CENTER ON RURAL INNOVATION

Digital Economy Diagnostic

Berkshire County, MA

October 2021

Objective

01 | **Provide a data diagnostic** on Berkshire County's digital economy

02 | **Discuss findings and outline potential next steps** and priority areas

CORI Team

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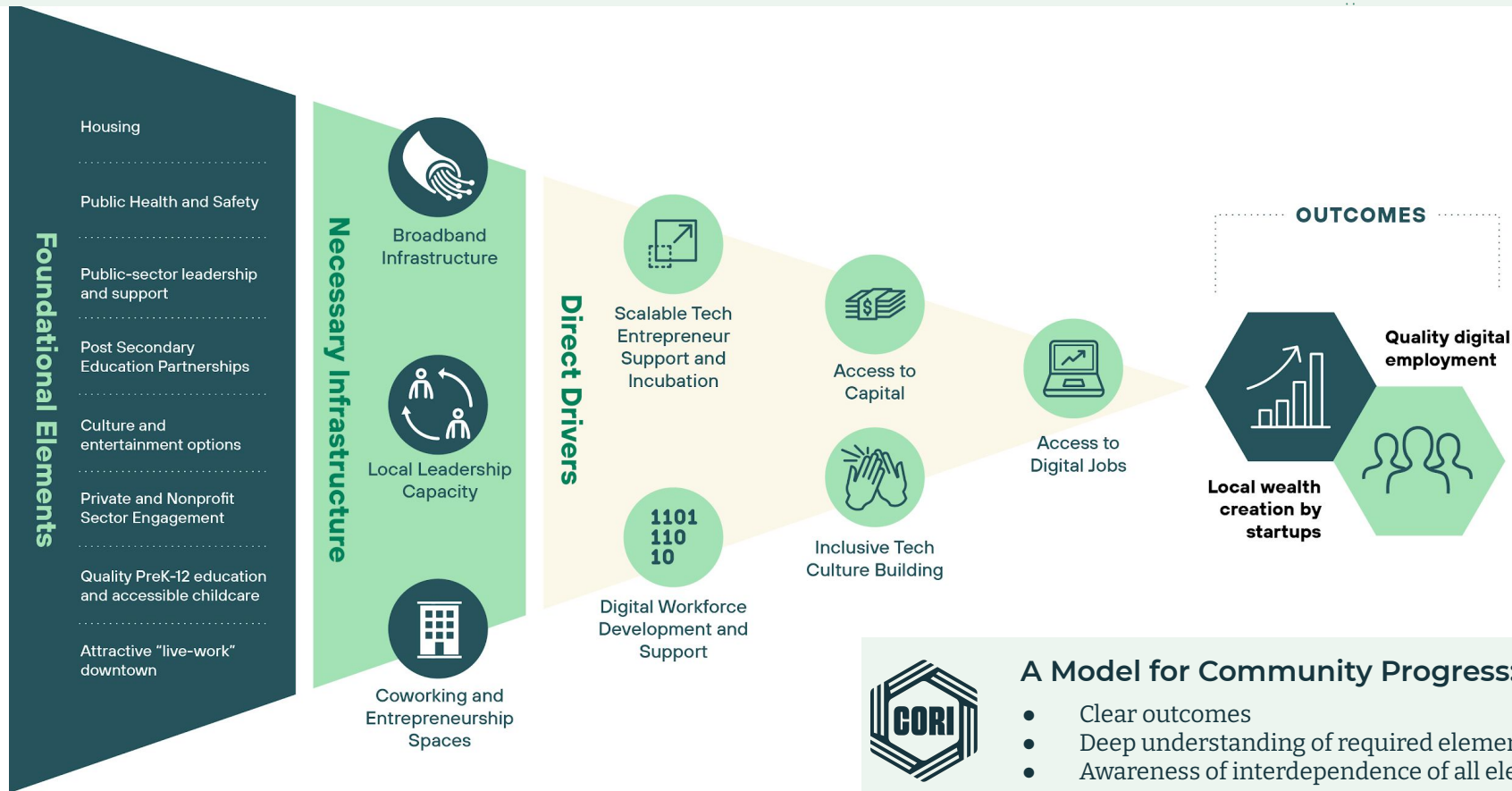# Agenda & Contents

- **Introduction and Context**

- Economic Baseline / Foundations

- Digital Economy Direct Drivers

CORI's Digital Economy Ecosystem Model

Foundational Elements

- Housing
- Public Health and Safety
- Public-sector leadership and support
- Post Secondary Education Partnerships
- Culture and entertainment options
- Private and Nonprofit Sector Engagement
- Quality PreK-12 education and accessible childcare
- Attractive "live-work" downtown

Necessary Infrastructure

- Broadband Infrastructure
- Local Leadership Capacity
- Coworking and Entrepreneurship Spaces

Direct Drivers

- Scalable Tech Entrepreneur Support and Incubation
- Digital Workforce Development and Support
- Access to Capital
- Inclusive Tech Culture Building
- Access to Digital Jobs

OUTCOMES

- Quality digital employment
- Local wealth creation by startups

A Model for Community Progress:

- Clear outcomes
- Deep understanding of required elements
- Awareness of interdependence of all elements

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Report Geography

Focus of this report:

- Berkshire County, MA

Comparison geographies::
- Counties:
    - Barnstable County, MA
    - Bennington County, VT
    - Cheshire County, NH
    - Columbia County, NY
    - Franklin County, MA
    - Hampden County, MA
    - Hampshire County, MA
    - Litchfield County, CT

- CORI's Rural Innovation Network (RIN) communities

- State of Massachusetts

- United States

CORI's Rural Innovation Network Communities

- Ada, Oklahoma
- Cape Girardeau, Missouri
- Cedar City, Utah
- Durango, Colorado
- Emporia, Kansas
- Independence, Oregon
- Marquette, Michigan
- North Iowa region, Iowa
- Pikesville, Kentucky
- Pine Bluff, Arkansas
- Platteville, Wisconsin
- Portsmouth, Ohio
- Red Wing, Minnesota
- Shenandoah Valley, Virginia
- Springfield, Vermont
- Taos, New Mexico
- Traverse City, Michigan
- Waterville, Maine
- Wilson, North Carolina

Agenda & Contents

- ❏ Introduction and Context

- ❏ **Economic Baseline / Foundations**

- ❏ Digital Economy Direct Drivers

Economic Baseline / Foundations

Favorable foundations supporting digital economy growth:

- **Total employment** is growing while **levels of worker productivity are high,** suggesting the presence of higher quality, professional, and durable jobs

- **High access to and use of technology** and devices demonstrates high digital literacy

- **Comparatively affordable home values** may attract younger, tech-oriented workers

Key challenges that may limit digital economy growth:

- **Negative population growth** could be an indicator of a lack of opportunity

- **Older and aging population** could present reskilling and upskilling challenges

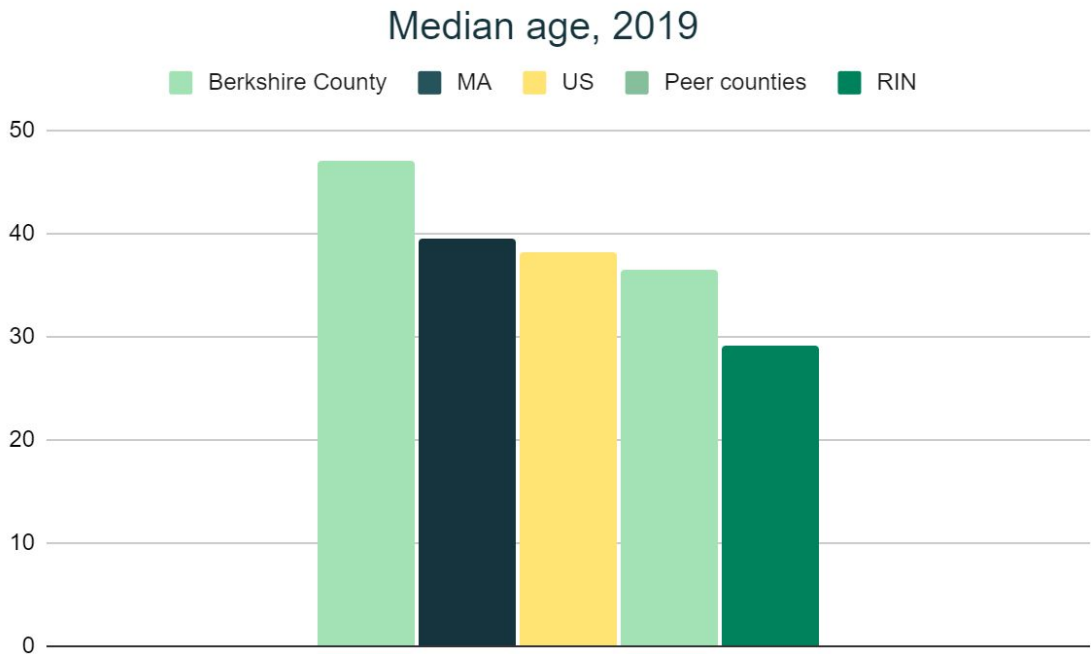# Berkshire County's population has declined over the past ten years...

Population Change, 2010-2019

X% = change, 2010-2019

Legend: US, MA, RIN, Peer counties, Berkshire County

Line chart values at 2019: 6% (US), 5% (MA), 1% (RIN), -1% (Peer counties), -5% (Berkshire County). Y-axis 94 to 108, X-axis 2010 to 2019.
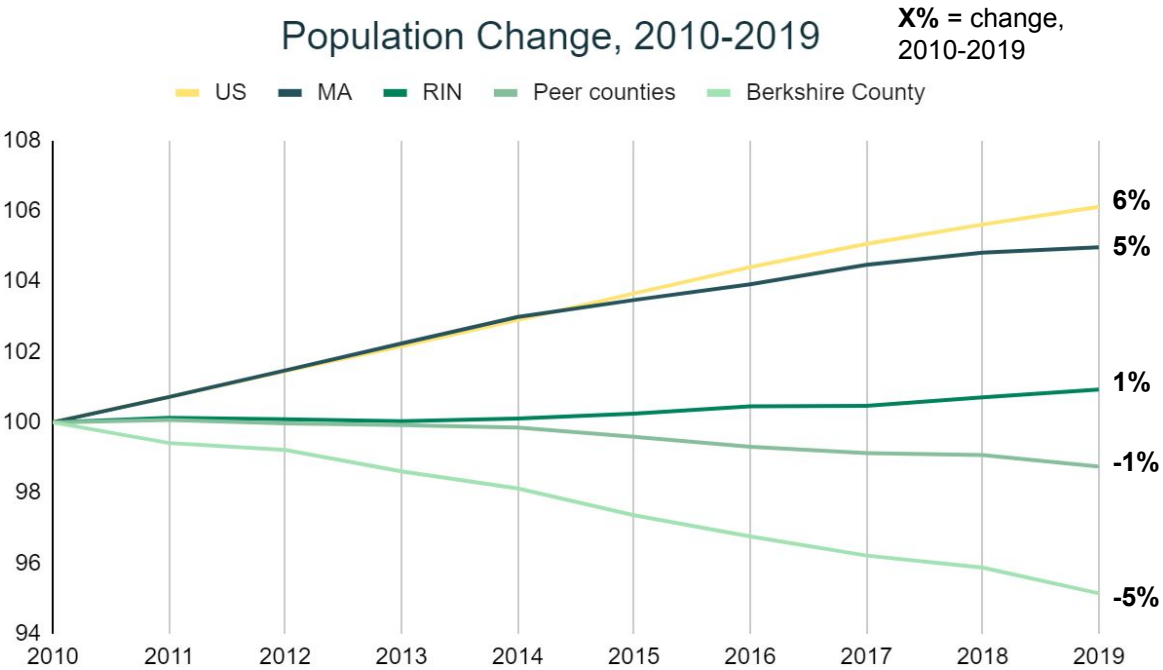
Takeaways

- Since 2010, both Berkshire and peer counties' population trajectory is negative

- Berkshire County underperforms in population growth compared to peers, RIN, MA, and the US

Implications

- Strategies to grow digital economy sectors and jobs could help stem population declines

Source: County Population Characteristics, US Census Bureau

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...and this population is older than all other comparison groups

Median age, 2019

Legend: Berkshire County | MA | US | Peer counties | RIN

Takeaways

- Berkshire County's median age is at least 10 years higher than that of peer counties and similar rural Network communities

Implications

- As the population is older than peer counties and the state overall, Berkshire County could face challenges in attracting more younger residents and potential tech workers

Berkshire's population is aging, though younger residents (<29) are also staying

Population by Age Cohort, 2010-2019

Legend:
- > 55
- 30-54
- 15-29
- < 15
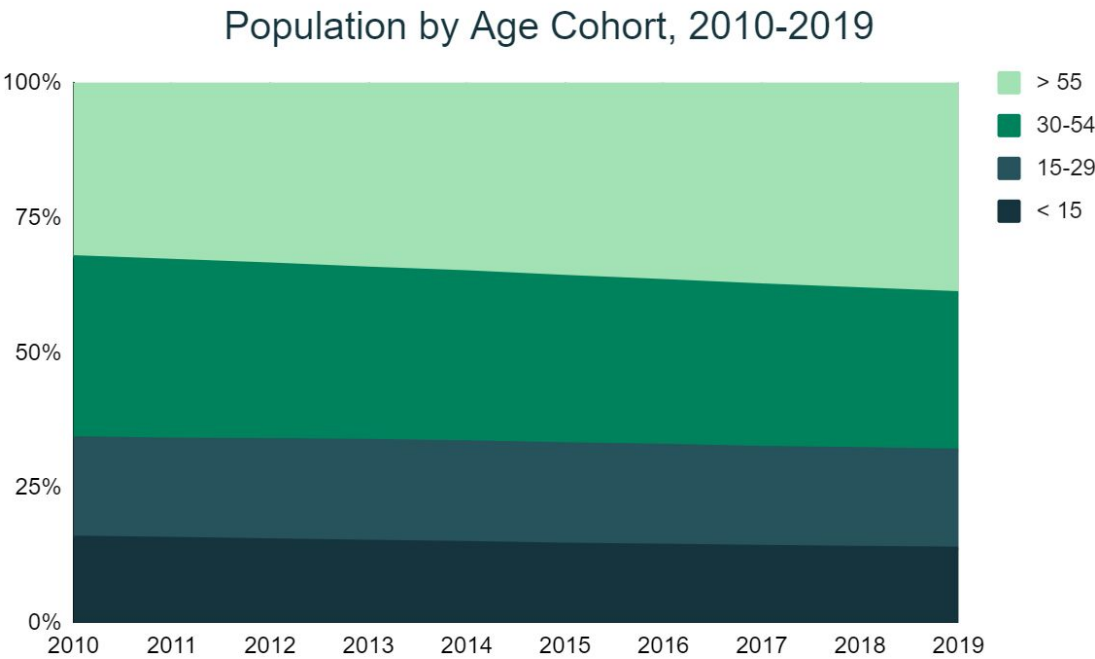
Takeaways

- >55 population cohort has increased as a percent of the population since 2010 (increasing from 32% to 39%)

- Less than one-third of the population is of prime working and earning age (30-54)

Implications

- While older populations grow, young populations remain stable and could be promising to engage in job growth efforts

Source: American Community Survey, US Census Bureau, 2019

Berkshire County shows single-digit job growth in the last decade

Employment Change, 2010-2019

X% = change, 2010-2019

Legend: MA, US, Peer counties, Berkshire County, RIN

- 19% (MA)
- 17% (US)
- 11% (Peer counties)
- 7% (Berkshire County)
- 5% (RIN)
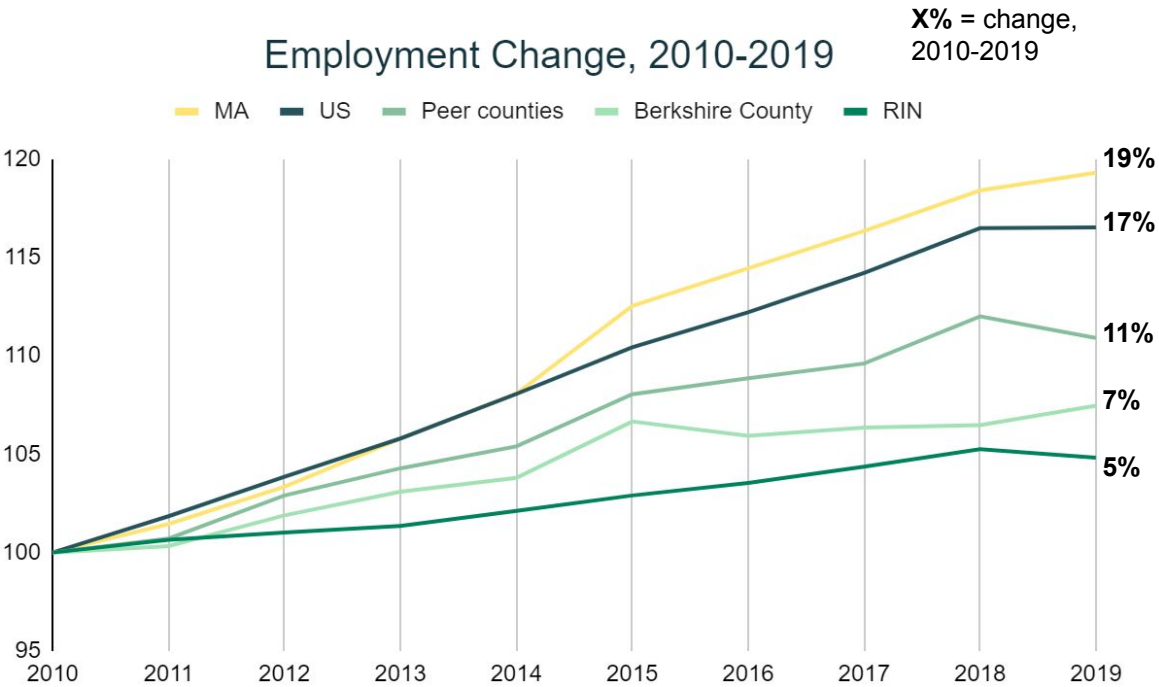
Takeaways

- Berkshire County has positive job change but isn't sharing in the double-digit job growth in MA

- Berkshire County job growth exceeds that of similar rural Network communities

Implications

- As opposed to population trends, Berkshire's employment base is more stable and has grown since 2013

Source: US Bureau of Economic Analysis (BEA)

Workers in Berkshire County are less engaged than workers in peer counties and MA

Labor Force Participation, 2012-2019

Legend: MA — Peer Counties — Berkshire County — US — RIN
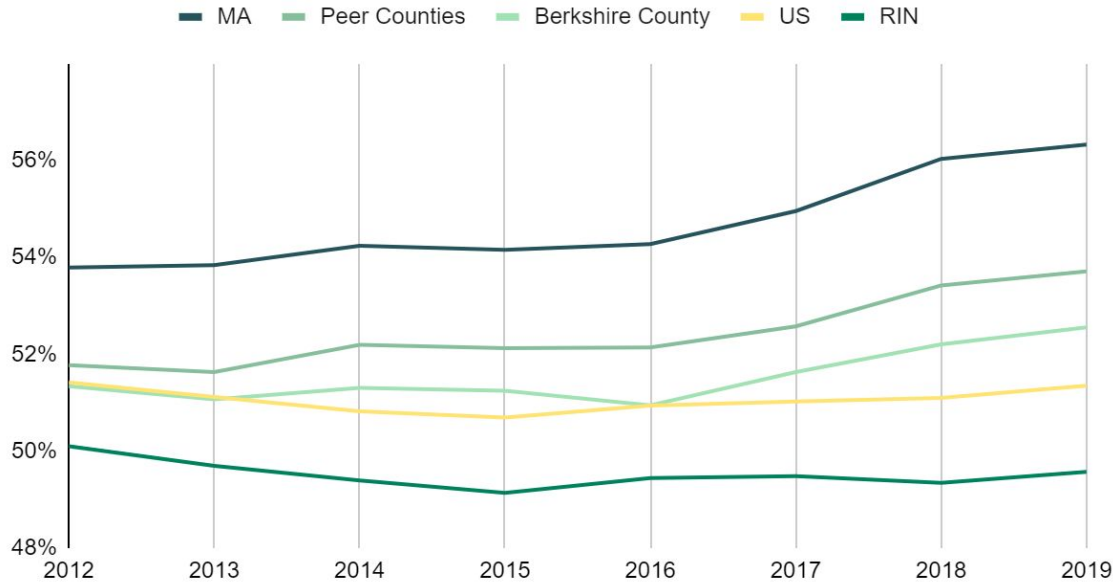
Takeaways

- Participation in the labor force is 53% in Berkshire County, leading the US rate and similar rural Network communities

- Participation rates for workers have been increasing since 2016
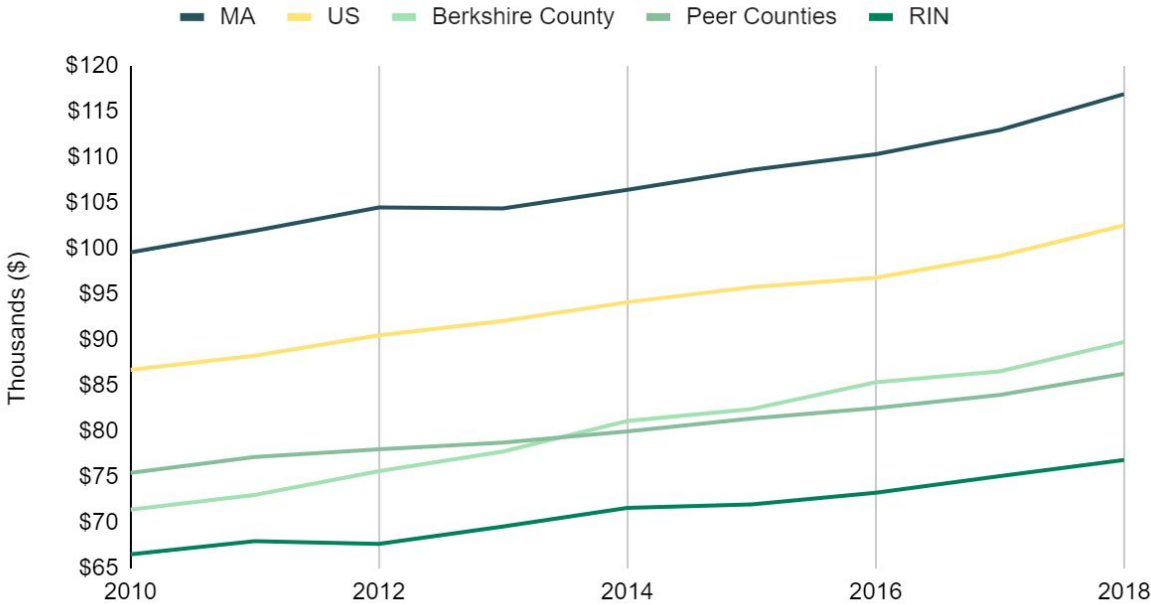
Implications

- Higher participation rates indicate a more engaged labor pool and better alignment between employer needs and worker skills

Note: The labor force participation rate (LFPR) is the percentage of the civilian noninstitutional population 16 years and older that is working or actively looking for work.

Berkshire County's workers hold more productive jobs than peer counties and rural Network communities

Worker Productivity (GDP/worker), 2010-2018

Legend: MA — US — Berkshire County — Peer Counties — RIN

Takeaways

- Worker productivity is $90K/worker, compared to $77K/worker in other similar Network communities

- Worker productivity is increasing

Implications

- High workforce productivity indicates a presence of higher-quality, more durable, and wealth-creating jobs (e.g., communications technology and technical services)

Source: US Bureau of Economic Analysis (BEA)

Berkshire County's home values are lower than peer counties and MA overall

Home Value Index, 2010-2019

Legend: MA | Peer counties | US | Berkshire County | RIN
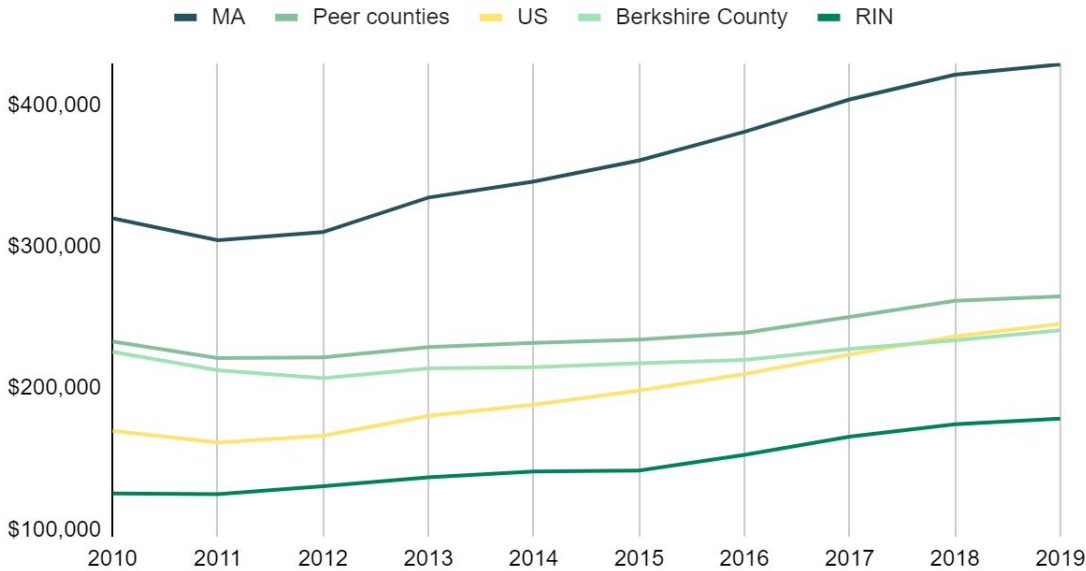
Takeaways

- At $240K, Berkshire's typical home value is on par with peer counties and the US but is ~$188K less than MA
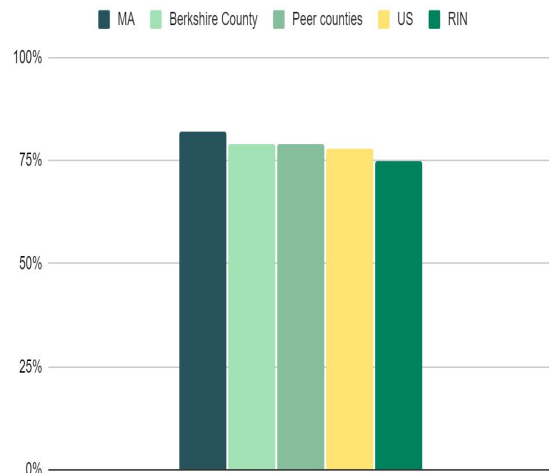
Implications

- Lower housing costs could be an advantage to attract residents and workers from other higher cost geographies in peer counties and MA

Notes:
1) ZHVI is a smoothed, seasonally adjusted measure of the typical home value and market changes across a given region and housing types (single family, condo/co-op). It reflects the typical value for homes in the 35th to 65th percentile range.
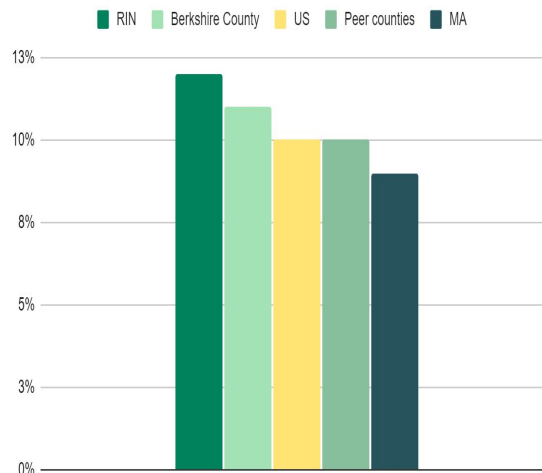
Source: Zillow Home Value Index (ZHVI)

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Access to tech hardware and devices is higher than similar rural Network communities and the US

Share of population with access to desktop or laptop, 2019

■ MA ■ Berkshire County ■ Peer counties ■ US ■ RIN

Share of population with access to no device, 2019

■ RIN ■ Berkshire County ■ US ■ Peer counties ■ MA

Takeaways

- Berkshire County has lower rates of technology access than MA

- Berkshire County also has higher rates than peer counties, MA, and the US of those with access to no device

-

Implications

- Access to a desktop or laptop is critical for digital skilling and entrepreneurship

Key Takeaways

- **Total employment** is growing while **levels of worker participation** and engagement in the economy are high, indicating strong alignment between employer needs and worker skills

- **High access to and use of technology** and devices demonstrates high digital literacy

- **Affordable home values** may attract younger, tech-oriented workers

- **Negative population growth** could be an indicator of a lack of opportunity

- **Older and aging population** could present reskilling and upskilling challenges

Agenda & Contents

❏ Introduction and Context

❏ Economic Baseline / Foundations

❏ **Digital Economy Direct Drivers**

Digital Economy Ecosystem: Direct Drivers

CORI

Scalable Tech Entrepreneur Support and Incubation

- Incubators, accelerators, and other methods to provide direct support to entrepreneurs

Access to Capital

- Sources of capital suitable for scalable businesses
- Full capital stack

Access to Digital Jobs

- Companies that hire tech talent
- Cultures of remote work

Digital Workforce Development and Support

- Efforts to develop a digital workforce, including and going beyond traditional methods (e.g., bootcamps)

Inclusive Tech Culture Building

- Programming and outreach to foster a culture of tech and innovation. Current & future entrepreneurs connect and inspire one another.

Digital Economy Drivers

Favorable conditions supporting digital economy ecosystem growth:

- **Digital workforce dev't: High attainment levels for 4-year degrees** indicate overall workforce readiness

- **Access to digital jobs:** Shares of **employment in tech-enabled industries higher** than peers and the Rural Innovation Network (RIN)

- **Scalable tech entrepreneurship:** Higher **intensity of web ventures** is a sign of **digital literacy** and **entrepreneurship**

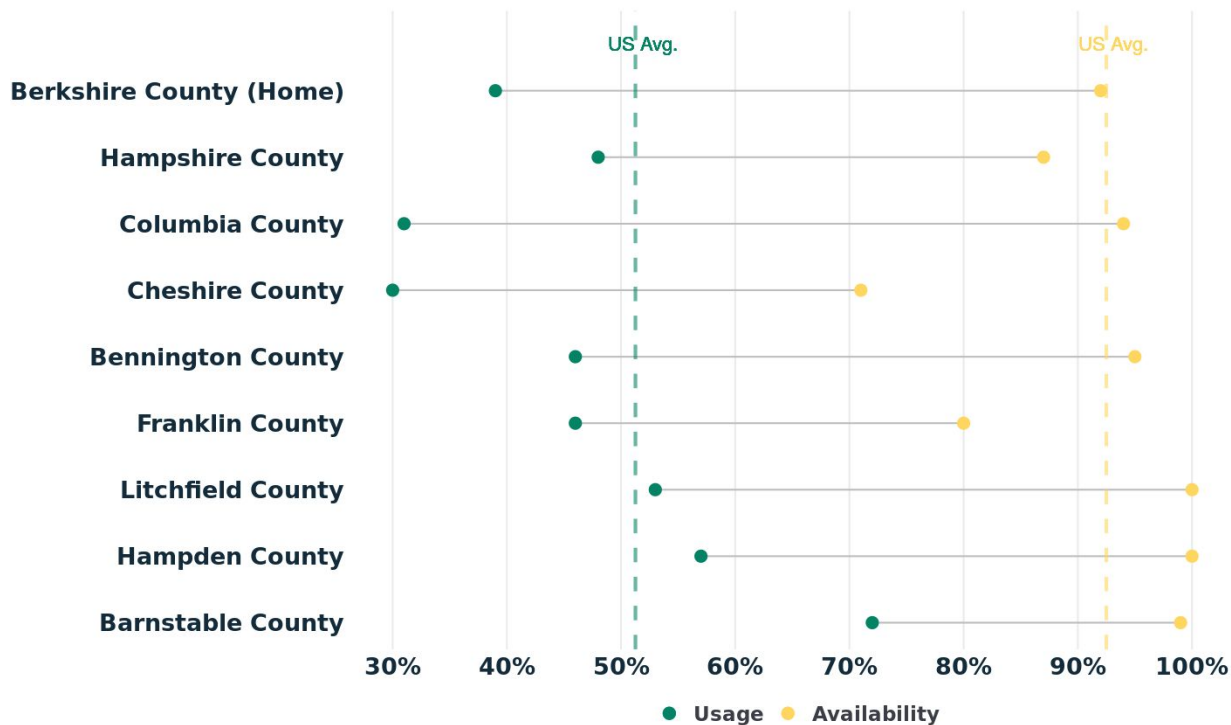**Key challenges that may limit growth:**

- **Access to digital jobs:** Lower shares in **computer and math employment**

- **Access to digital jobs:** While **broadband availability** is average, usage is lower

- **Digital workforce dev't:** A weaker **computer science graduate pipeline**

Berkshire County meets US average for broadband availability but usage is lower than most peer counties

Takeaways

- Berkshire County has lower broadband usage than all but two peer counties

Implications

- There is an opportunity to boost wider availability of broadband

Sources: "Usage" is sourced from Microsoft Corp. "Availability" is sourced from the Federal Communications Commission (FCC)

Berkshire County employment in computer and math occupations is on par with similar rural communities

Employment in Computer/Math Occupations 2010-2019

— MA — US — Peer counties — RIN — Berkshire County
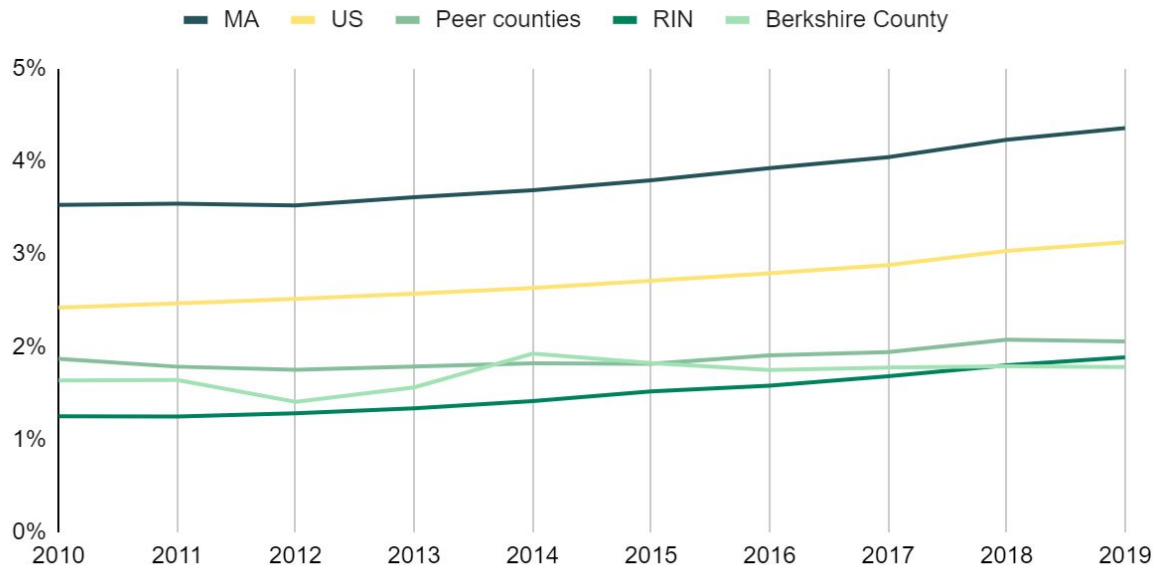
Takeaways

- Employment in computer and math occupations trails all comparison geographies
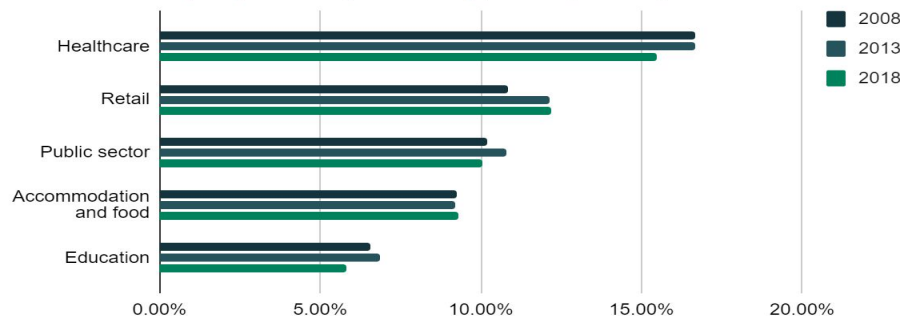
- These occupations show a stable trajectory since 2014

Implications

- There is not a strong base of workers in comp/math occupations to leverage for digital economy jobs
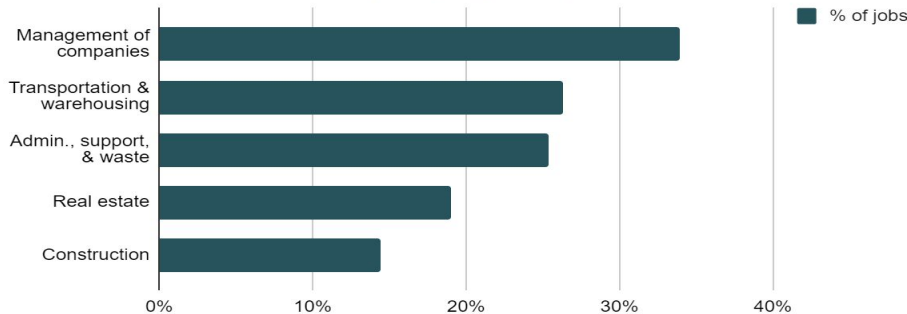
Source: American Community Survey, US Census Bureau, 2019

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The regional economy shows specialization in Education and Tourism related sectors

Employment by industry, 2008, 2013, 2018

Legend: 2008, 2013, 2018

Categories (top to bottom): Healthcare, Retail, Public sector, Accommodation and food, Education

X-axis: 0.00%, 5.00%, 10.00%, 15.00%, 20.00%

Shift in industry employment, 2013-2018

Legend: % of jobs

Categories (top to bottom): Management of companies, Transportation & warehousing, Admin., support, & waste, Real estate, Construction

X-axis: 0%, 10%, 20%, 30%, 40%

Takeaways

- Most major sectors are in lower growth, non-traded sectors

- The digital economy supporting Management of Companies sector is growing
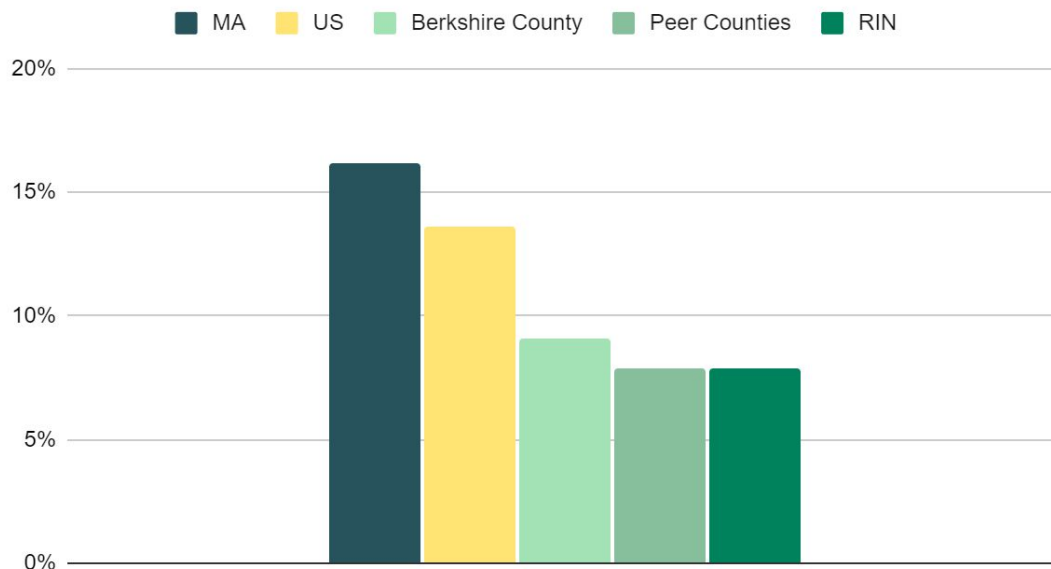
Implications

- Strategic focus should be on sectors more directly related to high-technology such as Information and Professional and Technical Services

Source: US Bureau of Labor Statistics (BLS)

Berkshire County has higher shares of employment in tech-enabled industries than peer counties

Employment in Tech-enabled Industries, 2019

Legend: MA | US | Berkshire County | Peer Counties | RIN

Takeaways

- More than 9% of employment in Berkshire County is in tech-enabled industries, more than peers and rural Network communities

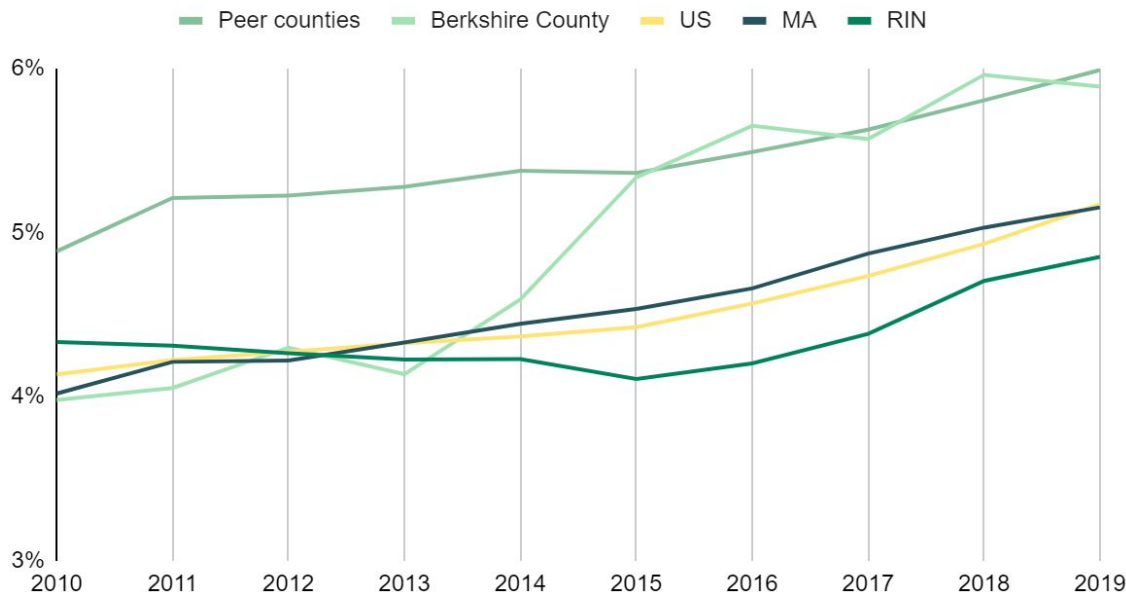### Implications

- There is an opportunity in Berkshire County build on tech-enabled employment given its healthcare industry specialization

Note: "Tech-enabled" industries are both those that aren't technology centric, but also other industries that are deploying technology significantly into their business operations

Source: Upjohn Institute; County Business Patterns, US Census Bureau

Berkshire County has a high base of remote and home-based workers

Working From Home (% of total employment)

Legend: Peer counties, Berkshire County, US, MA, RIN

Takeaways

- Since 2013, levels of home working are increasing in Berkshire County and peer counties
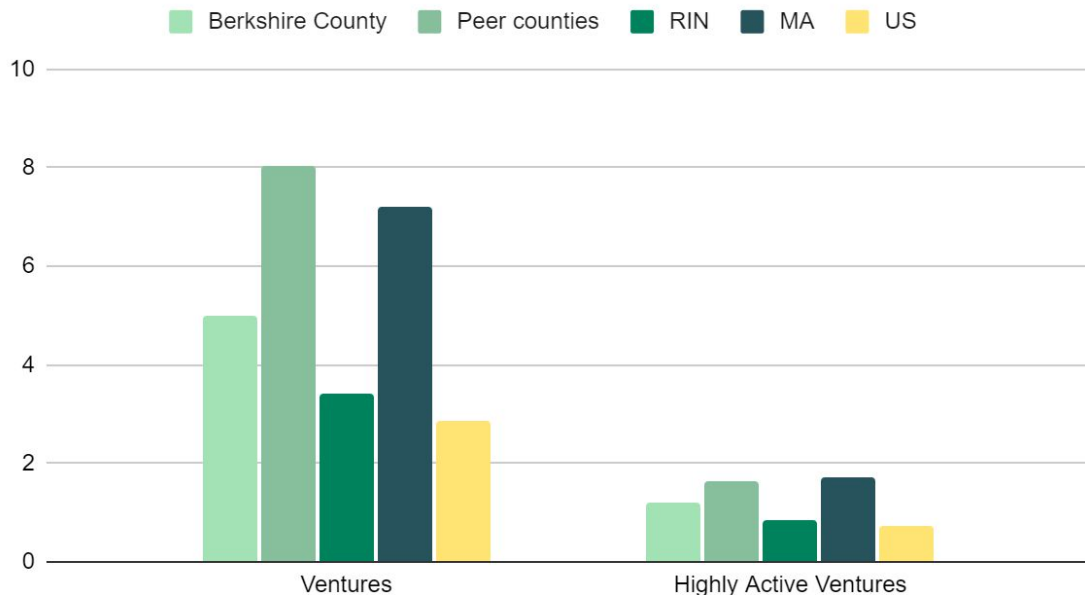
Implications

- Given Berkshire's relatively high availability of broadband, there is genuine opportunity for local workers to seek out digital economy remote working opportunities

Source: American Community Survey, US Census Bureau

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Berkshire demonstrates higher levels of activity in web-based businesses than rural Network communities

Web Ventures per Capita (per 100 people)

Berkshire County · Peer counties · RIN · MA · US

Takeaways

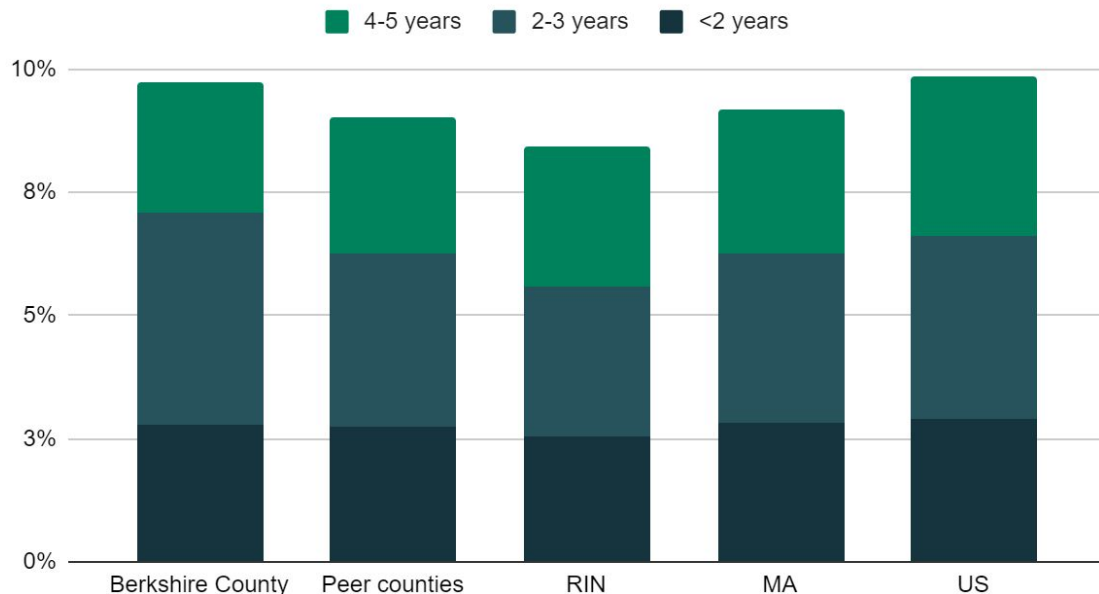- Berkshire activity in web ventures lags that of peer counties and MA overall

Implications

- Higher levels of web-based, entrepreneurial businesses also correlates with higher levels of digital literacy

Source: GoDaddy, 2020

Berkshire County has almost 10% of employment in businesses <5 years old

Employment by Young Firms, 2019

Legend: ■ 4-5 years ■ 2-3 years ■ <2 years

Takeaways

- Berkshire County's level of employment by young firms is higher than all comparable geographies except the US
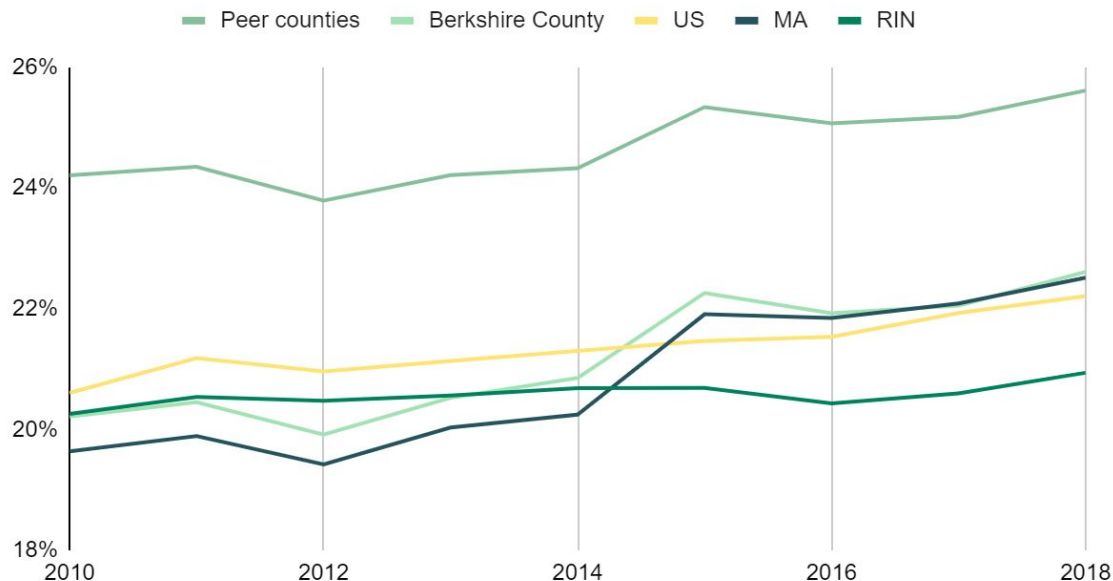
Implications

- Development and growth strategies should seek to maintain and build upon the strong environment for smaller businesses, start-ups, and entrepreneurs

Berkshire has a higher share of self-employed proprietors than MA overall and similar rural Network communities

Proprietor Share of Employment, 2010-2018

Legend: Peer counties — Berkshire County — US — MA — RIN

Takeaways

- Berkshire County's share of proprietor employment of 23% trails only peer counties

- More than 25% of employment in peer counties are made up of the self-employed

Implications

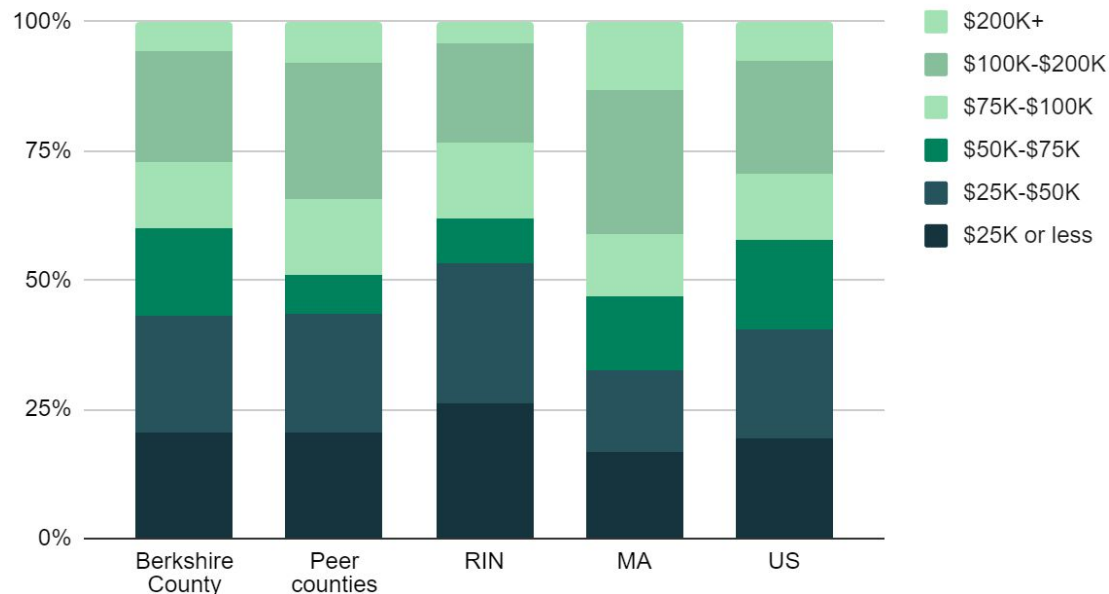- Better supporting self-employed proprietors would benefit tech company founders and entrepreneurs as well

Note: Share of employment from non–farm proprietors represents the share of the workforce that is self-employed or owns their own business

Source: US Bureau of Economic Analysis (BEA)

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With fewer high income households, Berkshire County has less of a pool of potential local venture funders

Household Income, 2019

Legend:
- $200K+
- $100K-$200K
- $75K-$100K
- $50K-$75K
- $25K-$50K
- $25K or less

Categories on x-axis: Berkshire County, Peer counties, RIN, MA, US

Takeaways

- The share of Berkshire County households in the $200K+ income bracket exceeds the share for rural Network communities, but lags all other comparison geographies

Implications

- A larger presence of high-net worth individuals and households could fuel a network of seed or angel investors

Educational attainment rates in Berkshire are higher than the US and rural Network communities

Educational Attainment (% of population w/ BA)

Legend: MA · Peer counties · Berkshire County · US · RIN
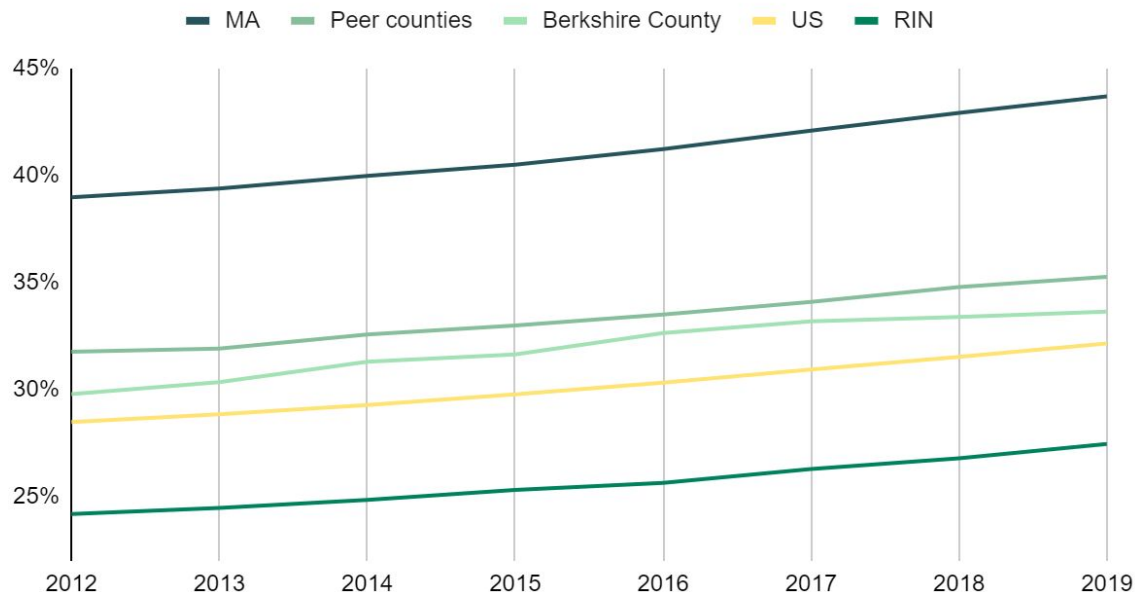
Takeaways

- Berkshire County's Bachelor's degree level attainment rates of 34% are on par with peer counties (35%)

- MA attainment rates exceed Berkshire County by 10%

Implications

- Strategies should seek to attract Bachelor's degree holders from other parts of the state and peer counties

Source: American Community Survey, US Census Bureau, 2019

Berkshire has high overall educational attainment and regional institutions are producing CS graduates
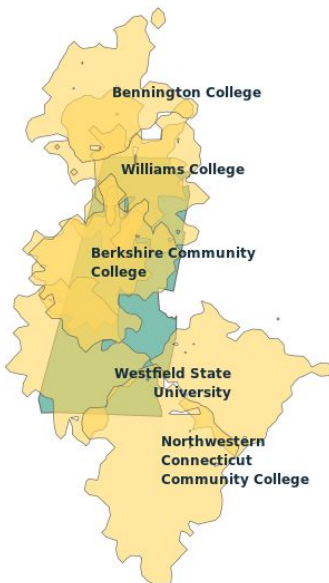
30 min drive time · County Selected

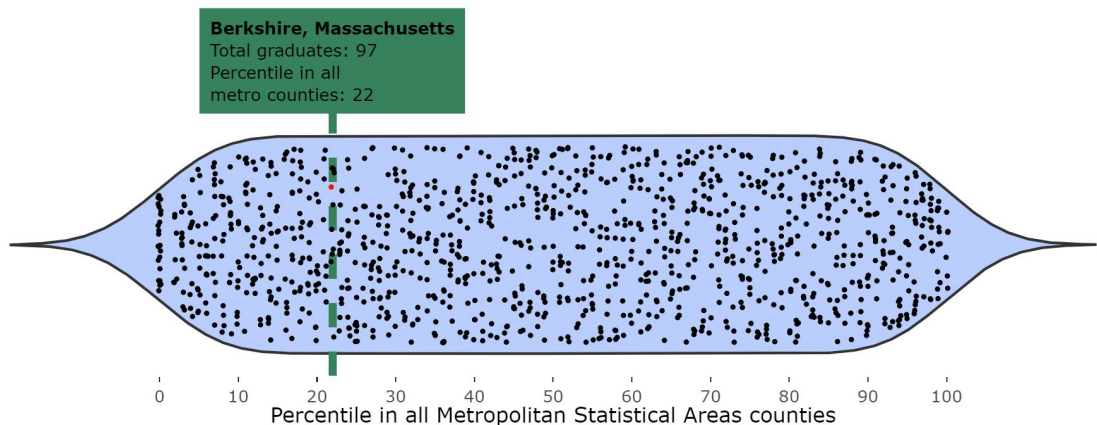| School	CS Grads (2016-2017)
William College	24
Westfield State University	22
Berkshire Community College	17
Massachusetts College of Liberal Arts	13
Bard College at Simon's Rock	7

Takeaways

- The top five institutions of higher-education produced 83 computer science graduates in 2016-2017

Implications

- Strategies should focus on improving the strength and output of the computer science talent pipeline

Source: US Department of Education

Yet computer science graduates aren't produced at high levels compared to similar rural counties

Berkshire County, Massachusetts has 97 computer science majored graduates in 2016-2017. Among all metro counties, Berkshire County, Massachusetts ranks 255 of all 1169 metro counties (~22%).

Berkshire, Massachusetts
Total graduates: 97
Percentile in all
metro counties: 22

Percentile in all Metropolitan Statistical Areas counties

Takeaways

- Berkshire Count's 's number of annual computer science graduates is below the median of rural, micropolitan counties

Implications

- Maintaining a strong pipeline of computer science talent can both generate potential tech company founders and to entice tech firms to relocate and/or employ in Berkshire County

Source: US Department of Education

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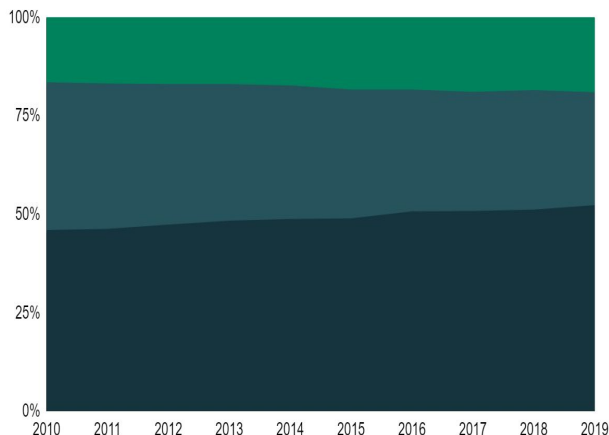# The population has lower racial and ethnic diversity

Race and ethnicity shares, 2010-2019

Legend: Asian, African American, Hispanic, White not hispanic

Race and ethnicity shares, 2010-2019

Legend: Asian, African American, Hispanic

Takeaways

- More than 90% of the population is White, non-Hispanic

- Approximately 7% of the population is either Asian, African American, or Hispanic

Implications

- There is significant opportunity to build more of an inclusive digital economy

Source: American Community Survey, US Census Bureau, 2019

Berkshire has the lowest levels of diversity when compared to all other geographies…

Diversity Score, 2010-2019

Legend: US — MA — Peer counties — RIN — Berkshire County
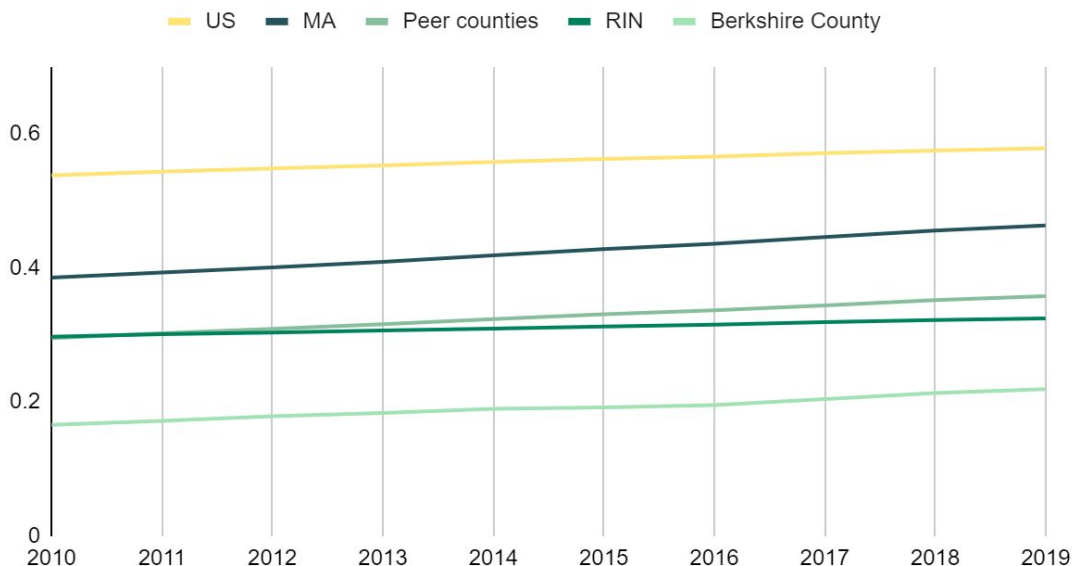
The diversity score is the chance two people of different races/ ethnicities coming into contact in an area or place

Takeaways

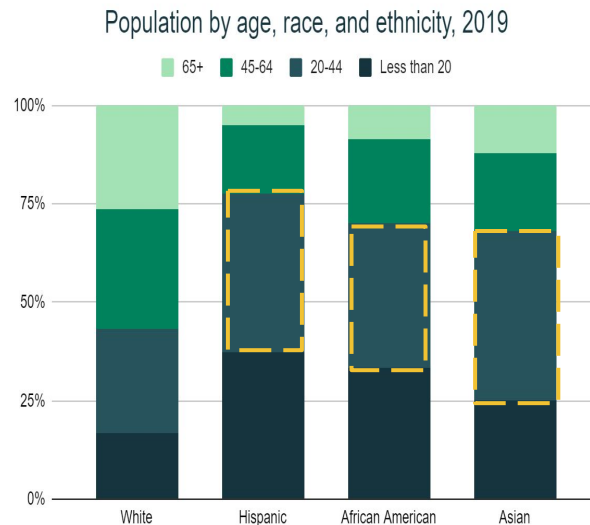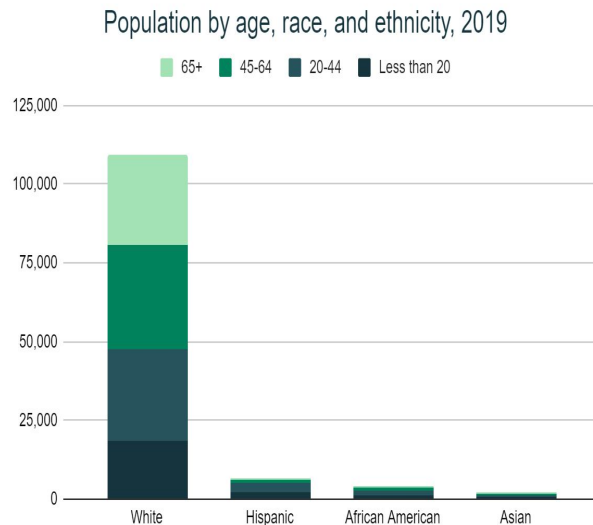- Berkshire County's diversity is low, but has increased modestly since 2010

- Diversity in peer counties is higher than in similar rural Network communities.

Implications

- Berkshire County's digital economy ecosystem development strategies should consider ways to diversify the population and support and attract communities of color

Source: American Community Survey, US Census Bureau

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...but young, working age communities of color offer an opportunity for workforce growth

Population by age, race, and ethnicity, 2019

■ 65+ ■ 45-64 ■ 20-44 ■ Less than 20

Population by age, race, and ethnicity, 2019

■ 65+ ■ 45-64 ■ 20-44 ■ Less than 20

Takeaways

- Non-white communities are smaller in absolute terms

- While lesser in number, there are large shares of the population in communities of color of prime working age (20-44)

Implications

- There is an opportunity with these communities of color for targeted engagement and workforce development

Key Takeaways

- **High attainment levels for 4-year degrees** indicate overall workforce readiness

- Shares of **employment in tech-enabled industries higher** than peers and RIN

- Higher **intensity of web ventures** is a sign of **digital literacy** and **entrepreneurship**

- Lower shares in **computer and math employment**

- While **broadband availability** is average, usage is lower

- A weaker **computer science graduate pipeline**

Thank You

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CORI Center on Rural Innovation

LTI Berkshire Co by job Title

Talent Pool Report

Created on: 10/2/2021

by Michael Tavilla

in TALENT INSIGHTS

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in TALENT INSIGHTS

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TALENT INSIGHTS

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Lead Business Analyst · Information Technology Support Specialist

Information Technology Project Manager · Director Of Information Technology

Information Technology Technician · SQL Developer · Senior Sql Database Administrator

SQL Database Administrator · SQL Server Consultant · PL/SQL Developer

Oracle Sql Server Database Administrator · Digital Marketing Manager · Digital Marketing Specialist

Digital Marketing Intern · Digital Marketing Consultant · Digital Marketing Executive

Digital Marketing Director · Search Engine Optimization Specialist · Search Engine Optimization Executive

Technical Project Manager · Technical Project Specialist · Technical Project Lead · Python Developer

HTML Developer · Web Design Specialist · Sales Engineer · Technical Sales Engineer

Technical Sales Support Specialist · Solutions Engineer · Senior Solutions Engineer

Senior Solutions Developer · Senior Sales Engineer · Quality Assurance Specialist

Quality Assurance Engineer · Quality Assurance Tester · Senior Quality Assurance Engineer

DevOps Architect · DevOps Manager · DevOps Specialist · Cloud Engineer · Cloud Architect

Cloud Support Engineer · Cloud Administrator · Cyber Security Specialist · Cyber Security Analyst

Cyber Security Consultant · Cyber Security Engineer · Cyber Threat Investigator

Cyber Security Architect · Computer Security Specialist · Agile Developer · Computer Engineer

System Specialist · Senior System Engineer · System Engineering Manager · Lead System Engineer

Assistant System Engineer · Senior System Analyst · Business System Analyst · System Administrator

System Manager · Senior Web Developer · Web Development Specialist · Web Application Developer

Freelance Web Developer · Junior Web Developer · Lead Web Developer · Web Development Intern

Front End Architect · Product Manager · Senior Product Manager · Technical Product Specialist

Senior Technical Product Manager · Technical Product Manager · Technical Product Support Specialist

Technical Support Product Specialist · Technical Product Support Manager · Chief Information Officer

Assistant Chief Information Officer · Deputy Chief Information Officer · Group Chief Information Officer

Interim Chief Information Officer   Global Chief Information Officer   Acting Chief Information Officer

Interim Chief Technology Officer   Quality Assurance Analyst   Senior Quality Assurance Specialist

Quality Assurance Manager   Head Of Quality Assurance   Software Test Engineer

Software Engineer In Test   Software Tester   Software Testing Specialist

Senior Software Test Engineer   Software Test Analyst   Senior Software Development Engineer Test

Software Test Lead   Software Test Manager   Mobile Application Developer

Search Engine Optimization Analyst   Search Engine Optimization Manager

Search Engine Optimization Consultant   Search Engine Optimization Team Lead

Technical Support Engineer   Technical Support Analyst   Senior Technical Support Specialist

Information Technology Technical Support   Senior Technical Support Engineer

Technical Support Manager   Desktop Support Specialist   Desktop Support Technician

Information Technology Desktop Support   Desktop Support Analyst   Desktop Support Engineer

Desktop Engineer   Wordpress Developer   Database Engineer   Database Consultant

Sales Application Engineer   Sales Support Engineer   Technical Solutions Engineer

Customer Solutions Engineer   Solutions Engineering Manager   Solutions Sales Engineer

Customer Success Engineer   Salesforce Administrator   Salesforce Consultant   Senior Business Analyst

Information Technology Business Analyst   Senior Business System Analyst   Project Business Analyst

Business Process Analyst   Business Development Analyst   Graphic Designer   Graphic Web Designer

Freelance Web Designer   Senior Web Designer   Freelance Graphic Web Designer

Web Design Development Specialist   Web Design Manager   Web Design Intern

Web Design Consultant   Web Development Manager   Junior Web Designer   Graphic Web Specialist

Webmaster   Chief Data Scientist   Game Developer   Unity Developer

Senior Technical Project Manager   Technical Project Engineer   Project Manager Technical Lead

Technical Project Consultant   Technical Project Director   Technical Project Program Manager

Technical Program Manager   Digital Specialist   Digital Designer   Head Of Digital

Digital Project Manager · Digital Media Specialist · Director Of Digital Media · Datacenter Manager

Datacenter Technician · Data Center Engineer · Data Center Architect · Datacenter Administrator

Datacenter Operations Specialist · Director Datacenter Operations · Datacenter Operator

Datacenter Analyst · Datacenter Operations Manager · Datacenter Supervisor

Customer Relationship Management Business Analyst · Search Engine Optimizer

Senior Search Engine Optimization · Web Developer Search Engine Optimization

Search Engine Marketing Manager · Search Engine Marketing Specialist · Desktop Publisher

Graphic Designer Desktop Publishing · Desktop Publishing Operator · Desktop Publishing Specialist

Desktop Publishing Manager · Desktop Publishing Designer

Location

INCLUDES

Berkshire County, Massachusetts, United States

1,103
Professionals

91
Changed jobs

78
Job posts

0
Engaged talent

Key Insights about this talent

Hiring demand

Very high   This talent is very hard to hire

Gender diversity
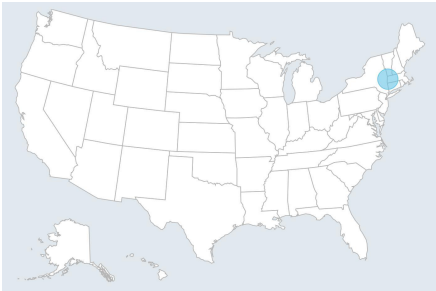
● **74%** Male
● **26%** Female

Compensation

$92,516 Average total compensation

Where is this talent located?

Top locations	Professionals
Greater Pittsfield Area	1,103

Who is employing this talent?

Top companies	Professionals	1y growth	Job posts
General Dynamics Mission Systems	215	▲ 2%	16
General Dynamics	53	0%	0
Guardian Life	25	0%	0
Williams College	22	0%	0
Berkshire Health Systems	19	▼ -5%	1

PROFESSIONALS
The number of professionals on LinkedIn within this talent pool.

1 YEAR GROWTH
The percentage change in the total number of professionals in this talent pool compared to one year ago.

CHANGED JOBS
The number of these professionals who changed companies during the past year.

JOB POSTS
The number of open job posts that match the search criteria. Job posts are aggregated from more than 40K+ sources globally.

ENGAGED TALENT
The unique number of professionals who engaged with your updates, visited your company page, viewed your jobs, or started following your company over the past 12 months.

HIRING DEMAND
The average number of Recruiter InMails sent to these professionals over the past 12 months, compared to the average number of InMails sent to other professionals in all other talent pools on LinkedIn.

GENDER DATA COVERAGE
There is 96% coverage of this talent pool based on our inferred gender data for LinkedIn members in this talent pool. Less than 1% could be identified as another gender identity, so we have shown gender composition using only male and female data points.

COMPENSATION DATA
Data is inferred for 11% of this talent pool. Data is inferred using Linkedin Salary data collected from LinkedIn members and estimated based on similar roles, companies, and regions.

TOP LOCATIONS
The top locations of professionals in this talent pool who have a location listed on their LinkedIn profile.

TOP COMPANIES
The top companies of professionals in this talent pool who have company associated with an active position on their profile.

What schools are producing this talent?

Top schools	Professionals	Top fields of study	Professionals
Berkshire Community College	94	Computer Science	178
Massachusetts College of Liberal Arts	78	Computational Science	155
University of Massachusetts Amherst	75	Electrical and Electronics Engineering	61
Rensselaer Polytechnic Institute	32	Graphic Design	52
Williams College	29	Mechanical Engineering	51

What are related skills and titles for this talent?

Top skills	Professionals	Top titles	Professionals
Software Development	196	Software Engineer	131
Engineering	186	System Engineer	105
Java	138	Graphic Designer	55
SQL	136	Quality Assurance Specialist	44
Systems Engineering	128	Senior System Engineer	41

TOP SCHOOLS
The top schools of professionals in this talent pool who have a school listed in the education section of their LinkedIn profile.

TOP FIELDS OF STUDY
The top fields of study of professionals in this talent pool who have a field of study listed in the education section of their LinkedIn profile.

TOP SKILLS
The top skills of professionals in this talent pool who have a skill listed in the skills section of their LinkedIn profile.

TOP TITLES
The top titles of professionals in this talent pool who have a job title associated with an active position on their profile.

What are the top locations for this talent?

This module summarizes the talent located in each region.
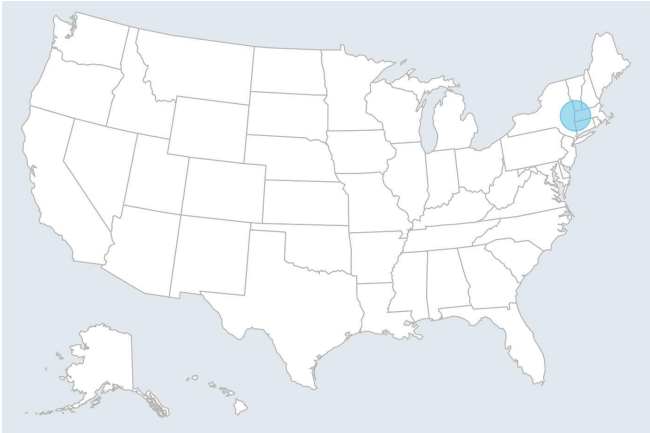
Location (1)	Professionals	1y growth	Job posts	Hiring demand	Female	Male	Gender gap	Compensation	Top Employer
Greater Pittsfield Area	1,103	0%	66	Very high	26%	74%	48%	$92,500	General Dynamics Mission Systems

percentage of employees within this talent
pool who identify as Female and those who
identify as Male. Those with a lower gender
gap are closer to 50/50 gender split.

TALENT INSIGHTS

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Where has Greater Pittsfield Area gained and lost talent over the last 12 months?

This module summarizes the number of professionals who have moved between the selected location* and other locations over the past 12 months. Included are professionals who match the titles, skills and industries specified in your search.

Location (50)	Lost talent | Gained talent	Ratio	Net change
Greater Boston	12 ▮▮▮▮ 8	-1.5	-4
New York City Metropolitan Area	6 ▮▮ 12	+2	+6
Springfield, Massachusetts Metropolitan Area	2 ▮ 7	+3.5	+5
Albany, New York Metropolitan Area	3 ▮ 4	+1.3	+1
Washington DC-Baltimore Area	1 ▮ 5	+5	+4
Greater Hartford	4 ▮ 1	-4	-3
Greater Philadelphia	2 ▮ 2	+1	0
Miami-Fort Lauderdale Area	3 ▮ 1	-3	-2
Los Angeles Metropolitan Area	1 ▮ 2	+2	+1
Rochester, New York Metropolitan Area	2 ▮ 1	-2	-1

LOCATION
Location is determined by the location a member has selected on their LinkedIn profile. Geographic migration data is based on members changing the location on their LinkedIn profile.

LOST TALENT
The number of professionals who moved from the selected location* to each of the locations listed in this table over the past 12 months.

GAINED TALENT
The number of professionals who moved to the selected location* from each of the locations listed in this table over the past 12 months.

RATIO
A ratio comparing the number of professionals gained compared to professionals lost by location within the defined talent pool.

NET CHANGE
The difference between the number of professionals who moved from the selected location* to each of the locations listed in this table compared to the number of professionals who moved to the location selected above from each of the locations listed in this table over the past 12 months.

* SELECTED LOCATION
Greater Pittsfield Area

What companies are employing this talent?

This module summarizes the companies where these professionals are currently employed.

Company (100)	Professionals	1y growth	Job posts	Compensation	Attrition	
General Dynamics Mission Systems	215	▲ 2%	16	$86,200		2%
General Dynamics	53	0%	0	N/A		2%
Guardian Life	25	0%	0	N/A		8%
Williams College	22	0%	0	N/A		5%
Berkshire Health Systems	19	▼ -5%	1	N/A		10%
Berkshire Bank	15	▲ 7%	0	N/A	--	
Crane Stationery	13	0%	0	N/A	--	
VidMob	11	0%	5	N/A	--	
Kripalu Center for Yoga & Health	10	0%	0	N/A	--	
Berkshire Sterile Manufacturing	10	▲ 100%	0	N/A	--	

COMPANY
Company is determined by the current active position(s) a member has listed on their LinkedIn profile.

PROFESSIONALS
The number of professionals with an active position at this company listed on their LinkedIn profile.

1Y GROWTH
The percentage change in the number of professionals working at this company at the end of last month, compared to the number working at this company one year prior. Growth rates are not provided if there were no professionals at this company in the prior year.

JOB POSTS
The daily average number of open jobs during the past 30 days matching the search criteria.

COMPENSATION
The average total compensation for these professionals. (Currency: USD)

ATTRITION
The number of professionals who departed this company in the past 12 months divided by the average number of employees during this period. A professional is considered to have departed their previous company if they have added a position with a new company on their LinkedIn profile and provided an end date for the position at their previous company. Contractors and other non-FTEs are excluded and attrition is only displayed if the average number of employees in the past 12 full months is at least 15. Attrition estimates may be below actual attrition due to the time lag between when a professional departs and when they update their LinkedIn profile.

What are the most common titles among this talent?

This module summarizes the most common titles among these professionals.

Titles (82)	Professionals	% of total	Job posts	Female	Male	Gender gap	Your talent
Software Engineer	131	12%	12	13%	87%	74%	0
System Engineer	105	10%	15	14%	86%	72%	0
Graphic Designer	55	5%	0	61%	39%	22%	0
Quality Assurance Specialist	44	4%	0	--	--	--	0
Senior System Engineer	41	4%	4	--	--	--	0
Senior Software Engineer	39	4%	9	--	--	--	0
Information Technology Specialist	36	3%	1	--	--	--	0
Business Analyst	34	3%	0	--	--	--	0
Quality Assurance Manager	30	3%	0	--	--	--	0
System Administrator	23	2%	0	--	--	--	0

PROFESSIONALS
The number of professionals who have this job title listed on a currently active position on their LinkedIn profile. We convert the title a member enters into one of approximately 25,000 standardized titles on LinkedIn.

% OF TOTAL
The percentage of professionals who have this job title listed on a currently active position on their LinkedIn profile, divided by the total number of professionals in this talent pool.

JOB POSTS
The number of job posts that match the search criteria and have this title in the job post. Job posts are aggregated from more than 40,000 sources globally.

YOUR TALENT
The number of your employees have this job title listed on a currently active position on their LinkedIn profile.

FEMALE VS. MALE
The estimated percentage of employees within this talent pool who identify as Female or Male.

GENDER GAP
The difference between the estimated percentage of employees within this talent pool who identify as Female and those who identify as Male. Those with a lower gender gap are closer to 50/50 gender split.

What are the fastest growing titles among this talent?

This module summarizes the fastest growing titles among these professionals.

Titles (82)	1y growth	Professionals	Job posts	Your talent
Associate Product Manager	--	2	0	0
System Engineering Intern	▲ 200%	3	0	0
Senior Principal System Engineer	▲ 100%	2	0	0
Digital Marketing Specialist	▲ 50%	6	0	0
Senior Director Information Technology	▲ 50%	3	0	0
Digital Marketing Manager	▲ 40%	7	0	0
Technical Lead	▲ 25%	5	0	0
Search Engine Optimization Specialist	▲ 25%	5	0	0
Advanced Software Engineer	▲ 17%	7	2	0
Technical Support Engineer	▲ 17%	7	0	0

PROFESSIONALS
The number of professionals who have this job title listed on a currently active position on their LinkedIn profile. We convert the title a member enters into one of approximately 25,000 standardized titles on LinkedIn.

1Y GROWTH
The percentage change in the number of professionals who have this job title listed on a currently active position on their LinkedIn profile, compared to the number of professionals one year prior. Growth rates are not provided if there were no professionals with this title in the prior year.

JOB POSTS
The number of job posts that match the search criteria and have this title in the job post. Job posts are aggregated from more than 40,000 sources globally.

YOUR TALENT
The number of your employees have this job title listed on a currently active position on their LinkedIn profile.

What are the most common skills among this talent?

This module summarizes the most common skills among these professionals.

Skills (100)	Professionals	% of total	Job posts	Female	Male	Gender gap	Your talent
Software Development	196	18%	25	13%	87%	74%	0
Engineering	186	17%	29	13%	87%	74%	0
Java	138	13%	3	8%	92%	84%	0
SQL	136	12%	5	20%	80%	60%	0
Systems Engineering	128	12%	30	10%	90%	80%	0
C++	119	11%	18	10%	90%	80%	0
Graphic Design	114	10%	0	55%	45%	10%	0
Linux	111	10%	3	7%	93%	86%	0
Technical Support	110	10%	12	18%	82%	64%	0
Troubleshooting	110	10%	0	16%	84%	68%	0

PROFESSIONALS
The number of professionals who have this skill listed in the skills section of their LinkedIn profile.

% OF TOTAL
The percentage of professionals who have this skill listed in the skills section of their LinkedIn profile, divided by the total number of professionals with at least one skill listed on their LinkedIn profile.

JOB POSTS
The number of job posts that match the search criteria and have this skill in the job post. Job posts are aggregated from more than 40,000 sources globally.

YOUR TALENT
The number of your employees who have this skill listed on their LinkedIn profile.

FEMALE VS. MALE
The estimated percentage of employees within this talent pool who identify as Female or Male.

GENDER GAP
The difference between the estimated percentage of employees within this talent pool who identify as Female and those who identify as Male. Those with a lower gender gap are closer to 50/50 gender split.

What are the fastest growing skills among this talent?

This module summarizes the fastest growing skills among these professionals.

Skills (100)	1y growth	Professionals	Job posts	Your talent
Data Entry	▲ 43%	33	0	0
Database Administration	▲ 29%	40	0	0
Search Engine Optimization (SEO)	▲ 24%	31	0	0
Business Intelligence (BI)	▲ 23%	32	0	0
Agile Methodologies	▲ 21%	52	0	0
Customer Satisfaction	▲ 21%	29	0	0
Computer Science	▲ 20%	53	5	0
C#	▲ 17%	55	1	0
Information Technology	▲ 16%	100	1	0
Analytics	▲ 16%	37	1	0

PROFESSIONALS
The number of professionals who have this skill listed in the skills section of their LinkedIn profile.

1Y GROWTH
The percentage change in the number of professionals with this skill, compared to the number of professionals one year prior.

JOB POSTS
The number of job posts that match the search criteria and have this skill in the job post. Job posts are aggregated from more than 40,000 sources globally.

YOUR TALENT
The number of your employees who have this skill listed on their LinkedIn profile.

What industries are employing this talent?

This module summarizes the industries where these professionals are currently employed.

Industry (100)	Professionals	1y growth	Job posts	Hiring demand	Female	Male	Gender gap	Compensation	Top Employer
Defense & Space	303	▲ 1%	24	High	11%	89%	78%	$88,900	General Dynamics Mission Systems
Information Technology & Services	97	▲ 10%	18	High	14%	86%	72%	N/A	IBM
Computer Software	64	▼ -6%	8	Very high	13%	87%	74%	N/A	VidMob
Higher Education	63	▼ -6%	1	Moderate	46%	54%	8%	N/A	Williams College
Hospital & Health Care	46	0%	1	High	--	--	--	N/A	Berkshire Health Systems
Financial Services	36	▼ -3%	--	Very high	--	--	--	N/A	Guardian Life
Internet	34	▼ -3%	1	Very high	--	--	--	N/A	Google
Graphic Design	27	▲ 4%	--	Low	--	--	--	N/A	Self Employed
Banking	27	▼ -4%	--	High	--	--	--	N/A	Berkshire Bank
Marketing & Advertising	26	▲ 8%	--	High	--	--	--	N/A	@utoRevenue

INDUSTRY
Industry is based on the the industry of the company a member has listed in active position(s) on their LinkedIn profile. If the company's industry is unknown, the industry listed on the member's profile is used.

PROFESSIONALS
The number of professionals currently employed by a company in this industry.

1Y GROWTH
The percentage change in the number of professionals working at a company in the industry at the end of last month, compared to the number working at a company in the industry one year prior. Growth rates are not provided if there were no professionals within an industry in the prior year.

JOB POSTS
The daily average number of open jobs during the past 30 days matching the search criteria.

HIRING DEMAND
Provides a measure of demand for this talent relative to supply in the industry, compared to other industries listed in this table. Hiring demand by industry is based on the average number of recruiter inMails sent to professionals in this industry over the past 12 months, compared to the average number of inMails sent to professionals in this talent pool who are in the other industries.

COMPENSATION
The average total compensation for these professionals. (Currency: USD)

TOP EMPLOYER
Company with the largest number of professionals in this industry.

FEMALE VS. MALE
The estimated percentage of employees within this talent pool who identify as Female or Male.

GENDER GAP

The difference between the estimated
percentage of employees within this talent
pool who identify as Female and those who
identify as Male. Those with a lower gender
gap are closer to 50/50 gender split.

Where is talent flowing to and from the Defense & Space industry over the last 12 months?

This module summarizes the number of professionals who have moved between the selected industry and other industries over the past 12 months. Included are professionals who match the titles, skills and locations specified in your search.

Industry (7)	From selected industry*	To selected industry*	Ratio	Net change
Higher Education	0	3	+3	+3
Financial Services	0	1	+1	+1
Automotive	0	1	+1	+1
Telecommunications	1	0	-1	-1
Aviation & Aerospace	1	0	-1	-1
Pharmaceuticals	1	0	-1	-1
International Trade & Development	1	0	-1	-1

INDUSTRY
Industry is based on the the industry of the company a member has listed in active position(s) on their LinkedIn profile. If the company's industry is unknown, the industry listed on the member's profile is used. Industry changes are identified when a member ends a position at one company, and begins a position at a company in a new industry.

FROM SELECTED INDUSTRY*
The number of professionals who moved out of the selected industry into each of the industries listed in this table over the past 12 months.

TO SELECTED INDUSTRY*
Total number of professionals who moved into the selected industry from each of the industries listed in this table over the past 12 months.

RATIO
A ratio comparing the number of professionals gained compared to professionals lost by a location with the defined talent pool.

NET CHANGE
The difference between the number of professionals who moved from the selected industry to each of the industries listed in this table compared to the number of professionals who moved to the industry selected above from each of the industries listed in this table over the past 12 months.

* SELECTED INDUSTRY
Defense & Space

What schools are producing this talent?

This module summarizes the top schools that have produced this talent.

Schools (100)	Professionals	Recent grads	Your 1y hires	Female	Male	Gender gap
Berkshire Community College	94	6	0	33%	67%	34%
Massachusetts College of Liberal Arts	78	20	0	28%	72%	44%
University of Massachusetts Amherst	75	11	0	24%	76%	52%
Rensselaer Polytechnic Institute	32	4	0	--	--	--
Williams College	29	13	0	--	--	--
Western New England University	21	2	0	--	--	--
Pittsfield High School	17	--	0	--	--	--
Clarkson University	17	--	0	--	--	--
Westfield State University	16	4	0	--	--	--
Rochester Institute of Technology	15	3	0	--	--	--

SCHOOLS
The school(s) a member has attended is listed in the education section of their LinkedIn profile.

PROFESSIONALS
The number of professionals who attended this school. The schools a member has attended are listed in the education section of their LinkedIn profile.

RECENT GRADS
The number of recent graduates who attended this school. Recent graduates are professionals who have listed a degree end date on their LinkedIn profile that is within the past 12 months.

YOUR 1Y HIRES
The number of professionals you hired in this past 12 months who attended this school.

FEMALE VS. MALE
The estimated percentage of employees within this talent pool who identify as Female or Male.

GENDER GAP
The difference between the estimated percentage of employees within this talent pool who identify as Female and those who identify as Male. Those with a lower gender gap are closer to 50/50 gender split.

What degrees does this talent have?

This module summarizes the highest education level these professionals have attained.

	Total professionals	New grads
Master of Business Administration	6%	4%
Master's Degree	23%	23%
Associate's Degree	10%	5%
Bachelor's Degree	60%	67%
Doctor of Philosophy	1%	1%

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What are the fields of study for this talent?

This module summarizes the most common fields of study for these professionals.

Fields of study (98)	Professionals	Recent grads	Your 1y hires
Computer Science	178	38	0
Computational Science	155	33	0
Electrical and Electronics Engineering	61	2	0
Graphic Design	52	4	0
Mechanical Engineering	51	19	0
Business Administration and Management, General	38	3	0
Information Technology	38	7	0
Computer and Information Sciences and Support Services	26	1	0
Fine/Studio Arts, General	23	--	0
Mathematics	22	7	0

How has this talent engaged with your company on LinkedIn over the past 12 months?

How has this talent engaged with your company on LinkedIn over the past 12 months?

SELECTED AFFILIATES
The data shown is associated with: Center on Rural Innovation

TOTAL ENGAGED TALENT
The unique number of professionals who visited your company page, viewed jobs or responded to inMails over the past 12 months. "The current month is not included.

COMPANY PAGE VISITORS
The number of professionals who visited your company page over the past 12 months. The current month is not included.

NEW FOLLOWERS
The number of professionals who started following your company on LinkedIn over the past 12 months. The current month is not included.

JOB VIEWERS
The number of professionals who viewed one or more of your jobs posted on LinkedIn over the past 12 months. The current month is not included.

ENGAGED WITH UPDATES
The number of professionals who clicked, liked, commented, or shared your updates over the past 12 months. The current month is not included.

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How has this talent engaged with your jobs over the last 12 months?

This module summarizes how these professionals have engaged with your company's jobs on LinkedIn over the past year.

--   --

● View to apply rate   -- 1y median

How has this talent responded to your LinkedIn InMails over the last 12 months?

This module summarizes how these professionals have responded to your company's InMails.

--   --

● InMail response rate   -- 1y median

What employer value propositions are most important for this talent?

The results below are produced from the Employer Value Propositions survey sent to millions of LinkedIn members. It is used to determine what employer value propositions respondents within this talent pool consider most important when evaluating new job opportunities. These results indicate the best ways to position your company and job opportunities to professionals within this talent pool.

	Value proposition by importance	% Agree in importance	
1	Excellent compensation and benefits		71%
2	Good work-life balance		68%
3	Flexible work arrangements		41%
4	Open and effective management		38%
5	Colleagues and culture that inspire employees to do their best		37%
6	Job security		36%
7	Challenging work		31%
8	Employees have influence over their tasks and priorities		28%
9	Role that meaningfully impacts the company's success		26%
10	Convenient commute to work		26%
11	A company with a purposeful mission		24%
12	Inclusive workplace for people of diverse backgrounds		19%
13	Investment in comprehensive and ongoing employee training		14%
14	Opportunity for rapid advancement within the company		14%
15	An industry-leading company with high caliber talent		13%

VALUE PROPOSITION BY IMPORTANCE
Employer value propositions are ordered by the percentage of respondents who selected the value proposition as one of their top five considerations when evaluating a new job opportunity.
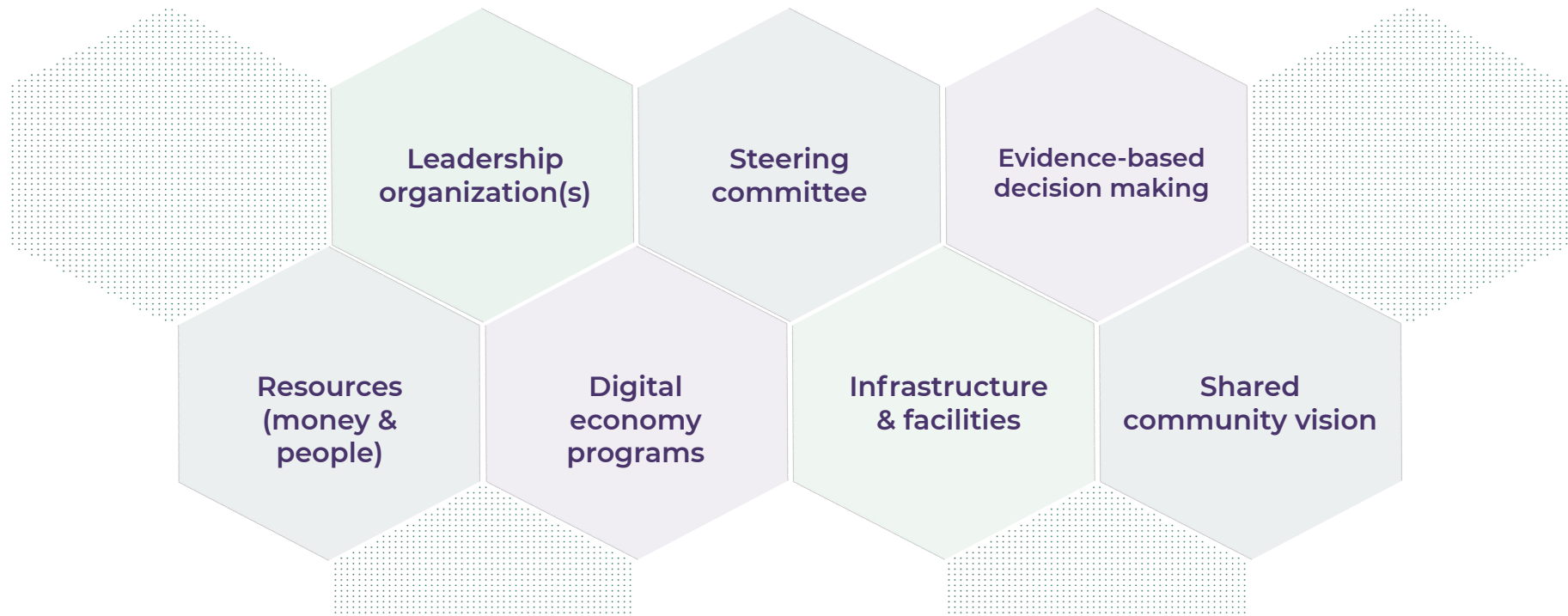
% AGREE IN IMPORTANCE
The percentage of respondents that selected the employee value proposition as one of their top 5 considerations, divided by the total number of survey respondents.

Results are based on 4,941 survey respondents.

Pillars of a Digital Economy Ecosystem Building Journey

Based on CORI's experience working with communities across the country, we have identified seven pillars that are commonly present in communities with successfully growing Digital Economy Ecosystems. Communities can benchmark their ecosystem-building progress using these pillars as a guide. This deck outlines each pillar and their associated benchmarks from initial assessment to early strategy execution.

Leadership organization(s)

Steering committee

Evidence-based decision making

Resources (money & people)

Digital economy programs

Infrastructure & facilities

Shared community vision

Pillar Definitions

Leadership Organizations. The relevant conveners and connectors in the community to define and clarify roles, drive the workstreams, and devise the execution path for the Digital Economy Ecosystem strategy.

Steering Committee. Identified by and inclusive of the leadership organizations, a committee or advisory group of cross-sector partners and stakeholders that collaborates regularly to ensure an ecosystem approach. *An early stage of the steering committee is the "core team" that gathers to complete the assessment and build a strategy.*

Evidence-based Decision Making. The process for collecting and analyzing data to understand the current state of the community, identify priorities and areas of focus, guide decision-making, and inform program development and resource allocation.

Resources. The essential human and financial resources required to ensure that strategies and plans progress towards execution and on-the-ground impact.

Digital Economy Ecosystem Programs. The tailored set of programs and initiatives designed to address community gaps and needs to achieve strategic goals.

Infrastructure & Facilities. As gaps and opportunities are identified, the planning and execution on the creation of the physical spaces and other aspects of the built environment that will support the Digital Economy Ecosystem and innovation hub(s).

Shared community vision. The articulation of the shared priorities and goals for a Digital Economy Ecosystem, coordinating and expressing the community's commitment towards building a tech economy and an inclusive tech culture.

Examples of Steering Committee Representatives

Steering Committee members are people who will be active ecosystem builders with you, helping to implement your strategy and digital economy programming. They should represent a balance of different cross-sectoral partners as well as the demographics that represent the makeup of your community or region.

The following is a list of example organizations we commonly see working together, however every community will have it's own unique mix:

- Economic Development Organizations

- Entrepreneurship or small business organizations (e.g. SBDC, entrepreneurship centers, chambers of commerce)

- Post-secondary institutions (e.g. entrepreneurship, computer science, continuing education programs)

- Workforce development boards

- Unemployment offices

- Makerspaces & coworking spaces

- Local tech employers and other anchor employers

- Local government (e.g. city managers, planners)

- Organizations that support underrepresented groups in the community (e.g. Hispanic Business Association, Boys & Girls Club, Women's groups etc.)

- Organizations trusted by the demographic/cultural group you are looking to reach (e.g. Churches/Faith Leaders, Local leadership/Community representatives)

Digital Economy Ecosystem Building Journey Map (p.1)

Pillars	Completion Benchmarks	
	1. Assessment	**2. Strategy Readiness**
Leadership organization(s)	Core team convened to drive assessment work Equips leadership organization(s) with data and context for engaging stakeholders to develop a strategy	Core team convenes a steering committee of stakeholders and shares the findings from the assessment
Steering Committee	Core team engages stakeholders through interviews and participation in presentations Identifies who isn't at the table but needs to be	Cross-sector steering committee representative of community demographics forms to develop digital economy ecosystem vision (core-team noted is part of this steering committee)
Evidence-based decision making	Define a data driven current state and build common framework for understanding and tracking economic development progress	Leadership and steering committee can make a clear, data driven case for why investing in a digital economy ecosystem makes sense

Digital Economy Ecosystem Building Journey Map (p.2)

CORI

Pillars	Completion Benchmarks ⟶	
	1. Assessment	2. Strategy Readiness
Resources (money & people)	Creates case for investing resources in developing a digital economy ecosystem	Commitment of staff and funding to start executing a strategy. Core team able to dedicate .25 FTE to strategy development for ~8 weeks
Digital Economy Ecosystem Programs	Provides a framework for organizing existing programs into a digital economy ecosystem framework, clarifies gaps and areas for action	Programming gaps identified and ideas are being developed for addressing those gaps
Infrastructure & Facilities	Identify infrastructure assets and gaps and areas for action	Infrastructure gaps identified and ideas are being developed to address those gaps
Shared community vision	Core team understands potential impact of a digital economy on their community's well being	Steering committee can articulate why digital economic development matters to partners