

**MAGNET**  
Manufacturing Advocacy & Growth Network

# **The MAGNET Story: From Lean Manufacturing to Partnerships for Innovation**

**James W. Griffith**

**National Academy of Sciences MEP Panel**

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# Facts About MAGNET

- Non-profit organization founded in 1984 as Cleveland Advanced Manufacturing Program (CAMP)
  - One of first MEP's in nation & first Edison Centers in Ohio
  - Name change in 2007 reflects broader mission
- Fundamental goal: help manufacturers become more competitive and grow
- 36 FTE's employees + 3 PT and 5 interns; FY12 budget ~ \$9M
- Wear several hats (with different funding streams):
  - Ohio Edison Technology Center & Edison Incubator
  - O.D.S Manufacturing Extension Partnership Contractor
  - Element of regional economic development system in N.E.O.
- Geographic service area varies depending on program
  - 29 counties of northern Ohio for MEP
  - Statewide scope for motor vehicles and parts sector
  - 16 N.E. Ohio counties for regional economic development



Where Industry Meets Innovation

## 1. Provide Direct Client Services to Manufacturing Companies

- Fulfill MEP and Edison Center missions
- Core element of business model for addressing productivity and innovation needs of companies (~100 projects/yr.)

## 2. Build Supporting Infrastructure for Manufacturing Sector

### – Advocacy

- Urge adoption of most modern manufacturing strategies and techniques (“Voice to Manufacturing”)
- Advocate for manufacturers on visibility, public policy and regulatory issues (“Voice for Manufacturing”)

### – Education & Training Intermediary

- Encourage education/training institutions to build curricula & programs to serve manufacturers
- Raise level of workforce expertise in region
- Increase Pipeline: Promote career opportunities in manufacturing

### – Competitiveness & Innovation

- Develop and maintain network of resource providers
- Enhance manufacturing companies access to global markets
- Help companies access resources, e.g. Third Frontier, E-TAG
- Operate Edison Incubator for start-ups

## Program Highlights

- Have lead responsibility for serving automotive sector and providing product development services on statewide basis
- For past seven years have served as project manager for installation of new welding technology systems at Joint Systems Manufacturing Center (aka Lima Tank Plant)
- Continuing to tweak service offerings. Recent adjustments include:
  - Added new green enterprise development training capability through Purdue University
  - New global product management service that will help smaller manufacturers understand process of exports and provide country- and industry-specific domain expertise
- Operate one of 13 Edison Incubators in State; currently have 22 tenants; working to link tenants more closely with MAGNET's product engineering capabilities



# Partnerships “Я” Us



Joint NIST-MEP funded project to connect manufacturers to innovation opportunities in advanced energy; collaborator on EDA-funded Regional Cluster Accelerator Project focused on advanced energy and flexible electronics

MAGNET is part of regional business retention/expansion delivery system being organized by Team NEO through Jobs Ohio

Joint Cleveland Foundation-funded project to help manufacturers access new markets through supply chain development; coordinated outreach to small manufacturers

MAGNET Edison incubator is element of JumpStart's regional Entrepreneurial Signature Program; co-collaborator on "Time to Market" Cluster Accelerator project with NorTech

Collaboration on supply chain development for medical device manufacturers



## Our Impact (FY 2011)

- 57 Events - Attended by 1,601 People – from 791 Companies
- Sold 99 Fee-for-Service Projects
- Served 551 Manufacturing Companies through face-to-face interaction (meeting, event attendee, proposal or project)
- Economic Impact :

Increased/Retained Sales	\$296,407,262
Cost Savings	17,420,3000
<u>Investments</u>	<u>50,354,263</u>
<u>Total impact</u>	<u>\$364,181,825</u>
Jobs Created/Retained	1,382



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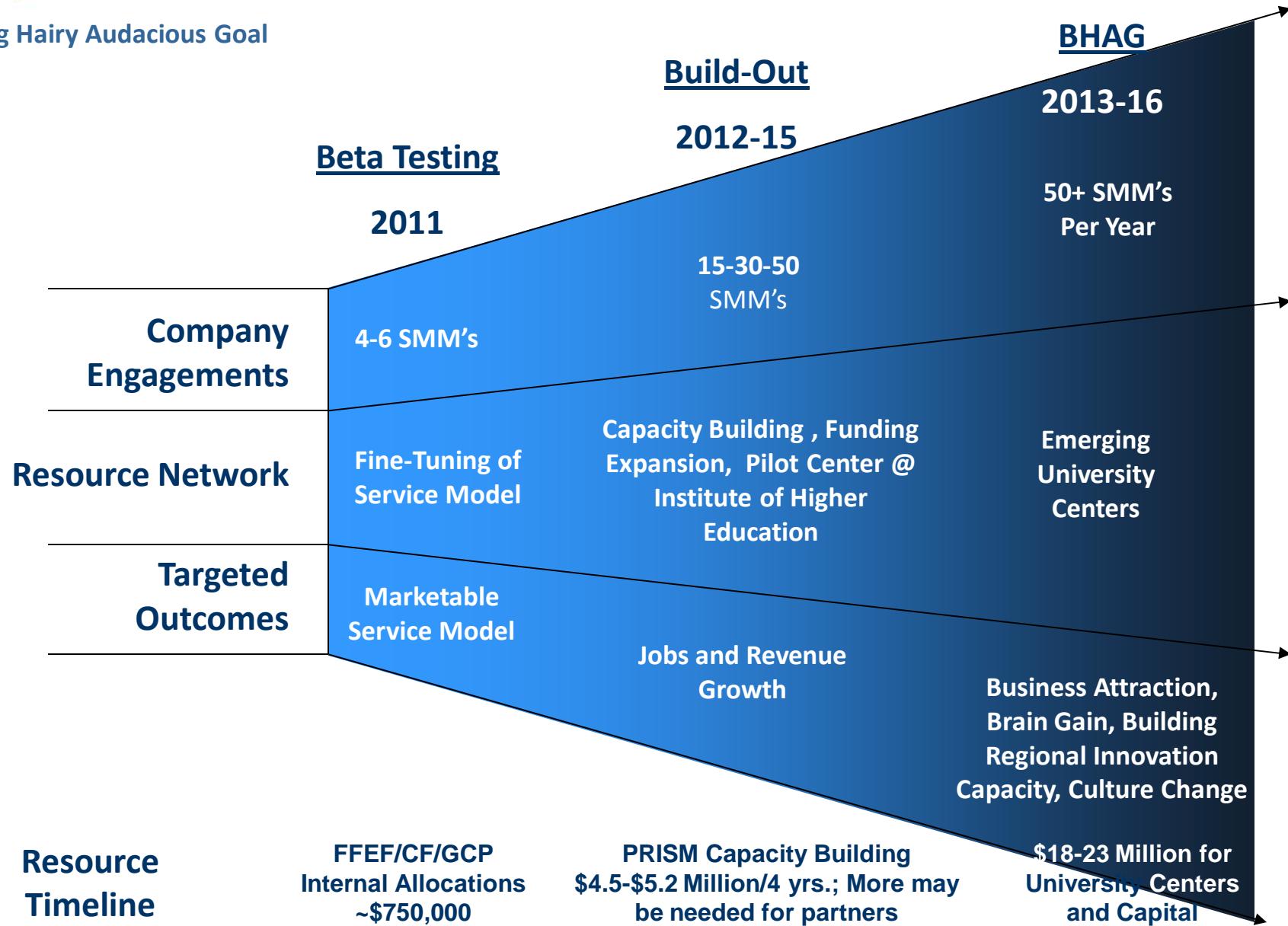
**PRISM**

Partnership for Regional Innovation  
Services to Manufacturers

- New/enhanced services to stimulate/support innovation efforts of small-to-medium-sized manufacturing firms
  - Services: market intelligence; network linkages; direct consulting
  - New paths to growth: new products/services/business models, exports, market diversification
- Grow an ongoing portfolio of 50 companies to demonstrate effectiveness of services and impact regional economy
  - Build off region's manufacturing strengths, heritage of innovation and emerging and/or growth clusters like advanced energy, aerospace, medical devices
- Services rely heavily on connections with organizations in region that have technical, financial, and human resources to support company transformation through innovation
  - Universities, Community Colleges, Economic Development Orgs., WIB's, Capital Sources, Government entities, Trade Associations

# PRISM: From Beta to BHAG\*

\* Big Hairy Audacious Goal



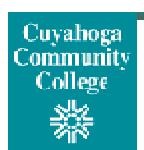


# Long-term Vision

*Northeast Ohio is internationally renowned as a center of excellence in manufacturing education and product innovation*

Through a network facilitated by MAGNET among higher education institutions, and manufacturers and others, Northeast Ohio is:

1. Seeing manufacturing companies grow through innovation strategies
2. Emerging as a hotbed of talent as college students pursue education in manufacturing management and innovation career paths
3. Attracting manufacturing companies because of the region's talent and innovation support system



LAKELAND COMMUNITY COLLEGE



FUND FOR OUR ECONOMIC FUTURE



# BHAG Elements

