



Vermont Manufacturing Extension Center **2013 IMPACT REPORT**

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





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.

HOW VMEC ASSISTS COMPANIES

SYSTEMS & SOLUTIONS FOR ACCELERATING PROFITABLE

GROWTH: VMEC offers proven services and support to help you create and activate strategies to address your Very Important Opportunities (Innovations for Current or New Customers) and Very Important Systems (Innovations for Improving How You Work). VMEC was an early pioneer (2006) and is a licensed member of the growing Innovation Engineering Network across the globe.

ON-SITE CONSULTING AND HANDS-ON IMPLEMENTATION: VMEC Advisors are hands-on experts, working with manufacturers and other organizations to develop and implement specific administrative and manufacturing 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, 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 and resources through VMEC. A partial list includes the 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.

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'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.

VMEC SERVICES vmec.org

Profitable Growth and Innovation Engineering
Accelerate a continuous stream of meaningfully unique ideas for growing sales and profits.

Lean Enterprise Training and Implementation
Establish a systematic approach to eliminating wastes and creating flow throughout the company.

CoreValue® Enterprise Assessment
Assess your enterprise value and plan actions to drive revenue and profits above current levels.

Supply Chain
Improve management of supply chain planning, sourcing, making and delivering.

SoftSelect™ Software Selection Process
Significantly reduce time, risk and cost selecting business and manufacturing software.

Quality Systems
Encompass everything from product design to distribution of finished products and ISO.

ExporTech
Drive international sales with proven training, customized planning and coaching.

Training for Executives and Workers
Public workshops, private training and coaching to help companies grow and compete.

VERMONT MANUFACTURING: THE FACTS

MANUFACTURING IS CRITICAL TO VERMONT'S ECONOMY

Jobs: In 2013, manufacturing employed about 32,000 people, or 11% of Vermont's total employment population of about 307,000. This is a greater proportion than the U.S. overall at 9%.

Source: U.S. Bureau of Labor Statistics

Wages: In 2013, manufacturing paid average annual wages that were 31% higher (\$53,978/yr) than the state average wage (\$41,123/yr). Source: Economic Modeling Specialists International

State GDP: In 2012, manufacturing accounted for about \$3.15 billion or 11.5% of the state's gross domestic product (GDP).

Source: U.S. Bureau of Economic Analysis

Exports: In 2012, manufactured goods made up almost two-thirds (65.2%) of all Vermont exports, or about **\$2.8 billion** in total value.

Source: U.S. Census Bureau Foreign Trade Division

Economic Multiplier Impact: Every \$1 in manufactured goods generates an estimated \$1.48 worth of additional economic activity—the highest of any other sector.

Source: National Association of Manufacturers, November 2013

Employment Multiplier: Each manufacturing job supports an additional 1.6 jobs, and each "Advanced Manufacturing" job supports as many as 4.9 other jobs.

Source: "Local Multipliers," American Economic Review, Papers and Proceedings 100

PARTIAL VMEC IMPACT

- Jobs created that otherwise would not have existed: **207***
Last three years: **435**
- Jobs retained: **95*** / Last three years: **440**
- Total jobs created (direct, indirect and induced): **827**** that paid a total of **\$33.8 million**** in employer wages and benefits
- Client investment in modernization: **\$24,859,000***
Last three years: **\$74,866,000**
- Cost savings: **\$4,572,000*** / Last three years: **\$13,920,000**
- Increased and retained sales: **\$61,373,000***
Last three years: **\$165,403,000**
- Additional labor compensation: **\$57,000,000****
- Total value added (gross state product): **\$72,400,000****

NUMBER OF MANUFACTURERS SERVED: 881

VMEC served more than 881 of Vermont's approximately 2,000 manufacturers from January 1996 through June 2013. VMEC served 93 manufacturing companies from July 2012 through June 2013.

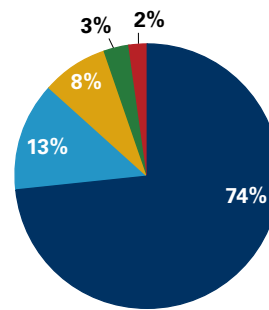
PUBLIC AND ON-SITE WORKSHOPS AND TRAINING

More than 1,617 manufacturing employees from 80 companies participated in public workshops and onsite manufacturing training in Vermont from July 1, 2012 through June 30, 2013.

VERMONT MANUFACTURERS FORUMS: Approximately 268 manufacturing employees from 32 companies participated in five 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.

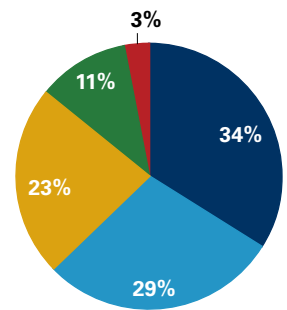
This data reflects the results of VMEC client projects from July 2012 through June 2013. The data is from formal surveys conducted by a third party under contract to the National Institute of Standards and Technology (NIST), Hollings Manufacturing Extension Partnership (MEP). Clients surveyed represent only 31 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.

PARTIAL IMPACT OF VMEC: JULY 2012–JUNE 2013



Client-reported Investment in Modernization: \$24,854,000

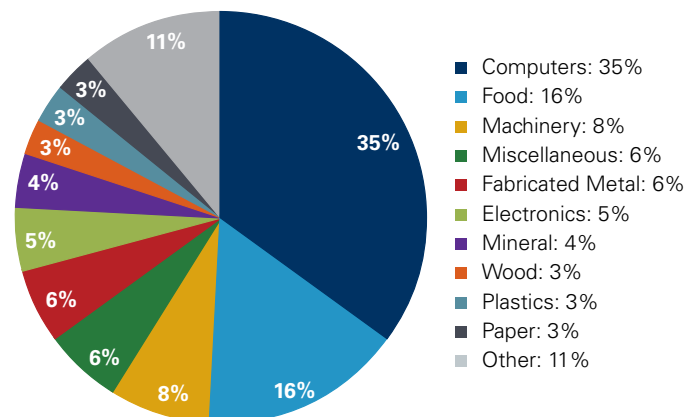
- Plant & Equipment: 13%
- New Products: 8%
- Information Systems and Software: 3%
- Workforce Practices and Employee Skills: 2%
- Other: 74%



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

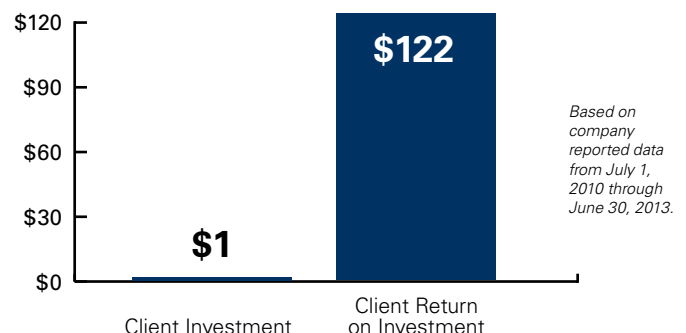
- 1–9: 11%
- 10–50: 29%
- 51–100: 23%
- 101–500: 34%
- 500+: 3%

DISTRIBUTION OF MANUFACTURING GDP IN VERMONT



VMEC DELIVERS RESULTS!

Each Client Dollar Spent on VMEC Assistance Returned an Average of \$122 Over the Past 3 Years



VMEC'S TOTAL IMPACT ON VERMONT'S ECONOMY¹

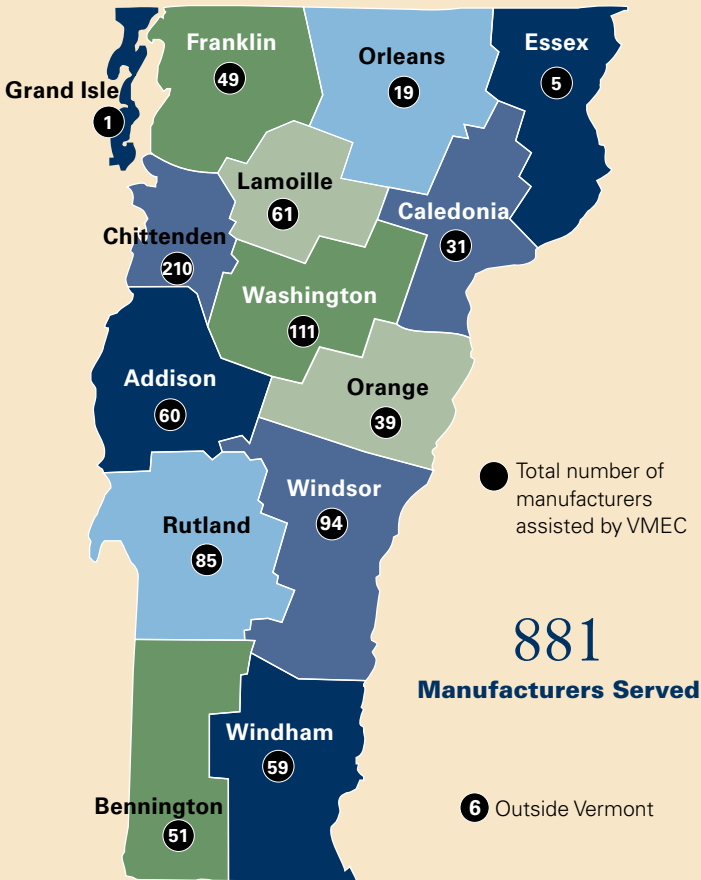
\$1,400,911,000
January 1996–June 2013

\$178,332,000
July 2012–June 2013

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 ASSISTANCE BY COUNTY JANUARY 1996–JUNE 2013



2014 VMEC ADVISORY BOARD

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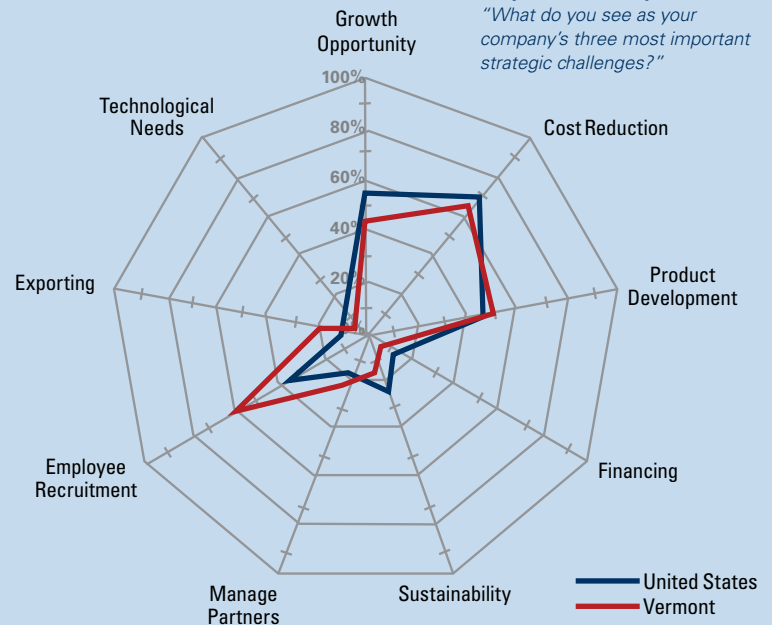
MIKE RAINVILLE (CHAIRMAN)
President and Owner, Maple Landmark, Inc.

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.

CHALLENGES TO MANUFACTURING GROWTH IN VERMONT

Recent surveys of VMEC Vermont manufacturing clients conducted by a third party under contract to NIST MEP revealed that their highest ranking concerns include: staying cost competitive, finding skilled workers, developing innovative and competitive new products, expanding into new markets, and managing partners.

Responses to the question:
"What do you see as your company's three most important strategic challenges?"



a NIST Network MEP Affiliate

