

Vermont Manufacturing Extension Center
2012 IMPACT REPORT

a NIST | Network
MEP | Affiliate



*Providing Systems and Solutions to Help Vermont
Manufacturers Innovate, Plan, Perform and Grow.*

2012

vmec.org



| SINCE 1995 |

The Vermont Manufacturing Extension Center operates statewide as a not-for-profit center providing confidential consulting, coaching, hands-on assistance and training to accelerate profitable growth through innovation, increased productivity, reduced costs, improved competitiveness, and creating and retaining good paying jobs.

VMEC's Mission

Our primary mission is to help improve and grow manufacturing in Vermont and strengthen the global competitiveness of the state's manufacturers.

Additionally, in early 2006 VMEC launched the Process Strategies Group (PSG) as a specialized business unit within the Center to bring its vast Lean process improvement experience and growth strategy expertise to selected non-manufacturing sectors. This impact report does not include any client project impact results from VMEC PSG.

How VMEC Assists Companies

Systems and Solutions for Accelerating Profitable Growth:

- VMEC services accelerate solutions for your company's very important problems and opportunities for profitable growth.
- VMEC Innovation Engineering Black Belts provide expertise and coaching to help organizations learn and apply innovation tools and the Innovation Engineering Management System to increase speed (up to six times) and decrease risk (30 to 80 percent). Innovations may be for more profitable customers and markets, processes, and products and services.

On-site Consulting and Hands-on Implementation: VMEC Advisors are hands-on experts, working with Vermont manufacturers and other organizations to develop and implement targeted improvements and growth strategies.

Lean Implementation, Coaching and Training: Since 1995, VMEC has been

working with companies of all sizes to transform plant and office administrative processes, to lower costs, increase throughput, and improve customer and employee satisfaction. VMEC staff members are "Lean" experts with a proven track record. Success stories are available at vmec.org.

When Lean companies mature and have their own Lean resources, VMEC often continues to assist as an unbiased coach—or "sensei"—and provides new and advanced training.

Public Workshops, Forums and Special Events:

A variety of basic and advanced workshops, forums and special events are held throughout the state to provide information and tools to improve operations. On-site workshops are also available.

A Resource Center: Companies have access to a wealth of information from the VMEC website, newsletters, events, certification programs, and numerous local, regional and national resources through VMEC's affiliation with its federal partner, the Hollings Manufacturing Extension Partnership (MEP), a nationwide program of the National Institute of Standards and Technology (NIST) in the U.S. Department of Commerce.



Next Generation Manufacturing

Attributes & Strategies for Success

Leading the way for "Next Generation Manufacturing" in Vermont:

VMEC is helping manufacturers be competitive in the six Next Generation Manufacturing strategies and attributes:

- 1 Innovation and Technology Acceleration
- 2 Advanced Talent Management
- 3 Systemic Continuous Improvement
- 4 Extended Enterprise Management
- 5 Sustainable Product and Process Development
- 6 Global Engagement

VMEC can help manufacturers and other organizations accelerate profitable and sustainable growth through innovation using principles of Innovation Engineering.

Vermont Innovation Marketplace

THE VERMONT INNOVATION MARKETPLACE accelerates "open innovation" connections between people and companies who have innovations and ideas for growth and those that need ideas for profitable growth. This web-based service was launched in April 2009 by VMEC and the U.S. Department of Commerce. It is a subset of the USA National Innovation Marketplace. The Marketplace also includes a USA Manufacturing and Expertise Registry where Vermont companies can create a free website with higher credibility and visibility, tell what makes them great, and provide a link to their site. The Innovation Marketplace is a valuable tool for manufacturers, investors, entrepreneurs, distributors and researchers.

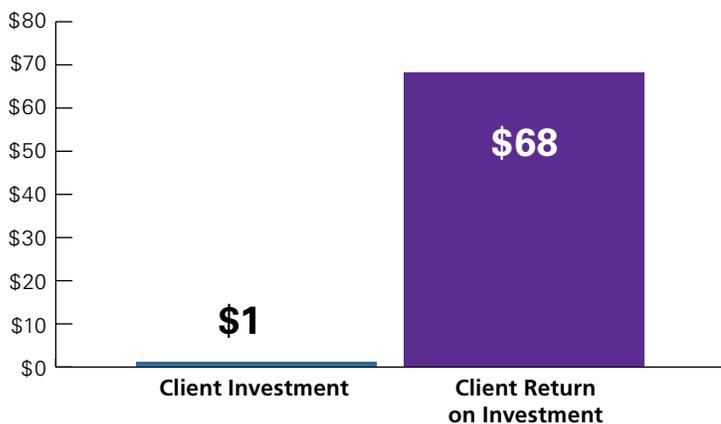
2012 Innovation Marketplace Statistics (as of December 2012)

- Ability to search over \$2 billion in Innovation Buying Requests
- Ability to search over \$955 billion in Innovation Business Opportunities

www.VermontInnovation.org

VMEC Delivers Results!

Each Client Dollar Spent Returned an Average of \$68 Over the Past Three Years

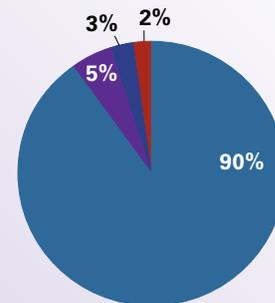


Based on company reported data, as a direct result of VMEC services, every \$1 invested in VMEC assistance and services returned \$68 to the company on its investment, during the period July 1, 2009 through June 30, 2012.

Partial Impact of VMEC: July 2011 – June 2012

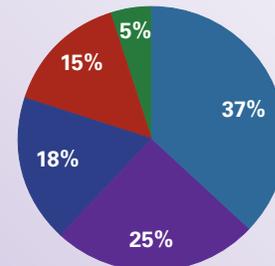
Client-reported Investment in Modernization: \$45,855,000

- Plant & Equipment: 90%
- Information Systems and Software: 5%
- Workforce Practices and Employee Skills: 3%
- Other: 2%



Size of Firms Served by VMEC (by number of employees)

- 1–9: 15%
- 10–50: 25%
- 51–100: 18%
- 101–500: 37%
- 500+: 5%



Partial VMEC Impact

- Jobs created that otherwise would not have existed: 93***
Last three years: 260
- Jobs retained: 230*** / Last three years: 434
- Total jobs created (direct, indirect and induced): 1,104**** that paid a total of \$31.5 million** in employer wages and benefits
- Client investment in modernization: \$45,855,000***
Last three years: \$54,093,000
- Cost savings: \$7,419,000*** / Last three years: \$21,577,000
- Increased and retained sales: \$100,268,000***
Last three years: \$111,385,000
- Additional labor compensation: \$48,000,000****
- Total value added (gross state product): \$81,600,000****

Number of Manufacturers Served: 877

- VMEC served more than 877 of Vermont's approximately 2,000 manufacturers from January 1996 through June 2012.
- VMEC served 110 manufacturing companies from July 2011 through June 2012.

Public and On-site Workshops and Training Provided by VMEC

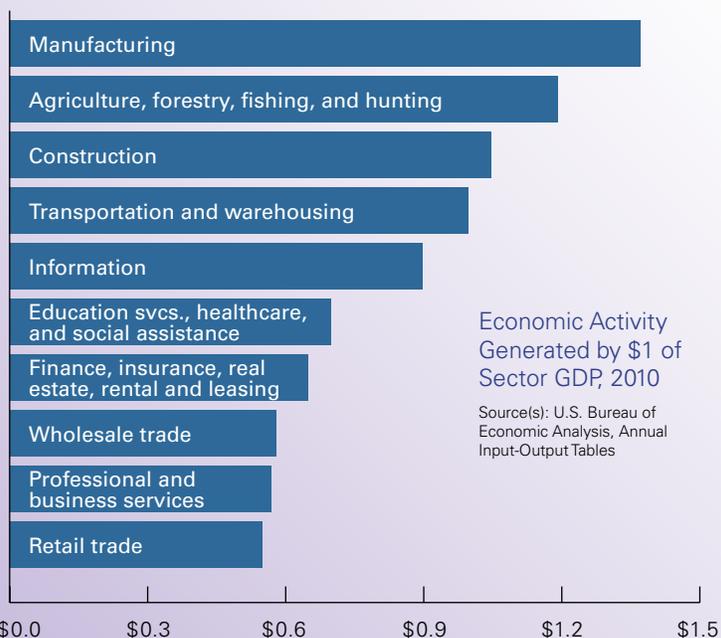
More than 1,780 manufacturing employees from 87 companies participated in public workshops and onsite manufacturing training in Vermont from July 1, 2011 through June 30, 2012.

Vermont Manufacturers Forums

Approximately 240 manufacturing employees from 34 companies participated in four Vermont Manufacturers Forums held throughout Vermont at various plant sites of companies committed to continuous improvement, Lean thinking and/or Lean manufacturing, and innovation-led growth.

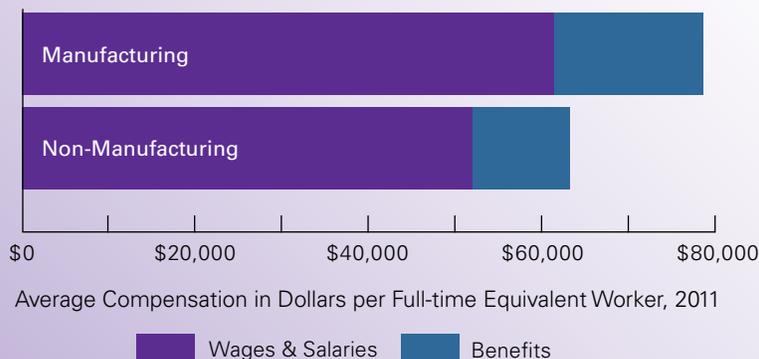
This data reflects the results of VMEC client projects from July 2011 through June 2012. The data is from formal surveys conducted by a third party under contract to the National Institute of Standards and Technology (NIST), Hollings Manufacturing Extension Partnership (MEP). Clients surveyed represent only 24 percent of all Vermont clients served by VMEC during the period. *Client-reported impact as a direct result of VMEC assistance. **Results of input-output analysis (IMPLAN modeling) based on results from VMEC clients surveyed.

Manufacturing Has the Strongest Multiplier Effect



Manufacturing: the Path to Prosperity

U.S. Manufacturing Pays Higher Average Compensation





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The VMEC Board is an elected board of experienced manufacturers and other leaders with manufacturing interests who serve without compensation for a minimum of two years. The board works with the center's director to help set basic policies and directions to enable VMEC to fulfill its mission.

VMEC's Total Impact on Vermont's Economy¹

\$1,222,579,000

January 1996–June 2012

\$229,442,000

July 2011–June 2012

Includes the direct client impact reported by clients via third-party survey, the indirect impact generated when clients' firms increase their purchases from suppliers, and the induced impact caused by increased household expenditures generated by direct and indirect effects.

¹ Reported impacts are modeled using IMPLAN 3.0 Software and Vermont 2011 State data package.

VMEC is the local affiliate and point of contact for Vermont companies interested in learning about or applying for **The Shingo Prize for Operational Excellence** in the Northeast Region. *Business Week Magazine* has referred to the Shingo Prize Program as the "Nobel Prize of manufacturing," because it establishes a standard for world-class excellence.



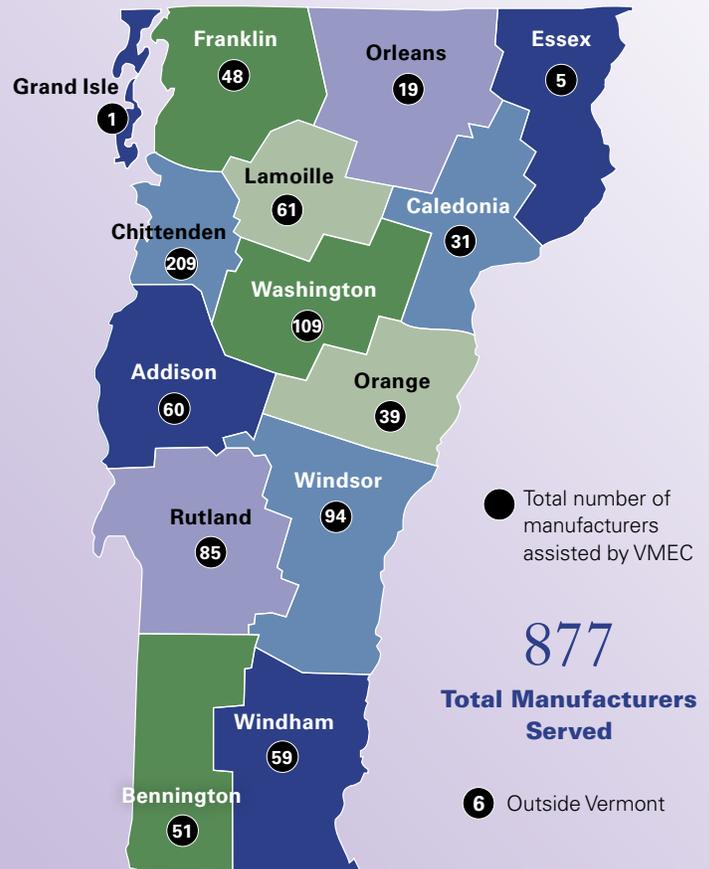
**INCREASES SPEED,
REDUCES RISK**
for Existing and New Projects
and Profitable Solutions for
Very Important Problems and
Very Important Opportunities



In March 2012, VMEC hosted the fourth Vermont Innovation Engineering Leadership Institute in Woodstock.

Since May 2012, a total of 474 participants from 172 companies have attended this intense graduate-level course held in Vermont.

VMEC Assistance by County January 1996–June 2012



VMEC Host Since 1995

Vermont Manufacturing Extension Center
P.O. Box 12, Randolph Center, Vermont 05061
p 802.728.1432 / f 802.728.1456 / vmec.org

Photos courtesy of AllEarth Renewables, GW Plastics,
Kaman Composites - Vermont, Inc., Revision, and Sonnax.