Commonwealth of Massachusetts
Executive Office of Housing and Economic Development

Opportunities for All

Community Based Innovation Tour

Massachusetts: An Innovation State

■ **Bloomberg Ranked Massachusetts #1 Most Innovative State in America**

Bloomberg State Innovation Index

Rank/State	Total score	R&D intensity	Produc-tivity	High-tech density	STEM concen-tration	Science & engineering degree holders	Patent activity
1 Massachusetts	93.33	2	6	1	4	7	2
2 California	93.30	4	7	2	6	2	1
3 Washington	90.40	5	9	7	1	4	3
4 New Jersey	80.42	10	8	5	15	13	7
5 Connecticut	77.18	8	4	22	13	10	11
6 Oregon	77.08	13	12	17	10	5	12
7 Maryland	76.82	3	15	24	2	1	25
8 Colorado	75.12	19	18	15	5	6	10
9 Delaware	72.72	6	3	30	8	9	25

■ **Innovation is part of the Massachusetts story, part of our economic DNA.**

- **Ideas and invention that get adopted into practice.**

  - We see innovation every day! Schools, governments, businesses and not-for-profits.

  - The innovators (in any field) are at the center of the activity.

  - New technology is driving these opportunities, enabling the acceleration of these changes.

  - At some point there is a critical mass of activity and excitement in a given community – with multiple access points or "innovation infrastructure".

Why we think this Community Innovation is important:

- Democratization of innovation.

- We <u>know Innovation is happening in every corner</u> of the Commonwealth and believe every community has a place in the ecosystem.

- The Commonwealth recognizes a needs to <u>build capacity among a broad range of small businesses</u>, including businesses owned by women, veterans, recent immigrants, and entrepreneurs of color and the way to do that is through community based innovation.

- This is a global trend and we believe Massachusetts can lead the way.
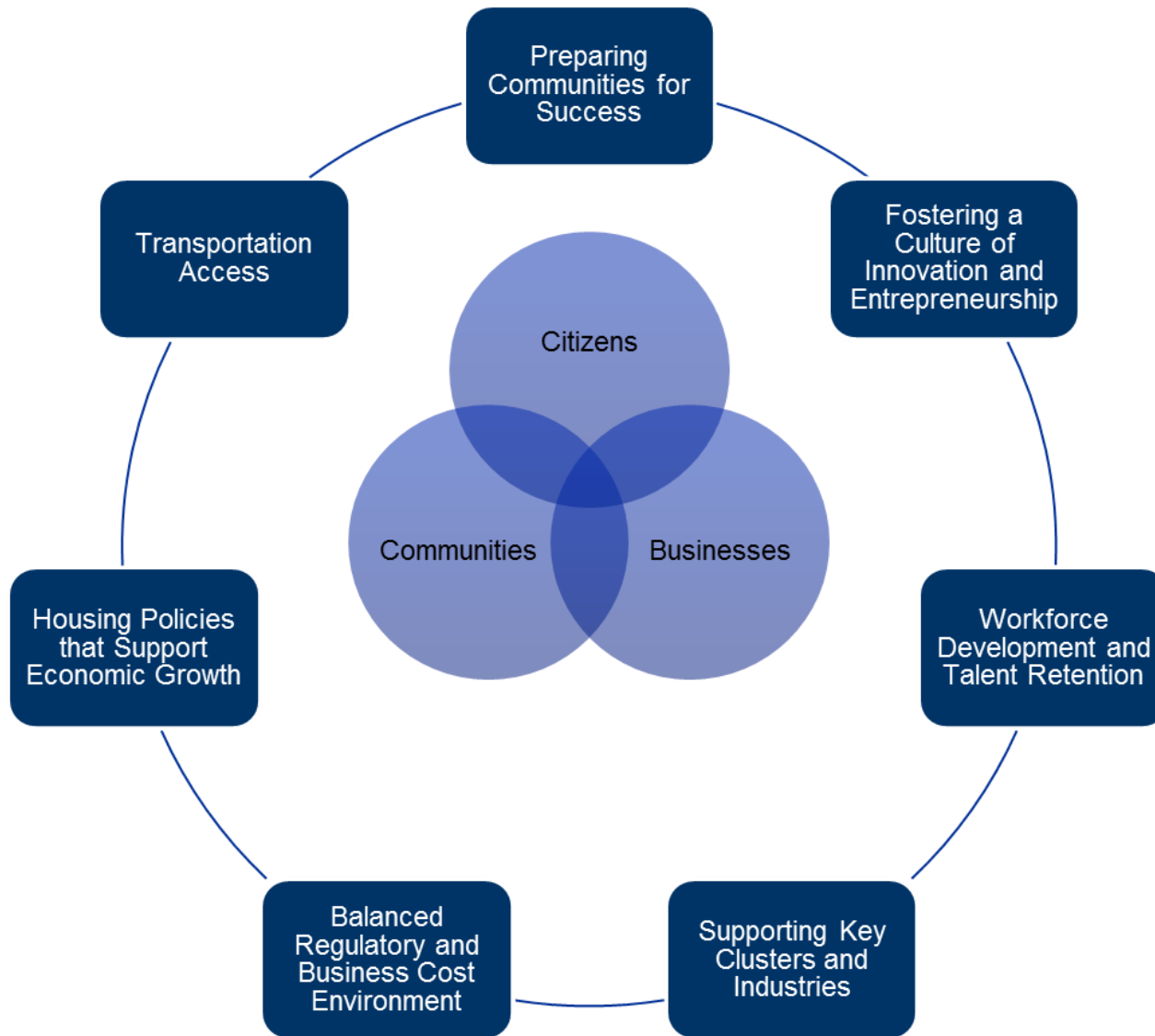
Goals for Fostering a Culture of Innovation

- **Goal #1:** Deepening Partnerships with Higher Education

- **Goal #2:** Support an Infrastructure for Innovation

- **Goal #3:** Seed and Grow Innovation Communities

- **Goal #4:** Support Community-Based Entrepreneurship

- **Goal #5:** Coordinate Quasi-Public Agency Work

EOHED's Policy Review

Economic Development Bill & 2016 Budget

Included in the Governor's 2016

Opportunities for All Bill

Innovation Infrastructure : Innovation Infrastructure Fund creates a new fund for making capital grants that support community-based innovation efforts, including co-working spaces, venture centers, maker spaces and artist spaces. The Fund will be administered by MassDevelopment.

$25 Million Proposed Capital Authorization

Other Noted Community & Innovation Programs in Jobs Bill & Budget

Communities in Bill

- MassWorks
- TDI Equity Investments
- Site Readiness Fund

Innovation in Bill

- M2I2
- R&D Fund
- Innovation Infrastructure

Communities in Budget

- TDI, Fellows & Operating
- Urban Agenda
- Community Compact Grants

Innovation in Budget

- MassTech
- Small Business Technical Assistance Program

Community Based Innovation

Research

EOHED Review

We have mapped and researched the innovation ecosystem of Massachusetts, municipality by municipality, region by region.

Mapping Innovation Assets

- Spaces
- Organizations
- Programs
- Connections

Researching Key Clusters

- Strong Traded Clusters
- Strong Local Clusters
- Emerging Clusters

Innovation Asset Mapping

Findings

What do we consider Innovation Infrastructure?

When we map the foundation for innovation in a community, we take note of spaces, organizations, programs and connectors that anchor and spur activity.

Spaces
> Innovations Centers
> Centers & Event Spaces
> Maker Spaces
> Artist Spaces
> Collaborative Kitchens
> Co-Working Spaces

Organizations
> College or University
> Clubs
> Sector or Cluster Groups

Programs
> Mentorship Opportunities
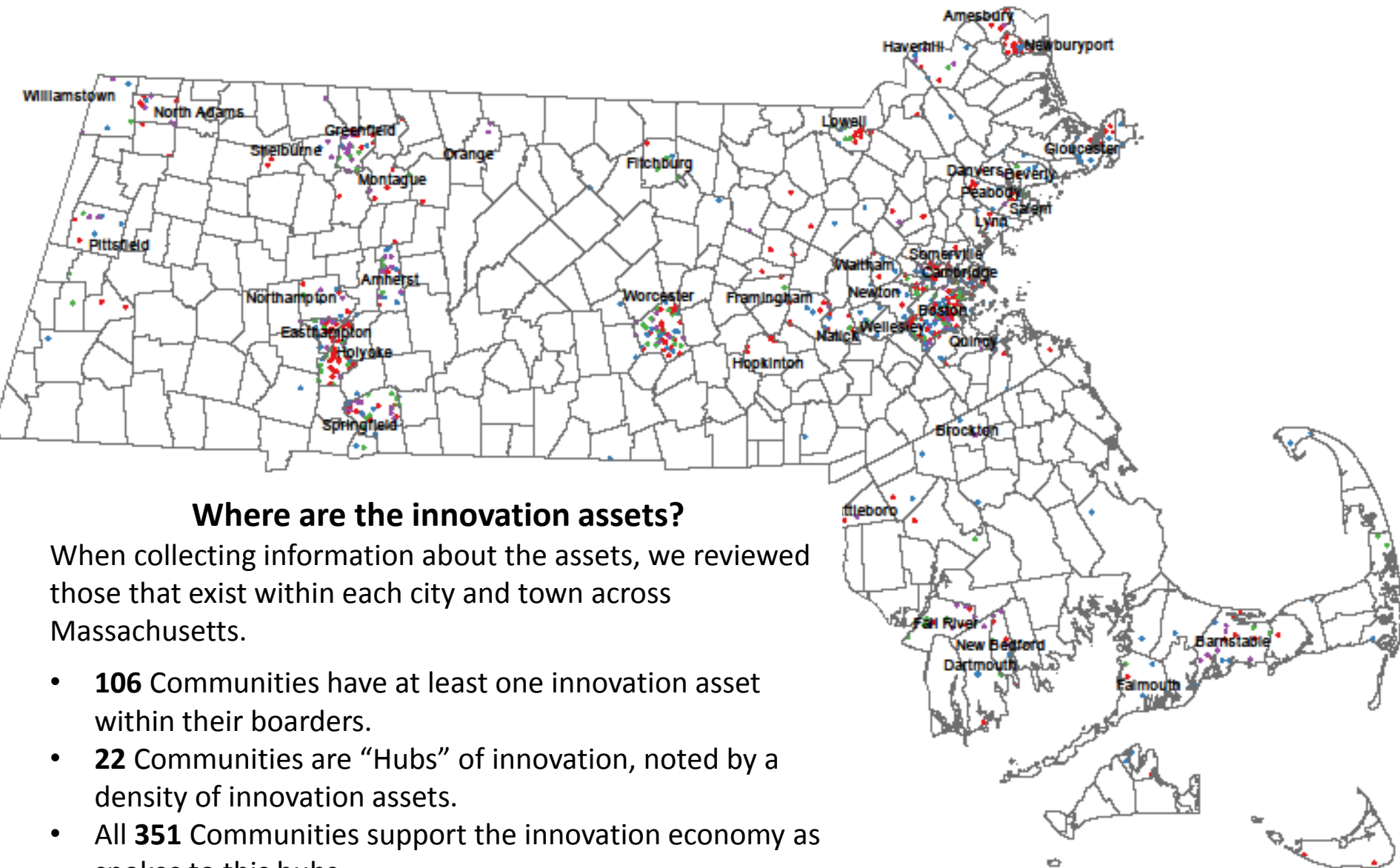> Classes
> Programs & Accelerators
> Funding

Connections
> Meet-Ups and Events
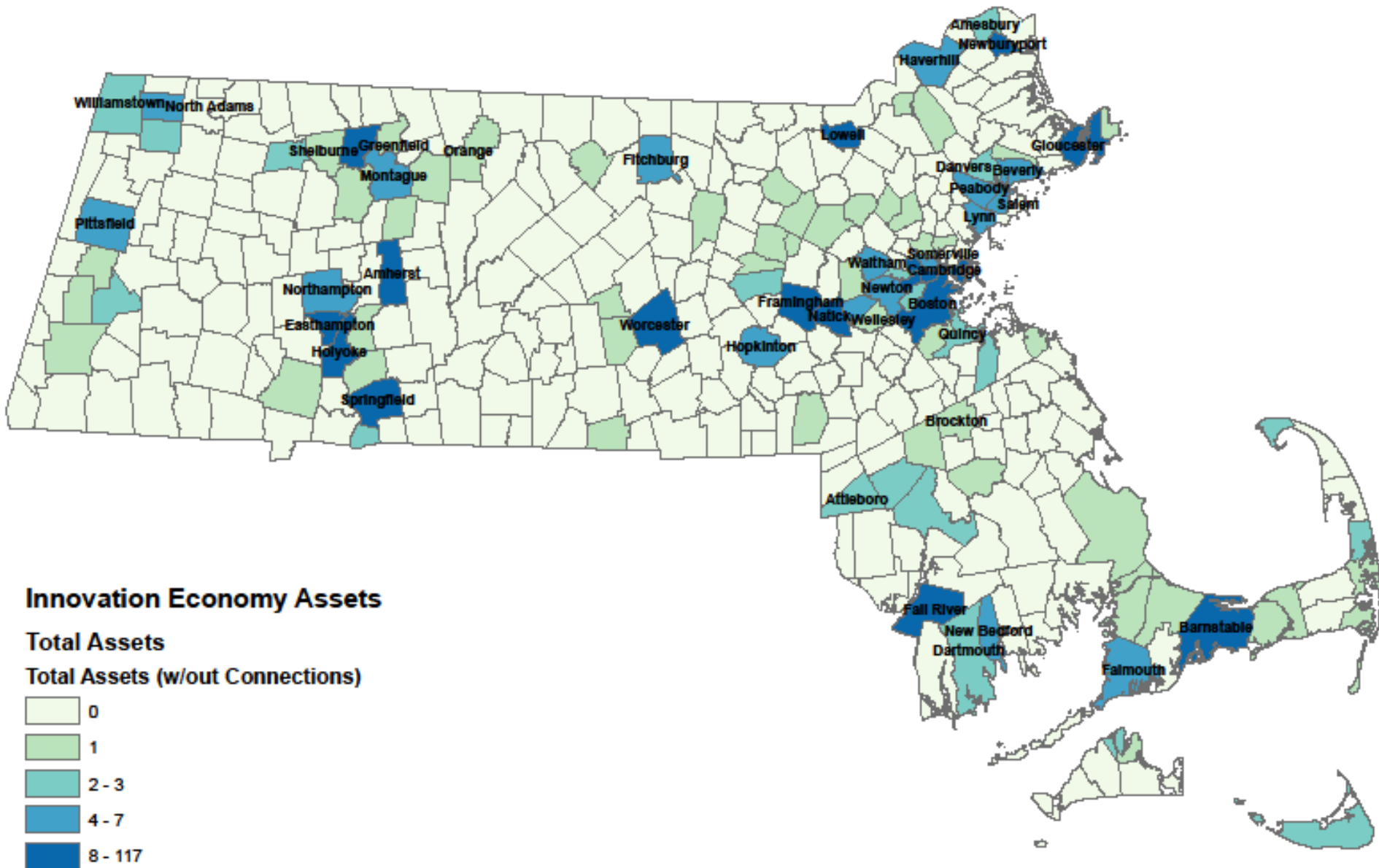> Competitions
> Websites
> Thought Leaders

Where are the innovation assets?

When collecting information about the assets, we reviewed those that exist within each city and town across Massachusetts.

- **106** Communities have at least one innovation asset within their boarders.
- **22** Communities are "Hubs" of innovation, noted by a density of innovation assets.
- All **351** Communities support the innovation economy as spokes to this hubs.

Innovation Asset Heat Map

Innovation Economy Assets

Total Assets

Total Assets (w/out Connections)

- 0
- 1
- 2 - 3
- 4 - 7
- 8 - 117

What innovation assets should we know about?

Makers' Mill
create · learn · collaborate

Tech Spring

VALLEY VENTURE
M E N T O R S

Western Mass Food Processing Center

New Vestures
a fashion makerspace

GATEWAY CITY Arts
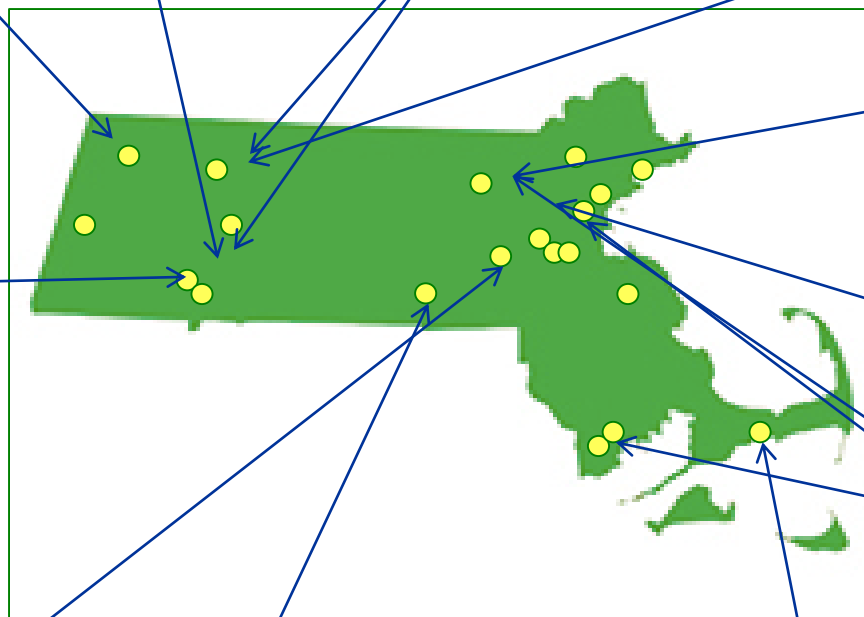
GREENTOWN LABS

E FOR All
ENTREPRENEURSHIP
— FOR ALL —

Framingham
DOWNTOWN
Renaissance

technocopia
worcester

Startup
Weekend
Cape Cod

Every community is different, but there are signals to show the development phase of the ecosystem.

Mature

Ecosystems always evolve, but at the more formed stages colleges, universities, large institutions and strong sector groups are actively involved in the ecosystem.

Emerging

Spaces begin to emerge, including innovation centers, co-working, maker spaces & kitchens.

Services for entrepreneurs begin to form including accelerators & mentorship programs.

Developing

The groups in the ecosystem begin for form group or clubs, host competitions or classes.

Ecosystem become more "self aware" and starts to address gaps.

Forming

Ecosystem starting to convene informally, through meet ups.

Early Stage

Artists and early adopters in the ecosystem.

Key Cluster Review

Findings

How do we analyze Clusters?

When we research the key clusters in a region, we take note of established and emerging clusters, that are traded globally and locally that anchor and spur activity.

Established

Clusters with strong employment built upon region's competitive advantages.

Emerging

Clusters with strong future market potential, building upon region's strengths.
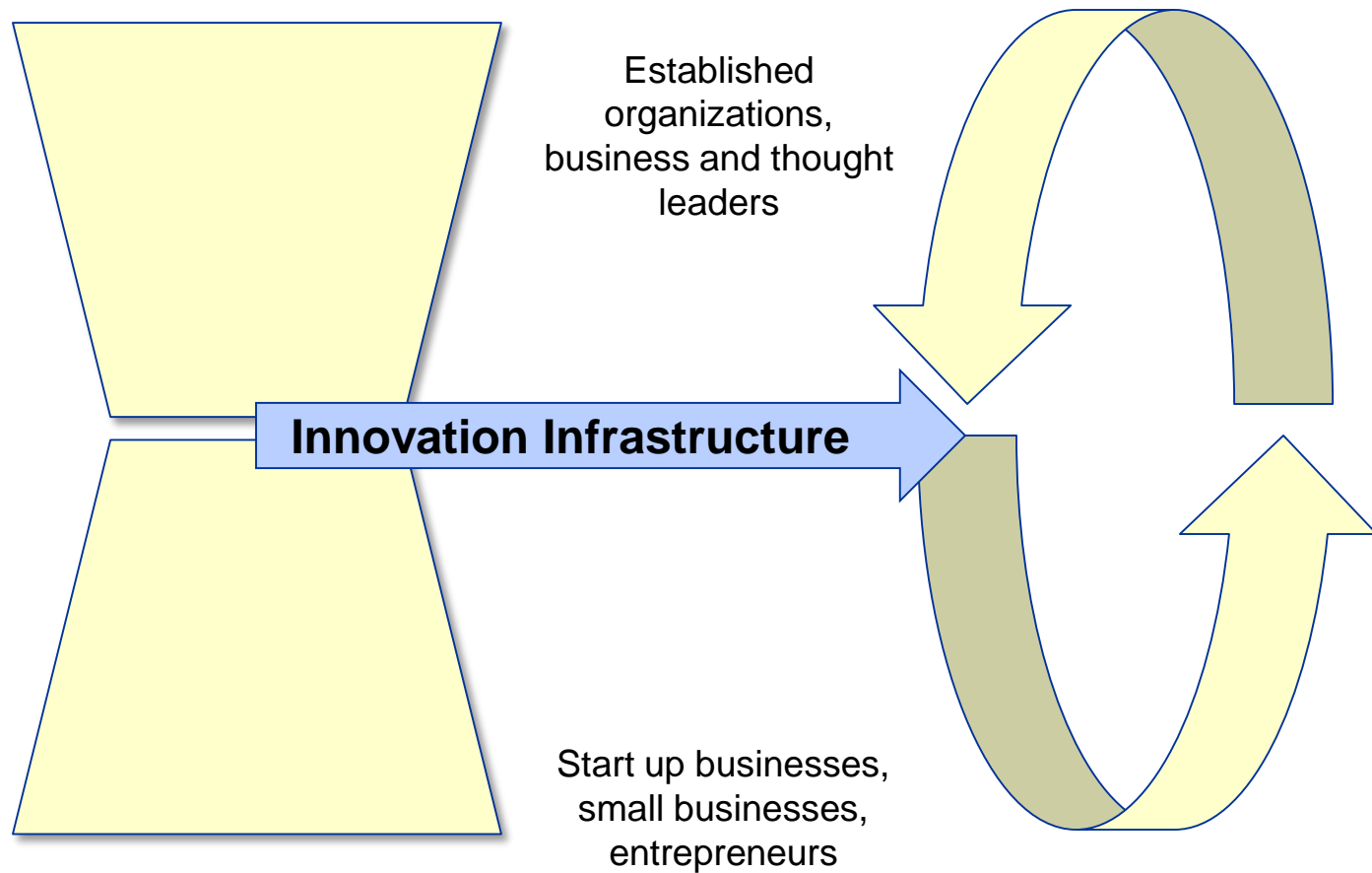
Globally Traded

Serves markets in other regions or nations, concentrated in regions that afford specific competitive advantages. Example Industries: aircraft manufacturing or management consulting.

Local Traded

Sell products and services primarily for the local market, located in every region. Example Industries: drug stores or elementary schools

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Source: Clustermapping.us

Early Stage Ecosystem

Strong Ecosystem

Established organizations, business and thought leaders

Innovation Infrastructure

Start up businesses, small businesses, entrepreneurs

Recap of Guiding Principals for Innovation Ecosystems

As we are looking at the innovation ecosystem as a whole, we are considering the following ideas:

- There is **a place in the ecosystem for all communities**, each region has natural community hubs with other communities as spokes.

- Community based Innovation must have a **regional view**, with a local strategy.

- All new infrastructure should be **built around proven demand and present community**.

- **People** are as, if not more, important than buildings in an ecosystem.

- Similarly, with noted clusters, **build on present capacity and uniqueness**.

- A **connection to technology** is important for all emerging clusters.

- **Leadership is key, but must involve present community.**

Feedback & Input

We need your help!

Where do we go from here?

■ **Research & Findings**

- This is an ongoing process, what else should we include?

- How would this help your community?

■ **Community Innovation Network**

- We are meeting with other communities, if there is interest, we will convene a Community Innovation Network, to share best practices & discuss issues.

■ **What else could we consider?**

■ **What do you want to do?**

Other Noted Community & Innovation Programs in Jobs Bill & Budget

Communities in Bill

- MassWorks
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Innovation in Bill

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Innovation in Budget

- MassTech
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Thank you!

Appendix I
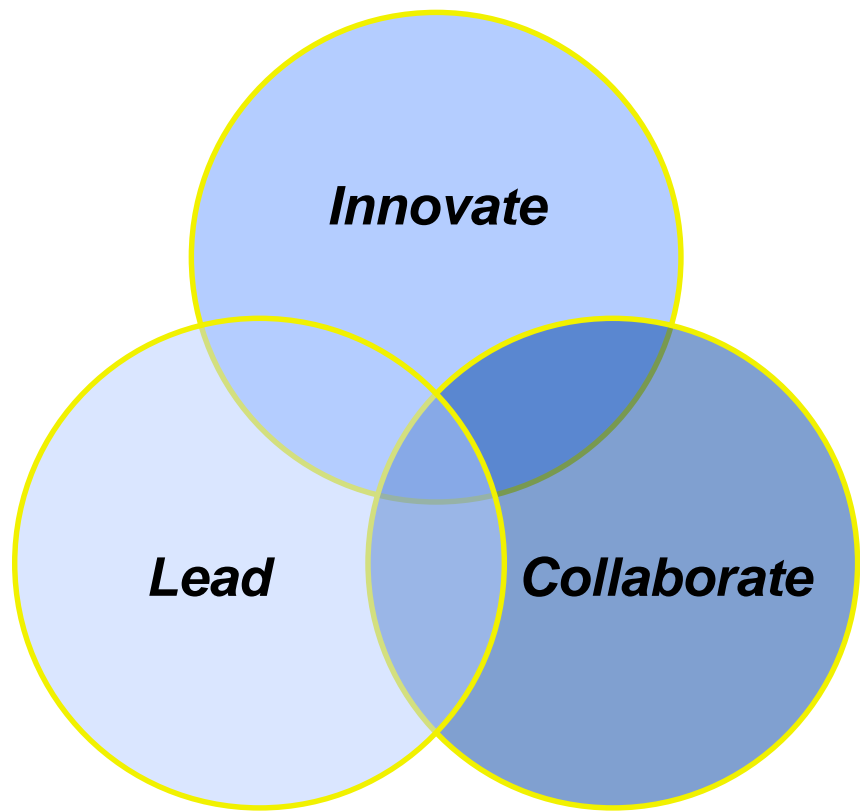
The Massachusetts "Story"

Governor Baker has said that Massachusetts is what you get when people "establish two great educational institutions and wait 200 years".

Massachusetts' story is simple:

The Massachusetts "Story"

- **Innovation.**
  - Our world-class educational system attracts, develops and creates talent that fuels our economy and infuses our communities with diverse and dynamic new ideas.
  - Massachusetts companies and research institutions drive investments in knowledge, making Massachusetts #1 in research and development spending per capita and as a share of GDP and #1 in federal expenditures for academic and non-profit R&D.

- **Collaboration.**
  - Academic, business and government institutions collaborate across the board on clean energy, advanced computing, life sciences, advanced manufacturing, defense sector initiatives.
  - Our culture of innovation and entrepreneurship is supported by professional and financial networks that make Massachusetts #1 in technology transfers, #2 in venture capital under management, #2 in tech patents.
  - Strong existing companies are bolstered by emerging and high growth sectors.

- **Leadership.**
  - In Massachusetts, leaders from business, higher education, philanthropy, non-profits, and state and local government work together to advance individual and common aspirations, including prosperity, innovation, a great quality of life, and meaningful impacts on our country and the world.

INNOVATION IS OUR BUSINESS

Nearly **40%** of our total employment is in the 11 key sectors of the Innovation Economy

From 2005–2010, the total wages paid in the Massachusetts Innovation Economy grew **23%**

The **#1 new economy state** in 2012 as ranked by the Information Technology & Innovation Foundation

Recent Bureau of Labor Statistics reports rank Massachusetts **#2 in high tech job growth**, at 5.5% growth

The Massachusetts tech sector includes 180,000 employees with an estimated **$65 billion** of output, or 20% of the state's GDP

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MA is the Most Dynamic, Innovative State

- #1 on the Milken Institute State Technology and Science Index.

- #1 in R&D spending as % of GDP and per capita.

- #1 most economically evolved state, according to the Information Technology and Innovation Foundation.

- #1 in federal expenditures for academic & non-profit R&D level and growth among leading technology states.

- #1 in funding from the National Institute of Health as % of GDP.

- #1 state for overall competitiveness according to the Beacon Hill Institute at Suffolk University.

- #1 life sciences cluster, according to GEN magazine ratings.

- #1 in life sciences employment per capita, and in % of workforce in science and engineering occupations.

- #1 in technology transfers.

- #1 in science & engineering articles per capita.

MA is the Most Dynamic, Innovative State

- 2nd in venture capital under management.

- 2nd in technology patents per capita.

- 2nd in pre-market biopharmaceutical notifications.

- 4th in new drug approvals.

- 2nd highest growth in defense manufacturing and instrumentation.

- Greater Boston ranks 2nd in technology employment among major US markets.

- Massachusetts medical device industry is 2nd largest in the US.

Appendix II

Innovation Economy Assets

Asset Types
Sum of Fields

7.1

Total Spaces
Total Organizations
Total Programs
Total Connections

Innovation Economy Assets

Asset Types

Sum of Fields

7.1

- Total Spaces
- Total Organizations
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Innovation Economy Assets

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Innovation Economy Assets

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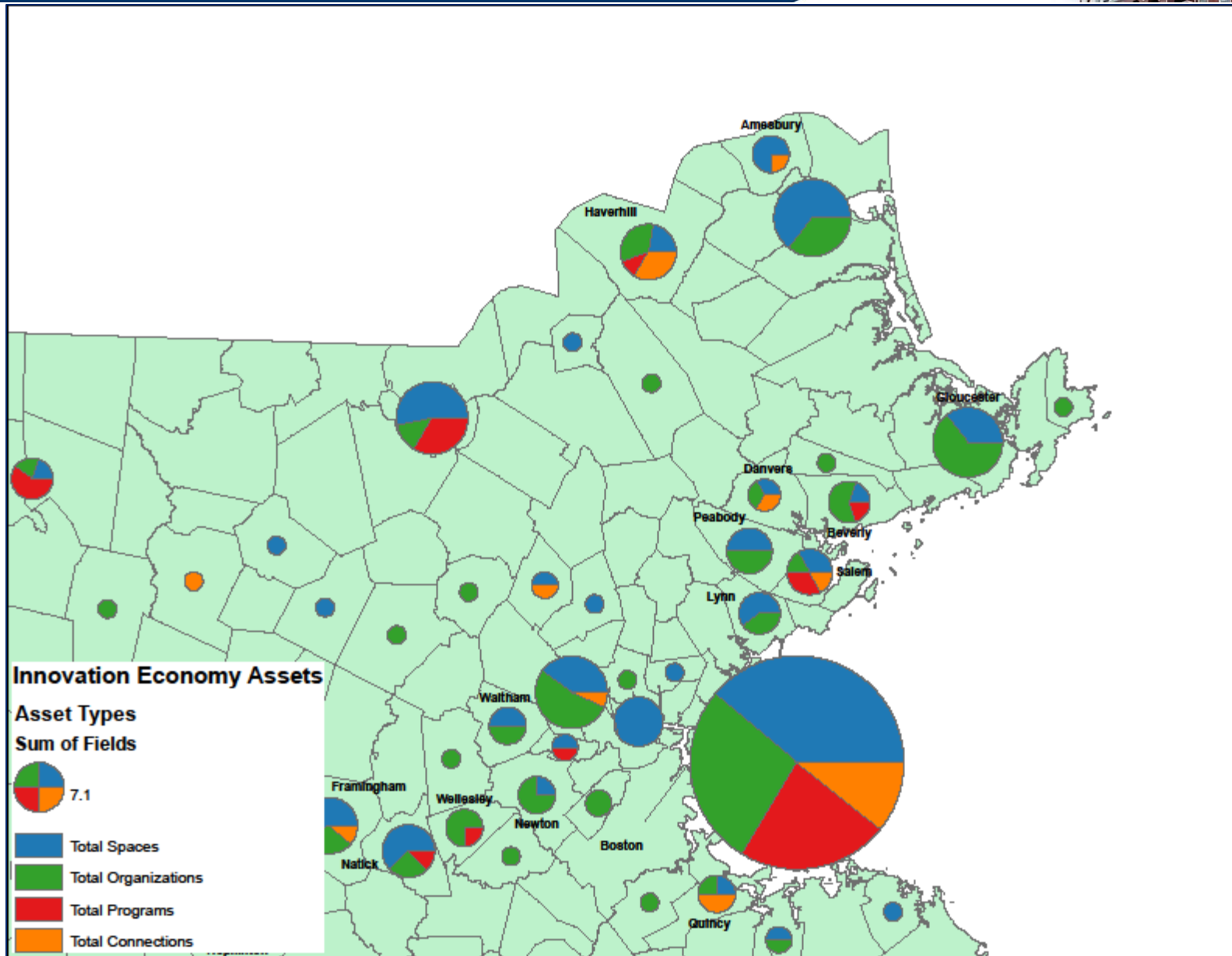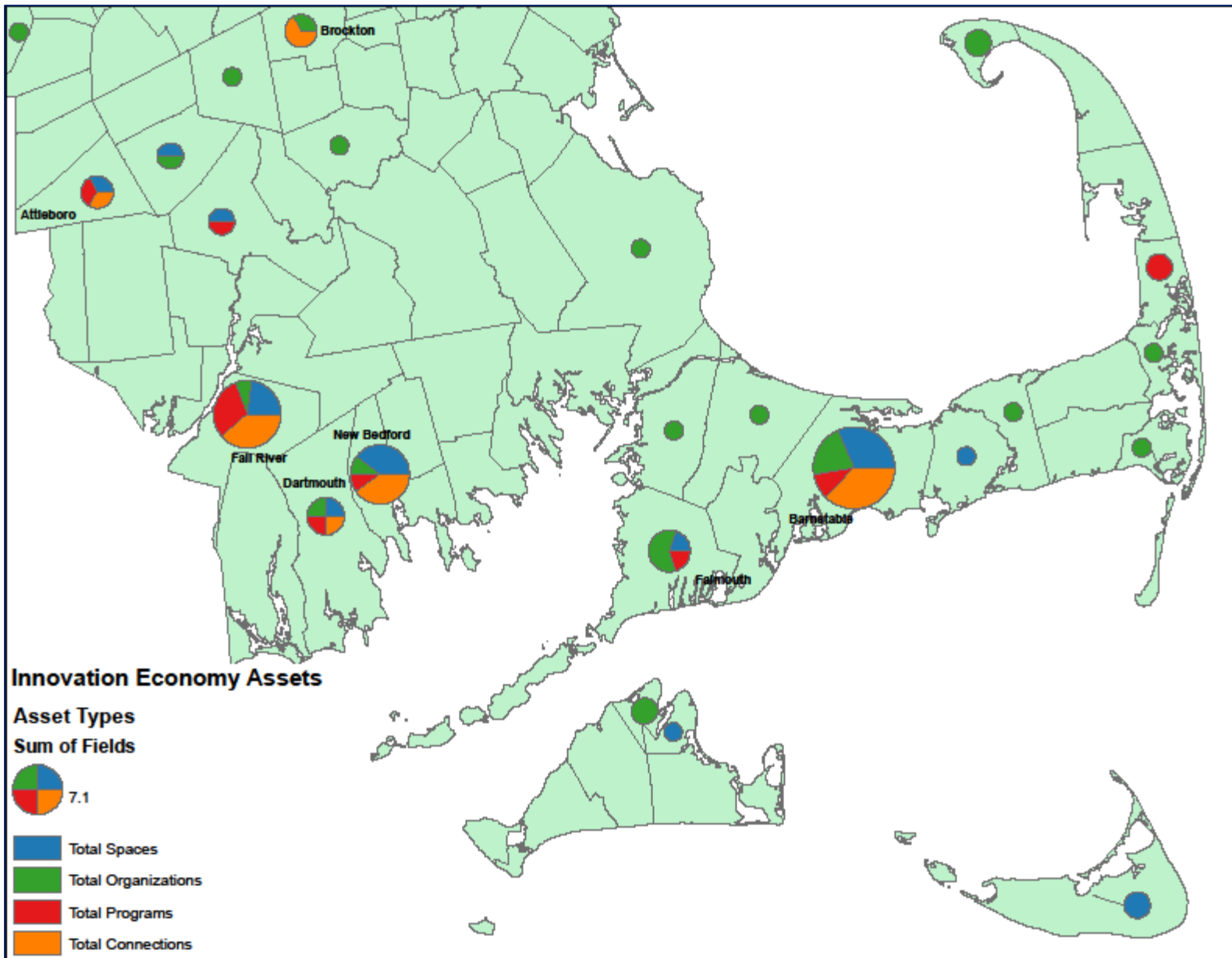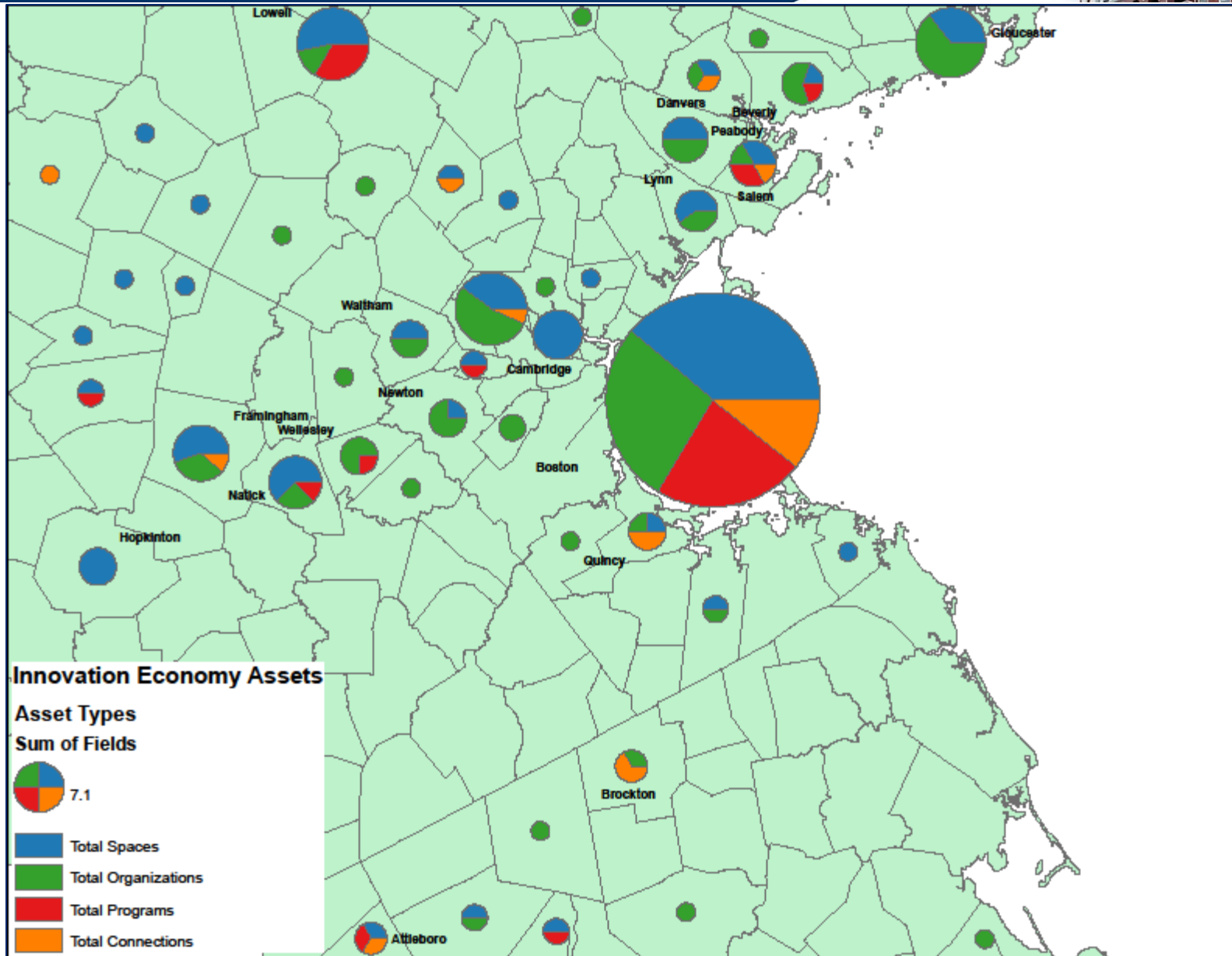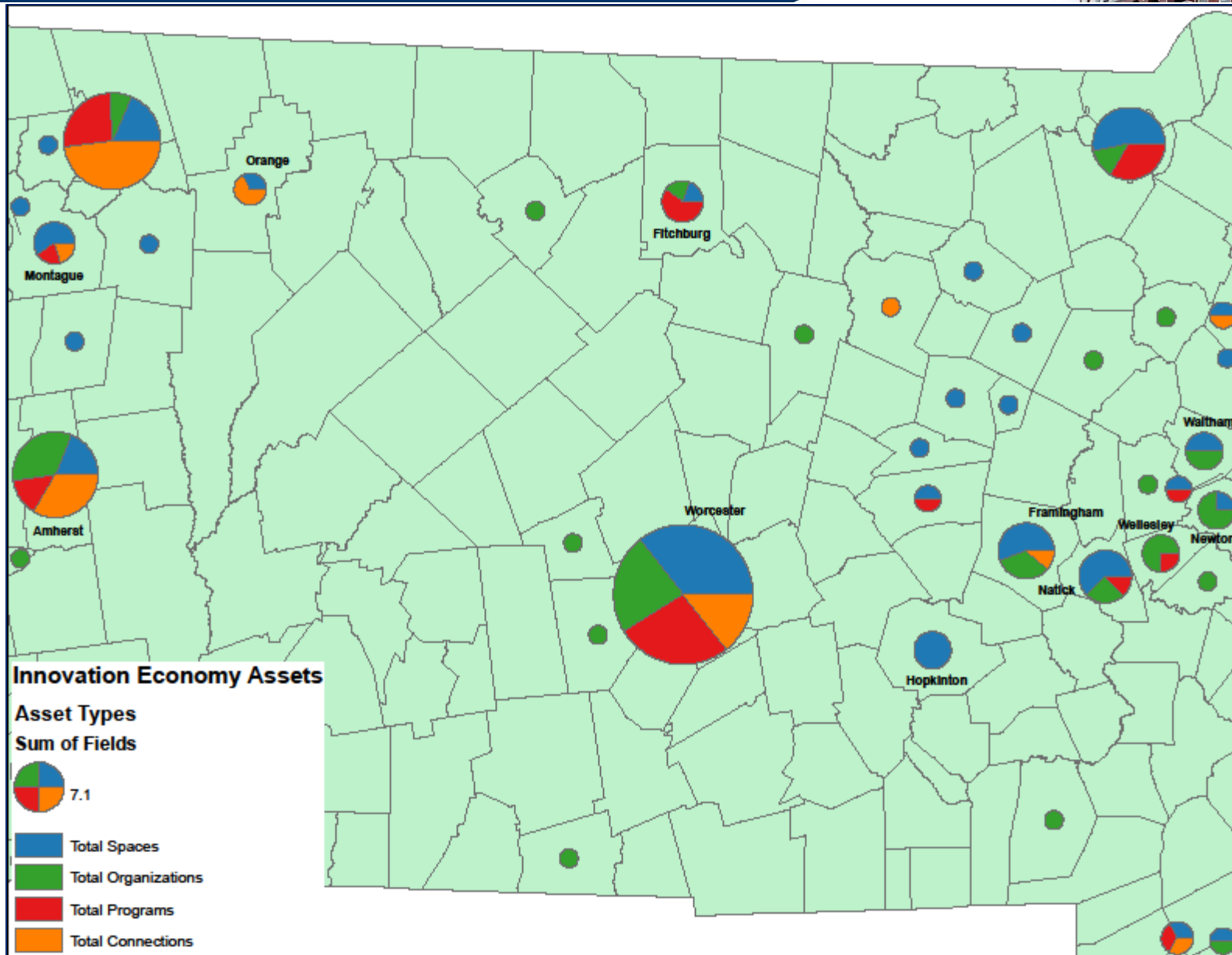
Appendix III

Statewide Strong Traded Clusters

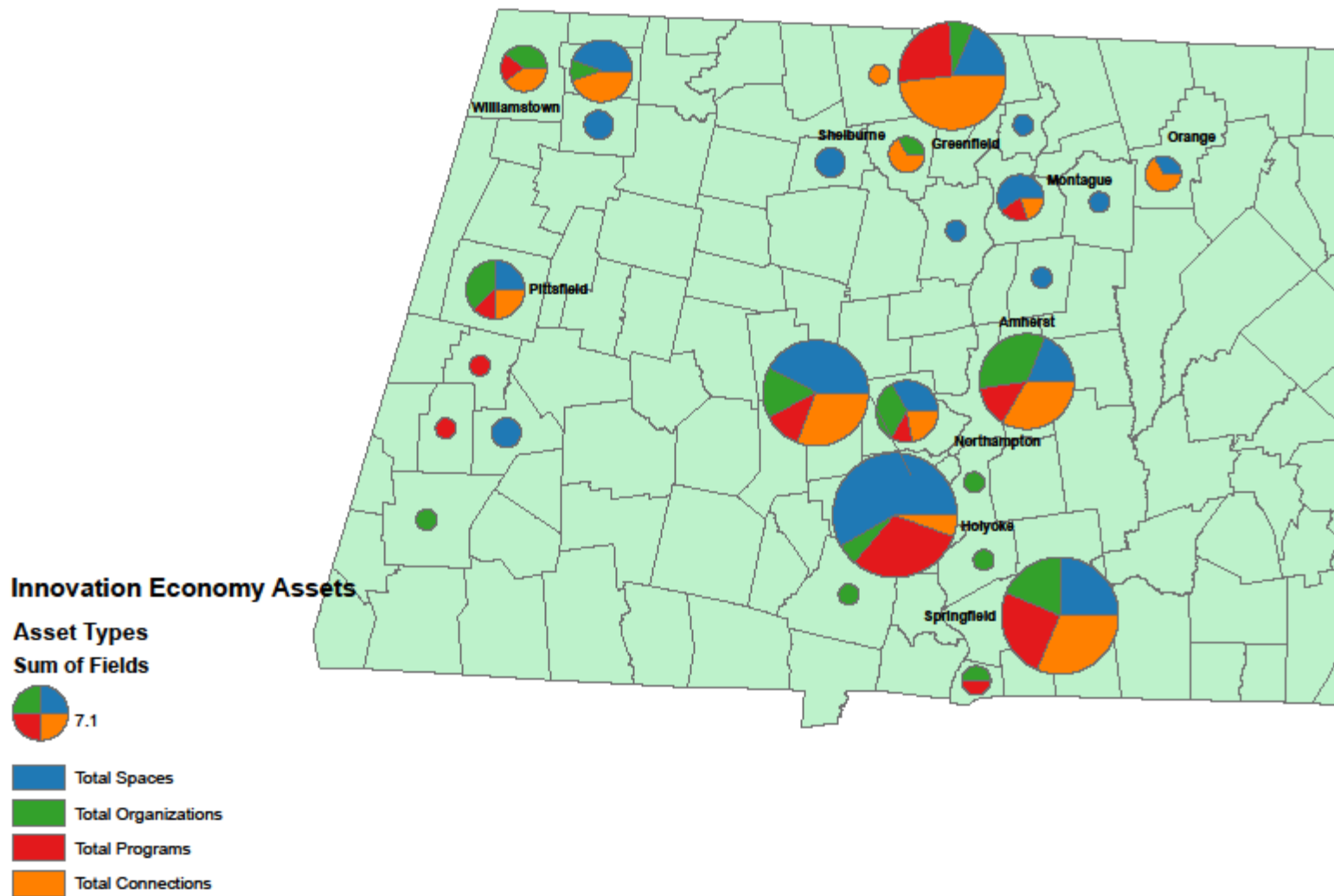| Cluster Name 2013 Employment	National Rank	Statewide	Berkshire	Pioneer Valley	Worcester	Northeast	Boston	Southeast	Cape & Islands
Education and Knowledge Creation	4	206,274	3,273	15,520	13,913	102,211	56,362	10,087	1,709
Financial Services	6	90,830	1,170	919	5,027	6,022	57,918	8,940	1,352
Information Technology & Analytical Instr.	4	68,097		405	4,047	46,451		11,743	660
Insurance Services	11	48,653		4,581	5,534	-	14,706	12,454	-
Marketing, Design, and Publishing	7	42,846		345		20,067	15,068	3,648	831
Medical Devices	10	9,955		1,176	1,646	4,364		2,938	-
Biopharmaceuticals	7	9,072		-	692	5,354	2,685	995	175
Recreational and Small Electric Goods	7	7,446		1,720		-		5,048	10
Fishing and Fishing Products	5	2,086		-		480	398	1,080	108
Jewelry and Precious Metals	6	1,239	60	-		-		966	20
Footwear	10	742	10	-		250		335	-

Source: Clustermapping.us

Berkshire County has strong cluster presence.

These established clusters are globally competitive:

- Hospitality and Tourism
- Education and Knowledge Creation
- Financial Services
- And more!

Emerging Tech clusters could be up-and-coming:

- Digital Health
- Cyber Security
- Big Data and Data analytics
- Manufacturing
- Robotics
- Creative Tech & more!

Cluster Name	2013 Employment	Strong Cluster	National Rank
Hospitality and Tourism	3709	TRUE	168
Education & Knowledge Creation	3273	TRUE	186
Aerospace Vehicles and Defense	1750	TRUE	62
Financial Services	1170	TRUE	216
Paper and Packaging	995	TRUE	94
Plastics	735	TRUE	267
Printing Services	440	TRUE	264
Metalworking Technology	402	TRUE	296
Performing Arts	332	TRUE	177
Upstream Chemical Products	175	TRUE	223
Environmental Services	80	TRUE	283
Jewelry and Precious Metals	60	TRUE	87
Music and Sound Recording	20	TRUE	231
Footwear	10	TRUE	139

Source: Clustermapping.us

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Franklin County has strong cluster presence.

These established clusters are globally competitive:

- Plastics
- Electric Goods
- Food Processing
- And more!

Emerging Tech clusters could be up-and-coming:

- Digital Health
- Cyber Security
- Big Data and Data analytics
- Manufacturing
- Robotics
- Creative Tech & more!

Cluster Name	2013 Employment	Strong Cluster	National Rank
Plastics	1045	TRUE	167
Recreational and Small Electric Goods	820	TRUE	38
Food Processing and Manufacturing	495	TRUE	514
Information Technology and Analytical Instruments	405	TRUE	320
Upstream Metal Manufacturing	395	TRUE	276
Marketing, Design, and Publishing	345	TRUE	376
Metalworking Technology	247	TRUE	446
Paper and Packaging	245	TRUE	404
Downstream Metal Products	200	TRUE	513
Furniture	130	TRUE	532
Apparel	70	TRUE	321
Electric Power Generation and Transmission	70	TRUE	400
Leather and Related Products	60	TRUE	177
Music and Sound Recording	10	TRUE	272

Source: Clustermapping.us

Hampshire County has strong cluster presence.

These established clusters are globally competitive:

- Education and Knowledge Creation
- Financial Services
- Medical Devices
- And more!

Emerging Tech clusters could be up-and-coming:

- Digital Health
- Cyber Security
- Big Data and Data analytics
- Manufacturing
- Robotics
- Creative Tech & more!

Cluster Name	2013 Employment	Strong Cluster	National Rank
Education and Knowledge Creation	8789	TRUE	75
Financial Services	919	TRUE	263
Plastics	530	TRUE	364
Paper and Packaging	420	TRUE	278
Medical Devices	385	TRUE	180
Downstream Metal Products	310	TRUE	374
Downstream Chemical Products	140	TRUE	414
Recreational and Small Electric Goods	90	TRUE	353
Electric Power Generation and Transmission	70	TRUE	401
Trailers, Motor Homes, and Appliances	60	TRUE	307
Music and Sound Recording	20	TRUE	181

Source: Clustermapping.us

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Hampden County has strong cluster presence.

These established clusters are globally competitive:

- Education and Knowledge Creation
- Plastics
- Paper and Packaging
- And more!

Emerging Tech clusters could be up-and-coming:

- Digital Health
- Cyber Security
- Big Data and Data analytics
- Manufacturing
- Robotics
- Creative Tech & more!

Cluster Name	2013 Employment	Strong Cluster	National Rank
Education and Knowledge Creation	6731	TRUE	108
Insurance Services	4581	TRUE	96
Downstream Metal Products	2850	TRUE	13
Metalworking Technology	1974	TRUE	47
Plastics	1814	TRUE	77
Paper and Packaging	1657	TRUE	43
Printing Services	1549	TRUE	85
Electric Power Generation and Transmission	935	TRUE	32
Recreational and Small Electric Goods	810	TRUE	39
Medical Devices	791	TRUE	86
Lighting and Electrical Equipment	425	TRUE	213
Environmental Services	140	TRUE	205
Leather and Related Products	70	TRUE	117

Source: Clustermapping.us

Worcester County has strong cluster presence.

These established clusters are globally competitive:

- Education and Knowledge Creation
- Financial Services
- Info Tech and Analytical Instruments
- And more!

Emerging Tech clusters could be up-and-coming:

- Digital Health
- Cyber Security
- Big Data and Data analytics
- Manufacturing
- Robotics
- Creative Tech & more!

Cluster Name	2013 Employment	Strong Cluster	National Rank
Education and Knowledge Creation	13913	TRUE	45
Insurance Services	5534	TRUE	75
Financial Services	5027	TRUE	87
Plastics	4239	TRUE	14
Information Technology and Analytical Instruments	4047	TRUE	58
Metalworking Technology	3171	TRUE	24
Lighting and Electrical Equipment	2660	TRUE	11
Paper and Packaging	2386	TRUE	7
Downstream Metal Products	1756	TRUE	38
Medical Devices	1646	TRUE	38
Upstream Metal Manufacturing	1540	TRUE	61
Vulcanized and Fired Materials	1266	TRUE	32
Furniture	844	TRUE	71
Downstream Chemical Products	814	TRUE	68
Biopharmaceuticals	692	TRUE	113
Recreational and Small Electric Goods	448	TRUE	83
Environmental Services	260	TRUE	97
Leather and Related Products	80	TRUE	93

Source: Clustermapping.us

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Essex County has strong cluster presence.

These established clusters are globally competitive:
- Textile Manufacturing
- Marketing, Design and Publishing
- Financial Services
- Education and Knowledge Creation
- And more!

Emerging Tech clusters could be up-and-coming:
- Digital Health
- Cyber Security
- Big Data and Data analytics
- Manufacturing
- Robotics
- Creative Tech & more!

Cluster Name	2013 Employment	Strong Cluster	National Rank
Information Technology and Analytical Instruments	9720	TRUE	18
Education and Knowledge Creation	7427	TRUE	99
Aerospace Vehicles and Defense	6506	TRUE	22
Financial Services	6022	TRUE	80
Marketing, Design, and Publishing	4482	TRUE	64
Biopharmaceuticals	2245	TRUE	23
Metalworking Technology	1245	TRUE	79
Printing Services	1101	TRUE	126
Textile Manufacturing	1073	TRUE	36
Medical Devices	945	TRUE	73
Lighting and Electrical Equipment	937	TRUE	63
Downstream Chemical Products	781	TRUE	79
Upstream Chemical Products	580	TRUE	74
Fishing and Fishing Products	480	TRUE	13
Apparel	443	TRUE	40
Environmental Services	320	TRUE	69
Footwear	250	TRUE	19
Leather and Related Products	120	TRUE	74

Source: Clustermapping.us

Middlesex County has strong cluster presence.

These established clusters are globally competitive:
- Education and Knowledge Creation
- Info Tech and Analytical Instruments
- Marketing, Design and Publishing
- Medical Devices & Biopharma
- And more!

Cluster Name	2013 Employment	Strong Cluster	National Rank
Business Services	121847	TRUE	11
Education and Knowledge Creation	94784	TRUE	3
Information Technology and Analytical Instruments	36731	TRUE	3
Marketing, Design, and Publishing	15585	TRUE	13
Medical Devices	3419	TRUE	13
Biopharmaceuticals	3109	TRUE	13

Source: Clustermapping.us

Emerging Tech clusters could be up-and-coming:
- Digital Health
- Cyber Security
- Big Data and Data analytics
- Manufacturing
- Robotics
- Creative Tech & more!

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Suffolk County has strong cluster presence.

These established clusters are globally competitive:
- Financial services
- Education and Knowledge Creation
- Marketing, Design and Publishing
- And more!

Emerging Tech clusters could be up-and-coming:
- Digital Health
- Cyber Security
- Big Data and Data analytics
- Manufacturing
- Robotics
- Creative Tech & more!

Cluster Name	2013 Employment	Strong Cluster	National Rank
Financial Services	57918	TRUE	3
Education and Knowledge Creation	56362	TRUE	9
Marketing, Design, and Publishing	15068	TRUE	14
Insurance Services	14706	TRUE	18
Performing Arts	3581	TRUE	16
Biopharmaceuticals	2685	TRUE	15
Fishing and Fishing Products	398	TRUE	20

Source: Clustermapping.us

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Plymouth County has strong cluster presence.

These established clusters are globally competitive:
- Financial Services
- Info Tech and Analytical Instruments
- Metalworking Technology
- And more!

Emerging Tech clusters could be up-and-coming:
- Digital Health
- Cyber Security
- Big Data and Data analytics
- Manufacturing
- Robotics
- Creative Tech & more!

Cluster Name	2013 Employment	Strong Cluster	National Rank
Insurance Services	2324	TRUE	158
Financial Services	1782	TRUE	168
Metalworking Technology	1266	TRUE	74
Information Technology and Analytical Instruments	1154	TRUE	163
Printing Services	820	TRUE	161
Electric Power Generation and Transmission	750	TRUE	64
Performing Arts	669	TRUE	102
Environmental Services	533	TRUE	25
Lighting and Electrical Equipment	450	TRUE	194
Medical Devices	433	TRUE	151
Furniture	383	TRUE	237
Footwear	335	TRUE	17
Recreational and Small Electric Goods	276	TRUE	145
Textile Manufacturing	265	TRUE	187
Leather and Related Products	115	TRUE	80
Fishing and Fishing Products	80	TRUE	88

Source: Clustermapping.us

Bristol County has strong cluster presence.

These established clusters are globally competitive:
- Distribution & Electronic Commerce
- Fishing and Fishing Products
- Apparel
- And more!

Emerging Tech clusters could be up-and-coming:
- Digital Health
- Cyber Security
- Big Data and Data analytics
- Manufacturing
- Robotics
- Creative Tech & more!

Cluster Name	2013 Employment	Strong Cluster	National Rank
Distribution and Electronic Commerce	10855	TRUE	120
Recreational and Small Electric Goods	3882	TRUE	3
Communications Equipment and Services	2320	TRUE	43
Lighting and Electrical Equipment	2067	TRUE	17
Medical Devices	1576	TRUE	40
Information Technology and Analytical Instruments	1518	TRUE	144
Upstream Metal Manufacturing	1509	TRUE	62
Apparel	1348	TRUE	9
Textile Manufacturing	1185	TRUE	31
Printing Services	1133	TRUE	124
Metalworking Technology	1126	TRUE	87
Fishing and Fishing Products	1000	TRUE	5
Jewelry and Precious Metals	966	TRUE	5
Vulcanized and Fired Materials	864	TRUE	59
Downstream Chemical Products	710	TRUE	95
Paper and Packaging	615	TRUE	199
Leather and Related Products	245	TRUE	24
Trailers, Motor Homes, and Appliances	245	TRUE	91
Environmental Services	160	TRUE	171

Source: Clustermapping.us

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Norfolk County has strong cluster presence.

These established clusters are globally competitive:
- Education and Knowledge Creation
- Info tech and Analytical Instruments
- Financial Services
- Marketing, Design and Publishing
- And more!

Emerging Tech clusters could be up-and-coming:
- Digital Health
- Cyber Security
- Big Data and Data analytics
- Manufacturing
- Robotics
- Creative Tech & more!

Cluster Name	2013 Employment	Strong Cluster	National Rank
Insurance Services	10130	TRUE	37
Education and Knowledge Creation	10087	TRUE	69
Information Technology and Analytical Instruments	9071	TRUE	20
Financial Services	7158	TRUE	66
Marketing, Design, and Publishing	3648	TRUE	79
Performing Arts	2006	TRUE	36
Biopharmaceuticals	995	TRUE	68
Medical Devices	929	TRUE	75
Recreational and Small Electric Goods	890	TRUE	30
Lighting and Electrical Equipment	760	TRUE	102

Source: Clustermapping.us

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Barnstable County has strong cluster presence.

These established clusters are globally competitive:

- Hospitality and Tourism
- Education and Knowledge Creation
- Info Tech and Analytical Instruments
- And more!

Emerging Tech clusters could be up-and-coming:

- Digital Health
- Cyber Security
- Big Data and Data analytics
- Manufacturing
- Robotics
- Creative Tech & more!

Cluster Name	2013 Employment	Strong Cluster	National Rank
Hospitality and Tourism	2762	TRUE	229
Education and Knowledge Creation	1709	TRUE	333
Financial Services	1074	TRUE	235
Transportation and Logistics	900	TRUE	307
Information Technology and Analytical Instruments	660	TRUE	255
Marketing, Design, and Publishing	651	TRUE	255
Water Transportation	295	TRUE	152
Communications Equipment and Services	275	TRUE	254
Performing Arts	230	TRUE	233
Biopharmaceuticals	175	TRUE	225
Fishing and Fishing Products	88	TRUE	74
Environmental Services	70	TRUE	379
Electric Power Generation and Transmission	60	TRUE	428
Music and Sound Recording	20	TRUE	175
Jewelry and Precious Metals	10	TRUE	263

Source: Clustermapping.us

Nantucket County has strong cluster presence.

These established clusters are globally competitive:

- Hospitality and Tourism
- Marketing, Design and Publishing
- Transportation and Logistics
- And more!

Emerging Tech clusters could be up-and-coming:

- Digital Health
- Cyber Security
- Big Data and Data analytics
- Manufacturing
- Robotics
- Creative Tech & more!

Cluster Name	2013 Employment	Strong Cluster	National Rank
Hospitality and Tourism	605	TRUE	706
Marketing, Design, and Publishing	100	TRUE	769
Financial Services	90	TRUE	1250
Transportation and Logistics	90	TRUE	1449
Performing Arts	30	TRUE	815
Communications Equipment and Services	20	TRUE	869
Textile Manufacturing	20	TRUE	674
Fishing and Fishing Products	10	TRUE	359
Music and Sound Recording	10	TRUE	283

Source: Clustermapping.us

Dukes County has strong cluster presence.

These established clusters are globally competitive:
- Hospitality and Tourism
- Transportation and Logistics
- Design, Marketing and Publishing
- And more!

Emerging Tech clusters could be up-and-coming:
- Digital Health
- Cyber Security
- Big Data and Data analytics
- Manufacturing
- Robotics
- Creative Tech & more!

Cluster Name	2013 Employment	Strong Cluster	National Rank
Hospitality and Tourism	401	TRUE	900
Financial Services	188	TRUE	768
Transportation and Logistics	110	TRUE	1324
Marketing, Design, and Publishing	80	TRUE	888
Performing Arts	40	TRUE	667
Water Transportation	40	TRUE	386
Furniture	30	TRUE	995
Printing Services	30	TRUE	1092
Communications Equipment and Services	20	TRUE	871
Lighting and Electrical Equipment	20	TRUE	824
Electric Power Generation and Transmission	10	TRUE	1062
Fishing and Fishing Products	10	TRUE	358
Jewelry and Precious Metals	10	TRUE	272
Music and Sound Recording	10	TRUE	281
Recreational and Small Electric Goods	10	TRUE	1251
Video Production and Distribution	10	TRUE	537

Source: Clustermapping.us

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Appendix IV

Innovations Centers: Spaces enable entrepreneurs and researchers to activate breakthroughs

The Roxbury Innovation Center: Roxbury

North Shore InnoVentures: North Shore

Entrepreneur Innovation Center at Framingham State University: Framingham

Lowell Innovation Hub: Lowell

Sky Venture Innovation Hub: Boston, Massachusetts

Verizon Innovation Center: Waltham

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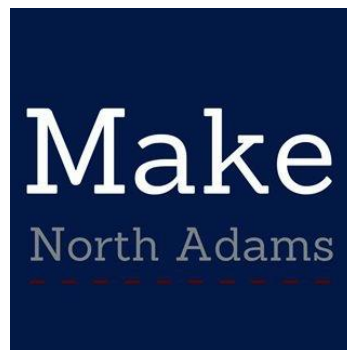# Maker Spaces: Spaces that provide shared tools for use of members.

Technocopia: Worcester, MA

Lowell Makes: Lowell, MA

Artisan's Asylum: Somerville, MA

Brick CoWorkshop: Holyoke, MA

Makers' Mill: North Adams, MA

Made @ Masschallenge: Boston, MA

Artist Spaces: Spaces in which Artists have studios and collaborate.

Fountain Street Studios: Framingham, MA
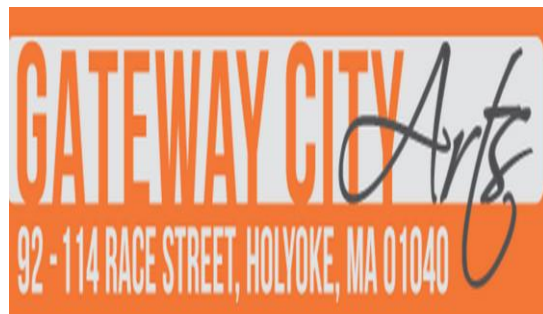
Gateway City Arts: Holyoke, MA

HyArts: Barnstable, MA

Appleton Mills: Lowell, MA

Eastworks: Easthampton, MA

Midway Studios: Boston, MA

Collaborative Kitchens: Commercial kitchens were small businesses that have access to equipment.

Greenfield Food
Processing Center:
Greenfield, MA

Commonwealth Kitchen:
Boston, MA

Stock Pot Holder:
Malden, MA

CoWorking Spaces: Working spaces where individuals or small businesses work in shared spaces. (No shared tools).

GroundWork: New Bedford, MA

Cloud 85: North Adams, MA

Running Start: Worcester, MA

WeWork: Boston, MA

Workbar: Cambridge, MA

Impact Hub: Boston, MA

Industry Specific Incubation Spaces: spaces with an explicit focus on growing businesses within specialized industry.

Greentown Labs:
Somerville, MA

Social Impact:
Boston, MA

Beehive sewing:
Northampton, MA
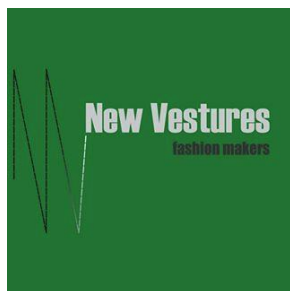
New Vestures:
Lowell, MA

TechSpring:
Springfield, MA

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Sector or Cluster Groups: Organized groups to support a certain type of innovation businesses (i.e. Design)

MITX: Boston, MA

Cape Tech Council: Cape Cod, MA

Berkshire Film and Media Collaborative: Berkshire, MA

MassDIGI: Worcester, MA

Plug In to the Creative Valley: Pioneer Valley, MA

SeArts Wearable arts group: Gloucester, MA

Programs and Accelerators: Longer term programs helping early stage companies bring their ideas to the market.

SPARK: Holyoke, MA

Valley Venture Mentors: Springfield, MA

E For All: Lowell, New Bedford, Lynn, MA

Masschallenge: Boston, MA

Techstars: Boston, MA

Startup Weekend: Cape Cod, MA

Classes: Classes for Businesses in creativity, entrepreneurship, Innovation, and business methods

General Assembly:
Boston, MA

Holyoke Creative Arts Center:
Holyoke, MA

Enterprise Center:
Salem, MA

Workbench, Woodworking and
Craft School: EastHampton, MA

Funding: programs that give funding to early stage ventures

Assets for Artists:
North Adams, MA,
Statewide

MLK Junior
Opportunity Center,
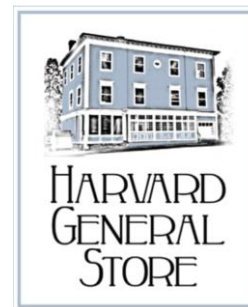Microloan Program:
Worcester, MA

Mass Ventures:
Statewide

MeetUps and Events: Awesome event that convene the innovation and creative economy

Berkshire Flirt:
Berkshire, MA

Geek Girl Tech Con:
Cape Cod, MA

Harvard General Store
Entrepreneurial Meet-up

Don't eat lunch alone:
Springfield, MA

MIT Enterprise Forum:
Cambridge, MA

Haverhill Hackers:
Haverhill, MA

Competitions: Time specific events that offer prizes to businesses

Annual 5-minute
Pitch Contest, The
Venture Forum:
Worcester, MA

Grinspoon
Elevator Pitch:
Pioneer Valley,
MA

Enterprise Center
Business Plan
Competition:
Salem, MA

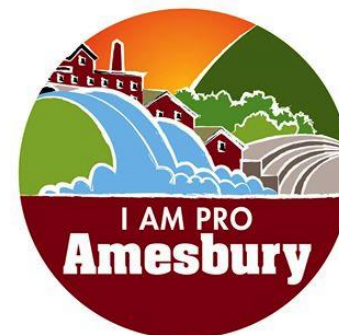**Websites: Websites that foster connectivity in the innovation and creative space**

Start Hub Boston:
Boston, MA
www.starthub.org

Plug In to the
Creative Valley:
Pioneer Valley, MA
www.facebook.com/PlugIntoTheCreativeValley

I Am Pro Amesbury:
Amesbury, MA
www.iamproamesbury.com

Thought Leaders: The people that everyone know, in the innovation and creative economy. The connectors.

Peter Karlson
Entrepreneur in Residence: Cape Cod, MA

Jess Conzo
Alchemy Initiative: Pittsfield, MA

Amy Lynn Chase
Crompton Collective: Worcester, MA

Christopher Rezendes
IOT Impact Lab: New Bedford, MA