Greenfield & Franklin County, MA

Digital Economy Ecosystem Assessment

Assessment of Current State & Priorities

June 29, 2021

Your Assessment Team

Leah Taylor
Rural Innovation Initiative Manager

Mike Tavilla
Regional Economic Data Specialist

Nora Foote
Community Manager

Sydney Stearns
RII Assistant

May Erouart
Community Manager

Rachel Barra
Community Associate

Jacob WIldfire
Summer Associate

Agenda

01 | Introduction: The path toward scalable growth

02 | Assessing Greenfield & Franklin County's current position and potential

03 | Greenfield & Franklin County in context

04 | Focus on the five Direct Drivers

05 | Conclusions and next steps

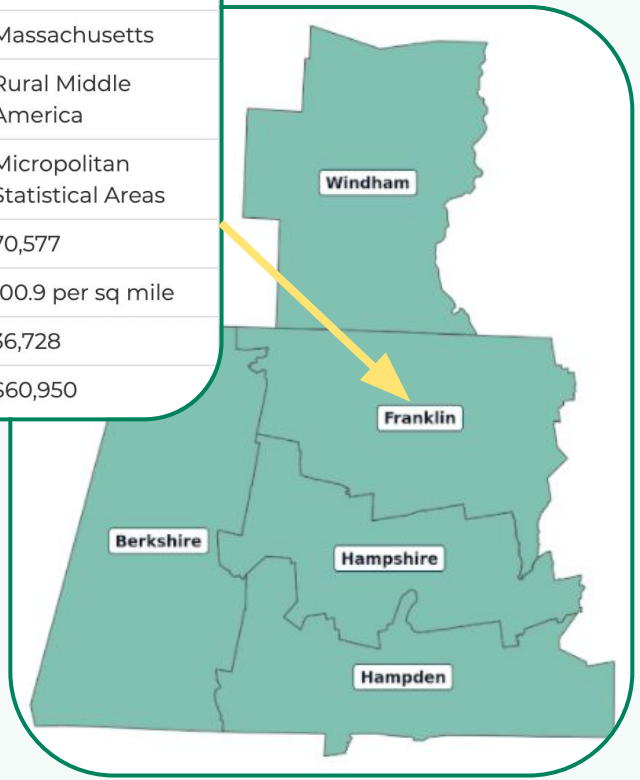
What are you most hoping to learn or take away from this presentation today?

Community overview

- **Industry and agriculture provide the historic setting of Greenfield:**
  - Top three industries in 2018 were health care and social assistance, (advanced) manufacturing, and retail trade
  - Growing creative economy at 9.2% of total economy (57% above national average)
- **Foundational Elements:**
  - Attractive live-work downtown | Culture & entertainment options | Greenfield Community College
  - Public Health & Safety: Opioid crisis |“Greenfield doesn’t always feel safe”
- **Pioneer Valley Plan for Progress includes technology sector development**

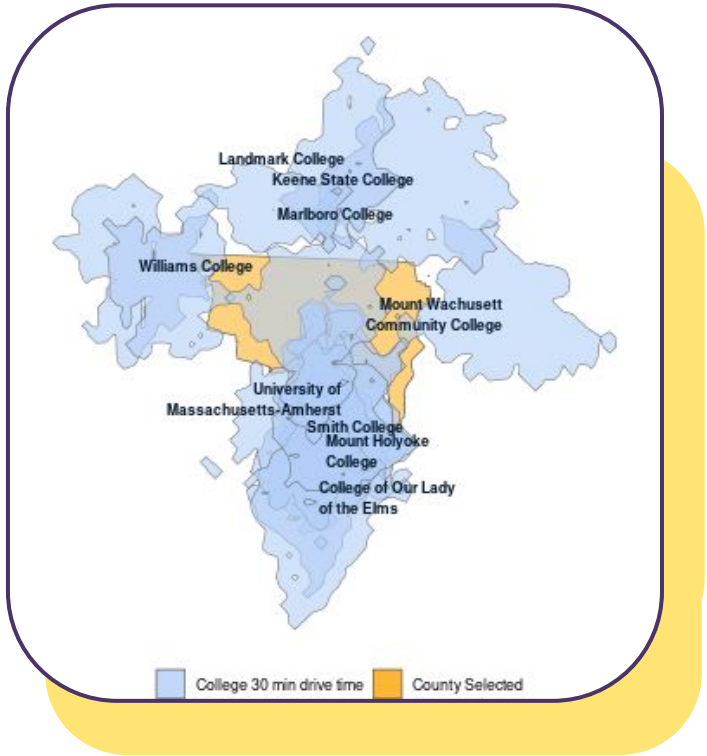
County Summary

FIPS	25011
County	Franklin
State	Massachusetts
ACP Typology	Rural Middle America
Urban/Rural Type	Micropolitan Statistical Areas
Population	70,577
Pop. Density	100.9 per sq mile
Employment	36,728
Med. Income	$60,950



Strengths

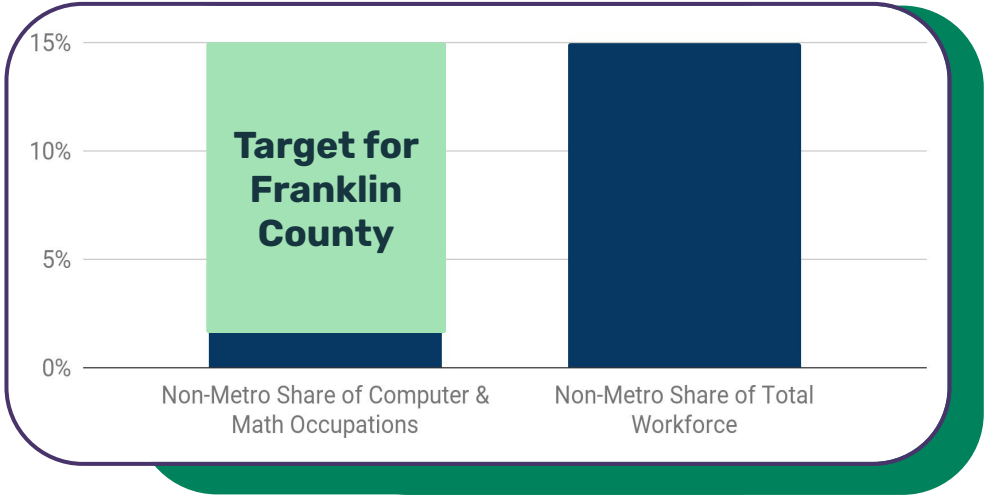
- **Digital Infrastructure:**
  - **Strong local leadership** across ecosystem | **Coworking spaces**, one tech-focused (Another Castle) | **Emerging entrepreneurship spaces** (LaunchSpace, GCC Ideation Center, Rural Innovation Center))
  - **Quality broadband/fiber** in Greenfield and Orange, some unconnected pockets
- **Enviable post-secondary assets in the region** that produce **631 CS grads** per year
- Examples of **successful startups** (i.e. Hit Point Studios exit)
- Early stage programs for Digital Workforce Development, Entrepreneurship Incubation & Support present



Areas of Opportunity

- Potential for more intentional intersections between creative economy and tech
- Build connection between Greenfield Community College programs and tech employer demands
- Leverage traditional entrepreneurship programs/spaces to create programs for tech startups inclusive of diverse aspects of community
- Jumpstart the ecosystem by pulling in CS talent from the wider region through access to capital and wrap around supports

Non-Metro Share of Computer & Math Occupation Employment (2018)



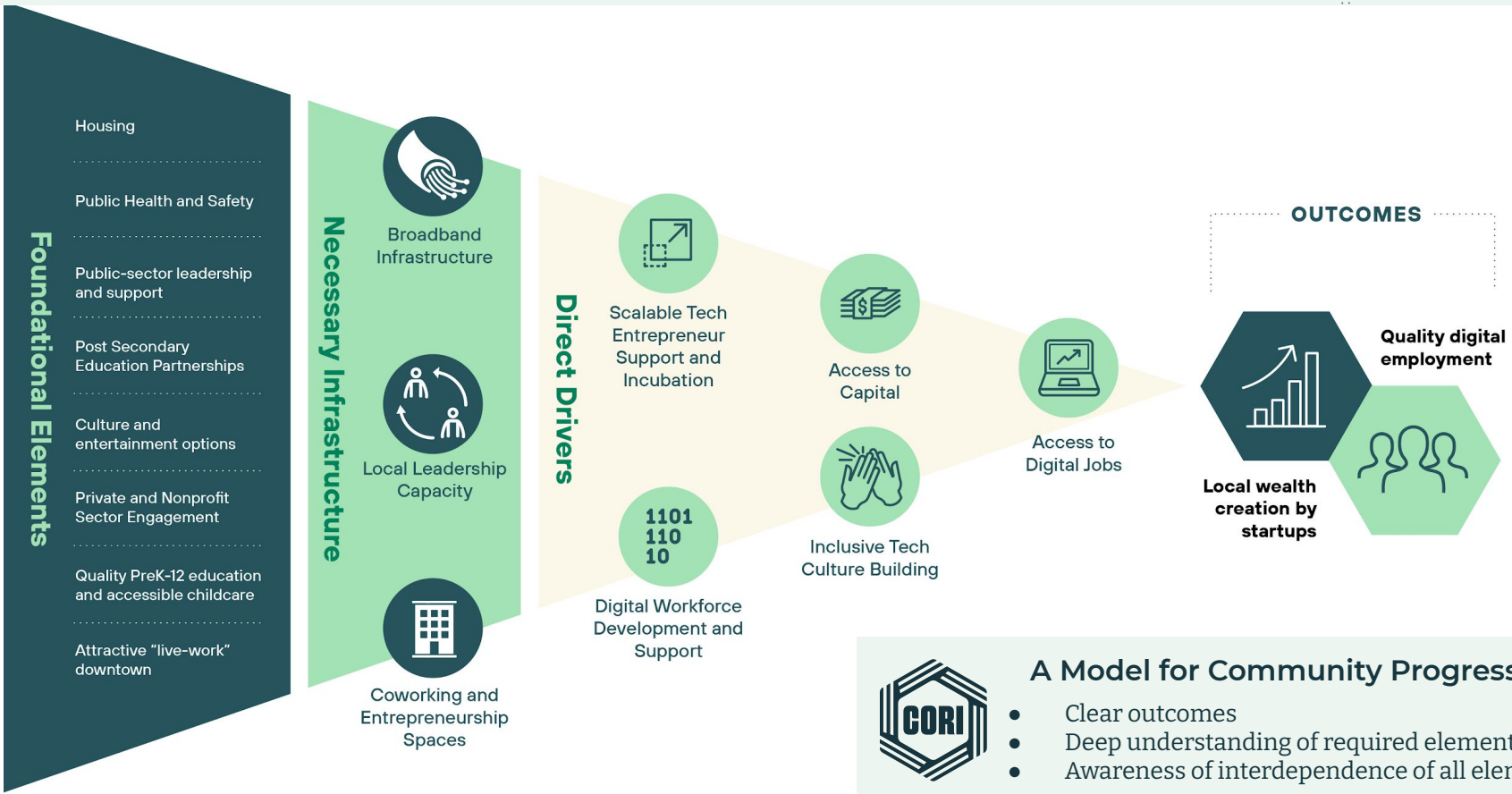
Franklin County Share: 1.7% in 2018

Source: ACS Survey 2018

Community Assessment Activities

Community Self-assessment	Digital Economy Ecosystem Report	Document Review	Community Interviews
• Benchmarking digital economy ecosystem survey • Self-assessment and scoring for each aspect of DEE model, including identification of assets, gaps, and opportunities	• Analysis of digital economy data indicators related to digital employment and entrepreneurship	• Review of current economic strategies and reports	• Interviews with community stakeholders about challenges and opportunities for local tech entrepreneurs and the digital workforce

CORI's Digital Economy Ecosystem Model

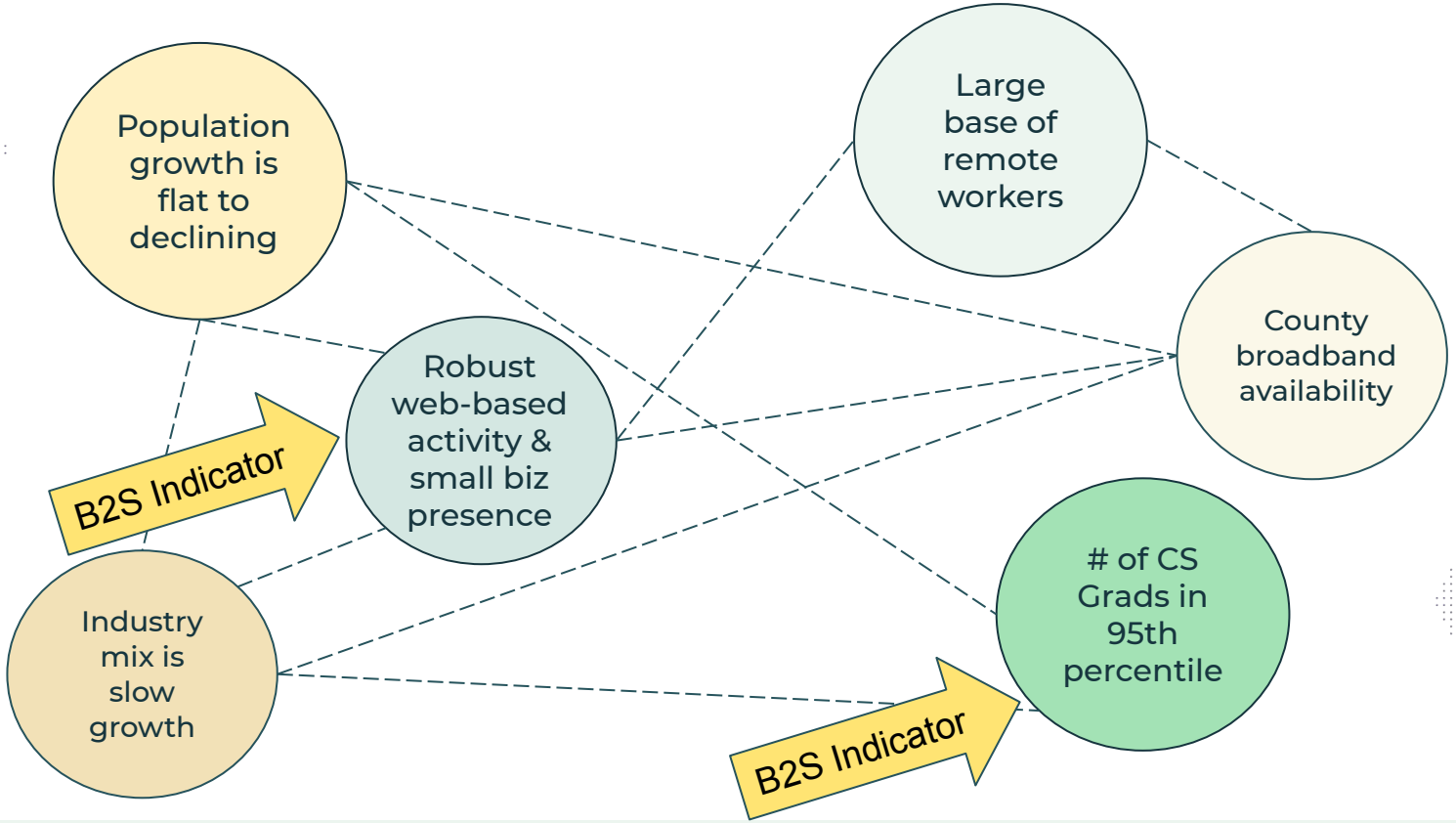


A Model for Community Progress:

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

Pillars of a Digital Economy Ecosystem Building Journey

Greenfield & Franklin County's digital economy foundations



Heather Bell, Innovation Accelerator

“My experience is that people **[tech startups] look into Amherst, North Hampton, and Springfield, and ... Holyoke.** That's just where the focus gets drawn. The focus doesn't get drawn further north, yet **I think that is evolving,** particularly **as downtown Greenfield becomes more vibrant**. I think there are more artists that are there that are starting to pick up. You know they're opening stores, they're just locating themselves because their rent was cheap."

Five Direct Drivers

Inclusive Tech Culture Building

Digital Workforce Development and Support

Access to Capital

Scalable Tech Entrepreneurship Support and Incubation

Access to Digital Jobs

Stages of Development

Stage 1

Communities at a very early stage of development for a driver.

Stage 2

Communities that have already taken action to advance a driver, and is in the process of building momentum. This is generally the stage where programmatic elements are being put in place.

Stage 3

Communities that have put in place advanced programming with focus primarily on growing impact.

Scalable Tech Entrepreneur Support and Incubation

Stage 1

- Traditional Main Street eship programming
- Culture of Main Street eship

❑ Programming and organization supports in place for Main Street entrepreneurship (small business)

- ❑ Main Street
- ❑ Buy Local Program
- ❑ Chamber focused on E-ship
- ❑ SBDC
- ❑ Startup programming/pitch competition for Main Street businesses

Stage 2

- Building culture of scalable tech eship
- Scalable eship integrated into the ecosystem

❑ Events focused on scalable eship

- ❑ Pitch events
- ❑ Entrepreneurship meetups
- ❑ Ideation workshops
- ❑ Programming on scalable entrepreneurship

❑ Designated organization (with resources) focused on scalable entrepreneurship activities

❑ Scalable entrepreneurship included in local econ dev strategy

Stage 3

- Driving the volume and growth of scalable tech startups

❑ Scalable tech startup incubator and/or accelerator program that is successfully preparing companies for investment and scale

❑ Mentor network that includes local entrepreneurs that have built scalable tech companies

❑ Outreach program for recruiting entrepreneurs

❑ Supports to connect startups to new markets, customers, and resources

Scalable Tech Entrepreneurship Support and Incubation

Community's self-score **1**

CORI's score **1**

Strengths:

1. GCC Ideation & Entrepreneurship Center
2. Startup success stories e.g. exit to Penn Game Studios
3. Greenfield has attractive amenities for startups (OZ, GB fiber, cowork spaces, affordable downtown)
4. Healthy small business culture to leverage

Challenges:

1. Gap in scalable tech entrepreneurship program focus from ideation -> acceleration
2. Low access to services / wrap around supports focused on startups
3. Programs in Pioneer Valley concentrated in Springfield

Key partners:

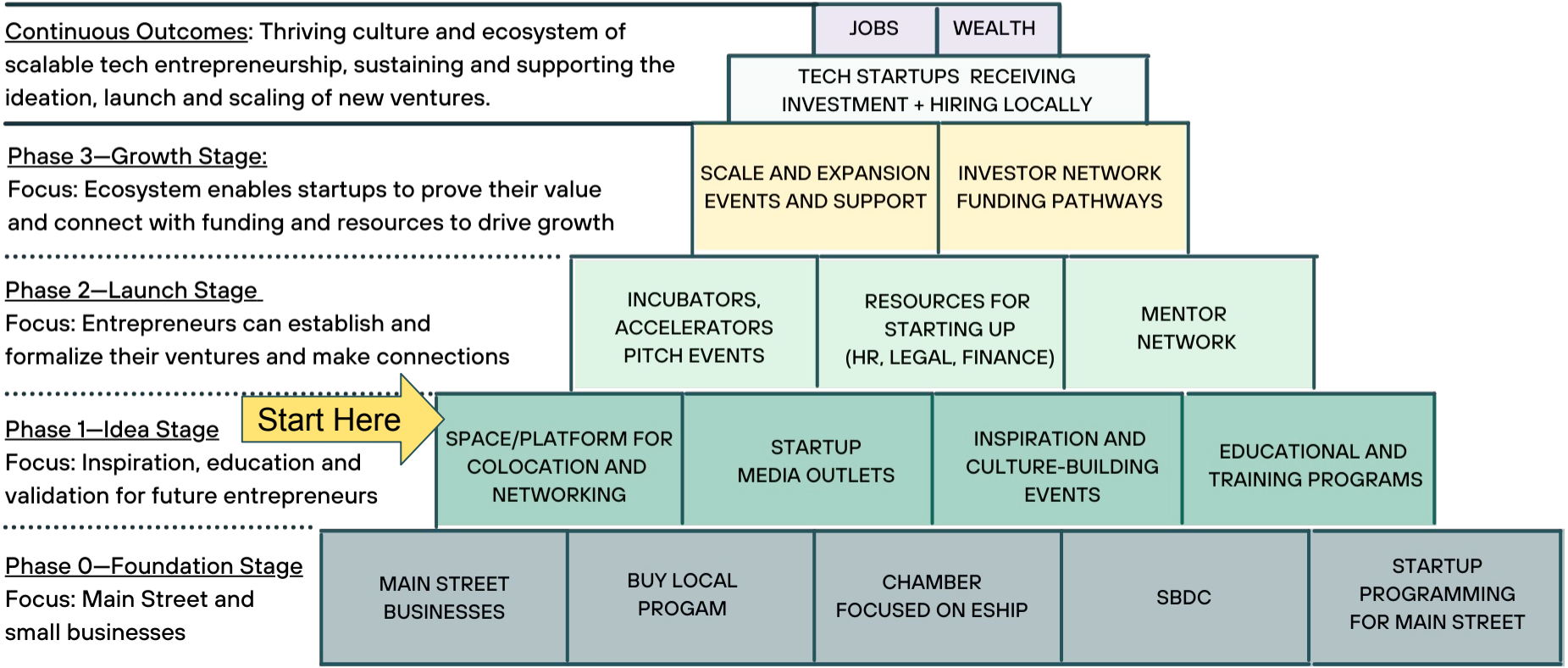
- GCC Ideation Center | Rural Innovation Center
- Innovation Accelerator
- The Hive, Another Castle, Greenspace CoWork, Launch Space, Bridge of Flowers Business Center
- Valley Venture Mentors (pending capacity)
- GCC Business Administration Program & Entrepreneurship Certificates
- Leverage small business focused programs (e.g. Chamber, SCORE, SBDC, Venture Center)

Potential Solutions to Explore

1. **Position GCC Ideation Center or Rural Innovation Center as the designated organization focused on scalable tech** (one stop shop)
2. **Leverage your county & Pioneer Valley partners** and coworking locations **to build a clear, accessible journey** for Franklin County residents to follow, starting with
    a. Tech ideation workshops
    b. Startup weekends and/or incubator programs tied to pitch events
    c. Explore how Innovation Accelerator could potentially expand to support local startups
3. **Dedicate staff resources to promising startup**s to provide custom wraparound supports and serve as connectors (e.g. mentors, legal services, accounting, space).

Building Blocks of a Scalable Tech Entrepreneurship Ecosystem

How can rural communities create and support local scalable tech startups? By providing targeted efforts at every stage of a startup's journey, communities can elevate their startup ecosystem by focusing on key assets and initiatives to support founders through all phases of growth and maturity. The Center On Rural Innovation is a nonprofit action tank working to advance economic prosperity in rural America through the creation of inclusive digital economy ecosystems that support entrepreneurship and job creation.



Paul Silva, Innovation Accelerator

"The Valley is now sorely lacking in tools to help people build scalable companies ... **they're doing a great job helping traditional main street businesses, but no one's really helping folks ideate, no one's building the community of mentors to bring them all together. T**he closest we've got is the incredible work that Heather and Kelly are doing building Innovation Accelerator again starting in the nonprofit sector."

Access to Capital

Stage 1

- Traditional small business lending institutions and vehicles

- ❑ Community has local, traditional capital focused on small businesses
- ❑ Local banks actively lending to small businesses w traditional business model
- ❑ Revolving loan funds or CDFI lending programs
- ❑ Microlending or micro-grants as part of small business support or eship program.

Stage 2

- Emergence of local risk capital
- Capacity in place to connect with public/incentive supported financing

- ❑ Network of angel investors connected to the ecosystem and actively seeking deals
- ❑ Structured support for entrepreneurs to connect with public incentive / venture programs (SBIR, NMTC, OZs, state programs)

Stage 3

- Startups have access to a full capital stack

- ❑ Venture fund backed by local investors capable of conducting due diligence
- ❑ Local economic development funds invested in the venture fund to create regenerative wealth
- ❑ Structured support to connect startups to capital from outside of the region

Access to Capital

Community's self-score **1**

CORI's score **1**

Strengths:

1. OZ in proximity to high # CS grads / faculty
2. Traditional small business lending, RLF, Common Good
3. Strong share of high income earners as potential local investors

Challenges:

1. Capital available in Springfield or Boston may pull entrepreneurs away from Franklin county (e.g. earlier stage of HitPoint Studios)
2. Deal flow not yet present for investors
3. Minimal early stage micro-grants or non-dilutive funds to encourage ideation / risk

Key partners:

- GCC Ideation Center | Rural Innovation Center
- Common Good & Local Banks as a source of pitch prizes or microgrants
- Valley Venture Mentors (potential investors)
- Regional Assets: River Valley Investors, New England Angel Capital Association

Potential Solutions to Explore

1. Launch a "First 50K" Competition to draw in tech startups from the broader Pioneer Valley with non-dilutive funds and wraparound supports (space, mentors, services)
2. Launch a series of smaller scale pitch competitions (e.g. First 5K) to increase pipeline of local First 50K startup applicants
3. Build a local angel investment OZ fund or angel investor network of Franklin County community builders

Paul Hake, Penn Game Studios (Hit Point exit)

"A couple of years later when we raised capital to be an injection of cash, that was a friends and family, round ... Then we had to move to Springfield as part of the Mass Mutual money because it was part of the requirements of their investment... it was the biggest mistake we made. We were diluted heavily and the only people that came out on top were the landlords in Springfield basically."

Digital Workforce Development and Support

Stage 1

- Traditional workforce development & education programs
- No integrated strategy tied to the ecosystem

- ❑ Connection to post-secondary partner (university, community college, Udacity, etc.) offering CS degrees/credentials
- ❑ K-12 STEM and computer science programming in the public school curriculum
- ❑ One-off or project-based tech programming (e.g., tech summer camp, makerspace programming)

Stage 2

- Broader set of digital skilling offerings and emerging strategy to integrate programs with DEE

- ❑ Cohort-based digital skilling program built on Massive Open Online Course (MOOC)s/online bootcamps with mentorship from local tech professionals and wrap around supports
  - ❑ E.g. Udacity/Flatiron
- ❑ Hackathon
- ❑ Local developer mentorship program
- ❑ Digital skilling roundtable that includes K12/post-secondary

Stage 3

- Tight integration of digital skilling efforts with employers and the broader DEE

- ❑ Alternative digital skilling programs (intro->advanced) are led by local tech professionals and have structured engagement with local tech employers
- ❑ Educational programs linked into pipeline from high school > post-secondary/alternative digital skilling > job
- ❑ Structured program for documenting/tracking local tech skill demand
- ❑ Internship programs for tech

Digital Workforce Development and Support

Community's self-score **1**

CORI's score **1**

Strengths:

1. 95th percentile for CS grads among comparable US micro counties
2. 165 tech jobs posted within 50 miles (Indeed)
3. Evidence of early K-12 pipeline development
4. GCC CS & Computer Workforce Development Programs

Challenges:

1. Uneven opportunity for K-12 pipeline
2. Low demand & awareness of tech careers as an opportunity, e.g. for GCC CS programs / Computer Workforce Development
3. No known coding bootcamps or other digital skilling efforts

Key partners:

- Greenfield Community College
- K-12 Public and Private Institutions
- Local anchor employers,
  - e.g. Greenfield Community College, manufacturing sector
- Known tech employers,
  - e.g. Penn Game Studios
- Coworking spaces and maker spaces,
  - i.e. Another Castle & Greenspace CoWork, LaunchSpace
- Tech Foundry

Potential Solutions to Explore

1. **Build a digital skilling roundtable** that includes K-12 (public and private), Greenfield Community College, anchor employers and coworking spaces

    a. **Uncover current tech job demand to inform** GCC's **curriculum decisions and implementation** of appropriate digital skilling efforts (e.g. coding camps).

2. **Increase equitable access to K-12 CS curriculum and** project-based, **summer / evening programming** (e.g. tech summer camps, STEM RAYs)

3. **Implement inclusive tech culture building activities to bring awareness of tech opportunities and accessible** skill development **pathways** for youth and adults

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Chet Jordan — Dean of Social Sciences, Professional Studies & Workforce Development at Greenfield Community College

"I think the biggest hurdle is ... **we need to identify a ... tangible demand in the area, and then we can** from ... a backwards problem solving strategy, we can **develop programs to meet those demands** ... [Our] ... fallacy in the past has been that we anticipated demand and develop a program for such a demand that doesn't materialize. And then we're stuck with an academic program that has nobody in [it], and ... I'm trying to pry loose because once it's there, it's actually quite difficult to do anything with ... **The big kind of mantra for us is to make sure that we understand, and this is [a] workforce development and also in the academic sphere is that we need to make sure that we have a demand that we understand.** And that's going to be able to match what we need an enrollment in order to sustain a program"

Access to Digital Jobs

Stage 1

- Digital jobs have a champion but little formal programming has been put in place

- ❑ A local organization has taken up increasing access to digital jobs as part of its mission
- ❑ Convened conversations with employers about current and future demand for digital skills

Stage 2

- Community has an economic development strategy that includes a focus on digital jobs

- ❑ Established mechanisms tracking and understanding the needs of employers (surveys, roundtables, talent support, etc.)
- ❑ # employed in tech and in remote work is tracked as economic dev metric
- ❑ Remote worker engagement program
- ❑ Program to support newly trained digital workers to obtain local and remote job opportunities

Stage 3

- Visible tech jobs and presence in the community with robust support for tech job strategy in the DEE

- ❑ Tech employers and econ dev + workforce dev work together to increase # employed in tech
- ❑ Mechanisms in place for tracking, sharing, forecasting tech jobs
- ❑ Remote work attraction/incentive program
- ❑ Structured programs to support remote workers
- ❑ Project shop to create job opportunities for newly trained tech workers

Access to Digital Jobs

Community's self-score **1**

CORI's score **1**

Strengths:

1. High rates of remote workers
2. Early evidence of demand for tech jobs
3. Fiber internet in Greenfield attractive remote workers / tech employers

Challenges:

1. Disparate broadband availability and usage in the county
2. 1.5% of economy in the IT sector (2018)
3. Increasing tech jobs not a clear economic development focus

Key partners:

- Franklin Hampshire Career Center
- Local anchor employers,
  - e.g. Greenfield Community College, manufacturing sector
- Known tech employers,
  - e.g. Penn Game Studios
- Tech Foundry
- Coworking spaces and maker spaces,
  - i.e. Another Castle & Greenspace CoWork, LaunchSpace

Potential Solutions to Explore

1. **Identify a local organization or collaborative to take up increasing access to digital jobs as part of its mission in Franklin County.**
   a. **Convene key partners** to join in this effort

2. **Engage in strategic conversations with employers about** current and future **demand** for digital skills (surveys, roundtables, etc.)

3. **Establish mechanisms for identifying, tracking** and understanding the **needs of tech / remote workers and** their **employers to build community**

4. **Link any digital workforce development efforts with** local and remote **job** internships and **opportunities**

Another Castle, Paul Hake

[Describing a game jam at Another Castle] "A lot of … community college students or UMass, Hampshire, Holyoke and sometimes Amherst [and] Smith [students] came… **I think there were 40-50 people there**. It was pretty crazy, 24 hours to work on a project and you stay at the office if you want, or over the weekends it's like 48 hours. **It's a great community building event** was a great experience for students …

… There's also some other … people who have day jobs that want to get into game development so they'll do [this] for the weekend and make a game independently. **We [also] have tech meetups** where we [host] talks … Now we just have a **guest speaker every month. This past month it was [a local] guy who just moved to Shelburne Falls."**

Inclusive Tech Culture Building

Stage 1

- Creating a culture of collaboration

❏ Multiple organizations in the community are partnered with a shared vision for building an inclusive tech economy

Stage 2

- Establishing new values and norms that emphasize the value and importance of scalable eship and digital jobs

❏ Dedicated channels (website/email/social media) focus on promoting entrepreneurship and the tech economy

❏ Local news and business organizations regularly feature entrepreneurs and the tech economy

❏ Programming and recruitment efforts are designed to be inclusive and inviting to diverse participants

Stage 3

- Enacting new values and norms through events and branding that engage diverse audiences and build buy-in

❏ The ecosystem has a brand that is used throughout the community

❏ Annual conference or large scale event focused on engaging diverse audiences and celebrating the ecosystem's successes

❏ Coworking space is recognized as a gathering space that integrates coworking, eship programs, and digital skilling

Inclusive Tech Culture Building

Community's self-score **2**

CORI's score **1**

Strengths:

1. Strong creative economy & tech adjacent industries
2. Early examples of tech startup & job success, tech meetups (Another Castle)
3. Multiple strong community programs to leverage culture building

Challenges:

1. Tech not seen as a viable pathway inclusive of all community members
2. Examples of success are not widely celebrated or broadly seen as part of community identity
3. The digital divide: literacy and access

Key partners:

- Local media (AOTV, GCTV, The Recorder)
- Inclusion partners: Center for Women & Enterprise, Franklin County CDC - Racial Justice program, Erving Senior Center & OASIS at GCC, YMCA, Musica Franklin, Girl Scouts etc.
- Industry: Local Tech Companies | Pioneer Valley Game Developers Group | Another Castle | County's anchor industry employers
- Main Street Business Organizations: Chambers, SBDC, SCORE etc.
- Coworking spaces and maker spaces: Greenspace CoWork, LaunchSpace, Bridge of Flowers
- Arts Extension Service, Assets for Artists

Potential Solutions to Explore

1. **Start building your shared community vision now.** Bring partners together with a case for change and a call to action for how to collaborate.
2. **Begin to build a brand:** Share widely the current tech story of Franklin County via media outlets, highlighting successes like the Hit Point Studios exit, feature tech workers.
3. **Design early pipeline awareness, inspiration, and educational events** for those new to tech **by meeting them where they are** - leveraging local cultural traditions/events/industries
    a. Promote tech cultural belonging for those in recovery, seniors, BIPOC, women, current tech and remote workers
4. **Create a "front door" for your regional tech culture** in Greenfield and other satellite locations (LanuchSpace)

Traci Talbert, Franklin County CDC

“This is an up and coming community ... I am working to bring more black-owned businesses here and increasing racial equity in the businesses already present. **When I say welcome and belonging,** I see that hand holding. I **see this chain of all these businesses physically holding hands, so if one business owner drops or makes a mistake, the next business should be there to pick them up or encourage them** or, or just help them to kind of refocus and talk through what could have possibly went wrong.”

"**I [imagine] seeing the generations coming together** and maybe a grandmother and grandson are **working together on a tech project** to really promote that in our community.”

Innovation Accelerator Interview

“I think there's a lot of people in greater Greenfield, that could learn some skills, and then realize that they could make their thing [startup] happen, because it's never been easier to code." — Paul Silva, Co-Founder & Instructor

"The Franklin County Jail is located in Greenfield, and, and they've already started to build partnerships, there, and there's a real passion around helping folks that are on the margins of society have a real path and so I think you could building a real tech path there." — Heather Bell, Co-Founder & Instructor

Pillars of a Digital Economy Ecosystem Building Journey

DEE Building Journey - Assessment to Strategy Readiness

Pillars & Benchmarks	Assessment	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 DEE strategy	Core team convenes a steering committee of stakeholders and shares the findings from the DEE assessment
Steering Committee	Engages stakeholders and brings them to the table to develop DEE Identifies who isn't at the table but needs to be	Cross-sector steering committee representative of community demographics forms and regularly meets to develop DEE vision (core-team noted is part of this larger steering committee) **In progress**
Evidence-based decision making	Define a data driven current state and build common framework for understanding and tracking DEE progress	Leadership and steering committee can → Make a clear, data driven case for DEE investment → Begin collecting data about key ecosystem issues (e.g. learning more remote workers) **In progress**
Resources (money & people)	Creates case for investing resources in developing a DEE	Commitment of resources to start executing a DEE strategy Core team able to dedicate .25 FTE to strategy development for ~8 weeks **In progress**
DEE Programs | Infrastructure & Facilities	Provides a framework for organizing existing programs into a DEE Clarifies gaps and areas for action	Programming gaps identified and ideas are being developed for addressing those gaps

Key conclusions

1 **Strong potential for a robust Digital Economy Ecosystem**

Greenfield & Franklin County have enviable assets, potential strategic partners, the foundational elements and DEE infrastructure necessary to build a robust Digital Economy Ecosystem | Pioneer Valley Plan for Progress and local leadership are aligned with this focus.

2 **Establish Pull Factors to Draw Talent to Greenfield**

Without intentional focus and resources, this potential could remain unrealized due to strong pull factors towards more developed tech ecosystems in the Pioneer Valley and beyond in MA.

3 **Jumpstart DEE with a few quick "wins" & Inclusive Tech Culture Building**

Highlight successes already present, **draw attention** and talent **via a First 50K** program and **widen the top of your funnel through culture building** events to develop more tech talent and foster a culture of innovation.

Steering committee recommendations:
GCC, Innovation Accelerator, LaunchSpace, Another Castle, K-12 representation, Franklin CDC, Action Innovation Network, City of Greenfield, North Quabbin Chamber, Valley Venture Mentors (if staff capacity available)

Potential outcomes

Building a Digital Economy Ecosystem by tying together these assets, and strategically filling in the identified gaps will …

Produce homegrown tech startups that create new, higher than median income paying jobs for the county..

Shift industry concentrations towards higher growth, tech-focused and enabled sectors.

Attract and retain more tech workers with a desire for rural life, **and regain family-age expats** that want to be close to relatives.

Create an inclusive, viable pathway for kids and adults **towards local high paying tech employment or entrepreneurship.**

Thank You

Keep in touch with us

Leah Taylor,
Rural Innovation Initiative Manager

leah.taylor@ruralinnovation.us

www.ruralinnovation.us