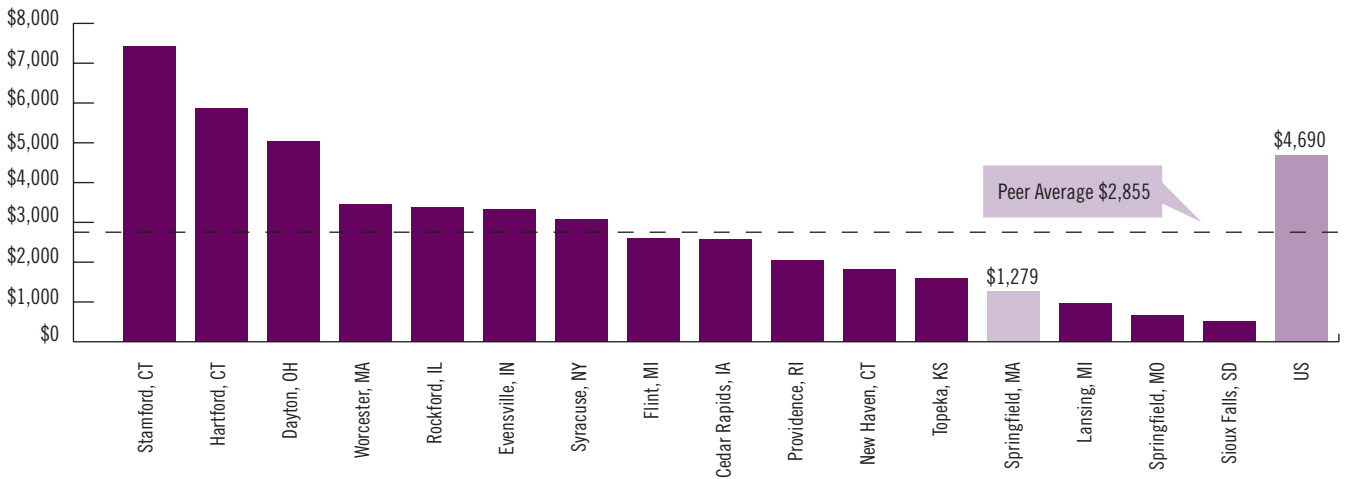
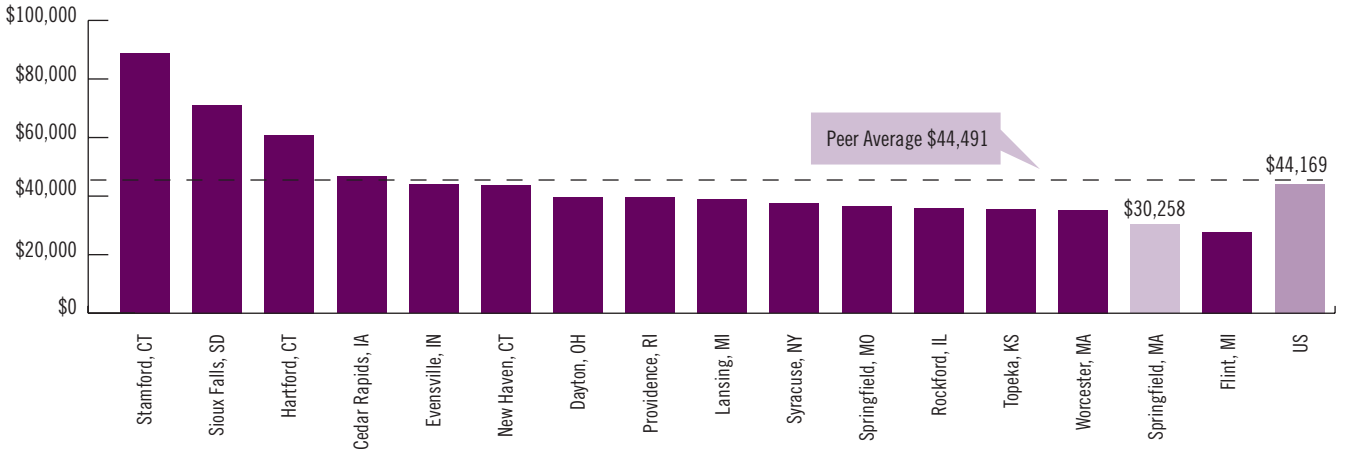


Figure 28c:

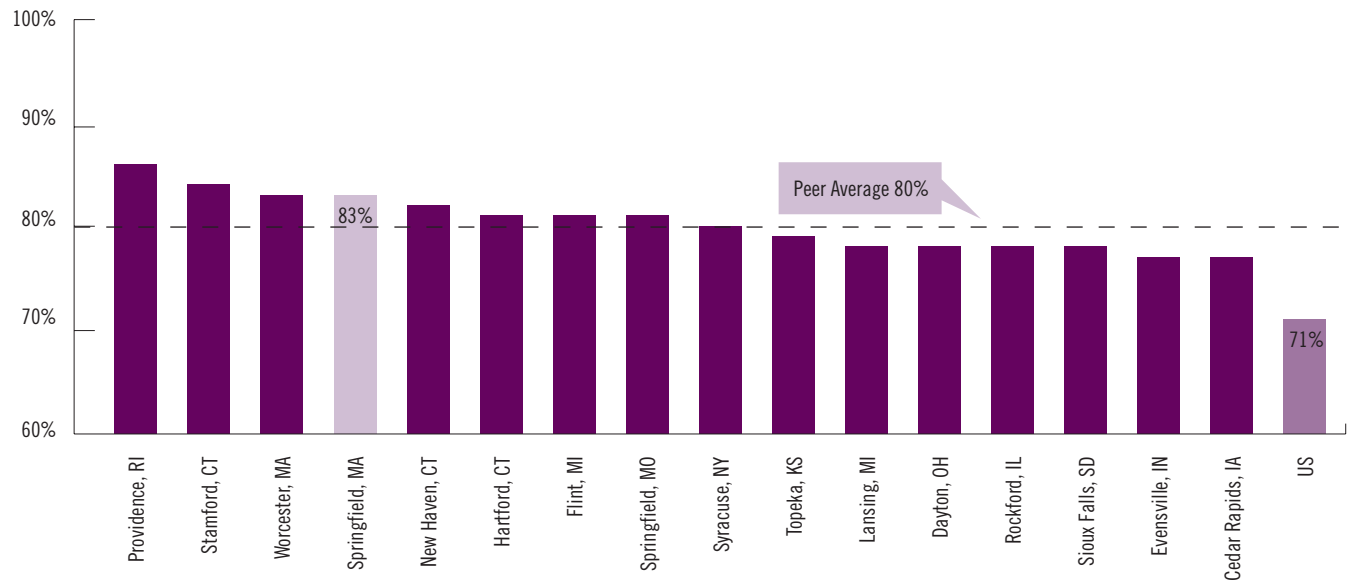
Per Capita Gross Metropolitan Product (2006)



Sources: U.S. Census Bureau, U.S. International Trade Administration, and U.S. Bureau of Economic Analysis

Figure 29:

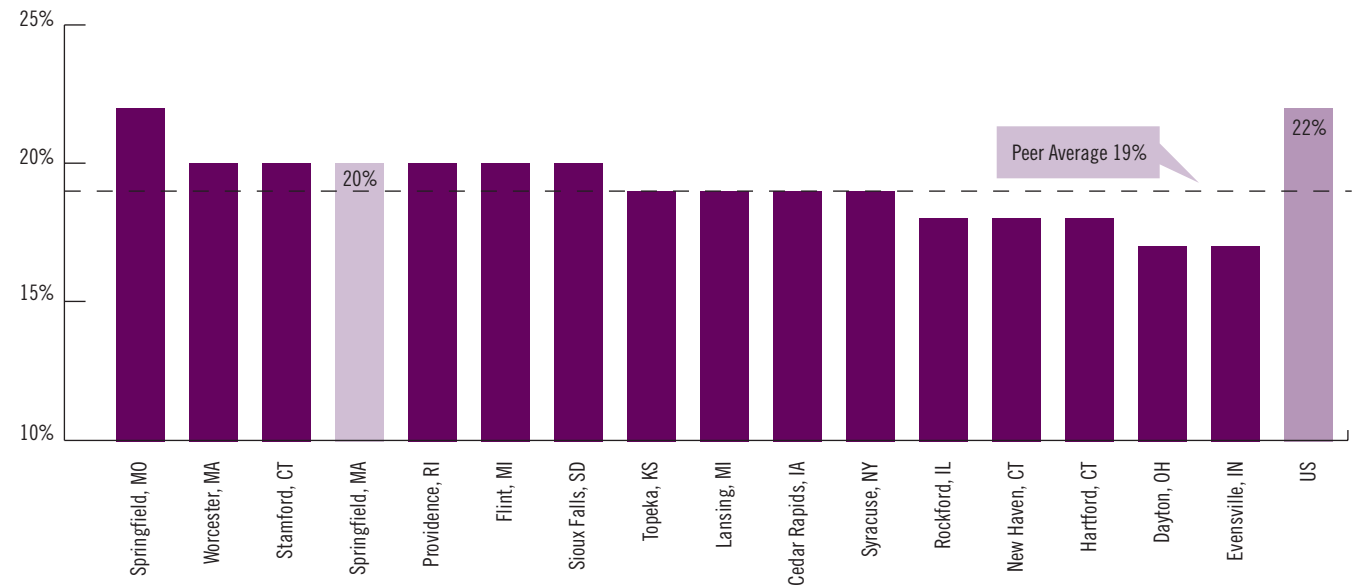
Percent of Employment in Firms with Fewer than 20 Employees (2006)



Source: U.S. Small Business Administration

Figure 30:

Annual Firm Births and Deaths as Percent of Total Establishments (2003-2005)



Source: U.S. Small Business Administration

Figure 31:
High Technology Employment Location Quotients (2007)



Source: Milken Institute

institutions have an effect. Businesses, along with their suppliers and workers, are also an important contributor. While indicators of innovation in Springfield and the Pioneer Valley reveal some bright spots, overall, the pattern drawn by these data suggests both the city and the region need more innovation to support economic growth.

Springfield has a large number of small businesses and a lot of job churn. These indicators point to a strong environment for innovation. Research demonstrates a relationship between small business employment and regional economic growth.²⁸ Small dynamic businesses provide an important contribution to the pipeline of innovative new products and services that fuel growth. In Greater Springfield, businesses with fewer than 20 employees account for 83 percent of all workers. Just three peer regions have larger shares of residents employed in small firms (Figure 29).

While many small innovative ventures are ultimately unsuccessful, regions need entrepreneurs willing to take the risk involved in launching a new enterprise. For this reason, innovative

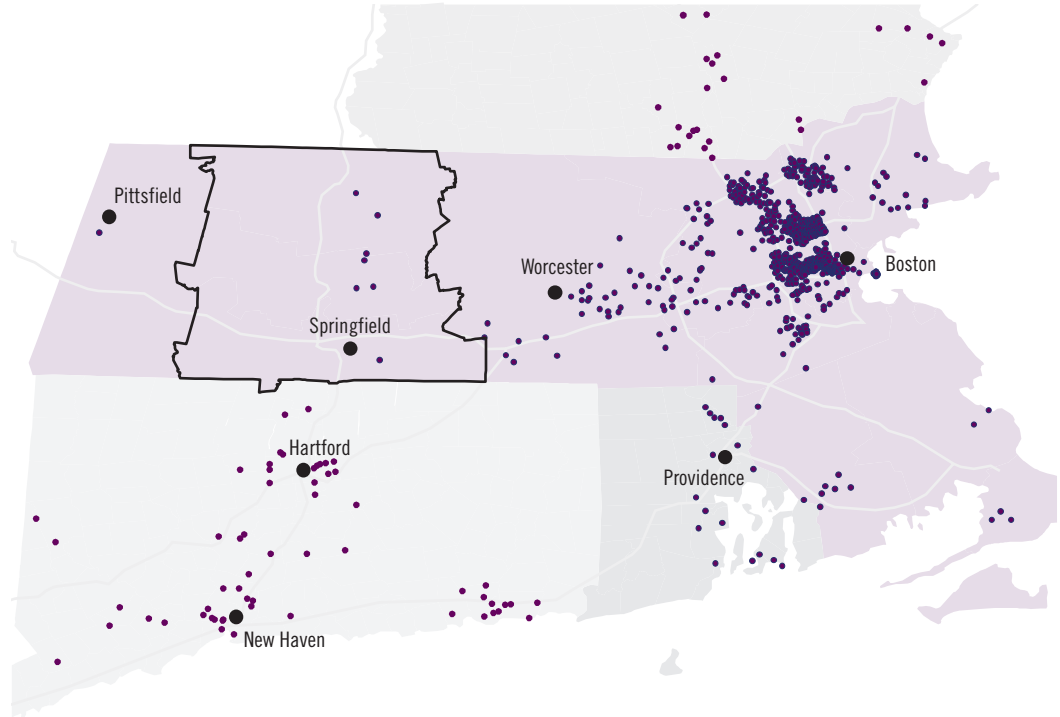
regions tend to churn jobs in what economists call creative destruction. Job churn is measured by the number of new startups and business failures in a given year as a percentage of total firms. Between 2003 and 2005, firm births and deaths combined represented 20 percent of all Greater Springfield establishments. Only three regions had higher levels of job churn (Figure 30).

But Greater Springfield has relatively low levels of high-technology activity. Innovation is frequently driven by new technology. Regions with a large number of businesses engaged in high-tech activity are likely to lead on innovation. On this important measure, the Pioneer Valley does not fare as well. A Milken Institute Index, which measures employment concentration in advanced industries, ranks just two peer regions lower than Greater Springfield (Figure 31).²⁹

Small Business Innovation Research Awards (SBIR) provide another picture of how the city and region compare in terms of scientific discovery. SBIR is a competitive federal grant given to firms with fewer than 500 employees. Ideally, these small businesses could spawn new innovative

Map 1:

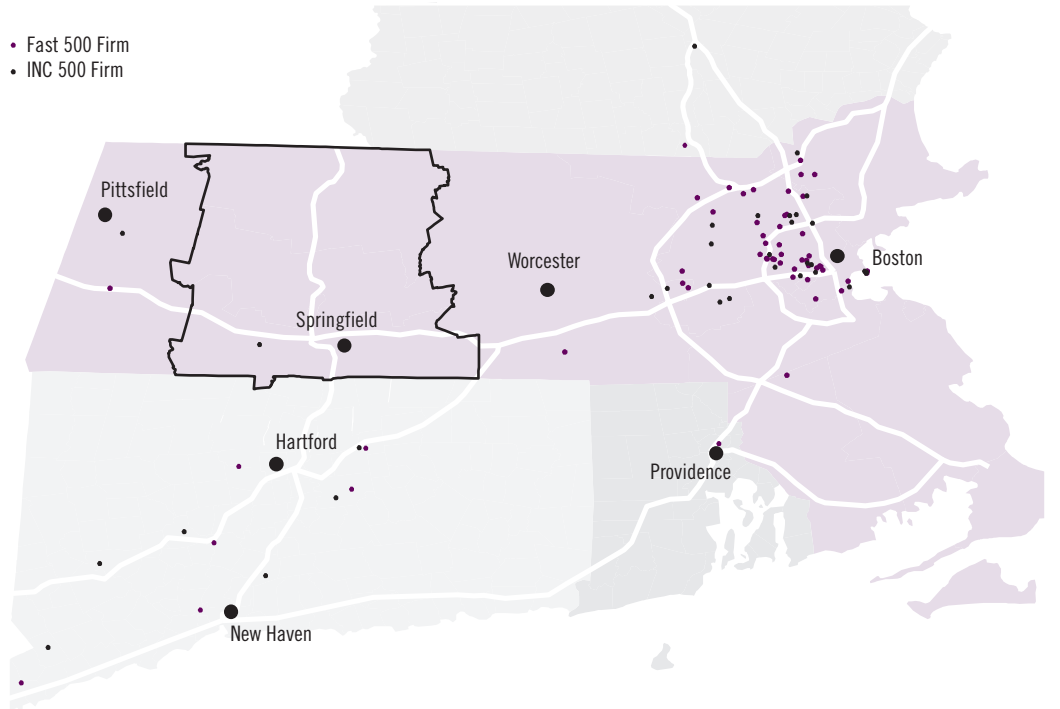
Location of Firms Receiving SBIR Awards (2006)



Source: MassINC's analysis of data from the Small Business Administration

Map 2:

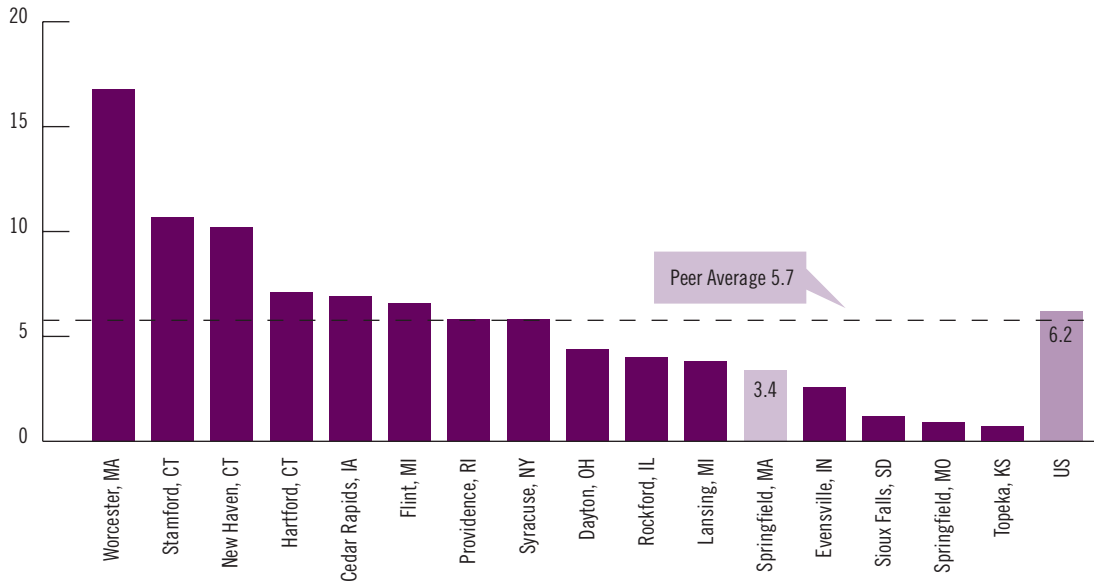
Location of Fast Growing Firms (2008)



Source: MassINC's analysis of Deloitte & INC Magazine awards

Figure 32:

Patents Per Metro Area Employee (2006)



Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

activity to compensate for the region’s relatively low levels of high-technology activity. Unfortunately, the data show only a handful of grants awarded in 2006 went to Greater Springfield firms, and most of these companies were located near UMass Amherst. And while statewide SBIR awards increased by 17 percent between 2001 and 2006, grants to Springfield firms fell by 50 percent, from 14 companies in 2001 to just seven in 2006 (Map 1).

Greater Springfield trails peer regions on patents. The registration of intellectual property provides another useful view of regional innovation. Greater Springfield ranks well below national and peer averages on patents per metro area employee (Figure 32). However, patent figures can often be somewhat misleading because firms frequently register many patents for a single product, and they continue to generate them over a product life cycle, which means patents are not always an indication of truly new innovation.

Often a look at the companies in a region filing for patents is more helpful. Between 2001 and 2005, patent leaders in the Pioneer Valley were

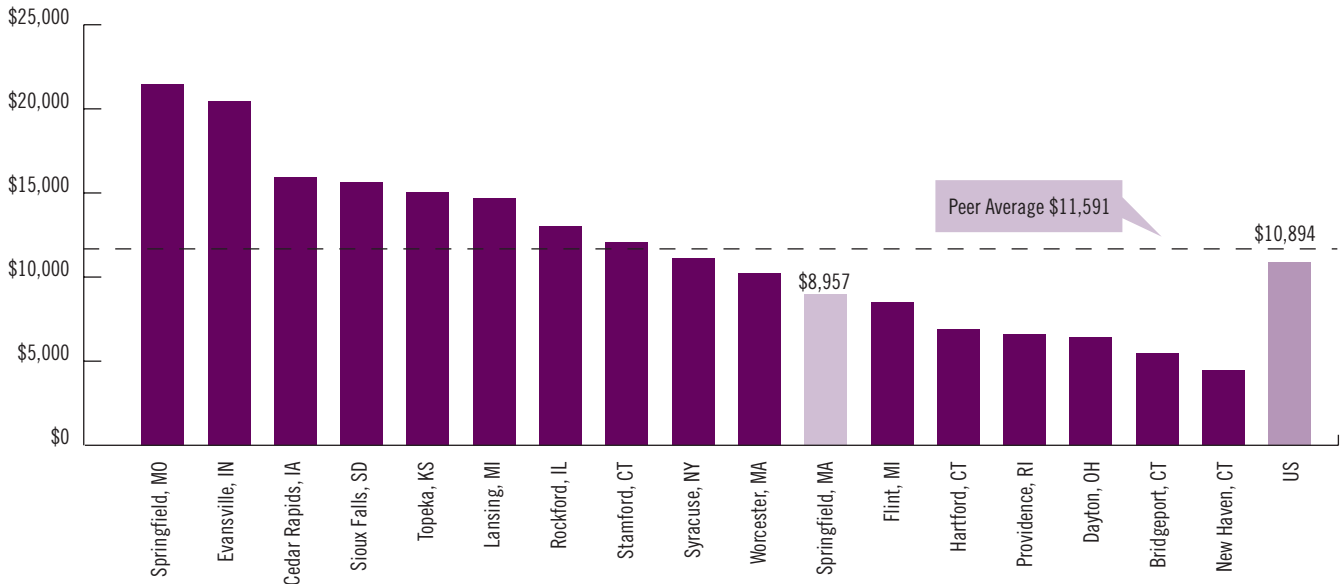
companies in relatively mature industries – two makers of sporting goods, Spalding (91) and Callaway (36), and the firearms manufacturer Smith and Wesson (33). UMass Amherst, the state’s largest public research university, ranked fourth in the region with 15 patents. Compared with peer metros like Lansing (Michigan State – 150 patents), Hartford (United Technologies – 228 patents), and New Haven (Yale University – 76 patents), Greater Springfield’s intellectual property development seems less likely to generate significant regional economic growth.

Relatively few Pioneer Valley businesses are growing rapidly. None of the 24 Massachusetts companies listed in Deloitte’s Fast 500 – North American businesses generating high growth from their own proprietary technology – are located in the Pioneer Valley. But while fast growing businesses tend to exploit untapped markets created by new technologies, not every innovative concept requires technology.

Business growth provides a more direct gauge of entrepreneurial vitality. A 2006 index published by the National Policy Research Coun-

Figure 33:

Retail Sales Per Capita (2002)



Source: U.S. Census Bureau

cil (NPRC) looked at businesses started four to 14 years ago with five or more workers, and measured the percentage of these young companies that grew rapidly over the previous four years. On this measure, Springfield ranked 62 out of 63 mid-size cities. INC magazine’s list of the 500 fastest growing privately held companies in the US provides another view of innovative new firms. To make this list, businesses needed to boost revenues by at least 300 percent between 2004 and 2007. Only one of the 27 Massachusetts companies identified by INC magazine was located in Greater Springfield (Map 2).

What makes innovation critical?

- *In a competitive global economy, established businesses have a short life span.* Historically, communities like Springfield have relied on large recognized leaders to provide local employment. This is no longer possible. Between 1980 and 2001, businesses less than five years old generated all net US job growth.³⁰
- *In a competitive global economy, the Pioneer Val-*

ley must focus on developing new products and services as opposed to producing and supplying them. Countries and regions with lower labor costs will outcompete Greater Springfield in manufacturing. The region now relies on innovation to drive economic growth. This increasingly means growth will require technology. Whether it is fully tapping into the promise of the Internet, or discovering clean renewable sources of energy, growth opportunities for the Springfield economy will be rooted in knowledge.

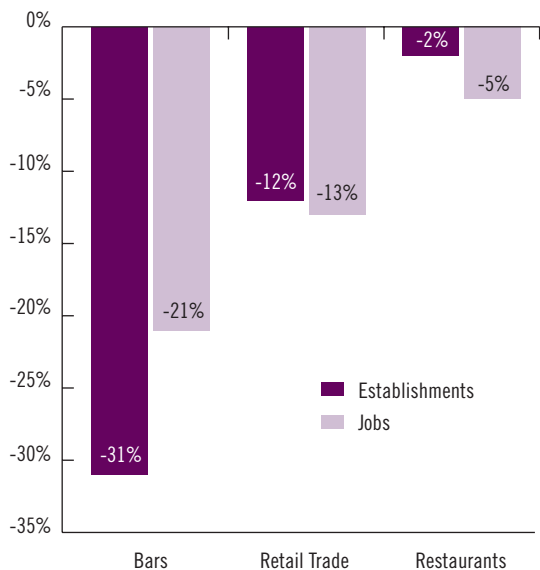
- *Innovation represents another promising economic development strategy.* As with cluster development, efforts to nurture new companies and increase the entrepreneurial spirit of the community are often more effective and efficient than offering financial incentives as an economic development tool.

4. Local Markets

Unfortunately, disinvestment in cities, along with the development of indoor malls and lower cost

Figure 34:

Percent Change in Establishments and Jobs (2001-2007)



Source: Massachusetts Department of Labor and Workforce Development

big box retailing, has meant that regional stores and service providers have moved to competing suburban locations. A few decades ago, cities like Springfield served as regional destinations. Now these communities struggle to retain the purchasing power of their own local residents.

In recent years, cities have experimented with a variety of creative approaches to reconstitute local markets. Like Springfield, many built stadiums and convention centers to anchor downtown revitalization. Cities also established business improvement districts, public-private ventures to transform downtowns. A number of communities are also focused on revitalizing neighborhood “Main Street” districts, where restaurants and local vendors are located, that give cities quality of life. Data to describe Springfield’s urban markets are limited. However, available evidence suggests the city’s local markets are both underdeveloped and declining.

Retail spending in Springfield is below average. While it is difficult to estimate demand – the purchasing power of residents plus commuters

and visitors – on a per capita basis, Springfield’s retail spending is lower than both the national and peer average, although still notably higher than many of the New England peers (Figure 33).

Employment in key local sectors has fallen. Between 2001 and 2007, both jobs and the number of establishments in important local sectors declined. For example, employment in the city’s bars dropped by more than a fifth, and jobs with retailers fell by 13 percent (Figure 34). While these data are very limited, vacancies in the city’s downtown and neighborhood retail districts demonstrate that these areas clearly require new investment.

What makes local markets critical?

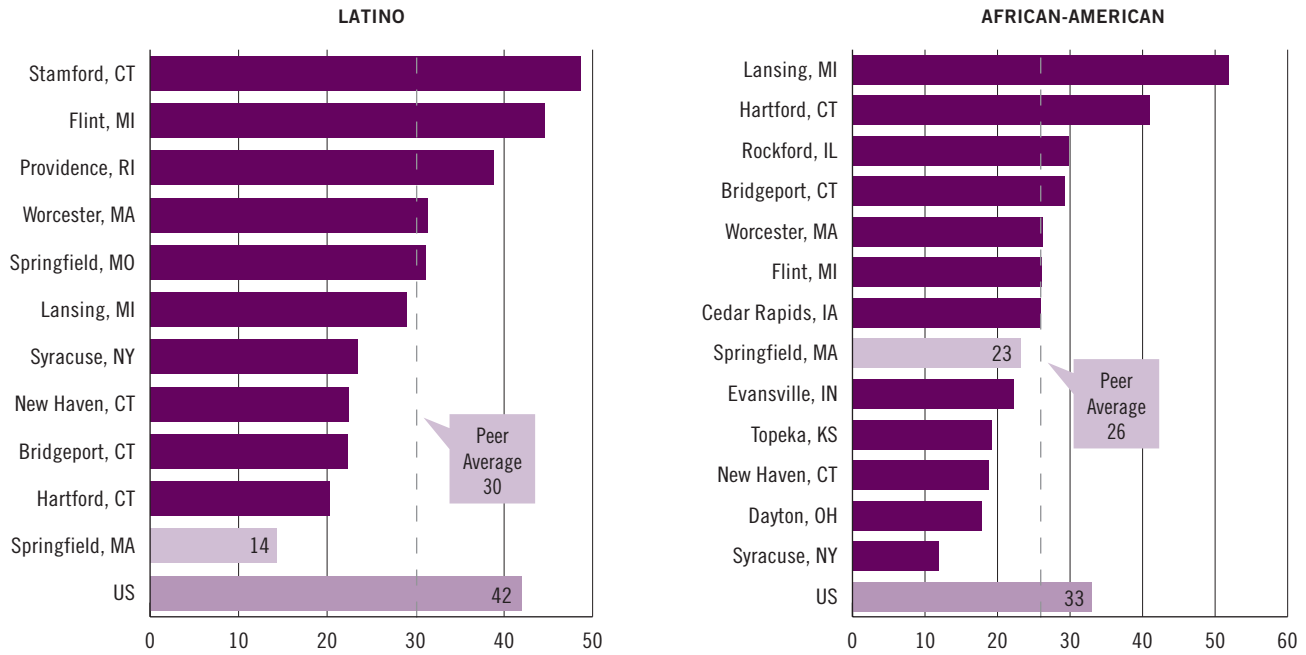
- *Local retailers and service providers are an essential quality-of-life amenity.* Restaurants, shops, and entertainment make cities attractive to both residents and businesses.
- *Local markets represent jobs and make up an important segment of the city’s property tax base.* In cities where nonprofit educational and medical institutions are major landholders, these local service providers represent an important part of the property tax base.

Building for the Future of Springfield’s Businesses

For Springfield, helping residents make the most of their economic potential is not just the surest formula, but most likely a prerequisite for long-term business growth. While resident-focused community development efforts will consume significant city resources, Springfield must also have a thoughtful plan for economic development that leverages both local and regional strengths to build a healthy urban economy. This means a diverse economic base, globally competitive traded clusters, an innovative environment that constantly seeds new growth opportunities, and strong local markets to give the city an attractive quality of place.

Figure 35:

Firms Per 1,000 Residents by By Owners Race/Ethniity (2002)



Source: U.S. Census Bureau

Strategies that integrate community development and economic development will have many synergies. One place these two approaches meet is in addressing inequality. Springfield’s growing Latino and African-American populations are clearly an increasingly important component of the city economy. Yet tax filings from the Internal Revenue Service show that Springfield’s Latinos rank last among Latinos in peer cities in business ownership per capita; the city’s African-Americans also fall well below the peer average on this measure (Figure 35). While these data describe only formal businesses, without legal incorporation, small businesses cannot access the credit and capital required for growth.

As a community, Springfield can create new strategies to maximize the potential of its small businesses. Cultivating the traded clusters of tomorrow, however, will require strong regional and state-level partnerships. As Springfield prepares a long-term strategy, the city will need to

work through complex questions with these partners, such as:

- How do the city and region balance efforts to promote growth throughout the Pioneer Valley with the need to strengthen the region’s urban core?
- Which industries have the potential to develop into strong traded clusters for Greater Springfield? How can Springfield and its partners invest together to grow these clusters?
- How can Springfield ensure that long-term investments to increase business activity in the city translate into long-term returns shared by the community?
- What benchmarks can the community set to measure progress on economic development efforts? What are reasonable goals?

IV. BUILDING ON ASSETS AND OPPORTUNITIES

Up until this point, our analysis has largely focused on the challenges Springfield residents and businesses face competing in today's global markets. This orientation has been necessary to highlight areas that need improvement, and to demonstrate an imperative for addressing these serious issues. While Springfield, relative to peer cities, has a large share of residents and businesses struggling to connect to the New Economy, the city is a dynamic place, and many residents and businesses are highly productive and innovative. In debating the future, it is important to keep the right balance. Challenge should never overshadow opportunity and success.

Equally important, the city must recognize the valuable assets it can leverage for growth. As policy experts at the Brookings Institution in Washington, DC, have noted, disinvestment in older industrial cities throughout the Northeast and Midwest has meant that assets in these communities are both underleveraged by state and local leaders, and undervalued by private markets.³¹ Members of the Urban Land Institute panel emphasized this in their report as well, noting Springfield's unique opportunities and promise.

This section begins with a brief inventory of these assets. We then show that social, economic, and political trends nationally are becoming more favorable for cities like Springfield. This final section concludes by demonstrating how combining these assets and opportunities in a comprehensive strategy can open up important new growth opportunities.

1. Assets

Springfield has many strengths. In preparing a growth strategy, the city must review current efforts to leverage these assets and consider how emerging trends present new opportunities to make the most of them. Below we frame just five of the city's most prominent strengths as examples.

Precision manufacturing. Small machine shops throughout the Pioneer Valley rely on precision manufacturing to engineer technologically advanced products. These companies have done well with analytical and medical devices, but in order to continue providing significant employment for the region in a competitive global economy, they must find additional markets to serve. Unfortunately, the region's machining skills have been less applicable to the computer and life science sectors, which have been the focus of state-wide economic development efforts for the past two decades. However, both state and federal attention on emerging green technology markets may present important new opportunities for the Pioneer Valley. Windmills, mass transit, and a smart energy grid will all require components fabricated by precision manufacturers.

The Economic Development Council of Western Massachusetts and the Western Massachusetts Chapter of the National Tooling and Machining Association have worked cooperatively with the Regional Employment Board of Hampden County to support the region's precision manufacturers. These groups, along with others, have mostly worked to help the region's technical schools meet the needs of local employers. To capture opportunities in the Green Economy, broader partnerships with more strategic focus will be required.

Institutions. Strong institutions are essential to civic health, whether they be large employers, hospitals, colleges, or faith-based organizations. When these large institutions are invested in the community, their resources, energy, and advocacy can help channel both private and public investment necessary for growth.

Recent developments, such as the signing of a Memorandum of Understanding between the city and the University of Massachusetts, suggest these institutions are invested in and committed to Springfield's long-term growth. A growth

OPPORTUNITIES IN THE GREEN ECONOMY

In the years ahead, the United States will pursue a number of strategies to address global warming and reduce the nation's dependence on dwindling supplies of imported oil. Unprecedented public investments in these sectors and a growing market for renewable energy sources will lead to new industries providing millions of new jobs across the nation. Many of these new jobs will be well-paying with benefits. In contrast to biotechnology and other New Economy industries that have been the focus of recent economic development efforts, sectors of the Green Economy are also expected to provide entry-level jobs with career ladders that, over time, move lower-wage workers into higher-wage positions.

Green Economy efforts focused on increasing local production also offer economic development potential for cities. Many communities are leveraging efforts to increase sustainability as opportunities to make investments in locally-owned small businesses. Revitalization efforts in Cleveland, for example, include plans to serve local institutions with employee-owned "Evergreen" cooperatives such as an industrial-scale "green" laundry, a solar collaborative which will own and install solar panels at anchor institutions, and a large-scale commercial year-round greenhouse that will grow and sell produce to area hospitals and universities.

WEATHERIZATION	Building trades
MASS TRANSIT	Metal Fabricators
SMART GRID	Electrical Equipment
WIND POWER	Metal workers & machinists
SOLAR POWER	Metal & Electrical
BIOFUELS	Chemicals

strategy can help formally delineate the role of these institutions.

Connectedness. In a fast moving global economy, where an increasingly large volume of goods and information must be transported rapidly over long distances, connection is critical to economic development. Springfield has location and infrastructure, a prerequisite for economic growth that many older industrial cities lack. The city sits

at the junction of two major interstate highways (I-90 and I-91), and an international airport is within a 20-mile drive. Springfield also possesses both freight and passenger rail, as well as world-class telecommunications infrastructure.

The State of Connecticut's interest in expanding commuter rail service to Springfield will potentially increase the city's locational advantages. The Obama administration's recent announcement of a plan to invest in Northeastern high speed rail corridors may prove even more significant. Springfield would serve as a major hub, connecting east-west service from Boston to Albany with north-south travel from New Haven. Other recent developments, such as the selection of Springfield for a state data center, are opening up new opportunities to leverage the city's telecommunications infrastructure.

Cultural diversity. As noted previously, diversity can be a challenge in building community. However, without a doubt, cultural diversity is functioning as an asset for the city in many ways. The unique small businesses and restaurants operated by various ethnic groups make Springfield an interesting place to live and work and a cosmopolitan destination to visit.

With additional support, these businesses can help build greater vibrancy both downtown and throughout the city's neighborhood retail districts. Residents can also work to develop programming that breaks down barriers. Throughout the country, communities have developed innovative approaches to bring residents and community leaders from diverse backgrounds together. These efforts generally require minimal financial investment and pay large returns by creating a more cohesive and effective community.

Housing. Springfield has a large stock of attractive and affordable housing laid out in walkable neighborhoods and connected by public transportation. Relative to other large cities in the Commonwealth, single-family homes in Springfield are significantly more affordable (Table 6).

Table 6:

Average Assessed Value Single-Family Homes (2008)

1	Springfield	\$151,541
2	Pittsfield	\$189,128
3	Holyoke	\$196,395
4	Fitchburg	\$219,934
5	Lawrence	\$234,949
6	Westfield	\$239,396
7	New Bedford	\$246,211
8	Worcester	\$248,144
9	Fall River	\$269,589
10	Lowell	\$272,315

Source: Massachusetts Department of Revenue

Equally important, the city has the urban fabric to accommodate new growth and development at densities high enough to maintain affordability as economic growth and renewal lead to increased demand.

Leveraging the city’s housing assets will, however, require reinvestment in Springfield’s historic housing stock. Current efforts in the

South End are an excellent example of the type of collaborative large-scale neighborhood revitalization required. The South End initiative also demonstrates the city’s ability to maximize impact by strategically targeting resources in an area where private markets are likely to respond to public investment.

2. Promising Trends

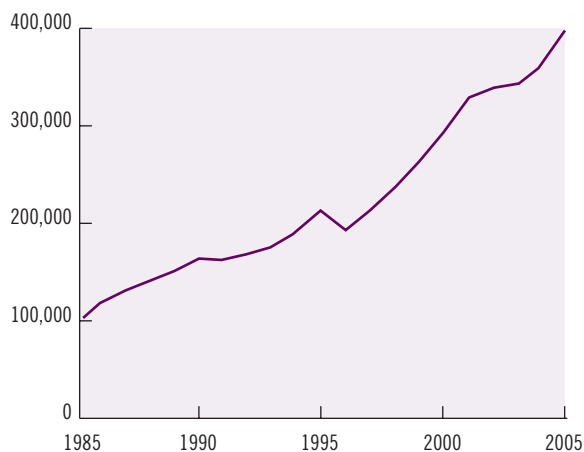
Changing social, economic, and political forces present new opportunities to leverage Springfield’s many assets. While these trends are developing mostly at the national level, the community must not underestimate their significance locally for long-term growth. Many of these emerging trends are related directly to cities and the way we use urban space in the New Economy.

For example, in an Innovation Economy, dense urban locations offer advantages. In this changing landscape, companies see competitive advantages in cities. Particularly in knowledge industries, cities bring creative people together in environments where workers tend to exchange ideas in informal meetings that take place in bars or cafes or even just riding the bus. Frequently

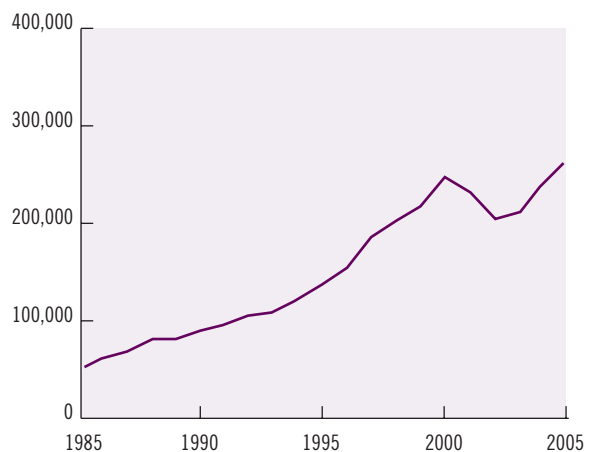
Figure 36:

Indicators of Rapid Innovation and Globalization (2008)

ANNUAL US PATENT APPLICATIONS



US HIGH-TECH EXPORTS



Source: National Science Foundation

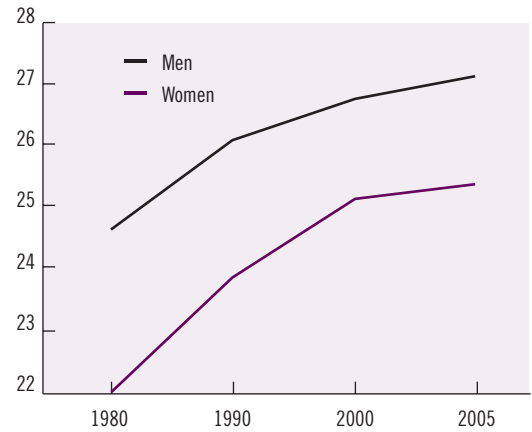
these informal conversations generate “knowledge spillovers” that lead to important innovations. Technology and global markets also create new opportunities. Technology allows for rapid innovation, which means there are always new products to design and produce; and globalization has created new and growing markets for exchange (Figure 36).

As the economy changes, residential patterns are also adapting in ways that are favorable for cities like Springfield. Young professionals need more education and experience in today’s economy. As a result, they are delaying marriage (Figure 37). And when they are ready for children, they tend to have fewer. This has helped cities hold on to young professional households longer.

At the other end of the spectrum, the country is aging. While this trend is not related directly to economic change, it still has equally large implications for cities. As the Baby Boom generation approaches retirement, many are trading in their large suburban homes for apartments and town houses in walkable urban communities, where

Figure 37:

Median Age at First Marriage (1980-2005)



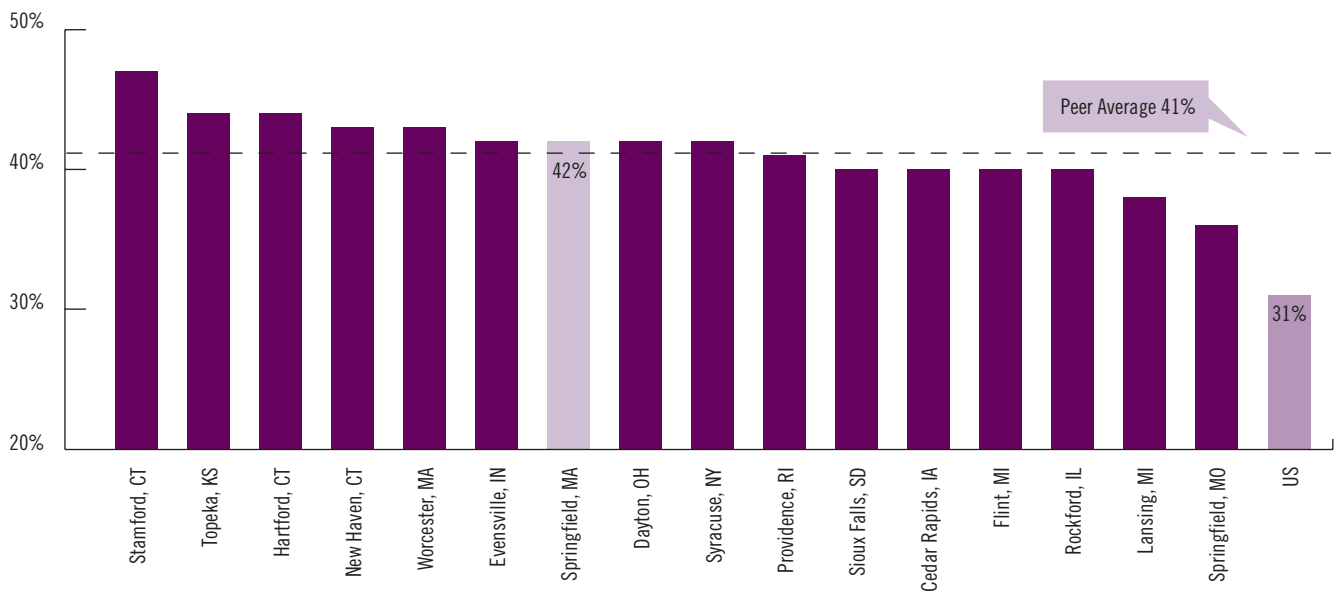
Source: U.S. Census Bureau

cultural and leisure activities are more accessible.

An aging workforce creates an imperative to build the skills of Springfield’s young residents. Retiring Baby Boomers will have an impact on cities like Springfield much larger than the potential residential market they offer. Workers in this aging generation are disproportionately located in older parts of the country. This, along with the outmi-

Figure 38:

Percent of Labor Force Over Age 45 (2007)



Source: U.S. Census Bureau

gration of young workers, means that cities in the Northeast and Midwest rely heavily on the skills of older workers. On average, 41 percent of the labor force in peer city regions is over age 45, compared with just 31 percent nationally. In Greater Springfield, 42 percent of the labor force is over age 45 (Figure 38). From an economic development perspective, replacing these aging workers is critical to the region's competitiveness.

There are already signs that a worker shortage is impacting the region's employers. The Pioneer Valley's overall job vacancy rate often exceeds 3 percent. The worker shortage is particularly hard for growing industries like health care. In 2007, job vacancy surveys showed more than 1,500 open positions in the region's health care industries; and this was actually down from over 2,400 a year earlier, at the peak of the business cycle.³²

This reality creates a new imperative to find strategies to prepare young workers for successful careers. Springfield Public Schools account for more than a quarter of the region's public school students. The Pioneer Valley's competitive future hinges on efforts to prepare this next generation of city residents for work in the metro area's future industries.

The critical challenge of recruiting the region's future workforce led to the creation of a Workforce Development Plan for Springfield. Released last year, the plan outlines major investments (\$13.6 million over three years) in the city's residents in order to help address the region's workforce needs. This plan correctly recognizes that addressing the workforce challenge is not just a matter of job training. Comprehensive efforts are needed, including major investments in early education and youth development. Adult basic education must accompany well-designed sectoral training initiatives to prepare workers for jobs in today's economy.³³

Technology opens up new opportunities for competitive lower-cost locations. If Springfield can respond to a shortage of workers, the city

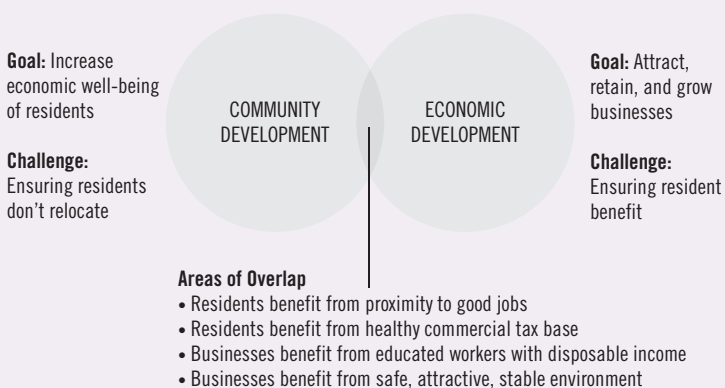
BUILDING AN INTEGRATED COMMUNITY & ECONOMIC DEVELOPMENT STRATEGY

Community development, which focuses on the well-being of residents of a particular place, is related to traditional economic development, which is concerned more directly with growing businesses and employment. While these two goals are interconnected, at times, they may also conflict. For instance, growth in high-wage jobs is often the economic development priority for a state or region; however, for a low-income neighborhood, the community development priority may be entry-level jobs with decent wages.

Despite common tensions between community and economic development, many areas of overlap should make it possible to better integrate the two objectives in Springfield. Residents benefit directly from business growth that leads to increases in the city tax base. Businesses benefit from efforts to better prepare workers. And both residents and businesses benefit when the city has safe, attractive, and stable neighborhoods.

The challenge for both community and economic development is ensuring that the people these efforts are conducted on behalf of actually receive the gains. In today's high-technology economy, businesses attracted by state spending may employ workers who come from across the country and even from abroad. And local residents benefiting from community development efforts may simply relocate to another neighborhood as their economic positions improve.

An integrated community and economic development strategy with clearly defined benchmarks can help the city coordinate and balance community and economic development goals.



TRANSFORMATIONAL LEADERSHIP

Over the last year, the message we heard most consistently from community members is that Springfield needs strong leadership to be successful in the future. As the community organizes to develop a collaborative vision for growth, it must recognize that cities that make real progress toward their revitalization goals can credit success to transformational leadership.

Transformational leadership means that at every level – within city classrooms and in employee break rooms, at neighborhood meetings and meetings of faith-based organizations, from the council chambers to the corporate boardrooms – leaders encourage others to internalize goals, demonstrate a positive spirit among community members, and communicate in tones that imply optimism about the future and all that can be achieved working together cooperatively.

and region will be in a better position to benefit from the way technology and globalization change where and how businesses operate. Communication technology allows divisions within companies to work collaboratively across large distances, which means firms are increasingly separating functions and sending units to places that can perform them most cost-effectively.

Unfortunately, information technology may have resulted in more job loss than job gains for the region in recent years. However, signs suggest this dynamic may improve. Driven by a variety of factors, including fuel costs, security of intellectual property rights, and concerns over service quality, major companies that spent the last decade engaging in waves of “offshoring” are now considering the advantages of “onshoring” to lower-cost domestic locations. According to the Information Technology Association of America, which represents a field that has experienced considerable offshoring in recent years, midsize US cities like Springfield can offer comparable services at costs 30 percent below first-tier cities like Boston.³⁴

In response to these new opportunities for cities, state and federal governments are begin-

ning to furnish tools to spur private reinvestment.

At the state level, the historic tax credit has been an incredibly powerful instrument for Springfield and other older cities in Massachusetts. State brownfields policy has also been enormously important. And the federal government is making relatively small but still important new investments in cities, including the federal historic tax credit, federal brownfields funds, the HOPE VI housing program for distressed public housing, and, most recently, New Markets Tax Credits.

The Obama administration has already signaled a desire to do more for cities, launching a White House Office of Urban Policy. And there are signs of a shifting political context. More suburban residents want their regions to have strong core cities, and they recognize that there are important environmental and economic returns to investing in the nation’s urban areas. Across the country, these trends are spurring investment in cities large and small. As developers turn their attention toward cities for the first time in decades, they are finding the opportunities more appealing than those available in suburbs, where retail and commercial markets have been saturated with development. These positive trends signal major new opportunities for Springfield.

3. Strategy

Springfield must act strategically to connect the city’s assets with these emerging opportunities and leverage them for growth. By articulating a bold call to action with a plan that summons all segments of the community to work together collaboratively with unprecedented commitment, Springfield can send important signals that it intends to thoughtfully pursue future opportunities consistent with established goals. Well executed, an informed strategy will also help prioritize efforts and maximize resources.

Addressing the complex challenges the city faces requires a realistic outlook, attuned to the difficulties of long-term strategic planning.

Springfield's strategy must recognize three fundamental principals. First, responding to the city's interrelated challenges calls for a comprehensive approach. Second, the complexity of these issues will require a significant degree of outside support. And third, results will only come with sustained focus over the long term. While these three principles are critical, they also need careful balancing. The city must make difficult decisions about where and when it can intervene. Springfield should guard closely local ownership essential for success. And a long-term orientation can never become an excuse for poor results or jeopardize short-term wins.

At its core, the strategy must delicately balance and integrate community development with economic development. Springfield families will not thrive as long as they face pervasive poverty. Poverty, and the often associated crime and blight, detract both potential businesses and higher-income residents. A strategy focused exclusively on improving the economic well-being of residents will not work because many will simply relocate as their earnings grow. On the other hand, a strategy focused on attracting businesses and new residents would be both unfair and unlikely to succeed if it overlooks current residents. Springfield must meld a community building strategy that attaches current residents to the workforce, reduces poverty, and forges stronger community ties to keep residents invested in the city – with a business attraction, retention, and development strategy that operates more directly to spur business activity.

Springfield's plan must emphasize the central role of innovation in both community and economic development. Innovation is the key to spawning new businesses that will generate job growth and local revenue. Springfield is a dynamic city that, with the right investments over the long term, can become a more entrepreneurial environment. On the community development side, innovation has an equally important role. The

challenges Springfield must address are deep. The city and its partners must acknowledge that success will only come if Springfield takes risks and tries new approaches. In addition to finding effective interventions, by signaling a willingness to take on social challenges in an innovative manner, Springfield can draw new resources and entrepreneurial talent to the city.

While the global economic downturn adds to the complexity the city faces in making decisions about its future, it can also offer new opportunities. Both public and private leaders face increased pressures in this economic downturn. Managing the day-to-day will consume more of their energy. Despite these concerns, the economic restructuring that will occur as a result of this economic crisis makes it all the more critical for cities and regions to act strategically. As the economist Richard Florida wrote recently in *The Atlantic*, this recession “will accelerate the rise and fall of specific places within the U.S.—and reverse the fortunes of other cities and regions.”

Springfield is prepared for collaborative strategic planning efforts. The Pioneer Valley has a well-honed economic development strategy, *The Plan for Progress*. Recently the city has set an important precedent by working with the Urban Land Institute to create and implement a real estate strategy. The Regional Employment Board's workforce plan and the Davis Foundation's *Cherish Every Child Strategy* are two other notable examples of important ongoing strategic efforts.

Working collaboratively, the community has a new opportunity to use the information presented in this report as a launching pad for an informed comprehensive strategic planning process. As a first step in strategic planning efforts, the community must review these data and reflect on what they mean for Springfield's future, and how they inform a strategy that will bring sustained and broadly shared economic growth to residents and businesses throughout the city.

ENDNOTES

- 1 Poverty thresholds are defined annually by the Census Bureau for families of various sizes. For instance, a two parent family with two children that earns less than \$21,027 falls below the federal poverty line; a family with two children led by a single mother earning less than \$16,705 would also classify as poor. Poverty rates are designed to provide a national benchmark. They are not adjusted for regional cost of living variations. Compared with the peer cities, Springfield actually has a relatively high cost of living measured by median home values. The median home value in Springfield (\$161,300) ranked seventh highest in 2007. The six other New England peer cities each had higher home values than Springfield.
- 2 See for example John Kasarda, "Urban Industrial Transformation and the Underclass," *Annals of the American Academy of Political and Social Science* 501 (1989); and William Julius Wilson, *When Work Disappears: The World of the New Urban Poor* (New York, NY: Alfred A. Knopf, 1987).
- 3 See Sherry Lee Linkon and John Russo, *Steeltown USA: Work and Memory in Youngstown* (Lawrence, KS: University of Kansas Press, 2003) and Lorlene Hoyt and Andre Leroux, "Voices from Forgotten Cities," (Oakland, CA: Policy Link, 2007).
- 4 For a full review see Alan Berube, "Concentrated Poverty in America," in *The Enduring Challenge of Concentrated Poverty in America*, David Erickson and others, editors, (Richmond, VA: Federal Reserve Bank of Richmond, 2008).
- 5 Sara McLanahan and Gary Sandefur, *Growing Up with a Single Parent: What Hurts, What Helps* (Cambridge, MA: Harvard University Press, 1994).
- 6 V. Joseph Hotz and others, "Teenage Childbearing and its Life Cycle Consequences," *Journal of Human Resources* 40(3) (2005); Sara Jaffee and others, "Why are Children Born to Teen Mothers At Risk for Adverse Outcomes in Young Adulthood," *Development and Psychopathology* 13(2) (2001).
- 7 Jeanne Brooks-Gunn and Greg Duncan, "The Effects of Poverty on Children," *Children and Poverty* 7(2) (1997).
- 8 See Randall Kempner, "The Talent Imperative for Older Industrial Cities," in *Retooling for Growth*, Richard McGahey and Jennifer Vey, editors (Washington, DC: Brookings Institution Press, 2008).
- 9 See John Comings and others, "New Skills for a New Economy," (Boston, MA: MassINC, 2000). The Education Reform Act of 1993 attempted to address this by requiring that all high school graduates pass the state's math and English MCAS examinations.
- 10 Grace Kao and Jennifer Thompson, "Racial and Ethnic Stratification in Educational Achievement and Attainment," *Annual Review of Sociology* 29 (2003).
- 11 Lawrence Mishel and others, *The State of Working America, 2006/2007* (Ithaca, NY: Cornell University Press, 2007).
- 12 Ariell Kailil and Kathleen Ziol-Guest, "Single Mothers' Employment Dynamics and Adolescent Well-Being," *Child Development* 76(1) (2005).
- 13 Thomas Mroz and Timothy Savage, "The Long-Term Effects of Youth Unemployment," *Journal of Human Resources* 41(2) (2006).
- 14 See Robert Putnam, *Bowling Alone: The Collapse and Revival of American Community* (New York, NY: Simon & Schuster, 2000).
- 15 Robert Putnam, "E Pluribus Unum: Diversity and Community in the Twenty-First Century," *Scandinavian Political Studies* 30(2) (2007).
- 16 Eric Uslaner and Mitchell Brown, "Inequality, Trust, and Civic Engagement," *American Politics Research* 33(6) (2005).
- 17 Alberto Alesina and others, "Public Goods and Ethnic Divisions," *Quarterly Journal of Economics* 114(4) (1999).
- 18 John Helliwell and Robert Putnam, "Education and Social Capital," *Eastern Economic Journal* 33(1) (2007).
- 19 Robert Sampson and others, "Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy," *Science* 277(5328) (1997).
- 20 Joshua Zumbun, "America's Fastest-Dying Cities," *Forbes* August 4, 2008; Daniel Rohmer and others, "Television News and the Cultivation of Fear of Crime," *Journal of Communications* March 53(1) (2003).
- 21 Tama Leventhal and Jeanne Brooks-Gunn, "The Neighborhoods They Live In: The Effects of Neighborhood Residence on Child and Adolescent Outcomes," *Psychological Bulletin* 126(2) (2000).
- 22 Anil Rupasingha, "The Production of Social Capital in US Counties," *Journal of Socio-Economics* 35 (2006).
- 23 Kenneth Temkin and William Rohe, "Social Capital and Neighborhood Stability: An Empirical Investigation," *Housing Policy Debate* 9(1) 1998.
- 24 Each of the indicators measures something different. To combine them into an index that charts each city's position on average for all of the measures compared with other cities, we used a revised z-score, substituting the national average for the peer city mean. This gives an indication of how far each city is from the national average in terms of peer city standard deviations.
- 25 In fact, economic base analysis is generally performed at the regional level. From this vantage point, the city's health care industry would not be considered an economic base industry. Springfield's health care industry draws patients primarily from the region. Since city hospitals draw new capital into the local economy, but not the regional, their economic impact is more limited than industries like manufacturing, which serve much broader markets.
- 26 See Barry Bluestone and others, "Staying Power: The Future of Manufacturing in Massachusetts," (Boston, MA: Northeastern University, Center of Urban and Regional Policy, 2008).
- 27 See Joseph Cortright, "Making Sense of Clusters: Regional Competitiveness and Economic Development," (Washington, DC: Brookings Institution, 2006).
- 28 Scott Loveridge and Denys Nizalov, "Operationalizing the Entrepreneurial Pipeline Theory: An Empirical Assessment of the Optimal Size Distribution of Local Firms," *Economic Development Quarterly*, 21(3) (2007).
- 29 Ross DeVol, "Best Performing Cities," (Santa Monica, CA: Milken Institute, 2008).
- 30 Robert Atkinson and Scott Andes, "The 2008 State New Economy Index," (Washington, DC: Information Technology and Innovation Foundation, 2008).
- 31 Jennifer Vey, "Restoring Prosperity: A State Role in Revitalizing America's Older Industrial Cities," (Washington, DC: Brookings Institution, 2007).
- 32 Massachusetts Department of Workforce Development, Job Vacancy Surveys, Accessed at <http://lmi2.detma.org/Lmi/LMIjobvacancy.asp> (March 23, 2009).
- 33 "Building a Better Workforce," (Springfield, MA: Regional Employment Board of Hampden County, 2008).
- 34 "Lower Cost Domestic Sourcing: A Niche Opportunity for the US," (Arlington, VA: Information Technology Association of America, 2007).
- 35 Robert Pollin and others, "Green Recovery," (Amherst, MA: Political Economy Research Institute, September 2008).

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