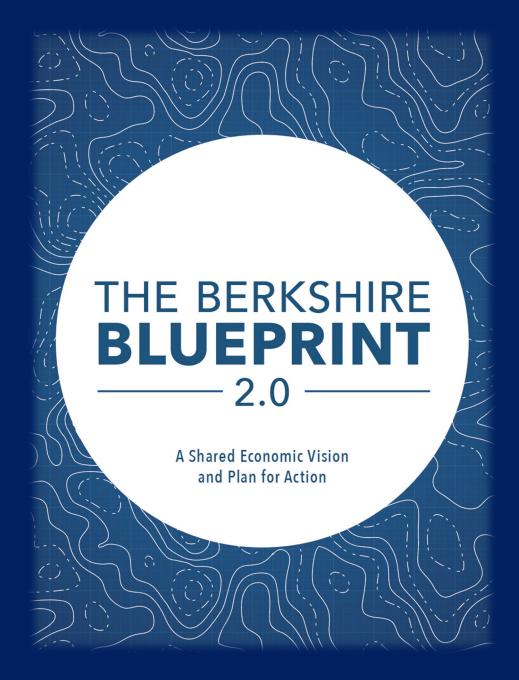
FULL REPORT



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1BERKSHIRE

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FOREWORD

Looking back to 2016, the Berkshires were in the midst of a several major conversations that all needed attention. The region was seeing growth in certain areas and stagnancy in others, and a major employer had recently announced their plans to transition out of town. Across all business sectors, there were concerns around the issues of population loss, workforce, transportation, and broadband, among others. Concurrently, we were experiencing investment in many of our downtowns and expansion within many of our economic clusters. We had both challenges to address and opportunities to capitalize on.

Regional leadership wrestled over where to focus attention for the greatest impact, knowing that despite our proven ability to collaborate, squandering critical resources will not be an option.

In that moment, facing many questions and having such a diverse array of perspectives involved, the solution was crystal clear. We needed to get more strategic. We needed a new regional Blueprint.

The Berkshire Blueprint 2.0 process launched in early 2017. Taking nearly a year to ensure we were doing it correctly, we established a framework, recruited a team of consultants, and launched into a discovery process that extensively examined recent studies and commissioned new research. In 2018, the process became very interactive, with over 100 interviews conducted, multiple focus groups organized, and the guidance of a large and diverse advisory committee that helped shape the content and bring to life our new regional agenda.

Blueprint 2.0 aspires to strategically focus our efforts on key areas of potential to strengthen multiple business clusters, while also incorporating significant alignment around cross-cutting issues like workforce and talent development, entrepreneurship, and transportation that impact the quality of life for all residents of the Berkshires. Blueprint 2.0 comprises action items intended to align regional energy and resources with a call to action for the next decade.

This process, and resulting work, is not intended to act as another research document that finds the shelf after a cursory review. The release of Blueprint 2.0 is instead the launch point of an initiative with structure and oversight, accountable to itself and its collaborators. The plan itself is the product of two years of work, but is designed to live and evolve as new ideas, energy, and solutions are injected into the process.

Berkshire Blueprint 2.0 belongs to the Berkshires, and we hope that you will approach this initiative with as open a mind as we did while acting as conveners of the process. It has been an honor to work in a collaborative manner with so many talented individuals and partner organizations throughout this process, but the reality is that our work is only beginning. Please join us in working through the Berkshire Blueprint 2.0 and its process as we push our region to reach its greatest potential in the coming decade.

Jonathan Butler President & CEO 1Berkshire

Tyler Fairbank Chairman

The Berkshire Blueprint 2.0

VISION

The following is a vision to guide the implementation of the Berkshire Blueprint and the growth and prosperity of the region.

- 1. Berkshire County's principal economic clusters (Advanced Manufacturing and Engineering Services, Healthcare, the Creative Economy, Food and Agriculture, and Hospitality and Tourism) will continue to grow and enhance their competitiveness.
- 2. A clear group of leaders will oversee the deployment of cluster-based growth activities, advocate for the growth of the clusters, and create clear lines of authority and responsibility for the work that is undertaken to support the clusters.
- 3. The economic and entrepreneurial development system will coordinate and align, be strong and effective, and will focus principally, but not exclusively, on the targeted clusters.
- 4. The talent development system will be innovative and in sync with the skill and employment needs of the businesses in the clusters.
- 5. The residents and leaders of the region will have a mind-set that "we're all in this together" as the county works for a bright economic future.
- 6. Organizational and programmatic resources will be devoted to several important issues that impact the economy and the standard of living of residents who live in the county:
 - a. A transportation system that keeps pace with a growing, re-structured Berkshire economy and resident base.
 - b. Population that grows and new residents who are attracted to the county, especially a younger generation.
 - c. Working and immigrant families gain financial and economic security.
 - d. Broadband access is strong and prevalent across the county.



PROJECT OVERVIEW AND METHODOLOGY

The consulting team for the Berkshire Blueprint started its work in the early fall of 2017 in a "discovery" phase (Phase I). This involved a review of reports, studies, and strategic plans that were completed over the last five to seven years (see bibliography in the appendix). The discovery phase identified key assets, challenges and opportunities in the Berkshire economy, and identified gaps in existing research. Findings from the discovery phase include:

- Many of the intractable challenges to the Berkshire economy (e.g., population, transportation, workforce, household income, etc.) were well documented.
- Several of the county's key economic clusters had been analyzed, but the analysis was dated and not comprehensive, and did not include all five of the clusters that are the focus of the Blueprint 2019.
- Scores of strategies were identified to help the county's economy and address many of the most difficult economic and workforce challenges, but it was not clear what strategies were being implemented or which organizations had primary responsibility for their implementation.

With this context, the consulting team and the client, 1Berkshire, decided to focus Phase 2 of the Berkshire Blueprint, which ran from March 2018 to July 2018, on several key areas:

- 1. An intensive analysis of the county's five key economic clusters.
- 2. A review of the economic development system i.e., economic, workforce, business and entrepreneurial development programs and organizations.
- 3. A review of cross-cutting issues that are critical to the long-term viability of the county's economy e.g. transportation, wages and financial stability for residents, broadband access, and population.

Once the focus of Phase 2 was clear, the consulting team undertook the following efforts:

- Worked with a broad-based Advisory Committee of key stakeholders and organizations in the county that met three times to review the consulting team's work, provided feedback on our analysis, and helped develop ideas and strategies to grow the Berkshire economy.
- Reviewed and analyzed economic, demographic, and workforce data from federal, state and regional sources.
- Analyzed the structure and performance of each of the economic clusters in the county.
- Analyzed the economic and entrepreneurial development system and the talent development system.
- Completed interviews with more than 100 individuals from varied disciplines in the county primary, secondary, and higher education, business, workforce, social and human services, finance, and government.
- Conducted focus groups with CEOs, senior managers, and workers in each of the five clusters.
- Attended meetings of many of the organizations that function in the economic and entrepreneurial
 development and talent development systems, such as for the Impact Council of Berkshire County
 Leaders, Economic Prosperity Impact Council (EPIC), MassHire Berkshire Workforce Skills Cabinet,
 Berkshire Comprehensive Economic Development Strategy (CEDS) Committee, and Berkshire Taconic
 Community Foundation's Capital Flow Analysis project.

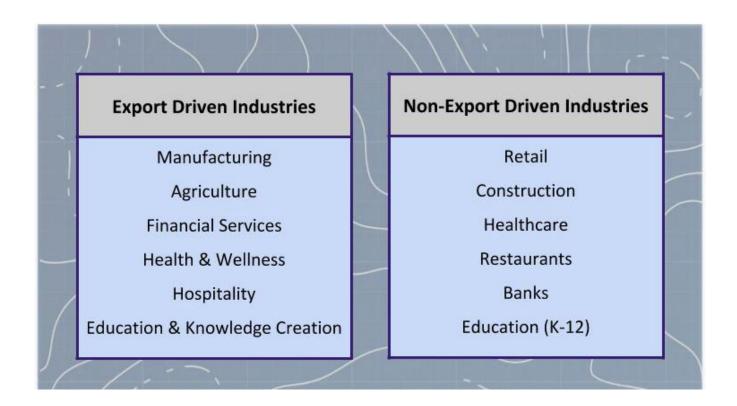
FRAMEWORK FOR ECONOMIC DEVELOPMENT

Regional economies have two fundamental components: **Economic Clusters** that include export-driven companies and enterprises (e.g. Advanced Manufacturing, Food and Agriculture, the Creative Economy, some parts of Healthcare, etc.), and non-export driven companies and enterprises (e.g. retail, finance, public education, etc.); and the **Economic Development Support System** that provides resources to help companies and enterprises to grow. (See graphics below).

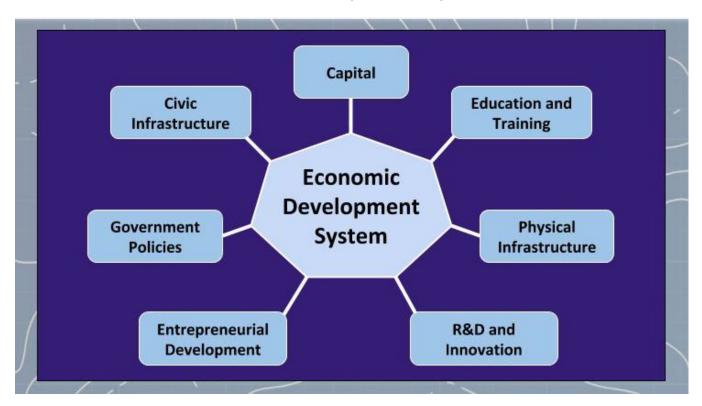
Economic development researchers and practitioners view the companies and enterprises in the export-driven clusters as the engines of the economy. Companies in export-driven industry clusters sell products and services outside of a local economy. They bring income and revenue into an economy, create well-paying jobs, and help bring about a quality standard of living for local residents. The revenue generated by these export-driven companies and enterprises also makes it possible for non-export driven companies to flourish and thrive.

In this context, economic development is the process of aligning a region's economic development support system with the competitive needs and opportunities of companies and enterprises in the export-driven clusters. When the process works effectively, the economic development support system helps companies and enterprises remove barriers to growth, provides resources for innovation, helps companies expand markets, makes capital available, and educates and trains existing and new employees.

This is not to say that the economic development support system shouldn't be responsive to the needs of companies and enterprises in non-export driven clusters. The economic development support system should be responsive to the needs of companies and enterprises whether they are export-based or not, but the priority should be on the growth and expansion of those in the export-driven clusters.



Economic Development Ecosystem



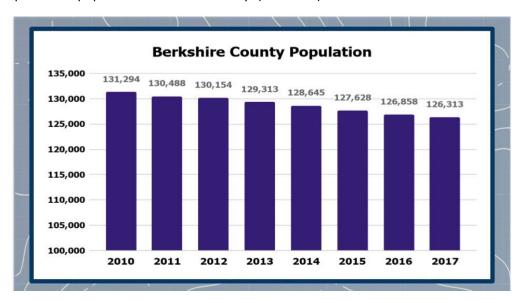
The Berkshire Narrative

The Berkshire economy is in the midst of a transition, from a job base, labor market and civic infrastructure that was long dominated by General Electric and legacy industries like paper, to newer growing industries, economic innovation, and start-up companies. These changes are helping the Berkshires move from long-held perceptions and realities of struggle and challenge to a new narrative of growth and opportunity. In this section, we highlight current trends in population and the labor market and describe the new narrative emerging in the Berkshires.

Population and Labor Market Trends: Existing Realities

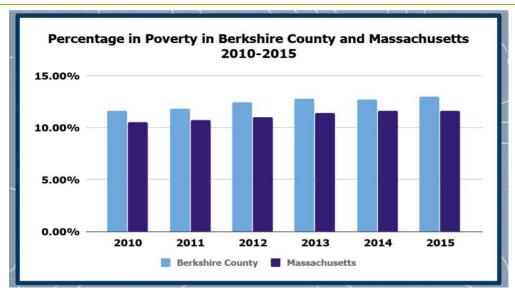
Berkshire County is still dealing with the effects of the economic restructuring that started two decades ago, and from the fallout of the national recession from 2007-2009. Challenges remain in the county, as shown by some of the trends in the county's population and labor market:

• Since 2010, population in the Berkshires has declined by 4,980 people, or -3.8 percent. This is part of a longer pattern of population loss in the county. (See chart)



Source: Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2017. US Census Bureau, 2018.

- The county continues to be predominantly white, although Latinx and immigrant populations are on the rise.
 - White, non-Latinx make up 89 percent of the county population.
 - The percentage of Latinx has increased from 2.8 percent to 4.2 percent over the last decade (2007 to 2017), a net increase of 1,625 residents. There were an estimated 5,300 Latinx individuals in the county in 2017.
 - Foreign-born individuals in the region are estimated at 6 percent of the total population, or 7,600 individuals, up from 4.5 percent of the population in 2010. Many civic leaders in the county say that the true number of foreign-born residents is much higher.
- In 2016, about 13 percent of county residents were in poverty, or an estimated 16,000 people. This is up from roughly 11 percent of county residents in poverty in 2010. (See chart).



- Median household income in the county is an estimated \$50,000. There are 24,115 households in the county (or 63.1 percent of all households) that have incomes less than \$75,000.¹ The leaders of the Economic Prosperity Impact Council (EPIC) set an aspirational goal of the Berkshire median household income reaching the statewide average, approximately \$75,000 according to the 2016 American Community Survey.
- The same data produced for EPIC shows that 867 Hispanic households (or 74 percent of all Hispanic households) and 763 Black households (87 percent) have incomes less than \$75,000.
- An estimated 42 percent of the county population has attained a college degree in 2016, up from 38 percent in 2010. A college degree is defined as an associate degree or higher. College degree attainment in the county lags the statewide average of 46 percent. Data provided for EPIC shows that there are significant disparities in educational attainment by race across the county.
- Roughly 63.5 percent of the population is in the labor force. These are residents who are either employed or actively looking for work.
- Roughly 2,800 county residents are unemployed. Another 2,100 residents are so-called "discouraged workers" who have dropped out of the labor force, and 27,000 residents work either part-time or seasonally.²
- Though many residents work within Berkshire County, a net 2,000 residents regularly travel outside
 the county for work. Boston, Springfield, and Worcester, respectively, are the most frequent
 destinations for residents who work outside the county.³

¹ Data collected for EPIC from the US Census American Community Survey 2011-2015. Multiple people and wage earners can live in one household.

² Massachusetts Executive Office of Labor and Workforce Development (EOLWD) and US Census ACS 5-year estimates.

³ Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics, 2012-2015.

A New Narrative: An Economy of Growth and Opportunity

At the same time, there are clear signs that a shift is taking place in the Berkshire County economy. After many years of either sluggish growth or even decline, the economy is showing significant signs of activity, growth, and new economic opportunity. This new narrative of growth and opportunity is borne out in three areas of progress:

1. Strong and Growing Clusters

Employment in the county's five most important economic clusters has grown between 2010 and 2017, and new growth-oriented initiatives and developments are happening within those clusters.

2. Significant Investments

Financial investments in the county in the last three to four years approach \$1 billion. The investments have been in the purchase and construction of new facilities, upgrading in production equipment, and market-rate and affordable housing. This shows a serious level of confidence in the Berkshire economy by businesses, individual investors, non-profit organizations, state of Massachusetts, and cities and towns.

3. Signature Programs and Initiatives

Numerous programs and initiatives are making a strong contribution to the shift that's occurring in the Berkshire economy. Many organizations in workforce, economic and business development, higher education, social and human services, and planning entities are paving the way for growth and innovation through their efforts.

1. Strong and Growing Clusters

Companies and employers are continuing to add jobs, make strategic investments, and develop new programs and initiatives. The following chart highlights job growth and prospects for the five economic clusters that are the engine of the Berkshire economy. (See definitions and sources in the appendix.)

Economic Performance of	(Ç)	<u>Gw</u>		(3)	
Berkshire Industry Clusters	Advanced Manufacturing and Engineering Services	Creative Economy	Food and Agriculture	Healthcare	Hospitality and Tourism
Gross Regional Product	\$917,000,000	\$398,000,000	\$416,000,000	\$702,000,000	\$394,000,000
Total Jobs (including self-employed)	6,450	5,450	8,947	11,417	6,329
Job Growth 2010-2017 (Berkshire County)	3.1%	9.5%	4.0%	3.0%	6.3%
Job Growth 2010-2017 (Massachusetts)	3.4%	18.1%	16.1%	14.6%	11.7%
Job Growth 2010-2017 (United States)	8.8%	14.2%	16.2%	14.2%	8.7%
Industry Concentration	0.98	1.62	0.92	1.50	1.29
Average Wage & Salary	\$72,477	\$30,249	\$22,184	\$52,877	\$27,735
Jobs Multiplier	4.8	1.6	1.7	1.7	1.4

2. Significant Investments in the Berkshire Economy

The Berkshire Regional Planning Commission (BRPC) has compiled a list of publicly-reported investments that have been made in Berkshire County over the last several years. The consulting team worked with the staff at BRPC to cull a sampling of current or recent investments from the several that impact the Berkshire economy. The consulting team believes that these investments by individuals, companies, institutions and government are critical to the long-term viability of and make a profound statement on investor confidence in the Berkshire economy. Since 2013, there has been more than \$1 billion of investments made in the Berkshire economy.

Following are the investments that have been made between 2013 and 2018 in four categories, totaling \$1,156,662,500:

Creative Economy, Hospitality, and Tourism			
Investment Name	Amount	Completed	Description
Elm Court Travaasa, Lenox	\$50,000,000	2019 (projected)	Renovation of historic Elm Court house and construction of new 112-room hotel.
Miraval Cranwell Expansion, Lenox	\$80,000,000	2019 (projected)	Renovation of historic mansion and expansion of resort facilities.
Tanglewood Expansion, Lenox	\$40,000,000	2019 (projected)	Construction of year-round facility with lecture, rehearsal, performance spaces, and a cafe.
Williams Inn, Williamstown	\$48,600,000	2019 (projected)	New construction to replace existing inn to have 64 rooms, restaurant, and event center.
Courtyard by Marriott, Lenox	\$11,285,000	2017	Construction of 92-room hotel.
MASS MoCA Expansion, North Adams	\$65,400,000	2017	Doubling of gallery space through redevelopment of former factory complex.
Clark Art Institute Campus Redevelopment, Williamstown	\$170,000,000	2016	Renovation and construction of new gallery, maintenance, office, classroom, and event spaces.
Hotel on North, Pittsfield	\$15,000,000	2015	Renovation of downtown Pittsfield building into boutique hotel and restaurant.

Housing			
Investment Name	Amount	Completed	Description
47 Railroad , Great Barrington	\$7,500,000	2018	Redevelopment of downtown Great Barrington buildings into 13 high-end rental housing units.
Lenox Schoolhouse Apartments, Lenox	\$9,900,000	2018	Redevelopment of historic Lenox Schoolhouse into 38 affordable housing units.
Power House Lofts, Pittsfield	\$2,200,000	2018	Redevelopment of historic church into 10 market-rate apartments.
Berkshire Peak Apartments, Pittsfield	\$16,500,000	2017	Renovation of 120-unit affordable housing complex.
Canyon Ranch Residences, Lenox	\$22,000,000	2017	Construction of 19-unit luxury condominium expansion.
Cable Mills, Williamstown	\$26,000,000	2016	Redevelopment of former mill into 61 housing units, including 16 affordable units
Highland Woods Senior Housing, Williamstown	\$11,000,000	2016	Redevelopment of mobile park home destroyed by Tropical Storm Irene into a 40-unit affordable housing.
Onota Building Redevelopment, Pittsfield	\$9,000,000	2016	Redevelopment of historic Onota Building in downtown Pittsfield to 25 market-rate rental units.
Central Annex/Union Court, Pittsfield	\$16,800,000	2015	Combined redevelopment of historic downtown school and hotel into 103 affordable housing units.

Manufacturing and Research & Development			
Investment Name	Amount	Completed	Description
TOG Manufacturing Expansion, North Adams	\$5,400,000	2019 (projected)	Addition of new manufacturing space on existing building.
Berkshire Innovation Center, Pittsfield	\$13,750,000	2019 (projected)	Construction of workforce training and research center.
Interprint Expansion and New Machinery, Pittsfield	\$12,200,000	2019 (projected)	Construction of new space to accommodate \$10m rotogravure printing press.
LTI Smart Glass Expansion and New Machinery, Pittsfield	\$2,540,000	2019 (projected)	Expansion of current campus and purchase of a glass tempering oven.
Shire City Herbals Expansion, Pittsfield	\$987,500	2018	Renovation and conversion of former warehouse into industrial kitchen.
Iredale Mineral Cosmetics Headquarters, Great Barrington	\$4,800,000	2016	Redevelopment of historic Bryant Middle School into administrative and manufacturing base for firm.
Berkshire Sterile Manufacturing, Lee	\$9,000,000	2015	Renovation of former Lee Corporate Center and purchasing of machinery.

Education			
Investment Name	Amount	Completed	Description
Williams College Science Center, Williamstown	\$202,000,000	2021 (projected)	Updating and expansion of science center facilities.
Berkshire Community College Campus Development, Pittsfield	\$36,500,000	2018	Renovation of main academic buildings, installation of new turf field, upgrading of facilities buildings, and expansion of roadways and parking.
Mount Greylock High School, Williamstown	\$64,800,000	2018	Construction of new high school and related infrastructure.
Taconic High School, Pittsfield	\$119,200,000	2018	Construction of academic and vocational high school with modern classrooms, shops, labs, and other technical training facilities.
Williams College Center for Development Economics, Williamstown	\$29,300,000	2016	Renovation of historic building and construction of new facility to house development economics program.
MCLA Bowman Hall Renovation, North Adams	\$15,000,000	2015	Renovation of main classroom building on campus.
MCLA Center for Science and Innovation, North Adams	\$40,000,000	2013	Construction of new science center with modern labs and technical training facilities.

Source: Berkshire Regional Planning Commission, July 2018

3. Signature Programs and Initiatives

There are a number of compelling programmatic developments and initiatives that are ongoing in the Berkshires. Each effort is helping to drive the economy to higher level of performance, adding a significant asset to the county, and supporting the new narrative for growth and opportunity. A sample of these signature programmatic developments and initiatives, focused on industry clusters, jobs and skill development, economic development capacity, transportation, and county anchor Institutions, includes:

Industry Clusters

- Approximately \$13 million has been secured for construction of the new Berkshire Innovation Center (BIC) in Pittsfield. Funding was provided by the state, the city, and private investors. Construction began in September of 2018. BIC will be a 21,000 square-foot building that will house the latest production technology and equipment and will be the centerpiece for innovation in manufacturing and other sectors in the Berkshire economy. Training programs are currently underway at Berkshire Community College with \$1M of equipment. Additionally, a recent speaker series organized by the BIC leadership brought in experts in the field to talk about innovation and technology issues.
- The Berkshire Taconic Community Foundation, through the Barr Foundation, has made a \$500,000 investment in the **Creative Commonwealth Initiative**. This is a multi-year, multi-dimensional undertaking to build a strong relationship between the county's residents and the cultural and creative assets within the county. This Initiative involves research, grant-making, new partnerships, and a focus on arts education. The latter is a joint effort between the Foundation and MCLA Creative Compact for

Collective Impact (- C4). The goal is to give students in the county's K-12 public schools the opportunity to take full advantage of the county's cultural assets. It is currently underway and will be completed in December of 2019.

Jobs and Skill Development

- The **Economic Prosperity Impact Council** is a county-wide, community-led coalition convened by the Berkshire United Way to build pathways to sustainable incomes for Berkshire residents. The coalition is advancing a number of initiatives in talent development. This is an effort with businesses to test new hiring practices, retain, and build pathways for a younger, more diverse workforce in the Berkshires. Another effort examines the multiple layers of credentialing and training programs in the county, with an eye toward maximizing programs that are effective in achieving outcomes and identifying gaps in the region's skill development landscape. A third related effort involves a grant from the MassHire Berkshire Workforce Board (formerly the Berkshire County Regional Employment Board) that matches under- or unemployed workers with job openings among county businesses.
- 1Berkshire's county-wide 'the jobs thing' portal enables Berkshire businesses to post job openings and recruit workers for jobs that are full time, permanent, and pay \$40,000 or more per year. The portal is being promoted locally, but will also market opportunities to an external audience, as a potential tool to draw new talent to the area. In addition, the portal links job postings to information on regional resources, cost of living calculators, and promotional videos generated by current #LiveBRK and #InTheBerkshires campaigns. This will serve as an employment tool for businesses and workers as well as a lifestyle navigation opportunity for both locals and potential new residents.
- Construction of a new 246,000 square-foot Taconic High School, a \$120M building with state-of-the-art labs, classrooms, and facilities has positioned Taconic as a focal point for educating and training a new generation of students and future workers. Construction of the new Mount Greylock Regional High School, a \$53M, 132,800 square-foot building offers similar benefits to northern Berkshire County.

Economic Development Capacity

- The North Adams Partnership has positioned itself as a core resource for economic and community development in North Adams. The board and staff played a key role in GreylockWORKS, the TOURISTS Welcome hotel, Extreme Model Railroad and Contemporary Architecture Museum, and several downtown projects. This 'red carpet' approach to business development is helping build a solid economic base in the city and northern Berkshire County.
- The **Berkshire Regional Planning Commission** has launched a Shared Economic Development Planner program through which municipalities in Berkshire County can access economic development expertise and technical assistance specific to their needs. Participating towns have focused on increasing efficiency, marketing and communications, grant writing, and development of planning documents.
- The Berkshire Regional Planning Commission is also preparing an application to the Federal Economic
 Development Administration for Economic Development District designation for Berkshire County. If the
 designation is approved by the EDA, it will make the county eligible for a broad range of economic
 development funding, and this could significantly enhance the county's capacity to strengthen its
 economy.
- Lever created the Arts Enterprise Challenge, which awarded \$25,000, four months of business support, and office space to the Challenge's winner to help him develop and launch his business. Lever has subsequently created additional challenges focused on health sciences and advanced manufacturing, which will help accelerate new start-ups in the county.

Transportation

- Senator Adam Hinds is spearheading an effort that will explore development of a Transportation Management Association (TMA) for Berkshire County. Currently, there are 14 operating TMAs in the state, each one structured differently. However, all of them involve employers, developers, residents and municipalities in the development of the TMA to ensure that the system meets the needs of the key stakeholders. The planning process will launch in early 2019 with the support of a \$35,000 grant from the DOT. If properly developed, a Berkshire TMA could have a profound and positive effect on the economy.
- The Berkshire Flyer is a planned seasonal weekend train route in partnership with Amtrak that will transport passengers directly from Penn Station in New York City to Pittsfield, arriving on Friday nights in Pittsfield and returning to New York on Sunday. This visitor-centric train route plans to offer a new method for individuals to leave New York City and come to the Berkshires. Phase 1 of this study was conducted by MassDOT and concluded that a service was viable and that the state would be a willing partner to support a pilot. Currently, the phase 2 initiative is being co-chaired by Berkshire Regional Planning Commission and 1Berkshire. The Berkshire Flyer will begin service in the Spring/Summer of 2020. This entire process was spearheaded by the Berkshire Delegation and supported through the FY18 and FY19 state budgets.

Anchor Institutions

- Williams College is making investments of more than \$205 million to renovate and expand its Science Center facilities, including a new 178,000 square-foot science building. This investment will bring new opportunities to develop collaborations between the college, its students and faculty, and the Berkshire economy. Moreover, the Williams College Center for Learning in Action has experts that can work with county leaders to leverage investments and build stronger, permanent links between county economic priorities and student internships, student research projects, and faculty research. For example, there are opportunities for college faculty with expertise in entrepreneurship and business development, as well as for student research projects, to help the BIC build new business ideas and help advance concepts into viable market opportunities.
- Massachusetts College of Liberal Arts (MCLA) has had a very strong presence in downtown North Adams and plays an important role in northern Berkshires and overall Berkshire County economy. For example, Gallery 51, the Arts Management Program, the Design Lab, and the Berkshire Hills Internship Program are all signature initiatives that have a deep and broad impact. The new Electrical Engineering concentration, a new Communications major in the Education Department, a re-configuration of the Business undergraduate and graduate programs, as well as the on-going work of the Innovation and Entrepreneurship Challenge, will enhance the college's position with employers and the economy.
- Berkshire Community College is in the process of developing a new 11,000-square-foot South County Center. The core component of the Center is a learning kitchen, and related facilities, that will be a resource for food producers, farmers, restaurants and food entrepreneurs. The Center will position itself as a catalyst for strengthening the food and agriculture industry, helping companies and entrepreneurs expand their production capability and markets, and for training the next generation of food industry workers. The training program will be particularly strong, with certificate and credentialing classes and courses, as well as professional and entrepreneurial development progress. Berkshire Agricultural Ventures, Berkshire Grown, Bard College at Simon's Rock, and the Southern Berkshire Chamber of Commerce are some of the partners with the new Center.

RECOMMENDATIONS

Our research shows, as is well-documented in this report, that there are still challenges that confront the Berkshire economy. Despite these challenges, there is a new narrative forming around economic growth and opportunity in the county. This narrative is based on the realities of meaningful growth occurring in the county's key clusters, the more than \$1 billion of investments made in the foundations and infrastructure of the economy in the last several years, and the constellation of programmatic developments and initiatives that are helping propel the Berkshire economy forward. It is in this context that the consulting team offers six areas of recommendation to further strengthen the economy and provide greater economic opportunity for county residents.

Recommendation #1: Develop a Set of System Operating Principles

Context

The original 2007 Berkshire Blueprint identified several key economic clusters as central to a competitive regional economy. The original Blueprint also outlined a number of strategies to strengthen the economic clusters, and many of those strategies were acted upon by leaders and stakeholders throughout the county. In part, signs that these efforts had impact and laid the foundation for today's 2019 Berkshire Blueprint and the new narrative of growth and opportunity are these:

- Employment growth has occurred in each of the five clusters targeted in this report. This has occurred despite the financial recession of 2007-2009.
- Financial investments exceeding a billion dollars have been made by public and private sectors.
- Companies have adopted new technologies and business innovations that have led to expansions in their markets and product lines.
- Organizations within the county's economic development system have developed new tools and strategies to deliver services.
- The workforce system has been focusing more resources and attention on the employment needs of businesses in key clusters.

Despite these accomplishments and successes, challenges remain. As is true elsewhere, there are still pockets of poverty in the county. There is a significant gap between the skills base in the county and the need companies have for skilled workers, household income hasn't kept pace with other parts of the state, and population growth is not what county leaders want it to be. Within the economic development system, there remain several challenges to overcome, such as:

- Although there is a very respected and diverse leadership base in the county, there is no cohort focused
 on growing and strengthening the clusters, the economic engines of the Berkshire economy.
- Of the scores of strategies contained in the numerous reports reviewed by the consulting team, some
 are directed toward the clusters; many are not, and it's not clear how effectively or to what degree
 these strategies are being carried out.
- A number of economic and workforce development organizations are carrying out exemplary work, and some of them are clearly focused on the clusters. However, lines of responsibility in the work of some of these organizations are blurred, with no coherent, agreed-upon set of roles and responsibilities to strengthen the clusters.

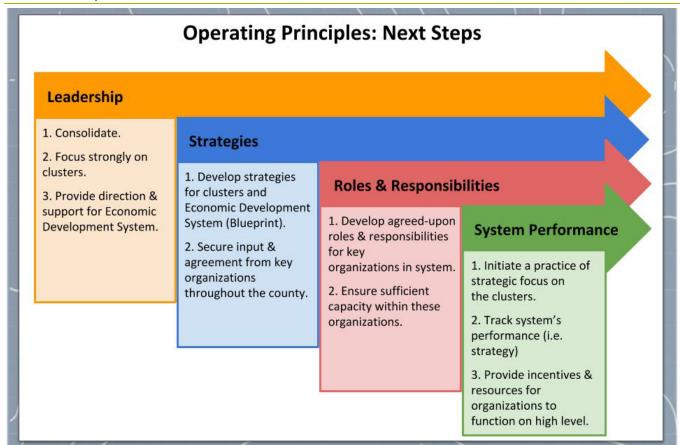
 Many organizations in the economic development system have metrics and performance measures to assess their impact. However, there are no system performance measures to determine how the economic development system is helping grow the clusters.



Action Steps

In this context, we recommend that leaders in the business and economic development system adopt a set of guiding principles and decisions to build effective leadership and capacity to drive Blueprint deployment in the years ahead.⁴

⁴ The principles identified here reflect the principles that regional economic development organizations and systems throughout the country use to inform their economic development work.



1. Create a Unified and Effective Leadership Team

There should be a leadership cohort, from the business and economic development system, that is charged with overseeing the work of strengthening the clusters and making sure others in the county and system are moving in the right direction together and making progress.

2. Adopt a Clear Set of Strategies Directed at Strengthening the Clusters

There should be a commonly agreed-upon set of strategies that are focused on the clusters and supported by the economic development system. The Blueprint report has strategies for strengthening each of the five clusters.

3. Establish a Set of Defined Roles and Responsibilities for Organizations in the System

Developing clear lines of roles and responsibilities will make a profound difference in the delivery of cluster support services and programs. Further, making sure that there is sufficient staff and organizational capacity for the organizations that are playing a role in the economic development system would help the system function in a highly-effective manner. The organizations that do perform at a high level should be supported in ways that enhance their capacity even further. Those that have difficulty performing at an effective level should be given an opportunity to make improvements.

4. Initiate a Culture of Systems Performance

Under the guidance and support of the leadership team/cohort, put in place a process for assessing and tracking the system's performance in growing and strengthening the clusters and the Berkshire economy.

Recommendation #2: Grow and Strengthen Clusters

Overview of Industry Clusters

An industry or economic cluster is a group of interdependent companies, organizations, and institutions in a geographic region with common or complementary interests that have reached sufficient scale to develop specialized expertise, services, resources, suppliers, and labor. A cluster operates as an informal system, with its core firms reaching external markets with its products and services. Sales to external markets by these companies bring net new income to the region through local employee wages, taxes paid, and capital investments made. Critical to growth and vibrancy of an industry cluster is a strong local buyer-supplier value chain and local infrastructure, as well as assets and policies that support business growth and give businesses competitive advantages. Examples of well-known industry clusters are information technology in Silicon Valley, Life Sciences in Boston, Film and Media in Los Angeles, Creative Enterprises in Santa Fe, and Food and Agriculture in Vermont.

Successful clusters grow over time, most often driven by entrepreneurship and innovation, and are strengthened from the support and technical services of an effective economic, workforce, and business development system. They are built on a foundation of business and social relationships among companies and with local institutions, particularly educational and financial.

A cluster approach to economic development benefits and strengthens the core businesses in the cluster through:

- 1. **Achieving economies of scale** as businesses associate and cooperate to identify common cluster needs and leverage opportunities to develop new products, pursue new markets, and share non-proprietary information and technologies.
- 2. **Boosting innovation**, both intentional and unintentional, formal and informal ("knowledge spillovers"), that lead to new technologies or enhanced techniques.
- 3. **Stimulating entrepreneurship** whereby opportunities are more transparent, role models more visible, and opportunities to supply, compete, or complement become more available.
- 4. **Improving employment opportunities** whereby clustered firms tend to attract and compete for similar talent, pipelines develop between schools and businesses, and community- and school-based "grapevines" quickly circulate information about job openings, career opportunities, and workplace conditions, which leads to higher incomes and career advancement.

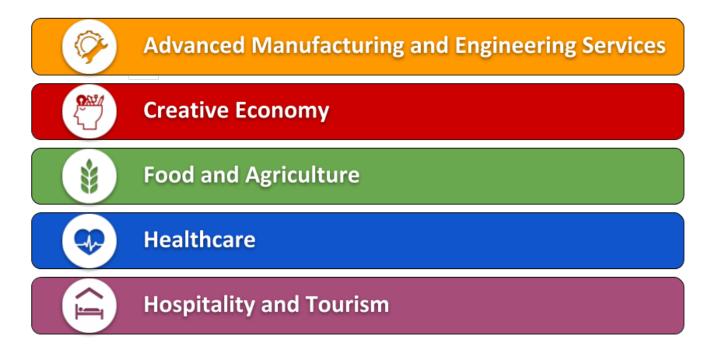
The Berkshire economy benefits from a number of businesses that have clustered or are beginning to emerge as industry clusters. Early in the Blueprint process a small group of civic and economic development leaders, guided by the consulting team's use of economic data and experience with cluster development, prioritized key industry clusters for further research and strategic planning. Clusters were prioritized by the following criteria:

- Economic and employment impact
- Potential for sustainability
- Innovative capacity
- Recognized niche
- Local leadership

⁵ National Governors Association.



Using these factors and advice from the consulting team, a team of Berkshire leaders selected five clusters to focus on:



It is important to note that the focus on these five clusters does not preclude focusing on new, emerging clusters or other cluster-related activity in the region, such as educational services, outsourced business operations, outdoor recreation, and segments of existing clusters like cannabis production and distribution.

A. Advanced Manufacturing and Engineering Services

Definition and Structure



Advanced manufacturing and engineering services use innovative technology, high-precision equipment, and engineering methods to improve products or processes. In the Berkshires, key growing segments range from production engineering systems to advanced materials, defense armaments, and medical and life sciences. Other legacy segments within the cluster include paper and plastics. As a cluster of companies, advanced manufacturing and engineering services develop products or provide services to original equipment manufacturers (OEMs), or they manufacture their own product line for the business or consumer market. The companies in the industry cluster are part of regional and national supply chains, and they stimulate the local economy through investments in equipment, facilities, taxes, and spending by their workers.

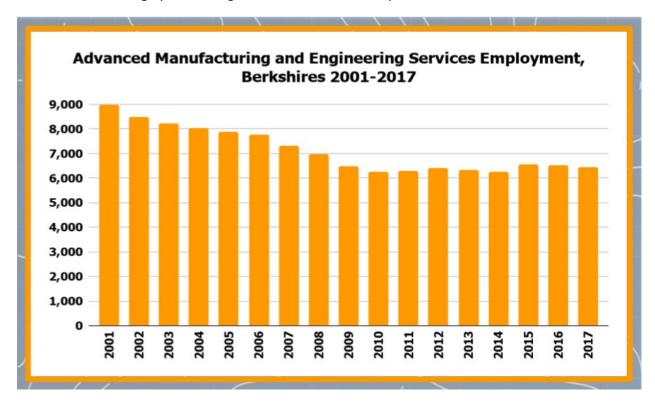
	Examples of Advanced Manufacturing and Engineering Services Segments				
	Segment	Status	Sample Companies		
	Production Engineering Services	Largest of the segments almost solely due to the presence of General Dynamics; in large growth mode.	General Dynamics		
	Advanced Materials	Transition from legacy paper companies to new innovative products linked to chemicals and advanced materials; in more incremental growth mode.	Onyx Specialty Papers Crane Neenah Technical Materials Interprint MRA Laboratories Iredale Mineral Cosmetics		
	Defense Armaments	Segment that delivers products for commercial and government-related security applications; moderate growth.	Lenco Armored Vehicles LTI Smart Glass Protech Armored Systems		
	Medical and Life Sciences	Younger companies ranged from 30 to 75 employees; newer growth area for the county.	Berkshire Sterile Manufacturing Boyd Technologies Oraceutical Berkshire Corporation		
	Plastics	Overall decline in the last 20 years; includes many smaller mold-making, die-making, precision-machining and other plastics-related shops part of the legacy of General Electric plastics supply chain.	Apex Resource Technologies Cavallero Plastics Sinicon Plastics Sonoco Plastics Amaray Moldmaster Engineering		
,	Other	Variety of other companies that are key businesses in the segment.	Unistress Excelsior Integrated Intertek PTL New Dalton Group Cord Master Engineering		



Cluster Activity, Assets, and Opportunities

Employment Growth

After a long period of decline starting in the 2000s, the Berkshires' Advanced Manufacturing and Engineering Services industry is growing. Since 2010, jobs in the industry grew by 3.3 percent, from 6,257 jobs in 2010 to 6,450 in 2017. This is roughly the same growth rate for the industry in Massachusetts as a whole.



High value Added to the Economy

The industry produces a gross regional product of \$917,000,000 – the highest of any single industry in the county. These are wages earned by workers, taxes paid by the companies, and real estate and capital reinvestments that go into the Berkshire economy from the industry. Moreover, Advanced Manufacturing and Engineering Services has a job multiplier of 4.8, also the highest job multiplier in the county among all industries. This means that for every job added in Advanced Manufacturing and Engineering Services, almost five jobs are created in other industries in the economy.

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⁶ Healthcare produces the second highest gross regional product of \$702,000,000 in the county.

⁷ A multiplier is a way of measuring how important one industry is to other industries in the region. In this case, the jobs multiplier indicates how important an industry is in regional job creation. Industries with a high sales-to-labor ratio typically have a high jobs multiplier.

Market Growth and Innovation in Core Firms

Many of the core firms in the main segments of the industry—production engineering systems to advanced materials, defense armaments, and medical and life sciences—are adding new products and growing their markets, principally through technological innovation. For example, a company like Onyx Papers, once a legacy paper company, now produces high-end advanced materials. With these innovations, started a decade or more ago, Onyx have become one of the world's largest suppliers of transmission paper. For their part, companies like

Berkshire Sterile Manufacturing and Boyd Technologies rely on core competencies of product development, material sourcing, and manufacturing know-how to compete in life sciences. Each company is a part of the life sciences supply chain that stretches from Boston to Albany.

General Dynamics Grew in 16 of Last 17 Years

General Dynamics' Pittsfield site is part of the larger holding company's Mission Systems business with 1,400 employees, the company's largest Mission Systems facility across the country. The division has grown 16 of the last 17 years at the Pittsfield facility, from 400 employees in 1990's to 1,400 in 2018.

Skills and Wages

Today's high-value manufacturing worker is a combination of production technician (machining, welding, fabrication technologies) and engineer (process improvement, quality assurance, design) which together improve the processes in the organization and products that go to market. This hybrid of technical skills yields competitive wages – an average wage of \$72,477 in the industry.

Investments in Training

Berkshire Community College, McCann Technical High School and Taconic High School form the backbone of workforce development activities for the industry. Berkshire Community College and the Berkshire Innovation Center recently acquired \$1M in equipment to train students and workers on coordinated measuring machines (CMM) and 3D printing machines. Both McCann and Taconic have robust co-op programs in partnership with the industry as well as business advisory groups. And in January 2018, the Massachusetts College of Liberal Arts Department of Computer Science began offering a new concentration in electrical engineering—a first for the college.

A Local Supply Chain

Most of the larger original equipment manufacturers (OEMs) rely on supply chains outside of the Berkshires. Some of the larger companies showed interest in building a strong and local supply chain that would meet their needs for products and services.

Industry-Led Best Practices Dialogue

A UMass Donahue Institute report in 2013 said that manufacturing firms within the county operate somewhat in isolation from each other. That appears still to be the case. Firms interviewed for the Berkshire Blueprint expressed interest in more robust opportunities to share best practice strategies and solutions that would enhance their operations and help them attract and keep skilled workers. Several firms in the county, for example, have introduced cutting-edge worker retention practices and they would welcome the chance to hear from other firms who have introduced their own innovations.

The Berkshire Innovation Center

Businesses say that the Berkshire Innovation Center has the potential to be a vital component in the support system of the industry, not only for new technologies and innovation but also as a hub for skill development and attraction of new workers from within and outside the county. Construction began in September of 2018, with a projected completion date in the fall of 2019. The center's programming committee has held several seminars with innovation and industry experts, conducted training classes on advanced technology and equipment at

Berkshire Blueprint 2019

BCC, and is considering holding a business competition for new start-ups in advanced manufacturing and life sciences.



Challenges

Systems for Attracting and Keeping Talent

Businesses in the industry strongly desire better or more effective recruiting techniques for workers of all types, especially young professionals. Manufacturing still has a difficult time attracting people because of an outdated image of the industry's decline and work structures—even though the wages, skills and kind of work that go on in manufacturing are radically different from what it was 10-20 years ago. Moreover, given the demographics of the region and competition from other occupations and professions, it is hard to recruit students into manufacturing programs.

Skills Shortages

Businesses in Advanced Manufacturing and Engineering Services report that they have large gaps in finding quality workers—from shift work to engineers. In addition to specific technical skills, there appears to be a range of common skills development competencies like problem-solving, design thinking, product development, and innovation skills that all firms need. These skills are harder to build training programs around.

The Demise of Berkshire Applied Technology Council (BATC)

The BATC served a key networking function for the industry in the Berkshires. Its demise is generally seen as a lost opportunity to work together on common industry issues.

Industry Advisory Groups

There is concern over multiple touchpoints with education and businesses. One leader from a manufacturing company said, "We go to four different business advisory groups; the system is not rational – there has to be a better way."

High Energy Costs

Firms producing products with high energy needs cite the high cost of energy as a competitive disadvantage to doing business in the Berkshires. Although the costs are high in many places in the northeast, they are somewhat higher in the Berkshires, which makes it especially difficult for Berkshire producers with tight margins to compete in the marketplace.

Innovation among Smaller Manufacturers

One of General Electric's legacies is a network of small and medium enterprises (SMEs) in the plastics industry. There are production job shops to larger prime manufacturers. These smaller supplier-type firms are highly dependent on and respond to OEM-demands for lower prices, process changes, and high levels of skills in their workforce. These requirements often inhibit SME-led investments and innovation, but some say that the key to survival for these smaller job shops in the Berkshires is innovation, new market exploration, and integration of cutting-edge engineering processes and skills.



Action Steps

1. Position the Berkshire Innovation Center as a Leader for Innovation in Advanced Manufacturing and Engineering Services

We recommend two areas of focus to support the current direction of leadership, development and programming of the BIC:

- The BIC has already started programs and technical assistance focused on innovation among small, supplier manufacturers in a rural context. This will only be enhanced now that there is full-time leadership in place.
- There should be a recruitment effort to get firms involved in a meaningful way in the BIC. This is not an
 issue of raising money to "buy" the participation of firms, rather it is encouraging joint ownership and
 operations of BIC programs by local manufacturing firms. This could be done by making BIC a valuable
 extension of existing companies and encouraging them to take responsibility for the success of the BIC's
 efforts.

2. Develop a Strong Local Supply Chain and Generate Spin-Offs

There are two parts to this recommendation, both focused on generating more manufacturing revenue and activity in the county by tapping underdeveloped opportunities.

- Economic development leaders should identify opportunities to plug holes in the local supply chain among the county's largest firms in Advanced Manufacturing and Engineering Services. 1Berkshire has already started a rough mapping of the supply chain and should be used as a starting point.
- The second part to this recommendation is to work with General Dynamics and other large OEMs in the region, including those located in the Pioneer Valley and New York Capital Region, to identify products that could be built and taken to market. In large part, existing partnerships between Lever and the BIC already are well positioned and have begun supporting, building out, and implementing this recommendation. The Proof-of-Concept room in the new BIC is a perfect place for new firms to test their products and bring them to scale. Or there could be a "skunk works" type of room or space at General Dynamics' facility that encourages engineers to tinker and explore product and business ideas. Alternatively, General Dynamics could just use the proof-of-concept space at BIC as a means of inspiring their engineers to venture out. Another opportunity is to leverage the capacity of Greentown Learn to support and supplement efforts by looking for business and product ideas across Massachusetts that could be a good fit to explore and launch through the BIC.

3. Build a Formal, Peer-To-Peer Best Practices Learning Network

In response to the desire for more network-based sharing and learning as an industry, we recommend that the BIC or another convener begin hosting a series of industry events to build peer-to-peer interaction across the county. Content of the network could start by focusing on high-need issues in the industry. For example, it could focus on the recruitment, attraction, and retention of new employees, and integrating new workers into the fabric of Berkshire life. Other areas of focus could include the housing of employees, management and supervisory practice, shift work, and building more quality worker experiences.

4. Strengthen the Relationship between Education and Manufacturing

While there are many excellent education and training programs in the county focused on building skills for and awareness related to manufacturing, there is a need to build new out-of-the-box approaches that 1) successfully compete with the popularity and attraction of other occupations and professions in the region, 2) convinces area youth and parents of the value in a manufacturing career and 3) repositions the way advanced manufacturing and engineering firms in the county organize work, integrate training, and offer careers to youth in the county. The effort could build off existing initiatives of current partners like Taconic High School, McCann Technical, Berkshire Community College, MCLA, Williams College, and others. One activity could be the creation of a Manufacturing Academy that could offer multiple entry points for K-12 students and adults across the county to come to one place (virtual or otherwise) to learn about and build skills relevant to the industry. The academy could bring tuition supports, apprenticeship, internship, credentialing, and other existing and new opportunities together. Industry should help pay the cost of something like this. Another action could be an effort like the summer manufacturing camps, affiliated with the Fabricators and Manufacturers Association, or a variation of the Berkshire Robotics Challenge. The Fabricators and Manufacturers Association camps seek to expose and draw middle school girls to the industry. The program has the girls design a personal product, create a prototype, scale it up, and then spend the last part of the program on the business side of the product.



B. Creative Economy

Definition and Structure



In the last fifteen years, leaders of economic development have identified the Creative Economy as an important cluster within local, regional, state and national economies. Starting this shift was the work of Mt. Auburn Associates and Regional Technology Strategies (RTS) in 2000 that documented the revenue and job-generating potential of "arts and culture," in part due to a more robust cluster-oriented analysis that adds for-profit companies and individual artists and creative sole proprietors to the traditional construct of creative nonprofits. Mt. Auburn and RTS coined this more cluster-oriented definition the "creative economy," rather than the narrower term of arts and culture as an industry. Mt. Auburn and RTS define the creative economy as the enterprises, organizations, and people involved in the production and distribution of artistic goods and services to the marketplace. Because of this new analysis and definition, municipalities, regions, and states in the US and Europe increasingly treat the creative economy as a building block of the economy.⁸

As many readers of the Blueprint will recall, a strategic plan for the Berkshires was developed in 2007. The Berkshire Creative Economy Plan provided qualitative and quantitative evidence of the revenue and jobgenerating capacity of the Berkshire creative economy. Since 2007, Berkshire Creative and 1Berkshire have provided the backbone for nurturing the Berkshire creative economy.

Sample of Creative Economy Segments and Example Entities				
Segment	Example Companies and Entities	xample Companies and Entities		
Visual Arts and Fine Crafts	Magic Fluke Jeffrey All Sheffield Pottery	Karen Allen Amrita Lash Ferrin Gallery		
Performing Arts	BSO/Tanglewood Barrington Stage Williamstown Theatre Festival Jacob's Pillow	Shakespeare and Company Berkshire Theatre Group Mahaiwe Performing Arts Center		
Literary Arts	Storey Publishing Suzi Baum Mastheads	The Mount Berkshire Magazine The Berkshire Writers Group		
Design	Blue Q T Square Design Studio Burr and McCallum	James Jarzyniecki Robin Marie Sills		
Film and Media	Great Sky Media Joe Aidonidis Berkshire Film and Media Collaborative	Ben Hillman Fine Line Multimedia		
Culture, Museums and Heritage	Hancock Shaker Village The Clark Art Institute The Berkshire Museum	The Normal Rockwell Museum MASS MoCA		

⁸ Examples of places that have developed robust strategic plans to grow their creative economies and, in so doing, diversify and strengthen their overall economies, include Louisiana, Arkansas, Mississippi, and Colorado; the Capital Region of New York and the Greater Milwaukee region, and New York, Washington, D.C., and Birmingham, AL.



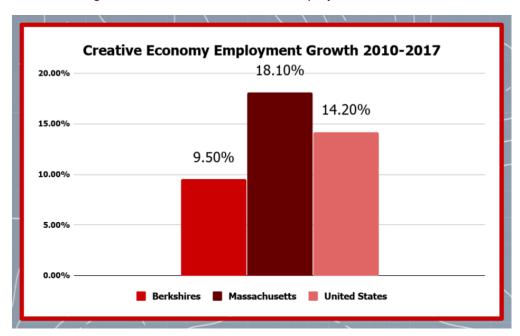


Cluster Activity, Assets and Opportunities

The creative cluster has shown considerable growth and expansion between 2010-2017.

Large Growing Industry

There are 5,450 jobs in Berkshire creative businesses and organizations, representing 6.4 percent of all jobs in the county. Between 2010 and 2017 jobs in the industry grew by 9.5 percent, or 470 jobs, the highest post-recession growth rate among the five clusters identified for this project.



High Concentration

Creative businesses and organizations as a whole have high specialization in the region. In fact, the industry has the highest concentration of specialization among all industries in the Berkshires. In 2017, the concentration of creative industry employment was 62 percent higher than the nation, or a location quotient of 1.62. That means that the industry's presence is 1.62 times as concentrated in the Berkshires as it is for the industry nationwide.

Diverse Business Establishments

The creative industry has a number of large employers, from Tanglewood to MASS MoCA and the Clark Art Institute. Together there are 2,700 so-called wage and salary jobs from companies and organizations like this that are part of the creative industry. At the same time, about one-half of the jobs in the industry (2,750) are made up of self-employed individuals or sole-proprietors who earn income on their own from selling their creative-based goods and services to local and export-oriented markets.

In addition to the quantitative indicators of growth in the Creative Cluster, there are a number of other growth indicators and several initiatives that show how vibrant the Cluster is.

Emergence of Northern Berkshire County

Northern Berkshire County has become a destination and an emerging hub of creative, cultural and artistic activity, as well as an economic engine. A number of examples underscore this dynamic:

- MASS MoCA recently completed work on its complex and Building 6, (an investment of roughly \$65m) and that development, in addition to the success of its performing arts program, is responsible for 250,000 visitors in 2017. MASS MoCA is also working to deepen and expand its economic impact on North Adams and is in discussions with MCLA on broader collaborations.
- The re-purposing of several mill buildings (e.g. Windsor Mill, NORAD, GreylockWORKS) has dramatically increased the space for artists and creatives to live and work.
- MCLA's Berkshire Cultural Resource Center in North Adams and the Williams College Museum of Art in Williamstown have added significantly to the presence of arts and culture in the downtowns.
- The Clark Art Institute invested approximately \$29 million over the last few years in the Manton Research Center and other facilities. It is expanding its exhibits, incorporating the environment into its work, and adding performing arts. Last year, the Clark had approximately 200,000 visitors.
- Lever's North Adams Art Enterprise Challenge program and Assets for Artists are bringing criticallyimportant business resources to the creative community.
- The Art Country collaborative marketing and advertising campaign is designed, in part, to bring more visitors and have them extend their stay.
- The North Adams Exchange, North Adams Public Arts Commission, the North Adams Cultural District, and the O+ Festival provide the platform for collaboration between businesses and the arts community.
- Also, the proposed Extreme Model Railroad & Contemporary Architecture Museum, the recent \$2.6
 million completion of the Berkshire Scenic Railway's tracks between North Adams and Adams, and the
 TOURISTS Welcome hotel add significantly to the creative and cultural foundation in northern Berkshire
 County.

Strength of Central and Southern Berkshire County

Central and southern Berkshire County also continued to be core locations for the Berkshire Creative Economy. In May of 2018, Pittsfield was one of only six communities in Massachusetts to sign a cultural compact with the MA Cultural Council. The **Berkshire Museum**, through its controversial art sale, has met its goal of expanding and re-positioning the Museum in the years ahead, the **Pittsfield Office of Cultural Development** has enhanced its capacity and programming to support artists and arts enterprises, and Pittsfield was just designated as one of the Top Ten Medium-sized Most Vibrant Arts Communities in the country by the National Center for Arts Research. In southern Berkshire County, the **Norman Rockwell Museum** is exploring the possibility of establishing the Rockwell National Center for Illustration and Education in Stockbridge; **St. James Place** has become a focal point for individual artists to sell their products, and provides space for artists and performers. The **Mahaiwe Performing Arts Center** has gone from 130 shows/productions a year to 150 nights this coming season, and is deepening its presence in the public schools.

Berkshire Taconic Community Foundation and MCLA

The Berkshire Taconic Community Foundation received a \$500,000 community engagement grant from the Barr Foundation through the Creative Commonwealth Initiative. This is a multi-year, multi-dimensional undertaking to build a strong relationship between the county's resident population and the cultural and creative assets that are found here. This Initiative involves research, grant-making, new partnerships, and a focus on arts education. The latter is a joint effort between the Foundation, the North Adams Public Schools, and MCLA's Creative Compact for Collective Impact. The goal is to give students in county K-12 public schools the opportunity to take full advantage of the county's cultural assets. It is currently underway and will be completed in December of 2019.

Growth of Major Cultural Institutions

The major cultural institutions and organizations in the county have all experienced growth or are in the process of expanding. For example:

- **Barrington Stage** bought a building in downtown Pittsfield in 2016, consolidated its administrative office, and added new rehearsal space.
- Tanglewood's \$40m expansion of performance and rehearsal space, including the new Tanglewood Learning Institute, as well as its new 'shoulder season,' positions the BSO to have a more robust and extended-year presence, and helped bring more than 330,000 visitors to the venue in the summer of 2018.
- **Jacob's Pillow**, with its new studio, is growing and expanding its audiences and is doing more programming in the community, as well as extending work beyond the summer season. Summer 2018 proved to be its all-time highest-grossing season.
- Williamstown Theatre Festival has grown its audience in each of the last four seasons, is commissioning and developing work all year long, shifting to more original work, and employs 400 people during its summer season.
- **Berkshire Theatre Group** is celebrating its 90th season, has acquired The Colonial Theater, and has doubled its presentations and productions.
- Hancock Shaker Village has greatly expanded its footprint and its offerings by broadening the farm component of its operations, deepening its relationship with the Food and Agriculture cluster, hosting a "Dinner with Authors" program, and bringing in well-known artists like Maya Lin.
- **Shakespeare & Company** was a recipient of an NEA grant that has allowed it to strengthen its high school theater arts training program.

Market Adaptions by Creative Enterprises

Creative enterprises, including individual artists, have made significant adjustments in their work and in their business model:

- They have broadened their market and customer base to a wider geography outside of the Berkshires and New England, through online selling (e.g., through Etsy), attendance at shows in New York City, and through technical assistance from the MA Small Business Development Center (SBDC), Assets for Artists, Lever, 1Berkshire, MCLA's Arts Management Program, and others.
- They have developed sustainable business models and found right-sized local markets through increased sales at regional galleries, seasonal markets, and retail outlets.
- They have developed partnerships and collaborations with many of the county's major cultural institutions and, as a result, have enhanced their market profile, as well as their brand and identity.
- They have benefitted from professional networking and business opportunities provided by
 organizations like the Makers' Mill, Assets for Artists, Mastheads, the Pittsfield Office of Cultural
 Development, the Berkshire Film & Media Collaborative, MCLA's Berkshire Cultural Resource Center, the
 Berkshire Art Association, the Berkshire Woodworkers Guild, the Berkshire Writer's Group, local cultural
 councils, St. James Place, IS 183 Art School of the Berkshires, and others.
- They have benefitted in their production capability and capacity through access to space and equipment
 at entities like the Makers' Mill, GreylockWORKS, the NORAD Mill, the Windsor Mill, the Old Stone Mill
 Center, St. James Place, the Stationery Factory and Framework Coworking.

Key Initiatives

There are numerous initiatives in the county that are emblematic of creative programming and compelling approaches to strengthening the creative economy. Two such examples are:

- Community Access to the Arts (CATA) nurtures artistic excellence in people with disabilities. CATA partners with 49 organizations, works in eight of the county's school districts, and exhibits the work of its constituents in institutions like the Clark. The scale and integrity of CATA's work has captured the attention of the Kennedy Center, and it is seen as a national model.
- The Berkshire Film & Media Collaborative (BF&MC) is developing a new Film Certificate Program and other credit courses related to the film industry at Berkshire Community College. BF&MC has also created a network of virtually all the principal film and media-related individuals and enterprises in the county and Western Massachusetts to position the region as a focal point of the Film and Media industry.



Challenges

Engagement of Local Residents

Throughout the interviews and focus groups that were conducted for this project, there was a general consensus that more needs to be done to better engage and include local residents in the creative economy as audience members, as employees in creative businesses and in the major cultural institutions, and as creators and producers of artistic content. This is not to say that efforts haven't been made, because they have. Rather, it's a recognition that a chasm still exists between the cultural/creative community and Berkshire residents. Overcoming this hurdle would help both the creative community and the local resident population base.

Perceptions of Economic Importance

The findings in the 2007 Berkshire Creative Economy Report state that the creative economy is a critically important generator of revenue and jobs in the Berkshire economy, and that holds true for 2019: employment growth occurred in the cluster between 2010 and 2017 and was the second-highest growth rate among the five clusters; hundreds of individual creatives produce and sell their work as sole proprietors; the creative economy's impact on the Hospitality and Tourism industry is significant; and, the creative economy's contribution to the 'Berkshire Brand' is profound. Nonetheless, parts of the business community have difficulty seeing and accepting it as an important economic asset.

Organizational Support

Past efforts to support and strengthen the creative economy in the county, principally through the work of Berkshire Creative and 1Berkshire, had a significant and positive impact. The creative cluster had a voice within the Berkshire economy, the brand was strengthened, networking opportunities increased, and individual artists and creatives received technical assistance, professional development, and business connections. However, as the needs of the creative cluster have evolved, the organizational support system has not maintained the pace. Consequently, creative cluster-specific strategies around key issues (like transportation, housing for seasonal workers, access to capital, collaborative programming, and business assistance) are not being adequately addressed in a strategic and collective fashion.

Needs of Cultural Institutions and Creative Enterprises

The difference in the needs and opportunities within the major cultural institutions in Berkshire County, and those of individual creatives and small for-profit creative enterprises pose challenges to organizing the Creative Economy as a cluster. For example, at a series of focus groups of individual creatives and small enterprises, the following needs were identified:

- Greater access to business and financial development services
- Stronger connections/partnerships with the major cultural institutions
- An online 'Bulletin Board' that facilitates great connections within the creative community for
 professional and business-related connections this was a clear need particularly in southern Berkshire
 County.

At a recent focus group meeting of the major cultural institutions, they identified several challenges:

- Housing for seasonal workers.
- Developing a stronger connection to the Boston market.
- Growing a younger audience base and donor base.
- Having more available housing options for performers.
- Creating a more effective county-wide transportation system.



Action Steps

1. Organize Convenings of the Major Cultural Institutions

Organize three to four convenings of the major cultural institutions during the year. This would allow them to address critical challenges and obstacles to further growth. For example, employee and visitor transportation is a significant problem that could be addressed through Senator Hinds' Transportation Management Association planning initiative. Also, extending visitor stays, housing for seasonal workers, and access to capital are other issues that many cultural institutions would like to address. Further, the meetings would provide an opportunity to hear from the cultural institutions that are extending their seasons and, in some cases, planning to have a year-round presence in the Berkshires. This offers a significant opportunity for the cultural institutions to work closely with economic and workforce development leaders on training and recruitment for new year-round employees and on deeper connections with the local resident population.

2. Develop an Intensive Business Resources Awareness Campaign

Develop a multi-level outreach and awareness campaign (social media, advertising, info sessions, etc.) that would make it possible for creatives to take advantage of the resources and technical assistance available from the county's economic and business development organizations. Some of these organizations, like the Massachusetts Small Business Development Center (MSBDC), Lever, and 1Berkshire, have been invaluable to the business models of several of the creatives who were interviewed for this project.

3. Expand Assets for Artists

Expand the capacity of Assets for Artists to the central and southern Berkshire County sub-regions. Currently the resources of this exceptionally helpful program for individual artists and creatives are principally available in the northern part of the county, and less so throughout the rest of the county. A modest investment in Assets for Artists would make a significant contribution.

4. Provide Support for BTCF and the Creative Commonwealth Initiative

As previously noted, this is a multi-year, multi-dimensional undertaking to build a strong relationship between the county's resident population and the cultural and creative assets that are found here. This initiative involves research, grant-making, new partnerships, and a focus on arts education, and has the potential to create a county-wide network built around the creative community and local residents. This is a critically important effort that the leadership and deployment team for the Berkshire Blueprint should wholeheartedly support.

5. Provide More Creative Resources Workshop Opportunities

The Creative Resources Conference that was scheduled for last April covered topics and issues that are central to the ability of individual creatives and creative enterprises to develop a sustainable business, e.g., Scaling-up, Forging Creative Partnerships, Artistic Collaborations, Marketing and Social Media, Utilizing Your Website, Finding the Right Space, etc. In that context, the conference, or a series of workshops/seminars on these key topics, is recommended.

6. Create Partnership between the BIC and Creative Community

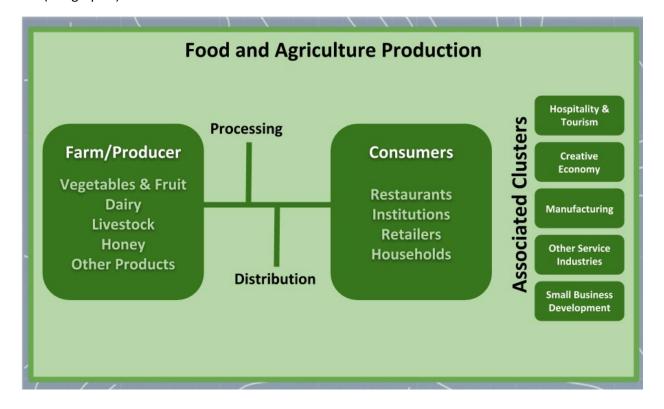
Create an institutional relationship between the Berkshire Innovation Center (BIC) and the creative community in the Berkshires. The BIC will soon become a catalyst and resource for innovation in the Berkshire economy. Many creatives are producers and manufacturers in their own right (e.g. Magic Fluke, Interprint, the members of the Berkshire Woodworkers Guild, as well as a cohort of creatives who are sculptors, glassmakers, fine artists, etc.) The BIC could be an ideal place for these producers to enhance their production capability, and it could be a place where creative producers and traditional manufacturers interact around product design and new products. The Kohler Company's Artist-in Residence program is one of many instances where creatives and manufacturers collaborate and innovate.

C. Food and Agriculture



Definition and Structure

Food and agriculture consists of the growing, distributing, processing, and consuming of food. In the Berkshires this includes the clustering of farms, value-added farm products, restaurants, food services for major institutions, and food vendors. The businesses range from large fruit and vegetable producers to farm-to-table restaurants, specialty retail shops, large and small grocery stores, canning and food processors, and product distribution firms. Other local industries are closely associated, depend on, and converge with the economic activity of the Food and Agriculture industry in the Berkshires. For example, the Berkshire Hospitality and Tourism cluster relies on the authenticity and sustainability brand of farm-to-table restaurants and the presence of locally-grown product. For its part, the creative economy inspires and is tied to the culinary arts and artisan food producers in the region. Food processing and production is also related to the region's manufacturing cluster. (see graphic).





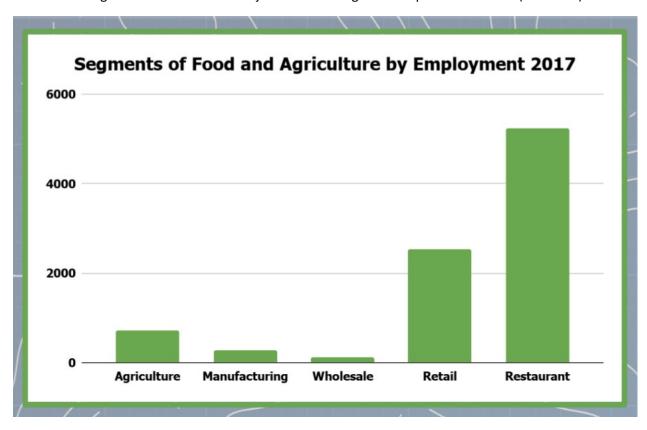
Cluster Activity, Assets, and Opportunities

Employment Growth Since 2010

Businesses in the Berkshire's Food and Agriculture industry are growing, adding about 450 jobs between 2010 and 2017, a growth rate of 4.0 percent. In 2017 there were 8,950 jobs in businesses in the cluster. A recent report to the Berkshire Taconic Community Foundation notes that there has been significant growth in farm-to-table restaurants, and the growth of small-scale specialty farms and agricultural products in the Berkshire region over the last twenty years.

Strong Presence in Retail and Dining

Not surprisingly, most of the jobs in the Food and Agriculture cluster are related to food consumption—retail activities and dining. About one-tenth of the jobs are in the agricultural production area. (See chart).



Growing Number of Farms

The Agricultural Census reported a 31 percent increase in the number of farms over the last decade, jumping from 401 farms in 2002 to 525 farms in 2012. Keep Berkshires Farming, an initiative under the Berkshire Regional Planning Commission, identified and mapped 331 commercial farms in the Berkshire region during its surveying in 2014. Together Berkshire farms sold a market value of \$22,468,000 in products in 2012, down from a total \$29,000,000 in real dollars in 2002.⁹

Convergence with Other Key Industry Clusters

The presence of food and agricultural businesses in Berkshire County impacts the clustering and specialization of other key industry clusters in the region, especially Hospitality and Tourism, Creative Economy, and Advanced Manufacturing and Engineering Services. For example, tourism in the Berkshires benefits from the draw of the Berkshires' authenticity of farm-to-table restaurants, agricultural heritage, and outdoor space. Food and Agriculture's culinary segment is driven, in part, by the creative pursuits of its chefs (creative industries) and the processing of food relies on value-added production capacity (manufacturing) in the region.

⁹ The 2002 USDA Census of Agriculture reports Berkshire County farms sold \$21,725,000 in product in 2002, a real dollar value of \$29,000,000 in 2012 using the Bureau of Labor Statistic's Consumer Price Index as an inflator.

Growing Network and Emerging Capacity Supporting the Cluster

There is a relatively solid network of organizations supporting businesses in the cluster, some of them with a long history in the region, and some newer. One of the newer independent nonprofit organizations is Berkshire Agricultural Ventures, though it was a program of The Carrot Project and Berkshire Grown for four years prior to gaining its independence. Its staff provides business planning, management, marketing, and other tools to grow and sustain food- and agriculture-related businesses. The organization also uses several financing tools—equity investments, loans, small grants—as well as investment partnerships to help food businesses grow and support infrastructure projects for the industry.

One of the better-known brands in the county is Berkshire Grown. Its role is to build market opportunities for local farmers through a network of farmers markets and connections of local product to Berkshire grocers. The Schumacher Center for New Economics, headquartered in Great Barrington, offers support to build business plans and entrepreneurial capacity that is in line with sustainable agriculture, farming, and small-batch, employee-owned food production. It also hosts educational events, sponsors BerkShares, and supports the growth of land trusts across the region. Other growing or important parts of county capacity supporting the industry include Berkshire Farm and Table, Lever, Berkshire Community College, and the regional technical high schools. Keep Berkshire Farming helped document some of this region-wide capacity. Most local organizations

and businesses believe the region would benefit from additional attention to networking and convenings to build relationships, share learning, and potentially catalyze action to further grow food and agriculture businesses in the Berkshires.

Food Manufacturer Shire City Herbals Grows in the Berkshires

The company, which makes vinegar-based health tonics, recently completed a \$1.4 million expansion project which includes the construction of its first on-site commercial kitchen and production facility in Pittsfield. This will allow its popular Fire Cider brand to reach new production levels and the company to add new employees.

Important Part of Region's Identity

The Berkshire identity is tied to the

authenticity of locally-grown, organic, sustainable practices that drive its food and agricultural industry. The first community-supported agriculture (CSA) farm in North America started in the Berkshires. Local tourism officials note that in the last five years, farm-to-table has become an increasingly-important part of the Berkshire brand, relying on the county's many highly acclaimed farm-to-table restaurants and specialty food stores that serve and ship local Berkshire-grown foods. The potential of the Berkshires as a national food destination has been noted recently in *The New York Times* and *The Boston Globe*. In addition, the pick-your-own and other authentic food-related activities that local farms offer go beyond food production and tie to the Berkshire identity. It also helps

that this movement is popular with a younger

demographic.

Favorable Trends for Local Food

The Sustainable Berkshires report also notes that the Berkshires sits in the center of one of the largest food markets in North America, one that extends 200 miles in each direction, from New York to Boston. In addition, trends point to a rise in educated consumers who have a heightened interest in the local food movement. This is particularly advantageous for Berkshire producers to grow their market share because of the county's brand of local, sustainably-grown products.



New Initiatives Emerging to Bring Product to Market

There are a number of new initiatives and emerging business development efforts that hold potential to grow the industry, add new jobs to the county, and help farmers become stronger and more sustainable over the long term.

- Berkshire Agricultural Ventures (BAV) provides technical assistance and financing support for businesses and projects that fill the industry's infrastructure gaps and support its growth. For example, BAV has partnered with Lever to support the new company FoodLove and its plans to build an online portal that connects local producers with the restaurants, schools, and institutions looking for locally-produced food. BAV and Lever have also teamed up to support the growth of Marty's Local, a two-year-old homegrown food distribution service that is expanding quickly and reaches over 60 producers and 80 buyers in four states. BAV is also supporting the feasibility of bringing poultry processing capacity to the county.
- Berkshire Community College plans to build a new flagship culinary center in southern Berkshire County that will attract local and regional chefs, food service workers, and the early stage development of value-added product in food and cooking.
- GreylockWORKS is in the redeveloped Cariddi Mill, a campus and support network that provides food
 wholesalers with quality, affordable food production facilities, coordinated distribution logistics, and a
 network for marketing and financing. One of GreylockWORKS' recent initiatives, "Cook Test + Launch,"
 partnered with the Western Massachusetts Food Processing Center to launch new business ideas in the
 region.
- The Alchemy Initiative has a partnership with Berkshire Farm & Table to build a collaborative of 20+ farmers markets in the county to increase their reach through more coordinated marketing and other back office support.
- A nursery owner in the central Berkshire region started a commercial kitchen with facilities and equipment available for rent by farmers and processors.



Challenges

Costly Farmland

As noted earlier, the number of farms in Berkshire County has increased in the last 10 years - from 401 farms in 2002 to 525 farms in 2012. While the number of farms has increased, the total land put into use for farming has decreased countywide. According to the USDA Census of Agriculture, acres of farmland in the Berkshires have decreased by 10 percent over a decade, from 68,630 acres in 2002 to 61,650 acres in 2012. Moreover, one study from the Williams College Center for Environmental Studies estimated the county has another 83,000 acres of farmland that could be brought into production. One reason noted for the decline of farmland in use is the high cost of land, in part due to the robust market of second homeowners in the region. This makes it difficult for producers to maintain or expand their farmland and production capacity.

Knowledge and Capacity of Farmers

Data from the USDA Census of Agriculture shows that the average age of Berkshire farmers is falling. However, local experts note that while there is significant interest among the younger generation in farming, their knowledge and technical capacity, as well as access to financing, pose challenges. Another recent report funded by the Berkshire Taconic Community Foundation concludes that the large number of farmers who are reaching retirement age without a succession plan also means that there are many properties either on the market or potentially going on the market that may not be put back into use.

Concentration of Seasonal Product

One of the key challenges to the growth of the cluster is that the county's farms and producers rely on a seasonal market that extends from roughly late spring to the fall. Too many producers in the Berkshires have difficulty becoming a year-round business. Sometimes this is due to lack of appropriate on-and off-farm infrastructure, such as appropriate greenhouses or nearby flash-freezing facilities, or the capital or technical know-how to grow their seasons.

Underdeveloped Markets

Industry leaders observe that there is room for the industry to grow if Berkshire farmers could get more of their product to markets inside and outside the region. In fact, according to the Sustainable Berkshires report, most Berkshire farmers sell a majority of their product within the Berkshire region. However, based on interviews with producers and retailers conducted by Berkshire Agricultural Ventures, part of the issue is product availability and reliability and the price per product. Right now, most of the regional agricultural product consumed in the Berkshires comes from the Pioneer Valley.

Infrastructure Bottlenecks

One of the challenges to tapping internal and external markets for food producers is inadequate infrastructure to aggregate, distribute and process food in the county. This lack of infrastructure, from a close-by chicken processor to a flash-freeze facility that enables farmers to sell seasonal product year-round or a distributor that can collect Berkshire product and get it to Boston or New York City, creates a bottleneck that impedes a well-functioning food-value chain that could otherwise expand economic growth of the industry into more jobs and more income for the county.



Action Steps

1. Expand Food Processing and Distribution Capacity to Grow Markets

We recommend that Berkshire leaders leverage and strengthen existing capacity in the county to bring more products to internal and external markets year-round. Berkshire Agricultural Ventures is a logical lead to identify the kinds of additional food processing and distribution capacity needed to help grow markets for Berkshire agricultural and food product. BAV just submitted a pre-proposal to the US Department of Agriculture to further explore and identify what kind of capacity is needed to support and grow new markets for local producers, distributors, and processors. An important aspect of building this capacity is finding ways to leverage the significant private investment capital in the Berkshires for these efforts.

2. Build Best-In-Class Food and Farm-To-Table Training Centers

We recommend the support of Berkshire Community College's plans to build a signature culinary training and food center at its South County Center. This center will be home to a farm-to-table cooking institute that draws people from far and wide. It will have culinary certificates and other training and will support the incubation of food businesses and product development. The Blueprint leaders should support the development of these efforts in southern Berkshire County as well as help BCC explore ways to link this emerging capacity to existing and emerging culinary efforts across southern, central and northern Berkshire County.

3. Spark the Next Generation of Entrepreneurs and Social Innovation in the Farm/Food Business

We recommend that BAV and other food and agricultural partners continue to expand their capacities to provide technical assistance and financing for newer and mature farms and food businesses. One area of focus should be to extend the seasons and meet buyers' needs year-round. There are already good partnerships to build on to provide new business ideas, markets, and jobs in the food ecosystem through Lever and BAV, among others.

4. Build the Berkshire Brand as Destination for Food, Culinary, Farm-To-Table Authenticity

We recommend 1Berkshire convene a food marketing roundtable to refine its marketing goals and investments to strengthen food as part of the Berkshire brand. This will attract a new demographic of travelers and attract business people interested in starting/expanding food-related businesses year-round.

D. Healthcare



Definition and Structure

The healthcare industry in the Berkshires includes a range of companies and non-profit organizations that provide diagnostic, preventive, curative, and therapeutic services. Key segments of companies and organizations in the industry are hospital systems; offices of doctors and medical groups; rehabilitation and long-term care organizations (including assisted living and elderly housing facilities); and home health care services. Berkshire-based companies and organizations in healthcare primarily serve the health care needs of residents of Berkshire County. However, there are a handful of organizations serving markets outside the county, such as Hillcrest Children's Services, a national provider of therapeutic children's homes and schools, and Austen Riggs Center, a psychiatric hospital and rehabilitation center that services an international clientele. (See graphic).

Healthcare Segments and Example Entities					
Segment	Example Entities				
Hospitals and Hospital Systems	Berkshire Health Systems (BHS)				
Offices of Doctors, Medical Groups, and Outpatient Services	Community Health Programs (CHP) Berkshire Orthopedic Association				
Rehabilitation and Long-Term Care Organizations	Hillcrest Children's Services Brien Center for Mental Health and Substance Abuse Services Williamstown Commons (Part of BHS) HospiceCare in the Berkshires (Part of BHS) Austen Riggs Center				
Home Health Services	Home Instead Senior Care Berkshire Family and Individual Resources (BFAIR) Elder Services of Berkshire County				

Cluster Activity, Assets, and Opportunities

County's Largest industry

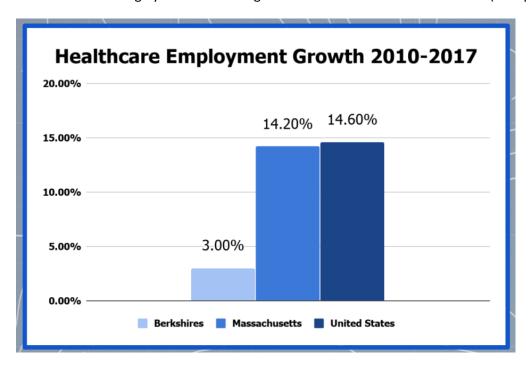
There are 11,417 jobs in Berkshire healthcare businesses and organizations, the largest single industry sector and cluster in terms of employment in the county. Healthcare as a whole represents 13.4 percent of all jobs in the county.

High Concentration

Employment in healthcare businesses in the Berkshires is 50 percent higher than in the rest of the nation. That is, the concentration of the industry in Berkshire County is 1.5 times higher than for the industry nationwide. This indicates unique attributes, such as a deep pool of providers or a relatively broad reach of services available in the market, that makes the industry's presence in the county relatively strong.

Modest Growth

Employment in the Berkshire County healthcare sector grew by three percent since 2010, from 10,748 jobs in 2010 to 11,417 in 2017. This is roughly one-fourth the growth rate of healthcare in the nation (14.6 percent).



Increase in Home Health and Outpatient Care

Throughout the next 10 years, from 2018-2028, employment in hospitals is projected to decline slightly while home health care services are projected to grow by 45 percent. Hospitals will still be the largest segment in the region, employing far more people than other healthcare organizations, but other components of health care services are shifting in importance. Some of the shifts, such as from hospitals to home health care, can be linked to changing demographics as well as changing business models for health care in largely rural areas.

Healthcare Segment	2018 Jobs	2028 Jobs	2018 - 2028 Change	2018 - 2028 % Change
Home Health Care Services	950	1,285	335	35%
Continuing Care Retirement and Assisted Living Facilities	536	685	149	28%
Psychiatric and Substance Abuse Hospitals	204	259	55	27%
Residential Mental Health, and Substance Abuse Facilities	1,879	2,344	465	25%
Outpatient Care Centers	491	602	111	23%
Other Ambulatory Health Care Services	265	319	54	20%
Offices of Other Health Practitioners	905	1,078	173	19%
Offices of Dentists	525	602	77	15%
Nursing Care Facilities (Skilled Nursing Facilities)	1,659	1,623	(36)	(2%)
General Medical and Surgical Hospitals	3,132	3,040	(92)	(3%)
Offices of Physicians	1,042	936	(106)	(10%)

Training Backbone

Berkshire Community College, McCann Technical High School and Taconic High School form the backbone of workforce development activities for the sector. McCann recently started a medical assistant program to add to its licensed practical nursing program. BCC has a long-standing nursing program as well as a new community health worker program. Berkshire Health Systems is also running its own upskilling programs for employees to increase their skills and migrate into new jobs within its system.



Challenges

Berkshire Health Systems' Central Presence

Berkshire Health Systems is the largest healthcare organization in the county in terms of business scale, total revenues and employment. Its nearly 4,000 workers and 450 medical staff represent four out of every 10 healthcare jobs in the county. As the county's only hospital system, it has many affiliations, partner organizations, and ownership relationships with medical facilities. Due to its size and reach, BHS's decisions about growth and service provision either dictates or has a large impact on economic activity within the region. For example, its decisions around pay and labor-management practices have ripple effects throughout the economy. And, its current focus on meeting the needs of county markets (e.g. serving the health care needs of local residents) rather than exploring expansion outside the region also has effects on economic activity in the region.

Shifts in Service and Strains on Growth

Healthcare may be entering a period of low growth as the region experiences generally no- to slow-growth in the overall population. A declining population means not only that the number of people needing services may decrease (simply fewer people to treat) but also that the services required for a smaller population that is growing older and sicker will lead to more intense service levels for fewer people (e.g. more services for an older population) and, in the industry as a whole, a focus on a much narrower slice of care delivery (e.g. more geriatric care and fewer maternity or pediatric services).

Cost of Services and New Models

Healthcare organizations in the county report that the dependence on government reimbursement (Medicare and Medicaid) is increasing while private insurance or self-pay methods are decreasing. That means the cost pressures on care provision are increasing because the reimbursement models from Medicare and Medicaid are tightening. Healthcare organizations are trying to respond by developing new business models for delivery and service of health care in the region. This kind of innovation is particularly difficult in a region that does not have a broad and growing population to underwrite and spread the costs associated with such changes.

Information Management

An additional challenge in the industry is keeping up with technological change. Healthcare organizations in the county report that over the next decade, they will need to build new systems to manage and control big data and information. The costs to develop these systems are most difficult to absorb for smaller organizations and practices. Increased demand for information management also has implications for workforce development. Healthcare organizations across the industry will need managers and technicians who have data literacy, management, and analytical skills.

Changes in Employment

A new emphasis on preventative medicine, efficiencies and cost containment, and coordinated care is reshaping work, skills, and occupations in county healthcare organizations. There is increased demand for more crossfunctional skill sets among healthcare positions. For example, the ubiquitous need for electronic medical records now means that certified nursing assistants must record every interaction with patients on computers and through bar code readers and electronic monitors. Nurses are now empowered to be medical team leaders and take a much more direct role in managing patient care across care givers and providers. At the same time, entirely new positions have emerged in the industry. Berkshire Community College has just started a community health worker training program to meet the demand from healthcare organizations that want navigators to help patients move through healthcare organizations, coordinate services, and organize additional services.

Many Health and Wellness Agencies

There are a host of health care providers, such as family and children service agencies and behavioral health programs in the county. Demand for services determines the development of capacity, which has built up over years. Some industry leaders point to a need for some kind of rationalization or mapping of services to see who and how many people are served, and if there are any gaps, unmet needs, or overlap that could be coordinated.



Action Steps

1. Create a County-Wide Health Program to Solve Common Workforce Issues

We recommend that several of the county's leading healthcare organizations come together to invest, plan, and find ways to build stronger solutions to common workforce challenges in the industry. Organizations that could form the nucleus of such a partnership could be Berkshire Health Systems, Community Health Program, Brien Center for Mental Health and Substance Abuse Services, Berkshire Community College, and Berkshire AHEC (Area Health Education Center). The partnership should support the business needs of healthcare organizations by promoting investment in the skills and careers of healthcare workers to increase business impact, improve health outcomes, and provide quality jobs. The partnership could also act as an intermediary organization to connect to statewide policy issues, aggregate demand for skills and occupations, and update local curricula and renew health care education and methods of delivery in key occupations across the county.

A collaboration of this nature is not without precedent. There are a number of healthcare sector partnerships across the United States, including many in more rural, exurban regions. One of these is the Central Iowa Careers in Healthcare partnership, which supports individuals in health care training programs, assimilates English language learners into the workforce, and advocates for better pay for direct care workers. Another is CareerEdge in Sarasota, Florida, which has developed a partnership with local healthcare employers to assist them in addressing the challenges they are experiencing in hiring, retaining, and advancing their workforce. Financial investments from private industry and through state and local grants for training in the industry have surpassed \$5.1 million.

Closer to the Berkshires, the Healthcare Workforce Partnership of Western Massachusetts spans Franklin, Hampshire, and Hampden counties and brings together healthcare employers, workforce development leaders and training and education providers to strengthen the industry through its workforce. One of its initiatives is the Care Transitions Education Project, designed to increase the number of nurses equipped to lead effective patient-centered care transitions. Industry leaders from the Berkshires could connect with CareerStat, a national organization of healthcare businesses and industry leaders in sector partnerships in their home regions. CareerStat offers startup and ongoing guidance and assistance in defining the goals, relationships, and

parameters of a healthcare sector partnership. The national staff liaison for CareerStat lives in Western Massachusetts.

2. Explore Healthcare Innovations and New Markets in Partnership with the Berkshire Innovation Center

The county's many healthcare businesses and institutions should form an initiative with the Berkshire Innovation Center to explore opportunities to solve healthcare's internal business stresses and build services and products for markets that go beyond the Berkshires. At present, the largest share of Berkshire County's healthcare industry is focused on serving local markets.

To expand market ideas and opportunities, the partnership should include local healthcare businesses as well as related businesses and key institutions focused on science research and product development. That means involvement should include not only the Berkshire Innovation Center and major healthcare businesses (Berkshire Health Systems, Community Health Programs, Brien Center, Austen Riggs Center, etc.), but also representatives from the new Science Center at Williams College, Lever, and county businesses in medical and life sciences (Berkshire Sterile Manufacturing, Boyd Technologies, Berkshire Corporation).

One area of emphasis could be testing health care prototypes, whether it is a new management practice, new service model, or new product. A health care prototype would test and highlight innovation, assess and learn what works, and adopt practices into platforms that can scale into more businesses or markets. A prototype could even be vetted for health care training across employers and educational institutions as part of the proposed healthcare sector partnership as previously-described.

Another point of inspiration could be to showcase Rachel Walker, a nurse "invention ambassador" from the University of Massachusetts who has just been recognized by the American Association for the Advancement of Science and the Lemelson Foundation, for her invention of a product that can filter unclean water into sterile IV bags needed in developing countries. Her experience in creating this product during her work in the field could fit well with the new partnership.

E. Hospitality and Tourism



Definition and Structure

The Hospitality and Tourism industry in the Berkshires comprises the hotels and inns, restaurants and food service enterprises, recreation and attractions, and other supporting industries that attract visitors who spend resources in the county. Closely aligned to hospitality and tourism are creative enterprises such as museums, performing arts venues, and other cultural institutions, as well as food and agriculture-related businesses and organizations. Second homeowners are also an aligned segment of the Hospitality and Tourism industry in the Berkshires. Increasingly, traditional seasonal visitors are supported by a strong second home market throughout the region while businesses that cater to visitors are thriving because of the involvement of second homeowners.

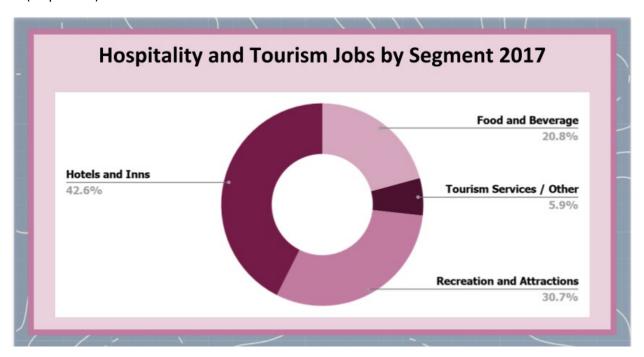
Berkshire Hospitality and Tourism Segments and Example Entities				
Segment	Example Entities			
Lodging	Wheatleigh Blantyre Main Street Hospitality Fairfield Inn & Suites - Great Barrington Berkshire Elegant Country Inns Yankee Inn TOURISTS Welcome			
Food-Related	Chocolate Springs Cafe SoCo Creamery Berkshire Mountain Distillers Bright Ideas Brewing Mezze PUBLIC eat+drink			
Nature and Recreation	Jiminy Peak Mountain Resort Berkshire East Ramblewild Ashuwilticook Rail Trail Zoar Outdoor Berkshire Hills Country Club			
Health and Wellness	Kripalu Center for Yoga and Health Canyon Ranch Miraval/Cranwell Resort Berkshire HorseWorks Eastover Estate & Retreat Berkshire Summer Camps			



Cluster Activity, Assets, and Opportunities

Significant Employer

Berkshire-based Hospitality and Tourism establishments directly employ 6,329 workers. ¹⁰ Between 2010 and 2017, the industry grew 6.3 percent. The largest segment in the industry is accommodation, making up about 43 percent of all jobs in the industry. The next-largest segment is recreation and attractions, followed by food and beverage, and tourism services. (See chart). Accommodation is a much greater part of the industry in the Berkshires than the state (accommodation accounts for 26 percent of jobs in Massachusetts) and the United States (33 percent).



Broad Impact

Hospitality and tourism contributes much more to the Berkshire economy than its employment numbers and the industry's \$400 million in Gross Regional Product suggest. According to the Massachusetts Office of Travel and Tourism, visitors to the Berkshires in 2017 spent \$517 million in the local economy and generated local tax receipts of \$14.9 million and state tax receipts of \$27 million. Moreover, spending by visitors increased by nearly 30 percent in the last five years, which outpaces other regions in the state, according to tourism officials.

Convergence and Connected

Hospitality and tourism is connected to and converges with many of the region's core industry strengths, including the area's creative and food and agriculture industries. The vast majority of visitors who visit the Berkshires come for the cultural assets and natural environment. Data from the Massachusetts Office of Travel

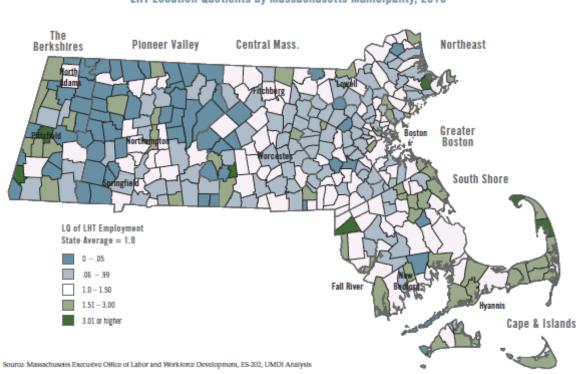
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¹⁰ Note that industry standards typically attribute 25 percent of local food and beverage employment to tourism and hospitality. We include this ratio of food and beverage employment as part of our calculations for total employment in tourism and hospitality in Berkshire County.

and Tourism shows that 79.5 percent of all visitors to the Berkshires visited museum and historic sites, 59.2 percent attended performing arts venues, and 36.9 visited outdoor recreation areas. A visitor survey conducted by the Berkshire Visitors' Bureau several years ago noted that 88 percent of all visitors cited scenic beauty as the principal reason for having selected the region as their destination rather than another area, and 42 percent of visitors engaged in some form of outdoor recreation during their stay.¹¹

High Concentration

Municipalities in Berkshire County have higher concentrations of employment in Hospitality and Tourism than the state as a whole. Cities and towns such as Pittsfield, Williamstown, Lenox, Lee, and Great Barrington have high concentrations, as represented by high location quotients in the graphic below. A location quotient of 1.0 indicates the same concentration as the state, while location quotients of 1.5 indicates a concentration in employment that is 50 percent higher than the statewide average. (See graphic).



MAP 1.2

LHT Location Quotients by Massachusetts Municipality, 2016

High Income Visitor Profile

The Berkshires attract an affluent, well-educated visitor population. According to data collected by the Massachusetts Office of Travel and Tourism, a typical visitor to Berkshire County has a median household income of \$100,200, a college degree or more (55 percent of all visitors), and comes from the New York City

¹¹ Conservation and Recreation: An Element of Sustainable Berkshires, Long-Range Plan for Berkshire County, Berkshire Visitor's Bureau: 2014.

metro area, Boston metro area, or Hartford/New Haven area. 1Berkshire conducted a study to understand the notable growth in visitors from Boston, and in younger visitors.

New/Upgraded Hospitality Properties

There have been significant additions and upgrades to hospitality properties in the county, which indicates confidence in the Berkshires as a visitor destination, and a desire among businesses to position their assets to stay relevant in the future. A sampling of recent investments in Berkshire-based hospitality properties includes:

- The Miraval Group's \$80 million project to renovate and expand the Cranwell Spa & Golf Resort, adding 43 rooms to the current 105 as well as a new spa and wellness and "mindfulness" amenities (completion anticipated in 2019).
- The TOURISTS Welcome hotel opened in 2018, in North Adams.
- The Williams Inn's \$48 million redevelopment in a new location including new rooms, restaurant, and event center (completion in 2019), and the new \$12 Million 94-room Fairfield Inn & Suites opening in 2019.
- Opening of the downtown boutique Hotel on North in Pittsfield (2015), Hilton Garden Inn on the Lenox/Pittsfield line (2015), and \$2.5 to \$3 million renovation and conversion of the Crowne Plaza to a Holiday Inn & Suites in Pittsfield (completion anticipated in 2019).
- Starwood's \$24 million Element hotel project to build a new 100-room hotel and events center on the site of the former Magnuson Hotel in Lenox (project launch in 2019).
- New hotels or renovations in southern Berkshire County such as Courtyard by Marriott (Lenox), Elm Court Travaasa (Lenox), Blantyre renovation project (Lenox), and Fairfield Inn (Great Barrington).

Growing Outdoor Recreation and Four-Season Experiences

Many of the region's outdoor recreation businesses, such as Jiminy Peak and Berkshire East, have transitioned to four-season resorts, expanding their offerings and attracting visitors year-round. Ramblewild opening in 2014, increased development at Catamount and Bousquet around ziplines and adventure experiences, and growth and

development in golf courses and water sports in the summer and fall have added another layer to the recreation economy. In part these offerings are a response to a growing interest in outdoor recreation, especially among a younger demographic. For example, a snowmobiling study cited in a *Sustainable Berkshires* report in 2014¹² notes that the Berkshire region has approximately 30 percent of the snowmobile trails in the

"One thing we're really good at in the Berkshires is producing experiences for people. And authentic experiences are what visitors get by traveling to the Berkshires."

-- Manager of a Berkshire-based hospitality property.

state and is a net importer of riders visiting the region. Overall, complementary and year-round visitor experiences build new revenue and stability for Berkshire businesses.

Growth in Health and Wellness as Destination Driver

A blossoming health and wellness sector has played an emerging role in the breadth of the hospitality segment with development in both exclusive and publicly accessible amenities.

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¹² Conservation and Recreation: An Element of Sustainable Berkshires, Long-Range Plan for Berkshire County, Berkshire Regional Planning Commission: 2014.

- Kripalu Center for Yoga and Health and Canyon Ranch have both grown offerings and drawn greater visitor traffic for their amenities. While not open to the public more broadly, these venues draw significant business into the region.
- Increased focus and resources for bike trails through private and public investment, as well as support
 through legislative measures have provided new growth potential, while added focus on Mount
 Greylock as a destination has increased optics for hikers.
- Kayaking, canoeing, and other non-motorized water activities such as paddle board yoga have become increasingly notable on local waterways as they've been revitalized.

The Berkshire Experience and Traveler Trends

With a robust Berkshire brand centered around a historic awareness of the region as a cultural hub and scenic landscape, the narrative now faces the need to pivot to address the wants and desires of an evolving set of demographics. Local officials note that the industry will need to adjust and adapt to two important growing trends in traveler preferences. **Travelers are increasingly attracted to these kinds of experiences in the following three areas, all of which are already strengths in the Berkshires:**

- Farm-to-table products, food culture, and local authenticity
- Emphasis on health and wellness integrated into hospitality
- Accessibility of outdoor adventure while in proximity to cultural resources.

New Markets

Less than three percent of Berkshire visitors are from foreign countries, which represents an opportunity for growth. Foreign visitors tend to stay longer and spend more money than U.S. visitors. The Berkshires also have the opportunity to grow the length of stay of visitors, coupling experiences across the county into longer visits.



Challenges

Strains on Small Businesses

Local officials supporting the industry say that many of the county's smaller bed and breakfast inns and motels, which were once the mainstay of Berkshire charm, are now facing increased pressure to adjust and provide more desirable options to either a younger demographic or a luxury-oriented demographic. Either way, these smaller businesses have a much more difficult time raising the capital to make investments and keep up with changing trends. Another concern is competition from the sharing economy. Airbnb and other short-term rentals are disrupting practices in the industry.

Wages and Job Security

Employees in hospitality and tourism generally have lower than average wages than other industries. In 2017, wages in the industry averaged \$27,735 per employee. There are a few reasons for the low wages: most hospitality and tourism businesses in the county are small, operate on tight margins, and their employees often work part-time or are seasonal. The recent statewide report *The Work of Leisure* notes that statewide, the industry has the lowest wages among all sectors, and that employees in the industry are often young, disproportionately foreign-born, and often temporary, seasonal, or part-time. ¹³ These are first-time jobs for

¹³ The Work of Leisure: Behind the Scenes of the Massachusetts Leisure, Hospitality and Tourism Industry, 2018: The UMass Donahue Institute.

many of the employees and the career ladders are less certain than some other industries. Berkshire businesses in the industry cite the lack of candidates to hire and high employee turnover as significant challenges to business productivity and profitability.

Education and Training

One of the attributes of the industry's job structure is schedule flexibility; that is, "scheduling in the industry is often flexible—part-time, seasonal, and available from dawn to late at night—allowing time for classes and other activities." At present, there are a handful of training offerings in culinary and hospitality areas, with few graduates earning an academic certificate or degree in related fields. In 2016, Berkshire Community College had 11 graduates from culinary programs and 4 from hospitality programs. McCann Technical School and the nonprofit Soldier On also offer culinary programs.

Transportation and Housing

Transportation -for workers, and for customers- continues to be an area of concern for business leaders. According to an employer survey in *The Work of Leisure* report, two-thirds of Berkshire employers say they are frustrated with customer transportation access, and over half of them are concerned about their employees' ability to get to work. The report also says that employers in the Berkshires are concerned about inadequate passenger rail to New York and Boston, which limits the customer base for the industry. Businesses also cite the high cost of housing as a challenge to their workforce. It was one of the top concerns cited by Berkshire employers in the business survey conducted for *The Work of Leisure* report.

Seasonality of Area

With a high demand for employees during seasonal peaks, and a high density of H2B visas (which allow employers to temporarily hire foreign workers for non-agricultural services or labor due to local labor shortages), non-seasonal recruitment tactics have not been employed readily throughout the region. Businesses also cite housing challenges for their workforces, including access to quality market-rate housing and, in some instances, affordable housing.

State-Level Support

State funding for the Regional Tourism Councils (RTCs) across Massachusetts has been reduced, including funding for the RTC in the Berkshires. In 2016, grant funding to the RTC was reduced by half. Additionally, a disproportionate balance exists between the amount of tourism dollars being spent in the Berkshires versus the limited financial support returned to the region from the Commonwealth.

Regional Competition

The industry faces stiff competition from bordering Hudson Valley, and New York State as a whole. The Hudson Valley has a surging brand of farm-to-table, authenticity, arts and culture, and a bucolic setting that attracts more and more visitors and competes with the Berkshires. The State of New York has invested heavily in upstate New York's branding and travel and tourism industry.

MGM Springfield

While the opening of the MGM Springfield offers a new critical mass of Western Massachusetts visitors that creates an opportunity in the Berkshires, there remains concern among many of the Berkshire-based businesses

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¹⁴ The Work of Leisure: Behind the Scenes of the Massachusetts Leisure, Hospitality and Tourism Industry, 2018: The UMass Donahue Institute.

¹⁵ Integrated Postsecondary Education Data System (IPEDS), 2016.

that the addition of 3,000 or more jobs at the new Springfield casino will drain workers from the Berkshires. In general, the casino pays very competitive (if not higher) wages than are currently being paid across the industry.

Industry Cooperation and Brand

The Berkshires appears to be a recognizable brand, but there is still room to grow. One nagging frustration is that there is still a divide among southern, central and northern Berkshire County when it comes to cooperative efforts in the industry. Overcoming these parochial attitudes requires continued commitment to a more united county and overtures to involve partners from each sub-region as often as possible. This issue is larger than the Hospitality and Tourism cluster, although this cluster is particularly affected.



Action Steps

1. Invite and Encourage the Leadership Base and Industry Hub to Focus on Common Internal Business Issues

The industry already has strong partners working to build the Berkshire brand through marketing. The biggest resource is 1Berkshire's capacity as the state-funded Regional Tourism Council. We recommend that leaders in the industry build similar industry-based advocacy and organizing capacity focused on the internal issues of running profitable, sustainable Berkshire-based business in the industry. That is, while the region seems to have robust capacity to develop and deploy an "outside" game (e.g. developing and marketing the brand), we recommend the industry build the same level of capacity to address its "inside game" (e.g. developing strong, innovative, and forward-leaning businesses in the industry). This would mean developing expanded, non-member and membership-based leadership into a hub that can sit beside and/or complement the leadership already present through organizations like 1Berkshire. Issues that this group might also address include training, job design and retention (see recommendation 2 below), building outdoor recreation as a more significant segment of the tourism experience, and joint approaches to address industry-related transportation and housing challenges.

2. Invest in Training, Job Design, and Retention

The industry needs to engage in a long-overdue dialogue about programs and policies that support motivated businesses and empower workers to find the best solutions to build wages, retention, and economic security in the industry. We recommend a coalition of industry hub leadership embark on a series of prototypes to test new practices in the industry to achieve these goals.

For example:

- A number of retail businesses across the country are banding together to test and share the costs of
 new ways to make low-wage jobs better. They are testing out new industry practices in predictive
 scheduling, which uses shared software to build employee schedules that enable employee planning and
 set upfront expectations for work.
- Other businesses are deploying shared employee assistance programs (i.e. sharing the cost) that help workers navigate workplace conflict, address employee health and wellness, and offer financial literacy and child care solutions that impact retention and productivity.
- Increased integration of H2B visas to supplement workforce during the height of the visitor seasons.

Two national resources that leaders from the Berkshires' Hospitality and Tourism industry can consult for guidance and solicit for support are the Good Companies/Good Jobs Initiative at the Aspen Institute Economic

Opportunities Program, and the National Fund for Workforce Solutions and its Job Quality efforts supported by the Hitachi Foundation and the Prudential Foundation.

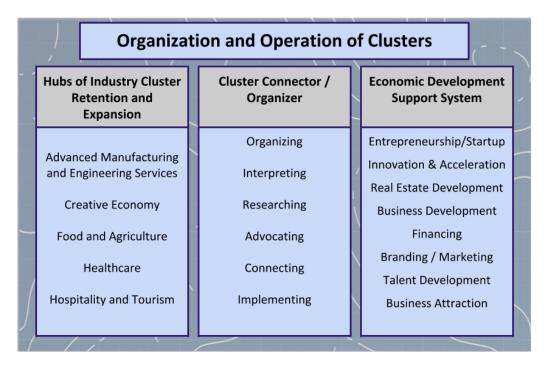
In addition to these efforts, the industry should get involved in the proposed culinary and food training center to be located at Berkshire Community College's South County Center. Early involvement can help shape the programs, curriculum, and investments so that the new center builds a pipeline of talent for the industry and becomes a hub of industry-relevant training for hospitality and tourism businesses in the county.

3. Explore New Funding Sources and Partnerships

In order to increase the promotion of the region, new funding mechanisms and strategic partnerships across geographic and functional areas of the region should be pursued that will enhance brand awareness, new market development opportunities, and ongoing, sustained research for iterative best practice integration.

Recommendation #3: Organize Cluster Leadership Hubs and Support

The diagram below is an illustration of how key leaders and stakeholders can organize to support the growth and competitiveness of the region's key industry clusters.



Action Steps

1. Create Leadership Hubs for Each Industry Cluster

The hubs can be formal or informal, but they need to be organized to give voice to the competitive and changing market dynamics that affect companies/organizations, and enterprises in each of the clusters. The hubs are essential to making this information known to the economic development system in the Berkshires.

2. Identify and Support Cluster Organizers

Cluster organizers should be identified. These organizers will work with the Leadership Hub teams and help them overcome barriers, find new opportunities and, importantly, maintain productive relationships with each of the organizations in the Berkshire economic development system. The organizer will play the following roles in the cluster:

- organizing companies around common tables,
- interpreting company needs to the economic development system,
- researching new opportunities to grow markets, support companies, build connections, and address infrastructure needs,
- advocating for policies and practices that support the businesses in and address infrastructure gaps for the cluster,
- connecting businesses and resources to each other and to the economic development system in the county, and
- implementing new and ongoing efforts to support the growth of the cluster.

Recommendation #4: Explore Other Clusters and Economic Activity

Concentrate and Further Capitalize upon Other Emerging Clusters and High-Impact Economic Activity

The consulting team believes that the most productive and strategic actions for 1Berkshire and its partners are to grow and strengthen the five clusters identified in this report. Each of those clusters has a solid presence in the economy, each has experienced employment growth since 2010, and each makes a major contribution to the Berkshire brand and quality of life. However, the consulting team believes that other clusters and economic activity should be further explored to make the economy even stronger, more competitive, and more diversified.

Emerging cluster activity can come from several different sources, such as:

- The Berkshire Innovation Center
- Lever's work to support high-growth enterprises and entrepreneurs
- Williams College's new Science Center and related investments
- Framework Coworking's services and facilities
- Analysis and potential build-out of the local supply chain for companies such as General Dynamics
- Entrepreneurial spin-offs that could come from larger manufacturers and anchor institutions

Clusters that could emerge from these sources include:

- Business process outsourcing
- Private education and education services that are export-driven
- Niches in engineering and technology services

Recommendation #5: Enhance the Economic Development System

A. The Talent Development System

The consulting team completed an analysis of the talent development system based on: interviews with businesses in the industry clusters; a review of existing analyses and reports on the workforce needs in the county; meetings with education, training, and other groups providing services in the region; and an inventory of resources and credential output from the system. The following overview describes the system's talent assets, opportunities, and challenges, and offers recommendations to strengthen the system.

Assets and Opportunities

The following assets and opportunities impact the talent needs of businesses in the industry clusters.

Businesses participating in cluster-based focus groups say they want:

- to bring new talent to the Berkshires as well as grow their own (local) talent and that the county needs
 everyone to participate in the economy and find better ways to work with people on the margins who
 are out of work or underemployed
- to build "stickiness" between the county's existing young talent and job and career opportunities in their companies
- people who are seeking to come the Berkshires for a job to have great experiences at the job <u>and</u> in the community
- a streamlined and centralized method for recruiting workers (which is a need also identified by businesses interviewed for the MassHire Berkshire Workforce Board's Matchmaker program)
- more coordinated efforts for engaging with education and training institutions, rather than the multiple touchpoints that exist now

The breadth of work-based learning opportunities for residents appears to be a strength. Resources and programs include:

- Berkshire Business Interns (BBI), a Lever program, matched more than 30 Berkshire companies and area college students in summer internships in 2018
- MassHire Berkshire Workforce Board's Connecting Activities program linked more than 300 high school students per year to internship, career awareness, exploration, and other workplace immersion opportunities
- McCann Technical School's placement of 75 students in co-ops each year and Taconic High School's work-based learning opportunities with business
- MassHire Hampden County Workforce Board's interest in partnering with the MassHire Berkshire Workforce Board to identify new apprenticeships with local businesses through the Massachusetts Apprenticeship Expansion Plan

There are also many promising investments building worker skills, pathways, and systems for talent in the county, such as:

- The Berkshire Innovation Center, in partnership with Berkshire Community College, acquired \$1 million in new equipment to train students and workers in CMM and 3D printing machines
- The MassHire Berkshire Workforce Board (formerly the Berkshire County Regional Employment Board) and Berkshire Community College partnered to train adults in welding, hoisting, and advanced manufacturing concepts through a three-year grant
- New state-of-the-art facilities for students at Taconic High School, existing strong career-focused occupational and co-op programs at McCann Technical High School, and new programming at MCLA in electrical engineering and health sciences
- The inception and potential of the Economic Prosperity Impact Council and its emphasis on building a culture of seeking out new ideas, prototyping, and solving issues together, around worker and workforce concerns in the county
- The Workforce Skills Cabinet process that will position the county for future state-level investment to shore up workforce challenges in three areas of priority (manufacturing, healthcare, and hospitality)
- 1Berkshire marketing efforts directed towards identifying links between quality of life issues and retaining and attracting workforce
- The Berkshire Education Task Force as forum to address emerging challenges in K-12 education related to enrollment decline and reduction of programming, and The Berkshire Compact for Education, which remains focused on raising higher education aspirations and attainment
- The MassHire Berkshire Workforce Board and the Berkshire United Way "matchmaker" grant exploring ways to build networks of human resource staff across the county for hiring and retention practices among businesses and workers
- 1Berkshire's Berkshire Leadership Program, providing networking and leadership development opportunities for a cohort of 30 participants annually for two decades

Challenges

The following are areas in the talent development system that leaders of economic and workforce development may need to strengthen or address.

- Businesses in the clusters say that they have markets for their products and services and that they could
 easily grow and add new workers to their Berkshire-based facilities right now, but the lack of the right
 talent prevents them from doing so.
- Talent shortages are widespread across the five clusters, including:
 - Advanced Manufacturing and Engineering Services shift work technicians to engineers
 - Creative Economy management positions
 - Food and Agriculture front-line workers as well as chefs in restaurants
 - Healthcare technical and allied health positions (nurses to therapists) to community navigators and front-line support positions
 - Hospitality and Tourism front-line staff in hotels and restaurants, and management positions
- Critical future skill needs across the clusters will be in "computers, communication, and management,"
 according to the findings of the MassHire Berkshire Workforce Skills Cabinet process. There are also
 future needs for cross-functional skills such as customer service, product development, design mindset,
 and computational thinking for all level of workers.
- Exacerbating these talent needs is slow growth in the regional population, an aging workforce, and relatively low labor force participation rates (63.6 percent). Seventeen thousand (17,000) people are of

- working age (16-64) in the county but not working, according to recent data collected and presented for the county's Economic Prosperity Impact Council (EPIC), a civic leadership group convened by the Berkshire United Way.
- Credential output in the county, such as one-year certificates, two-year associate degrees, four-year
 degrees, and skills training through public workforce sources, is heavily concentrated in healthcarerelated programs of study and not as robust in other areas important to the growth of the industry
 clusters, such as production, engineering, and technology.
- Relative to other regions, there are fewer resources for job training and attainment of occupational certifications outside of the K-12 and post-secondary system.
- Despite pockets of coordination, there is a need for better strategic implementation and communication with businesses in the industry clusters.
 - Businesses interviewed say that there are too many touchpoints between businesses and
 education institutions, training providers and workforce intermediaries. "We go to four different
 business advisory groups; the system is not rational. There has to be a better way," says a
 representative from one of the more prominent businesses in the county.
 - There is still some degree of parochialism that inhibits solutions to common education and training challenges across southern, central, and northern Berkshire County, particularly in K-12 education.
 - There is only loose coordination of new hire recruitment and retention efforts among businesses, institutions, economic development, and education providers.
- Employee retention, job security, and income are concerns among civic leaders and businesses, particularly in relation to front-line workers. Areas of concern include:
 - o Entry level workers are not only difficult to find but hard to keep
 - Small businesses often don't have the human resource bandwidth or capacity to provide effective retention and employee support practices
 - Shift work is difficult to manage and make attractive to a younger workforce
 - Some industries rely heavily on seasonal work
 - Average wages in the Creative Economy, Food and Agriculture, and Hospitality and Tourism clusters often fall below self-sufficiency standards
- While the reach of McCann Technical School and Taconic High School is impressive in northern and
 central Berkshire County districts, students from school districts in southern Berkshire County have
 much more limited avenues for career and technical education. For example, only one student in Lee's
 district is enrolled in career and technical education (CTE programming), and that student travels to
 Smith Vocational and Agricultural High School in Northampton for CTE instruction.

Action Steps

1. Establish and Coordinate Ongoing Workforce-Business Partnerships through the Cluster Hubs and Connectors.

The hubs will give businesses in the clusters the opportunity to come together, brainstorm, share, and help each other identify solutions for their workforce issues. The hubs also will serve as a forum to translate their industry needs to the education community, from K-12 experiences to postsecondary programs. There are many examples of sector partnership like this across the country. For example, the National Fund for Workforce Solutions is a network of 32 regions across the country that support sector partnerships, many of them in rural communities like the nationally-recognized agricultural and manufacturing sector partnerships in Wisconsin Rapids or manufactured flooring partnership in Northwest Georgia. Leaders in the Berkshires can learn from networks of sector partnerships like the National Fund for Workforce Solutions of the Next Generation Sector Partnership Community of Practice, which hosts an academy. County leaders should

consider using priorities established through the Berkshire Workforce Skills Blueprint to acquire state-level funding to develop sector partnerships in the five core industry clusters.

2. Build Even More Intensive and Broad-based Internship, Apprenticeship, and Career Awareness, Exploration and Immersion Opportunities.

We recommend forming a working group of work-based learning providers to identify ways to better coordinate, scale, and increase the quality of experiences in work-based learning across the county. This could be done through existing forums, like the Economic Prosperity Impact Council or the MassHire Berkshire Workforce Board. One early strategic goal of the working group could be to find ways to serve more local college-aged interns who are under-networked and under-resourced, and who are often left out of internship opportunities. The working group could also identify tools to make it easier for small businesses to offer internships. For example, the Baton Rouge Chamber offers a Virtual Schoolhouse, a technology platform that pairs local businesses with classrooms to engage in online mentoring, guest speaking, and internships related to classroom curriculum. The working group could also take advantage of new resources being allocated to apprenticeships with the Massachusetts Apprenticeship Expansion Plan and form a partnership between the MassHire Berkshire Workforce Board and MassHire Hampden County Workforce Board to start apprenticeships with at least one business in each cluster.

3. Extend Career and Technical Education to Southern Berkshire County.

This is an emerging priority of the Berkshire Education Task Force and should be supported by Blueprint leaders. New capacity in southern Berkshire County will give students in the district the same opportunities in career and technical education (CTE) that students in the central and northern parts of the county receive through Taconic High School and McCann Technical. An early priority for new CTE programs of study in southern Berkshire County should be on career opportunities in the clusters, such as management tracks for Hospitality and Tourism, pre-engineering tracks for Advanced Manufacturing and Engineering Services, and allied health for Healthcare. Part of the effort of the Berkshire Education Task Force, with the help of other organizations like the MassHire Berkshire Workforce Board, should be to develop and pilot career pathway schematics that demonstrate how students and workers move from entry-level to higher education and higher pay within each industry.

4. Build Stronger Supports that Lead to Economic Security for Front-line Workers and Support the Workforce Needs of Berkshire Businesses to Retain Employees and Provide Good Jobs.

The overriding goal is to help businesses build more consistent and more thoroughly-integrated practices around employee retention, hiring, and employee support, that in turn leads to higher levels of economic security, stability, and income for workers. This could be a priority for the Economic Prosperity Impact Council, and be supported by efforts like the matchmaker grant. One effort could be to convene a series of business-to-business panels that invites local companies and local experts to distribute, build, and inspire quality job practices among more Berkshire businesses. Municipalities and economic development agencies in the county could also build rewards, recognition, and marketing for Berkshire businesses offering employee engagement and management practices that improve employee performance and increase job stability – practices such as predictive scheduling, retention services, cross-training, supervisory support, and skills acquisition. EPIC or other leaders in the county could work with the *Berkshire Eagle* to create an annual "Best Places to Work" award that recognizes and highlights businesses that meet national criteria for job quality practices. Overall efforts like these should be integrated into the conversations, and possible grant opportunities, to help companies adjust and plan for annual increases in the statewide minimum wage to \$15.00 per hour by 2022.

5. Launch Coordinated New Hire Recruitment Initiative for Berkshire Businesses that Curates Jobs and Attracts Candidates to Fill Job Openings.

Blueprint efforts should support "**the jobs thing**," 1Berkshire's new recruitment platform that identifies, curates, and posts jobs from Berkshire businesses that offer good wages. The platform focuses on attracting countywide candidates, as well as domestic and international candidates, to work and live in the Berkshires. Part of the platform should also be used to coordinate and organize experiences for new workers and interns to learn more about the Berkshire advantage, smooth lifestyle transitions for new recruits coming to the county, and build opportunities to integrate them into the civic life of the Berkshires.

6. **Build Forums for Continuous Learning and Innovation for Talent Development Practice.**The Economic Prosperity Impact Council and Impact Council of Berkshire County Leaders could align efforts across the talent development system, examine "what works" across the county, and stimulate (through pilots or prototypes) new ideas and efforts that address challenges in the system.

B. The Business and Entrepreneurial Support System

Throughout the course of this project, the consulting team analyzed the business and entrepreneurial support system for Berkshire County. The team reviewed reports and information on the system and conducted extensive interviews with leaders and senior staff in key business and entrepreneurial development organizations. The team found that there are a number of organizations in the county providing technical assistance across the spectrum, from startups to small businesses, to real estate developers, and commercial building owners. This matrix summarizes the current system.

Examples of Organizations Currently Providing System Support							
	Startups & New Entrepreneurs	Existing Small to Mid-Sized Businesses	New Business Recruiting & Support	Real Estate Deals: Housing or Commercial once user identified			
Lead Coordination, Convening and Navigation for businesses and developers to align need with resources.	1Berkshire (BREP), Small Business Development Center	1Berkshire, Local Chambers, Local Bank Programming	1Berkshire, North Adams Partnership, Pittsfield Economic Development Authority (PEDA)	Berkshire Regional Planning Commission tracks projects across all Berkshire communities. Local "Red Carpet / Deal Teams" operate in many communities to support resource relationships.			
Business Support, Technical Assistance and Real Estate Permitting Guidance.	Lever, Berkshire Enterprises, SCORE, Small Business Development Center, 1Berkshire, MCLA, Berkshire Agricultural Ventures	Small Business Development Center, Business BootCamp (1Berkshire/MCLA), SCORE, PERC, Franklin County CDC	Local "Red Carpet/Deal Teams", 1Berkshire, Municipal Leadership (Mayors/Town Administrators), Massachusetts Office of Business Development, Pittsfield Economic Development Authority (PEDA)	Local Community Development and Planning Staff, Massachusetts Office of Business Development, MassDevelopment, Private Lenders and Consultants, Berkshire Regional Planning Commission			
Financial Support including Debt and/or Equity.	Milltown Capital, Lever, Berkshire Agricultural Ventures, PERC, Franklin County CDC	Private Lenders, Common Capital, Mass Growth Capital Corp., PERC, MassDevelopment, Milltown Capital, Pittsfield Economic Development Fund	Municipal "incentives" (primarily tax agreements), MassWorks, Massachusetts Office of Business Development (state job creation incentives)	Private Lenders, Common Capital, MassDevelopment, Milltown Capital, Variety of State Housing Assistance Programs (MassHousing, DHCD, Historic Low Income & New Markets Tax Credits)			
Networking, Locations, and Convening Programs.	Framework, Cloud85, Pittsfield Enterprise Center, Shire City Sanctuary, Old Stone Mill	1Berkshire, Local Chambers, Berkshire Business Roundtable, Lever, Small Business Development Center, Berkshire Taconic Foundation	Economic Development Practitioners Group, Berkshire Business Roundtable	Economic Development Practitioners Group			

Following is a brief overview of the system's assets and opportunities, its challenges, and recommendations for strengthening and growing its capacity.

Assets and Opportunities

- The support system for startups and new entrepreneurs has several bright spots. For example, entrepreneurship centers (Lever, Makers' Mill, and Framework Coworking) provide space and programming for entrepreneurs and startup activity.
- A number of projects are finding success in the conventional/institutional lending market (e.g., Williams College, Tanglewood), the hospitality sector (e.g., Cranwell Resort renovation/expansion, Courtyard Marriott Lenox Berkshires) and high-end residential (e.g., Canyon Ranch residences).
- Identifying and staying current on the broad range of available financing resources requires a high level of expertise and engagement. The GreylockWORKS project is an example of an innovative idea that needed to tap into multiple sources of funding and use a phased development approach in order to get the project going and demonstrate demand and interest.
- New rental developments in Pittsfield are successfully attracting market rate renters and proving demand for downtown housing.
- Groups such as the Economic Development Practitioners Group and Small Business Forum have been established to foster better communication between local, regional, and state organizations.
- The Berkshire Innovation Center has the potential to provide resources and technical assistance to businesses that have an appropriate business model, operational plan, and facility.
- The potential positive impact of several new projects:
 - Berkshire Innovation Center in Pittsfield
 - o Proposed museums in North Adams
 - New rental developments in downtown Pittsfield
 - o Eagle Mill Redevelopment in Lee
 - Greylock Glen in Adams

Challenges

- Old View/New View. Given historic economic challenges, it is still hard for some leaders and decision makers to see the positive upswing and potential in their own backyard. Often it is the newcomers to the area who are seeing opportunities, investing, and taking risks.
- Local-Only Protectiveness. Several interviewees noted that a parochial viewpoint with some distrust of organizations based "outside" the Berkshires limits opportunities. "People get nervous if 'Berkshire' is not in the name."
- Market. Berkshire County is a small, dispersed market. While some new businesses may be able to fill a niche in the local market, real economic growth is likely to come from businesses that can tap into broader markets.
- **Splintered Resources.** Despite the availability of resources, many businesses find the system hard to access and navigate. Consultant organization Next Street articulated the concern expressed by many interviewees: "Business service organizations are fragmented and siloed."
- **Referrals.** Referral systems among lenders with differing business niches are not robust. A business that "knocks at the wrong door" may not be referred to the more appropriate capital or technical assistance source in the region.

- Business Accelerators. There is not an articulated system for focusing on growth strategies for existing
 businesses. Small business accelerator programs (e.g. Babson's Scalerator Program, VVM Program for
 small business) are missing in the Berkshires. These could include growth financing, business strategy,
 assistance with generational transitions, and the like.
- **Creative Financing.** Most apartment and commercial real estate deals don't 'pencil out' for conventional financing given rental levels relative to the cost of construction and/or renovation. For developments of scale, creative sources of debt and equity are needed to solve pro-forma gaps.
- Accessing Financing. While there are many capital providers, Berkshire businesses and developers do not currently have easy access to CDFI, CDC, or USDA financing.
- Organization and Focus. As noted previously, the Economic Development Practitioners Group and the Small Business Forum foster better communication among local, regional, and state organizations. However, greater visibility, explicit support by member organizations for the groups, and an agreement on clear roles, responsibilities, and specific plans with accountability metrics would accelerate the effectiveness of these groups.
- **Startup Support.** Southern Berkshire County is lacking resources for startups. Robust programming and a physical space could support the acceleration of entrepreneurial efforts.

Action Steps

The following summarizes actions that could make an impact on the effectiveness of the business and entrepreneurial support system. The categories in the system support matrix can be a useful framing for problem-solving deliberations with stakeholders to implement these recommendations and develop action plans. Recommendations are organized in the matrix categories:

- Startups and Entrepreneurs
- Existing Small to Mid-sized Businesses
- New Business Recruiting and Support
- Real Estate Deals

1. Define and Communicate Roles and Responsibilities

- This is critical for all for parts of the system. Identifying a "lead" for convening and communication among the organizations (internally facing) and identifying a "navigator" to help businesses locate resources (externally facing) would add needed transparency to the system.
- A focus on metrics (the definition of success) and systems to hold organizations and staff accountable must also be built into the system.

2. Acknowledge and Embrace a Regional Economy

- Develop a "new narrative" for regional leaders, emphasizing how success in one part of the county can be leveraged for success in other areas of the county. Create a climate in which leaders can celebrate one another's achievements.
- Consider organizing an annual Berkshire County Convenes for Growth conference to present updated
 economic trends and discuss current opportunities and challenges in the economy. This could serve as a
 structured time for organizations to check in on progress on the Blueprint recommendations, to stay
 current on trends and opportunities, and to support existing businesses.

3. Support Startups and Entrepreneurs

• Strengthen the current ecosystem by clearly articulating a long-term commitment to strategies that support start-ups and entrepreneurs (it takes a long time to build a robust ecosystem!).

 With the input of the key partners (e.g., Lever, Milltown Capital, Framework Coworking, MCLA, Berkshire Agricultural Ventures) identify a leader to coordinate efforts in southern Berkshire County, and develop a work plan for coordination and support.

4. Strengthen Referrals for Small to Mid-sized Businesses

- Stronger coordination and referral networks are essential. Business service providers should work
 together to develop a unified framework -- first, to jointly discuss strategies to identify and engage
 businesses that may be ready to grow, and second, to create joint marketing strategies to reach out to
 businesses describing resources, and to establish mechanisms to connect lenders and other referral
 partners on a recurring basis.
- Consistently updating key contacts in all of the lending institutions and business service organizations is
 essential. Keep "quality over quantity" in mind. Businesses need to know who they can contact for the
 most current information, rather than dealing with outdated resource guides or generic web links.
- Develop strategies to tap into retirees and second home owners in the County to reinvigorate SCORE as a mentoring and business resource. Evaluate recent success of Cape Cod Chamber with SCORE as model.

5. Enhance Real Estate Deals

- Encourage all communities to create "red carpet teams" to meet with developers, discuss permitting and deal financing strategies, and designate a local champion for follow-up. This will be most effective if all teams share local leads across the county for better coordination and follow up.
- Deals often don't "pencil out." Identity experts (staff or consultants) who have depth of information and
 expertise to provide resource menus to developers for projects throughout the county. Consider
 retaining some of these experts on an "on call" basis to help developers of complex projects understand
 resources, tools, and how to access them. Provide continuing training for municipal teams on available
 resources.

6. Recruiting and Supporting New Businesses

- Develop a county-wide strategy (clear process and point person) to share business leads and information on sites available for development.
- In addition to maintaining a "business friendly" approach and responsiveness to companies that are evaluating opportunities in the Berkshires, potential growth could come from:
 - Developing an initiative to grow a local supply chain for existing businesses
 - Focusing on entrepreneurial business assistance to those businesses and startups with the potential for scalability

7. Look to Alternative Capital Providers

Explore the expansion of existing county resources (PERC, Greylock CDFI) or new, stronger partnerships with alternative capital providers (CDFI, CDC) based outside the county. Building consensus among Berkshire County capital providers about this strategy is crucial to success, rather than any one organization initiating an expansion strategy on its own. The availability of funding or other supports to cover startup/expansion expenses for these providers should be key in determining the direction in which the resources are deployed.

Recommendation #6: Address Cross-Cutting Issues

There are several issues that affect all of the clusters and the overall economy as well. Following is brief description of these so-called cross-cutting issues, and recommendations to address them.

Broadband

The Commonwealth of Massachusetts and the Baker-Polito Administration have demonstrated its commitment to solving the last-mile broadband challenges in Berkshire County by awarding more than \$11.5 million in grants to 14 municipalities and selected private providers, to construct broadband networks that will deliver connectivity to an estimated 10,000 previously unserved homes and businesses. While many of these so-called "last mile" projects are still in the design or construction phases, the Town of Mount Washington has completed a municipal fiber-to-the-home network, Alford has connected the first homes to its municipal fiber network, and Charter Communications has completed a network in the Town of West Stockbridge. In addition, the Commonwealth-owned MassBroadband 123 fiber-optic network underpins many of the last mile projects in unserved towns, and also reaches into every Berkshire County municipality, providing an opportunity to connect businesses and residents to a gigabit-level internet connection, as was done by the 47 Railroad mixed-use development project in Great Barrington.

Energy Costs

An article in the February 23, 2018 edition of the *Wall Street Journal*, "New England Has a Power Problem," noted that electricity costs are 56% higher in New England than in the rest of the nation. There are several reasons for this: retiring power plants, the lack of construction of new plants, the high costs of shipping natural gas, and the shortage of pipelines. According to the U.S. Energy Information Administration¹⁶, in 2017 Massachusetts generated 68% of its electricity from natural gas, placing additional strain on a limited supply and increasing prices.

Here in Massachusetts, businesses pay some of the highest electricity rates in the United States, behind only Hawaii, Alaska and Rhode Island. The rates are high because of some of the reasons referred to above, as well the state's approaches to energy and environmental issues and policies. These high costs are particularly challenging for industrial and commercial employers that consume a large amount of electricity to produce products and services for domestic and international customers. In the Berkshires, these industrial and commercial ratepayers are often the largest employers in the region. The high costs jeopardize the competitiveness of the companies that provide the foundation for the long-term economic health of the region and sustaining good jobs.

With advocacy from the business community, some progress has been made in Massachusetts to mitigate the problem, including more accurate rates based on real costs to serve each rate class, recognition that ratepayers with solar systems need to bear some grid costs, and methods that reward industrial and commercial rate payers who manage their electricity demand to reduce grid costs and support system reliability. However, the challenge of high energy costs remains.

It is not clear what direction the policy conversations in the state will take with respect to helping to lower energy costs, or at least keep them from growing. One strategy employed by the Baker Administration is the

¹⁶ United States Energy Information Administration. "Massachusetts: State Profile and Energy Estimates." https://www.eia.gov/state/?sid=MA. 2018.

importing of hydroelectric power from Quebec along the Northern Pass power line. That project ran into difficulties with the state of New Hampshire, but is still under consideration. There is also a case to be made for careful, balanced consideration of the costs imposed on employers for new or modified policies. There are other approaches as well that could help lighten the energy cost burdens and facilitate growth of employment levels and wages for our region's largest employers. Examples include establishing an economic development electricity rate for regions that are lagging behind in the overall economic health of the Commonwealth, and more latitude for industrial customers in using energy efficiency funds.

The group that is and has been advocating for large electricity users in Western Massachusetts is the Western Massachusetts Industrial Group (WMIG), a paid membership group. Very few members are from Berkshire County. If more companies joined the conversations and discussions, it could help the region and the county to address their energy needs and costs.

Population

The Saturday, October 21, 2017 edition of the *Berkshire Eagle* had a headline that read, "Report: Lure millennials; stem population loss." The story focused on a report that was prepared by 1Berkshire called "The **Berkshire Initiative for Growth (BIG)**." Business, education and community leaders started work on the report in 2014. They interviewed millennials, collected data on the county's population, and conducted surveys of young people's views of life in Berkshire County. The report analyzed the data and information and offered more than fifteen recommendations to overcoming the loss of population. Leaders and staff at 1Berkshire took responsibility for some of the recommendations, but, in the end, it was left to others in the county to step up and take responsibility for other recommendations. That aspiration was not fully realized, and as a consequence, the county lacks a unified, strategic, and collaborative effort to stop the out-flow of young people.

In this context, the consulting team recommends that county leaders follow the example of Tulsa, Oklahoma. Tulsa, like many communities around the country, was faced with a declining population and a shrinking workforce. Business leaders understood that unless there was a dramatic turnaround in the population, the economy and the quality of life in Greater Tulsa would suffer. As a result, leaders and staff at the Tulsa Regional Chamber of Commerce launched a new initiative several years ago called Project Boomerang.

The goal of Project Boomerang is to "increase the percentage of high school in-migrants with bachelor's degrees or higher in the greater Tulsa area." The strategic focus is on Tulsa high school students and Tulsa students who go off to college outside of the Tulsa region and encourage them to stay in or, in the case of college students, come back to live and work in Tulsa.

To make the initiative successful, the Tulsa Chamber did several things:

- received buy-in from the 14 school districts in Greater Tulsa and got them to be partners in the program,
- developed intensive relationships with administrators, guidance counselors, and teachers in each of the school districts in the region,
- created a hard-copy communication tool, as well as a dedicated website for the program,
- convened focus groups of high school students to get their suggestions and input in the development of the program, and
- entered into a partnership with Tulsa's Young Professionals to be ambassadors for the program.

Once project Boomerang was in place, the Chamber and its partners organized "Summer Send-offs" for graduating Tulsa high school students before they graduate, created work-based internships with Tulsa companies for high school students during the school year and over the summer for college students, and used an innovative software system that identified all recently graduated high school students and current college

students from Tulsa and sent targeted text messages to educate and keep them connected to jobs, internships, and cultural and local events throughout the year.

This high-touch, high-impact program reaches, in some fashion, nearly everyone of school age, and it builds a bond between them and the greater Tulsa area.

It is also important to note that although Berkshire County is losing population overall, it is not losing population in every demographic segment. The immigrant population represents the largest sector of growth in Berkshire County. According to estimates from the US Census Bureau, there were 7,587 foreign-born residents of Berkshire County as of 2017, up from 5,959 in 2010; this represents a 27.32% increase. In 2017, Berkshire County's total population was an estimated 126,313, down from an estimated 131,294 in 2010; this represents a decrease of 3.80%. In 2010, foreign-born residents accounted for 4.53% of the county's population; in 2017, foreign-born residents made up 6% of the county's population. That said, many who work with immigrants consider the immigrant population to be significantly undercounted in census data collection, and the increases may be even larger than these numbers suggest. There is also a belief among county leadership that the immigrant population will continue to show significant growth in the 2020 census.

The aforementioned Berkshire Initiative for Growth report noted this trend, and indicated that a better understanding of this demographic change will help encourage support for and appropriate allocation of resources to groups in need, and also strengthen engagement in schools, the workforce, and the community. Coordination with organizations that support the immigrant population, including the Berkshire Immigrant Center, Community Health Programs, Literacy Volunteers of Berkshire County, Multi-Cultural BRIDGE, and others, will help to sustain and strengthen this growing demographic of Berkshire County's population. Continued support for opportunities to showcase immigrant culture (such as the Pittsfield Ethnic Fair), shows of civic solidarity (such as North Adams installing a public menorah alongside the City's Christmas tree), and ongoing community dialogues will encourage continued integration of these populations into the Berkshire community.

Transportation

In addition to the challenges previously identified, one other significant impediment to further development of each cluster is **transportation**—the movement of people and goods within the region. Transportation was mentioned repeatedly during cluster-based focus groups.

Transportation challenges include:

- Absence of first/last mile transportation service provision
- Absence of express public transit service between employment clusters
- Lack of transportation services after 6:00pm and on weekends
- Lack of coordination of regional transportation assets--private and public
- User difficulty pertaining to access to real-time transportation information

These challenges have been cited as:

- Impeding hiring
- Reducing employee dependability
- Restricting the growth of private and non-profit sector revenues
- Negatively impacting income and revenue streams
- Making it difficult to transport customers and audiences around the county

In April 2018, the findings from the Blueprint cluster work were brought to the attention of the Berkshire County Transportation Working Group (BCTWG), a group that was created under the leadership of Senator Adams Hinds in September 2017. The group was formed to address and find solutions to the problems that transportation posed to the Berkshire economy. The group includes representatives of multiple agencies, including 1Berkshire, Massachusetts College of Liberal Arts, Community Health Programs, Berkshire Regional Transit Authority, and Berkshire Regional Planning Commission.

With the benefit of the Blueprint findings, and the findings from the BCTWG, a consensus emerged around the idea of a Transportation Management Association (TMA). In addition to the Blueprint and the work of the BCTWG, the idea for a TMA in Berkshire County is further corroborated by the November 2017 McMahon Transportation Engineers and Planners' study, "Shared-Ride Access to Work," prepared for Berkshire Regional Transit Authority.

Currently, there are fourteen TMAs operating in the state of Massachusetts. The TMA concept is centered on several elements: a public/private partnership between regional employers, transportation providers, and municipalities; express fixed-route transit services operating between "micro transit hubs" established within the commercial districts of eight of the region's municipalities; coordinated public/private first/last-mile service provision; and a digital application providing users with real-time information and the ability to schedule rides.

In July of 2018, in Amendment #1190, "Rural Transportation Solutions for Berkshire County," Senator Hinds was able to secure \$35,000 to further the work on a TMA for Berkshire County. This \$35,000 item will help sustain the TMA process. Over the course of the next few months, through the facilitation of 1Berkshire, the working group, and McMahon Associates, several actions will be undertaken:

- Hold focus groups with employers
- Develop a detailed inventory of all public and private transportation assets within the region
- Engage municipal leaders and other key stakeholders throughout the region
- Craft a business model and financial plan for operating the system

Wages and Financial Sustainability

Many Berkshire County residents and immigrants lag behind their counterparts in other regions of the state and country when it comes to wages, household income, and job quality. For example, in 2016 about 12.4 percent of county residents were in poverty, up from roughly 11 percent of the county residents in poverty in 2010. The rate of poverty in the state was 11.4 percent in 2016. Recent data collected by the Economic Prosperity Impact Council shows that median household income in the county is \$19,000 less than the state. In 2016, median household income in the county was \$52,253 and \$70,954 for Massachusetts. The July 17, 2018 edition of *Boston Magazine* underscored this point, and painted a picture of affluent people in Berkshire County taking advantage of all of the amenities the county offers, while others are forced to work two to three jobs just to make ends meet. This 'Tale of Two Counties' narrative persists even though business and economic development planners and education and workforce development organizations, along with community-based organizations, have been working very hard to address the wage and income disparities in the county.

The findings in the Berkshire Blueprint show slow but steady increases in employment in each of the five targeted economic clusters and significant investments by individuals, business organizations, municipalities, and state government in the last few years totaling close to \$1 billion. In addition, key business, entrepreneurial, education and training, and community-based organizations engaged in new and innovative programs designed to tackle some of the income challenges in the county.

Therefore, now is the time for a more intensive focus on economic and income inequality in the Berkshires. A growing economy, significant and on-going capital investments, and increased organizational capacity in the county means Berkshire leaders and economic development stakeholders have a golden opportunity to make a profound difference in the economic lives of those who are not benefiting from the improving economic situation in the county.

County leaders can take several actions to lift up the economic lives of many local residents and immigrants.

- 1. Support the Work of the Berkshire United Way's Economic Prosperity Impact Council (EPIC)

 Berkshire United Way created the Economic Prosperity Impact Council in 2017 to address the challenges many residents of Berkshire County face: low or stagnant wages, lack of benefits, poverty rates that are higher on a per-capita basis than they are in other regions of the state, and declining household income. The EPIC program is a multi-dimensional effort to reduce the number and percentage of households with incomes under \$75,000, expand employment opportunity for low-income residents, and create a pathway to individual and family financial stability. Although EPIC is spearheaded by the Berkshire United Way, it is a countywide coalition with shared leadership from the Greylock Federal Credit Union, Guardian Life Insurance company, and Berkshire Community College. A number of organizations in social and human services, education and training, community development, and business also participate in the initiative. There are three fundamental program components of EPIC:
 - The Employment Matchmaker program, a collaboration with the MassHire Berkshire Workforce Board (formerly the Berkshire County Regional Employment Board), matches underemployed or unemployed individuals with employers who are looking for workers. The program provides significant support to people during the job search process.
 - The Adult Work-Based Experiences program offers on-the-job training and internships for people who lack work experience. This component is designed to help individuals improve the chances of securing a job.
 - The Volunteer Income Tax Assessment program offers free income tax preparation to low-income individuals.

2. Study Other Program Models and the Experience of Other Organizations on Wages and Financial Sustainability.

- The Pinkerton Foundation, a New York City Foundation dedicated to improving the lives of people in low-income neighborhoods, published a series of working papers related to jobs, education and workforce. Two of those papers have relevance to the issue of wages and financial sustainability in the Berkshires: Make Bad Jobs Better and Now or Never: Heeding the Call of Labor Market Demand. The papers were authored by Stephen Dawson, the former Director of the Paraprofessional Healthcare Institute. Dawson, who has worked with numerous businesses and workforce and education organizations around the country on this issue, offers practical suggestions for improving job quality, job security and economic stability. He is based in New Hampshire.
- Boston Education, Skills & Training (BEST). Founded in 2006, BEST has been a resource for workers and businesses in the hospitality industry in Boston. BEST offers courses for workers in several key areas related to the industry: Food and Safety, Basic Culinary Arts, Professional Food Services, Citizenship, and Computer Skills Enhancement. This training makes it possible for some Boston non-incumbent workers to gain employment in the industry, and for incumbent workers to see increased wages and benefits, as well as greater job security. Currently, more than 30 companies in the hospitality industry are partners with BEST companies like the Battery Wharf Hotel, Copley Square Hotel, the Boston Park Plaza, Loews

- Boston, the Ritz Carlton, etc. BEST works with both union and non-union employers to carry out its mission of enhancing the quality of work in the industry.
- United Way of Chittenden County in Burlington, Vermont created a program in 2006 called Working Bridges. Organized by the United Way, Working Bridges is a collaborative of employers including Keurig Green Mountain, Rhino Foods, Sheraton Hotel of Burlington, and the University of Vermont Medical Center. The program also includes community-based organizations, education and training and adult learning institutions, food service programs and the Champlain Valley Office of Economic Opportunity. The mission of Working Bridges is to improve workplace productivity, retention, advancement, financial stability, and well-being for workers. Working Bridges uses several strategies: on-site workplace resource coordinators, income advance loans, financial education workshops, specialized job training, and employer problem-solving groups.

CONCLUSION

It is no secret that the decades-long national decline of traditional manufacturing has had a deleterious effect on Berkshire County. The departures of long-time major employers such as General Electric and Sprague Electric devastated the Berkshire economy. For too long, the narrative has been that our best days were behind us, confined to faded newsprint and wistful memory.

That narrative is out of date. For several years, Berkshire County leadership has felt a sense of cautious optimism that the tide is turning. New buildings, businesses, and partnerships are springing up everywhere. With the knowledge that Berkshire County has seen \$1 billion in investment over the last three years, the writing is on the wall: the days of doom and gloom are over. The new Berkshire narrative is about growth and opportunity in a diversified regional economy, and there is room for everybody at the table.

Advanced Manufacturing, Creative Economy, Food and Agriculture, Hospitality and Tourism, and Healthcare: these economic clusters represent a significant portion of the economy, chosen because of their impact on the overall economy, sustainability, innovative capacity, recognized niche, and local leadership. These clusters have seen sustained growth, and the Blueprint looks to the clusters and their leadership to help steward continued progress. Other clusters will almost certainly emerge as similarly-impactful in the years to come. The cluster approach to Berkshire County's economic development offers a structure for benchmarking and sustained growth, which the Blueprint Advisory Committee and its partners can oversee and help to guide.

None of the progress highlighted above happened by accident; it has taken years of tireless efforts from countless individuals and organizations. Although so much work has been done, we still have plenty to do. Larger concerns around transportation infrastructure, population loss, energy prices, and wages and financial security still present as impediments to regional economic progress. However, these challenges are not insurmountable. As a county, we will develop solutions through cooperation between the public and private sectors, with support from the Berkshire legislative delegation and state and federal agencies; but success will require an all-hands-on-deck effort.

This collaborative effort will require local elected officials, executives, organizers, workers, volunteers, and private citizens to step up to the plate, and leverage their own spheres of influence for the collective good. Organizations can become part of this critical work by serving as cluster leaders, or if not serving as cluster leaders, relaying concerns, opportunities, needs, trends, and other critical data to cluster leadership, and collaborating within and between clusters. Individuals can get involved by taking advantage of opportunities to serve on boards, committees, or task forces that advance Blueprint objectives. Everyone can become a critical part of this important work by committing to collaborate to improve life in the region. If you have an insight, share it. If you need help, ask for it. If you have a great idea that needs support, seek out resources and partners. Together, we can accomplish so much more than we can alone. Here in the Berkshires, collaboration has always been our greatest strength, and if we can present a united front, it will carry us forward, together, to our best days yet.

Appendix 1

Strong and Growing Clusters Table: Definitions and Sources

Source of Data: EMSI, 2018.1 – QCEW Employees, Non-QCEW Employees, and Self-Employed; American Community Survey, Non-employer Statistics, and Bureau of Economic Analysis State and Local Personal Income Reports. All data are 2007 unless otherwise indicated.

Gross Regional Product measures the final market value (wages, benefits, taxes, capital investments, profits paid) of all goods and services produced in a region by the businesses in the industry. GRP is used to gauge the total value that an industry produces in the economy.

Total Jobs/Job Growth are total number of wage and salaried jobs plus self-employed individuals plus individual proprietors earning income from the industry in base years 2010 and 2017.

Industry Concentration (Location Quotient) is the ratio of an industry's employment to the same industry's national employment. LQ > 1.0 indicates a concentration and/or a regional comparative advantage may exist for that industry.

Average Wage and Salary is the average wages and salaries and proprietor income paid by businesses in the industry (total wages divided by total jobs in the industry).

Jobs Multiplier is the total job yield to the region as a result of, and including, a single job added. A jobs multiplier indicates how important an industry is in regional job creation. A jobs multiplier of 3, for example, would mean that for every job created by that industry, 2 other jobs would be created in other industries (for a total of 3 jobs). Industries with a high sales/labor ratio typically have a high jobs multiplier.

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Appendix 3

Interviews (partial list)

Tad Ames, Kripalu Center for Yoga & Health and Berkshire Natural Resources Council

Betsy Andrus, Southern Berkshire Chamber of Commerce

Chris Aylesworth, Berkshire Community College Nursing, Health and Social Sciences Division

Brandon Braxton, MassDevelopment

Pat Begrowicz, Onyx Specialty Papers, Inc.

Tom Bernard, Mayor, City of North Adams

Dr. Jaime Birge, Massachusetts College of Liberal Arts

David Bissaillon, SBM Insurance

John Bissell, Greylock Federal Credit Union

Stephen Boyd, Boyd Technologies

Laura Brennan, Berkshire Regional Planning Commission

Matthew Brewster, Next Street

Toni Buckley, Berkshire Immigrant Stories and Berkshire Community College

Brenda Burdick, General Dynamics Mission Systems

Tim Burke, Mill Town Capital

Jonathan Butler, Nathan Haddad, and Lauri Klefos, 1Berkshire

Frank Canning, MassDevelopment

Angela Cardinali, Berkshire Farm & Table

David Carver, CT Management Group

Donna Cesan, Town of Adams

JD Chesloff, Massachusetts Business Roundtable

Michael Coakley, City of Pittsfield

Jeffrey Cohen, Eagle Mill Redevelopment

Julie Cowan, MassDevelopment



Paula Consolini, Williams College

Doug Crane, New Dalton Group

David Cruise, MassHire Hampden County Workforce Board

Gene Dellea, Berkshire Health Systems

Julia Dixon, creative entrepreneur and consultant

Lisa Donovan, Massachusetts College of Liberal Arts

Don Dubendorf, 1Berkshire Board of Directors

Jake Eberwein, Massachusetts College of Liberal Arts

Bill Ennen, Massachusetts Executive Office of Housing and Economic Development

Tyler Fairbank, the Fairbank Group

Michael Ferry, Berkshire Bank

Brent Filson, Lever, Inc.

Helena Fruscio Altsman, Massachusetts Executive Office of Housing and Economic Development

Alexandra Fuchs, Boston Symphony Orchestra/Tanglewood

Emmalyn Gaertner, Community Development Corporation of South Berkshire

Lori Gazzillo Kiely, Berkshire Bank Foundation

Tim Geller, Community Development Corporation of South Berkshire

Keith Girouard, Massachusetts Small Business Development Center

Pam Green, Smith Green Wax & Gold, LLP

Joanne Haracz, McMahon Transportation Engineers & Planners

Kris Hazzard, Berkshire United Way

Adam Hinds, State Senator

Rod Jané, Berkshire Innovation Center

Denise Johns, Berkshire Community College

Beryl Jolly, the Mahaiwe Performing Arts Center

Pat Larkin, Massachusetts Technology Collaborative

Nat Karns, Berkshire Regional Planning Commission

Margaret Keller, Community Access to the Arts

Christopher Ketchen, Towns of Lee and Lenox

Ellen Kennedy, Berkshire Community College

Shawn Kinney, Berkshire Sterile Manufacturing

Wendy Krom, Berkshire Interfaith Organizing

Kate Maguire, Berkshire Theater Group

Wayne Marzotto, General Dynamics Advanced Information Systems

Brooke Mead, Berkshire Immigrant Center

Olivier Meslay, The Sterling and Francine Clark Art Institute

Mindi Morin, Canyon Ranch Lenox

Elliott Morss, business consultant

Bill Mullholland, Berkshire Community College

Wendy Northcross, Cape Cod Chamber of Commerce

Nick Paleologos, Berkshire Theater Group

Cynthia Pansing, Berkshire Agricultural Ventures

Jodi Rathbun-Briggs, Greylock Federal Credit Union

Christopher Rembold, Town of Great Barrington

Dean Rizzo, Sand Dollar Strategies

Rich Rowe, Crane Currency

Deanna Ruffer, City of Pittsfield

Jill Sasso Curtis, Berkshire Community College

Jim Schantz, Schantz Galleries Contemporary Art

Matt Sheehy, Williams College

Heather Shogry-Williams, MassHire Berkshire Workforce Board

Beth Siegel, Mt. Auburn Associates

Christopher Sikes, Common Capital

Lia Spiliotes, Community Health Programs

Jennifer Tabakin, Town of Great Barrington

Peter Taylor, Berkshire Taconic Community Foundation

Linda Tyer, Mayor, City of Pittsfield

John Waite, Franklin County Community Development Corporation

Susan Witt, Schumacher Center for a New Economics

Carlo Zaffanella, General Dynamics Mission Systems

Barbara Zhuetlin, Berkshire Grown

Appendix 4

BRPC Investment Database Sample Report

