

The Region's



2019-2024

Comprehensive Economic Development Strategy



Prepared by
Pioneer Valley Planning Commission

June 2019

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MANAGEMENT CENTER



**The Pioneer Valley's
*Comprehensive Economic Development Strategy (CEDS)***

2019 - 2024

Prepared by

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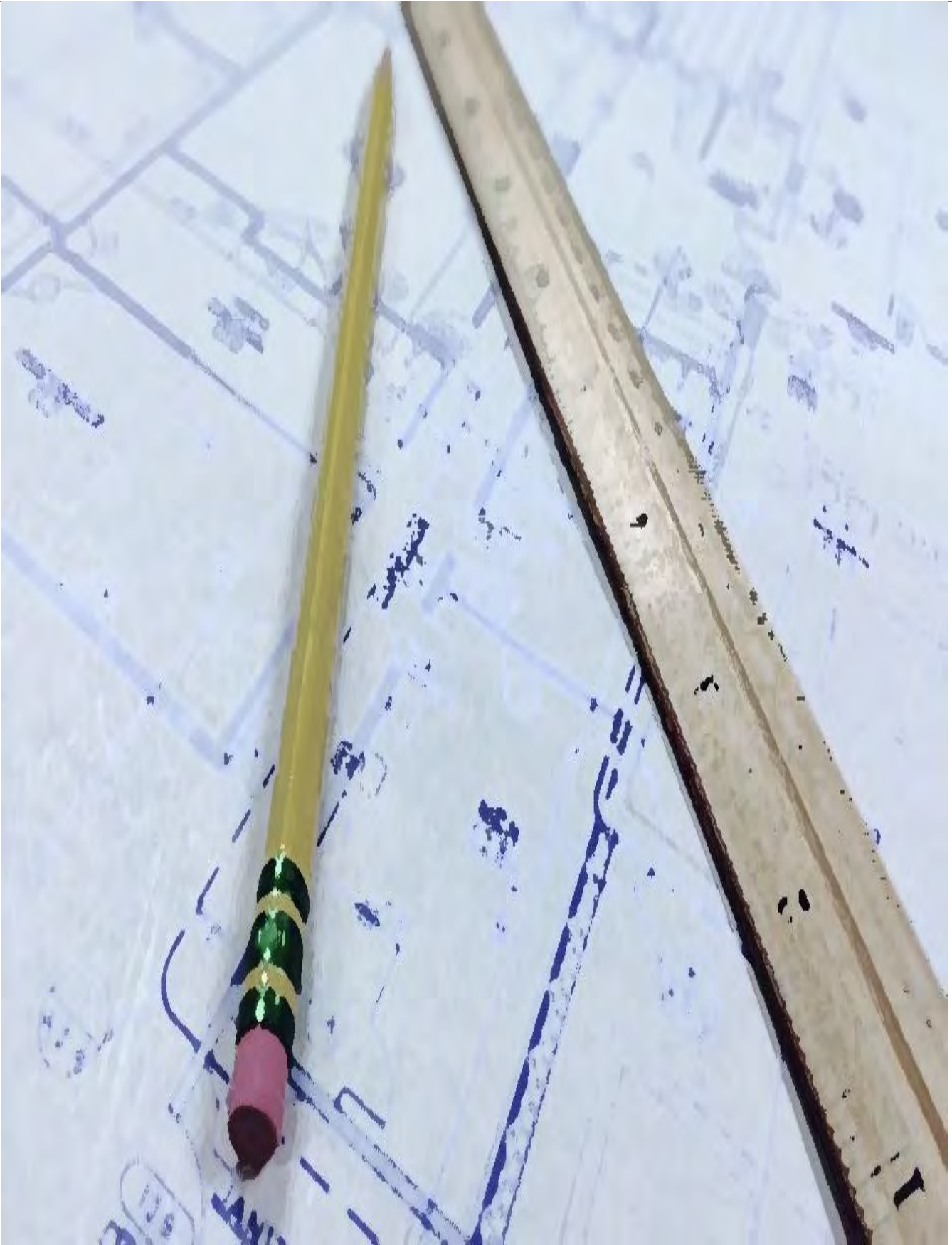
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Executive Summary

As a region of 43 vibrant cities and towns that is home to both long-time major employers as well as to thousands of small businesses, and which is the seat of 13 highly regarded colleges and universities, the Pioneer Valley has recovered from the recession, is seeing renewed public and private investment, and has a positive economic outlook. The region is witnessing increased economic activity in its cities and towns as evidenced by construction activity and successful programs to support education, entrepreneurship and career development. Unemployment has declined steadily and rapidly since the recession, in a pattern similar to Massachusetts and the United States overall. However, there is progress still to be made. Our region must retain its residents and employees by providing abundant opportunities for education, training, employment and career growth as well as a consistently high quality of life if the region is to continue to thrive with benefits accruing to all residents.

The Pioneer Valley's Comprehensive Economic Development Strategy (CEDS) serves both as a guiding vision and "blueprint" for the economic growth of the region and as a benchmark with which to measure growth and success. It outlines long-term goals and strategies in four broad areas: Talent, Business Development, Infrastructure, and Collaboration & Engagement.

The CEDS Plan for Progress Coordinating Council serves as the region's "CEDS Committee" and is designed to help guide the CEDS planning process and implementation. Members are drawn from major regional stakeholders, such as the regional employment boards, institutions of higher education, and chambers of commerce, as well as from community leaders and individuals who represent business and civic interests. The CEDS development process also includes a wide range of public outreach and participation opportunities, and these and the Coordinating Council's efforts are supported by the Pioneer Valley Planning Commission under a planning grant from the U.S. Department of Commerce Economic Development Administration.

Research and Public Outreach

For this Five-Year CEDS, a review of the region's demographic and socio-economic trends was conducted (Appendix B); a range of stakeholders were consulted for their input (Appendix A); and a SWOT analysis was undertaken to comprehensively assess the state of the economy (p. 13). The region's strengths are many and varied, from its location at a major crossroads of southern New England to its 13 colleges and universities and variety of living options from rural and village life to urban downtowns. The region has an extremely strong healthcare sector and at the same time fosters numerous small businesses in fields such as arts, agriculture, technology, and personal services. Many of these businesses, both small and large, are growing due to the improved national economy, increased local investment, and new business mentoring programs, presenting significant opportunities. The potential for continuing increased and improved passenger rail service is another area of opportunity for the region, and growing interest and investment in energy efficiency and clean energy alternatives bodes well for the Valley.

However, it is critical that attention is paid to weaknesses and threats as well. The Pioneer Valley remains highly segregated, with low-income residents and communities of color largely separated from

moderate- to high-income and “white” population areas. The region’s infrastructure continues to deteriorate, despite large improvement projects such as the I-91 Viaduct and numerous upgrades and improvements conducted by individual municipalities. School systems are uneven in quality, and transit services are insufficient. The population has remained stable, with slight growth only because of immigration, while at the same time immigrants are not as welcomed as they should be. Land use policies must be enacted to ensure that more prime farmland and critical natural ecosystems are not lost to “sprawling” development, Small colleges are at risk of financial troubles, given declining enrollment and higher costs.

Strategic Action Plan

The strategies in this Five-Year Plan are intended to address the region’s most challenging issues. A new Action Plan was created with a dozen specific and detailed action steps outlined as priorities. As a theme throughout these areas, as well as a specific strategy under the Infrastructure goal, economic *resilience* is emphasized. A further theme and goal is to incorporate *collaboration and engagement* in each of the objectives. See Table 1 for further details on these objectives.

Talent

- Facilitate and pursue business and education partnerships that promote career exploration programs for youth, based on existing models (such as Westfield Education and Business Alliance).
- Implement educational/career programs that present clear pathways for credential attainment, career mobility, and wage advancement in specific occupational groupings in priority industries.
- Improve early childhood education by completing and launching Educare Center in Springfield.

Business Growth and Development

- Continue to network business support agencies to achieve a more coordinated and streamlined system.
- Conduct campaign to market our region to visitors, workers, and businesses.

Infrastructure

- Advocate for funding to both support and expand current fixed route transit service, e.g. fund the Regional Transit Authorities in fiscal year 2020 with a base of \$90.5 million in state contract assistance and increase this amount by an automatic inflator each subsequent year.
- Complete East-West Rail Study, including potential scenarios including Palmer, Hilltowns, and Berkshires.
- Launch and test north-south pilot rail service to better serve Holyoke, Northampton and Greenfield. Ensure that pilot services are sufficiently utilized by local residents.

- Complete broadband last mile to all underserved Pioneer Valley communities with the help of state funding awards.
- Expand ValleyBike Share membership and service area to include Chicopee, Hadley and West Springfield including 22 new bike share stations.
- Assist all Pioneer Valley towns with Green Communities designations and implementation of energy efficiency projects for municipal buildings.
- Help at least 75% of Pioneer Valley communities achieve Municipal Vulnerability Preparedness (MVP) certification from the state.

Collaboration and Engagement

- Conduct the above activities with inclusion of all, particularly those most immediately affected by the outcomes.

Evaluation

The CEDS also provides an evaluation system with which to measure regional progress toward the long-term goals of the Plan. The 24 evaluation measures together represent all four of the CEDS Plan for Progress goal areas.

This year, the metrics show mixed outcomes in each of the areas. There have been significant improvements in high school graduation rates and workforce training, and unemployment has decreased, as noted above. Gains are still to be made in the levels of early education enrollment; however this data is from 2017 so recent improvements in early education accessibility have not yet been accounted for. In terms of the business environment, the number of employers and jobs has increased slightly; however poverty levels increased, meaning that these improvements have not extended into all communities yet.

Regarding infrastructure improvements of all types, the greatest challenges remain transit services, road pavement conditions, and home ownership levels. Other transportation measures have improved, along with levels of affordable housing and pollution reduction. Income inequality has improved somewhat in the Hampden county area but not in Hampshire or Franklin counties. On the positive side, local aid from the state has increased slightly, and leadership program graduation has jumped.



Introduction

Purpose of the CEDS

The purpose of the CEDS is multifaceted. It is designed to provide key information to communities, business leaders, nonprofits, regional organizations, civic groups, and other stakeholders for a variety of uses, as well as to provide a “blueprint” for the economic growth of the region. It is also meant to address economic resiliency in the face of potential disruptions to the economic base, whether from a natural disaster or economic downturn. It can be viewed as one of many tools in the region’s economic development toolkit.

Background and Process

The Comprehensive Economic Development Strategy (CEDS) is a regional planning tool that is updated annually, with a new plan every five years, providing the region with socioeconomic data, background information on the region, economic development strategies, and benchmarks. The Pioneer Valley region was designated an Economic Development District (EDD) in 1999 by the U.S. Department of Commerce Economic Development Administration (EDA), and the Pioneer Valley Planning Commission is the liaison with the EDA.

Plan for Progress Coordinating Council

The Plan for Progress Coordinating Council serves as the region’s “CEDS Committee” and is designed to help guide the CEDS planning process and implementation. Members are drawn from major regional stakeholders, such as the regional employment boards, institutions of higher education, and chambers of commerce, as well as from community leaders and individuals who represent business and civic interests.

Outreach and Public Participation

The CEDS development process included a wide range of public outreach and participation opportunities. Details of the findings are included in Appendix A: Public Outreach, and Appendix D: Business Survey. Over the course of late 2018 and early 2019, input was sought from diverse groups throughout the EDD communities regarding economic development needs and opportunities. A business survey was developed and administered to members of two chambers of commerce, and these results are described in detail in Appendix D. The Economic Development Partners, a group representing economic interests in the region, meets monthly and addresses topics of immediate concern to communities and the region. These discussions provided significant insight into the progress of the region as well as new and ongoing challenges. A statewide Rural Policy Advisory Commission that was established in 2015 conducted listening sessions in each region of the Commonwealth in 2018, and results from the Pioneer Valley region session were incorporated into the CEDS.

The Pioneer Valley Planning Commission (PVPC)

The PVPC provides staff support to the Coordinating Council, conducts public outreach, and prepares the region’s CEDS document. Since 1962, the Commission has been the designated regional planning body for the Pioneer Valley region, which encompasses 43 cities and towns in the Hampden and Hampshire county areas. It is the primary agency responsible for increasing communication,

cooperation, and coordination among all levels of government as well as the private business and civic sectors in order to benefit the Pioneer Valley region and to improve its residents' quality of life. Although PVPC is a public sector agency, it is not a direct arm of the federal or state governments. Rather, it is a consortium of local governments that have banded together under the provisions of state law to address problems and opportunities that are regional in scope.

EDA Investments in the Region

On an annual basis the Pioneer Valley Economic Development District, as has been designated by the EDA, solicits proposals from the region for projects that may seek funding under the EDA's Public Works Economic Development Program. The region has been successful in prior years in receiving substantial EDA funding awards for projects that create jobs and stimulate private investment in economically distressed communities of the Pioneer Valley region. Among these awards and accomplishments are the following:

- The Town of Ludlow was awarded \$3.1 million in 2018 for the Riverside Drive Infrastructure Project at Ludlow Mills, to access a vacant, shovel-ready portion of the property for light industrial development.
- DevelopSpringfield was awarded \$1.1 million in 2017 to develop the WorkHub at 77 Maple, involving restoration of an historic building in Springfield as an incubator for small businesses.
- In 2016, Holyoke Community College was awarded \$1.55 million for the renovation of the existing Cubit Building in Holyoke's Innovation District to establish the Center for Hospitality and Culinary Excellence, a state-of-the-art workforce training facility.
- In 2014, the City of Springfield was awarded \$1.3 million for the Springfield Job Creation/Technical Training Facility, an 11,400-square-foot facility that provides space to conduct work skills training in the precision manufacturing and construction trades industry.
- In 2011, the Holyoke Gas & Electric Company was awarded \$2.1 million for hydroelectric infrastructure improvements that will support the development of the Holyoke Innovation District anchored by the Massachusetts Green High Performance Computing Center.
- In 2011, EDA awarded the Caring Health Center in Springfield \$500,000 for a new community health center in downtown Springfield, in renovated historic buildings.
- In 2010, the Western Massachusetts Enterprise Fund was awarded \$500,000 from the EDA towards a Western Massachusetts Revolving Loan Fund.
- In 2008, EDA awarded the City of Northampton and MassDevelopment \$750,000 for the Village at Hospital Hill Business Park, a redevelopment of a former state hospital site.
- In 2006, EDA awarded \$1.6 million to the City of Holyoke for creation of the Crossroads Industrial Park Roadway (Kelly Drive).

- Also in 2006, EDA awarded the City of Springfield \$1 million for the Memorial Industrial Park II project adjacent to the Smith and Wesson facilities.
- In 2002, Holyoke Health Center and Medical Mall was awarded a \$1 million grant by EDA to complete Phase II of the project.
- In 2001, STCC received the EDA’s National Award for Excellence in Urban Economic Development.
- In 1999, the EDA awarded \$700,000 for the Latino Professional Office Center in Holyoke.

In the upcoming 12-18 months, the following projects are proposed to potentially pursue EDA Public Works funds:

Community	Project Name	Project Type	Total Est. Project Cost	# Perm. Jobs Created
Belchertown	Carriage Grove Industrial Area	Redevelopment of former Belchertown State School	\$1 million	50
Chicopee	Westover Air Park South	Infrastructure improvements for 88-acre industrial park	\$6 million	2,000
Chicopee	Rivermills at Chicopee Falls	Redevelopment of brownfields as mixed-use neighborhood	\$25 million	50-100
Holyoke	South Holyoke Redevelopment	Commercial, residential and infrastructure development	TBD	TBD
Holyoke	Whiting Farms Road – Parcel B	Infrastructure improvements to assist with commercial development	TBD	TBD
Holyoke	Victory Theater	Redevelopment of downtown historic theater for cultural & commercial uses	\$43 million	TBD

Integration with Other Plans

The 2019 CEDS is coordinated and aligned with a wide range of other recently established regional plans. Among these are the following:

Pioneer Valley Labor Market Blueprint: A Regional Planning Initiative of the Massachusetts Workforce Skills Cabinet. Franklin Hampshire Regional Employment Board and Regional Employment Board of Hampden County, Inc., 2018. (Note: the Regional Employment Boards are now known as MassHire)

2020 Regional Transportation Plan. Currently under development by the Pioneer Valley Planning Commission for the Pioneer Valley Metropolitan Planning Organization (MPO), to be completed July 2019.

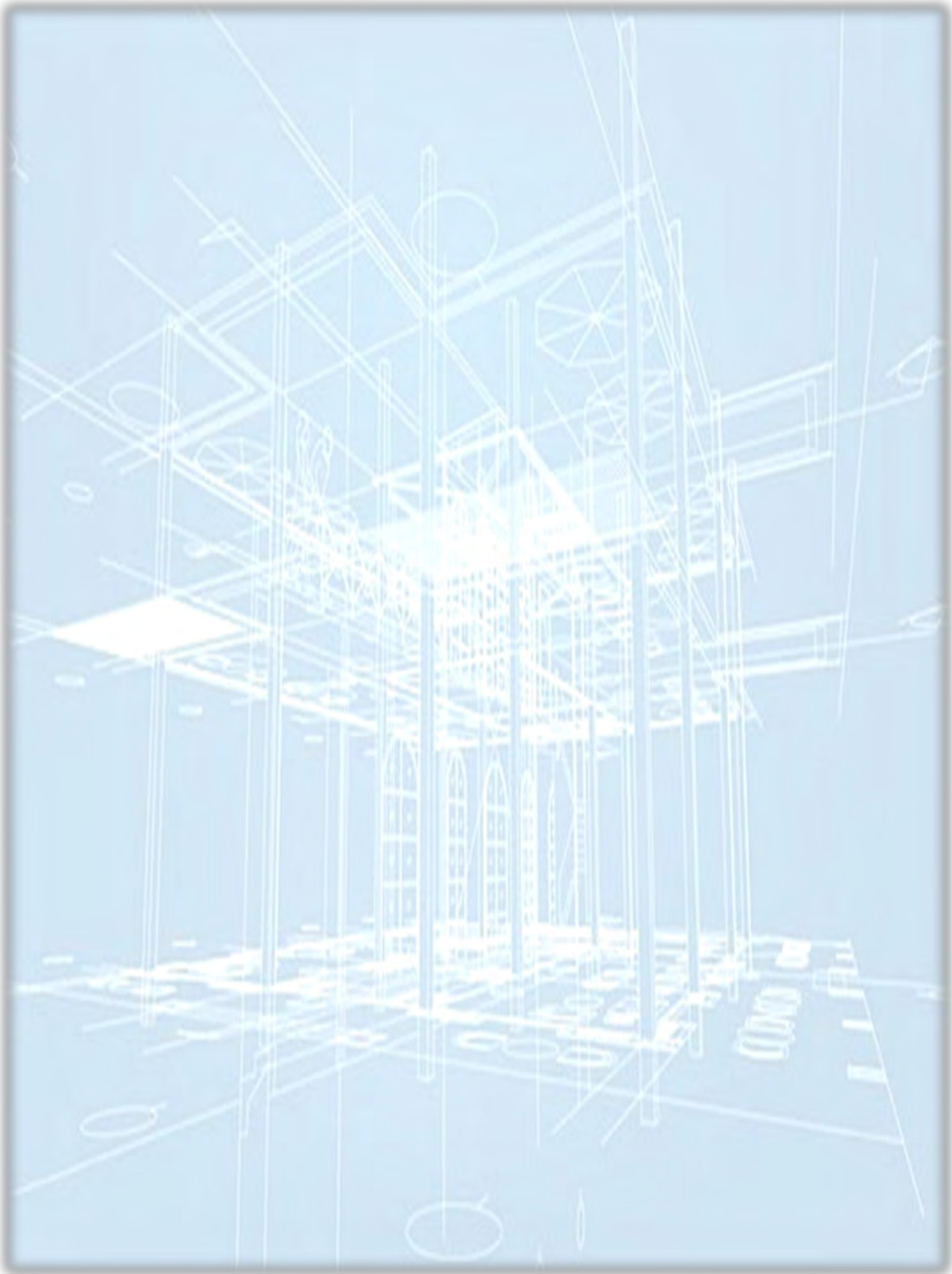
Our Next Future: An Action Plan for Building a Smart, Sustainable and Resilient Pioneer Valley. Pioneer Valley Planning Commission with support of U.S. Department of Housing and Urban Development Sustainable Communities Initiative Regional Planning Grant Program, 2014.

Pioneer Valley Climate Action and Clean Energy Plan. Pioneer Valley Planning Commission with support of U.S. Department of Housing and Urban Development Sustainable Communities Initiative Regional Planning Grant Program, 2014.

Westover Air Reserve Base Joint Land Use Study. Pioneer Valley Planning Commission with support of the Department of Defense Office of Economic Adjustment, 2018.

A ***Massachusetts Rural Policy Plan*** is being prepared by the Governor's Rural Policy Advisory Commission, based on research and public input throughout the Commonwealth including the Pioneer Valley. The plan will be completed in 2019.

These plans were developed by and in conjunction with ***Plan for Progress*** partners and have informed and been informed by the ***Plan*** and the annual CEDS updates.





Summary Background

The Pioneer Valley Region is maintaining steady economic growth amidst an uncertain national and international economic backdrop. The region's cities, particularly Springfield, are seeing significant new investment, including from large new employers including MGM Springfield and the China Railroad Rolling Stock Corporation (CRRC), as well as developers revitalizing centuries-old mill buildings or building new on former brownfields. Other parts of the region are also experiencing a strong period of growth and business confidence not seen since before the 2008 recession, including downtown revitalization in several of the region's smaller population centers. A list of major projects currently under way in the region can be found In Appendix C. These investments are spurring workforce and training efforts (such as Holyoke's recently completed HCC MGM Culinary Institute and the Springfield-based Gaming Training Institute) as well as tapping greater numbers and quantities of local products and services.

A recent Baker-Polito Administration-sponsored and supported regional Workforce Development Blueprint¹ involving our region's Workforce Investment Boards found that the top three industries most important to the region's economic success are:

- 1) Health Care and Social Assistance
- 2) Educational Services
- 3) Advanced Manufacturing

Other critical industry sectors are:

- Finance and Insurance
- Professional, Scientific, and Technical Services
- Accommodation and Food Services
- Agriculture and Sustainable Food Systems

These industry sectors have dominated for about the past two decades, with Agriculture and Sustainable Food Systems re-emerging and growing with value-added manufacturing processing, distribution, serving and selling, as well as managing food waste, animal care, and farm and nursery management. Gaming-related occupations are brand new to the region and expected to remain steady. The casino and associated hotel and other activities have increased demand for workers in food preparation and serving, as well.

Cross-industry occupations include:

- IT-related
- Professional Services

¹ ***Pioneer Valley Labor Market Blueprint: A Regional Planning Initiative of the Massachusetts Workforce Skills Cabinet.*** Franklin Hampshire Regional Employment Board and Regional Employment Board of Hampden County, Inc., 2018. (Note: the Regional Employment Boards are now known as MassHire)

- Back Office Administrative Support
- Logistics and Transportation
- Trades

The strategies in this Five-Year Plan are intended to address the region's most challenging issues. For instance, the region's overall population has increased only modestly over the past two decades, and there is population decline in some of the rural towns. In fact, for the past 25 years, with the exception of only two years (2002-3) there has been a net *out-migration* every year from the Pioneer Valley. If not for in-migration of Puerto Rican residents of the United States and immigration of foreign-born immigrants from a wide range of countries, the population of our region would have declined overall, resulting in reduced state and federal funding for education and other services, diminished interest from potential employers, and a stagnant economy. Additionally, the level of poverty remains high in the Pioneer Valley, with a rate of 16.3% versus 11.1% for Massachusetts. Poverty is also drastically different across racial categories. While the overall poverty rate in the region is 16.3%, the poverty rate in the Hispanic and Latino community is nearly twice that rate, at 38.7%, and the poverty rate is over twice as high for Black residents as it is for White residents (22.7% and 9.3% respectively). These disparities must be reduced and eventually eliminated if the region is to experience true economic success.

Socio-economic data and a detailed analysis of the region's economy is included in Appendix B.

Based on the data from the past decade or more; current public outreach conducted for this report; and related economic plans at the local, regional and state level, the following SWOT Analysis (Strengths, Weaknesses, Opportunities and Threats) examines the region's economy in depth as a foundation for the 2019 CEDS goals and objectives.

SWOT Analysis

The following section analyzes the Strengths, Weaknesses, Opportunities and Threats within and facing the Pioneer Valley region.

Strengths

(Region's competitive advantages)

- **Strategic location** at the crossroads of southern New England.
- **Affordable** cost structure for businesses and residents alike.
- **Scenic beauty, historic character, and outdoor recreational resources** make the region a highly desirable place to live, work and play.
- **Variety of living options** from urban and suburban to small-town and secluded rural locations.
- **Growing number of employers**, particularly small enterprises.
- **Improved high school graduation rates** in the urban core.
- **Coordinated workforce development system** with new Pioneer Valley Workforce Development Blueprint; the Blueprint has state level support and will guide future state investments in workforce development programs.
- **Downtown revitalization in region's economic capital of Springfield.** There is new/renewed interest in downtown Springfield real estate with major new investment and an increased critical mass downtown including Innovation District (especially Bridge Street) and the South End (MGM mixed use development).
- **A diverse range of higher educational institutions**, from community colleges to small liberal arts colleges and large universities.
- **Increased and improved north-south rail service;** new Hartford Rail Line serves Springfield to New Haven with trains every 45 minutes

- **Culture of innovation** with a long history of inventions and enterprising activities.
- **Major new employers** – MGM Springfield opened in 2018 with 3,000 employees; the CRRC rail-car manufacturing plant opened in 2017 and by late 2018 had approximately 240 employees.
- **Expansion of MassMutual** – The company consolidated its headquarters in Springfield, invested \$50 million in improvements, and plans to add 1,500 new jobs within several years.
- **Major investments in new or expanded facilities** by existing employers including U.S. Tsubaki, HP Hood, Agri-Mark, J. Polep, area universities and colleges, and Baystate Health (see list of committed projects in Appendix C).
- **New early education programs** are available and being developed. The MGM Head Start Child and Family Center is a LEED Platinum-certified green building with 20 employees and serves 88 children. Educare Springfield, a nationally recognized pre-school model that is among just 24 of its kind in the country is slated to open in late 2019.
- **New tourism draws** – MGM Springfield, Dr. Seuss Museum, Gateway City Arts in Holyoke, Pulaski Park in Northampton, Mill 180 in Easthampton, renovated Basketball Hall of Fame, and annual additions to Six Flags New England. There have also been increases in attendance at the Big E, Holyoke Parade, Springfield Museums in general, and the Basketball Hall of Fame as well as general increases in tourism in the region according to the MA Office of Travel and Tourism.
- **Downtown revitalization occurring throughout region** in addition to the urban core, including ongoing mill redevelopments in Easthampton; new development in Amherst Center and North Amherst; and two new residential/mixed use developments and Pulaski Park in Northampton.
- **Successful Federal Reserve Bank Working Cities Challenge** projects in Springfield and Holyoke. In Springfield, the SpringfieldWORKS program is a collaboration of diverse entities to connect potential workers with employers as well as training opportunities, while SPARK EforAll Holyoke is working to help accelerate economic and social impact through entrepreneurship.
- **Valley Venture Mentors program** – The program is extremely successful and has expanded from a small grassroots nonprofit to an organization with over a thousand community advisors who've provided key assistance to more than two hundred startups. Those startups in turn have generated more than \$50 million in revenue and investment.
- **Community colleges are increasingly involved and collaborating** in workforce training efforts including Adult Basic Education and English for Speakers of Other Languages.
- **Broadband has been extended** to nearly all communities in the region and is in the process of reaching the final few rural towns.
- **Two major military bases** in the region: Westover Air Reserve Base in Chicopee and the Barnes Air National Guard Base in Westfield employ significant numbers and have a positive economic impact.
- **Interstate 91 viaduct** through Springfield has been repaired, with improved access ramps.

- **Three institutions of higher education have located branches in downtown Springfield** in the past several years, including Cambridge College, UMass, and Bay Path University's American Women's College.
- **The Holyoke Community College/ MGM Center for Culinary Arts** opened in Holyoke in 2018 and serves as a pipeline for future chefs, bakers, restaurateurs, caterers, and culinary instructors in the region. MGM alone has hired hundreds of culinary staff and food service workers.
- **Union Station multimodal transportation center** and new train stations in Holyoke and Northampton provide enhanced train and transit services along the Amtrak corridor.
- **Rapid increase in number of co-working spaces** throughout the region.
- **The Wellspring Cooperative Corporation (WCC)** has developed Springfield's first commercial hydroponic greenhouse and an upholstery repair business; the businesses serve major institutions including Baystate Medical Center and UMass.
- **New England Knowledge Corridor Partnership** – this interstate partnership fosters collaboration across the Massachusetts/Connecticut state line, encompassing the anchor cities of Springfield, Hartford and New Haven.
- **Leadership programs** are graduating a new generation of community leaders. Programs include Leadership Pioneer Valley, Leadership Institute for Political and Public Impact (LIPPI), and local chamber of commerce programs in Springfield and Holyoke.
- **New regional bike-share program** with electric-assisted bicycles began in five communities: Springfield, South Hadley, Holyoke, Amherst, and Northampton. It will be expanding into Easthampton in 2019.
- **Ludlow Mills redevelopment** is well underway, with Encompass Health Rehabilitation Hospital (formerly HealthSouth), new market-rate housing, planned senior housing, planned Riverside Drive accessing an available industrial parcel, and the publicly accessible Riverwalk.
- **Solar photovoltaic installations** have increased, both residential and commercial. As more of the region's communities are certified as Green Communities, they are using the available state funding for energy efficiency and solar installations.
- **Healing Racism Institute of Pioneer Valley** offers an ongoing successful program that has worked with school systems, police departments, and other institutions and individuals.
- **Successful local agriculture** due to good soils, relative lack of pollution.
- Successful past and ongoing efforts to **eliminate wastewater pollution** in Connecticut River.
- Significant progress of **disaster preparedness planning** and municipal vulnerability plan certification.
- **Bradley International Airport**, the second largest airport in New England, is within an hour of most Pioneer Valley region communities. The airport offers numerous air carriers and flights including a transatlantic link to Ireland with connections to Europe. The airport has modernized

its facilities and increased non-stop flights, resulting in passenger growth of 23% over the past six years.



Weaknesses *(Region's relative competitive disadvantages)*

- **Shortage of educated, skilled workers** for the available jobs.
- **Shortage of local farmworkers** to support the local agricultural economy, requiring dependence on temporary/seasonal immigrants with special visas that are difficult to obtain.
- **Insufficient support infrastructure for workers**, including transit services, childcare, and housing.
- **Continued high poverty rates and poor health outcomes**, especially in the region's urban core.
- **Still-evolving region-wide system of services for businesses** including start-ups and entrepreneurs.
- **Several urban core schools remain underperforming**; graduation rates remain below desired level.
- **Continued deterioration of the region's infrastructure assets** including roads and bridges, public water and sewer lines, wastewater treatment facilities, and historic buildings.
- **Continued lack of high-speed broadband service** in several rural communities (11 in Pioneer Valley region)
- **Insufficient public transit services**, particularly for older adults, persons with limited incomes, and people with disabilities that prohibit driving.
- **Loss of population in some rural areas**, particularly where there is limited high-speed internet service.
- **Low population growth** throughout the region.
- **Limited inventory of "shovel-ready" industrial land**, particularly larger parcels.
- Existing land use practices combined with a lack of sufficient water-management infrastructure makes many communities **vulnerable to flooding** during and after major storms.


- **Energy challenges:** limited supply and distribution capacity for natural gas plus relatively high electricity costs.



Opportunities (*Potential positive impacts*)

- **Positive momentum** created by a critical mass of growth, investments and interest in region's central city of Springfield – “unlike anything seen in decades” according to the region's business publication, BusinessWest (December 2018).
- **Major new employers and expansions** with potential for regional job multiplier effects including enhanced supply chain. Large companies in the region utilize goods and services from numerous local businesses, and their employees also patronize local businesses.
- **Pilot of expanded north-south passenger rail** service targeted for summer 2019; if the service is sufficiently utilized after a two-year trial it will become permanent.
- **New East-West Rail study** under way with 31-member advisory committee; the study is due by the end of 2019.
- **Real estate market showing signs of growth**, including higher numbers of inquiries, showings, leases and sales.
- **Burgeoning agriculture and sustainable food** systems ecosystem.
- **Incremental growth** of small and medium sized enterprises and emergence of new startups.
- **Enhanced marketing of the region** would draw more visitors, residents and businesses.
- **The cannabis industry** may provide economic benefits to local municipalities and provide jobs.
- **State-designated and federally approved “Opportunity Zones”** offer revitalization potential but have yet to be utilized.
- Pioneer Valley communities that are now state-designated “Green Communities” have access to state funding to **implement energy efficiency and clean energy upgrades**.
- **Expanding network of bicycle and pedestrian routes** and trails that contribute to the region's attractiveness and livability.

- **Coordinated policies and investments** in areas of land use, economic development, housing and transportation that can support a dynamic and competitive region.



Threats *(Potential negative impacts from external factors)*

- **Loss of population in rural areas;** towns struggling to maintain services and meet budget needs; deteriorating infrastructure.
- Potential for **undercounting in 2020 Census.**
- **Loss of prime farmland and forest** to solar projects and other forms of development.
- **Negative impacts of reduced transit services** on seniors, individuals with disabilities, and low-income workers.
- **Effects of import tariffs** on local companies, particularly precision manufacturers and others that provide links in the supply chains of industries affected by steel and aluminum tariffs; and also including CRRC.
- **Financial challenges for small liberal arts colleges** in New England, recently evidenced locally at Hampshire College, which is seeking a merger partner.
- **Cannabis industry** could potentially have some negative impacts.
- The **new gaming industry** could potentially have negative impacts such as increased gambling addiction.
- **Lack of desired population growth** due to intensifying federal controls on immigration.
- **Antiquated formula for education assistance** to public schools and school districts.
- **Loss of markets for recycled material** which, in turn, is depleting a source of local revenue.
- **Climate change and resulting vulnerabilities** that have been linked to Greenhouse Gas (GHG) emissions, particularly from the transportation sector.
- **Significant levels of poverty** still concentrated in the Pioneer Valley's urban core.

- **Declining college enrollment** which can adversely impact the region's higher education institutions, especially the smaller private colleges.
- **A national opioid epidemic** which in Massachusetts has elevated the opioid-related death rate to surpass the national average with over 23 fatal overdoses for every 100,000 Massachusetts residents.



Strategic Action Plan

The 2019 CEDS sets forth a vision of:

A strong, innovative, engaging, and vibrant economy and quality of life that fosters prosperity and sustainability and is driven by collaborative leadership.

This vision is expressed through four major goal areas, each with its own set of strategies and tangible action steps to guide the plan's implementation. In addition, six top priorities for the region are laid out. All of the strategies are meant to be periodically revised in order to meet the region's changing economic needs, conditions, and circumstances. This plan examines the goals and strategies and lays out new areas of focus as well as a dozen specific action steps for the next five years.

The Region's Key Opportunities

Over the decade encompassing 2015-2025, the Pioneer Valley will steadfastly pursue its most promising economic opportunities in the following ways:

1) Leverage New Connections That Significantly Enhance the Region's Economic Competitiveness

Work in concert with government leaders and agencies at all levels, along with the region's business and civic sectors, to complete the reconstruction, reactivation and service expansions along the Pioneer Valley's principal north-south (Knowledge Corridor) and east-west (Inland Route) rail corridors to accommodate both passenger and freight traffic.

Simultaneously tackle the remaining "last mile" phase required to build out western Massachusetts' new, "middle mile" high-speed broadband network, thereby allowing the Pioneer Valley to realize the full range of potential economic and job creation benefits while ensuring a favorable return on this substantial investment of public funds.

2) Lead the Commonwealth's Clean Energy Transformation While Moving the Region Toward a Balanced and Diversified Energy Portfolio

Maintain the Pioneer Valley's efforts to lead multifaceted efforts by the Commonwealth to significantly reduce our heavy reliance on fossil fuels and accelerate the region's transition to emerging clean energy sources, broadly employing energy conservation measures and technologies, and overall fostering the creation of a far more balanced, diversified, reliable and affordable energy supply portfolio to support the Pioneer Valley and its regional economy. More specifically, by 2025 strive to achieve parallel goals of: a) realizing over 600 million kWh of new clean energy generation coupled with a cut of 3.2 metric tons of Greenhouse Gas (GHG) emissions emanating from Pioneer Valley sources, and b) growing our clean energy industry, which has approximately 500 establishments and 7,000 workers, as a region-specific initiative that is consistent with the most recent Massachusetts Clean Energy and Climate Plan.

3) Harness the Economic Development Potential of the New England Knowledge Corridor

Realize and tap the impressive and wide range of economic attributes and assets concentrated in the interstate New England Knowledge Corridor (NEKC) encompassing the Greater Springfield, Hartford and New Haven metropolitan areas, an economic region which boasts a population of nearly 3 million; a workforce of more than 1.25 million; 215,000 college students enrolled in 41 colleges and universities; and in excess of 64,000 businesses; thereby making the NEKC the 20th largest market in our nation. Correspondingly, utilize the NEKC with its combination of academic power, strategic location, high productivity workforce and innovative talent pool to elevate the NEKC's visibility, reputation and combined strength to participate and successfully compete in a global marketplace where critical mass, thought leadership, workforce talent and the ability to collaborate are now essential to achieving sustained economic progress.

The Region's Key Economic Challenges

Over the decade encompassing 2015-2025, the Pioneer Valley will act to address its most pressing economic challenges by addressing:

1) Talent Pool and Pipeline Challenges

Pursue a broad array of policy reforms and aggressive program initiatives and interventions that work together to identify and implement actions that both retain and expand the Pioneer Valley's supply of educated, skilled workers by a target of +6% or the equivalent of 25,000 workers, while also striving to mitigate adverse impacts to the region's higher education, manufacturing, health care and technology clusters. Critical to this effort is the improvement of educational outcomes and graduation rates in the region's public school systems, particularly in the urban core's distressed cities.

2) Fragile Infrastructure Systems

Invest and leverage limited federal, state and local financial resources, as well as public-private partnerships where possible, in order to address and resolve an ever-expanding list of the region's critical infrastructure system needs and deficiencies (e.g. roadway, transit, bridge, rail, water and sewer, etc.). Simultaneously advocate for increased and multi-year infrastructure funding commitments by the federal and state governments that are at levels of investment commensurate with maintaining all forms of the Pioneer Valley public infrastructure in a state of good repair.

3) Retention and Growth of Existing Businesses

Proactively respond to the critical importance of small and mid-sized enterprises to the Pioneer Valley economy's strength, vitality and potential for long-term jobs growth by enhancing the system of business support services provided to them and developing new and more flexible sources of growth capital. Provide these services in a way that is highly visible, accessible, coordinated and aligned with the needs of those small and mid-sized firms that demonstrate the potential to innovate, create and grow. As part of this effort, enhance supply chain and vendor opportunities for existing Pioneer Valley businesses, with special attention to connections with new major employers in the region.

CEDS Plan for Progress Goals and Strategies

To achieve the Plan’s vision and address its top challenges and opportunities, the CEDS Plan for Progress sets forth the following four major goals, each of which includes a set of detailed strategies, with short- and long-term action steps. Plan for Progress implementers will:



Goal #1 **Develop and maintain a globally competitive and regionally engaged talent pool**

Strategy #1: Strengthen Regional Engagement and Coordination in Talent Development Initiatives

Strategy #2: Make the Implementation of High Quality Early Education an Essential Element of the Region’s Economic Development

Strategy #3: Improve K-12 High School and Vocational School Achievement and Graduation Rates

Strategy #4: Improve Community and Four-Year College Programs and Graduation Rates

Strategy #5: Enhance Career and Workforce Training



Goal #2 **Foster an Environment Where Established, New, and Growing Businesses and Organizations Thrive**

Strategy #1: Retain, Attract, and Grow Businesses and Priority Clusters

Strategy #2: Advocate Efficient Regulatory Processes at All Levels of Government

Strategy #3: Market Our Region





Goal #3

Implement and Enhance the Infrastructure that Connects, Sustains and Ensures the Safety and Resiliency of the Region and its Economy

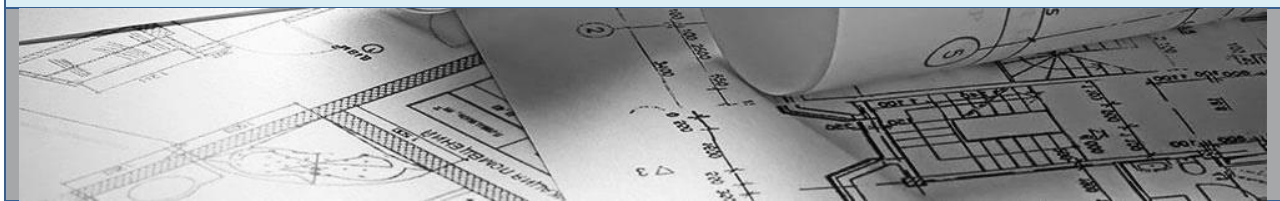
Strategy #1: Enhance High-Tech and Conventional Infrastructure

Strategy #2: Increase Use of Clean Energy to Reduce Business Costs and Improve the Environment

Strategy #3: Enhance Regional Approaches to Public Safety, Public Health and Disaster Resilience

Strategy #4: Develop an Array of Housing Options that Foster Economic Competitiveness

Strategy #5: Revitalize and Protect the Connecticut River and its Watershed



Goal #4

Conduct Economic Development Activities in a Regionally Responsible Manner, Prioritizing Collaboration and Engagement

Strategy #1: Foster Equity and Economic Opportunity through Public Policy Decisions, Educational Opportunities and Advocacy

Strategy #2: Engage, Convene and Collaborate with Diverse Groups to Maximize Regional Success



The 2019 CEDS Five-Year Action Plan designates a limited number of prioritized action steps, identified in Table 1.

Table 1: A Dozen Top Objectives for 2019-2024

Goal Area	Project	Time Frame – Short or Long-Term	Lead Implementers
Infrastructure/ Transportation	Advocate for funding to both support and expand current fixed route transit service, e.g. fund the Regional Transit Authorities in fiscal year 2020 with a base of \$90.5 million in state contract assistance and increase this amount by an automatic inflator each subsequent year.	Short-Term: By 2020	Regional Transit Authorities Regional Planning Agencies MassDOT
Business Growth	Continue to network business support agencies to achieve a more coordinated and streamlined system.	Medium-Term: By 2022	MA Small Business Development Center Valley Venture Mentors EDC of Western Massachusetts EforAll Holyoke
Talent	Facilitate and pursue business and education partnerships that promote career exploration programs for youth, based on existing models (such as Westfield Education and Business Alliance).	Long-Term: By 2024	Pioneer Valley Planning Commission Davis Foundation MassHire agencies
Infrastructure/ Transportation	Complete East-West Rail Study, including potential scenarios including Palmer, Hilltowns, and Berkshires.	Short-Term: By 2020	MassDOT with Advisory Council
Infrastructure/ Transportation	Launch and test north-south pilot rail service to better serve Holyoke, Northampton and Greenfield. Ensure that pilot services are sufficiently utilized by local residents.	Short-Term: By 2021	MassDOT Trains in the Valley EDC of Western MA Pioneer Valley Planning Commission
Business Growth	Conduct campaign to market our region to visitors, workers, and businesses.	Short-Term: By 2021	EDC of Western Massachusetts Greater Springfield Convention and Visitors Bureau Hampshire County Regional Tourism Council

Goal Area	Project	Time Frame – Short or Long-Term	Lead Implementers
Talent	Implement educational/career programs that present clear pathways for credential attainment, career mobility, and wage advancement in specific occupational groupings in priority industries.	Short-Term: By 2020	Massachusetts Workforce Skills Cabinet Regional partners MassHire agencies Colleges
Talent	Early childhood education – Complete and launch Educare Center in Springfield.	Short-Term: By 2020	Davis Foundation City of Springfield
Infrastructure/ Communication	Complete broadband last mile to all underserved Pioneer Valley communities with the help of state funding awards.	Short-Term: By 2021	Massachusetts Broadband Institute Municipalities Franklin Regional Council of Governments
Infrastructure/ Energy	Expand ValleyBike Share membership and service area to include Chicopee, Hadley and West Springfield including 22 new bike share stations.	Short-Term: By 2021	Municipalities UMass Amherst Pioneer Valley Metropolitan Planning Organization
Infrastructure/ Energy	Assist all Pioneer Valley towns with Green Communities designations and implementation of energy efficiency projects for municipal buildings.	Medium-Term: By 2022	Pioneer Valley Planning Commission Municipalities
Infrastructure/ Disaster Resilience	Help at least 75% of Pioneer Valley communities achieve Municipal Vulnerability Preparedness (MVP) certification from the state.	Short-Term: By 2021	Pioneer Valley Planning Commission Municipalities

Designated lead implementers for each of the objectives above will develop or follow their own detailed plans. Funding sources and methods will be determined by the entities involved.



Evaluation Framework




Summary

The CEDS Plan for Progress Performance Indicators are a set of quantitative benchmarks that assist in identifying economic trends and measuring progress towards the goals of the Pioneer Valley Plan for Progress. In order to provide a highly objective, measurable method of accountability, this quantitative system complements the qualitative assessments discussed above. The system does not attempt to evaluate current year statistics in isolation (e.g. judging whether a specific unemployment rate is “good” or “bad”), but rather looks at changes over time and the general trend, indicating whether a situation is improving or not (e.g. observing whether the unemployment rate is increasing or decreasing).

This evaluation section includes a chart of all performance indicators with the current and previous data as well as the percent change in data and the rating that this change warranted. Following this chart is a list of all the performance indicators organized by strategy grouping with a summary of the data and data source for each indicator.

Rating Scale

Each indicator was assigned a rating of positive, negative, or neutral, based on the most recent annual trend in the data available. Once benchmark data was collected for the most recent year available, Pioneer Valley Planning Commission (PVPC) staff calculated percentage changes from one year prior (or the most recent previous year possible if prior year data is not available). An improvement of at least one percent is considered a positive trend, while a decline of at least one percent is considered a negative trend. Between one percent improvement and a one percent decline is considered a neutral trend.

	Positive Trend More than a 1% change in a positive direction.
	Neutral Trend Less than a 1% change in any direction.
	Negative Trend More than a 1% change in a negative direction.

Regional Geography

Because we are partnering with our neighbors to the north in Franklin County on these indicators, ratings for each indicator represent the current trend for the greater Pioneer Valley which includes Hampden, Hampshire, and Franklin counties. This evaluation section includes a chart of all performance indicators with the current and previous data as well as the percent change in data and the rating that this change warranted. Following this chart is a list of all the performance indicators organized by major goal area with a summary of the data and data source for each indicator.

Pioneer Valley Plan for Progress Performance Indicators - *Pioneer Valley (3 Counties)*

Goal #1: Develop and maintain a globally competitive and regionally engaged talent pool.							
Measure	Indicator	Prior Data	Year	Current Data	Year	Annual Change	Rating
Early Education Enrollment	Enrollment In Early Education/Preschool Programs For 3 & 4 Year Olds	52.9%	2016	50.4%	2017	-4.7%	
3rd Grade Reading Proficiency	MCAS 3rd Grade Reading Proficiency	49.80%	2014	NA		NA	no trend
High School Graduation Rate	5 Year High School Graduation Rate	82.52%	2016	90.41%	2017	9.6%	
Community College Graduates	# Of Graduates From Community Colleges in Region	2,153	2017	1,800	2018	-1.6%	
Educational Attainment Of Workforce	% Of Workforce 25 And Older With 4 Year Degree	31.7%	2016	32.8%	2017	3.6%	
Workforce Training Participation	# Of People Served By Workforce Training Programs	7,836	FY2017	8,056	FY2018	2.8%	
Unemployment	Unemployment Rate	4.4%	2017	4.0%	2018	-9.1%	
Goal #2: Foster an environment where established, new, and growing businesses and organizations thrive							
Measure	Indicator	Prior Data	Year	Current Data	Year	Annual Change	Rating
Employers	Total Establishments	25,549	2016	25,614	2017	0.3%	
Jobs	Total Jobs	297,871	2016	300,482	2017	0.9%	
Sites Ready For Development	# Of Pre-Permitted Sites	7	2016	6	2019	-14.3%	
Low Income and Poverty	% Of Population With Income Below 200% Of Poverty Line	30.9%	2016	31.3%	2017	1.4%	

Notes: *Road Pavement Conditions only include Hampshire and Hampden Counties. Comparable data not available for Franklin County. Income Inequality is measured by the Gini coefficient and ranges from 0 to 1. Numbers closer to one indicate more income inequality

Continued on next page.

Pioneer Valley Plan for Progress Performance Indicators (Continued) - Pioneer Valley (3 Counties)

Goal #3: Implement and enhance the infrastructure that connects, sustains, and ensures the safety and resiliency of the region and its economy.							
Measure	Indicator	Prior Data	Year	Current Data	Year	Annual Change	Rating
High Speed Internet	% Of Communities/Population With Access To Broadband/High Speed Internet (25 MPS Download)	94.04	2016	94.96	2017	0.5%	
Bridge Conditions	# Of Structurally Deficient Bridges	97	2015	95	2018	2.1%	
Road Pavement Conditions**	Overall Condition Index (OCI)	77.6	2011	65.6	2015	-3.9%	
Bike Infrastructure	Completed Bike Facility Mileage	104.3	2018	112.8	2019	8.2%	
Transportation + Housing Costs	Combined Transportation And Housing Costs As A Percent Of Income	N/A	N/A	52%	2008-2012	NA	no trend
Affordable Housing	# Of Communities Meeting 10% Affordable Housing Threshold	8	2017	9	2018	12.5%	
Home Ownership	% Of Housing Units That Are Owner Occupied	63.62%	2016	61.69%	2017	-3.0%	
Combined Sewer Overflow Reductions	Total # Of CSOs Feeding Into The CT River Or Its Tributaries	59	2016	57	2018	-3.4%	
Goal #4: Conduct economic development activities in a regionally responsible manner, prioritizing collaboration and engagement.							
Measure	Indicator	Prior Data	Year	Current Data	Year	Annual Change	Rating
Income Inequality (Gini Coefficient)	Gini Coefficient Of Income Inequality						
	Hampden County	0.452	2016	0.489	2017	8.1%	
	Hampshire County	0.464	2016	0.437	2017	-5.7%	
	Franklin County	0.463	2016	0.453	2017	-2.0%	
State Funding - Non-School Local Aid	Statewide Non-School Local Aid Per Capita That Goes To The Region	\$232.46	FY2018	\$240.91	FY2019	3.6%	
Leadership Program Participation	# Of Graduates From All Leadership Programs In The Region	85	2017	97	2018	14.1%	
Registered Voters	Voter Participation Rates	85.26%	2016	84.48%	2018	-0.5%	

Goal #1: Develop and Maintain a Globally Competitive and Regionally Engaged Talent Pool

Early Education Enrollment


Early childhood education helps provide the opportunities necessary for positive development at this young and critical age. It is now supported by extensive research that a high quality early childhood education experience has significant long-term effects on a person’s life outcomes ranging from their achievement in K-12 school, their economic success, or the probability that they will be involved in the juvenile justice system.

Early childhood education is now recognized as a critical early phase of the cradle-to-career pipeline that takes a comprehensive, long-term view of workforce and economic development. The percent of all 3- and 4-year olds who are enrolled in any type of formal early education program (public, private, family child care, center-based preschool) is examined in this indicator.

Between 2016 and 2017 the percent of children enrolled in early childhood education programs decreased at a rate of 4.7% across the Pioneer Valley. Hampden county saw a decrease of 13.4%, while in Franklin County, the percentage decreased by nearly 55%. Hampshire County saw an increase in 34.5%.

It is important to note that these data points are estimates based on a sample of the population, and there are margins of error associated with them. In this particular case, the margins of error for all three counties are particularly large, so it’s quite possible that, while there was likely a decrease in enrollment in Hampshire and Hampden Counties, and an increase in Franklin County, it was not necessarily of the dramatic extreme that these estimates suggest.

Source: U.S. Census Bureau, American Community Survey 1-Year-Estimates

Trend	Rating
-4.7%	

3rd Grade Reading Proficiency

In an educational environment increasingly requiring quantitative measures of achievement and accountability, scores from standardized tests are used to “identify the strengths and weaknesses in curriculum and instruction” at the local level and to hold schools and school districts accountable with respect to “established standards for performance for districts that improve or fail to improve student academic performance.”*

Educational development standards indicate that students should be able to read proficiently by the end of third grade, that is, have a wide vocabulary, comprehend, write logically, speak coherently, read fluently and understand different types of texts. Beginning in fourth grade, all these skills are necessary for them to progress with more challenging work.

Previously, the percent of all children in the third grade who received a score of “proficient” or higher on the MCAS English language arts test was used to reflect early literacy skills achieved during formal early childhood education. However, to further align testing with Common Core Standards, in 2015 the Massachusetts Board of Elementary and Secondary Education began administering a new test called the Partnership for Assessment of Readiness for College and Careers (PARCC). This transition from MCAS to PARCC is an ongoing process. Although many school districts are now using this test, some are continuing to use an updated version of the MCAS, which includes only some elements of the PARCC. These changes make data difficult to compare not only from year-to-year but also between communities. Thus, this indicator is not included for this year, but will be included in future reports.


** In 2014, some third-grade students in the region took the PARCC test rather than the MCAS test. Only MCAS score results are presented in this report (thus, the sample size in 2014 is smaller than it is for 2013.)

Source: MA Department of Elementary and Secondary Education (DESE)

Trend	Rating
Trend Data Not Available	

High School Graduation Rate

High school graduation rates are a vital component in assessing the status of individuals and communities because educational attainment has a strong influence on future work and earning potential as well as the ability to constructively contribute to one’s community. Graduating from high school has become a minimum requirement for participation in most of our nation’s economy. The percent of all students enrolled in grades nine through twelve who graduate within 5 years or less is measured in this indicator. The rate is adjusted for students who transfer in or out of the schools, and thus measures only those students who began at a given school and graduated from that same school.


Trend	Rating
9.6%	

Across the region, there was an increase of 9.6 percent in graduation rates between 2016 and 2017. All three counties experienced an increase in graduation rate. The urban core cities of Springfield and Holyoke experienced an increase of 17.9% and 25.4%, respectively.

Source: MA Department of Elementary and Secondary Education

Community College Graduates

Most of today’s well paying jobs require a credential beyond a high school degree. Associate’s degrees and/or certificates are the most accessible and promising route to a job with a living wage and a genuine career path for many. This indicator measures the number of people in the who complete an associate's degree in a given academic year at one of the three community colleges in the region - Greenfield Community College, Holyoke Community College and Springfield Technical Community College.


Trend	Rating
-1.6%	

Between 2017 and 2018 the number of community college graduates in the Pioneer Valley decreased by about 1.6%.

Source: Directors of Institutional Research at Holyoke Community College, Springfield Technical Community College, Greenfield Community College

Educational Attainment of the Workforce

Higher education is increasingly necessary for long-term access to well-paying jobs. The extent of educational attainment, therefore, is indicative of a population’s ability to function and excel economically and an individual’s economic and social opportunities in life. While two-year associate’s degrees meet the needs of many positions, the bachelor’s degree is rapidly becoming a requirement for even some entry-level positions. Because a solid educational background, typically achieved during high school, is a prerequisite for getting a bachelor’s degree, this indicator also measures a community’s ability to prepare their children for college. This indicator measures the percent of the population over the age of 25 with a bachelor’s degree or higher.


Trend	Rating
3.6%	

Across the region, attainment of bachelor’s degrees remained fairly neutral, increasing slightly from 31.7% to 32.8% between 2016 and 2017. Hampden County and Hampshire County experienced increases of 3.2% and 3.3% respectively, while Hampshire County experienced an increase of 6.7%.

Source: U.S. Census Bureau, American Community Survey 1-Year-Estimates

Workforce Training Participation

Not all jobs require a bachelor’s degree to be effective, and not all bachelor’s degrees teach the specific skills that each job requires. People switch careers later in life and need specific training to learn skills that will support that shift. The Plan for Progress recognizes that a robust pipeline to a skilled workforce involves training people at all levels of skill and experience for a wide variety of jobs. This indicator evaluates the level of participation in programs that train people with specific skills to prepare them for jobs in the workforce. Data includes the number of people who take part in job skills training programs through the MassHire Workforce Boards or one of the three community colleges within the region. The majority of these are non-credit courses through the community colleges.

Trend	Rating
2.8%	


Between FY2017 and FY2018, the number of participants in workforce training programs increased from 7,836 to 8,056, or about 3 percent. Hampshire and Franklin counties experienced a small decline while Hampden County had a larger increase.

Note: Data is aggregated by fiscal year, and some duplication of totals is possible as the workforce boards and colleges may have the same students.

Source: MassHire Franklin Hampshire Workforce Board, MassHire Hampden County Workforce Board, Massachusetts Department of Higher Education

Unemployment

The unemployment rate, produced by the U.S. Bureau of Labor Statistics, is the percentage of people in the labor force who do not have a job (the labor force is the sum of those who have a job and those who are looking for a job). Unemployment rates are frequently used to report on the state of the economy: a high unemployment rate can indicate a shrinking economy. Furthermore, unemployment rates give an idea of the portion of a community’s population that is financially insecure because they do not have a job. It should be noted that because unemployment rates are calculated based on a percentage of the people who are looking for work, it is actually an undercount of the total number of unemployed people who may actually wish to be employed. The unemployment rate does not include people who left the official labor force. This too is a significant factor as it underscores the growing portion of the population who are no longer considered employable for any number of reasons.

Trend	Rating
-9.1%	


The unemployment rate in the Pioneer Valley was stable between 2017 and 2018 with none of the three counties experiencing an uptick in unemployment. In the urban core, the unemployment rate in both Springfield and Holyoke dropped 0.3% and 0.5% respectively.

Source: MA Executive Office of Labor and Workforce Development

Goal #2: Foster an Environment Where Established, New, and Growing Businesses and Organizations Thrive

Employers

Another method of measuring the strength of an economy and the opportunities within it is to count the total number of employer businesses that exist. When an economy is strong, there are appropriate economic development supports, and when confidence is high, existing businesses are more likely to stay operating and within the region. What’s more, businesses from outside of the region are more likely to relocate here, and local entrepreneurs are more likely to start to grow a business. This indicator measures the total number of establishments in the area that have more than one employee.


Trend	Rating
0.3%	

Between 2016 and 2017, the Pioneer Valley region saw an increase of 65 employers, representing a rate of growth of 0.3%. While all three counties in the region experience similar trends, the largest area of growth was in Franklin County. Holyoke was also somewhat strong with a growth rate of 1.1%. As a note, these numbers do not represent the introduction of the MGM Casino in Springfield, as they only take into account employers added up until 2017.

Source: MA Executive Office of Labor and Workforce Development

Jobs

In addition to measuring the number of employers supported by an economy, measuring the total number of jobs reflects the size and strength of those employers. It gives perspective on the number of employment opportunities that exist within the region. Additionally, the number of jobs can add nuance to unemployment rates. For example, increased unemployment coinciding with increased jobs may suggest that a larger portion of the employment opportunities are part time and people are working multiple jobs at the same time rather than more people getting full time jobs. This indicator measures the total number of jobs that exist in an area.


Trend	Rating
0.9%	

Between 2016 and 2017, the Pioneer Valley saw a slight increase in the number of jobs by 0.9%. This trend was seen in each county, with all three experiencing slight increases in the number of jobs throughout the year. Hampshire County saw the highest increase at 1.7%

Source: MA Executive Office of Labor and Workforce Development

Properties Ready for Development

A critical component to a region’s economic competitiveness is whether vacant commercial properties are available and ready to be used by companies who may want to grow within, or move to, the area. If properties are polluted or have buildings that need to be demolished, the likelihood of new employer prospects choosing that site are significantly diminished. This indicator measures the number of commercial properties that are pre-permitted by WestMass Area Development Corporation and are ready for occupancy.


Trend	Rating
-14.3%	

Between 2017 and 2019, the number of sites ready for development in the Pioneer Valley dropped by one. All pre-permitted sites are located in Hampden County in Ludlow and Chicopee.

Source: WestMass Development Corporation

Low Income and Poverty

Poverty rates are an important indicator of what portion of a community’s population likely lacks the necessary resources to provide for themselves or their families. The most widely used measure of poverty is the federal poverty rate, which is the percentage of all people who are living in households with incomes that fall below the federal poverty line. The poverty line is established based on the current cost of basic goods and services (such as food, housing, transportation, and other goods and services), and what proportion of family income is spent on those items. While the threshold is adjusted over time and is dependent on family size and ages of family members, it is increasingly thought to understate the extent of poverty. The threshold in 2016 was \$15,569 for a two person household – a very low level of income given that a low-cost one-bedroom apartment in western Massachusetts will typically rent for more than \$8,800 per year.

Trend	Rating
1.4%	

Because the federal poverty line is so low and generally misses a large portion of the population who are in economic distress, this indicator measures the percentage of the population living below 200% of that line. Poverty rates are calculated by the U.S. Census Bureau based on the income and number of people in each household.


Slightly less than one out of every three people in the Pioneer Valley live in households with incomes below 200% of the poverty line (31.3%). The region saw a slight increase in the number of these households in comparison to 2016 (30.9%). Hampden and Franklin Counties saw growth in the number of these households, whereas Hampshire County saw a decrease of 12.7%. This may be connected to the growth in the number of employers noted above in Hampshire County.

Source: U.S. Census Bureau, American Community Survey 1-Year-Estimates

Goal #3: Implement and Enhance the Infrastructure that Connects, Sustains and Ensures the Safety and Resiliency of the Region and its Economy

High Speed Internet

Without a modern, high quality network of infrastructure, a region cannot sustain economic activity, retain its students and workers, or attract visitors, tourists and investment. High-speed internet access has become a core requirement for economic development well beyond technology and business fields. It is now an expected service for most businesses, governments, and educational institutions, even for activities like elementary school homework. This indicator measures the percent of the population with access to high speed internet, as defined by the Federal Communications Commission (FCC). In 2015, the FCC increased the download speed standard for broadband, which is now 25/3Mbps.

Trend	Rating
1.0%	


Between 2016 and 2017, the percent of the population with access to high-speed internet remained stable, increasing just 1% (from 94.04 to 94.96%). This rate is just under the Massachusetts state average of 97.8%.

The FCC recently updated their standards and calculations on this measure. These new standards are not easily comparable to previous measures. For this reason, there is only trend data available between the years of 2016 and 2017.

Source: Federal Communications Commission Fixed Broadband Deployment. Released June 2017.

Bridge Conditions

Safe and efficient transportation of people and goods are essential to an economically vibrant region. The network of roads and bridges must continue to be developed and maintained as both are degraded by use and weather over time. Bridges are considered structurally deficient through a rating system developed by the Association of State Highway and Transportation Officials (AASHTO). A bridge is deemed “structurally deficient” when it scores poorly on “structural adequacy, functional obsolescence and serviceability” by the Massachusetts Department of Transportation (MassDOT). Since 2008, MassDOT’s Accelerated Bridge Program sought to identify and reduce the number of structurally deficient bridges across the state, several of which are located across the Pioneer Valley. This indicator measures the total number of bridges deemed structurally deficient within the region. The data was only available for bridges eligible for federal aid.


Trend	Rating
-5.0%	

Since the last report in 2015, the number of structurally deficient bridges has decreased slightly. In 2015, 100 bridges were noted as being deficient, whereas in 2018 there were 95, a 5% decrease.

Source: MassDOT

Road Pavement Conditions

Similar to bridge maintenance, quality of road pavement conditions affect freight deliveries, tourism, and daily commuters. Road pavement conditions are measured using the Overall Condition Index (OCI). While the Pioneer Valley Planning Commission collects data for all 43 municipalities in the region, the Franklin Regional Council of Governments conducts a survey of road conditions in Franklin County using a different system. Thus, a comparison between the two areas is not possible. OCI values span from 0 to 100, where zero indicates that the road is impassable and 100 indicates that a road in excellent condition. Average OCIs are computed for each community for the total number of miles of road eligible to receive federal aid.


Trend	Rating
-3.9%	

Most recently, data was collected for the Pioneer Valley Region (Hampden & Hampshire Counties) in 2011 and again in 2015. During this time, pavement conditions across the Pioneer Valley region worsened by an average of 3.9% annually. Trends were fairly similar in both counties, though the decrease was more significant in Hampden County which experienced an average annual drop of 4.4 percent. This data is collected and reported on over a four year period. The next available data will be in 2019.

Source: Pioneer Valley Planning Commission

Transit Ridership

Public transit use and access directly reflect the degree to which a regional transit network and its corresponding schedules meet the needs of residents, workers, and employers. An effective public transit system with extensive, regular ridership decreases traffic and travel times, reduces pollution, and creates desirable places to live and work for a diverse area of people. People who cannot afford cars or would rather not drive them on a regular basis are more likely to live near extensive and efficient public transit networks. In this scenario, businesses are also more accessible to employees and

Trend	Rating
-4.5%	


customers. This indicator measures the total annual rides on the two major transit authorities within the region (PVTA and FRTA) as well as Amtrak trains that service the region.

Between FY2016 and FY2017, ridership decreased significantly by 5.9%. Both bus and train ridership decreased, although the decrease in bus ridership was much more pronounced at an almost 6% reduction. This is a nationwide trend, but in the Pioneer Valley in particular, this decrease is similar to all transit agencies in the Northeast, with likely causes including Uber/Lyft, lower unemployment, and cheaper car loans.

Source: Amtrak, Franklin Regional Transit Authority (FRTA), and Pioneer Valley Transit Authority (PVTA)

Bike Infrastructure

Bicycling is generally regarded as one of the most efficient means of transportation, both for the user and the environment at large. Providing and continually extending bicycle-friendly paths can assist communities improve connectivity between destinations, provide transportation options to all users, and reduce transportation impacts on the environment. The availability of bicycle transportation is also an important factor in individual health outcomes. This indicator measures the total number of miles of on and off-road improved bike facilities. 'Bike facilities' is a broad term that encompasses sign-posted in-road bike routes, bike lanes, shared use paths and paved bike shoulders.

Trend	Rating
8.2%	

There has been a steady increase in bike infrastructure, averaging annually to about 3.2%. In 2013, a total of 84.7 miles of bike facilities existed across the Pioneer Valley. Since that time, many proposed bike facilities have been built, and the total has increased to about 113 miles.

Source: Pioneer Valley Planning Commission, MassGIS

Transportation & Housing Costs

Transportation and housing are generally the two most significant expenses for households. As a result, a region's affordability is increasingly being examined specifically based on the cost of these two major domains. The U.S. Department of Housing and Urban Development (HUD) has developed a method of examining these factors in relation to income by comparing these combined average expenses as a percent of household incomes. This measure is called the Location Affordability Index (LAI). For this indicator, the average household contains four people, two of whom commute.

Trend	Rating
Trend Data Not Yet Available	


The LAI is not calculated annually, and the most recent data was published in 2012 based on Census data from 2008-2012. At that time, an average four person household with two commuters in the Pioneer Valley spent about 52% of the household's income on housing and transportation costs.

New data is expected to be released later in 2019.

Source: U.S. Department of Housing and Urban Development (HUD) Location Affordability Index

Affordable Housing

The economic competitiveness of a region depends on the ability of workers of all income levels to find reasonably affordable housing. The state's Comprehensive Permit Law, alternatively called "Chapter 40B" was adopted in 1969 to address racial and economic segregation, shortages in decent housing, inner city poverty, and exclusionary zoning practices in suburban and rural communities. It compels

Trend	Rating
12.5%	


communities to have at least 10 percent of all housing set aside as affordable housing that is protected by long-term affordability restrictions. Communities below 10 percent must allow a streamlined process for proposed housing developments on the condition that 25 percent or more of the proposed units are reserved for low or moderate income households. This indicator measures the percent of all housing units in a community that are designated as subsidized housing units. Not included in this indicator is housing that is affordable, but does not have established long-term affordability restrictions attached to the property.

In 2018, there were eight communities in the Pioneer Valley that met this requirement, including many of the larger municipalities. For 2019, there were nine communities.

Source: MA Department of Housing and Community Development, Subsidized Housing Inventory

Home Ownership

Home ownership is a significant indicator of economic security. The primary financial investment for the vast majority of people in the U.S. is their home. Home ownership strengthens communities by building a strong connection between people and the place they live. However, the downside of a high owner-occupancy rate is that rental options for young, old, or transitional populations are limited. A lack of rental options, often supported by local zoning regulations, can also help to perpetuate socio-economic segregation throughout the region. Home ownership is expressed as the percent of all housing units that are occupied by the property’s owner. This indicator measures the percentage of housing units (including condominiums, apartments, houses, and mobile homes) that are occupied by the owner, as opposed to a renter. The American Community Survey collects and analyzes this data, and provides estimates on an annual basis.


Trend	Rating
-3.0%	

The percent of owner-occupied housing units in the Pioneer Valley decreased slightly from to 63.6% in 2016 to 61.7%. The percent of homeowners actually grew in Hampshire County by 4.5%, whereas it decreased in both Hampden and Franklin Counties by 6% and 0.3% respectively. In the urban core, Holyoke decreased by 2.3% while Springfield declined by 1%.

Source: U.S. Census Bureau, American Community Survey, 1-year-Estimates

Combined Sewer Overflows

Ordinarily, storm water is sent to a wastewater treatment plant before it is emptied to a river. However, during high rainfall events, treatment plants may not be able to process all wastewater. Combined sewer overflows (CSOs) were built as a way to deal with this excess wastewater, essentially bypassing the treatment plant. However, the Massachusetts Department of Environmental Protection (MassDEP) is working to reduce the amount of active CSOs across the state in an effort to reduce water pollution. MassDEP’s Western Regional Office maintains a list of active CSOs within the region.




Trend	Rating
-3.4%	

Between 2016 and 2016, the number of CSOs draining to the Connecticut River or its tributaries fell from 59 to 57, for an average decrease of 3.4% per year. Both of the CSOs that were removed were located in the City of Chicopee. All remaining CSOs within the region are located throughout Hampden County.

Source: MA Department of Environmental Protection

Goal #4: Conduct Economic Development Activities in a Regionally Responsible Manner, Prioritizing Collaboration and Engagement
Income Inequality

In addition to educational, employment, poverty, transportation, and housing indicators, the overall level of economic inequality has important economic development implications. A community with lower levels of economic inequality is more likely to have economic and social stability at a community-wide level. Income inequality is a good way to provide a snapshot of how income is distributed throughout a region. The Gini Coefficient is one way to measure a region’s level of inequality. This indicator is a measure of how income is or is not equally distributed through a particular area. The Gini Coefficient is measured on a scale of 0 to 1, where 0 is complete equality and 1 is complete inequality.


County	Trend	Rating
Hampden County	8.1%	
Hampshire County	-5.7%	
Franklin County	-2.0%	

This particular indicator does not allow calculating income inequality across the entire Pioneer Valley in a reliable way, but rates are available within each county area. Between 2016 and 2017, income inequality decreased 5.7% across Hampshire County and 2.0% across Franklin County. Inequality grew in Hampden County by about 8.1%.

Source: U.S. Census Bureau, American Community Survey 1-Year-Estimates

State Funding - Non-School Local Aid

Local aid provided by the Commonwealth of Massachusetts to municipalities is a significant source of budget revenue. While much of this aid provides funding for the local school system, it also funds veterans benefits, public libraries and general community programming. Municipalities track their funding on ‘Cherry Sheets’ which are maintained by the Massachusetts Department of Revenue.


Trend	Rating
3.6%	

Total non-school local aid increased 3.6% in the Pioneer Valley between FY2018-FY2019. Increases occurred across all three counties in the region, with Hampden County experiencing the largest increase of 4.6%. Hampshire experienced a more modest increase of 4.6% and Franklin’s rate stayed the same.

Source: MA Department of Revenue

Leadership Programs

A key strategy of the Plan for Progress is to ensure the development and mentorship of a new generation of collaborative, diverse, professional and civically engaged leaders who will ensure that the future of the Pioneer Valley continues to be bright. The region has a few specific programs designed for supporting this type of leadership. This indicator measures the total number of graduates from all

Trend	Rating
14.1%	


leadership programs within the region, including the Women’s Fund of Western Massachusetts, Leadership Pioneer Valley, Leadership Holyoke which is run by the Holyoke Chamber of Commerce, and the Springfield Leadership Institute which is run by the Springfield Chamber of Commerce in partnership with Western New England College of Business.

The number of graduates from these leadership programs increased by 14.1% between 2017 and 2018.

Source: Leadership Pioneer Valley, Springfield Leadership Institute, Leadership Holyoke

Active Voters

Voter registration is one method to measure the level of citizen engagement in the political process and the civic concerns of their community. Low voter registration rates can be interpreted in many ways. Some argue that low voter registration rates reflect a citizenry's lack of interest in the political process, a disconnection between citizen and government, and a sentiment that participation does not affect outcomes. Another interpretation of low voter registration is that this trend reflects a citizenry that is satisfied with the status quo. Language and educational barriers also influence voter registration rates by inhibiting participation. Voter registration rates are, in some ways, a better indicator of civic participation than voter turnout rates because the former do not reflect as much year-to-year variation based on the issues or elections on the ballot. This indicator measures the total number of registered voters divided by the total population over the age of 18, which approximates the voter registration rate.

Trend	Rating
-0.5%	

Between 2016 and 2018, the voter registration rate decreased slightly, from 85.3% in 2016 to 84.5% in 2018. Decreases occurred across all three counties in the region.

Source: Massachusetts Secretary of the Commonwealth, Elections Division, U.S. Census Bureau, American Community Survey 1-Year-Estimates

Economic Resilience

The Economic Development Administration CEDS guidance points out that “it is becoming increasingly apparent that regional economic prosperity is linked to an area’s ability to prevent, withstand, and quickly recover from major disruptions (i.e., ‘shocks’) to its economic base.” The CEDS is meant to address three aspects of disruptions: 1) the ability to withstand a shock, 2) the ability to recover quickly from a shock, and 3) the ability to avoid the shock altogether. Again, as the EDA indicates, shocks and disruptions to the economic base of a region are manifested in several ways:

- Downturns or other significant events in the national or international economy which reduce demand for locally produced goods and consumer spending;
- Downturns in particular industries that constitute a critical component of the region’s economic activity; and/or
- Other external shocks such as a natural or man-made disaster, closure of a military base, exit of a major employer, or the impacts of climate change.

The Pioneer Valley Region is engaging in numerous initiatives to protect its communities from shocks and disruptions to the economy. A detailed assessment of activities under way in the region is included in Appendix E.

Appendices

Appendix A: Public Outreach

This Appendix details the public outreach process conducted for the 2019-2014 Pioneer Valley CEDS.

CEDS Committee

The CEDS Committee, called the Coordinating Council, meets six times a year and is open to the public. Membership is comprised of representatives from public, private and civic sector entities and is periodically re-evaluated, with new members recruited from major new businesses or from organizations that are growing or evolving. Each year, issues of the highest concern for our region are addressed and monitored by the Council. For the 2019 CEDS Five-Year Plan, a draft of the SWOT analysis and the new objectives and action strategies was distributed in early March 2019 and discussed at the Council's March 20, 2019 meeting. A full draft of the CEDS was provided on May 1, 2019 for a 30-day public review period, during which Coordinating Council members also provide feedback both at their regular May 15th meeting and via email or other means.

CEDS Goals and Strategies addressed by the Committee this year (2018-19) included:

- *Develop and Maintain a Globally Competitive and Regionally Engaged Talent Pool* – The Coordinating Council heard from and talked with Dr. John Cook, President of Springfield Technical Community College (STCC), regarding the many ways in which STCC is implementing goals of the CEDS Plan for Progress while fulfilling its mission as a community resource.

As part of these same goals, the Coordinating Council hosted a visit with implementers of the Westfield Education to Business Alliance, a partnership of the Greater Westfield Chamber of Commerce and the Westfield Public School District that is helping students learn about career and employment opportunities in the region and helping employers find talented and qualified employees.

- *Enhance Regional Approaches to Public Safety, Public Health and Disaster Resilience* – The Coordinating Council spoke with the Co-Chairs of the Public Health Trust Fund established by the Massachusetts Gaming Commission about the economic and social impacts of expanded gaming and advocated for the equitable distribution of funding resources to address them within this region. The Council also heard from the research team from UMass Amherst that is tracking impacts of expanded gaming.
- *Foster an Environment Where Established, New, and Growing Businesses and Organizations Thrive* – Lead implementers for the development of small business and entrepreneurship met with the Coordinating Council to address the progress of Valley Venture Mentors and EforAll Holyoke, two successful business mentoring and accelerator programs.

- *Conduct Economic Development Activities in a Regionally Responsible Manner, Prioritizing Collaboration and Engagement* – Representatives from two urban core Transformative Development Initiatives (TDI), sponsored by MassDevelopment, met and spoke with the Coordinating Council about successful efforts over the past several years to partner with the host cities of Springfield and Holyoke and with numerous other entities within the Districts.

Economic Development Partners (EDP)

The Economic Development Partners is a group of stakeholders convened monthly by the Economic Development Council (EDC) of Western Massachusetts. The group includes about 25 members, including municipal economic development staff, regional representatives of state offices, regional planning agency members, workforce development entities, EDC staff, state university representatives and others.

The group addresses issues of regional concern that affect many cities and towns in the Pioneer Valley, by sharing best practices, hearing from business leaders, and learning about state programs that assist businesses. Some of the concerns that communities are addressing now include:

- Church vacancies and reuse strategies – Many area churches are now vacant due to smaller congregations, and numerous church buildings have been “mothballed” or are slated for demolition. Many of these are historic structures with architectural significance. Communities are seeking ways to approach the issue, both with the Catholic Diocese and with potential developers.
- Opportunity Zone legislation – Cities and towns are seeking to utilize the benefits of opportunity zones without jeopardizing the well-being of their communities. The first-time program is just being rolled out and municipalities are in the process of learning about it. The Economic Development Partners planned and hosted an event and workshop in April 2019 that sought to match shovel-ready projects in Opportunity Zones with qualified investors.
- Short-term rentals issues – Short-term rental properties have different levels of significance in different parts of the region – in some places, they are a boon to tourism, while in others, they can be a concern for pre-existing accommodations, particularly bed-and-breakfast establishments and small inns. State-level regulations will take effect in July of 2019 and will allow communities to levy an additional lodging tax of up to 6%.
- Cannabis sales - permitting and siting. Both medical and recreational marijuana sales are now legal in Massachusetts, although each community must regulate them individually. Cities and towns are navigating the complex process, and several new cannabis outlets have opened in western Massachusetts.

Rural Policy Advisory Commission (RPAC)

The Rural Policy Advisory Commission was created by the Massachusetts legislature in 2015, with a mission to research issues “critical to the welfare and vitality of rural communities.” There are 29 rural

towns in the Pioneer Valley Economic Development District, based on the state's definition as having a density of less than 500 persons per square mile. The RPAC is represented by members from each region of the state, meets quarterly, and has conducted research and surveys of rural towns in Massachusetts. In 2018, the RPAC held a series of listening sessions, including one in the Pioneer Valley, to gather input from local communities. The December 11, 2018 session brought 21 attendees representing 9 rural towns who spent about two hours discussing issues of concern in their communities. The most significant concerns regarding economic development issues were the following:

- Economies of scale in rural areas are too small to be viable. Businesses are extremely small, most with less than five employees.
- Small businesses lack access to services especially technical assistance. They have high transportation costs and in many areas still lack broadband access.
- Transportation needs innovative solutions, such as a public ride-hailing service, use of school buses for transit, and coordination of senior services.
- Economic resilience is threatened because of lack of sufficient and sufficiently robust infrastructure, including flood management, power grid resilience, and water supplies not dependent on electric pumps.
- The tourism industry can have negative impacts at the same time that it brings investment to rural areas.
- Lack of broadband is a problem for existing businesses and also a disincentive for young people to stay in the area and start new businesses.
- The clean energy industry has created new challenges, such as needing expertise in permitting and oversight and creating an incentive to cut down forested areas for large solar arrays.
- Local agriculture and food production is viable, particularly with lack of air and water pollution; however farmers who rely on seasonal farm workers have been affected by policies that affect immigrants.
- There is a lack of tradespeople to fill basic service needs.

The strengths of rural areas were identified as:

- Natural beauty
- Small-town "feel"
- Innovation
- Lack of pollution

- Can grow your own food
- Businesses locate there for the sense of community not primarily for the financial rewards

Business Surveys

In the fall of 2018, the PVPC conducted business surveys at two local chamber of commerce events, one in the City of Chicopee and one in the City of Westfield. The surveys were distributed to about 45-75 attendees in each case, and a total of 36 surveys were returned, for a response rate of about 30%. The businesses responding included four in financial services/insurance, two manufacturers, two utilities, two banks, and a wide variety of others. The top five issues of greatest concern for these businesses were:

- 1) Health care costs for employer and employees
- 2) Finding qualified high-skill employees
- 3) Cyber-security
- 4) Employee training needs
- 5) Energy costs

A detailed summary of the results can be found in Appendix D.

Westover Air Reserve Base Joint Land Use Study: Public Outreach to Pioneer Valley communities of Chicopee, Springfield, South Hadley, Ludlow and Granby.

The United States Department of Defense (DoD) enlisted the assistance of the Pioneer Valley Planning Commission (PVPC) to work with Westover Air Reserve Base (WARB), Westover Airport and the surrounding communities of Chicopee, Springfield, South Hadley, Ludlow and Granby to update the base's Joint Land Use Study (JLUS), most recently completed in 2004.

The development of the JLUS update was a cooperative land-use planning effort to identify existing and potential incompatibilities between activities occurring on the base and those in the surrounding communities. The study also reviews the economic context and impact of the Air Reserve Base. The recommendations developed from the JLUS provide the policy framework to support adoption and implementation of compatible development near the military installation. This is typically most effectively achieved through the use of local land-use planning and zoning regulations and improved cooperation and communication between all parties.

The JLUS Update was a comprehensive and ongoing process which encouraged public input, including soliciting comments through a public survey. The results of the Westover JLUS Community Survey are available [here](#).

Appendix B: Summary Background Data

AN ANALYSIS OF REGIONAL ECONOMIC CONDITIONS

Summary Background Data for 2019 CEDS Five-Year Plan

The Pioneer Valley Region

Located in the midwestern section of Massachusetts and covering 1,179 square miles, the Pioneer Valley region and Economic Development District (EDD) encompasses the fourth largest metropolitan area in New England. The region is bisected by the Connecticut River, and it is bounded to the north by Franklin County, to the south by the state of Connecticut, to the east by the Quabbin Reservoir and Worcester County, and to the west by Berkshire County. The Pioneer Valley region constitutes the 43 cities and towns within the Hampshire and Hampden county areas and is home to about 630,385 people including the urbanized areas of Springfield, Chicopee, and Holyoke.

Springfield, the third largest city in Massachusetts, is the region's cultural and economic center. Springfield is home to several of the region's largest employers, including MassMutual Life Insurance Company, Baystate Health, and Big Y World Class Markets. Major cultural institutions include the Springfield Symphony, the MassMutual Convention Center, the Basketball Hall of Fame, and the Springfield Museums, including the Dr. Seuss Museum and National Memorial Sculpture Garden.

The cities of Chicopee and Holyoke were the first planned industrial communities in the nation. Merchants built an elaborate complex of mills, workers' housing, dams, and canal systems that evolved into cities. While many of the historic mills and industries are now gone, a number of 19th and 20th century structures are maintained and improved through municipal revitalization initiatives, and new industries and small businesses are growing.

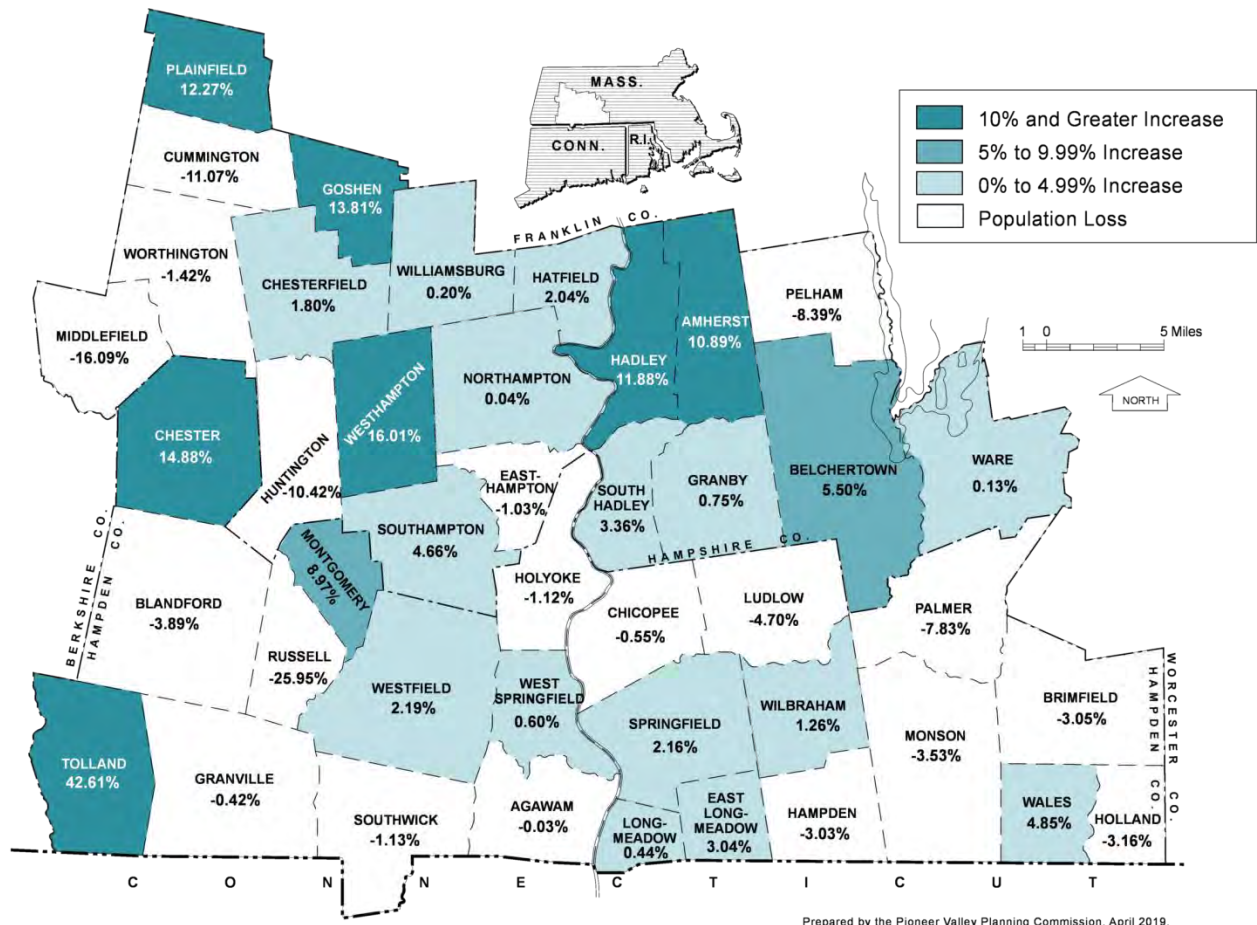
Unique within the Commonwealth of Massachusetts, the Pioneer Valley region contains a diverse economic base, internationally-recognized educational institutions, and remarkable scenic beauty. Dominant physical characteristics include the broad, fertile agricultural valley formed by the Connecticut River, the Holyoke Mountain range that traverses the region from Southwick to Pelham, and the foothills of the Berkshire Mountains. Prime agricultural land, forests, and scenic rivers are some of the region's premier natural resources. Choices in lifestyle range from contemporary downtown living, suburban neighborhoods, and rural environments in very small communities—a variety that contributes to the diversity and appeal of the region. The unique combination of natural beauty, cultural amenities, and wide range of opportunities make the Pioneer Valley region an exceptional environment in which to live, work, and play.

The People

Changes in Population

Between 2010 and 2017, the Pioneer Valley region’s population increased by about 1.7 percent. While some of that growth occurred in the urban areas, many of the more rural or suburban towns saw the most significant proportional increases. Conversely, other rural towns experienced the most significant population decreases during the same period. Collectively, the population of the more urban communities of Agawam, Chicopee, Holyoke, Springfield, Westfield, and West Springfield grew just over 1 percent between 2010 and 2017, with much of this growth occurring in Westfield and West Springfield.

Figure 1: Percent Change in Population (2007-2017)



Data Source: U. S. Census Bureau Population Estimates Program, 2007-2017

Table 1: Changes in Total Population of the Pioneer Valley Region (2007-2017)

Municipality	2007 Population Total	2017 Population Total	% Change 2007-2017
United States	301,621,159	321,004,407	6.43%
Massachusetts	6,449,755	6,789,319	5.26%
Pioneer Valley Region	622954	630385	1.19%
Hampden County	467756	469188	0.31%
Hampshire County	155198	161197	3.87%
Agawam	28757	28748	-0.03%
Blandford	1310	1259	-3.89%
Brimfield	3841	3724	-3.05%
Chicopee	56088	55778	-0.55%
Cummington	967	860	-11.07%
Easthampton	16218	16051	-1.03%
Granville	1667	1660	-0.42%
Hampden	5355	5193	-3.03%
Holland	2592	2510	-3.16%
Holyoke	40820	40362	-1.12%
Huntington	2207	1977	-10.42%
Ludlow	22382	21331	-4.70%
Middlefield	553	464	-16.09%
Monson	9125	8803	-3.53%
Palmer	13276	12237	-7.83%
Pelham	1394	1277	-8.39%
Russell	1796	1330	-25.95%
Southwick	9822	9711	-1.13%
Worthington	1271	1253	-1.42%
Chesterfield	1280	1303	1.80%
East Longmeadow	15680	16156	3.04%
Granby	6271	6318	0.75%
Hatfield	3239	3305	2.04%
Longmeadow	15806	15876	0.44%
Northampton	28538	28548	0.04%
South Hadley	17160	17737	3.36%
Southampton	5819	6090	4.66%
Springfield	151342	154613	2.16%
Wales	1916	2009	4.85%
Ware	9850	9863	0.13%
West Springfield	28501	28671	0.60%
Westfield	40774	41667	2.19%
Wilbraham	14372	14553	1.26%
Williamsburg	2476	2481	0.20%
Belchertown	14129	14906	5.50%
Montgomery	736	802	8.97%
Amherst	35962	39880	10.89%
Chester	1331	1529	14.88%
Goshen	963	1096	13.81%
Hadley	4738	5301	11.88%
Plainfield	595	668	12.27%
Tolland	467	666	42.61%
Westhampton	1568	1819	16.01%

Source: U. S. Decennial Census, 2000-2017

Table 2: Hispanic or Latino Population in the Pioneer Valley Region 2000-2017

	Hispanic or Latino Persons			% of Total Population		
	2000	2017	% Change	2000	2017	% Change
Pioneer Valley Region	74,409	120,936	62.5%	12.2%	19.2%	7.0%
Hampden County	69,197	112,302	62.3%	15.2%	23.9%	8.8%
Hampshire County	5,212	8,634	65.7%	3.4%	5.4%	2.0%
Massachusetts	428,729	760,177	77.3%	6.8%	11.2%	4.4%
United States	35,305,818	56,510,571	60.1%	12.5%	17.6%	5.1%

Sources: U. S. Census Bureau, 2000 Decennial Census and 2017 ACS 1-Year Estimates

Table 3: Population by Race 2017

	White	African American	Native American	Asian	Pacific Islander	Other Races
Pioneer Valley Region	82.9%	7.7%	0.2%	3.2%	0.0%	5.9%
Hampden County	81.2%	9.3%	0.3%	2.5%	0.0%	6.6%
Hampshire County	87.8%	2.9%	0.1%	5.3%	0.0%	3.9%
Massachusetts	78.5%	7.8%	0.2%	6.6%	0.0%	6.9%
United States	72.3%	12.7%	0.8%	5.6%	0.2%	8.4%

Source: U.S. Census Bureau, 2017 1-Year County Population Estimates.

Because the U.S. Census Bureau considers Hispanic/Latino an ethnic category rather than a race category, all race categories include some people who are Hispanic or Latino and some who are not.

Figure 1 depicts the pattern of population growth and decline between 2010 and 2017. The populations of the Pioneer Valley Region's urban communities have remained relatively stable over the past seven years, with modest growth occurring in Westfield, West Springfield, Holyoke, Springfield and Chicopee. Several suburban and rural communities, such as Tolland, Chesterfield, Chester, and Westhampton, experienced significant population growth of over 14% from 2010 to 2017, while other small towns like Huntington, Russell, and Cummington experienced substantial decline, with each town losing over 10% of its population.

The northern urban areas of Amherst and Northampton have experienced distinct growth patterns since the early 2000s. While Amherst climbed back to well beyond its 1990 level, with a population increase of 6.6% between 2010 and 2017, the population of Northampton decreased slightly during the same period. The general pattern of large proportional increases happening in smaller towns also occurred in communities around these northern urban areas, with Hadley growing by 10.6% since 2000.

In a seventeen year time frame (2000-2017), the region's Hispanic and Latino population grew by 62.5%, a rate of growth that was slightly higher than that of the nation and lower than that of the state (see Table 2). While the rate of growth in the Hispanic and Latino population has been slower than that of the state, at approximately 19% of the total population, the Hispanic and Latino population is actually significantly higher than that of the state. In this sense, the Pioneer Valley region looks less like the rest of the state as a whole and more like nation-wide demographics. Conversely, the proportion of the Pioneer Valley region population identifying exclusively as White (82.9%) is closer to that of the state (78.5%) than to the nation (72.3 percent). (See Table 3.)

While the proportion of people who identify as White in the Pioneer Valley region is now slightly higher than that of Massachusetts as a whole, the breakdown of people who identified as races other than White were varied somewhat. The Pioneer Valley region was nearly identical to the state in the proportion of people who identify as African Americans, Native Americans, or Pacific Islander, 3.4% lower in the proportion of people who identify as an Asian race and 1% lower in the proportion of people who consider themselves a race other than the main five classifications recognized by the U.S. Census Bureau.

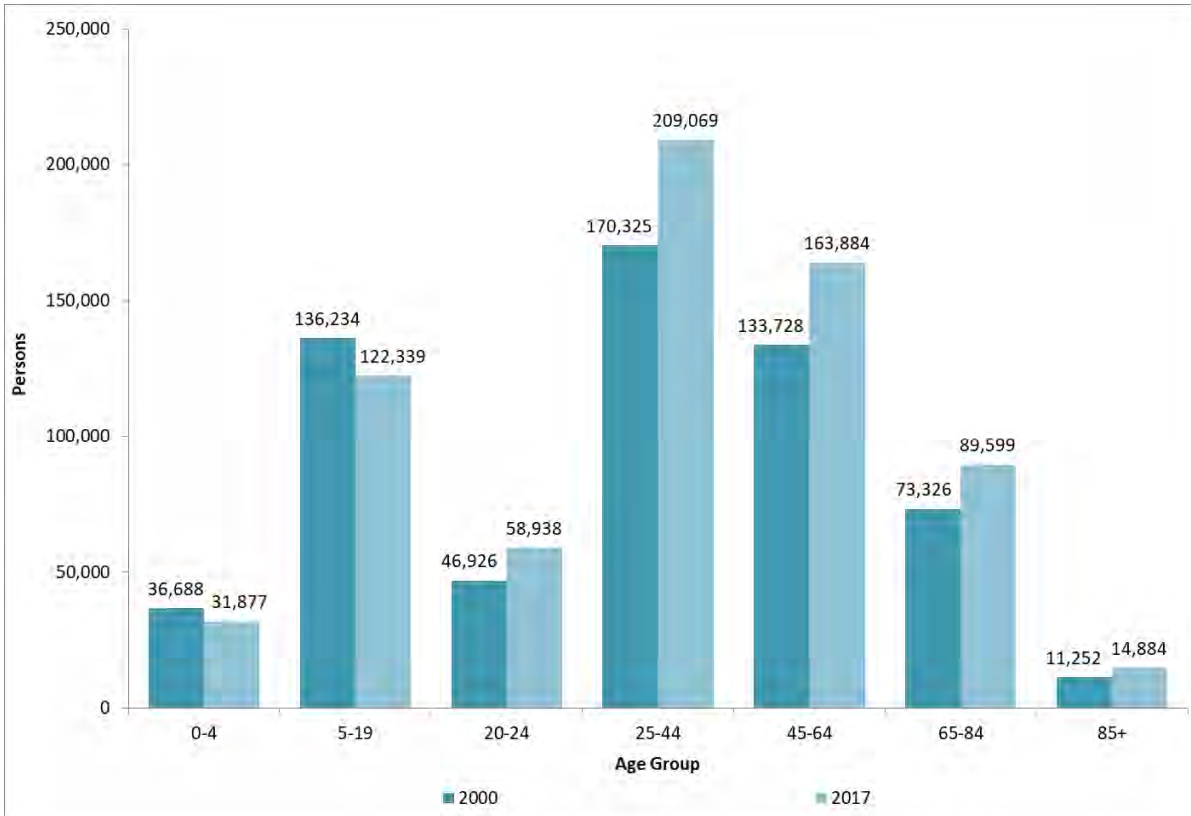
Figure 2: Pioneer Valley Region Population Changes by Race and Ethnicity



Source: U.S. Census Bureau, 2017 1-Year County Population Estimates.
 Note: In 2010, an additional Race category of "Some other race, not otherwise specified" was included in the category of "Other, Not Hispanic" which contributed to the significant increase in that category.

The age distribution of the population within the Pioneer Valley region mirrors the aging population trends across the nation, and hints at some explanations for the type of slow population growth that has occurred over recent decades. Between 2000 and 2017, the region has seen increases in people of every age category except 0-4 years and 5-9 years, with the largest increases seen in the 25-44 and 45-64 year old age groups. While many in the 45-64 year old age group are still fully in their careers, it will be important to note this share of the population (23%) who are likely to move out of the labor force and into retirement within the next decade.

Figure 3: Population by Age in the Pioneer Valley Region

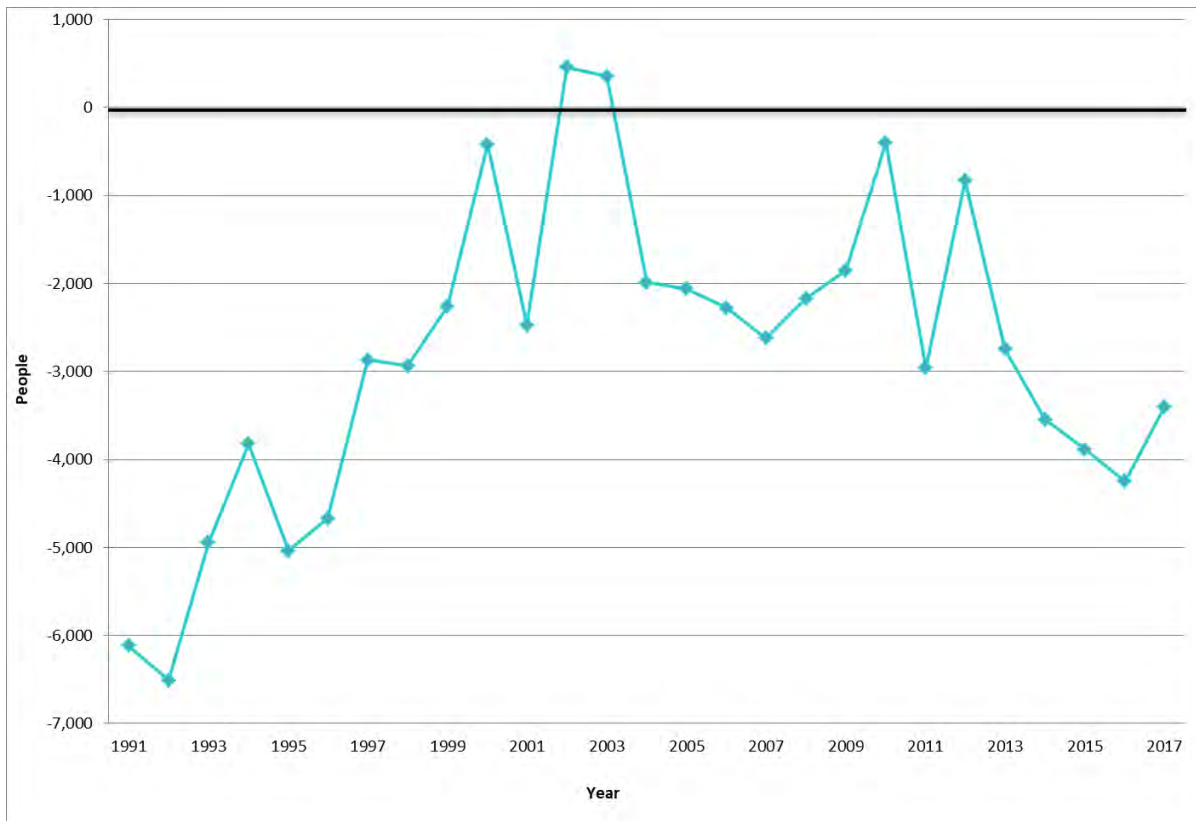


Source: U.S. Census Bureau American Community Survey, 2017 1-Year-Estimates

Demographics and Migration

Retaining the population base has been a challenge in the Pioneer Valley region. Although trends of out-migration decreased between 1991 and 2002, it appears that this trend is reversing. During the recession of the 2000s when the housing market crashed, net out-migration decreased significantly, reflecting similar trends to those in previous economic downturns. However, net-out migration has been increasing steadily since then. In 2011, net out-migration was over seven times higher than in 2010. Although this trend reversed between 2016 and 2017, net out-migration in the Pioneer Valley region is overall on the rise.

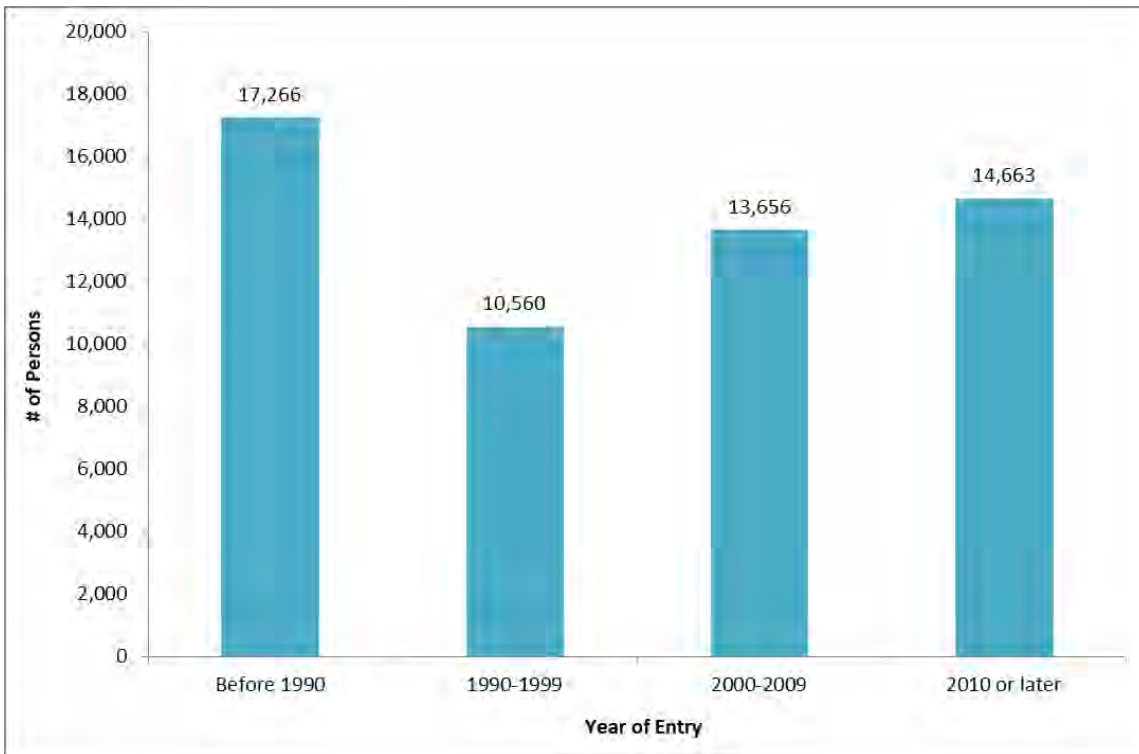
Figure 4: Net Domestic Migration in the Pioneer Valley Region



Source: U. S. Census Bureau Population Division, 2017

The Pioneer Valley has always been a destination for foreign immigrants and this continues to be the case. From 2000 to 2009 inclusive, a total of 13,656 new immigrants settled in the Pioneer Valley region. In fact, if not for foreign born immigration, the Pioneer Valley region would have experienced a net loss of population between 1990 and 2000. This trend of foreign immigration has continued since 2010, which has seen an additional 14,663 people immigrating to the region from another country.

Figure 5: Foreign Born Persons by Year of Entry in the Pioneer Valley Region

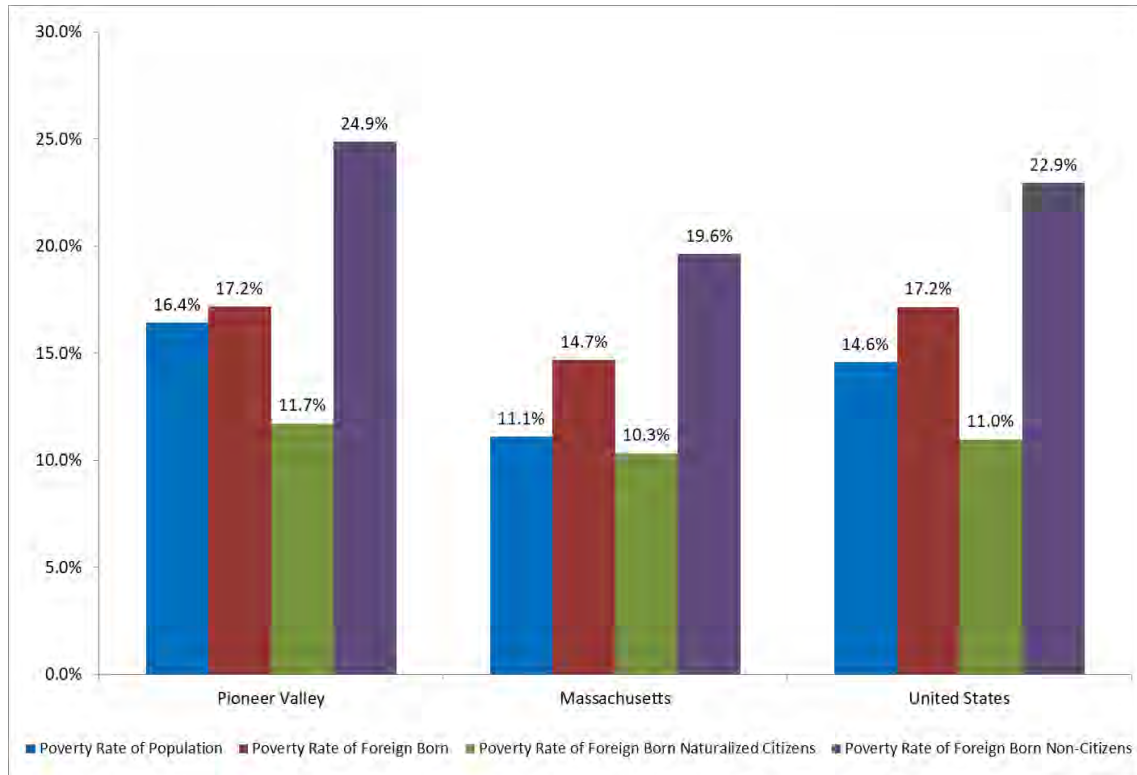


Source: U.S. Census Bureau, American Community Survey, 2017 1-Year Estimates

A commonly cited concern about the region’s high level of international immigration is whether there are adequate services for new arrivals who often enter the country with few resources. However; with its history of immigration dating back to the industrial mills of the nineteenth century, the Valley has historically demonstrated the capacity to readily absorb new immigrants into the economy. For instance, in 2017 the poverty rate of the foreign born population was only 0.8% higher than the total population in the Pioneer Valley region (see Figure 6). This figure is lower than state and national trends, which show the foreign born population with an observably higher poverty rate than the general population (by 3.6% in Massachusetts and 2.6% nationally in 2017).

Additionally, data from 2017 show that once immigrants have become naturalized citizens, they have a poverty rate in the Pioneer Valley region that is 4.7% below that of the population as a whole. Immigration has been, and will continue to be important to the growth of the region's population and economy.

Figure 6: 2017 Poverty Rates for all Persons and Foreign Born Persons by Citizenship Status



Source: U.S. Census Bureau, 2017 American Community Survey 1-Year Estimates

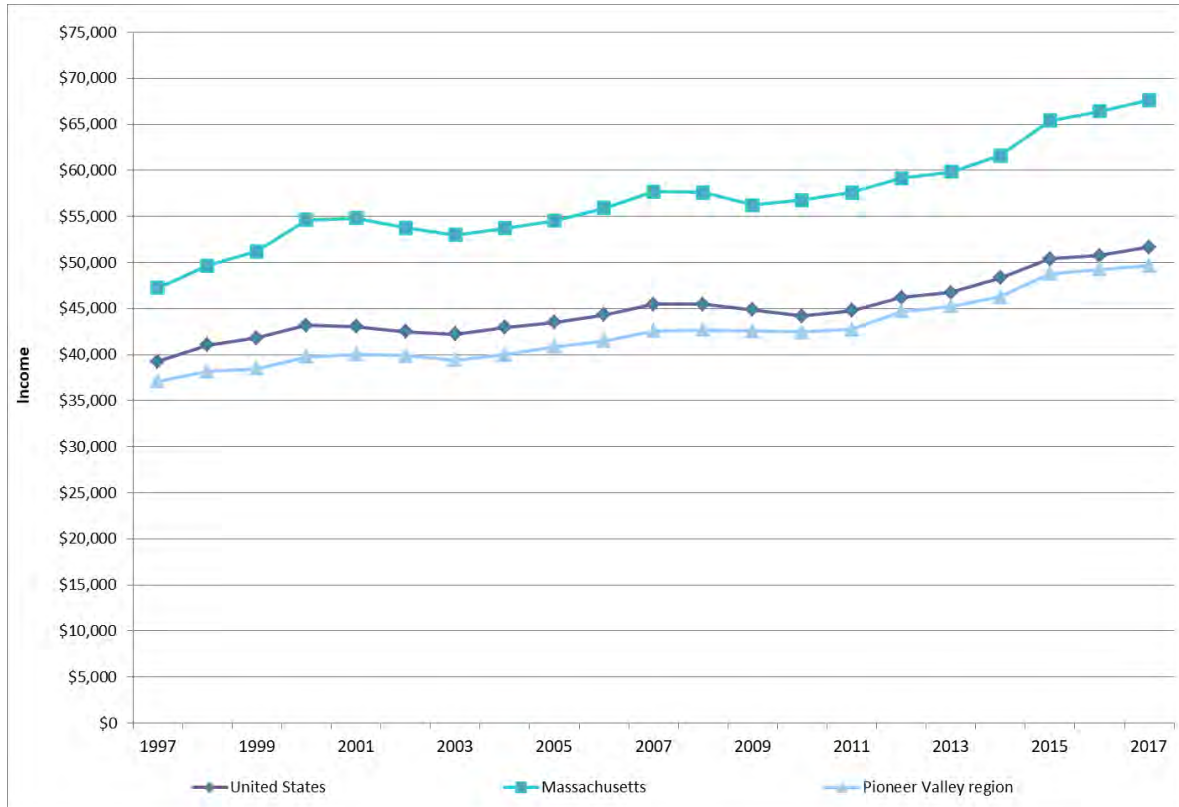
Income and Poverty

To measure economic growth, we examine several indicators including per capita income, median family income, and poverty rates. According to these measures, the Pioneer Valley region experienced economic improvement consistent with national rates during the 1990s, and, while growth was slower than the nation for the first part of the 2000s, the region's economy seems to have been less negatively affected by the recession than the state and national economies.

Per capita income is a useful measure of economic growth because it controls for population change by measuring total income as it relates to population size. Inflation is controlled by converting the annual values to current year dollars using the Consumer Price Index for the Northeast. As seen in Figure 7, the region's per capita income is significantly less than the per capita income for the Commonwealth and slightly below that of the nation. Much of the economic growth is the result of economic changes in the 1990s. In 1980, the difference between incomes in the Pioneer Valley and state, adjusting for inflation, was \$3,685, but in 2017 it was \$17,987. This difference exists despite significant regional growth, as evidenced by the 37.3% growth of per capita income between 1990 and 2017. However, in a comparable time period, Massachusetts per capita incomes grew by 54.1%. Since 2000, this trend has shifted and growth rates in the Pioneer Valley region have surpassed those of the state and nation: The region's per capita income gains have equaled 24.8% while statewide gains have been a more moderate 23.82%.

According to 2013-2017 5-year estimates from the U.S. Census Bureau, "real" per capita income rose between 2000 and 2017 in 24 Pioneer Valley region communities (see Table 4). Middlefield, Chesterfield, Belchertown, and Chester all experienced increases exceeding 15%. In contrast, Amherst, Wales, and Springfield experienced double-digit decreases in per capita income.

Figure 7: Per Capita Income (Adjusted to 2017 \$)



Source: U.S. Bureau of Economic Analysis, Regional Economic Information System, 1997-2017

Table 4: Changes in Per Capita Income

	Per Capita Income (in 2017 Dollars)		
	2000 Count	2013-2017 Estimate	% Change
Massachusetts	38,821	39,913	2.7%
Pioneer Valley Region	30,033	29,127	-3.1%
Hampden County	29,231	28,072	-4.1%
Hampshire County	32,439	32,198	-0.8%
Agawam	33,750	33,297	-1.4%
Amherst	26,069	20,336	-28.2%
Belchertown	32,817	39,308	16.5%
Blandford	36,328	33,957	-7.0%
Brimfield	35,469	39,077	9.2%
Chester	27,073	32,045	15.5%
Chesterfield	28,751	36,177	20.5%
Chicopee	27,892	26,432	-5.5%
Cummington	32,241	32,170	-0.2%
East Longmeadow	41,375	38,320	-8.0%
Easthampton	32,793	34,038	3.7%
Goshen	33,240	35,419	6.2%
Granby	34,718	40,133	13.5%
Granville	33,381	34,208	2.4%
Hadley	37,315	41,575	10.3%
Hampden	39,925	39,634	-0.7%
Hatfield	37,118	38,574	3.8%
Holland	32,566	34,752	6.3%
Holyoke	23,804	22,625	-5.2%
Huntington	28,998	30,025	3.4%
Longmeadow	58,264	55,593	-4.8%
Ludlow	30,075	33,247	9.5%
Middlefield	36,106	45,630	20.9%
Monson	33,686	35,744	5.8%
Montgomery	38,807	37,029	-4.8%
Northampton	35,934	36,045	0.3%
Palmer	27,919	30,793	9.3%
Pelham	44,609	48,294	7.6%
Plainfield	31,092	30,631	-1.5%
Russell	31,890	30,928	-3.1%
South Hadley	34,005	32,070	-6.0%
Southampton	39,200	44,641	12.2%
Southwick	32,545	38,002	14.4%
Springfield	22,785	20,046	-13.7%
Tolland	45,065	40,435	11.5%
Wales	31,813	27,133	-17.3%
Ware	28,284	27,579	-2.6%
West Springfield	31,387	29,344	-7.0%
Westfield	30,815	29,092	-5.9%
Westhampton	37,936	37,453	-1.3%
Wilbraham	44,658	45,539	1.9%
Williamsburg	38,614	43,357	10.9%
Worthington	36,186	41,365	12.5%

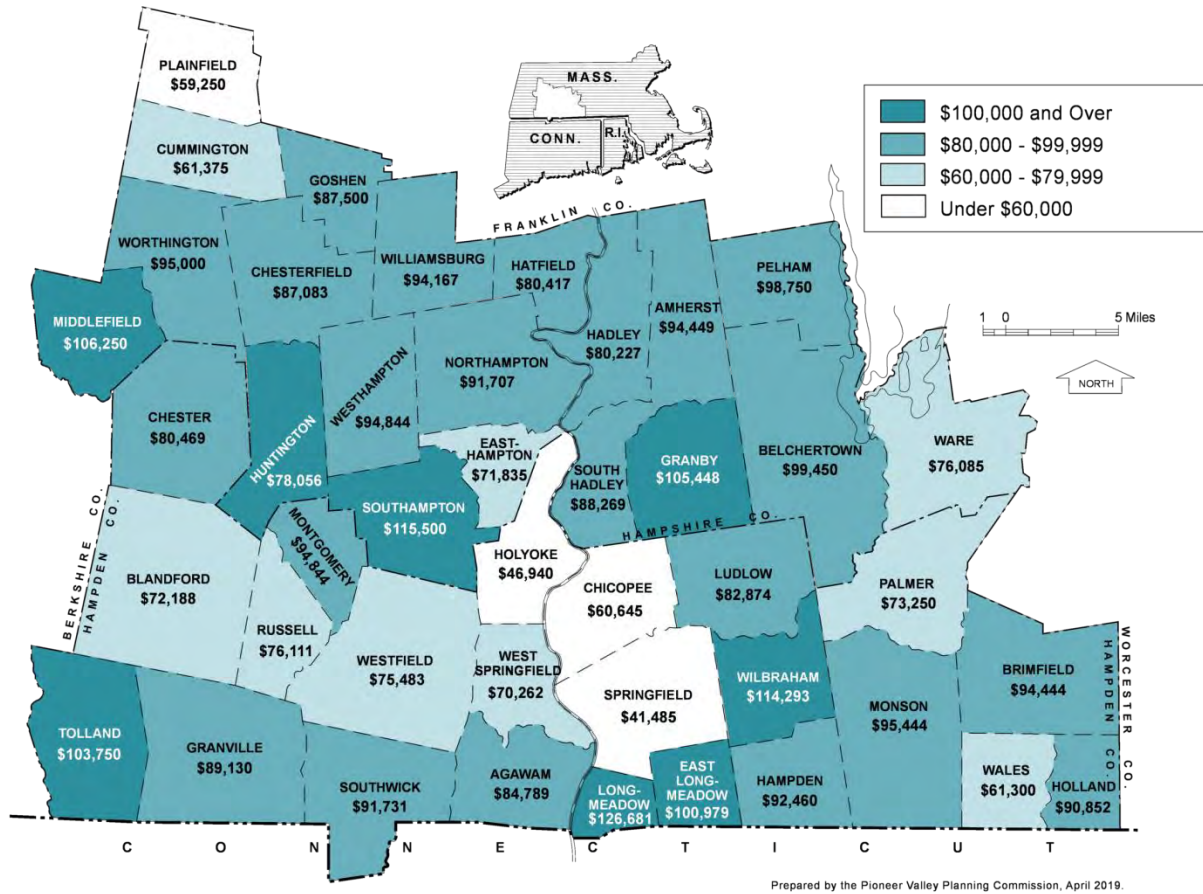
Source: U.S. Census Bureau 2000 Decennial Census and 2013-17 American Community Survey Estimates

Table 5: Changes in Median Family Income in the Pioneer Valley Region

	Median Family Income (in 2017 Dollars)		
	2000 Count	2013-2017 Estimate	% Change
Massachusetts	\$91,263	\$94,110	3.12%
Hampden County	\$72,900	\$88,476	21.37%
Hampshire County	\$85,070	\$71,205	-16.30%
Pioneer Valley Region	\$75,821	\$65,994	-12.96%
Agawam	\$87,450	\$84,789	-3.04%
Amherst	\$90,631	\$94,449	4.21%
Belchertown	\$90,028	\$99,450	10.47%
Blandford	\$87,875	\$72,188	-17.85%
Brimfield	\$88,716	\$94,444	6.46%
Chester	\$76,859	\$80,469	4.70%
Chesterfield	\$84,894	\$87,083	2.58%
Chicopee	\$65,321	\$60,645	-7.16%
Cummington	\$72,150	\$61,375	-14.93%
East Longmeadow	\$104,445	\$100,979	-3.32%
Easthampton	\$80,382	\$71,835	-10.63%
Goshen	\$86,950	\$87,500	0.63%
Granby	\$85,295	\$105,448	23.63%
Granville	\$87,644	\$89,130	1.70%
Hadley	\$91,608	\$81,786	-10.72%
Hampden	\$111,602	\$92,460	-17.15%
Hatfield	\$91,178	\$80,417	-11.80%
Holland	\$84,396	\$90,852	7.65%
Holyoke	\$53,472	\$46,940	-12.22%
Huntington	\$77,416	\$78,056	0.83%
Longmeadow	\$129,858	\$126,681	-2.45%
Ludlow	\$82,461	\$82,874	0.50%
Middlefield	\$79,756	\$106,250	33.22%
Monson	\$86,738	\$95,444	10.04%
Montgomery	\$98,050	\$94,844	-3.27%
Northampton	\$84,129	\$91,707	9.01%
Palmer	\$73,050	\$73,250	0.27%
Pelham	\$106,067	\$98,750	-6.90%
Plainfield	\$68,142	\$59,250	-13.05%
Russell	\$71,989	\$76,111	5.73%
South Hadley	\$86,866	\$80,227	-7.64%
Southampton	\$96,141	\$115,500	20.14%
Southwick	\$95,395	\$91,731	-3.84%
Springfield	\$53,702	\$41,485	-22.75%
Tolland	\$96,817	\$103,750	7.16%
Wales	\$76,411	\$61,300	-19.78%
Ware	\$67,347	\$76,085	12.97%
West Springfield	\$74,417	\$70,262	-5.58%
Westfield	\$81,884	\$75,483	-7.82%
Westhampton	\$98,605	\$94,844	-3.81%
Wilbraham	\$109,261	\$114,293	4.61%
Williamsburg	\$82,633	\$94,167	13.96%
Worthington	\$88,995	\$95,000	6.75%

Source: U.S. Census Bureau 2000 Decennial census and American Community Survey 2013-2017 5-Year Estimates

Figure 8: Median Family Income (2017)

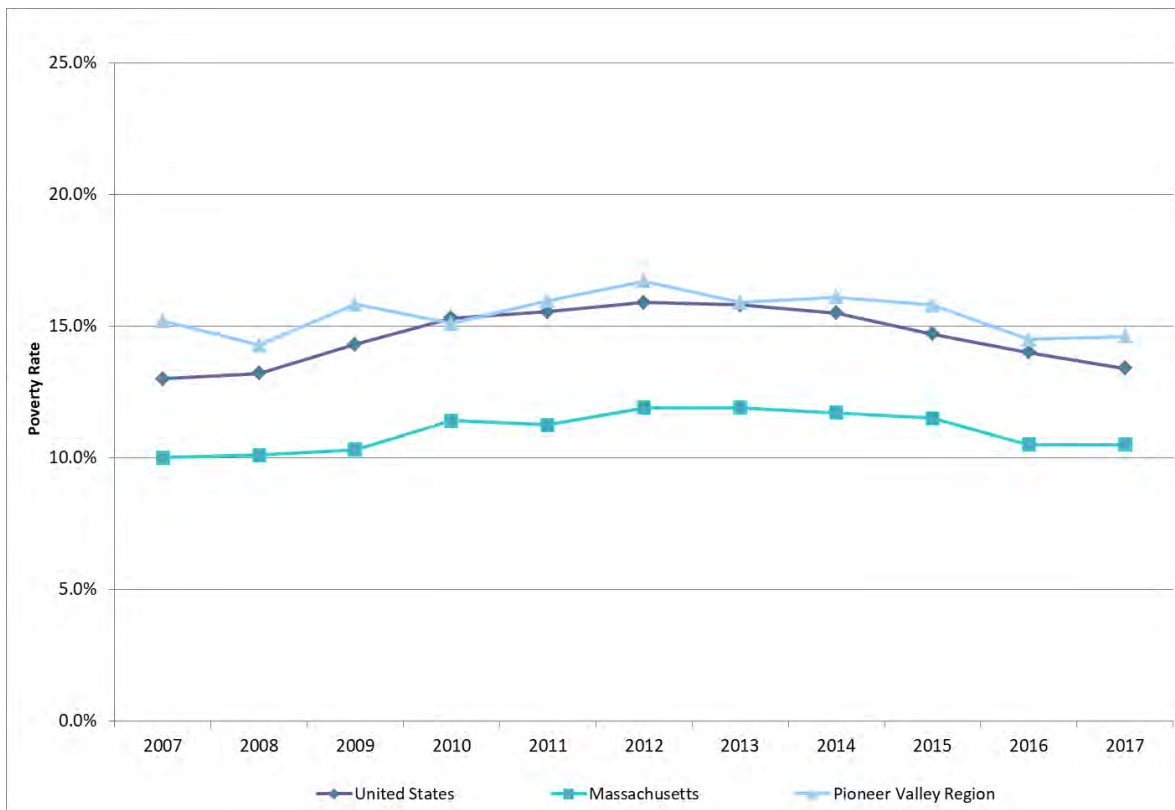


Source: U.S. Census Bureau, American Community Survey 5-year Estimates, 2013-2017

According to the U.S. Census Bureau, median family incomes in the Pioneer Valley region decreased by just over 6% between 2000 and the five year period between 2013-2017 (see Table 5). Within the region there are significant income disparities (see Figure 8). For example, while Longmeadow, Southampton, Wilbraham, and Middlefield have median family incomes well above \$100,000, Springfield and Holyoke median family incomes are less than \$47,000.

What’s more, the lowest family incomes have continued to decline, particularly in Springfield (by 22.7%). This trend is not exclusive to large cities, as many of the region’s smaller towns like Wales, Blandford, and Hampden experienced significant drops exceeding 15%. Cummington, Plainfield, Holyoke, Hatfield, and Hadley also experienced significant proportional declines.

At the same time, several communities have experienced more positive trends. Middlefield and Granby, for example, experienced large increases to their median family incomes (by 33.2% and 23.6% respectively). In 1999, the median family income was \$79,756 in Middlefield and \$85,295 in Granby (adjusted for inflation to 2017 dollars). Seventeen years later, both median incomes are both over \$100,000, with Middlefield at \$106,250 and Granby at \$105,448.

Figure 9: Poverty Rate in the Pioneer Valley Region, 2007-2017

Source: U.S. Census Bureau, Small Area Income and Poverty Estimates (SAIPE), 2017
 Note: Poverty rates displayed in this figure may differ slightly from Table 6 and Figure 11 as different data sources were required

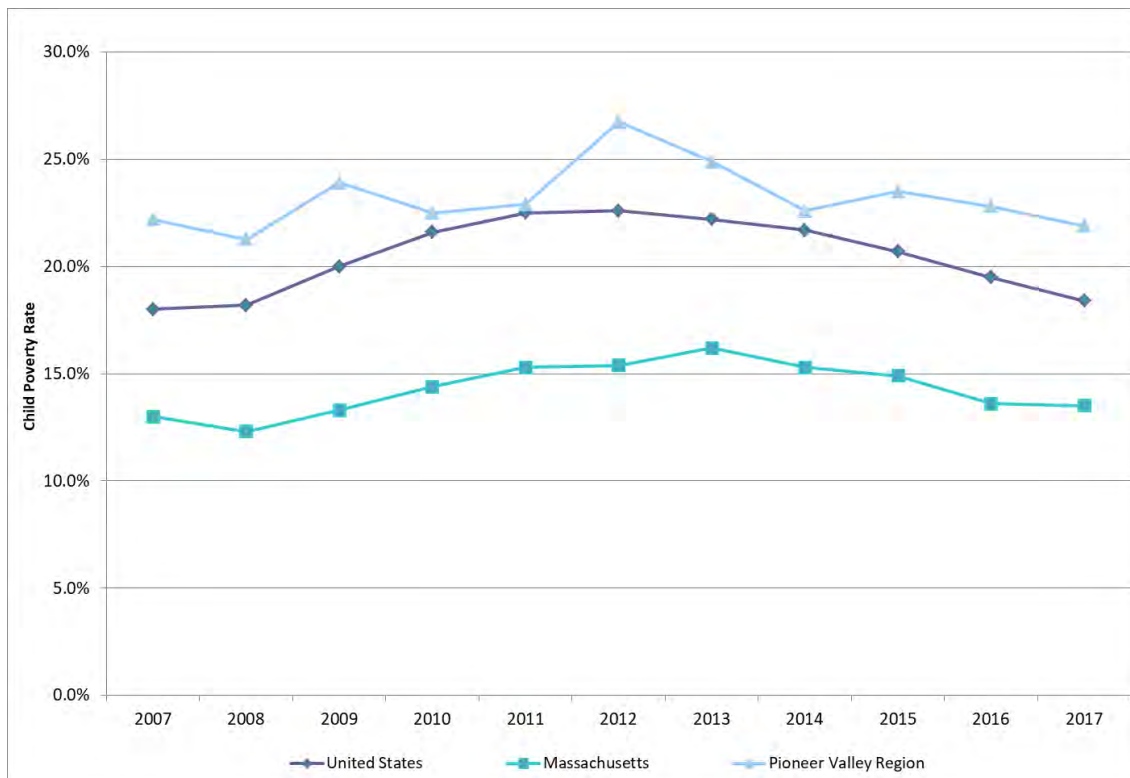
Poverty rate is another measure used to determine quality of life and economic well-being. In the Pioneer Valley region, poverty rates amongst the general population climbed from 15.2% in 2007 to 16.7% in 2012. Between 2007 and 2010, poverty rates hovered consistently around 15 percent, dropping slightly in 2008 to 14.3% but then increasing in 2009 to 15.8% and again in 2012 to 16.7%, a rate higher than has existed for over a decade. However, since then, poverty rates in the Pioneer Valley region have decreased to 14.6% in 2017 (as seen in Figure 9). Despite lower poverty rates in recent years, the poverty rate in the Pioneer Valley region continues to follow a decade-long pattern of exceeding Massachusetts' overall rate by several percentage points. In 2017, this difference was 9 percent. The poverty rate trends, and the per capita income growth patterns previously mentioned, suggest that the region did not share equally in the state's economic growth at the end of the 1990s, nor in the middle portion of the 2000s. While in 2010 the total poverty rate in the Pioneer Valley region was lower than that of the nation as a whole for the first time in over a decade, the current 2017 rate is about 1% above the national rate.

In the ten year period from 2007 to 2017, child poverty rates in the region have been consistently higher than those for the United States and drastically so in relation to Massachusetts overall, as seen in Figure 10. Child poverty rates in the Pioneer Valley region decreased from a high of 26.7% in 2012 to 21.9% in 2017. Still, since 2005, child poverty rates in the Pioneer Valley region as a whole have exceeded 20% annually. This indicates that more than one in five children in the Pioneer Valley region has grown up in households with incomes below the poverty line.

According to the U. S. Census Bureau American Community Survey 2013-2017 5-Year Estimates, disparities in the distribution of poverty amongst the municipalities of the region are substantial. The major urban centers of Springfield and Holyoke continue to have the highest poverty rates in the region, well above 20% in all categories (as seen in Table 6). Most alarmingly, the rate of children living in poverty is 42.3% in Springfield and 45.6% in Holyoke.

There has been a significant increase in the number of individuals living in poverty in the Town of Amherst. The Town of Amherst has surpassed both Holyoke and Springfield in the number of individuals living in poverty in 2017. The large student population in Amherst is likely a major contributor to the high poverty rate in town, a theory supported by the fact that family and child poverty rates remain much lower than the individual rates. Still, this doesn't explain why there was such a large increase in the poverty rate in recent years. Holyoke, Springfield, Amherst, Ware, and Chicopee all experienced significantly increasing percentages of children in poverty. Among those communities close to the urban centers, West Springfield and Westfield have managed to keep relatively stable family and individual poverty rates but experienced a significant jump in child poverty (7.7% and 4.3% respectively).

Figure 10: Child Poverty Rate in the Pioneer Valley Region, 2007-2017



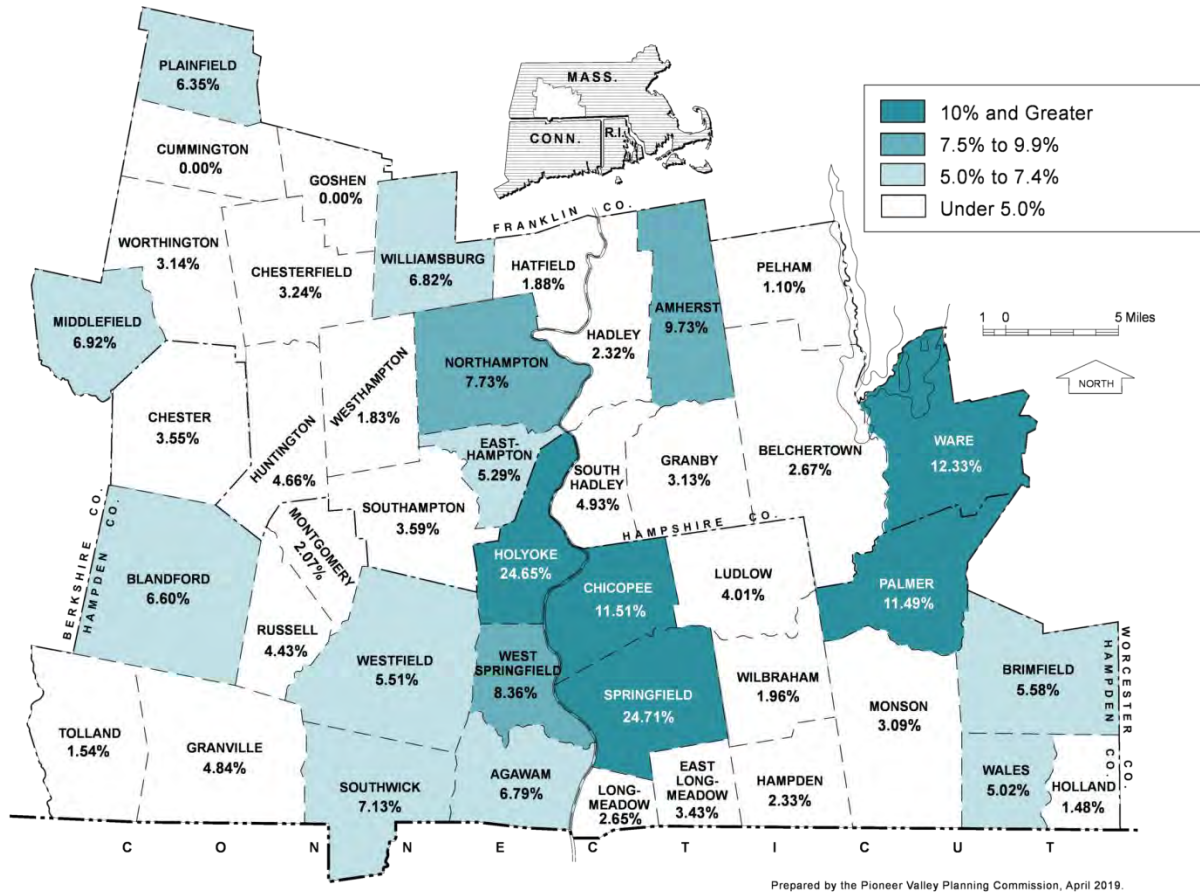
Source: U.S. Census Bureau, Small Area Income and Poverty Estimates (SAIPE), 2017
 Note: Poverty rates displayed in this figure may differ slightly from Table 6 and Figure 11 as different data sources were required.

Table 6: Changes in Community Poverty Rates 2000 to 2017

	Families in Poverty		Children in Poverty		Individuals in Poverty	
	2000	2017	2000	2017	2000	2017
Massachusetts	6.7%	7.8%	6.7%	14.6%	9.3%	11.1%
Pioneer Valley Region	10.0%	11.9%	10.0%	23.9%	13.4%	16.3%
Hampden County	11.4%	13.7%	11.4%	26.7%	14.7%	17.2%
Hampshire County	5.1%	5.9%	5.1%	12.3%	9.4%	13.8%
Agawam	4.3%	6.8%	4.3%	13.2%	5.6%	9.4%
Amherst	7.2%	9.7%	7.2%	22.0%	20.2%	33.2%
Belchertown	5.1%	2.7%	5.1%	4.8%	5.9%	5.8%
Blandford	1.7%	6.6%	1.7%	18.8%	3.4%	7.1%
Brimfield	2.2%	5.6%	2.2%	5.6%	4.4%	4.2%
Chester	2.9%	3.5%	2.9%	9.5%	5.8%	6.4%
Chesterfield	3.4%	3.2%	3.4%	4.0%	5.7%	5.9%
Chicopee	9.6%	11.5%	9.6%	20.4%	12.3%	14.4%
Cummington	4.2%	0.0%	4.2%	0.0%	6.6%	5.3%
East Longmeadow	2.1%	3.4%	2.1%	7.6%	3.4%	4.5%
Easthampton	5.9%	5.3%	5.9%	12.6%	8.9%	10.7%
Goshen	4.3%	0.0%	4.3%	0.0%	7.9%	2.4%
Granby	1.0%	3.1%	1.0%	5.2%	2.2%	5.5%
Granville	1.8%	4.8%	1.8%	12.1%	3.4%	8.4%
Hadley	4.8%	2.3%	4.8%	3.9%	6.9%	5.4%
Hampden	1.4%	2.3%	1.4%	3.5%	2.2%	4.0%
Hatfield	1.4%	1.9%	1.4%	1.5%	2.8%	4.4%
Holland	6.5%	1.5%	6.5%	0.8%	7.3%	4.1%
Holyoke	22.6%	24.7%	22.6%	45.6%	26.4%	28.6%
Huntington	4.4%	4.7%	4.4%	13.1%	5.8%	8.0%
Longmeadow	1.0%	2.7%	1.0%	4.7%	2.1%	3.6%
Ludlow	5.3%	4.0%	5.3%	7.2%	6.4%	5.8%
Middlefield	7.3%	6.9%	7.3%	7.0%	8.6%	7.1%
Monson	5.2%	3.1%	5.2%	4.1%	5.6%	5.6%
Montgomery	1.0%	2.1%	1.0%	4.9%	2.9%	3.7%
Northampton	5.7%	7.7%	5.7%	15.7%	9.8%	15.0%
Palmer	5.8%	11.5%	5.8%	17.8%	7.9%	14.1%
Pelham	2.6%	1.1%	2.6%	0.0%	4.9%	4.0%
Plainfield	4.8%	6.3%	4.8%	10.5%	8.0%	7.6%
Russell	7.1%	4.4%	7.1%	11.3%	9.0%	7.1%
South Hadley	4.1%	4.9%	4.1%	11.0%	5.9%	10.4%
Southampton	1.8%	3.6%	1.8%	4.2%	2.4%	4.6%
Southwick	3.8%	7.1%	3.8%	9.3%	6.1%	7.2%
Springfield	19.3%	24.7%	19.3%	42.3%	23.1%	28.7%
Tolland	2.3%	1.5%	2.3%	0.0%	4.2%	7.2%
Wales	1.8%	5.0%	1.8%	8.0%	3.5%	5.7%
Ware	8.4%	12.3%	8.4%	21.3%	11.2%	14.3%
West Springfield	8.7%	8.4%	8.7%	16.4%	11.9%	12.1%
Westfield	6.9%	5.5%	6.9%	11.2%	11.3%	8.5%
Westhampton	1.9%	1.8%	1.9%	3.4%	3.5%	3.7%
Wilbraham	3.2%	2.0%	3.2%	2.7%	5.1%	4.0%
Williamsburg	1.2%	6.8%	1.2%	18.0%	5.5%	10.8%
Worthington	1.5%	3.1%	1.5%	10.4%	3.5%	7.0%

Source: U.S. Bureau of the Census 2000, American Community Survey 2000-2017 5-Year Estimates

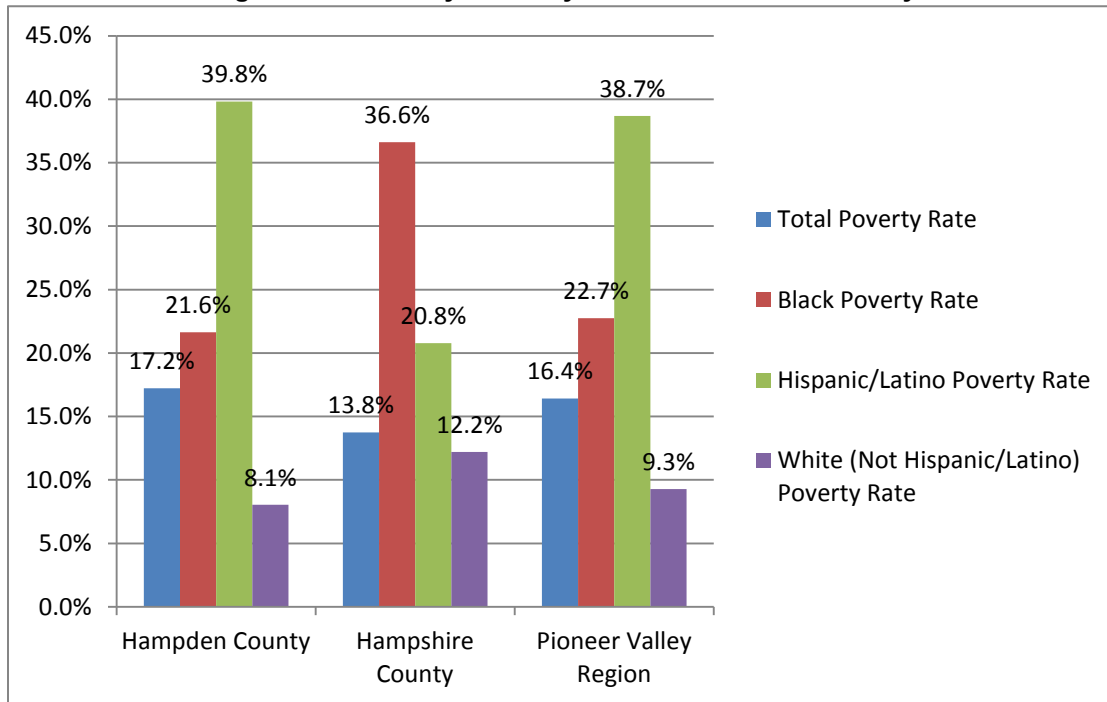
Figure 11: Families in Poverty (2017)



Source: American Community Survey 2013-17 5-Year Estimates

It is important to note that the poverty rate is drastically different across racial categories in the Pioneer Valley Region. While the overall poverty rate in the region is 16.4%, the poverty rate in the Hispanic and Latino community is nearly twice that rate at 38.7%. Over one third of Hispanic and Latino residents of our communities are living in poverty. The poverty rate is over twice as high for Black residents as it is for White residents (22.7% and 9.3% respectively).

Figure 11b: Poverty Rates by Race in the Pioneer Valley



Source: American Community Survey 2013-17 5-Year Estimates

Education

The 43 communities in the Pioneer Valley region are served by 39 municipal and regional school districts and 11 charter school districts. Ten of these districts only serve students from kindergarten through sixth grade (one is actually K-5). The four largest school districts are Springfield, Chicopee, Westfield, and Holyoke, which together account for slightly less than half of all the pupils in the region (see Table 7). In all of these districts, as well as many others across the region, school enrollments continued to fall or remain stable.

Pioneer Valley school enrollment fell by 0.82% between the 2016-2017 and 2017-2018 school years. During that time period, enrollment declined in 30 of the region's 38 districts. Enrollment dropped substantially in several areas, including Granby (7.3%), Westhampton (6.2%), Hadley (5.9%), Hampshire (5.4%), and Monson (5.1%). In contrast, six districts had increased enrollments above 1 percent. These districts were Longmeadow (1.3%), Northampton-Smith Vocational & Agricultural (2.5%), Williamsburg (3.2%), and Southampton (5.8%).

It is worth noting that many of these rural communities with declining enrollments are places where the population numbers as a whole remain fairly stable or are increasing (see Table 1). For example, population growth was 14.8% in Westhampton and 2.4% in Hadley from 2010 to 2017, but school enrollments declined 11.6% and 25.5%, respectively, between the 2010-2011 and 2017-2018 school years. Between 2010 and 2017, the population of Granby, Monson, Palmer, and Westhampton grew by varying amounts, with Westhampton increasing the most at 14.8% and Palmer increasing by 0.3%, while enrollments for school districts decreased by at least 12% during the same period.

Only 13 of the 38 districts have average per-pupil expenditures greater than or equal to the state's 2016-2017 average per-pupil expenditure of \$15,911. The Pathfinder Regional Vocational Technical district had the highest per-pupil expenditure (\$23,502) out of all the region's districts serving students in grades K-12. On the other end of the spectrum, Southampton's Pre-K to 6th grade had the lowest average per-pupil expenditure at \$12,068.

In today's economy, a high school education is the minimum requirement to participate effectively in the job market. While the region's average high school dropout rate continues to decrease, it remains slightly higher than the state's (see Table 8). However, in the community with the highest dropout rate (Holyoke) per-pupil spending is above the statewide average, a factor that may help pull the dropout rates down over time.

Table 7: Pioneer Valley Region School Districts Profile

Public School District Name	Cities & Towns in the Pioneer Valley Region	Student Enrollment '16-'17	Student Enrollment '17-'18	% Change '17-'18	Average Per Pupil Expenditures 2016-2017	Average Teacher Salary 2016-2017
Pioneer Valley Region		90,237	89,499	-0.8%	N/A	N/A
Agawam	Agawam	3,918	3,864	-1.4%	\$15,930.54	\$69,650
Amherst (PK-6)	Amherst	1,148	1,146	-0.2%	\$21,669.83	\$73,844
Amherst-Pelham (7-12)	Amherst, Pelham	1,358	1,343	-1.1%	\$21,382.27	\$82,327
Belchertown	Belchertown	2,354	2,323	-1.3%	\$13,065.78	\$65,670
Brimfield (K-6)	Brimfield	285	286	0.4%	\$15,095.17	\$73,615
Central Berkshire *	Cummington-only	1,620	1,603	-1.0%	\$15,352.02	\$71,924
Chesterfield-Goshen (PK-6)	Chesterfield, Goshen	140	136	-2.9%	\$16,917.69	\$76,768
Chicopee	Chicopee	7,683	7,544	-1.8%	\$14,589.38	\$79,321
East Longmeadow	East Longmeadow	2,630	2,652	0.8%	\$14,943.82	\$77,543
Easthampton	Easthampton	1,562	1,541	-1.3%	\$13,023.44	\$64,258
Gateway	Blandford, Chester, Huntington, Middlefield, Montgomery, Russell, Worthington	841	831	-1.2%	\$17,108.27	\$60,683
Granby	Granby	756	701	-7.3%	\$14,748.33	\$72,894
Hadley	Hadley	562	529	-5.9%	\$14,902	\$64,712
Hampden-Wilbraham	Hampden, Wilbraham	3,107	3,060	-1.5%	\$15,242.80	\$79,504
Hampshire	Chesterfield, Goshen, Southampton, Westhampton, Williamsburg	741	701	-5.4%	\$17,006.17	\$69,105
Hatfield	Hatfield	442	436	-1.4%	\$14,256.31	\$59,376
Holland (PK-6)	Holland	237	233	-1.7%	\$13,951.99	\$62,171
Holyoke	Holyoke	5,344	5,293	-1.0%	\$17,043.32	\$68,779
Longmeadow	Longmeadow	2,841	2,877	1.3%	\$15,248.55	\$73,350
Ludlow	Ludlow	2,661	2,649	-0.5%	\$15,754.96	\$64,940
Mohawk Trail *	Plainfield-only	965	925	-4.1%	\$16,773.77	\$69,844
Monson	Monson	979	929	-5.1%	\$16,433.94	\$59,315
Northampton	Northampton	2,675	2,658	-0.6%	\$15,088.46	\$61,711
Northampton-Smith Vocational & Agricultural	Hampshire County	486	498	2.5%	\$21,702.97	\$62,731
Palmer	Palmer	1,427	1,400	-1.9%	\$14,655.80	\$67,092
Pathfinder Regional Vocational Technical **	Granby, Palmer, Monson, Ware	618	614	-0.6%	\$23,502.13	\$74,207
Pelham (K-6)	Pelham	132	127	-3.8%	\$17,186.26	\$65,645
South Hadley	South Hadley	1,869	1,887	1.0%	\$14,364.88	\$74,979
Southampton (PK-6)	Southampton	520	550	5.8%	\$12,068.02	\$72,794
Southwick-Tolland-Granville Regional School District	Granville, Southwick, Tolland	1,549	1,519	-1.9%	\$15,170.51	\$63,507
Springfield	Springfield	25,633	25,604	-0.1%	\$15,510.22	\$64,844
Tantasqua (7-13) *	Brimfield, Holland, Wales	1,839	1,788	-2.8%	\$13,568.91	\$80,279
Wales (PK-6)	Wales	164	161	-1.8%	\$12,877.26	\$72,336
Ware	Ware	1,226	1,213	-1.1%	\$13,859.12	\$64,329
West Springfield	West Springfield	4,094	4,114	0.5%	\$13,888.90	\$67,259
Westfield	Westfield	5,543	5,479	-1.2%	\$14,167.62	\$70,275
Westhampton (PK-6)	Westhampton	130	122	-6.2%	\$16,067.10	\$66,082
Williamsburg (PK-6)	Williamsburg	158	163	3.2%	\$15,785.15	\$75,082

Source: Massachusetts Department of Education, School District Profiles, 2018
 *Enrollment data for regional school district includes all students who attend schools within the Pioneer Valley Region.
 This includes some students who reside outside the Pioneer Valley Region.

***Enrollment data for vocational school district includes students who attend vocational schools within the Pioneer Valley Region. This includes some students who reside outside the Pioneer Valley Region.*

Table 8: Annual High School Dropout Rate in the Pioneer Valley Region 2007-2017

School District	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Massachusetts	3.8%	3.4%	2.9%	2.9%	2.8%	2.5%	2.2%	2.0%	1.9%	1.9%	1.8%
Pioneer Valley Region	5.4%	5.1%	4.0%	4.6%	5.0%	4.0%	3.2%	3.1%	2.7%	2.6%	2.4%
Agawam	4.4%	1.4%	2.2%	1.1%	1.9%	1.3%	1.8%	1.6%	0.9%	2.0%	1.0%
Amherst-Pelham	2.5%	2.1%	0.8%	1.5%	2.1%	1.6%	1.0%	0.7%	1.0%	1.5%	1.1%
Belchertown	1.6%	1.0%	1.4%	1.7%	1.1%	0.9%	0.3%	0.9%	0.7%	0.6%	0.8%
Central Berkshire	1.6%	1.5%	1.4%	2.2%	1.7%	1.7%	1.3%	1.8%	1.5%	0.7%	0.7%
Chicopee	6.0%	6.2%	5.7%	5.5%	5.4%	4.3%	4.3%	4.0%	3.9%	3.9%	2.9%
East Longmeadow	1.5%	0.9%	0.6%	0.7%	0.4%	0.6%	0.3%	0.5%	0.8%	0.1%	0.6%
Easthampton	2.1%	2.7%	2.0%	2.9%	2.9%	1.6%	1.3%	0.9%	1.8%	1.1%	1.3%
Gateway	4.3%	5.1%	2.4%	2.9%	2.4%	3.9%	2.0%	2.2%	2.4%	0.9%	3.2%
Granby	0.9%	1.1%	2.0%	1.1%	0.8%	0.0%	0.3%	0.0%	0.0%	0.7%	1.2%
Hadley	0.6%	0.6%	1.0%	1.0%	1.0%	1.1%	0.0%	0.6%	1.7%	0.0%	1.8%
Hampden-Wilbraham	1.2%	1.2%	0.7%	0.8%	0.6%	0.8%	0.6%	0.4%	0.8%	0.5%	0.7%
Hampshire	2.9%	1.5%	1.9%	2.4%	1.0%	2.0%	1.0%	0.4%	0.0%	0.2%	1.4%
Hatfield	0.0%	2.3%	2.5%	4.5%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Holyoke	11.3%	11.6%	9.8%	9.5%	9.8%	7.7%	9.1%	6.4%	7.6%	5.4%	5.7%
Longmeadow	0.1%	0.0%	0.5%	0.7%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Ludlow	1.7%	1.9%	0.9%	1.5%	0.8%	1.9%	2.0%	0.9%	0.8%	1.6%	0.9%
Mohawk Trail	6.2%	5.0%	4.6%	3.6%	2.0%	2.4%	2.7%	2.3%	2.7%	2.5%	1.6%
Monson	4.2%	0.5%	3.3%	2.7%	1.4%	1.2%	2.8%	2.9%	1.5%	1.6%	5.2%
Northampton	1.9%	2.1%	1.2%	1.6%	0.9%	1.5%	1.1%	0.9%	0.7%	0.8%	0.9%
Northampton-Smith	4.1%	1.8%	2.4%	1.3%	1.4%	1.4%	1.2%	0.5%	0.5%	1.1%	1.0%
Palmer	4.1%	6.6%	3.6%	4.9%	7.1%	2.7%	2.2%	3.4%	3.6%	4.9%	2.0%
Pathfinder Voc Tech	1.5%	3.1%	2.8%	2.6%	1.9%	1.4%	2.1%	1.1%	0.8%	1.5%	1.6%
Pioneer Valley Perf Arts	4.5%	4.0%	1.3%	5.1%	2.6%	1.5%	0.7%	1.5%	2.2%	1.9%	1.9%
Sabis International	1.5%	1.2%	0.2%	0.2%	0.6%	0.4%	0.2%	0.4%	0.4%	0.9%	0.0%
South Hadley	3.3%	2.9%	2.0%	2.8%	2.0%	0.8%	1.0%	1.7%	1.1%	0.9%	0.0%
Southwick-Tolland	2.6%	1.8%	4.5%	0.7%	1.6%	1.7%	2.0%	1.7%	1.7%	1.1%	1.4%
Springfield	10.9%	9.7%	9.6%	10.5%	11.7%	10.0%	6.5%	7.2%	5.1%	4.9%	5.1%
Tantasqua	1.2%	0.7%	1.9%	1.2%	1.5%	1.4%	0.4%	0.9%	0.7%	0.7%	0.6%
Ware	7.3%	10.2%	3.6%	4.2%	5.4%	3.8%	4.3%	5.5%	5.4%	4.7%	1.8%
West Springfield	6.3%	6.0%	5.4%	3.4%	5.1%	3.1%	2.1%	2.3%	2.3%	2.2%	1.3%
Westfield	5.3%	3.2%	2.4%	3.3%	2.3%	2.0%	2.2%	1.2%	1.9%	2.2%	1.2%

Source: Massachusetts Department of Education, Statistical Reports, 2017

In 2017, 27 out of 31 districts had dropout rates that were either the same or lower than they were in 2007. While most school districts in the region had dropout rates below the regional 2.4% mark, five districts had much higher rates. Holyoke saw 5.7% of its students drop out of high school. Monson schools had the second highest dropout rate in the region at 5.2%. Meanwhile, dropout rates in Springfield have decreased from a high of 11.7% in 2011 to 5.1% in 2017. Holyoke's dropout rate has remained below 8% for the past four years, down from 11.6% in 2008. Chicopee, another of the region's urban core cities, has reached its lowest dropout rate in over ten years, falling to 2.9% in 2017.

In 2017, just over 32% of Pioneer Valley residents aged 25 years and over had a bachelor's degree or higher (see Table 9). According to the 2013-2017 American Community Survey 5-year estimates, 11 of the Pioneer Valley's 43 communities had a higher percentage of college graduates than the statewide average (42.1%) (See Figure 12). In five communities (Amherst, Longmeadow, Pelham, Northampton, and Williamsburg) more than 50% of the residents had a bachelor's degree or higher. In contrast, there were seven communities (Chicopee, Wales, Springfield, Ware, Chester, Ludlow, and Holyoke) where the proportion was at or below 25%.

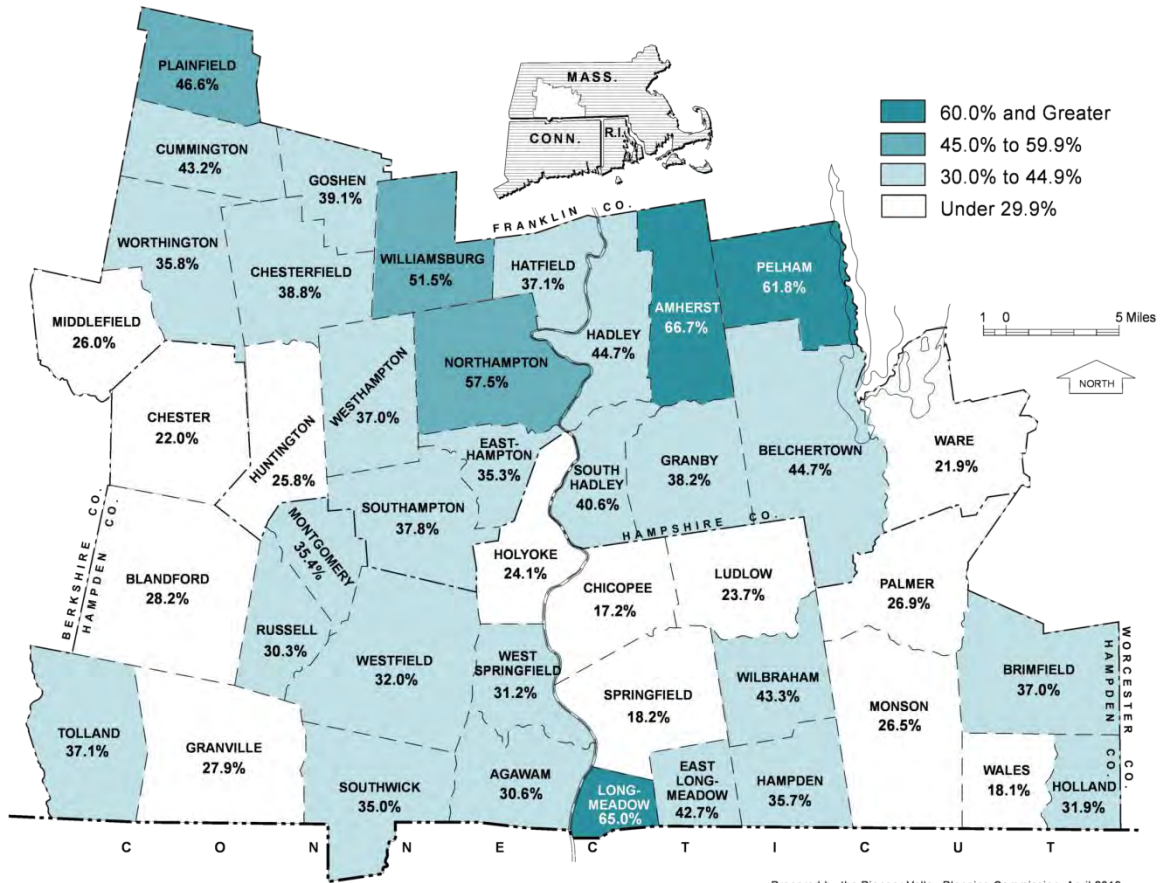
Given the region's rich endowment of higher education institutions, some of these rates are lower than expected. Other indicators, however, point towards the beginning of a positive trend. There has been a 17% increase in the population 25 years and over who have attained a bachelor's degree or higher since 2007 (see Table 9). Additionally, the number of people 25 years and over who are high school graduates or higher increased by 7.5%.

Table 9: Educational Attainment in the Pioneer Valley Region - 2000 and 2017

	2007 Population	% of Population	2017 Population	% of Population	10 Year % Change
Population 25 Years and Over					
Hampden County	299,425	100.0%	318,892	100.0%	6.1%
Hampshire County	96,581	100.0%	99,606	100.0%	3.0%
Pioneer Valley Region	396,006	100.0%	418,498	100.0%	5.4%
Less Than 9th Grade					
Hampden County	17,067	5.7%	18,284	5.7%	6.7%
Hampshire County	2,704	2.8%	1,110	1.1%	-143.6%
Pioneer Valley Region	19,771	5.0%	19,394	4.6%	-1.9%
9th to 12th Grade, No Diploma					
Hampden County	32,637	10.9%	29,563	9.3%	-10.4%
Hampshire County	5,022	5.2%	3,433	3.4%	-46.3%
Pioneer Valley Region	37,660	9.5%	32,996	7.9%	-14.1%
*High School Graduate					
Hampden County	107,194	35.8%	94,542	29.6%	-13.4%
Hampshire County	25,111	26.0%	25,341	25.4%	0.9%
Pioneer Valley Region	132,305	33.4%	119,883	28.6%	-10.4%
Some College, No Degree					
Hampden County	49,106	16.4%	60,954	19.1%	19.4%
Hampshire County	14,777	15.3%	13,576	13.6%	-8.8%
Pioneer Valley Region	63,883	16.1%	74,530	17.8%	14.3%
Associate's Degree					
Hampden County	23,655	7.9%	28,565	9.0%	17.2%
Hampshire County	7,630	7.9%	9,058	9.1%	15.8%
Pioneer Valley Region	31,284	7.9%	37,623	9.0%	16.8%
Bachelor's Degree					
Hampden County	43,716	14.6%	53,019	16.6%	17.5%
Hampshire County	20,185	20.9%	24,783	24.9%	18.6%
Pioneer Valley Region	63,901	16.1%	77,802	18.6%	17.9%
Graduate or Professional Degree					
Hampden County	26,050	8.7%	33,965	10.7%	23.3%
Hampshire County	21,248	22.0%	22,305	22.4%	4.7%
Pioneer Valley Region	47,298	11.9%	56,270	13.4%	15.9%
High School Graduate or Higher					
Hampden County	249,720	83.4%	271,058	85.0%	7.9%
Hampshire County	88,855	92.0%	95,024	95.4%	6.5%
Pioneer Valley Region	338,575	85.5%	366,082	87.5%	7.5%
Bachelor's Degree or Higher					
Hampden County	70,065	23.4%	87,058	27.3%	19.5%
Hampshire County	41,337	42.8%	47,114	47.3%	12.3%
Pioneer Valley Region	111,402	28.1%	134,171	32.1%	17.0%

Source: U.S. Census Bureau, American Community Survey 2013-2017 1-yr Estimate
*Includes Equivalency

Figure 12: College and University Graduates



Prepared by the Pioneer Valley Planning Commission, April 2019.

Source: US Census Bureau, American Community Survey 5-Year Estimates 2013-2017

Table 10: Number of College Graduates from the Pioneer Valley Region's Higher Education Institutions

College or University	Location	Graduates				
		2013	2014	2015	2016	2017
American International College	Springfield	1,094	1,359	995	1,511	1,113
Amherst College	Amherst	625	473	471	432	483
Bay Path College	Longmeadow	744	819	797	947	975
College of Our Lady of the Elms	Chicopee	415	527	545	523	576
Hampshire College	Amherst	316	328	291	342	295
Holyoke Community College	Holyoke	958	1,105	1,056	1,044	989
Mount Holyoke College	South Hadley	619	598	662	576	577
Smith College	Northampton	885	842	855	870	802
Springfield College	Springfield	943	941	965	1,005	926
Springfield Technical Community College	Springfield	1,099	1,116	1,105	1,051	1,077
University of Massachusetts	Amherst	7,415	7,755	7,771	7,876	8,328
Western New England University	Springfield	940	913	1,031	1,128	1,110
Westfield State University	Westfield	1,362	1,447	1,463	1,428	1,389
Total Graduates		17,415	18,223	18,007	18,733	18,640

Source: Integrated Postsecondary Education Data System (IPEDS), 2017

Our region's relatively low educational attainment rates, despite the existence of 13 area colleges and universities (see Table 10), demonstrates the Pioneer Valley's continuing struggle to retain those locally college-educated persons who possess the skills and knowledge critical for the health of the region's economy. The University of Massachusetts, Amherst, a leading national research university, anchors the Five College area of the Pioneer Valley. The other members of the Five College group are the prestigious Smith, Mount Holyoke, Amherst, and Hampshire colleges. Complementing the Five College consortium is a collaboration of eight area schools centered in the greater Springfield area. These include: American International College, Bay Path College, Elms College, Holyoke Community College, Springfield College, Springfield Technical Community College, Western New England University, and Westfield State University. Together, these 13 colleges and universities afford the residents and employers of the Pioneer Valley a multitude of opportunities and advantages that are unique to the region. These assets will undoubtedly continue to aid in the region's economic development initiatives.

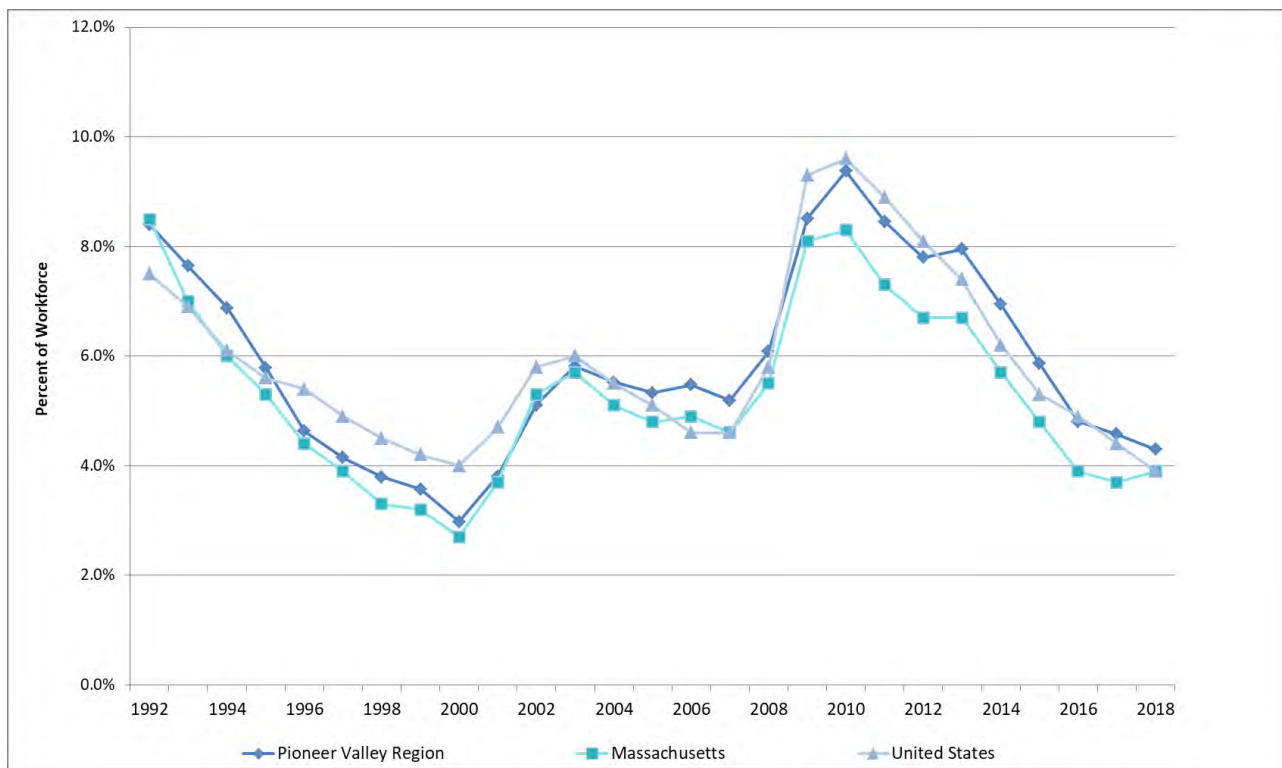
The Economy

The Workforce and Employment

After experiencing the highest unemployment in many years in 2010, the Pioneer Valley’s economy has strengthened, evident in its decreasing unemployment rates. Unemployment rates lowered from 9.4% in 2010 to 7.8% in 2012. Following a slight increase to 8.0% in 2013, unemployment rates fell to 4.3%, the Pioneer Valley’s lowest rate since 2001, in 2018. Meanwhile, employment levels fell from 2007 to 2013, reaching a low of 273,446 in 2013. However, since then, employment has rapidly increased, reaching 314,493 in 2018.

Mirroring trends in the Pioneer Valley, unemployment has continued to fall both nationally and at the state level. Nation-wide, unemployment reached a low of 3.9% in 2018 from a high of 9.6% in 2010, and the Massachusetts rate fell from 7.3% in 2011 to 3.4% in 2018. These rates are below 2007 figures, reflecting recovering national and state economies.

Figure 13: Unemployment Rates

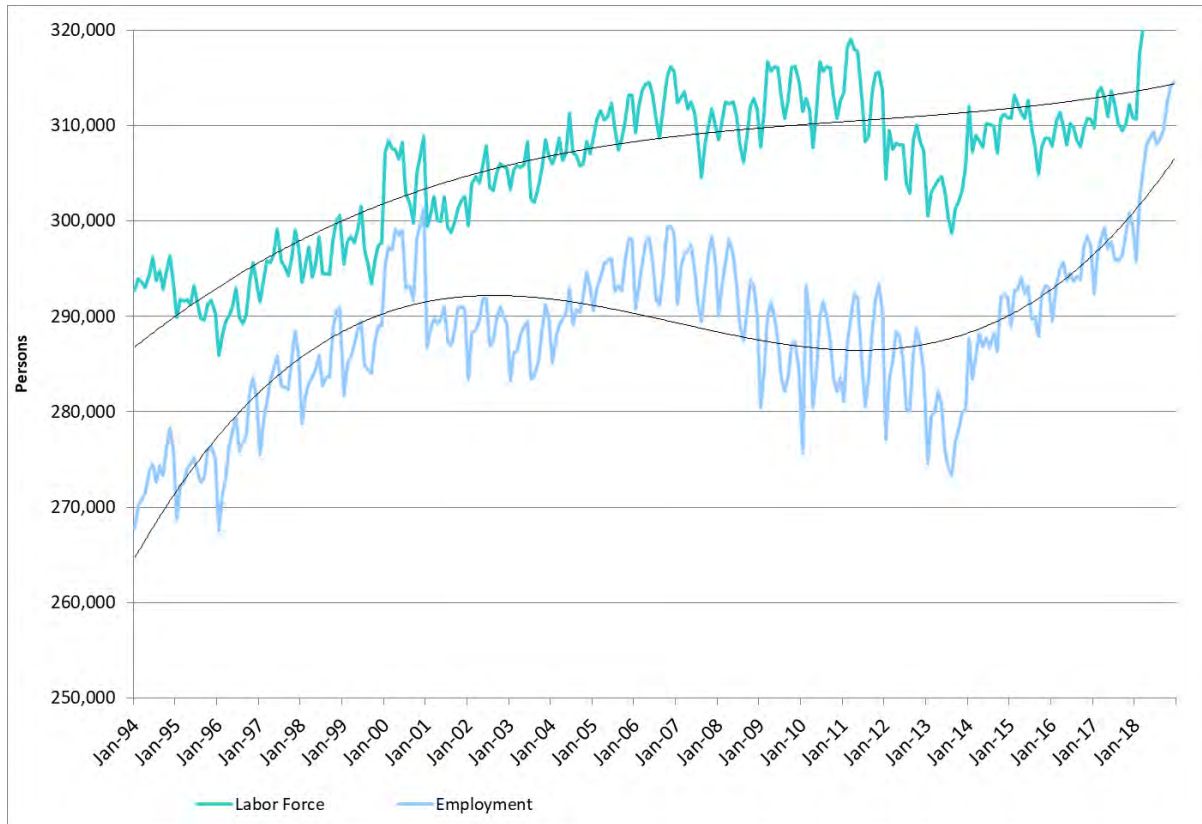


Source: U.S. Bureau of Labor Statistics, MA Office of Labor and Workforce Development, 2018

While the labor force gained strength between 2010 and 2011, rising to the highest levels in twenty years (314,556 participants), this trend was followed by an overall decline in the subsequent years, decreasing by 6,663 participants between 2012 and 2015. There was a slight rebound in 2013, yet with fewer than 308,000 people, this was the second smallest labor force of the Pioneer Valley since the year 2000 (see Figure 14). Between 1995 and 2005, the

number of people who work in the Pioneer Valley rose from 273,692 to 294,446 (a gain of 20,774 jobs); however, between 2005 and 2015, the number of people employed fell by 5,375 jobs. While the labor force shrunk by 3,097 workers, between 2005 and 2015, the number of people unemployed increased by 2,278 (see Figure 13). Since 2015, both the labor force and employment have steadily increased, with labor force and employment increasing by 16,792 and 21,450, respectively, from 2015 to 2018.

Figure 14: Pioneer Valley Region Labor Force and Employment with Trend Lines

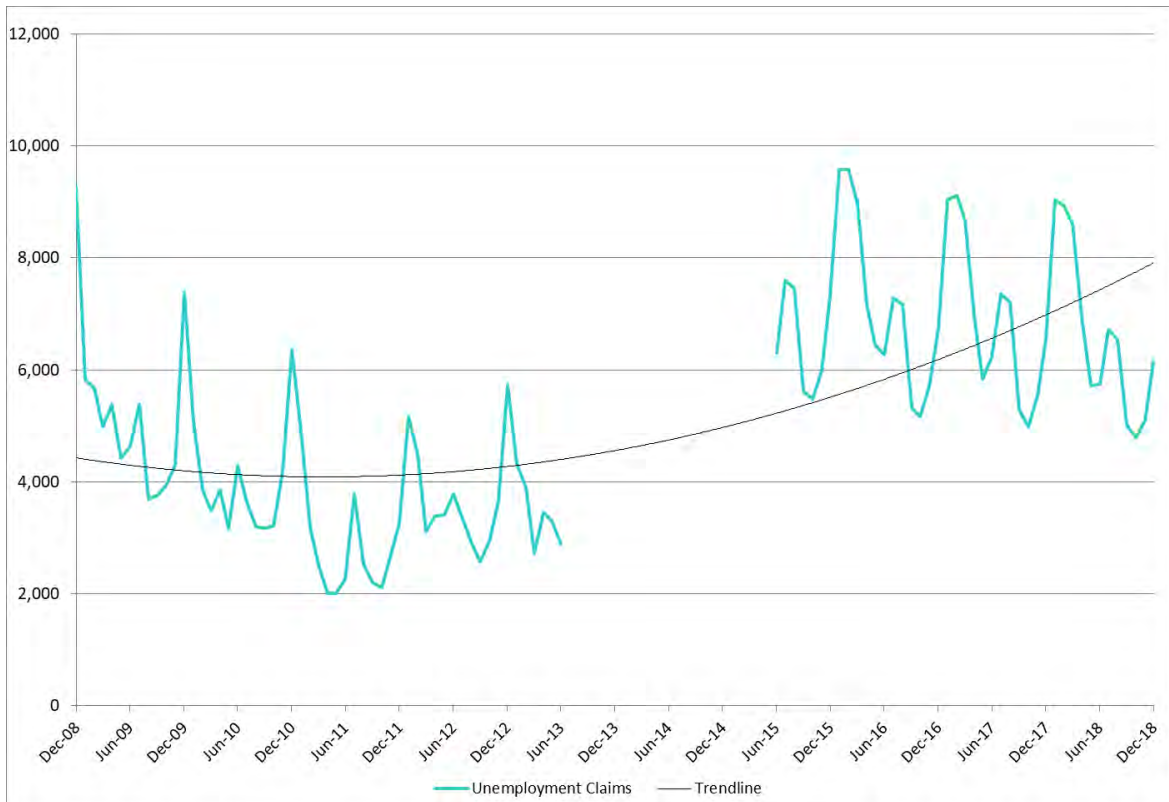


Source: MA Office of Workforce Development, 1994-2018

Unemployment claims have fluctuated greatly over the last few years, demonstrating the unpredictable nature of the economic recovery. While there was a decline in the number of new unemployment claims in 2011, there was an increase in unemployment claims in 2012. Data available for the first portion of 2013 showed another decrease in new unemployment claims. Though there was a downward trend in unemployment claims from 2008 to 2013, there were overall more unemployment claims from 2015 to 2018.

The number of individuals filing new claims for unemployment insurance tends to fluctuate markedly by month, but December traditionally sees the highest number of new claims as employers let go of workers they had hired for the holiday season. Therefore, comparing new claims from December to December provides a helpful measure of economic health. In December 2015, the number of new claims in Franklin, Hampshire, and Hampden Counties was 7,322. In 2016, the December new-claims figure dropped to 6,747 and in 2017 it was down to 6,557. In December 2018, the number of claims were lower than December 2010, (6,146 and 6,361, respectively) hinting at a recovering economy (Figure 15).

Figure 15: New Unemployment Insurance Claims, 2008 to 2018



Source: MA Office of Labor and Workforce Development, *Unemployment Insurance Claims, 2003-2018*
 Note: This data is only available by Workforce Investment Board, so it includes Franklin County.
 Additionally, data was not available from June 2013-June 2015

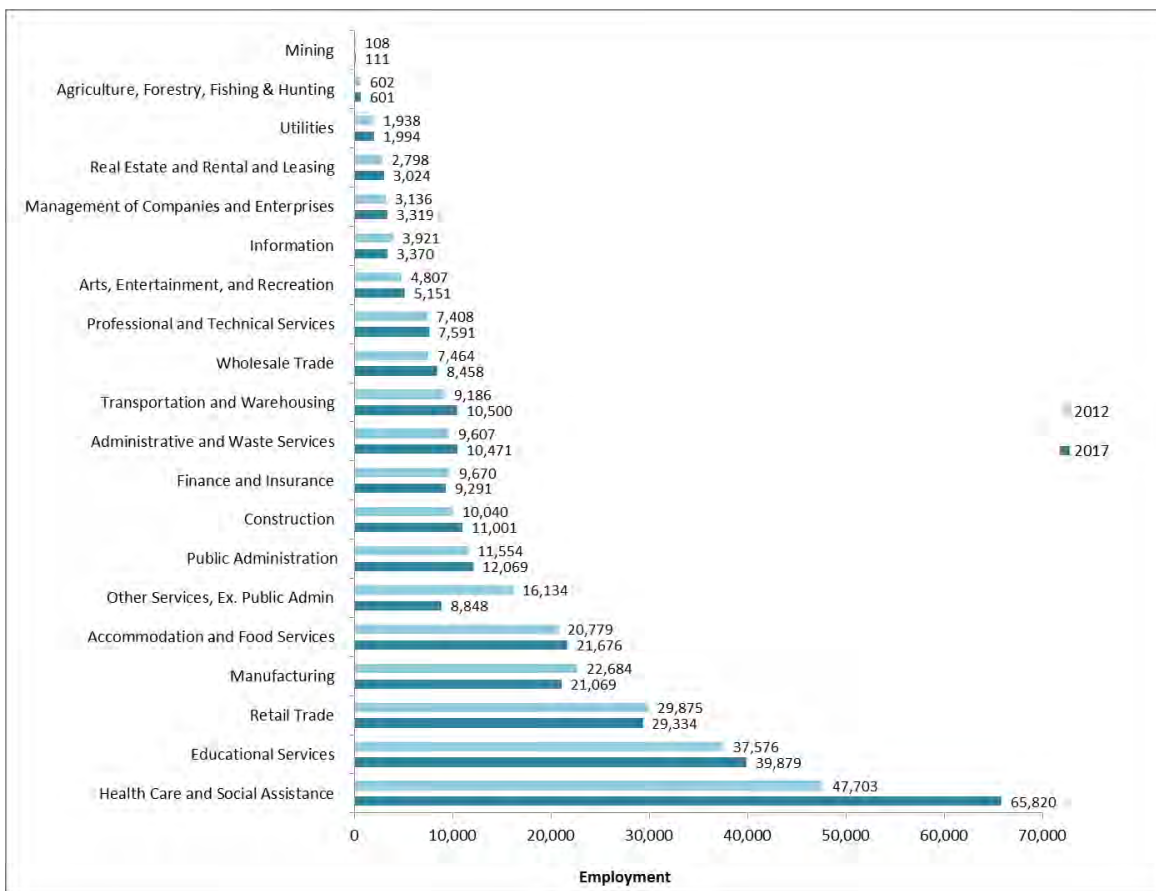
Employment Distribution

The region’s economy is in transition. Manufacturing was once the mainstay of the region’s economy, employing more than 29 percent of the workforce in 1980. Like most of the nation, service sector employment is increasing in the Pioneer Valley region while the number of manufacturing jobs has decreased. Examples of professions in the service sector include healthcare, education, and other industries that focus on customer-provider interactions: automotive/household goods repair, beauty salons and barber shops, funeral homes, political organizations, and pet care. From 1990 to 2000, the service sector’s share of total private sector

jobs grew from 36.0 to 40.9 percent and as of 2017 the service sector comprised about 85.9% of the private sector. Manufacturing’s share of jobs declined from 14.4 % in 2000 to 7.7% in 2017.

Between 2012 and 2017, the fastest growing industries in the Pioneer Valley region were healthcare and social assistance, transportation and warehousing, wholesale trade, construction, and administrative and waste services (Figure 16). Health care and social assistance alone grew by 38%, and provided 24.1% of all employment in the Pioneer Valley in 2017. Transportation and warehousing grew by 14%, and wholesale trade grew by 13%. In 2017, the four largest industries in the Pioneer Valley region, by total employment, were healthcare and social assistance, educational services, retail trade, manufacturing, and accommodation and food services. These four sectors account for 65% of the employment in the Pioneer Valley region.

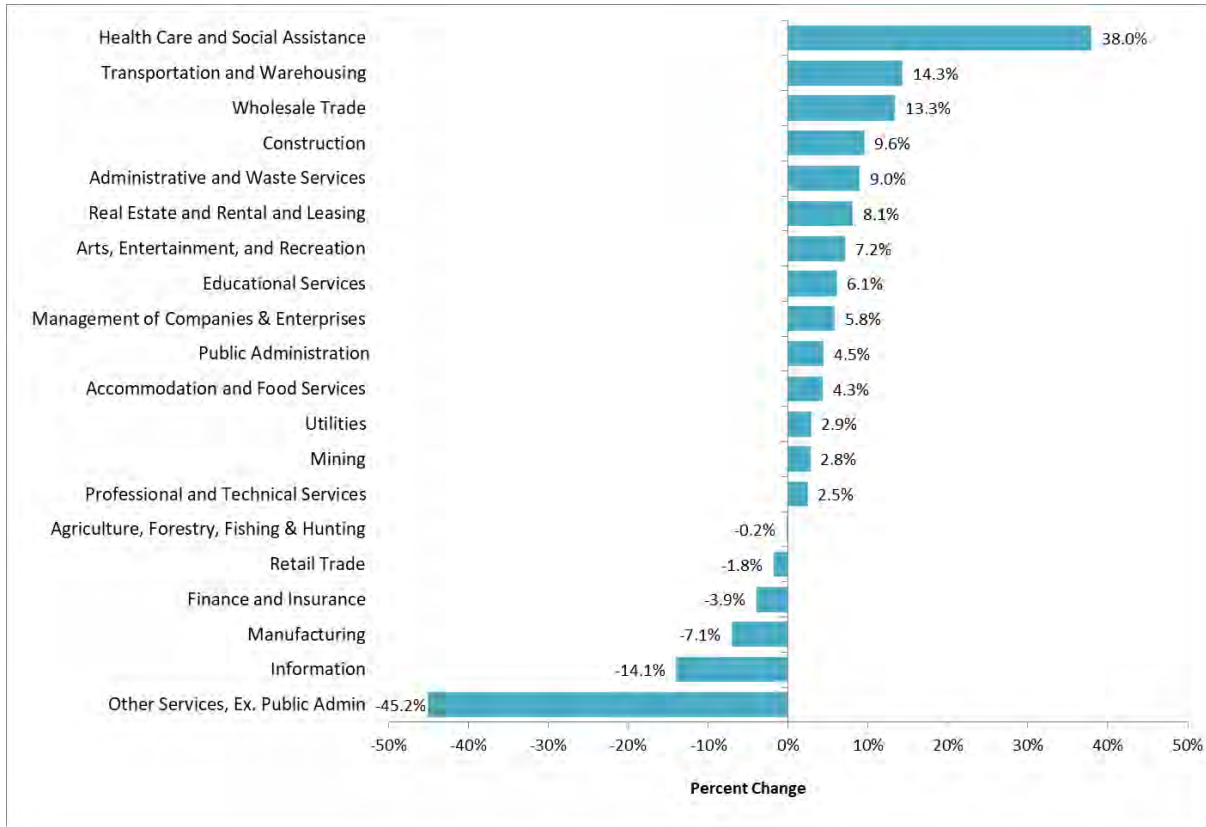
Figure 16: Employment in the Pioneer Valley Region by Major Industry, 2012 and 2017



Source: Massachusetts Department of Workforce Development, ES-202 Program, 2017
 Note: Beginning with the first quarter 2013, a code change for employees from private households (NAICS 814110) into services for the elderly and persons with disabilities NAICS 624120) moved 33,960 employees in Massachusetts in January 2013 on QCEW.

Despite the large number of people employed in manufacturing, employment in the industry fell 7% between 2012 and 2017. This decline represents the ongoing transition from a manufacturing based economy to a service and knowledge based economy. Other industries that experienced significant decreases were: other services (45%), information (14%), and finance and insurance (4%).

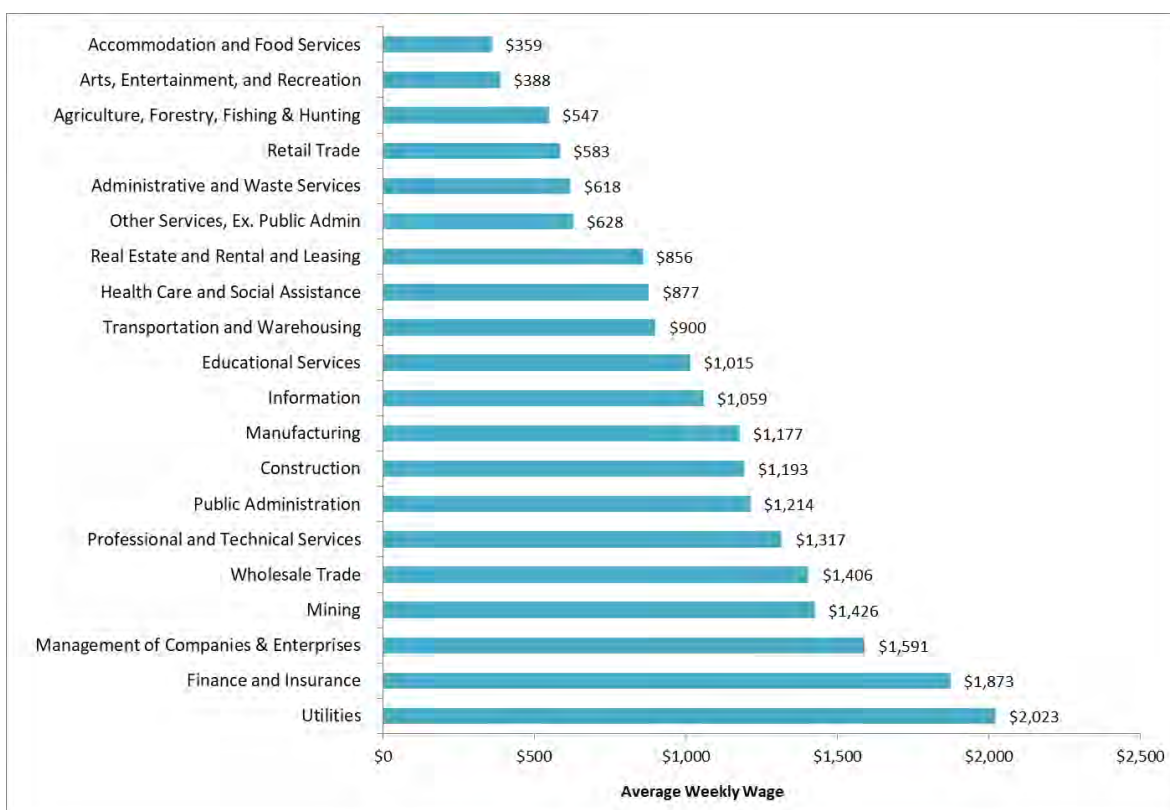
Figure 17: Change in Pioneer Valley Region Employment by Major Industry, 2012 to 2017



Source: Massachusetts Department of Workforce Development, ES-202 Program, 2017

Work in utilities, finance and insurance, and management of companies and enterprises offer the highest weekly wages. Each industry offers a weekly wage greater than \$1,500 (see Figure 18).

Educational services and healthcare and social assistance, the region’s top employment sectors, have average weekly wages of \$1,015 and \$877, respectively. One of the region’s growing industries – accommodation and food services– is among the lowest paying with average weekly wages of \$359. The particularly low average weekly salary services may be affected by a high rate of part-time workers in this industry.

Figure 18: Average Weekly Wages by Industry in the Pioneer Valley Region, 2017

Source: Massachusetts Department of Workforce Development, ES-202 Program, 2017

Regional Employment

Within the Pioneer Valley region, almost half (45.2%) of all employment is located in the urbanized communities of Springfield, Holyoke, and Chicopee, reaching a combined total employment of over 123,000. The northern urban areas, Northampton and Amherst, employ over 37,000 people. Other communities with high employment totals include the suburbs directly around the region's urban core, such as Westfield, West Springfield, and Agawam each employing over 12,000 people. The City of Springfield alone is home to 29.8% of the region's jobs.

A comparison of average weekly wages and total wages for the region's employment centers reveals some discrepancies. The total employment in Springfield in 2015 was over 360% the total employment of Holyoke, but the total wages paid was more than 430% of the amount paid in Holyoke, indicative of the much higher average wages for jobs located in Springfield. This is also shown in the \$216 difference in the average weekly wages between Springfield (\$1,045) and Holyoke (\$871). Although workers in Chicopee were paid a comparable average weekly wage (\$870) to those in Holyoke, the total employment was lower resulting in lower total wages.

There is a significant gap in total employment and average wages between the northern cities of Northampton and Amherst. Both the total employment and average weekly wage is higher in Northampton compared to Amherst. In Northampton, total employment was 19,873, and the average weekly wage was \$1,001. In contrast, total employment in Amherst was 17,508, and

average weekly wage was a slightly lower \$995. In a comparison of suburban towns located near the urban core cities, like Agawam, East Longmeadow, and Ludlow, there are higher levels of employment, but lower wages. Total employment was higher in Agawam (12,166) than in East Longmeadow (8,034) or Ludlow (6,885). However, the average wage in Agawam was slightly lower at \$899 than in East Longmeadow (\$914) but higher than Ludlow (\$889).

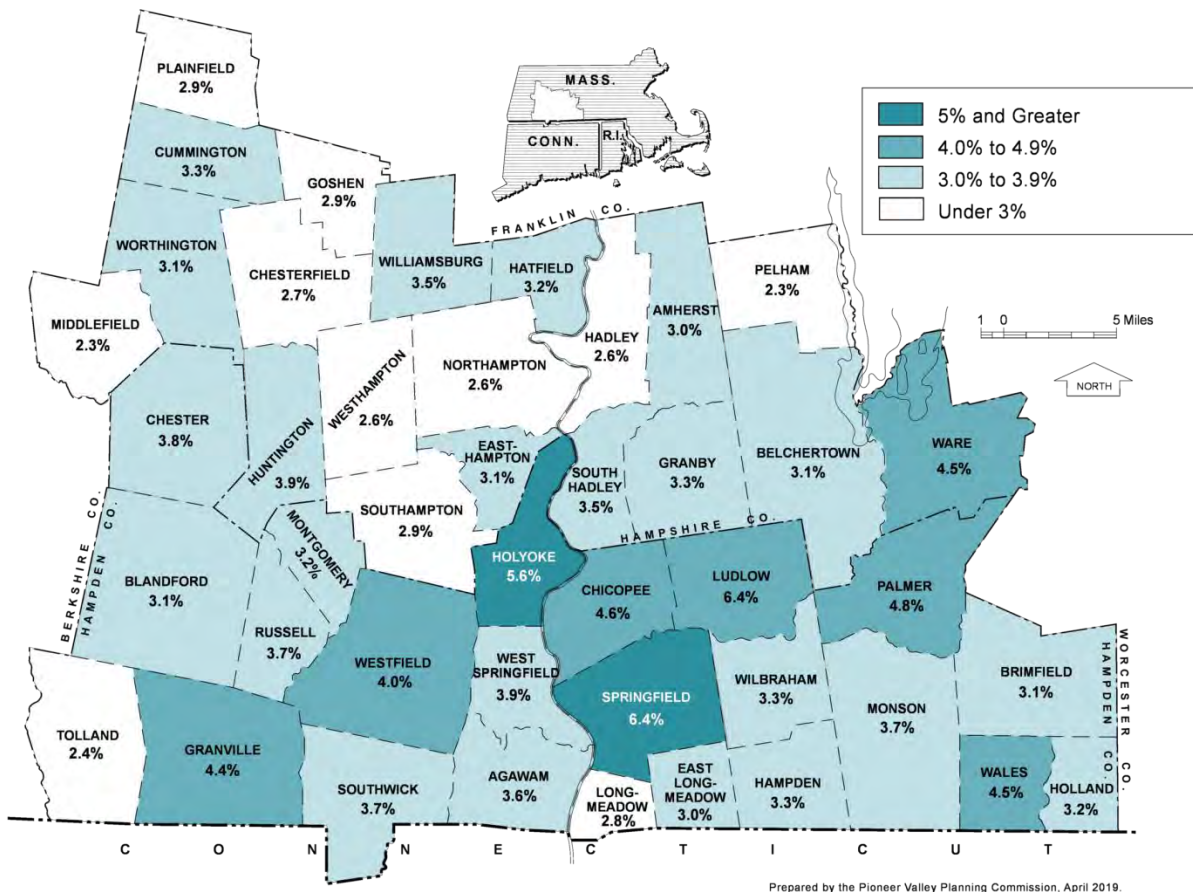
Table 11: Pioneer Valley Region's Top 10 Employment Centers for 2017

Community	Average Employment	Percent of Region's Employment	Average Weekly Wage	Total Wages
Springfield	81,462	29.8%	\$1,045	\$4,427,349,868
Holyoke	22,329	8.2%	\$871	\$1,011,319,853
Chicopee	19,991	7.3%	\$870	\$904,457,498
Northampton	19,873	7.3%	\$1,001	\$1,034,329,700
Westfield	18,668	6.8%	\$937	\$909,300,472
West Springfield	17,652	6.5%	\$822	\$754,077,162
Amherst	17,508	6.4%	\$995	\$906,056,086
Agawam	12,166	4.4%	\$899	\$568,743,486
East Longmeadow	8,034	2.9%	\$889	\$318,220,112
Ludlow	6,885	2.5%	\$889	\$318,220,112

Source: Massachusetts Department of Workforce Development, 2017

The regional map showing unemployment rates by workers' place of residence in 2017 (Figure 19) indicates that some of the region's largest employment centers also have high unemployment rates among their residents, suggesting that residents of some urban communities are not benefiting from their proximity to the region's leading employers. Springfield, which had the greatest number of jobs in the region (as seen in Table 11) also had the highest unemployment rate among residents at 6.4%. Holyoke ranked second for total employment, yet their unemployment rate (5.6%) ranks second highest in the region for residents of the community. Chicopee was the third largest employer in 2017, but had an unemployment rate of 4.6% in 2017.

Figure 19: Unemployment Rates by Worker's Place of Residence, 2017

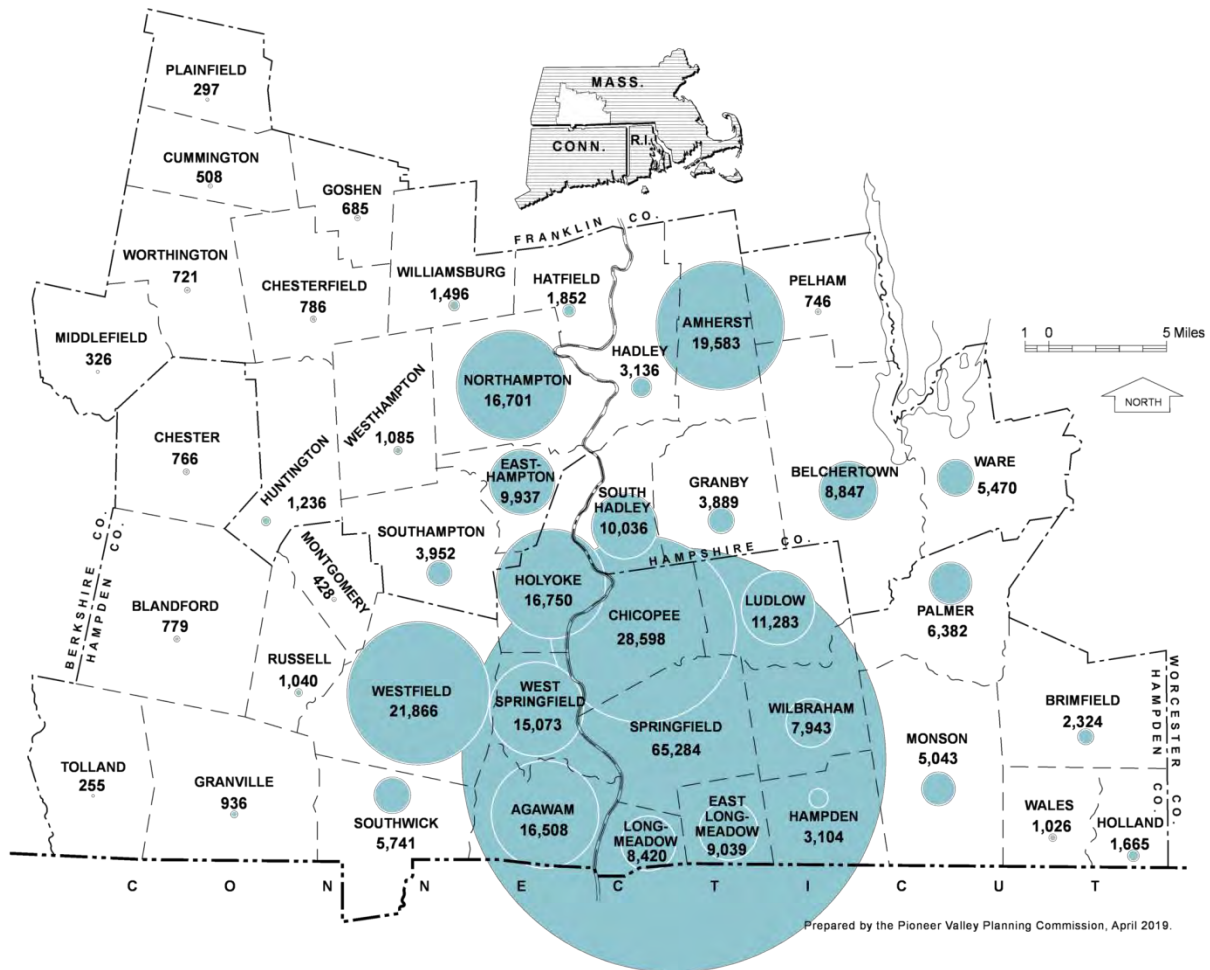


Source: MA Office of Labor and Workforce Development, 2017

A comparison of the total employment in the top employment centers in 2017 (Table 11) and the labor force (Figure 20) indicates that not all of the region’s employment centers are importing workers from other communities. In communities such as Agawam, Amherst, Chicopee, and Westfield, the number of workers living there were larger than the number of jobs – indicating that these communities must export workers to other communities.

However, the total employment in Springfield, Holyoke, Northampton and West Springfield in 2017 exceeded the number of workers living in those cities in the same year. Therefore, those regional employment centers are attracting workers from other cities and towns in the region. The high unemployment rate for residents of the region's larger cities suggests that there is a skills mismatch between the residents and the needs of employers in these communities.

Figure 20: Labor Force by Place of Residence, 2017

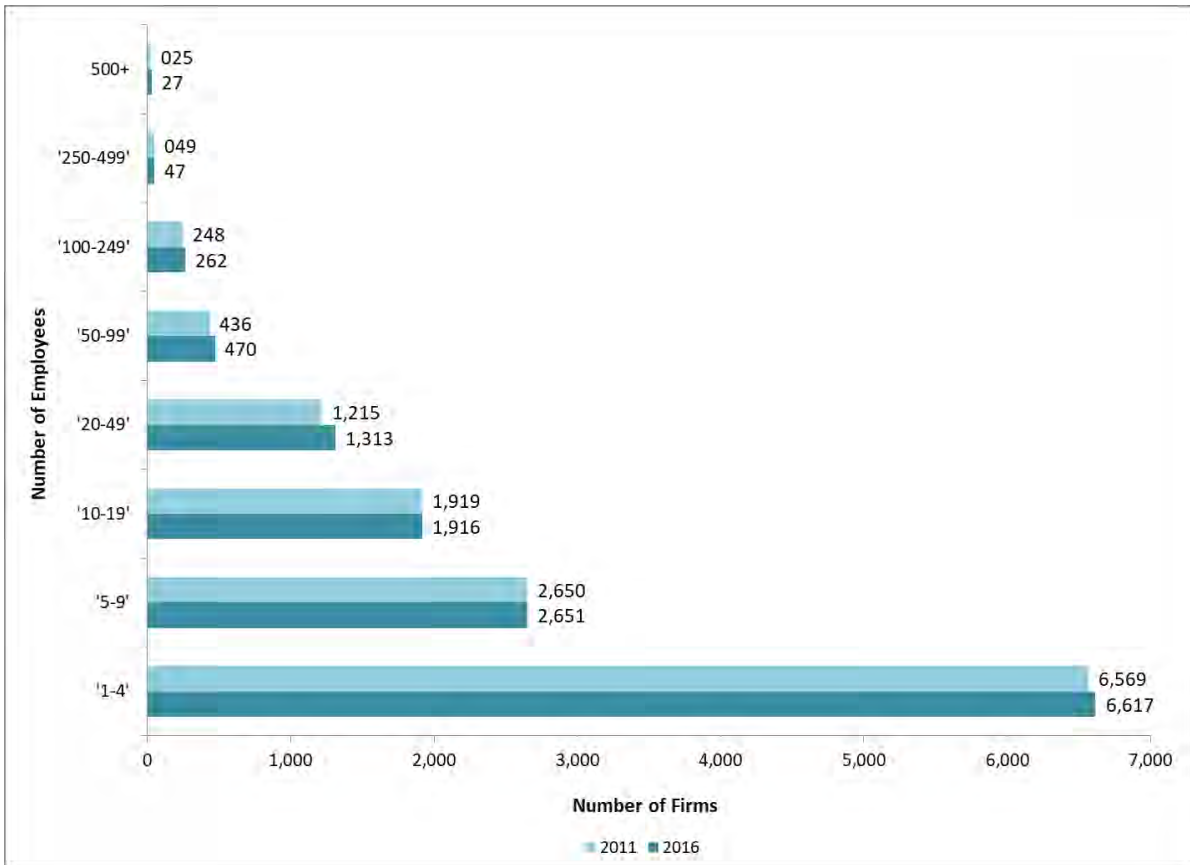


Source: US Bureau of Labor Statistics, Local Area Unemployment Statistics, 2017

Regional Employers

The Pioneer Valley region’s economy is rooted in small businesses. About 94% of businesses in 2011 and 2016 were firms of fewer than 50 employees (Figure 21), and approximately 70% of firms had fewer than 10 employees.

Figure 20: Numbers of Employers by Size in the Pioneer Valley Region, 2011 and 2016



Source: U.S. Census Bureau, County Business Patterns, 2011 and 2016

The percentage of firms employing between 100 and 499 people was 5.5% in 2017 and 0.6% firms had more than 500 employees in 2017 (Figure 21). Among the region’s largest employers are Baystate Health, Mercy Medical Center, Cooley Dickinson Hospital, and Holyoke Medical Center. These large health service sector employers are located in three of the region’s top employment centers: Springfield, Holyoke, and Northampton (Table 11). In addition, seven of the region’s colleges and universities are also major employers, and some of the largest employers in the region are firms with national name recognition, such as MassMutual Life Insurance Co. and C&S Wholesale Grocers.

For more detailed information about commute trends around major employment centers in the region, please see the Commute Trends digest at www.pvpc.org.

For extensive analysis of the businesses that are growing in the region, please see the Pioneer Valley Growth Business Study completed in 2013. The full study and executive summary are also available on the PVPC website.

Table 12: Major Employers in the Pioneer Valley Region in 2017

Company Name	Location	Primary Industry Code	Total Employees
5,000-9,999 Employees			
Baystate Health Inc	Springfield	General Medical and Surgical Hospitals	8,859
Massachusetts University-Amh	Amherst	Colleges, Universities, and Professional Schools	8,440
Big Y World Class Markets	Springfield	Grocery and Related Product Merchant Wholesalers	5,600
1,000-4,999 Employees			
Massachusetts Mutual Life Ins	Springfield	Agencies, Brokerages, and Other Insurance Related Activities	3,500
Westover Air Reserve Base	Chicopee	National Security	4,600
Mercy Medical Center	Springfield	General Medical and Surgical Hospitals	3,415
MGM Springfield	Springfield	Arts, Entertainment, and Recreation	3,000
Cooley Dickinson Hospital	Northampton	General Medical and Surgical Hospitals	1,899
ServiceNet Inc	Northampton	Administration of Human Resource Programs	1,750
Westfield State University	Westfield	Colleges, Universities, and Professional Schools	1,550
Center for Human Development	Springfield	Administration of Human Resource Programs	1,500
American Outdoor Brands Corp (formerly Smith and Wesson)	Springfield	Small Arms Manufacturing	1,480
Holyoke Medical Ctr	Holyoke	General Medical and Surgical Hospitals	1,416
Smith College	Northampton	Colleges, Universities, and Professional Schools	1,200
Mt Holyoke College	South Hadley	Colleges, Universities, and Professional Schools	1,000
Springfield College	Springfield	Colleges, Universities, and Professional Schools	1,000
Verizon	Springfield	Communication Services	1,000
500-999 Employees			
Holyoke Community College	Holyoke	Junior Colleges	939
J Polep Distribution Svc	Chicopee	Grocery and Related Product Merchant Wholesalers	925
Baystate Wing Hospital	Palmer	General Medical and Surgical Hospitals	913
Western New England University	Springfield	Colleges, Universities, and Professional Schools	855
Springfield Technical Community College	Springfield	Junior Colleges	792
Peter Pan Bus Lines	Springfield	Transportation Services	750
Lenox	East Longmeadow	Machine Tool Manufacturing	650
ISO New England Inc	Holyoke	Utilities	580
TD Bank	Springfield	Agencies, Brokerages, and Other Insurance Related Activities	575
Baystate Noble Hospital	Westfield	General Medical and Surgical Hospitals	564
C & S Wholesale Grocers Inc	Hatfield	Grocery and Related Product Merchant Wholesalers	500
Hampshire College	Amherst	Colleges, Universities, and Professional Schools	500

Source: MA Department of Labor & Workforce Development, 2017

The Infrastructure

Housing

Where homes have been built and will continue to get built, as well as the type and characteristics of our housing, is a reflection of land use policies, the strength or weakness of the housing market, mortgage lending practices, housing discrimination, transportation networks, topography, and public infrastructure. Our settlement patterns and built environment are also a reflection of structural issues such as economic security and educational attainment, which taken together can promote or hinder self-sufficiency, mobility and residents' abilities to obtain and maintain stable housing situations. One who does not need to worry about finding a safe and decent place to live can devote time to other pressing concerns, such as education, employment, personal health and community well-being. Housing is a basic human need and one of the most significant expenditures individuals and families face. This region needs a full range of housing opportunities that are affordable to households of all racial and ethnic backgrounds, abilities, and income ranges to ensure that our region remains economically competitive.

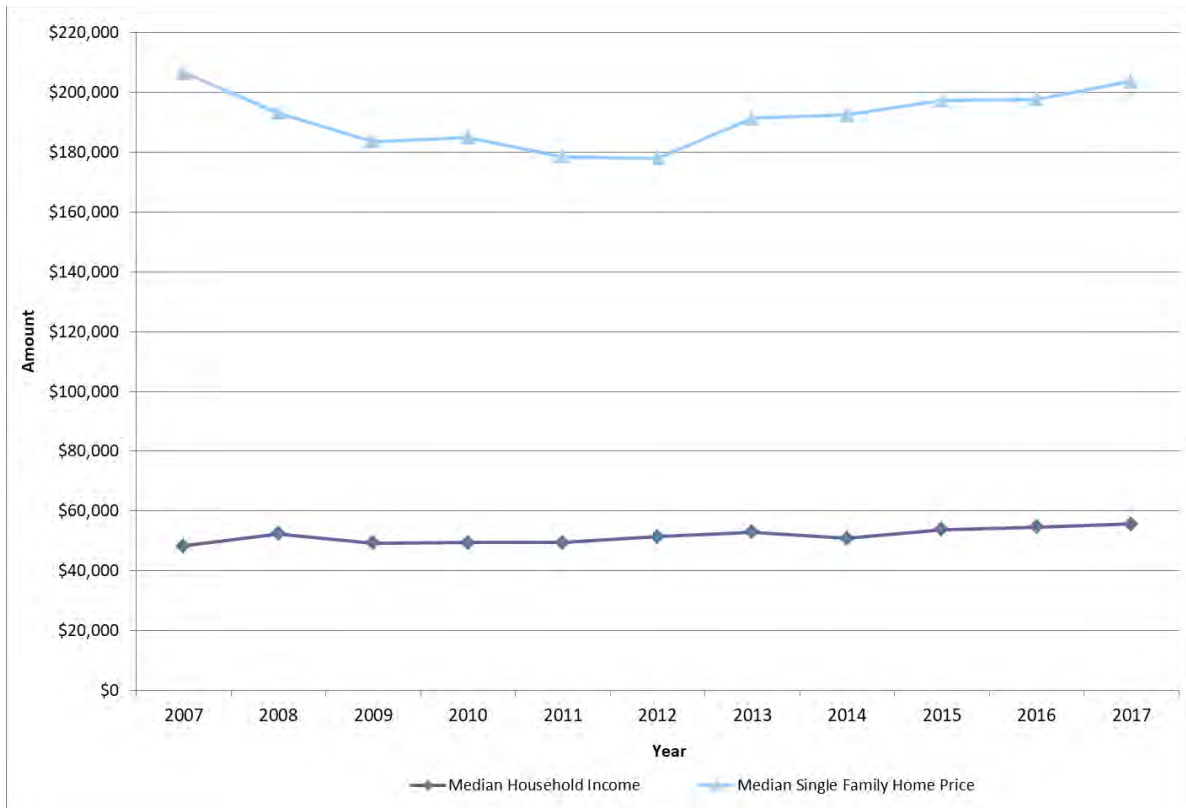
Housing Market

In the first decade of the 2000s, particularly between 2005 and 2007, housing prices rose in the region as well as nationwide. Although the housing market crash impacted the region, with a decrease in median single-family home prices by 14% between 2007 and 2012, the housing market has since returned to pre-recession home prices (Figure 22). Between 2012 and 2017, median single-family home prices increased by 14.6% in the region. The first signal of this shift occurred in 2013 when the regional median sale price for a single family home of \$191,382 surpassed the 2009 regional median sale price of \$185,060. In 2017, this figure reached \$203,820. Figure 22 also shows how household incomes have not kept pace with increased housing costs.

Our region has strong and weak housing markets which affect the cost of housing, the quality of housing, and the demand for housing. Figure 23 demonstrates the significant variation of our region's strong and weak housing markets in the form of single-family home prices. The communities with the strongest housing markets had median sale prices over \$300,000, including Amherst, Pelham, Hadley, and Longmeadow. At the same time, more than half of the communities in the region had median sale prices under \$200,000. The strong market communities tend to be the most desirable communities in the region. Strong demand for homes in these communities is driven by having good schools, low crime rates, and low poverty rates. Housing in these communities tends to have higher sale prices, home values, and higher rents, which has the effect of limiting the potential for a household with more limited economic means from being able to afford to buy or rent in the community.

The communities with weaker housing markets had median sale prices of single family homes around or below \$150,000. Cummington, Chester, and Springfield experienced the lowest home prices in the region with Cummington and Chester at \$113,000 and \$137,000 respectively, and Springfield at \$143,000. Plainfield, Worthington, Chicopee, and Palmer also had lower median sale prices at or below \$175,000 levels in 2017 (Figure 23). Our weak market communities tend to have low property values and high vacancies. The main revitalization challenge facing our central cities are weak housing markets. Low property values create a disincentive for homeowners and landlords to make capital or maintenance improvements to their properties because the cost of these improvements can be greater than the overall value of the property or does not increase the value of the property. Divestment from low property values has led to vacant or deteriorating housing, which creates neighborhood blight and makes for unsafe living conditions.

Figure 21: Median Household Income and Single-Family Home Prices in the Pioneer Valley Region, 2007-2017



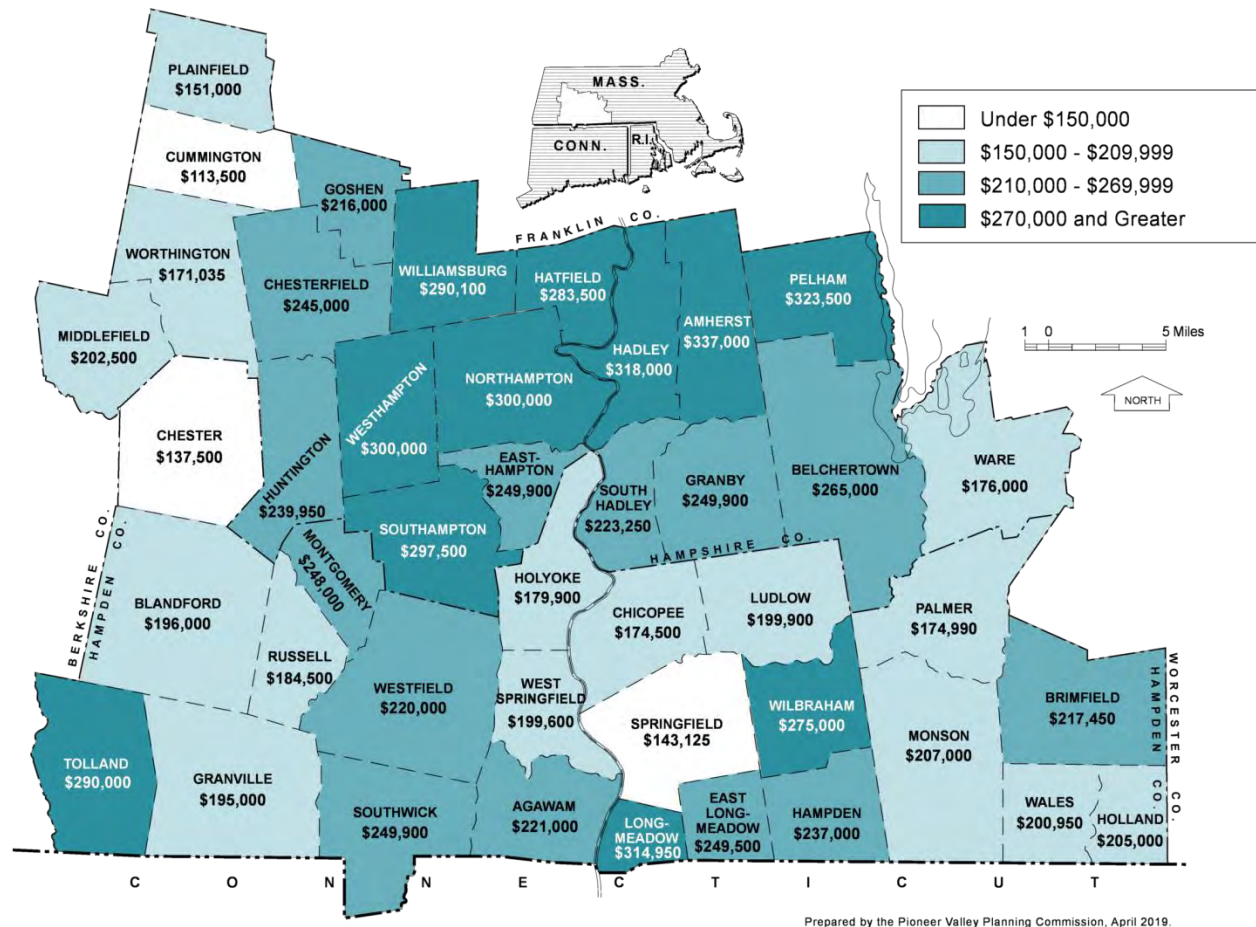
Source: Pioneer Valley Planning Commission, American Community Survey 2017 1-year estimate

Studies conducted as part of the regional housing plan found that weak market cities and towns in the Pioneer Valley would like to see their communities become desirable places to live—places of choice—and see a greater variety of market rate housing options created in the vacant or underutilized upper story spaces of their downtowns as well as on vacant lots and within underutilized properties that would attract moderate, middle, and upper income households. Anecdotal evidence suggests that there are young professionals, empty-nesters, or two person households who desire to rent apartments or buy condominiums in our cities but are unable to find housing that suits their tastes in areas they find safe and that have ready access to goods and services.

However, the depressed housing market makes it financially difficult to develop new housing on infill lots or within existing mill and commercial buildings or renovate existing multi-unit residential buildings for households that would pay market rent. Housing developers point to the problem that current market rents are typically insufficient to support the cost of new construction or significant rehabilitation of multi-unit housing. The limited state or federal public subsidies that exist to help developers fill the financing gap require income-restricted housing as a condition of receipt of these funds. These restrictions are good practice in many instances but can also serve as one more barrier to attracting an economically diverse population to urban neighborhoods and to increasing home-ownership rates.

A weak housing market can exist in spite of an unmet need for housing that is affordable to residents in that community. A key reason for this disparity is the very low incomes of residents in our weak market cities and towns. There is tremendous demand for existing affordable housing units, and these programs all maintain waiting lists. The strong demand for affordable housing units and lack of sufficient supply of these units is a statewide issue.

Figure 22: Median Sale Price of Single-Family Homes in the Pioneer Valley Region (2017)



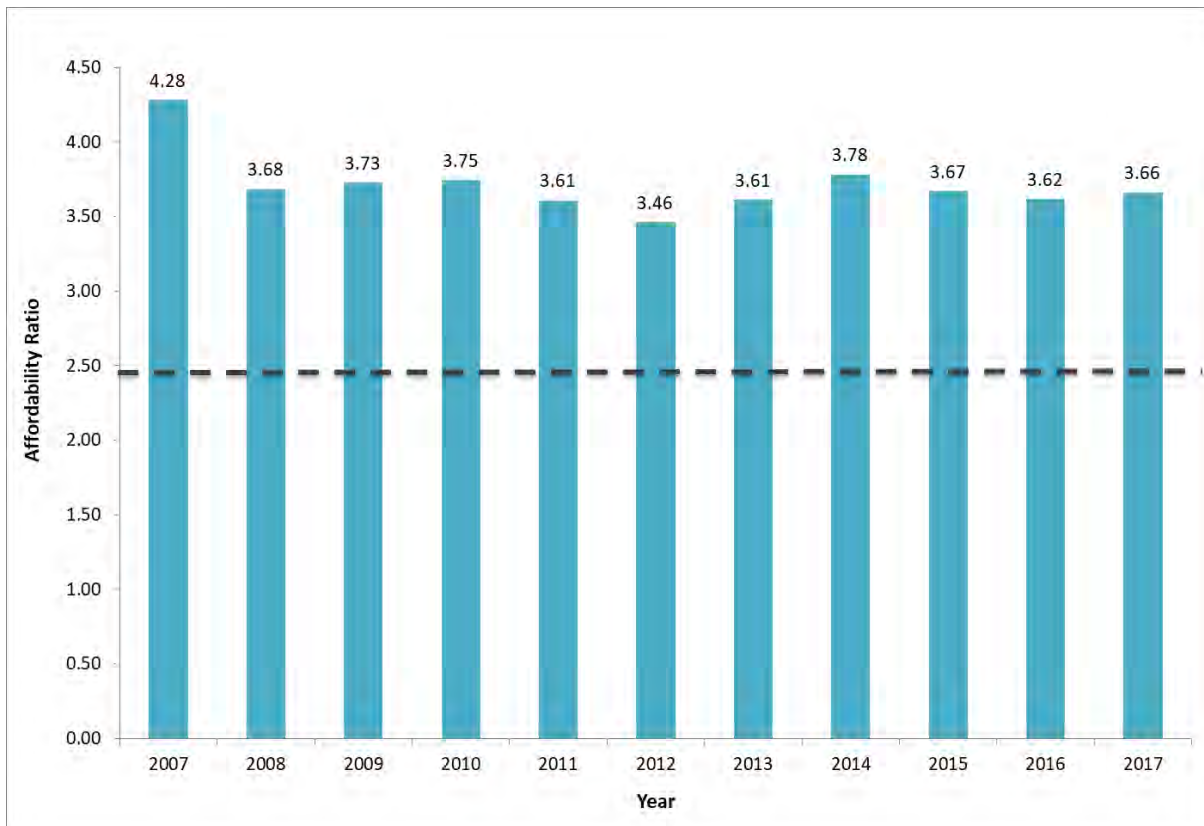
Source: The Warren Group 2015

Housing Affordability

Declines in housing prices over the past decade have not solved the issue of housing affordability, as incomes have decreased when inflation is factored in. It is generally accepted that a household can afford a home up to a price that is equal to three times the household yearly income. Households who pay more than this for a home are considered “cost-burdened” and may have difficulty affording necessities such as food, clothing, transportation and medical care as well as saving for their future and that of their families. The median household income in the Pioneer Valley in 2017 of \$55,666 translates into approximately \$167,000 of purchasing power for a home. Only four out of forty-three communities in the region had median housing prices equal to or less than that amount in 2017.

Springfield and Holyoke have many homes available for under \$150,000 and are actively promoting their affordable home-ownership opportunities through programs such as “Buy Springfield Now” and “Buy Holyoke Now” as a way to attract first-time homebuyers into their cities. At the same time, several communities such as Amherst, Pelham and Hadley have remained consistently unaffordable to households that earn below the region’s median household income.

Figure 23: Pioneer Valley Region Housing Affordability Ratio (Median Price/Median Income), 2007-2017



Source: U.S. Census Bureau ACS; SAIPE; Pioneer Valley Planning Commission, 2007-2017

Another way to examine the problem is through the use of a housing affordability ratio (See Figure 24). The Pioneer Valley’s housing affordability ratio can be calculated by dividing the median price of a single family home by the median household income. Therefore an affordability ratio above 3.0 is of concern because it means that, statistically, a household with the median income in the region cannot afford a single family home at the median price. The affordability ratio steadily climbed starting in 1997, and passed the 3.0 threshold in 2001. Although the affordability ratio decreased between 2007 and 2012, it increased slightly from 3.46 in 2012 to 3.66 in 2017. This is an indication that the increase in housing prices between 2012 and 2017 has outpaced the concurrent increase in incomes, thereby limiting housing affordability. A ratio of 3.66 is of concern. In the long run, the issue of housing affordability will continue to be very important, especially if incomes do not increase or if increases in income do not keep pace with rising housing prices.

Transportation

Vehicle Roadways

The Pioneer Valley area is considered the crossroads of transportation in western Massachusetts. Situated at the intersection of the area’s major highways, Interstate 90 (Massachusetts Turnpike) traveling east-west and Interstate 91 traveling north-south, the region offers easy access to all markets in the eastern United States and Canada. Major southern New England population centers are accessible within hours.

The interstate expressways (I-90 and I-91) link most of the major urban centers in the region. The basic highway network, including interstate highways, U.S. numbered routes, state routes, and other traffic arteries, provides access to all municipalities in the region, both urban and rural. The pattern of principal arterial highways in the region is radial, extending outwards from each of the region’s major centers, a consequence of development and topographic influences.

Of the existing transportation facilities in the Pioneer Valley region, major bridge crossings remain a focal point of regional transportation concerns, as many streets and highways converge into a limited number of crossings over the Connecticut, Westfield, and Chicopee rivers.

Table 13: Driving Distances and Times from Springfield to Select Urban Centers

Destination	Distance in Miles	Estimated Driving Time
Albany	85	1.5 hours
Boston	91	1.5 hours
Montreal	301	5.5 hours
New York City	140	3.0 hours
Philadelphia	260	5.0 hours
Washington, DC	400	8.0 hours

Source: PVPC, Regional Transportation Plan for the Pioneer Valley – 2016 Update

Table 14: Major Interstate Highways Serving the Pioneer Valley Region

Interstate Highway	Principle Orientation	Number of Interchanges in the Region	Road Mileage in the Region	Toll Road?
I-90	East/West	6	46.08	Yes
I-91	North/South	22	31.17	No
I-291	Connector (Springfield to I-90)	6	5.44	No
I-391	Connector (I-91 to Chicopee/Holyoke)	6	3.82	No

Source: PVPC, Regional Transportation Plan for the Pioneer Valley – 2016 Update

In general, traffic on the region’s roadways has been increasing. Between 1999 and 2009 the estimated number of daily vehicle miles traveled (DVMT) in the Pioneer Valley region rose about nearly half of a million miles per day, from about 14.76 million to about 15.23 million. The magnitude of increase is shared in the region’s rural areas. Table 15 presents the commute times for each of the Pioneer Valley communities in 2000 and 2017. The 4.6% increase in commuter times can be attributed to several major trends including a rise in vehicle ownership and the onset of several major roadway improvement projects, such as the Great River Bridge in Westfield.

Table 15: Pioneer Valley Region Average Commute Times to Work

	Mean Driving Time to Work (minutes)		
	2000	2013-2017	% Change
Massachusetts	27	29.3	8.5%
Pioneer Valley Region	21.8	22.8	4.6%
Hampden County	21.8	22.6	3.7%
Hampshire County	21.9	23.2	5.9%
Agawam	20.5	21.2	3.4%
Amherst	18	17.1	-5.0%
Belchertown	28.1	28.2	0.4%
Blandford	37.5	36.6	-2.4%
Brimfield	30.1	35.8	18.9%
Chester	38.9	35.7	-8.2%
Chesterfield	29.4	32.8	11.6%
Chicopee	19.3	19.1	-1.0%
Cummington	38.3	33.3	-13.1%
East Longmeadow	21.9	24.7	12.8%
Easthampton	21.1	24.2	14.7%
Goshen	31	32.1	3.5%
Granby	20.6	24.7	19.9%
Granville	29.5	34.6	17.3%
Hadley	21.9	19.9	-9.1%
Hampden	26.4	27.4	3.8%
Hatfield	20.9	21.3	1.9%
Holland	34.2	32.9	-3.8%
Holyoke	18.6	19.8	6.5%
Huntington	34.4	31.4	-8.7%
Longmeadow	20.3	22.9	12.8%
Ludlow	21.3	24.7	16.0%
Middlefield	41.6	38.3	-7.9%
Monson	29.5	28.8	-2.4%
Montgomery	29.7	30.1	1.3%
Northampton	20	21.6	8.0%
Palmer	22.9	28	22.3%
Pelham	22.3	23.6	5.8%
Plainfield	33.5	33.9	1.2%
Russell	28.1	29.6	5.3%
South Hadley	19.4	22.2	14.4%
Southampton	24.8	27.4	10.5%
Southwick	26.4	27.9	5.7%
Springfield	21.5	21.3	-0.9%
Tolland	39.4	38.8	-1.5%
Wales	36.7	35.1	-4.4%
Ware	25.8	28.1	8.9%
West Springfield	20.9	21.5	2.9%
Westfield	22.6	22.1	-2.2%
Westhampton	25.2	24.4	-3.2%
Wilbraham	24.3	26.8	10.3%
Williamsburg	23.3	25.6	9.9%
Worthington	40.5	39.4	-2.7%

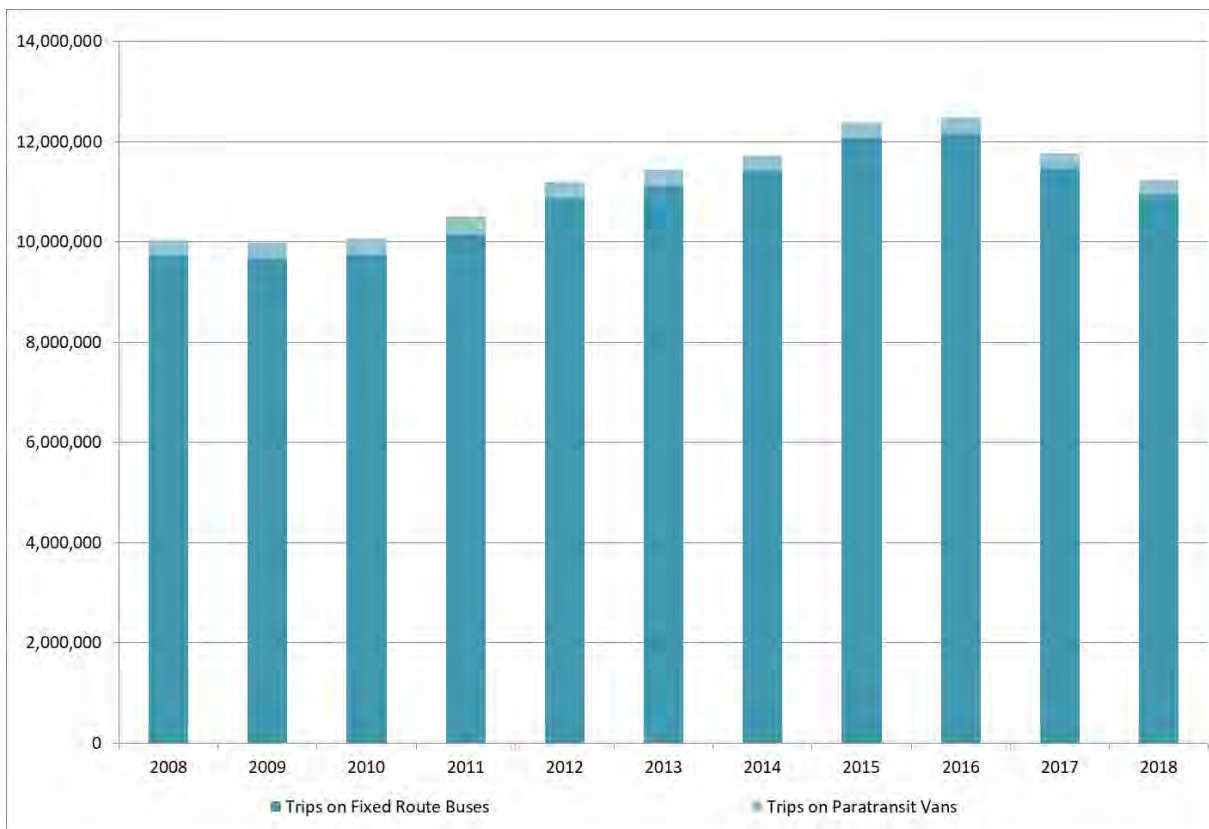
Source: U.S. Census Bureau, 2000 Decennial Census and 2013-17 American Community Survey 5-Year Estimates

Transit Routes

The Pioneer Valley has a well-developed public transit system that includes local bus service, ADA and senior paratransit van service, intercity bus service, and passenger rail. In addition, there are formal and informal park-and-ride lots, as well as ridesharing and car rental services that offer more options for accessing and leveraging transit services. Train service was expanded to Northampton and Holyoke in 2015, and additional passenger rail services and facilities are expected to begin operating in the fall of 2019. These will greatly enhance transit capacity in the region. All of these elements are vital contributors to mobility options for the region’s residents.

The Pioneer Valley Transit Authority (PVTA), established in 1974, is the largest of the Commonwealth’s 14 regional transit authorities. A total of 24 municipalities are members of the PVTA service area. PVTA oversees the operation of 189 buses and 142 vans throughout Hampden and Hampshire Counties, as well as two municipalities in Franklin County. The PVTA system has 42 scheduled bus routes that provide service in urban centers, as well as outlying suburban and rural areas.

Figure 24: Pioneer Valley Transit Authority System Wide Annual Bus and Van Trips 2008-2018



Source: PVTA Annual Reports

Fourteen towns in the PVPC region (which are not members of PVTA) contract with the Franklin Regional Transit Authority (FRTA) based in Greenfield, for senior paratransit service. These towns are: Blandford, Chester, Chesterfield, Cummington, Goshen, Huntington, Middlefield, Montgomery, Plainfield, Russell, Southampton, Southwick, Westhampton, and Worthington.

Intercity bus service in the region is provided by Peter Pan Bus Lines, Greyhound Lines and Megabus. These companies operate a mix of routes to destinations within the region, as well as connections throughout New England and the country. Other private bus carriers provide charters and package tours.

The regional transit system includes the following bus terminals and hubs:

- Springfield Union Station, an intermodal transportation center, is the major bus station in western Massachusetts, serving as the hub for 20 PVTA Springfield-area routes, Peter Pan regional service, and Greyhound regional routes.
- Holyoke Transportation Center is the hub for 8 PVTA routes, as well as limited service by Peter Pan.
- Northampton Bus Terminal is served by Peter Pan and Greyhound, with connections to 10 PVTA and FRTA routes at the nearby Academy of Music stop.
- Amherst, PVTA and Peter Pan service is available at the UMass Haigis Mall and Amherst Town Common. VanGo also operates service from Haigis Mall to Boston during the academic year.

Passenger rail stations for Amtrak service are located at Springfield's Union Station (Lyman Street), Northampton Station (Pleasant Street), and Holyoke Station (Main Street). Amtrak's most frequent service is at Union Station, where 18 trains per day are available to and from Springfield that provide extensive service within the Northeast. Passenger rail service is provided on east-west (Lake Shore Limited) north-south (Vermont) and regional (Northeast Corridor) routes through the region.

The Massachusetts Department of Transportation recently realigned Amtrak Vermont service north of Springfield to restore passenger rail service to the Connecticut River line through Holyoke, Northampton and Greenfield. The success of this service has spurred interest in additional north/south passenger rail service. In the fall of 2019, MassDOT is expected to begin a multi-year pilot service between Springfield and Greenfield.

In addition, the Connecticut Department of Transportation's New Haven-Hartford-Springfield (NHHS) commuter rail project began operating service on November 12, 2018. The new service includes six additional trips per day (3 northbound and 3 southbound) between Springfield and New Haven.

Commercial van shuttles serve an important segment of the region's transit market. Many operators focus on service to and from airports and rail stations in New England. Service to Bradley International is provided hourly from most locations the Pioneer Valley. Service to Boston, Providence, and New York is also provided, though not on a scheduled basis. Non-profit organizations also operate shuttles, typically for their clients. Examples include municipal councils on aging, day care providers and social service agencies.

There are more than 20 taxi companies operating in the region. Taxi companies provide a vital link in the transportation system by offering mobility during times and at locations when public transportation is not available. Ride-sharing services have also become more widespread in the Pioneer Valley in the last several years.

Non-Motorized Transportation

Bicycling and walking are popular transportation options in the Pioneer Valley. Historic town centers, vibrant central business districts and a variety of destination are within easy walking or bicycling distance from many residential areas. An expanding network of bikeways, sidewalks, and accommodating roadways provide residents with a variety of transportation alternatives. Many of the region's city centers offer easily accessibility for pedestrians and are supported by a strong transit network.

To support the increasing number of people who walk and bike, the Pioneer Valley Metropolitan Planning Organization (MPO) adopted a Regional Transportation plan that includes policy-related actions and physical projects that local, state, federal and regional partners can collaborate on to improve conditions for pedestrians and bicyclists. The plan includes recommendations for bicycle and pedestrian features in the design and reconstruction of roadway projects, sets goals for bicycle and pedestrian safety, and promotes bicycling and walking through "Complete Street" initiatives.

The Pioneer Valley land use plan "Valley Vision 4" includes zoning and community development tools to foster environments that support bicycling and walking. The Valley Vision plan (updated in 2013) lays out a detailed strategy to promote bicycling and walking through compact, mixed use growth in and around urban, town, and village centers.

The Pioneer Valley Transit Authority supports a popular "Rack and Roll" bikes-on-buses program to the entire region. All fixed route buses in the PVTA fleet (40 routes/180 buses) are equipped with racks, allowing cyclists to transport their bikes on public service transit lines throughout much of Hampden and Hampshire County. In 2017 the PVTA bike racks were used 62,778 times (excluding UMass shuttle trips).

In 2016 MassDOT launched the Complete Street Funding Program to incentivize municipal best practice in Complete Streets policy and implementation. Thirty-eight (38) communities have participated in MassDOT sponsored Complete Streets training, and 18 communities have actively participated in the Complete Streets Program (as of 2/2019). Through the program our communities have initiated projects to make local streets safer and more inviting for people to walk, run, and bike. These efforts will improve the health of Pioneer Valley residents through improved opportunities to stay active, reducing chronic disease. As of 2019 twelve communities in the region have adopted Complete Streets Policies including: Williamsburg, Amherst, South Hadley, Holyoke, Easthampton, Northampton, Holyoke, West Springfield, Agawam, Springfield, Longmeadow, and Granville.

Locally, many Pioneer Valley communities have followed MassDOT's lead by incorporating "Complete Streets" concepts into the planning and design of local road projects. The City of Springfield adopted a Complete Streets Bicycle and Pedestrian Plan while the City of Holyoke and Towns of South Hadley and Amherst adopted their own bicycle and pedestrian plans.

During the summer of 2018, several municipalities in the Pioneer Valley launched Valley Bike Share, a bicycle sharing program. Five municipalities currently have stations (Holyoke, Springfield, Amherst, South Hadley, and Northampton) and the number is set to increase with Easthampton adding to the system in 2019 and several other communities expressing interest. With over 800 members, the Valley bike share logged 43,000 trips and 185,000 miles in the first season. The bike share opened 2019 season with 54 stations and a goal of 540 bikes.

The region has an ever expanding network of off-road facilities ranging from traditional bike paths to multi-use trails or linear parks. The PVPC assisted local municipalities on the installation of more than 350 bicycle parking racks throughout the region's urban cores with the capacity to secure more than 900 bicycles. The PVPC also produced a series of instructional bike-rack installation videos to assist communities and nonprofit organizations which are available at the PVPC's video hosting site: <http://www.youtube.com/user/PVPCgroup>.

Currently seventeen communities provide over 90 miles of bicycle lanes, multi-use paths or "rail trails" in the region, while several communities have similar projects in the design phase.

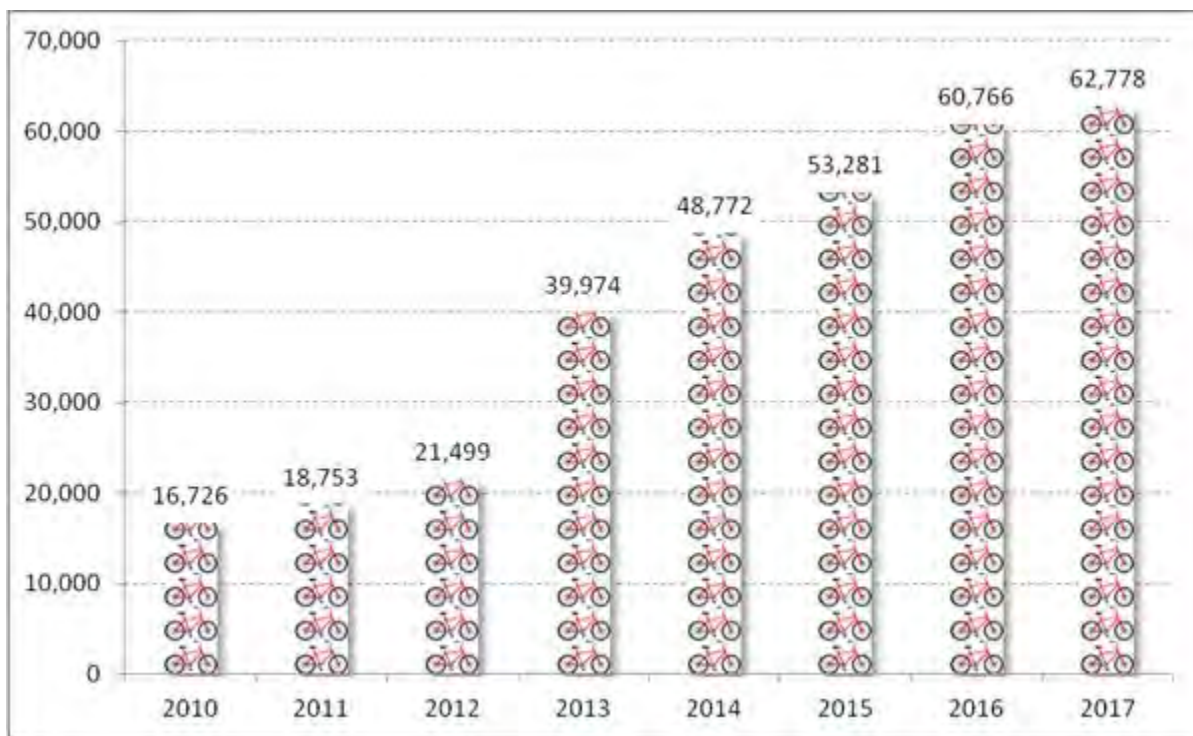
The Pioneer Valley communities are active participants in "Baystate Bike Week" with dozens of activities hosted during the third week of May each year (<http://baystatebikeweek.org/>). 2019 will be the twentieth anniversary of this popular program in the Pioneer Valley.

The Norwottuck Branch of the MassCentral Rail Trail is one example of the region's commitment to bicycling and walking. The ten-mile Norwottuck Trail links the communities of Northampton, Hadley, Amherst, and Belchertown, and facilitates travel to and from educational institutions, downtown commercial areas, major employment centers and residential neighborhoods. Weekend traffic counts show an average of 1,200 people per day utilize the Trail during the peak season which includes when local colleges and the University of Massachusetts, Amherst are in session. The Massachusetts Department of Conservation and Recreation (DCR) and Massachusetts Department of Transportation (MassDOT) reconstructed the original 1992 "Norwottuck Rail Trail" (now part of the MassCentral Rail Trail) in June 2015 after 2 years of construction. The reconstructed path is wider in most places, incorporate a number of accessibility and intersection improvements including re-decked the bridges.

In 2018 construction was completed on a MassDOT tunnel project by Northern Construction Services. The \$4.4 million tunnel under the active north-south Amtrak rail corridor provides significant connection between the MassCentral Rail Trail and the New Haven and Northampton Canal Greenway and the Manhan Rail Trail.

In 2019 the Town of West Springfield opened the newest section of the Connecticut River, addressing a need for visual access to the river while providing improved access to canoe launch.

Eighty-three (83) schools in the Pioneer Valley actively participate in the Massachusetts “Safe Routes to School Programs.” Safe Routes to School (SRTS) promotes healthy alternatives for children and parents in their travel to and from school. The program educates students, parents and community members on the value of walking and bicycling and provides funding for sidewalks, crosswalks, and traffic calming measures. Funding for construction projects is also available through the Safe Routes to School Program. Schools that have participated in this program in the past include the William E. Norris School in Southamptton, Jackson Street School in Northampton, Doering and Robinson Park Schools in Agawam, Blueberry Hill School in Longmeadow, and Bridge Street School in Northampton. The “revised” Safe Routes to School program also includes funding for painting and markings in the “lines and signs” part of the program.



PVTa Bike Rack Usage through 2017

Appendix C: Committed Projects in the Region

Major Committed Projects of Regional Significance

The following regionally significant projects are planned or under way in the Pioneer Valley region in 2019:

Project	Key Implementer(s)	Public or Private?	Total Estimated Cost
North Square at the Mill District, Amherst	Beacon Communities; W.D. Cows	Private	\$47.5 M
Ludlow Mills Clock Tower Building – Mixed Use	Winn Development	Private	\$40 M
One Ferry Street Mill Mixed Use Redevelopment, Easthampton	Michael Michon	Private	\$43 M
31 Elm Street Mixed Use Redevelopment, Springfield	OPAL Development, Winn Development, MGM Springfield	Private	\$56 M
Big Y Foods Distribution Center Expansion, Springfield	Big Y Foods	Private	\$35 M
Cabotville Mills Mixed Use Development, Chicopee	Silverbrick Group	Private	\$45 M
Colvest Group Bank and Retail Development, Holyoke	Colvest Group	Private	\$8 M
Educare Springfield	Davis Foundation; Holyoke-Chicopee-Springfield Head Start	Public/Private	\$14 M
Hotel and Indoor Climbing/Skydiving	Pioneer Valley Hotel Group	Private	\$37 M
J. Polep Expansion, Chicopee	J. Polep	Private	\$8 M
Burnett Road Hotel and Restaurant Complex, Chicopee	Dinesh Patel	Private	\$45 M
Springfield YMCA Housing Renovation	Home City Development	Non-Profit	\$12 M
River Valley Co-op – Easthampton location	River Valley Co-op	Private	TBD

2019 Pioneer Valley Comprehensive Economic Development Strategy (CEDS)

CRRC Warehouse, Springfield	CRRC	Private	\$4 M
Way Finders Headquarters	Way Finders	Public/Private	\$16 M
RiverMills Assisted Living, Chicopee	DS Development	Private	\$25 M
MassMutual, Springfield	Headquarters Improvements	Private	\$50 M
Springfield Innovation Center	DevelopSpringfield; MassDevelopment	Public/ Private	\$7 M
Naismith Memorial Basketball Hall of Fame Renovations	Naismith Memorial Basketball Hall of Fame	Private	\$30 M
Paramount Theater and Massasoit Building, Springfield	New England Farm Workers Council	Public/ Private	\$41 M
Check Writers Corporate Headquarters - former Clarke School	Check Writers Payroll, Inc.	Private	\$4 M
Lyman Mills Redevelopment	Mount Holyoke Development	Private	\$7 M
TOTAL COMMITTED FUNDS			\$574.5+ M

Appendix D: Business Survey Results

2018 Pioneer Valley Business Survey

In the fall of 2018, PVPC distributed a business survey to local businesses and organizations at two major Chamber of Commerce events in Chicopee and Westfield. The survey sought input on the challenges that employers and their workers are currently facing in the Pioneer Valley Region business environment. In total, 49 individuals completed the survey, representing a diverse range of 36 businesses and organizations.

The most critical issue identified by organizations across both communities was the cost of health care for employers and employees. This is not surprising given that most (17/36) of the organizations who participated in the survey were small organizations with less than 25 employees. Other critical issues identified by local organizations included finding qualified high-skill employees, cyber security challenges, and needs for ongoing employee training and skill development.

The least critical issue identified by Pioneer Valley organizations was exporting products and services. Over a third (17/49) of survey respondents work for non-profit organizations, which may in part contribute to this low ranking. Disparaging media coverage of the community/region, available business resources not serving the business, and finding financial/planning/legal business help when needed were also identified as less critical challenges facing local organizations.

Survey respondents showed overwhelming support for efforts to expand east-west and north-south railway connections, with only one respondent expressing that he or she would not support an expansion. Many respondents emphasized their support for an expansion in the “Comments” section of the survey, with one individual noting that the railway must be affordable for commuters. Other comments touch on the hurdles that permitting, licensure, banking, and state employee regulations create for businesses.

Though the findings from the 2018 Business Survey are limited to two communities, they still provide important insight into significant concerns of Pioneer Valley’s businesses and organizations. Complete survey results are below.

Table 1: Name of Business/Organization (# of respondents)

<p>A Plus HVAC Inc. (2) A. Crane Construction LLC Aflac Alan J. Stearly, Money Concepts Armbrook Village Baystate Noble (2) Caolo & Bieniek Architects East Mountain Country Club FitChics Unleashed Forum House Governor's Center (2) HCS Head Start Inc. (3) Liberty Mutual Legal Department Liptak Emergency Water Removal Lisa A. Vachon, CPA Living Hope Church MassHire Springfield Career Center (2) Mercy Adult Day Health of Westfield Mestek, Inc (6) NAI Plotkin Netlogix Optimum Health Therapeutic Massage Peppermill Catering LLC Polish National Credit Union (2) Pop Visa Inc. Project New Hope Inc. River Valley Counseling Center Savage Arms Sunshine Village (2) The Chester Foundation Inc. The Westfield News Group (2) Tru by Hilton United Bank Vivid Hair Salon and Spa WMDT</p>

Table 2: Form of Business/Organization	
Form of Business/Organization	# of Businesses/Organizations
Non-Profit	11
Corporation	10
LLC	5
Sole Proprietorship	4
No Response	3
Other	2

Table 3: Size of Business/Organization	
# of Employees	# of Businesses/Organizations
1-24	17
25-49	4
50-99	2
100+	9
Other	1
No Response	2

Table 4: Located in a downtown/village center?	# of Businesses/Organizations
Yes	16
No	13
Other	6

Table 5: How significant are the following concerns for YOUR business?

Topic	Weighted Average
Health care costs for employer and employees	2.17
Finding qualified high-skill employees	2.12
Cyber security (viruses, hacking, etc.)	1.87
Needs for ongoing employee training and skill development	1.81
Cost of natural gas, propane, gasoline, diesel, fuel oil	1.79
Transportation access and conditions, including roads, rail, and/or transit	1.78
Uncertainty over economic conditions	1.75
Staying up to date with computer technology and software	1.74
Reducing energy cost in a cost-effective manner	1.73
Mandatory paid family and/or sick leave	1.72
Finding low-skill/entry-level employees with good "soft skills"	1.67
Electricity cost (rates)	1.67
Government requirements (please note what specifically)	1.67
Access to high-speed internet	1.65
Ease of marketing your business products/services	1.48
Demand for business product or service has decreased over time	1.38
Environmental regulations	1.36
Want to expand but no suitable space available	1.33
Want to grow business but too many obstacles and don't know where to go for help	1.33
Finding business help when needed (financial, planning, legal)	1.33
Available business resources don't serve me or my business (why?)	1.32
Disparaging media coverage of community/region	1.27
Exporting products/services	1.09

Table 6: Do you support our region's ongoing efforts to expand passenger rail connections north-south with New York City and to establish an east-west rail link with Boston?

	# of Responses
Yes	37
No	1
No Opinion	6

<p align="center">Table 7: Please provide any specifics or other comments below:</p>
<p>The Gateway Hilltowns need more promotion (and are working on a marketing campaign - "Gateway Hilltowns - Naturally"), particularly beyond the Hilltowns. There is an unfair and uninformed view of the Hilltowns from too many east of our boundaries. We welcome ideas, promotion, and assistance. PVPC has been a great partner to the Hilltowns and Chester (my town) and we are sincerely appreciative. We just need to get "the word" out more about our spectacular area. Thank you!! Oh, and we NEED East-West rail service! Access to a train that runs between Boston and Pittsfield - with a stop in Chester - will open up the hilltowns to more business, more residents, more awareness. We welcome and encourage any support and assistance in this area. Thank you.</p>
<p>Increase in minimum wage - this will be a crisis for state funded non-profits as well as other low-wage/minimum wage employers as well as seniors. It will impact the safety net provided to all citizens throughout Western MA.; Paid Family Medical Leave Act (this will be a workforce issue as well as a huge financial issue for the state and the business community); EMAC</p>
<p>One respondent entered multiple checks for "yes" in the "expanding passenger rail" question</p>
<p>Ongoing building code issues/changes; Constant permitting hurdles</p>
<p>(regarding government requirements) Licensure regulations creating additional increased expenses/cost of staffing, operations and physical plant.</p>
<p>(regarding rail connections) Must be affordable for commuters.</p>
<p>Tough banking regulation that affect small financial institutions. These regulation came about from what the too big to fail financial institutions and their ways of conducting business.</p>
<p>(regarding expanding passenger rail) "I think it will be great having ridden the train from Northampton + I wish it went more often!</p>
<p>(regarding the "governmental requirements" question) state employee laws</p>
<p>I think Insurance Commissioner needs to look at not allowing some insurance products to be sold 65 years old. Example some working wants Aflac accident policy is 65 years old can pay it. How many people are working in mid 60's, CT allows to age 75. Mandatory sick time is bad for business and if employees use it, could be penalized. Mandated on disability, I have a lot of examples. Aflac has 10 months for childbirth, someone starts work June 1, Starts disability July 1 and has baby on Feb 22, Aflac will not pay. Now does the employee need to pay? Rail concerned about the cost for east west rail.</p>
<p>Problem - transportation clients</p>
<p>Changes to MassHealth/DMH funding Lack of public transportation for members in Hill towns and after business hours</p>
<p>I would like to know how I can get my catering business presence in local Westfield businesses. I know for a fact most of our local businesses are using Holyoke Caterers. Westfield should support Westfield.</p>

Table 9: Business/Organization Type	
Business/Organization Type	# of Businesses/Organizations
Social Services	6
Financial Services/Insurance	4
Nursing Home/Assisted Living	3
Manufacturing	2
Utilities	2
Bank	2
Health/Wellness	2
Construction/Architecture	2
Hospital	1
News/Media	1
Real Estate	1
Country Club	1
Legal Services	1
Hair Salon	1
Food Services/Catering	1
Computer Support/Services	1
Transportation	1
Hotel	1
Charity Organization	1
Church	1

Appendix E: Economic Resilience Planning

Disaster Resilience: Business and Economic Development Issues in the Pioneer Valley

The business community has a unique set of needs in disaster response, recovery and resiliency. It has been reported that 40% of businesses never reopen after a disaster, and of those who do open, at least 25% fail within two years (U.S. Department of Labor). The business community and those who serve them often experience gaps in disaster response coordination because many of the existing emergency preparedness and response procedures and resources are primarily aimed at residents, municipalities and large institutions. Issues include the need for emergency funds, relocation assistance, and technical assistance to adapt business models to changing conditions. There may be language and/or cultural barriers for many small businesses, and frequently in these cases, they may be underinsured.

The Pioneer Valley region experienced three significant natural disasters in 2011: a tornado that destroyed a half-mile wide swath primarily in Hampden County; Tropical Storm Irene that caused flood damage throughout the region particularly in the agricultural sector; and the “October Snowstorm,” a severe winter storm that occurred while foliage was still on the trees. In response to these weather events, the Federal Emergency Management Association (FEMA) announced major disaster declarations for the communities which comprise Hampden and Hampshire Counties.

Many businesses needed months and years to recover from effects of these events, which included a tornado, tropical storm, and severe snowstorm. Impacts of these events for businesses included damage to buildings and equipment, loss of data or paper records, loss of inventory, loss of employees (temporarily or permanently), and interruption of business for days or weeks (or longer). In many cases, insurance is inadequate to fully cover losses and/or the company did not have business interruption insurance. Ultimately, the event may result in business failure due to inadequate capital, impacts to the supply chain, loss of customers and entire markets, competition, or overwhelming levels of debt incurred in the effort to start up again.

For planning purposes, the most likely natural disaster events in the Pioneer Valley region as identified in the *Pioneer Valley Regional Natural Hazard Mitigation Plan* include hurricanes, dam failure, flooding, and severe winter storms. Other potential disasters include tornados, drought, wildfires, and earthquakes. The region has also experienced smaller scale but devastating events such as building fires, gas explosions, building collapses, and micro-bursts. Regarding these smaller occurrences, most recently there was a large gas explosion in downtown Springfield, a fire affecting 12 businesses in Hadley, and a building collapse affecting numerous businesses in Holyoke. It is also possible that the region could experience acts of terrorism, or chemical, biological, radiological, or nuclear disasters.

In many of these cases, the needs and concerns of businesses are quite similar. This section of the CEDS assesses the systems in place to assist private industry with disaster response and recovery from the federal to the local level. Regardless of the event, what systems and procedures are in place that are automatically activated?

Existing Disaster Recovery Framework

Summary

The existing system is the result of a series of disaster recovery laws and policies, beginning with the Disaster Relief Act in 1950 and most recently with the National Disaster Recovery Framework established in 2011 by Presidential Policy Directive (PPD-8: National Preparedness). The new Framework provides a continuum of support from the federal to the state and local level, and is particularly oriented toward incidents that are large-scale or catastrophic.²

Six new “recovery support functions” include housing, infrastructure, economic recovery, health and social services, community planning and capacity building, and natural and cultural resources. Each of these utilize existing governmental agencies and partners to coordinate response efforts. Most relevant to business and economic development needs, the federal government has now designated the Department of Commerce as the lead agency for Economic Development Support, a suggestion made in the past by IEDC and NADO³.

This section gives a brief overview of the main components of the system, including federal, state, regional and local entities that are involved in assisting the business community.

Federal Disaster Recovery Framework: Economic Recovery Support Function

U.S. Department of Commerce - Economic Development Administration (EDA) and Small Business Administration (SBA)

The Department of Commerce oversees numerous pre- and post-disaster recovery initiatives in coordination with other federal agencies; those that are discussed here pertain to direct business assistance and involvement. These federal response efforts are intended to provide technical assistance, data, and seed funding to businesses after a disaster event in order to facilitate private re-investment.

The U.S. Economic Development Administration (EDA) is the coordinating agency on behalf of the Department of Commerce for economic recovery from a disaster. The EDA and a diverse group of partner agencies, including the Small Business Administration, assist affected communities primarily through technical assistance and funding that leverages existing resources. Immediately following a disaster, EDA staff is deployed to affected areas, working with Economic Development Districts and other local and regional economic development practitioners, to collect on-the-ground information and assess needs. When funding is available, it may be used for strategic planning and technical assistance, disaster recovery coordinators, infrastructure design/engineering and construction, and revolving loan funds. All of these may involve business assistance.

² Federal Emergency Management Agency (FEMA), U.S. Department of Homeland Security. *National Disaster Recovery Framework: Strengthening Disaster Recovery for the Nation*. September 2011.

³ International Economic Development Council (IEDC) and National Association of Development Organizations (NADO), *An Improved Federal Response to Post-Disaster Economic Recovery: Final Report*. January 2010, p. 9.

The U.S. Small Business Administration (SBA) partners with local organizations including SCORE, the SBDCs (Small Business Development Centers) and local chambers of commerce, to conduct local outreach after a disaster occur and provides direct assistance to businesses through its Disaster Loan Program. For businesses, loans are available for physical damage and/or economic injury, with low interest rates and very long repayment periods (up to 30 years). The SBA Office of Disaster Assistance is able to expand capacity as needed to meet small to large-scale disasters, utilizing its network of district offices and additional staff as needed.⁴

Federal Emergency Management Agency (FEMA)

FEMA's role is separate from most business-related concerns. However, businesses are required to register with FEMA first following certain types of presidentially declared disasters, so that an accurate assessment of damages can be made. They are then asked to register and apply separately to SBA for loans. In other disasters, they may either not be eligible for SBA loans or may be able to apply to SBA without going to FEMA first. Thus, the role of FEMA vs. the SBA is confusing to most businesses, and they find it to be cumbersome to deal with both agencies.

Massachusetts State Agencies and Organizations

Executive Office of Housing and Economic Development (EOHED)

The EOHED is the state agency that addresses business needs, including disaster response and recovery. The Division of Community Development within the EOHED administers Community Development Block Grants (CDBG) and CDBG-DR or Disaster Recovery grants (see below), and the Office of Business Development has regional staff that is available to assist in times of disaster. The EOHED Secretary or staff conducts outreach to sites affected by major disasters, assesses needs, and coordinates response, including setting up and participating in Disaster Recovery Centers. After the 2011 disasters, a conference call protocol was set in place, originally initiated by the Massachusetts Office of Travel and Tourism (MOTT). The call connects the state agencies including EOHED, MOTT, and MassDOT with Regional Tourism Council (RTC) Directors, Chamber of Commerce Directors, and others throughout the affected regions. State officials seek information and reports about what is happening in each region, generally daily for a few days, then periodically as needed.

Executive Office of Energy and Environmental Affairs (EOEEA)

The EOEEA has established a Climate Change Clearinghouse for the Commonwealth, called resilientMA, providing extensive information and resources for all communities and regions. The EOEEA has also initiated a Municipal Vulnerability Preparedness program for all communities in the Commonwealth, and the PVPC is assisting many Pioneer Valley region communities to become certified.

⁴ U.S. Small Business Administration. *Disaster Recovery Plan*. July 31, 2010.

Massachusetts Office of Business Development (MOBD)

Under the Office of Housing and Economic Development, the regional office of the MOBD represents the state when needed. Regional staff are available to assist at Disaster Recovery Centers and conducting outreach to affected businesses.

Massachusetts Department of Housing and Community Development (DHCD)

CDBG-DR funds come from the U.S. Housing and Urban Development through the state DHCD, generally well after the disaster event is over. These funds can be used for business recovery and economic development. In order to obtain these funds, each community must apply to the state with project proposals; therefore the intent to use funds for businesses must come directly from the municipality.

Massachusetts Emergency Management Agency (MEMA)

The Massachusetts Emergency Management Agency (MEMA) is the state agency responsible for coordinating federal, state, local, voluntary and private resources during emergencies and disasters. Among other responsibilities, MEMA provides leadership to “assist individuals, families, businesses and communities to mitigate against, prepare for and respond to and recover from emergencies, both natural and manmade.” Massachusetts communities are required to prepare emergency management plans and submit to the Massachusetts Emergency Management Agency (MEMA). The Electronic Comprehensive Emergency Management Plans, or e-CEMPs, are web-based programs that allow Emergency Management Directors in each community to develop preparedness plans. Communities are also required to prepare Pre-Disaster Hazard Mitigation Plans and submit to MEMA and FEMA in order to be eligible for hazard mitigation funding. Emergency Management Directors in each community communicate directly with MEMA during a crisis. Their information is collected and displayed in MEMA’s Emergency Operations Centers (EOCs). For western MA events, the EOC is in Agawam.

Associated Industries of Massachusetts (AIM)

AIM is a statewide employer association with regional offices. After disaster events such as the tornado and Tropical Storm Irene, AIM helps employers navigate human resources concerns such as how to notify employees, pay requirements under disaster conditions, and special provisions for various scenarios. AIM also posts blogs on their website and social media sites with updates and information when there is no electrical power.

Regional and Local Entities

The Western Region Homeland Security Advisory Council (WRHSAC)

WRHSAC is a volunteer Council charged by the Massachusetts Executive Office of Public Safety and Security to administer and coordinate the State Homeland Security Grant for the four counties of Western Massachusetts: Berkshire, Franklin, Hampshire and Hampden. Funded activities are regional in scope and build and enhance capabilities that enable the region to prevent, protect against, mitigate,

respond to, and recover from the threats and hazards that pose the greatest risks. The project is coordinated by the Franklin Regional Council of Governments (FRCOG) as fiscal agent.

The members represent the first responder disciplines as identified by the Department of Homeland Security but does not include economic development agencies or business leaders. WRHSAC operates its own website plus www.westernmassready.org (READY stands for Rapid Emergency Action Depends on You), a website devoted to helping residents and businesses prepare for and deal with an emergency or disaster. The BusinessREADY section of the website provides basic guidelines for businesses. In 2008, WRHSAC prepared and distributed a brochure called "Getting Back to Business: Establishing a Disaster Preparedness Continuity of Operations Plan." The brochure includes basic guidelines for preparedness and recovery as well as links to additional resources. It is available online at <http://westernmassready.org/business-ready/make-a-plan/>.

The Franklin Regional Council of Governments (FRCOG)

The FRCOG serves as fiduciary agent to the Western Regional Homeland Security Advisory Council (WRHSAC) and also conducts extensive Emergency Preparedness planning for the region under contract with WRHSAC. FRCOG has also assisted with the promotion of business continuity planning, development of brochures, and outreach to the business community. After Tropical Storm Irene, FRCOG also helped coordinate Business Continuity Workshops.

Community Development Corporations (CDCs)

Several CDCs serve the Pioneer Valley region: the Franklin County CDC, Valley CDC, and Hilltown CDC. A non-profit organization formed to assist homeowners after the 2011 tornado in Springfield has been certified as a new community development corporation, Revitalize CDC. In addition to homeowner assistance, they have added a small business technical assistance program targeting the underserved Latino community in the city. The CDCs provide technical assistance and have a small staff available to assist after a disaster, particularly in coordinating with chambers and other service providers.

Massachusetts Small Business Development Center (MSBDC)

The western office of the MSBDC is located in Springfield. The MSBDC provides business advisory services on an appointment basis and is generally not involved in disaster recovery efforts, given that one of its sponsors, the SBA, plays that role. Funding for this office comes through the state and the University of Massachusetts and is matched 2:1 by the SBA.

SCORE

SCORE is a national organization of volunteer business advisors, affiliated with the SBA. Its western Massachusetts chapter has six locations. In several cases in the Pioneer Valley, SCORE advisors were invited to help work with businesses after a disaster.

Chambers of Commerce

Chambers of Commerce have no official or prescribed role in disaster preparedness or recovery. However, in recent years, many chambers have been forced by circumstances to address catastrophic events in their regions. Some chambers in particularly disaster-prone areas have developed special programming and resources to help their members and other businesses to be more disaster resilient.

Chamber directors can reach their members easily; however, many businesses do not belong to the chamber and will be left out of communication and assistance efforts. Chambers can also disseminate information from affected business to potential clients and customers. For example, when the Deerfield Inn was flooded in Tropical Storm Irene, the Greater Springfield Convention and Visitors Bureau posted information that they were temporarily closed. In some cases, businesses will help each other if they already know one another; according to chamber directors, the hospitality industry is fairly well-connected and will work out various arrangements among themselves.

Municipal Officials

Municipalities are responsible for coordinating activities within their jurisdiction and are required by the state to prepare Comprehensive Emergency Management Plans (CEMPs). The guidelines for plan preparation include provisions for assistance to businesses, but only as a relatively limited section of the plans. Each community has a local Emergency Management Director (EMD) and Local Emergency Planning Committee (LEPC) or is a member of a Regional Emergency Planning Committees (REPC). REPCs and LEPCs are established in each community under federal Environmental Protection Agency (EPA) regulations meant to control hazardous materials. They must complete emergency plans that are consistent with other emergency preparedness efforts of the community.

Each community is different and has different needs after a disaster, particularly in this region of the state, where municipal populations range from 500 to over 150,000. Smaller towns may have a fire or police chief who is also the town's emergency management director, and do not have planning, community development, or economic development staff to assist businesses after a disaster. The region's cities, on the other hand, have emergency preparedness officials as well as additional staff that can be deployed to help conduct outreach after a disaster.

Best Practices

The following are brief summaries of some of the best practices that have been utilized in this region and others. Additional recommendations are provided in the Final Recommendations section.

Communication with Business Community

The best and most efficient means of communicating with most businesses is through the local business association and/or chamber of commerce. In Buckland, MA, the Emergency Management Plan now specifies that municipal officials will communicate directly with the Shelburne Falls Area Business Association in times of disaster or crisis. For non-member businesses, the most efficient means of communicating is via municipal officials, including the Chief Elected Official and the Emergency

Management Director. This is much easier if a database of businesses has been compiled prior to a disaster event occurring. Ideally, every municipality would have an easily accessible database of all businesses within their borders. “Robocall” systems are also helpful for this, but businesses need to be signed up in the community the business is in.

On Cape Cod, the regional chamber of commerce serves the entire county; in other areas, if the largest regional chambers are able to extend and expand their reach temporarily and work with other chambers, this collaboration and communication can be a lifeline for those in less populated areas.

Door to door outreach conducted in Springfield after the tornado and in Vermont after the flooding was extremely helpful to businesses in terms of knowing possible avenues for support. In particular, the ability of staff to speak Spanish was critical for some Latino business owners.

In Joplin, Missouri, which is significantly smaller than Springfield but larger than most Pioneer Valley communities, a Joint Information Committee included not only municipal officials and the business community but also schools, hospitals, non-profits and housing agencies. Even small communities could convene as many of these groups as possible.

Social media was also used to excellent effect in Monson following the tornado, as well as in Joplin and Cape Cod.

Emergency Loans or Grants

Because SBA loans take time to process and are not available to all, and building funds from a hospitality sales tax takes even longer, even modest emergency loan funds created by the community can be critical to helping businesses in the short run. In the 2011 disasters, the Amherst Area Chamber and CISA were instrumental in raising and distributing funds to businesses who desperately needed them. Ideally, such funds would be available from state agencies on an as-needed basis.

Designated Technical Assistance

If communities are able to obtain funding from EDA or other sources for a staff person to conduct outreach and technical assistance specifically to disaster victims (as did Dover and Wilmington VT), that can be a significant help in the medium to long-term, as businesses rebuild, relocate and re-evaluate their market.

Other

Other strategies include:

- When businesses register with the town clerk, give them emergency contact and resource information.
- Use Reverse 911 or Code Red system –if your business is in the town but you live elsewhere, you need to be sure to sign up.

- Chambers must contact BOS and EMDs to insist on inclusion.
- Chambers should also contact EMDs during the event to be sure that they are receiving accurate and up-to-date information.
- Chambers should use social media, including Facebook and Twitter, to post messages about the storm or event and updates that affect businesses.
- Emergency preparedness information can be included on chamber and municipal websites.
- Educate EMDs in each community.
- Use robocalls to contact businesses.
- Think through statewide calls more; what are the expectations? Who should be on the calls?
- Clarify roles of FEMA and SBA after disaster.

Recommendations

Many of the reports and analyses done addressing the needs of businesses in disaster response and recovery have been very comprehensive and resulted in numerous recommendations for change. In some cases, there are dozens of individual steps to be taken. This may be a further obstacle to improvement, as change is too overwhelming. Therefore, here **only three recommendations are made** for each level of government or business-related entity. The primary one in each case is to build relationships, which are ultimately what all parties will rely upon in disaster scenarios.

TOP THREE recommendations for businesses:

- 1) Build relationships in advance. Strengthen your networks and establish relationships with someone who can help if disaster strikes.
- 2) Make a simple plan for the worst case scenario – even a “back-of-the-envelope” plan. Think it through.
- 3) Seek technical assistance after a disaster even if it feels like there isn’t time. You’ll need to re-evaluate your business plan, including market area, supply chain and customer base.

TOP THREE recommendations for chambers, business service providers and local economic development staff:

- 1) Be aware of potential disaster recovery needs and know that you may be called upon to help. Know that businesses will need a variety of technical assistance and support after an adverse event.
- 2) Build relationships! Discuss and address business continuity planning with your members and clients. Understand that they will most likely not take extensive business continuity planning on

their own and ask them pertinent questions to begin the process of thinking through key preparedness actions. For chambers and providers, build and maintain relationships with local officials.

- 3) Work with other providers on a regular basis and particularly in times of crisis, and consider the possibility of starting a community-supported emergency loan fund after a disaster event.

TOP THREE recommendations for municipalities

- 1) Take opportunities to have conversations with municipal emergency response staff, local and regional chambers of commerce, and state-level staff at the Executive Office of Housing and Economic Development (EOHED), including the Massachusetts Office of Business Development (MOBD) about disaster recovery issues.
- 2) Establish a database of businesses in your community, perhaps as part of the process of granting permits and licenses.
- 3) Provide pertinent local disaster preparedness information (contacts, procedures, etc.) to businesses, possibly at your city or town hall when they apply for business permits.

TOP THREE recommendations for state and federal government agencies:

- 1) Evaluate and streamline FEMA and SBA process at Disaster Recovery Centers established onsite after a disaster has occurred.
- 2) Re-evaluate “unmet” need criteria and eligibility requirements for CDBG-DR business recovery funding. Strive to make the funding available more quickly to greater numbers of affected businesses.
- 3) Incorporate this subject into economic development seminars, conferences, etc., as part of business resilience so that government officials, economic development practitioners, and business providers can be more prepared.

Implementation Projects

1) Chambers of Commerce: Education and Outreach

The Fall 2011 *Chamber Executive* article, “After the Headlines: Chamber Execs Lead Disaster Recovery Work,” is extremely useful and relevant and has been an excellent resource for chamber leaders. It provides numerous examples of chambers of commerce dealing with natural disasters in their communities, such as in Joplin, Missouri, and summarizes specific actions and approaches that can be taken.

2) Municipal Emergency Planning and Preparedness

The PVPC has strengthened the emphasis on incorporating businesses and economic development issues into Hazard Mitigation plans and E-CEMPs prepared for the region’s communities, because of the

fundamental disconnect on the local level between the business community and emergency planners/public safety personnel. During the Hazard Mitigation planning efforts, local governments and emergency planners are encouraged by PVPC staff to begin to think about including local business representatives more directly in their process and to ultimately develop more of a working relationship with the business community.

3) Plan for Progress Coordinating Council

The Coordinating Council oversees the Five-Year CEDS and its annual updates. Economic resilience is incorporated throughout the CEDS and specifically in certain goals and strategies. Coordinating Council meetings address implementation projects in the region and have included resilience issues such as extending broadband access, development of clean energy and clean energy storage capacity, workforce training for local industries including health care and IT, and local emergency and disaster preparedness.

4) Collaboration: Community Organizations Active in Disasters (COAD)

A Pioneer Valley COAD organization was developed after the 2011 disasters. A COAD is an affiliation of organizations that assist residents after a disaster, such as the Red Cross, Salvation Army, Food Bank, etc. Chambers of commerce could help coordinate those needs and also be kept better informed in the process. In our region, many residents have small home businesses and after a major storm or disaster, their business needs are integrally linked with their needs as residents.

5) NADO Lessons from the Storm Case Studies on Economic Recovery and Resilience

NADO included the Pioneer Valley Region in a series of case studies on this topic. Entitled “Southwestern Massachusetts: Strengthening Businesses and Communities through Disaster Recovery,” the report documents efforts made in the region following the 2011 tornado, tropical storm and severe snowstorm. PVPC staff assisted with information and writing for the report, which can be found at <http://www.nado.org/southwestern-massachusetts-strengthening-businesses-and-communities-through-disaster-recovery-2/>

