

# Berkshire Innovation Center

Pittsfield, MA



Berkshire  
Innovation  
Center

Innovation and Manufacturing in the Berkshires

June 13, 2019

#Berkshire Rising

Scott Longley, *Executive Director*  
**Berkshire Innovation Center**

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## Goal of the Presentation

**The Goal of this Presentation is to**

- Provide an overview of the History of Advanced Manufacturing in the Berkshires**
- Provide an overview of the Berkshire Innovation Center.**
- This presentation will include an overview of:**
  - The BIC's facilities**
  - The BIC's services and the various programs**

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## History of the Berkshire County

-Pittsfield-Birthplace of GE, and Former Home of GE Plastics, Ordinance and Transformer Business

- 1907-1987-GE had a significant history in Pittsfield
  - Jack Welch worked in Pittsfield
  - Occupied 300 acres, 50 + buildings on the Housatonic River
- 14,000 jobs lost when the Company left Pittsfield
- Significant pollution of the area due to PCB use

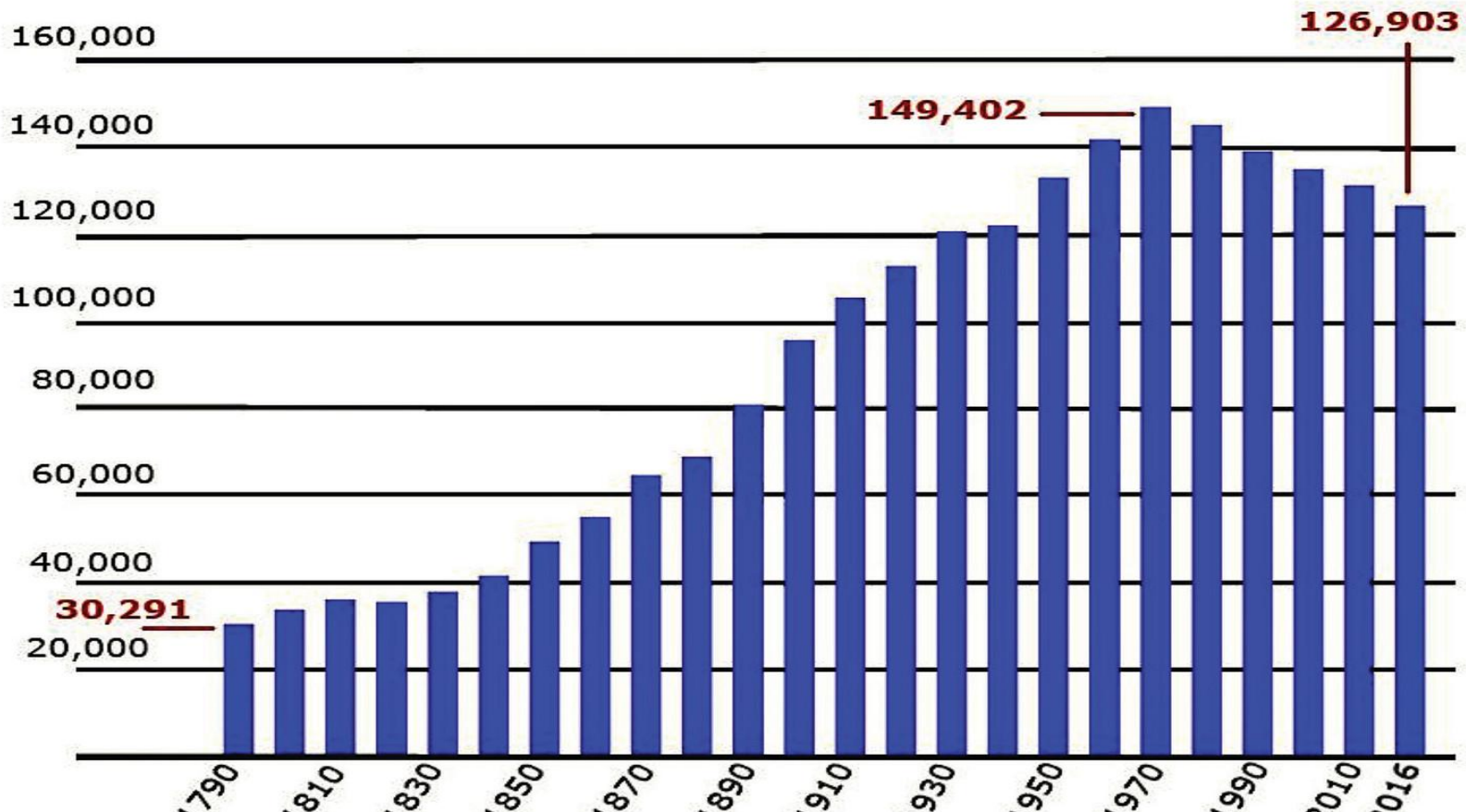
-North Adams-Former Home of Sprague Transformer

- 3,000 jobs lost
- 20% of the residents live below the poverty

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## Population Decline-Berkshire County

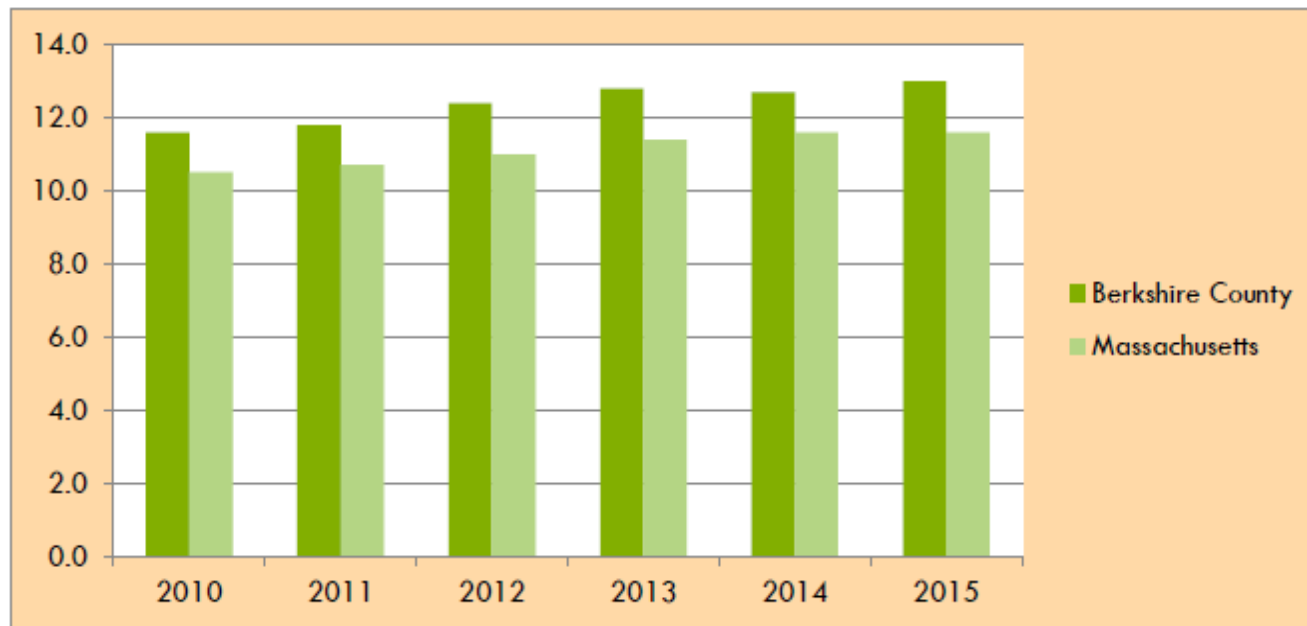


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## Economic Challenges in Berkshire County

Percentage in Poverty in Berkshire County and Massachusetts, 2010-2015








In 2016-the Percentage of Families in Poverty increased from 11% to 13%

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## Berkshire County Industry Clusters

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

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## History of the Berkshire Innovation Center

- The Massachusetts Life Sciences Act of 2008 provided:
  - Funds for the “Design, construction and development for life science incubator building in the William Stanley Business Park in Pittsfield”
  - The Massachusetts Life Science Center (MLSC)
    - Requested the City of Pittsfield conduct a feasibility study and develop a business plan for the future building
    - In 2013 an RFP was issued by Pittsfield
      - New England Expansion Strategic was awarded the contract for the Feasibility Study and the creation of business plan.

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## Feasibility Study Guideline

-New England Expansion Strategies (NEES) presented to the MLSC Board of Directors

- MLSC set strict guidelines for the study
  1. Direct Engagement with Stakeholders
  2. Outreach to New York Organizations
  3. Right Fit for the Region - The Berkshires is a unique region of Massachusetts (i.e. what works in Cambridge-Boston, Worcester, Lowell will not necessarily work in the Berkshires)
  4. Definition of Incubator - The definition should be in the broad sense of the word
  5. Target Industries
  6. Phased Approach - The Feasibility Study and Business Plan will utilize a phased approach.



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## Feasibility Study Guideline

- Phase One and Phase Two Guidelines were set by the MLSC
  - The Phase One Study
    - A Feasibility Study and a Conceptual Business Plan.
  - Phase Two
    - Detailed Business Plan
    - Operating Model
    - Facility Plan
    - Financial Pro Forma's
    - Formalized commitments and partnerships
      - Letters of Intent
      - MOU's

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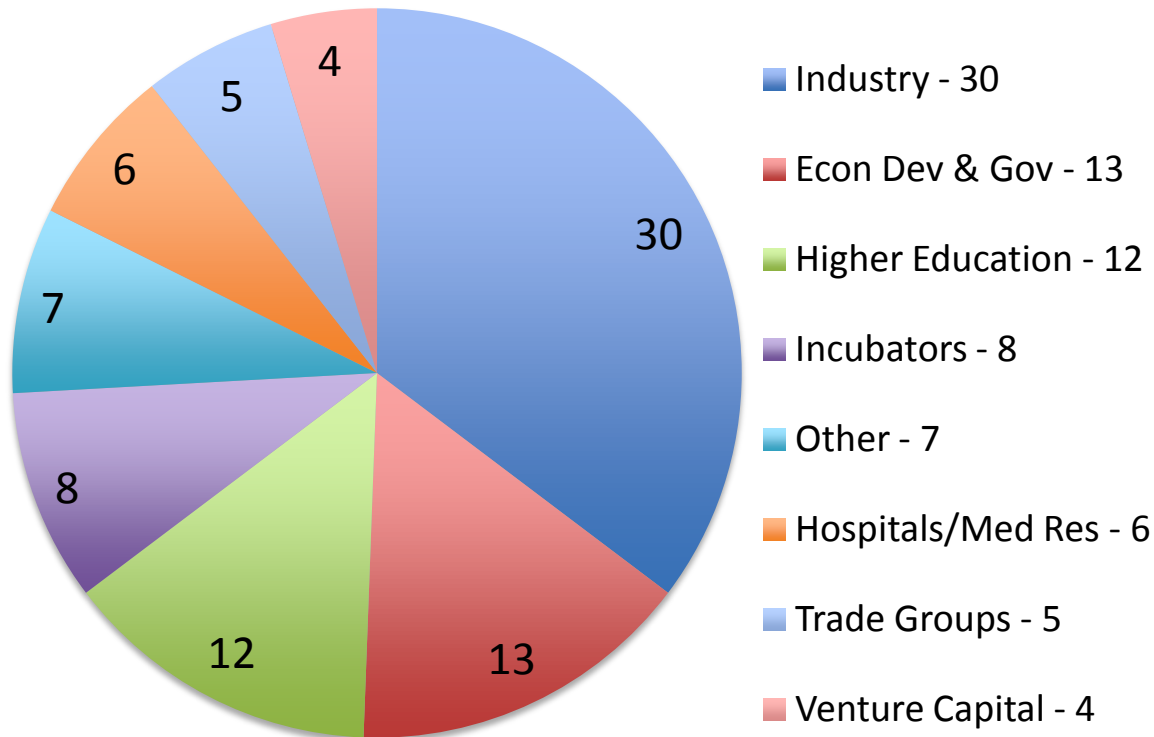
## Extensive Industry & Stakeholder Participation

### 85 External Organizations

- Includes 40 from Berkshire County
- Additional 22 from Western MA, NY

### 30 Private Sector Companies

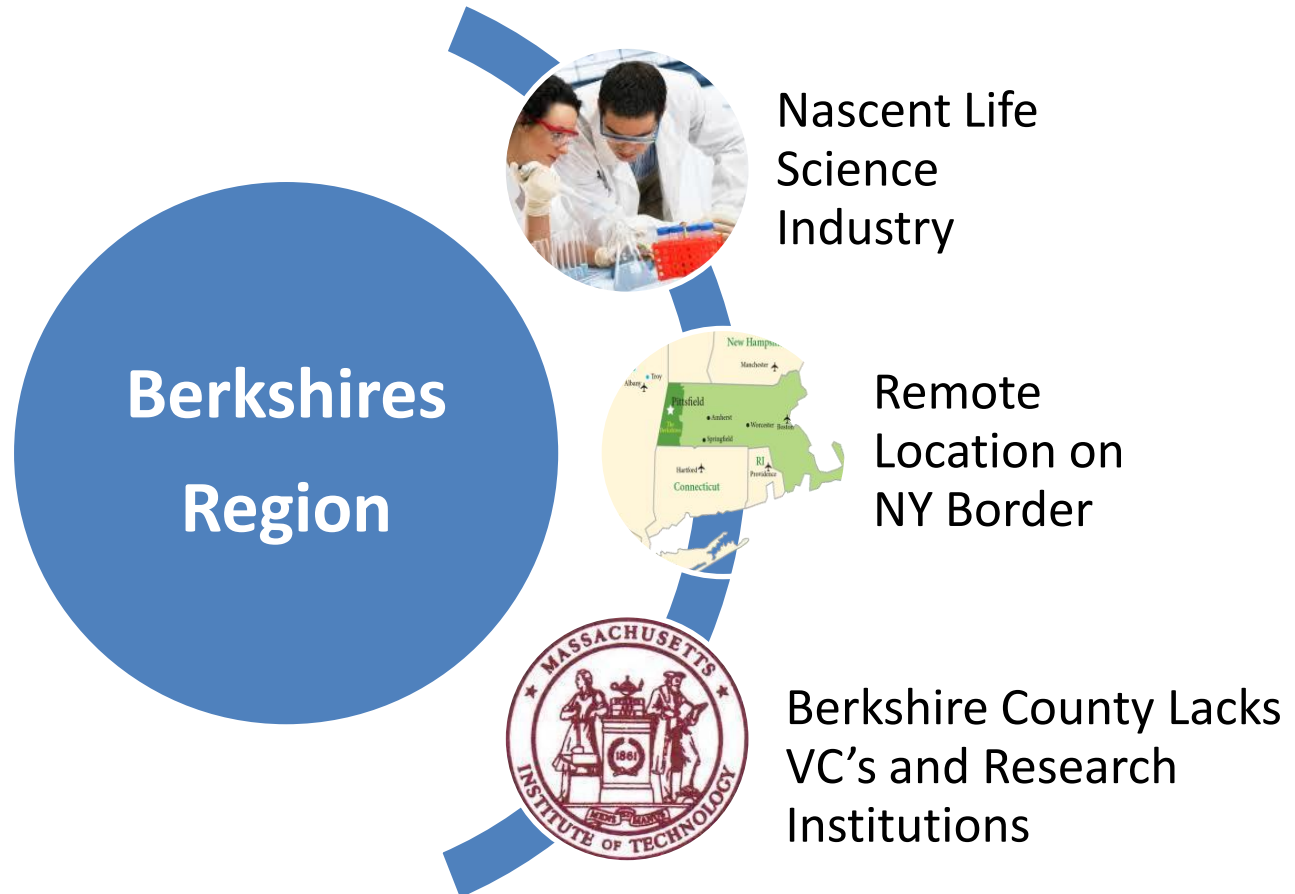
- Includes 26 from Berkshire County
- 6 Life Sciences & 20 Advanced Manufacturing



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## Business Plan Addresses Unique Regional Challenges



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## BIC Strategic Answer – Build on Regional Strengths

Secondary  
Voc-Tech  
Education

Berkshire  
Community  
College and  
MCLA

Excellent  
Quality  
of Life

Low Cost  
to Live &  
Work

“Research Donut “

8 Major Research Institutions within  
One Hour Radius of Pittsfield (MA & NY)

Manufacturing Know-  
How and Leaders –  
GD, SABIC, Crane

Life Science Supply Chain

30+ Companies in Berkshire County

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## The Innovation Equation

***"And, thus, we are all looking for the magic formula. Well, here you go: Creativity + Iterative Development = Innovation"***

**-James Dyson, Founder, Dyson**

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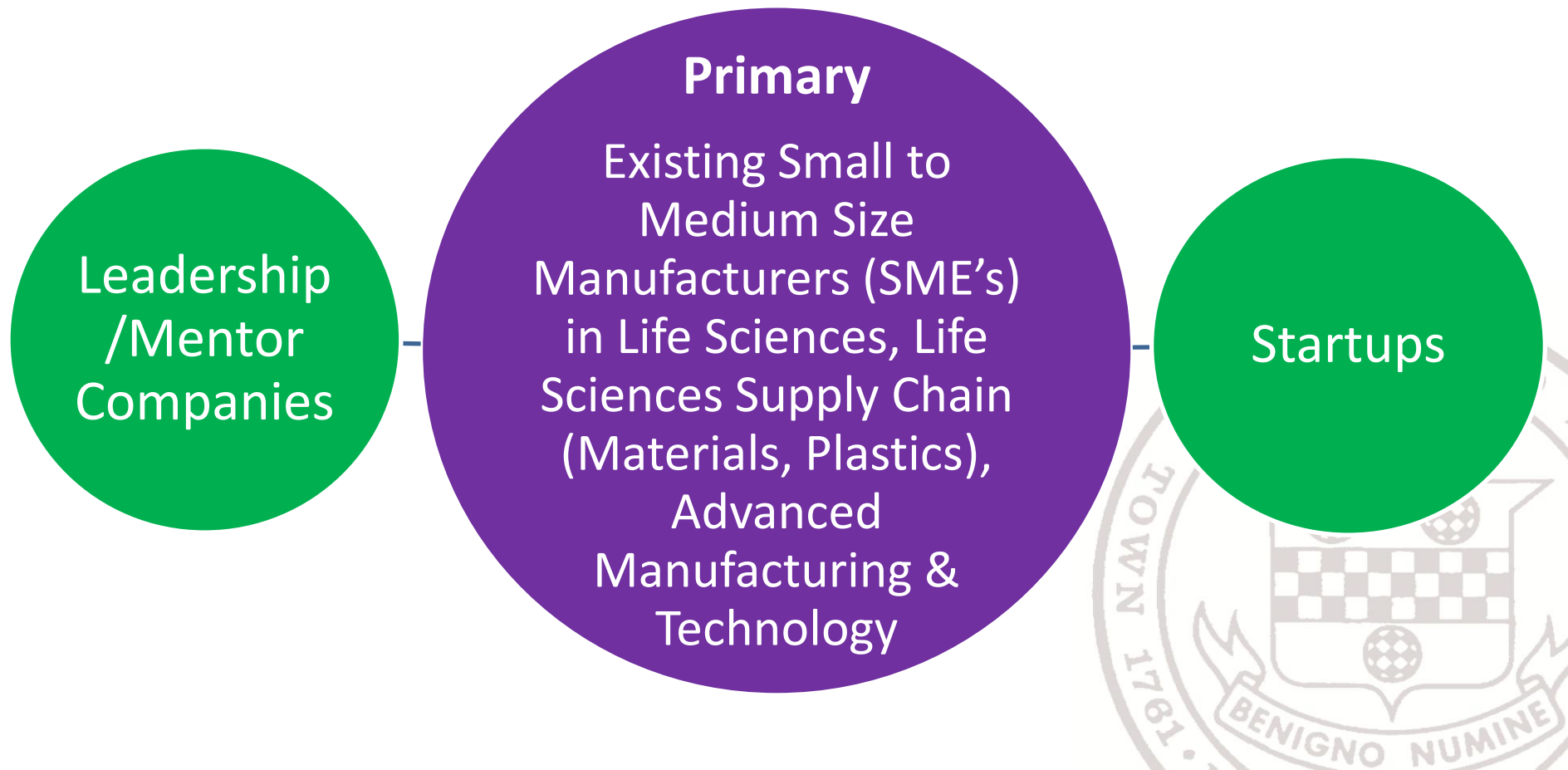
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## Mission of the BIC

- I. The Berkshire Innovation Center will Provide a Catalyst to Enable and Accelerate Innovation and Growth of Existing Companies in the Berkshire Region**
  - A. Primarily focus: Small to Medium Sized Manufacturing Companies (SME's)**
    - 1. In Life Sciences and Life Sciences Supply Chain**
    - 2. Advanced Manufacturing & Technology**
  - B. Objective**
    - 1. Spur Economic Growth, Jobs, and Investment in the Region.**

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**Delivering Advanced Capabilities to BIC Member**

**Cos.**

**Advanced  
R&D  
Equipment**

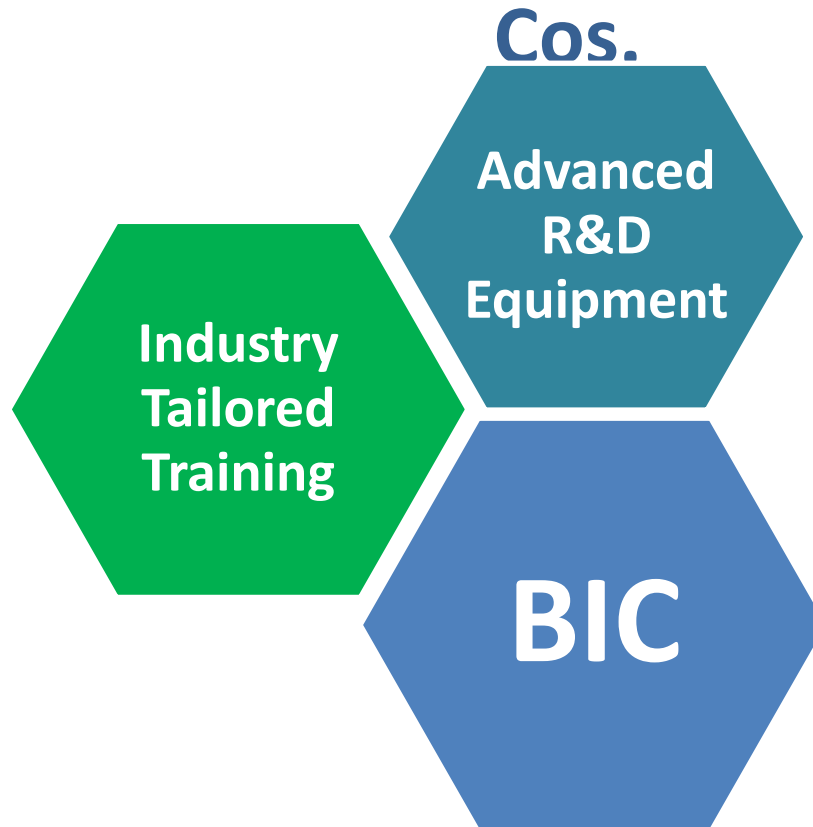
**BIC**



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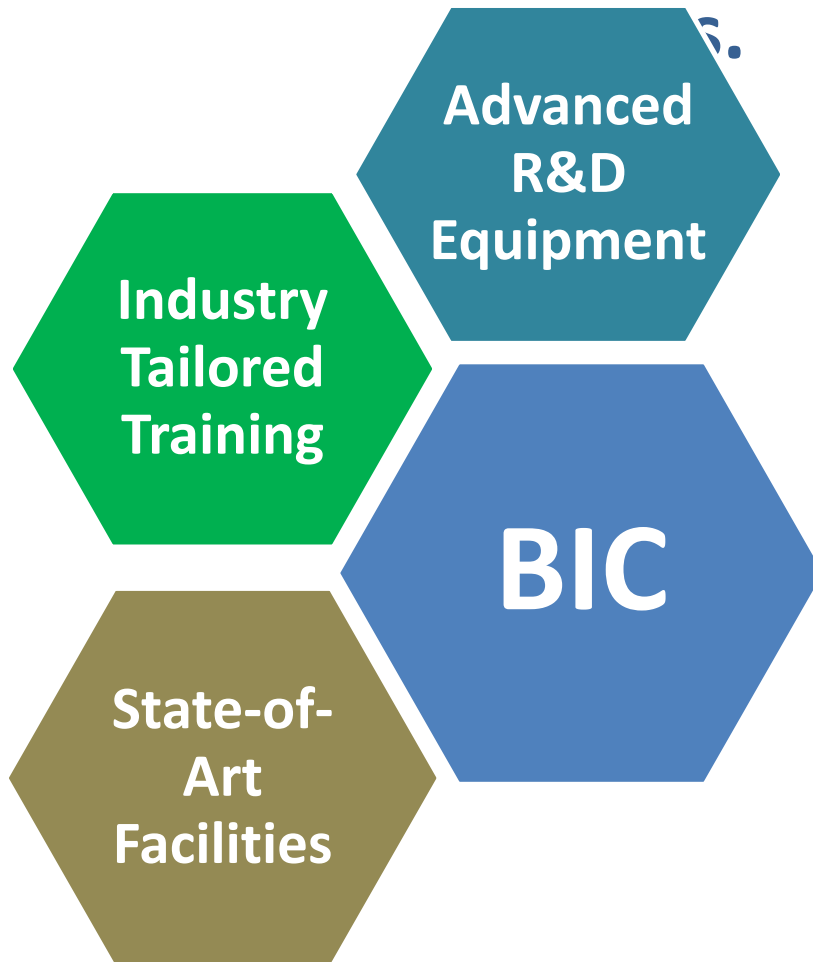
**Delivering Advanced Capabilities to BIC Member  
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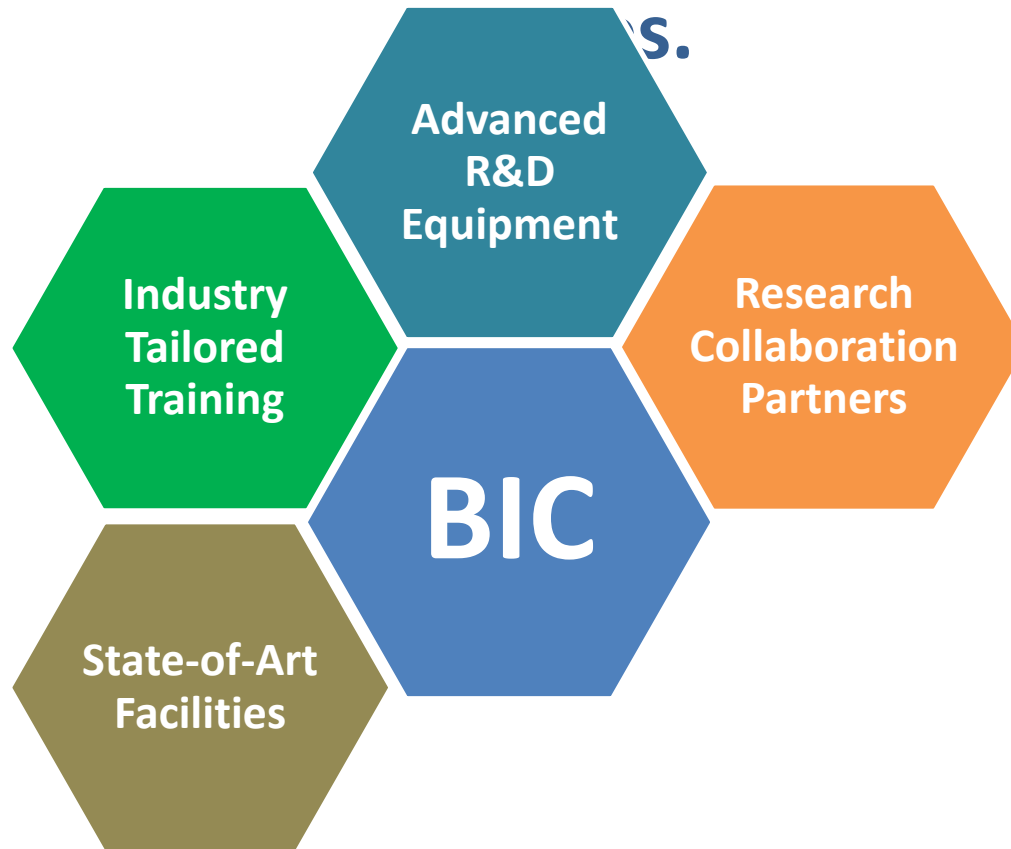
## Delivering Advanced Capabilities to BIC Member



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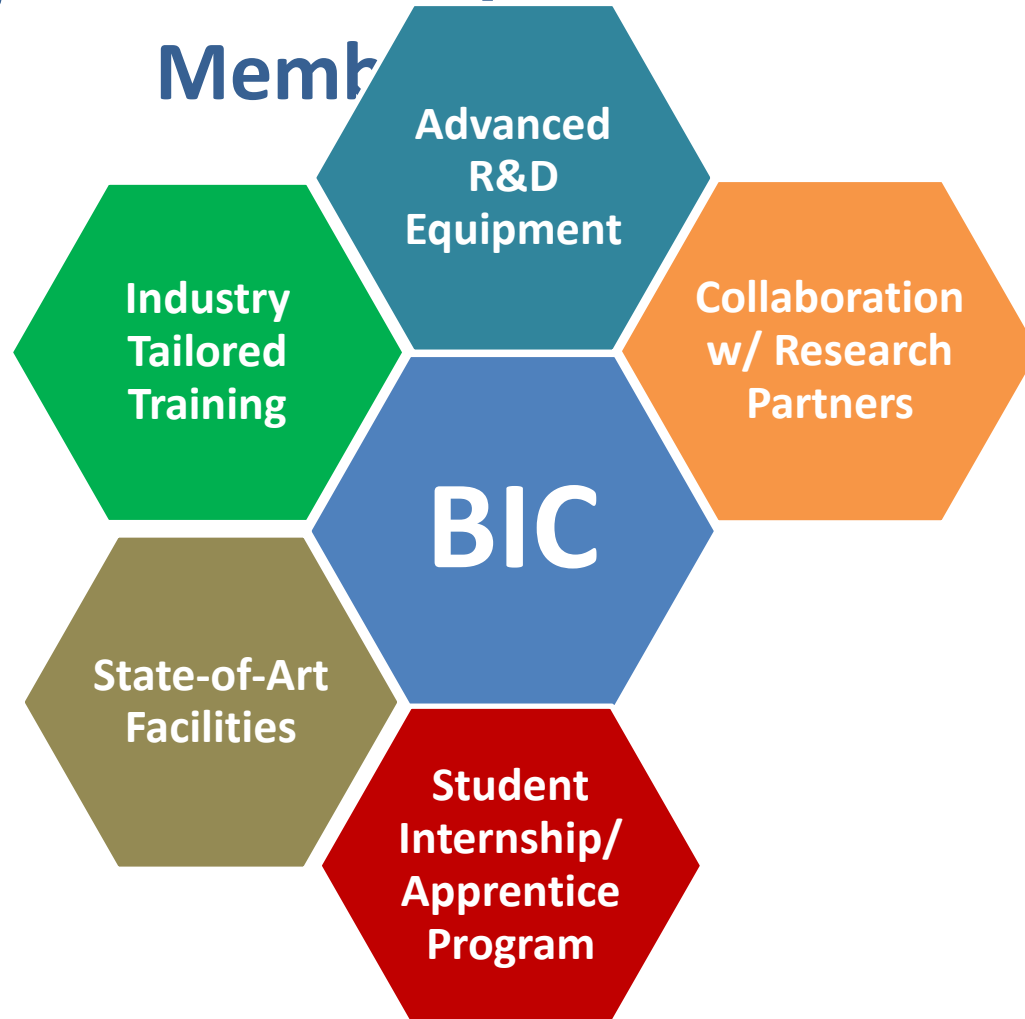


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## Delivering Advanced Capabilities to BIC

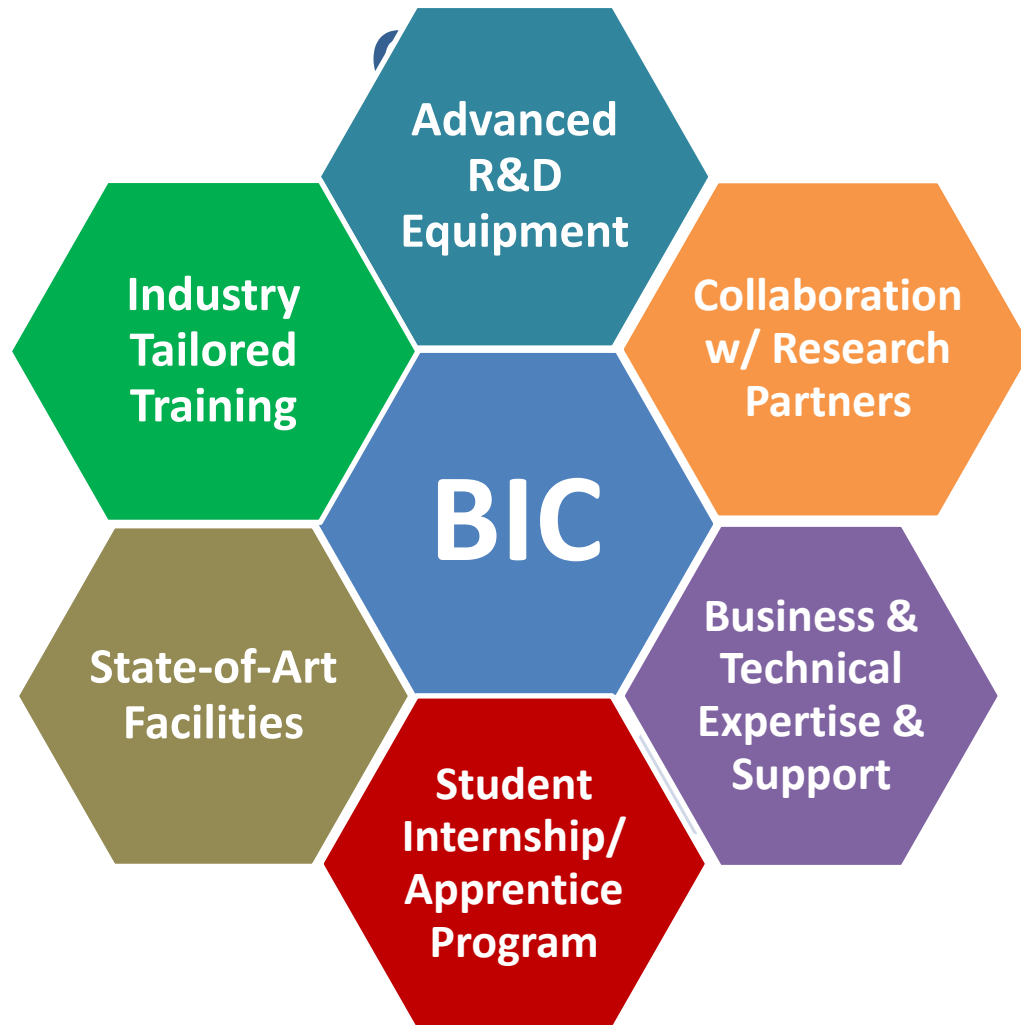
Members



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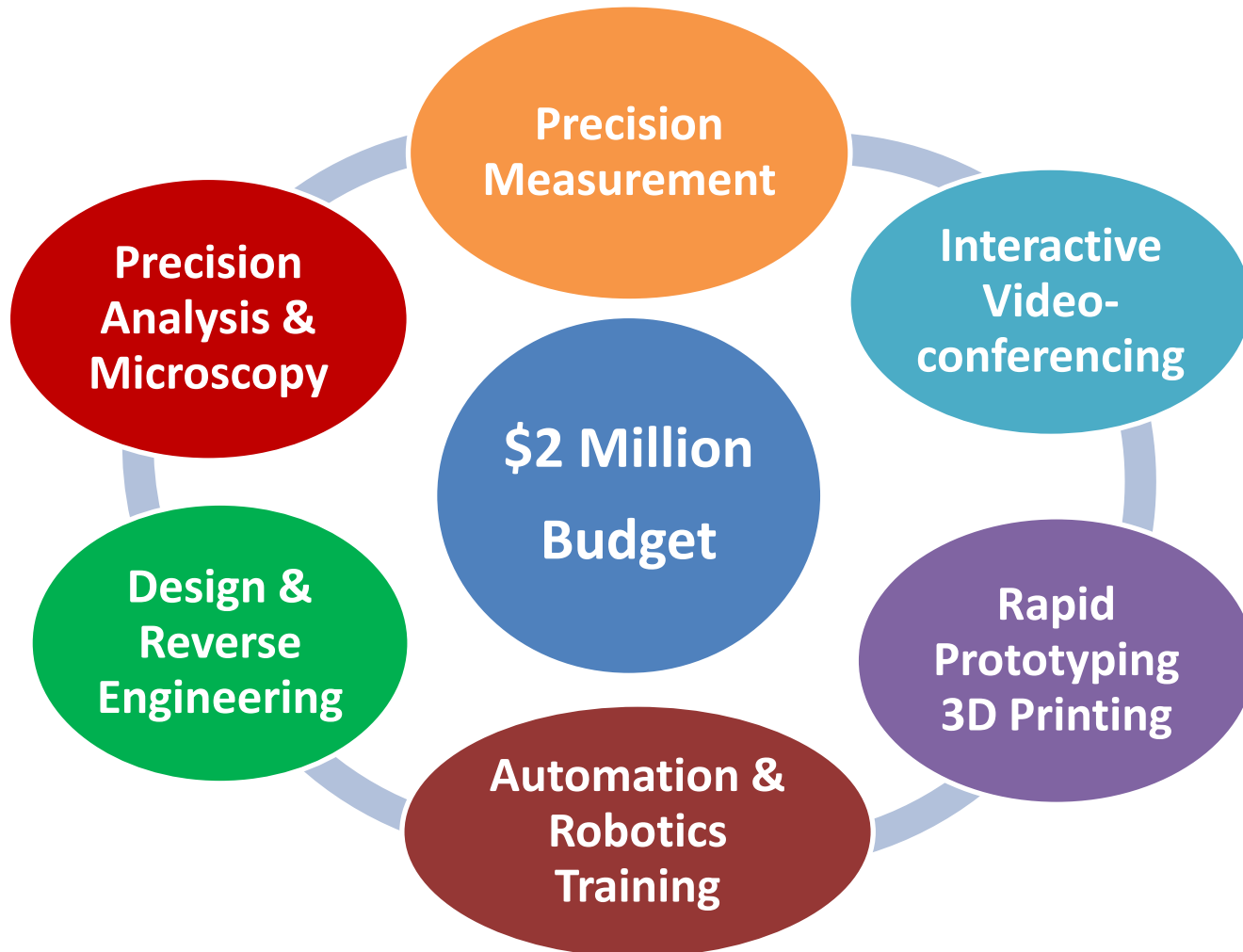
## Delivering Advanced Capabilities to BIC Member



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## Equipment Plan



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# BIC Facility



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## Key Strategic Partnerships for the BIC

- **Manufacturing USA - Become the Regional Focal Point for the 14 Institutes in the National Network for Manufacturing Innovation**
- **Partnership with the Massachusetts Green High Performance Computing Center**
- **Strategic Partnerships i.e Valley Venture Mentors, Tech Spring, CCAC, and UMASS Advanced Manufacturing Center**

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## Unique Opportunities in the Berkshires

- The BIC will create unique, Industry Specific Programming to attract out of region interest to the BIC-i.e. VR/AR Surgical Suite
- Launch of the BIC's RFP Program Network
  - Receive RFP's/RFQ's
  - Coordinate response to win the business for member companies
- The BIC will leverage the existing cultural assets (Tanglewood, Jacob's Pillow, etc) to offer opportunity for corporate meetings
- BIC will host Berkshire Focused Networking Events
- Alignment with the Berkshire Blueprint

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## Unique Opportunities in the Berkshires

- **Transitioning legacy manufacturing base**
  - **From Plastics and Paper Manufacturers transitioning to builders of new products like Medical Devices**
  - **Injection Molders to World Class Mold Makers**
    - **Key opportunity to accelerate the “on shoring” movement**
- **Three special effects companies located in the Berkshires**
- **Developing software, coding, and testing cluster**
  - **General Dynamics-Mission Systems**
  - **NTS, Intertek**

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## Q1-BIC Activities/Updates

- Identified as a Cluster Asset in the Healthcare and Advanced Manufacturing Cluster in the Berkshire Blueprint 2.0
  - Began meeting bi-monthly with 1Berkshire to discuss how to partner together to achieve the cluster goals
- BIC Website Update and Launch
- PEDDA Design Review Board
- Berkshire Robotics Challenge
- Co-Sponsor Berkshire Innovation Night
- Lever Business Challenge



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## Q1-BIC Activities/Updates

- Berkshire Community College Faculty Search Committee
- Partnered with the Mass Green High Performance Computing Center and the Northeast Cyber Team Initiative to offer a Pilot Program for BIC Members
- SBA and EDM-BIC Architect Update
- April 24<sup>th</sup>-Invited Panelist on the “Powering the Mass Innovation Ecosystem” in Boston.
- Launched the BIC RFP Pilot Program

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## Q2-Next Steps-Upcoming Activities

- April 30<sup>th</sup>-Guest Speaker ASQ Berkshire Quarterly Meeting-"Innovation in the Berkshires
- On June 4<sup>th</sup>- Host a visit from Ira Moskowitz, the Director of Advanced Manufacturing Program for the Mass Tech Collaborative
- Began discussions with Pharmaceutical Non-profit to offer Advance Life Science Trainings at the BIC
- Continued discussions with a BIC Member and the State on how we can support their future hiring plans
- BIC AV and IT RFP
- BIC Software RFP-Equipment and Room Rental Program
- Health Insurance Market Study

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## What Role does Engineering for the BIC and Berkshire County

- Engineering and Creative Design is the Foundation of Innovation
- Productivity without Creative Design quality is meaningless
- With the increased decentralization of manufacturing,  
Engineering is PARAMOUNT
- NEXT FLEX  
Flexible Hybrid Electronics-Manufacturing Institutes U.S.A.
- BIC FELLOWSHIP PROGRAM

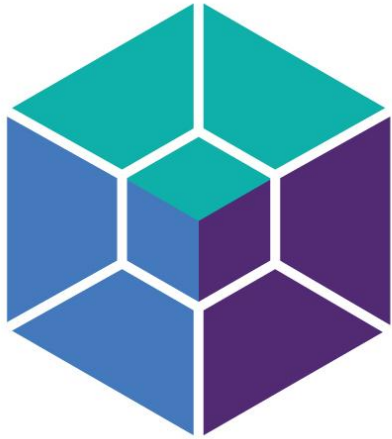
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## BACKUP SLIDES

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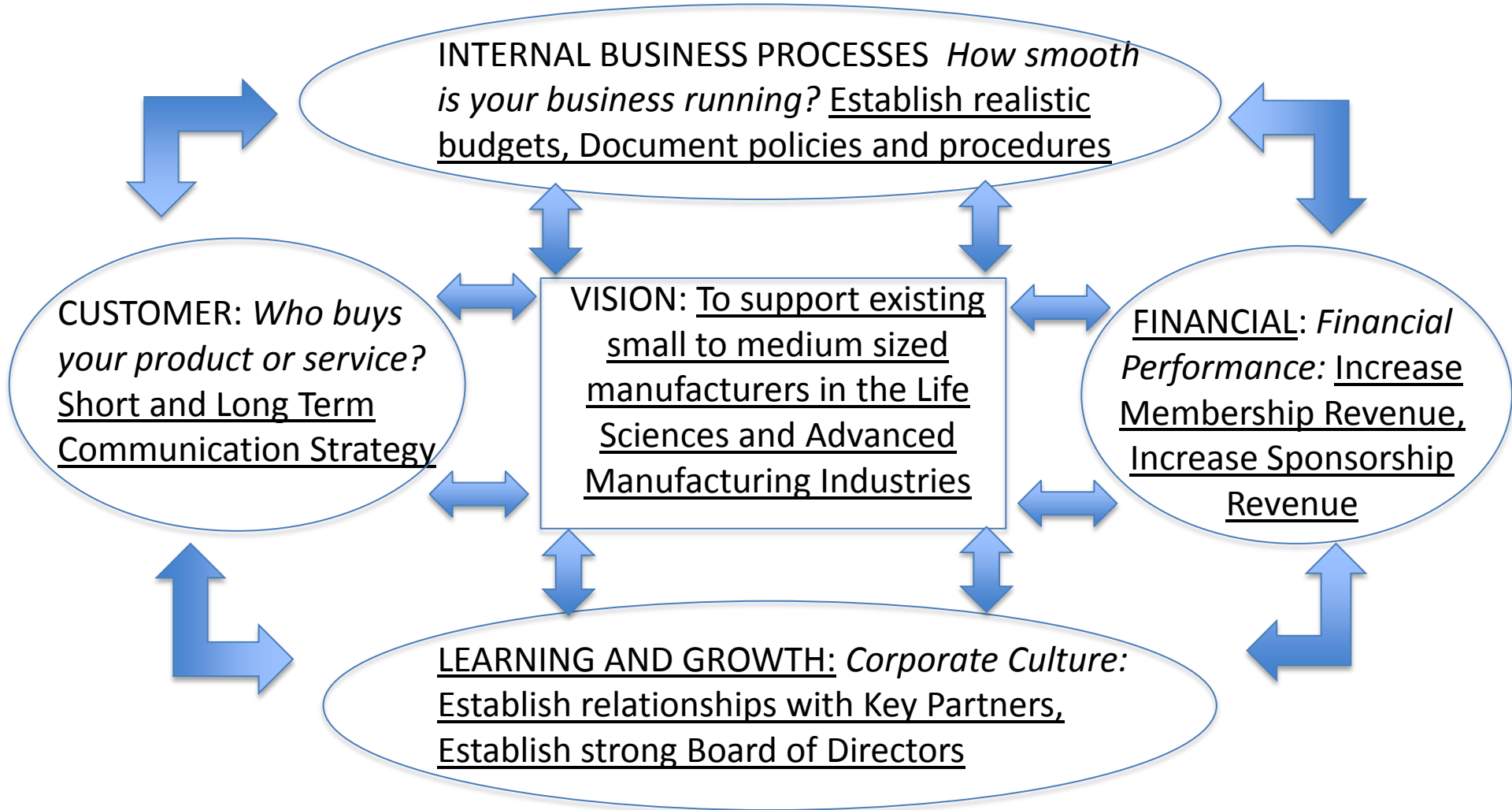


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## BIC Balanced Scorecard



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## Balanced Scorecard Berkshire Community

