



# Advanced Manufacturing Initiative

*Briefing for Dr. Patrick Gallagher, Director of NIST*

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# Manufacturing matters

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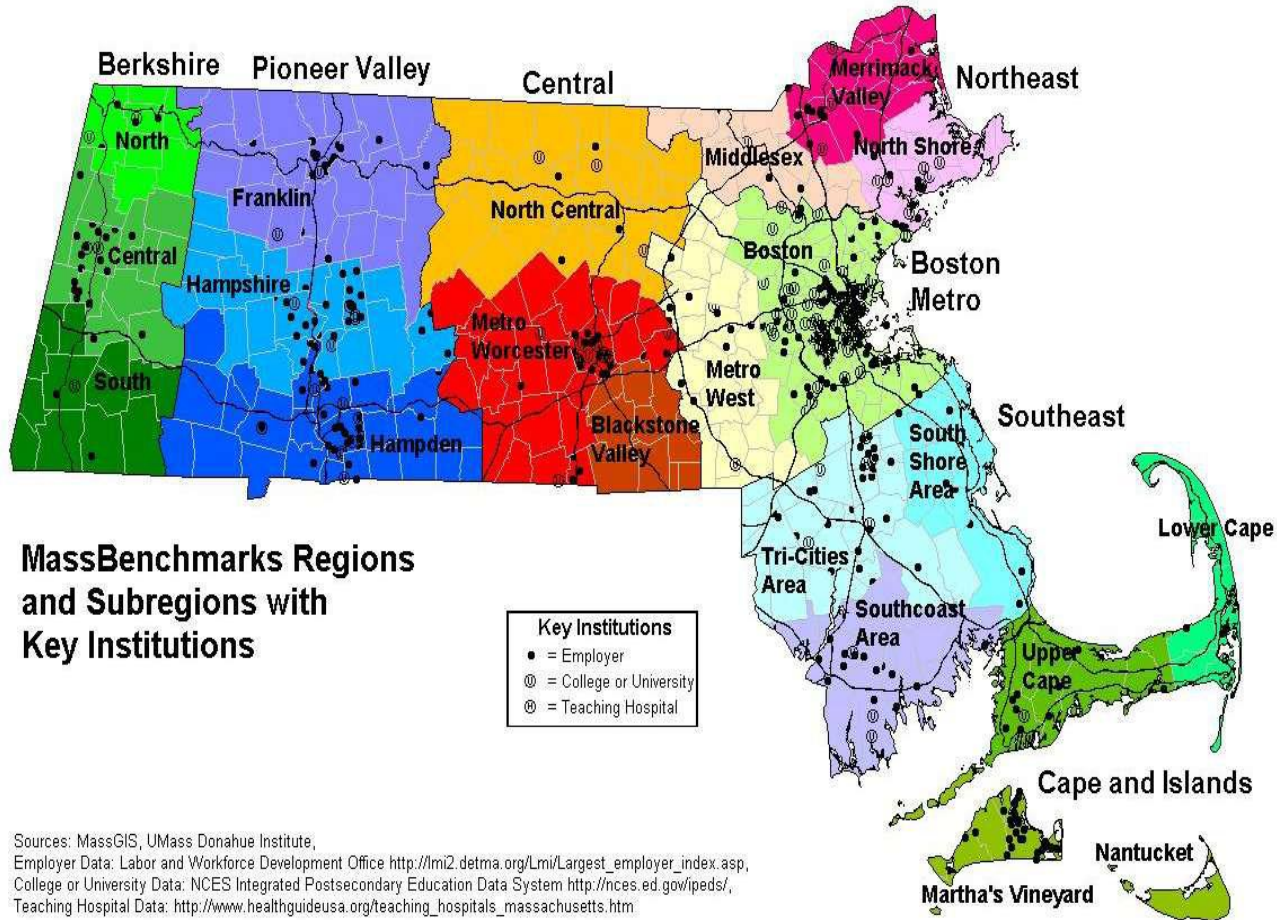
## ➤ For Jobs

- With over 260,000 jobs at the end of 2009, the manufacturing sector is the fourth largest employer in Massachusetts.
- Manufacturing can provide high paying jobs, upward mobility, and contributes a disproportionate share of state gross product (based on employment).

## ➤ For regional prosperity and individual opportunity

## ➤ For innovation – advanced manufacturing is an essential part of the state's R & D innovation ecology

# Manufacturing in Massachusetts – A statewide industry composed of distinct regional clusters



# Who is the Advanced Manufacturing Initiative?

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- A representative and cross-cutting group of
  - OEM / System Integrators
  - Suppliers
  - Small- and Medium-sized Enterprises
  - Key public sector stakeholders, support organizations, and industry associations

# Global and national context

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- Advanced industrial economies, characterized by high-cost environments, *can have a competitive manufacturing industry.*
  - Example: Germany
  - Competitive advantage: *Advanced manufacturing capabilities*
- Advanced manufacturing has emerged as a key priority of the federal economic development policy agenda.
- Massachusetts retains a stable and highly innovative base of manufacturers in multiple industries and segments of the value chain.

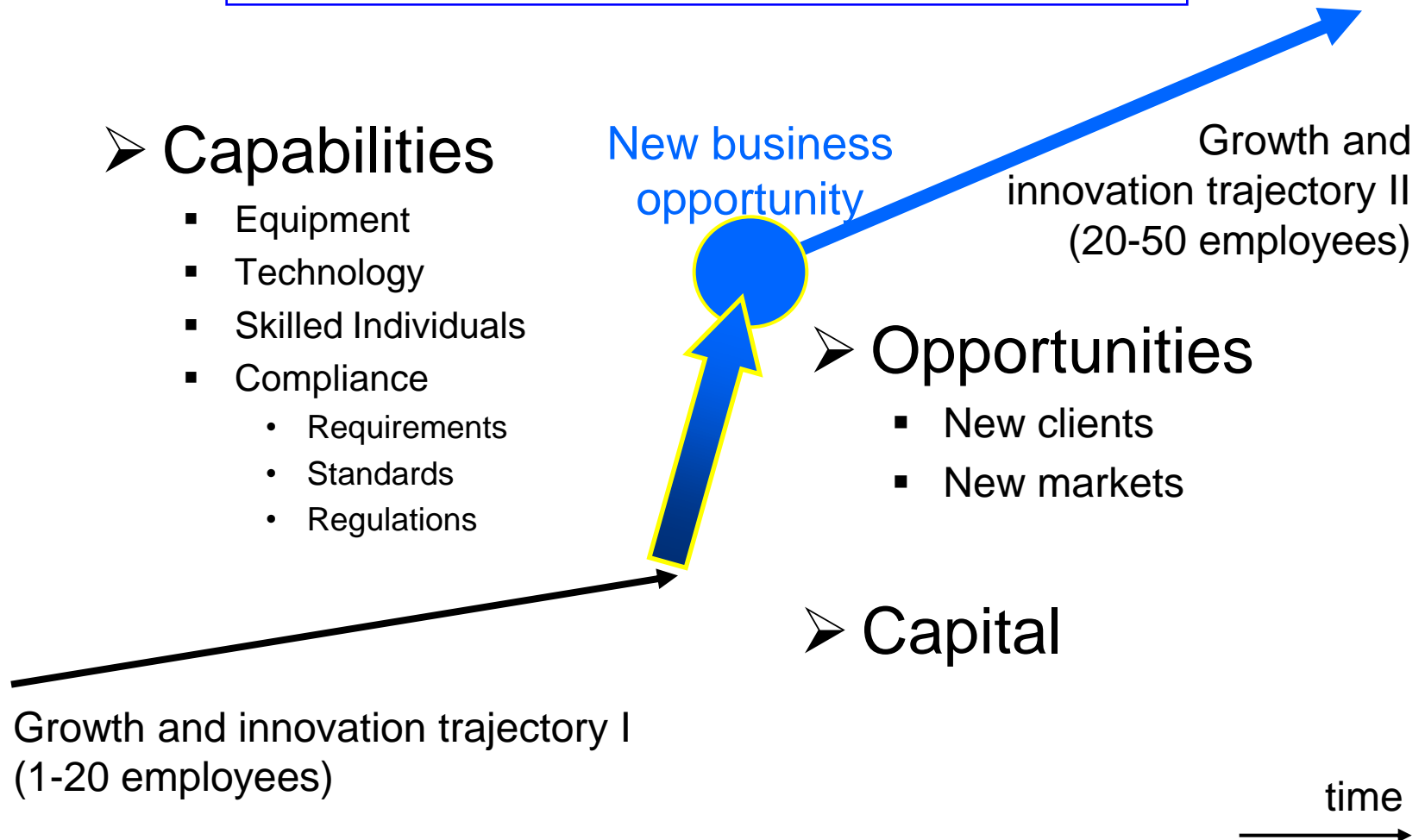
# A “manufacturing ecosystem” (cluster) approach

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- Strengthen and revitalize linkages and collaboration among the elements of the manufacturing innovation ecosystem in the Commonwealth.
  - OEM’s and system integrators
  - Small- and medium-sized enterprises (SMEs) and suppliers
  - Universities and colleges
  - Investment community
  - Public and private infrastructure (technical assistance, financial assistance, business development assistance, laboratories, etc.)

# Organizing principle for the State's role

## Building a bridge to growth



# Priorities identified

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- Technology in Manufacturing
- Emphasis on Export Growth
- Access to Capital
- Talent
- Value and supply chain development
- Industry image

# Vision

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- To make Massachusetts an acknowledged world-leader in advanced manufacturing exports.
  - Attract and retain advanced manufacturing operations and business opportunities in the Commonwealth.
  - Expand prosperity in regions across the state.
  - Deepen connections between the state's manufacturers and world-class R&D.

# Targets for Recommendations

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- Building up capabilities
  - Skilled individuals
  - Technology and equipment
  - Certification and Compliance
- Enhancing Access to Capital
- Filling in gaps
  - Building blocks and ingredients of a manufacturing innovation system
  - Collaboration and communities
- Enabling or accelerating information flows and creating opportunities for learning and discovery in the manufacturing innovation ecosystem.

# Current Activities and Draft Recommendations

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## ➤ Current Activities:

- Massachusetts Growth Capital Corporation
- Governor's STEM Advisory Council
- Collaboration with New England Governors
- Supply Chain Development Program (with Associated Industries of MA)
- MTC Innovation Institute support for regional clusters

## ➤ Draft Recommendations:

- Governor's Massachusetts Manufacturing Council
- Massachusetts Export Initiative
- Manufacturing Marketing Campaign