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Maine's Industry Partnership/Sector Strategy

December 2011



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TABLE OF CONTENTS

Comments from Maine’s Commissioner of Labor.	3
Executive Summary.	4
Advanced Manufacturing Industry Analysis.	6
Introduction.	6
Industry Partnerships in Maine.	7
Challenges and Growth Opportunities.	10
Occupational Growth Areas.	15
The Need for Skilled Workers.	15
National Trends and Initiatives.	16
The Future of Maine Manufacturing.	17
Maine’s Share of National Manufacturing Production.	18
Strategic Industry Partnership Toolkit.	18
The Proposal	21
Key Themes.	22
Critical Needs Assessment.	22
Implementation Strategy.	23
Key Points of Focus for MIPI.	25
Planned Committee Structure.	25
Current Industry Partnerships in Maine	27
Industry Partnerships’ Connection to Maine	29
Partnership Overview	29
Maine Manufacturing Industry Council for Excellence	30
Mission.	30
Vision.	30
Attachment 1: MAME Manufacturing Summit Outcomes	31
Attachment 2: Looking Ahead.	34



MAINE DEPARTMENT OF LABOR
54 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0054

COMMENTS FROM MAINE'S COMMISSIONER OF LABOR

Maine's industries represent 46,400 private sector companies with 478,600 employees and producing an output of \$51.6 billion to the state's economy. In order to sustain and grow Maine's economy, a strategy to address the workforce skills shortage is vital. The Maine Industry Partnership model (MIPI) is key to a sustainable model that will impact every sector in Maine from manufacturing to health care to tourism to forestry. This model is applicable and replicable to all sectors in Maine.

Even during the current period of high statewide unemployment, many employers report that skilled jobs are going unfilled due to a lack of qualified candidates. The pipeline to fill current openings for skilled labor or to replace skilled incumbents who will soon retire is inadequate. At the same time, sectors such as manufacturing, production workers—both employed and unemployed—are often not adequately prepared to adapt to changes in an evolving manufacturing work environment.

To meet these challenges, Maine Industry Partnership/Sector Strategy proposes to strengthen and revitalize all sectors by increasing public awareness of opportunities, providing high-quality training, and conducting regular reevaluations of the changing face of the economy.

Specifically, the Maine Manufacturing Industry Council for Excellence will serve as a clearinghouse for information regarding advanced manufacturing career opportunities in Maine. Its overriding mission will be to develop long-term strategies designed to increase the pipeline of skilled workers and grow the number of manufacturing jobs in Maine. The advanced manufacturing Industry Partnerships will join with industry representatives, worker representatives, economic development organizations, state and local workforce agents, and educators to enhance the skills of the available workforce to meet industry needs.

Together, the Industry Partnerships/Sector Strategy will address the long- and short-term needs of industry and the workforce. In coordination with Maine educational institutions, we will develop programs designed to spark the interest of today's students regarding Maine's sectors and provide the training and education required for both students and workers to reach their employment and career goals.

Robert J. Winglass
Commissioner

EXECUTIVE SUMMARY

The recent economic turmoil has prompted a renewed focus on advanced manufacturing occupations. Once thought of as labor-intensive, monotonous, and dangerous, manufacturing has grown into an industry now defined by advanced technology, innovation, and product design and development—all requiring a highly skilled workforce. The evolution of this industry has resulted in a unique set of challenges that employers are now facing in an effort to build and maintain a capable and competitive employee base. A comprehensive workforce strategy that builds and sustains a highly skilled pool of workers is necessary to overcome these challenges. The Maine Manufacturing Industry Council for Excellence is dedicated to creating a robust and skilled workforce that meets Maine's short- and long-term advanced manufacturing workforce challenges.

The Manufacturers Association of Maine (MAMe), who will lead and coordinate the Industry Partnerships, in collaboration with local and state entities, has been building the foundation for the Maine Industry Partnership/Sector Strategy.

In May 2011, MAMe hosted a statewide Manufacturing Summit in Owls Head, Maine. The purpose of the summit was as follows:

- bring manufacturing sectors together to network
- focus their resources
- share best practices from other industries
- identify issues and challenges (both by specific sectors as well as the manufacturing sector as a whole)
- report annually on issues, challenges, and solutions.

The manufacturing summit report that will be presented to the Governor will provide guidelines for policy development, resources for Industry Partnership/Sector Strategy development, and the recommendation that all manufacturing sectors network as one industry voice.

This report consists of the tools and strategies for developing this comprehensive approach and provides a synthesis of the two workforce strategies. The report outlines the separate but related activities and demonstrates how the independent initiatives influence one another. Data collected in this proposal comes from quarterly and annual CWIR reports, the MAMe Manufacturing Data System, and other resources.

In an effort to build and retain a skilled workforce and increase the available labor pool, the Industry Partnerships will address workforce priorities, such as pipeline and career ladder development. By collaborating on best practices and addressing some of the industry's most fundamental training and skill development needs, Maine's Industry Partnerships will create a unified and comprehensive effort. It is our goal for the tools, resources, human-capacity building, and organizational structures emerging from the activities of the Maine's Industry Partnerships to be viewed by other Maine industries as best practice in sector strategy initiatives.

Future opportunities for ongoing collaboration between the Maine Industry Partnerships and the workforce development and education system are endless. However, any efforts must be approached in a long-term, comprehensive way with attention to a structure that can identify and act on the common interests of a large and varied set of stakeholders.

It is against this background of optimism creating Industry Partnerships that this proposal is being developed. It will build on the successful model of Pennsylvania's Industry Partnerships and will be part of a long-term commitment to disseminate best practices and relevant information with a strong practical focus.

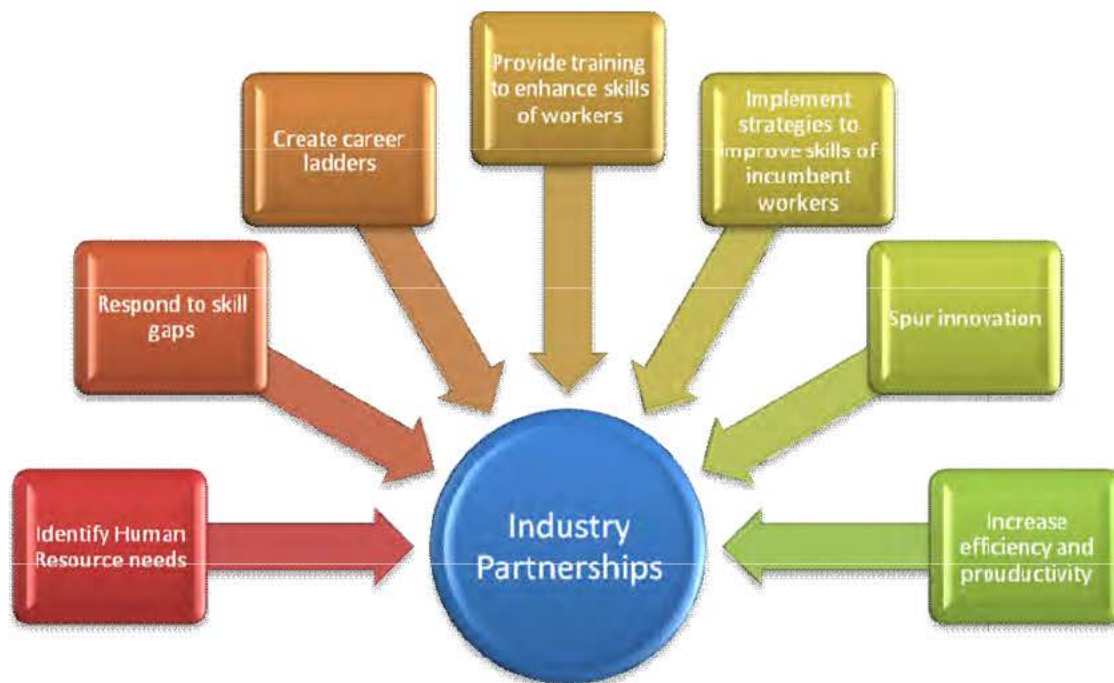
This proposal contains a comprehensive and current advanced manufacturing industry analysis, an outline of the Industry Partnership program within Maine, a list of model Industry Partnership fast facts and high-priority occupations, an explanation of the interconnected relationship, and best practices from three model Industry Partnerships.

STRATEGIC INDUSTRY PARTNERSHIP TOOLKIT

Today, the Manufacturers Association of Maine, Maine Department of Labor, business leaders, and education institutes will release their Strategic Industry Partnership Toolkit to be used as a roadmap for new and emerging partnerships across Maine. This report outlines several critical components of successful IPs and provides strategies for implementing these components into the partnership's structure.

Each of these components is essential to the effectiveness of a partnership, and each must be established with the input and direction of employer representatives. In keeping with the association and Department of Labor's goal of making all IP initiatives both data- and industry-driven, ensuring that employers are actively engaged in all aspects of the partnership development process is crucial.

The graphic below demonstrates several of the key elements that have been shown to determine effectiveness and success among high-performing Industry Partnerships.



Industry Partnerships are critical to the competitiveness and productivity of Maine's work force because they account for the needs of employers, the needs of training and educational providers, and the needs of Maine's overall workforce. By creating a system that focuses not only on moving incumbent workers up career pathways, but also training dislocated and unemployed workers to fill lower-level positions, we are enabling companies to remain solvent even in tough economic times.

As a successful example of Industry Partnerships, Pennsylvania has provided the Manufacturers Association of Maine and the Maine Department of Labor assistance in developing the structure, facts, and key areas needed for success. Fast Facts about Pennsylvania's Advanced Manufacturing Industry Partnership follow:



In 2011, the Pennsylvania General Assembly voted to institutionalize the Industry Partnership model within the state's workforce development infrastructure. This decision demonstrates the state's confidence in the model's ability to serve the needs of businesses, workers, state systems, and the economy of Pennsylvania.

INDUSTRY PARTNERSHIPS IN MAINE

Realizing the Problem

Traditionally, as with many other states, Maine's workforce development system has focused on the dislocated workers (those without jobs) who comprised roughly 7% of the population. The majority of state and federal funds were used to support the unemployed population with employment services. Therefore, the incumbent workforce, which encompasses about 93% of the population, was largely neglected or ignored.

Recognizing the inefficiency of this approach, Pennsylvania workforce development professionals spent two years working with employers and legislators to create an employer-driven workforce development strategy that focuses on the incumbent workforce. This work revealed a significant gap between the skills training offered at educational institutions and the actual needs of industry. The education community was not meeting employers' specific training needs because

employers were not given a vehicle to adequately communicate those needs. It was clear that a partnership among educational institutions, workforce development agencies, and businesses was necessary in order to not only keep workers employed but also provide them the opportunity to advance within their occupations while keeping businesses competitive. The approach to workforce development shifted from a more temporary needs focus to an economic-development strategy, based on and listening to business needs.

Building the Foundation—Identifying High-Priority Occupations Within Targeted Industry Clusters

The new workforce development strategy must be built on the knowledge that companies with similar products and markets become more globally competitive when they share a regional concentration of skilled labor, innovative technology, and complementary supply chains. As workforce agencies, employers, and unions recognize the application of this insight to economic development, they will understand its relevance to developing human capital. In addition, they will understand how organized consortia of related employers will be in a position to identify skill gaps and invest resources to strengthen the industries in regions with a competitive advantage. And, they will begin to share intelligence on industry trends, barriers to employment expansion, and the evolving competencies required of workers.

In order to determine where to focus resources, it is first necessary to identify Maine industries with competitive potential. The Maine Department of Labor, Center for Workforce Research and Information (CWRI) will help MAME determine criteria for selecting targeted industries: those that create jobs paying family-sustaining wages and offer opportunities for employment expansion, career ladders, and prospective openings due to significant retirements. The resulting list of industry clusters and sub-clusters will become the foundation on which the new workforce development strategy is built.

Maine must invest its resources in training for occupations that increase the competitiveness of these targeted industry clusters. The CWRI will develop a list of high-priority occupations critical to these clusters and establish criteria that all jobs are required to meet: demanded by employers, have higher skill needs, and are most likely to provide family-sustaining wages. This list of high-priority occupations will become the framework for guiding career awareness and investments to universities, community colleges, and technical schools.

Creating the Capacity for Partnerships

At the core of the new workforce development strategy is the recognition that Maine needs a better understanding of the key industries that support its economy. Once identified, the workforce system needs a more thorough understanding of the human capital challenges, technological trends, and global competition facing Maine's employers. Developing this industry-focused approach requires that significant resources be devoted to organizing employers in critical industries and providing the skills training necessary to bring their workforce up to competitive standards. These partnerships will then become the cornerstone of a new, demand-driven system that will provide information and intelligence to workforce, education, and economic development agencies.

Bringing together employers in similar industries to create a joint plan of action will be challenging. Reliable data, staffing availability, and knowledgeable salesmanship are required. Outreach to employers to gain a thorough understanding of their industry and a clear identification of the skills gaps is also necessary. Maine's partnership teams recognize the need for funding to facilitate both the logistical and training delivery components.

A number of critical factors will drive this strategy:

- Employers, with some guidance from industry experts, will identify their common needs and work together to address those needs.
- Employers will collaboratively develop and support a strategy to address industry's needs based on reliable data and information.
- Prior to requesting training dollars, employers would need to complete a careful needs assessment of what skill areas are critical to their success. This is done through the various industry associations, MAMe and the Maine Department of Labor.
- Guidelines for obtaining these funds require the involvement of designated partners and emphasize the over-arching importance of employers being able to choose their own training providers.

Developing Industry Partnerships

Industry Partnerships begin with funds allocated by the Office of the Governor and the Maine Department of Labor, as well as other sources, with matching funds provided by the employers. Once funds are allocated, the Department of Labor can draft guidelines for requesting Industry Partnerships and worker training grants.

Draft proposals submitted to the Department of Labor are reviewed as part of a competitive bidding process. Funding is awarded based on specific criteria and availability of funds. Industry Partnership member companies provide both in-kind and matching contributions, which are then leveraged with the state contribution and invested back into the partnership and training programs. As the partnership shows success, more businesses will become members, increasing the partnership's capacity and eventually making it self-sustaining.

Beneficiaries of Industry Partnerships include job seekers, employers, incumbent workers, upper-level management, schools, training providers, students, and others. The Industry Partnership concept creates a much more targeted approach to worker education and training than the previous system. Industry Partnership shifts the focus to advanced and innovative training for both the employer and the employee, instead of just one or the other.

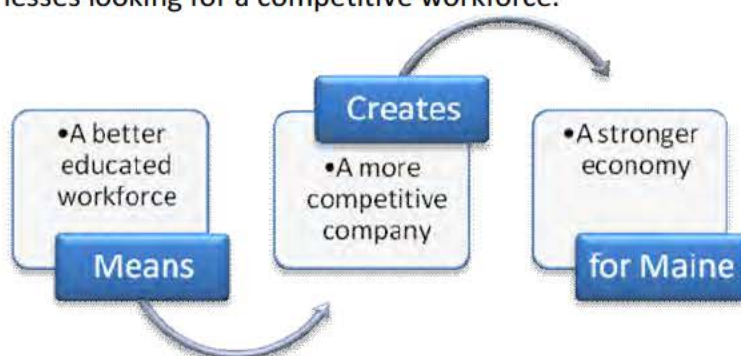
Gauging Success

Industry leadership will be central to Maine's new workforce system, with recognition that businesses, not government agencies or policymakers, can best identify and address the needs and gaps in the workforce. The key is that all parties—education, economic development, business, labor, state, and local workforce agents – come to the table to discuss these issues together, but the discussion is driven by industry needs. As a result, all entities benefit.

Businesses will play an active role in shaping workforce policy and improving the local economy; labor will help determine how workers move up the ranks from entry-level to management positions; and education and economic development groups will have more clearly defined roles and be better in tune with the real-time needs of the community and industry.

Industry Partnerships are designed not only to identify human resource needs and skill gaps, but also to address them by implementing strategies and training to improve incumbent worker skills and to provide career ladders that spur innovation and increased efficiency and productivity. In addition, Industry Partnerships and workforce investment boards work closely with schools, youth councils, community colleges, and technical schools to help students focus on the in-demand, high-skill jobs of today's global economy.

The collaboration between workforce development and economic development agencies at both the state and local levels will have created a skill-ready environment in Maine that will attract employers and businesses looking for a competitive workforce.



Through Industry Partnerships, businesses will fully understand that a better-educated workforce means a more competitive company; more competitive companies create a stronger economy.

An Industry Partnership is a shared venture among government, industry, and the community. All participants are equal investors with a shared goal. The Industry Partnership concept is not just about worker training; it is about constantly evaluating labor-market data and information to stay competitive on the local, state, national, and global levels.

Forty-five percent of companies in Industry Partnerships in Pennsylvania did not have organized training programs prior to joining a partnership. Today, those same companies now participate in training programs that have improved the efficiency, skill levels, and productivity of their employees. Because of these dynamic results, labor and management continue to work together in the shared interest of moving the company, the industry, and the region forward competitively.

The Industry Partnership program has enormous potential for implementation on a much larger scale. We anticipate that in just two years, Maine could grow its program to include active Industry Partnerships, to include more than 250 companies as members and 30,000 employees trained, potentially adding 2,000 new jobs for Maine companies. As more companies continue to see success, these programs will undoubtedly continue to be implemented, regionally as well as statewide. We expect that this Industry Partnership program will serve as a state sector strategy model for replication with other industry sectors.

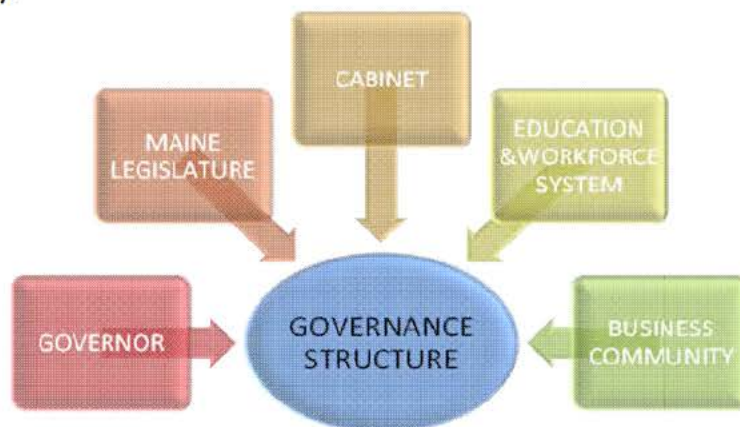
IMPLEMENTATION STRATEGY

This section provides a recommendation for the Governance Structure of Maine's Workforce Investment Board and Maine's Industry Partnership Initiative (MIPI) Model. It explores the relationship between the policy work of the State Workforce Investment Board (SWIB) and the implementation work of Maine Manufacturing Industry Council for Excellence.

The following is a recommendation to the Office of the Governor, regarding the Maine Jobs Council that is inclusive of the Maine Industry Partnership model. To assure success in both the governance structure and the outcomes for the businesses and workers in the State of Maine, we believe this newly developed system has the potential to bring Maine's workforce and economic development goals to actuality.

The MIPI system cuts across all segments of businesses and is organized so each Industry Partnership can determine what training and education are necessary for success.

The structure and building of this system requires a governance structure that is supported by the Governor, the Maine legislature, the Cabinet, the Education and Workforce System, and the Business Community.



GOVERNOR

In order for the statewide Industry Partnerships Initiative to succeed, the Governor's Office must be committed to assuring its success. Through public appearances, direction to cabinet, funding/resources, and policies, the Governor should be the Champion of the Maine Industry Partnership Initiative (MIPI).

SWIB

SWIB (State Workforce Investment Board) is a business led advisory group that serves as the convener and facilitator of the MIPI. Members of the SWIB include the Governor, representatives of the Administration, representatives from the University and Community

College systems, and business representatives and members from the Industry Councils. The SWIB reviews and approves recommended strategies and activities of the ICs.

ICs

ICs (Industry Councils) are business led stakeholders groups that develop strategies and policies for training their industries' workforce and make recommendations to the SWIB. ICs are supported with Workforce System funding and are provided technical assistance from state agency staff (DOL, DECD, DOE). Each IC has sub committees that focus on needed occupational skills and sector specific issues (such as licensing and data collection for Health Care).

Targeted industry sectors are identified on a cyclical basis using an established process of data review and analysis by the Center for Workforce Research and Information (CWRI) in consultation with Industry Representatives.

At the core of a new workforce development strategy, Mainers need a better understanding of the key industries that support their economy. Once identified, the workforce system needs a more thorough understanding of the human capital challenges, technological trends, and global competition facing the state's employers.

Developing this industry-focused approach requires that significant resources be devoted to organizing employers in critical industries and providing the skills training necessary to bring their workforce up to competitive standards. These partnerships would become the cornerstone of a new, demand-driven system that would provide information and intelligence to workforce, education, and economic development agencies.

Bringing together employers in similar industries to create a joint plan of action could prove challenging. Reliable data, staffing availability, and knowledgeable salesmanship are required. Outreach to gain a thorough understanding of the industry and a clear identification of the skill gaps is also necessary. Maine's workforce team recognizes the need for funding to facilitate both the logistical and training delivery component.

A number of critical factors will drive this strategy:

- Employers, with some guidance from industry experts, would identify their common needs and work together to address those needs.
- In order to address industry's needs, employers would collaboratively develop and support a strategy based on reliable data and information.
- Prior to requesting training dollars, employers would need to complete a careful needs assessment of what skill areas are critical to their success.
- Given that training will provide workers with skills and credentials that are transferable to other employers in the sector, workers will support this initiative.

PLANNED COMMITTEE STRUCTURE

The MMICE is in structural and strategic planning development stages.

The State Workforce Investment Board (SWIB) will form committees to work on its priorities. Committee members from the State Workforce Investment Board (SWIB) will be recruited to lead the work of industry committees.



Specific Skills Pipeline Committee

The Specific Skills Pipeline Committee is charged with identifying existing training programs (community colleges, private schools, career and technical education programs, etc.) with proven track records in training, retraining, and placement into high-priority manufacturing occupations that serve the geographic regions with immediate needs. (The occupations that result from the statewide needs assessment.) The committee will complete the following:

- Investigate pre apprenticeships, apprenticeships, internships, and other earn-and-learn pathways in manufacturing. This will include connections to industry-recognized credentials and articulation for college credit at two-year and four-year institutions.
- Evaluate existing education/training program capacity by region.
- Identify and promote successful regional strategies for recruiting and reclaiming adults with no degree or industry-recognized credential and placing them in rigorous training programs for technical occupations in manufacturing.
- Formulate long- and short-term goals to address the pipeline issue, working with both student and adult learners.

Image/Marketing Committee



The Image/Marketing Committee and Manufacturing Roundtable will develop and implement a joint strategy with regional manufacturing industry partners and the Manufacturers Association to educate Maine regarding the importance of advanced manufacturing to the state's economic health and the specific career opportunities that exist in this sector. The committee will complete the following:

- Create a Strategic Marketing Plan: Branding the State of Maine as a destination for manufacturing companies and manufacturing talent.

- Develop an economic impact study for the manufacturing sector for cost of not having a skilled workforce and pipeline of skilled workers.
- Promote Career and Technical Education (CTE) programs as cost-effective paths to college and high-paying technical career opportunities in manufacturing.
- Assist CTE centers in becoming schools of choice for academically well-prepared students and to fill open seats in programs leading to advanced skills in manufacturing.
- Formulate long- and short-term goals to address the image issue by working with the general public, students and adult learners, school administrators, guidance counselors, the manufacturing sector, appropriate state agencies, the Governor's office, and the media.

The cooperation and collaboration of the Maine Manufacturing Industry Council for Excellence (MMICE) and the State Workforce Investment Board (SWIB) Industry Partnerships is critical. While the work of the MMICE and the Industry Partnerships will be conducted, for the most part, independently, endeavors will require orchestrating policy initiatives through continuous feedback and information flow between the two entities. This will be best achieved by building on existing relationships and committing to continuous communication across the two workforce strategies.

Recently, much emphasis has been placed on strengthening the connection of regional Industry Partnerships with the policy developments of the MMICE. Partnership employers and coordinators are encouraged to stay updated on the outcomes of MMICE meetings and events. By sharing thoughts and ideas on statewide and local levels, leadership council and partnership members are able to gain better insight into how policy is formed and implemented as well as the rationale behind said policies.

Understanding barriers at the state and local levels enable these two entities to work together to formulate effective strategies that address a broad range of workforce issues and concerns. The regional challenges identified by MMICE Industry Partnerships directly affect the labor market data that drives policy at a statewide level. It is critical that Industry Partnerships are given the opportunity to share what they are experiencing locally with the MMICE so that all policy decisions are backed by input from the industry.

Throughout the recent economic turmoil, a partnership's ability to obtain and leverage additional resources beyond allocated state funding is extremely important. The State Workforce Investment Board (SWIB) is a valuable resource for identifying possible funding streams and grant opportunities that become available throughout Maine and nationally. The MMICE functions as a vehicle for the dissemination of data, information, and resources for the partnerships. The MMICE relies on the partnerships to drive statewide policy initiatives in their local regions.

Open communication and sharing of information and data is critical to the success of manufacturing workforce initiatives in Maine. Without the willingness to share resources, combine efforts, and learn from one another, the workforce development system becomes fragmented, and effective policy implementation is extremely challenging. Through the continuous efforts of Industry Partnership and MMICE members, this intricate relationship will

grow stronger, and the MMICE will become Maine's leader in state-sector strategies that address workforce issues.

INTRODUCTION

Maine's manufacturing companies contribute an annual economic output of \$5.5 billion to the state's economy, which accounts for approximately 10% of the gross state product. Maine's manufacturing sector drives our economy, with 1,804 establishments employing more than 52,100 (2010 MDOL data) individuals in family-sustaining jobs. Innovations in manufacturing are broad and long-standing, as evidenced in the number and variety of American products invented and manufactured in Maine.

Although they are strongly rooted in the past, Maine's manufacturing industries continue to grow to meet the demands of the future. Maine is on the leading edge of growth in aerospace, pharmaceutical, advanced materials, and medical device manufacturing, providing advanced technology processes, new technology, and R&D to increase market share and grow in these technological fields.

Today's manufacturing occupations are clean and modern, utilizing advanced technology, automation, and robots. In order to compete globally and help lead the country out of its economic downturn, manufacturing utilizes excellent process-improvement strategies and employs a highly skilled, highly motivated workforce. The manufacturing sector offers lifetime career opportunities appealing to a wide variety of worker interests, from improving the layout and efficiency of a company through industrial engineering to designing custom tools that enable a company to produce its product through a career as a tool and die maker.

During the past 10 years, much of the manufacturing growth in Maine was fueled by process and productivity improvement, often coupled with the introduction of new technologies. As a result, employers did not always need more workers to meet increasing demand, but they did require an increasingly more skilled workforce. Often low-skill production jobs either moved offshore or were replaced through automation. Newly installed capital equipment required more capable operators and skilled technicians to maintain the equipment. The Maine Manufacturing Industry Council for Excellence through the Industry Partnership/Sector Strategy is ideally positioned to respond to the evolving needs of manufacturing employers and workers.

However, this vibrant, growing sector of Maine's economy is not without its challenges. As Maine's economic recovery accelerates, our manufacturing sector will be challenged by 1) higher skill requirements, 2) an aging workforce, and 3) the lack of an effective talent pipeline. Maine's manufacturers must have access to a deeper pool of skilled and adaptable workers to respond to the competitive demands of a rapidly evolving global economy. In addition, Maine workers will need the opportunity to advance their skills.

Believing that a nationwide search for Best Practices was necessary, MAMe identified the Industry Partnership structure that is now well-established in Pennsylvania as an ideal model for Maine to emulate. MAMe staff and industry volunteers have spent many hours interviewing employers and

Industry Partnership staff from Pennsylvania and, with very little change to a successful effort, intend to base the Maine Industry Partnership approach on their model.

THE PROPOSAL

The Manufacturers Association of Maine, in partnership with businesses and state entities, proposes to establish the Maine Manufacturing Industry Council for Excellence ("the Council") to develop short and long-term strategies aimed at increasing the skilled workforce pipeline and growing manufacturing jobs in Maine. This Council will be direct link to the State Workforce investment Board.



As Maine's economic recovery accelerates, our manufacturing sector will continue to be challenged by a demand for advanced skill attainment, an aging workforce, and the lack of an effective talent pipeline. Maine's manufacturers must have access to a deeper pool of skilled and adaptable workers in order to respond to the competitive demands of a rapidly evolving global economy. Maine workers, recognizing this new reality, will need opportunities to develop new skills.

Statewide the Council seeks to build on and promote regional best practices through state networks, including industry-led manufacturing Industry Partnerships and the State Workforce Investment Board (SWIB).

Responding to the complex challenges and growth opportunities mentioned earlier in this report, the Council will serve as the clearinghouse for information regarding manufacturing career opportunities in Maine. It will address the long- and short-term needs of both industry and the workforce. In coordination with Maine's educational institutions, it will seek to spark the interest of today's students in the manufacturing careers of tomorrow and promote the training and education required for both students and incumbent workers to reach their employment goals.

INDUSTRY PARTNERSHIPS' CONNECTION TO MAINE

Overall, the success of Maine's workforce development system is heavily dependent upon Industry Partnerships' ability to build a collaborative relationship with the state's workforce development system offices in our regions. The Maine Manufacturing Industry Council for Excellence (MMICE) can build a strong connection to the state workforce development system which seeks to assist unemployed and dislocated workers in attaining suitable positions, retooling to advance along career ladders, receiving remedial training and/or earning work readiness credentials.

Partnership Overview

Strategically, the Maine Manufacturing Industry Council for Excellence will help manufacturers in Maine stay competitive in the global marketplace by having a workforce that is technologically competent. It will offer strategic assistance to employers and workers with a long-term goal that depends on strong governance and flexibility with regard to sustainable support. It will include small, medium, and large companies from the entire state and look to the manufacturing supply and distribution chains as it plans for programming.

From the standpoint of structure, the center is actually a collaboration of Industry Partnerships, each with its own steering committee but with a shared program manager. This structure allows us to share staff, find common programming themes, and account for the special training needs of the specific industries while keeping costs down. Research support is provided by the Maine Department of Labor.

MAINE MANUFACTURING INDUSTRY COUNCIL FOR EXCELLENCE

We expect this newly created council to drive and guide our implementation of the Industry Partnership/Sector Strategy we are proposing for Maine.

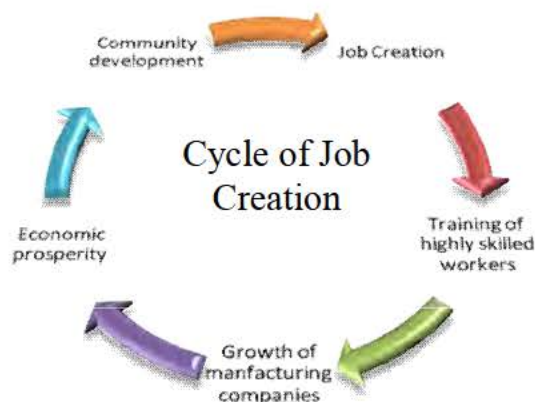
Mission

The Maine Manufacturing Industry Council for Excellence is data and industry-driven and is directed to improve the competitiveness of manufacturing in the global marketplace and support economic development activity in our region. We do this by focusing on four key programmatic areas:



Vision

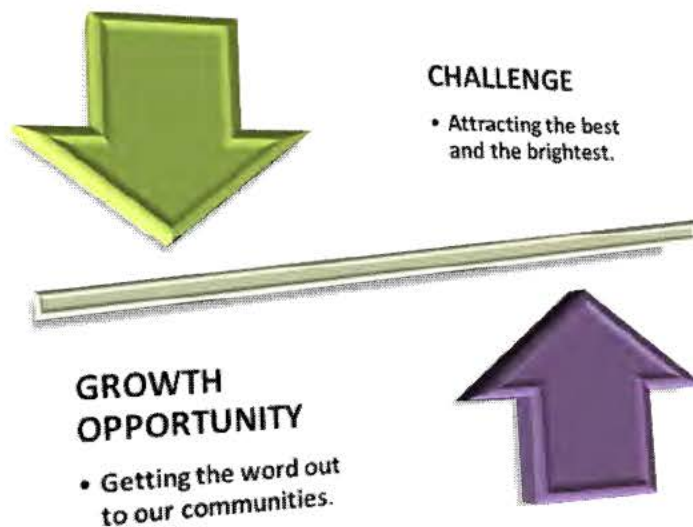
The Maine Manufacturing Industry Council for Excellence provides the framework and structure for regional manufacturers to collaborate with one another and for key partners to support its mission. It acts strategically and tactically to encourage the advancement of workers, the sharing of knowledge and best practices, and the fostering of innovation. Its work positively affects the cycle of job creation, the training of highly skilled workers, the growth of manufacturing companies, economic prosperity and community development.



With the dramatic growth of automation and technology in the sector, manufacturing needs fewer unskilled laborers and many more individuals with higher skills. Many of these occupations have been identified on the high-priority occupations list that has been developed jointly by Maine DOL. Employers want to see prospects with a basic level of foundation skills (literacy, numeracy, and information technology), work skills (attendance, teamwork, and preparation for unexpected events), and hard skills (ranging from engineering, machining, technical, and welding to customer service).

CHALLENGES AND GROWTH OPPORTUNITIES

Challenges and growth opportunities are inexorably intertwined. Each time a challenge is addressed, we (the manufacturing sector) provide ourselves with an opportunity for growth. The following explains how meeting these challenges will affect the growth of the manufacturing sector and, subsequently, Maine's economic health.



CHALLENGE #1 **Attracting the Best and the Brightest**

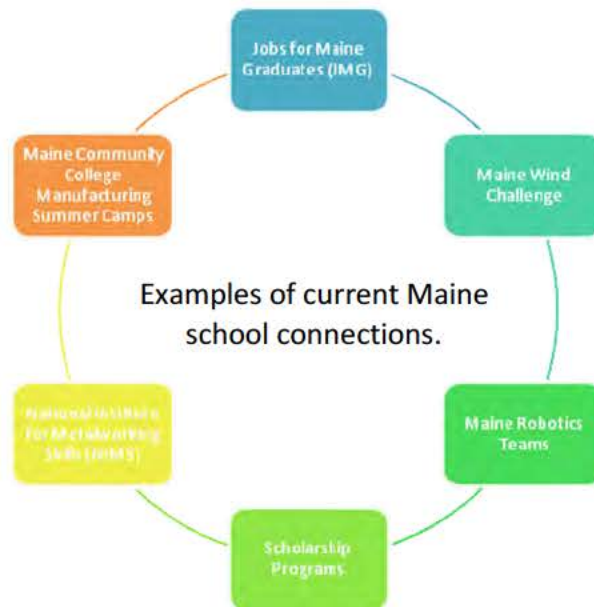
Today's manufacturing jobs are fast-paced and varied. They require workers to have

- excellent people skills (because employees will often work on a team with co-workers)
- critical thinking skills
- the ability to think on their feet and to troubleshoot underperforming areas and equipment
- the ability to convey ideas and work processes to others
- the ability to create new processes for improved efficiency
- a strong desire to learn new methods and new machinery.

Seventy-one percent of Americans feel that developing a strong manufacturing base should be a national priority, yet 61% of Americans feel that our public school system does not encourage

young people to pursue careers in manufacturing.¹ As a result, most high school graduates may not be aware of the many excellent career opportunities available to them in manufacturing, particularly if they are well-prepared in math and science. Manufacturing is driven by innovation—accounting for nearly 80% of all patents filed in the U.S. and nearly 75% of the nation’s industrial research and development.² Manufacturing companies employ technicians, machinists, programmers, purchasing agents, sales and marketing personnel, research and development personnel, and various other highly skilled individuals.

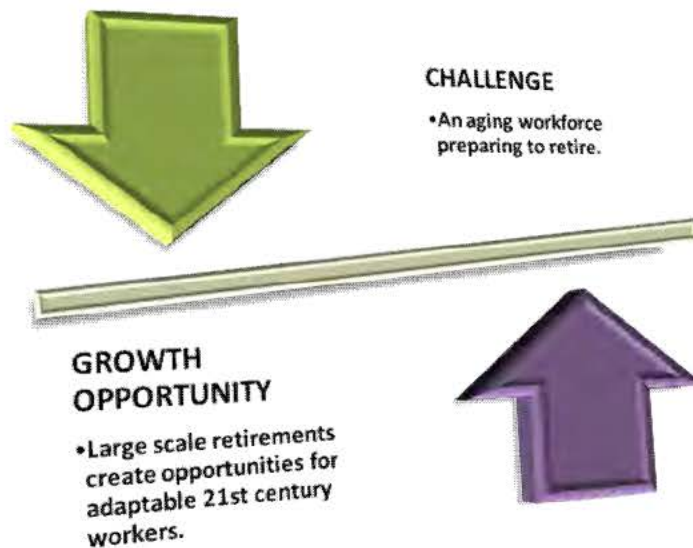
GROWTH OPPORTUNITY #1 Getting the Word Out to Our Communities



Maine’s industry and government priorities must be to promote the manufacturing sector as a high growth, highly skilled, high wage industry with infinite career opportunities. Maine’s education system (teachers, guidance counselors, and parents) must be informed of the career opportunities for all students. Influencing our youth to seek these opportunities will be a major challenge, but through data, programs, and marketing the sector through associations to educate youth on reaching their potential in this field. The Manufacturers Association of Maine will roll out a statewide marketing plan that focuses on key areas of education and reaching out to the state’s media sector and education system, parents, and students. This 18-24 month plan will concentrate on dual outcomes: 1) reaching the public to inform of the demand and career opportunities in manufacturing, and 2) outreach to the education system with data that supports and assists in steering students to careers in manufacturing.

¹ Public ViewPoint on Manufacturing, June 9, 2009, Deloitte.

² Growing a Manufacturing Economy for the 21st Century, March 31, 2010, United Steel Workers and the Alliance for American Manufacturing.



CHALLENGE #2

An Aging Workforce Preparing to Retire

Data from Maine Department of Labor, Center for Workforce Information & Research (CWIR), and Local Employment Dynamics (LED) indicates that the manufacturing workforce in Maine is older than average. For example, fabricated metals, in comparison to all other industries in Maine, reports that the number of workers aged 35 to 64 is about 9% older in age overall. As workers aged 55 to 64 retire within the next few years, industry will face an additional shortage of skilled workers in the advanced technology, high wage manufacturing sector at a time when we are already experiencing a major shortage of skilled workers.³

In Maine, 78.5% of all the people age 45-54 are employed. For those ages 55-64, 65% are employed. As people reach retirement age, there is a drastic decline in employment numbers. For example, for ages 65-74, only 24.2% of people are employed and 4.6% of people over the age of 75 are employed.⁴

³ March 18, 2010, MDOL, CWIR-Maine Manufacturing Report to MAMe.

⁴ U.S. Census Bureau. "S2301: Employment Status Data Set – 2008." *American Community Service*. 2008. 9 June 2010.

⁵ Perrin, Towers. "The Business Case for Workers Age 50+: Planning for Tomorrow's Needs in Today's Competitive Environment." *AARP*. 2005. 5 June 2010.

However, data strongly suggests that we will begin to see a downward shift in the numbers of retirees. Sixty-nine percent of individuals between the ages of 45 and 74, who are either working or are looking for work, plan to work in some capacity during “retirement”.⁵

The looming problem of large-scale retirements has been further complicated by the economic uncertainty resulting from the recent steep economic downturn. Many experienced workers postponed their retirement plans, creating a logjam that might break loose just as manufacturing demands show signs of sustained recovery. Large numbers of workers retiring over a short period of time will create a tremendous strain on the distribution of work within an organization. When one person retires, a company can usually shift a worker’s responsibilities to a few other employees until such time as the vacancy can be filled. However, when 10% of the workforce retires at once, the company must dramatically shift its workflow in order to remain productive. This shift will require an adaptable and flexible workforce to maintain productivity while the company reevaluates the duties associated with the newly opened positions and begins the lengthy process of finding, hiring, and training replacements.

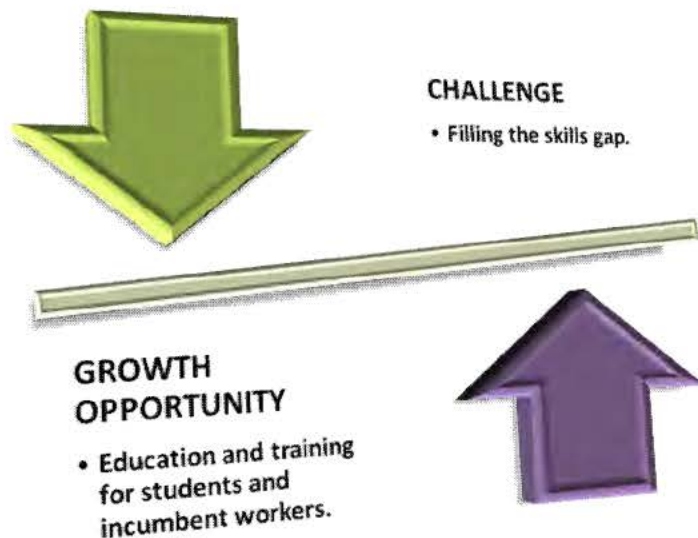
GROWTH OPPORTUNITY #2

Large-Scale Retirements Create Opportunities for Adaptable 21st Century Workers

Younger workers already employed in manufacturing will experience an increased opportunity to advance in their field, provided that they have the training and the skills required to help the company meet customer requirements. Additionally, high school, trade school, and college students will have a wealth of opportunity to find a career in manufacturing that will suit their abilities and career goals.

Through the Industry Partnership model described in this proposal, MAMe and other state and private sector organizations will customize training based on the assessment of the training needs of companies and consortiums. In fact, we have already started, although in a limited fashion. MAMe is an exemplary example of cluster/consortium development. MAMe currently is administering the aerospace alliance, medical device manufacturing and high performance textile clusters, RF/Electronic/Wireless Communications consortium and the Alternative Energy Initiative. Each sector has been or is currently undergoing an industry assessment and consortium development on education and workforce development assessment. MAMe is positioned as the entity to provide data and demand to these sectors to align need with actual data. This approach provides a solution **to** the problem, not a solution before we understand the problem.

As one example of currently ongoing training, MAMe’s Business Growth Services (BGS) hosts APICS (Advancing Productivity, Innovation, and Success) Supply Chain Management training. This training enables the participants to learn more about the cross-functional and inter-organizational processes of a successful supply chain. Individuals who have participated in this training become more valuable resources to their respective companies, as they will be better prepared than their counterparts to tackle the organizational challenges facing the industry.



CHALLENGE #3

Filling the Skills Gap

In the top 10 list of jobs that U.S. employers worldwide are having difficulty filling, technicians rank number one, followed by skilled trades at number four, and production operators at number five. Those hard to fill jobs include CNC Machinists, Swiss Machinists, Maintenance Mechanics, Electricians, Field Service Technicians, Engineers, PLC Technicians, Certified Forklift Drivers, Production Supervisors, and Executive Managers.⁶

Basic skills common to these jobs include applied math, communications, and knowledge of computers. Intermediate skills include the knowledge of quality systems, process improvement principles, statistical measurement, blueprint reading, and basic preventative maintenance. Employers also cite a lack of soft skills, such as communications, teamwork, and problem solving.

Unfortunately, the United States lags in both math and science skills when compared to students in economies, such as those in Germany, Japan, and the United Kingdom, and even in developing economies, such as those in Hungary and Poland.

GROWTH OPPORTUNITY #3

Education and Training for Students and Incumbent Workers

Education and Training for Students

A student may begin his or her career during high school through a vocational/technical internship. Upon graduation, the student then has the opportunity to work in his or her chosen field while pursuing an associate's degree at a community college. Because the student is employed, he or she can still earn an income while learning new skills. An existing articulation agreement between the Maine Community College System and the University of Maine stipulates

that the associate's degree can serve as the basis for a bachelor's degree without repeating courses. This path of combining high school technical education, subsequent pursuit of an associate's degree, and, ultimately, a bachelor's degree, often known as a 2+2+2 strategy, is well suited to pursuing a high-paying technical career.

Education and Training for Incumbent Workers

The Maine Manufacturing Industry Council for Excellence will actively address the need to improve the skills and education of manufacturing workers. The Center of Excellence will take a creative approach to promoting advanced skills aimed at building innovative practices to support member company growth through the Industry Partnership Initiative.

The Maine Manufacturing Industry Council for Excellence, within the Manufacturers Association of Maine, will complete a regional Gap Analysis/Needs Assessment Study for the diversified manufacturing base within its region. The study will specifically address occupational needs and skill gaps on a regional basis and explore the training required to fill those gaps. As a result, the Industry Partnership Initiative will be able to provide the appropriate training for advanced level and industry-specific skills attainment, especially in the areas of new technology identified by the industry.

The analysis will identify an array of training, education, certification, and consortium needs. The existing ongoing cluster activities will also follow the partnership model, expanding the cluster of companies that are in the process of developing workforce development strategies for their sector.

KEY THEMES

Early outreach efforts, as well as interviews and site visits with manufacturing employers, employers associations, and to a lesser extent, economic and workforce development professionals, result in expressed concerns regarding the quantity and quality of workers interested in and available for manufacturing employment in Maine. These concerns are classified under two key themes:

1. An insufficient pipeline exists to fill current openings for skilled manufacturing technicians and to replace skilled incumbents who will soon retire.
2. Manufacturing production workers (both employed and unemployed) are often not prepared to adapt to the changes of an evolving manufacturing environment.

These key themes serve as a launching pad for prioritizing and developing the MMICE's initial goals and objectives.

CRITICAL NEEDS ASSESSMENT

In conjunction with regional industry, the MMICE will complete a statewide needs assessment of key technical manufacturing occupations with known supply shortages to ensure that we are providing training that will meet these needs. Additionally, the assessment will provide such information on a regional, as well as a statewide basis. Initial assessments indicate needs in the following occupations. (The final assessment will likely lengthen this list.):

- Engineers
- CNC Machinists
- Machinists
- Planners/buyers
- Mfg Sales
- Fabricators
- Machine Assemblers
- PLC Control Engineers
- Cost Accountants
- Produce Development Engineers
- Supervisors
- ERP Engineers
- Welders
- Industrial maintenance technicians (electrical, mechanical, electronics, and mechatronics)
- Precision machinists (CNC programmers and operators, machinists and tool and die makers)

OCCUPATIONAL GROWTH AREAS

The Need for Skilled Workers

Manufacturing employers throughout Maine report that high-paying jobs are going unfilled as they struggle to find qualified candidates. The occupations most often identified to be in short supply include 1) Machinists, 2) Welders, 3) CAD/CAM/CNC Programmers, 4) Robotics & Programming, and 5) Engineers. Representative annual wages for experienced workers holding these jobs are as follows:

- | | |
|------------------------------------|----------|
| • Machinists | \$56,908 |
| • Welders | \$49,814 |
| • CAD/CAM/CNC Programmers | \$45,900 |
| • Robotics and related Programming | \$90,300 |
| • Manufacturing Engineers | \$62,800 |

All of these positions dramatically exceed the average per capita wage in Maine (\$37,640), and all but CAD programmers exceed the national average (\$47,140).

2011 Data from the Manufacturers Association of Maine confirms that high-skilled manufacturing employment opportunities are available. In November, 2011, the association polled members on current job openings. MAMe sent the request to 165 companies; 40 responded with 230 immediate job openings. Both large and small firms reported opening with an average of six jobs per company. At a rate of \$56,908 average per worker salary, that is a potential \$2,276,320 in wages that could be realized if we could fill the current job openings in Maine.

In-demand occupations require rigorous postsecondary education and training, ranging from a year or more of on-the-job training to an associate's degree. For many of these occupations, training is acquired through an apprenticeship, which may often progress into college credit. Industry-recognized credentials, such as those offered by the National Institute for Metalworking Skills (NIMS), are growing in popularity and often provide a benchmark by which an employer can qualify an individual with prior experience and by which a postsecondary institution can justify the awarding of advanced placement credit.

Because advanced manufacturing companies offer excellent wages, benefits, and growth opportunities, these companies often experience much lower turnover than firms in other industries and, as a result, can be very selective in their hiring activities. Gone forever are the days when employers looked for manufacturing workers with a strong back and the ability to complete repetitive tasks. Today's advanced manufacturing companies are looking for skilled problem-solvers who bring good communications skills, technical preparation, and a focus on health and safety.

National Trends and Initiatives

As we move in, and ultimately out of, our most severe economic downturn in nearly 80 years, many American policymakers are rediscovering the critical role of the manufacturing sector in generating wealth and supporting the economy.

In 2010 the National Association of Manufacturers (NAM) commissioned a report *Manufacturing Resurgence—A Must for U.S. Prosperity* which emphasizes the importance of a robust manufacturing sector to the nation's economy. Findings include the following:

- An increase in manufacturing production creates more economic activity both within and outside the sector than does a similar increase in any other major sector because of manufacturing's high multiplier effect and its extensive linkages to other parts of the economy.
- Incremental growth in the manufacturing sector is likely to increase domestic research and development (R&D) activity by more than a comparative increase in any other major private industrial sector because of the high intensity of innovation in manufacturing.
- R&D, through the innovation process, boosts overall U.S. productivity growth, the source of improvements in our standard of living.

THE FUTURE OF MAINE MANUFACTURING

In addition to the national attention devoted to some of the more pressing issues in manufacturing, Maine remains focused on this valuable sector of our economy. Maine offers a number of accessible programs and resources aimed at protecting and promoting the manufacturing industry.

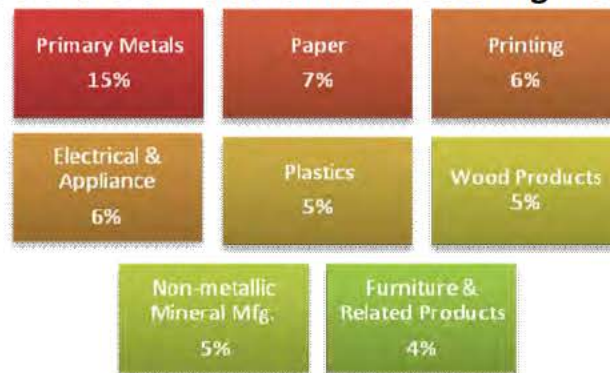
The Manufacturers Association of Maine provides information and referrals to manufacturers in areas, such as financing, education and training, technical assistance, and regulatory issues. The Association is also the primary advocate for manufacturers needing help to navigate programs and regulations when dealing with state agencies.

Industry Partnerships bring together employers, educators, and other interested organizations to provide training, outreach, and marketing for the manufacturing sector.

The Business Services Division of the Manufacturers Association of Maine is comprised of the Business Growth Services (BGS), the Maine Industry Partnership Initiative (MIPI), and the Compliance Plus Program. BGS, which provides a variety of professional consulting services to small- and medium-sized manufacturing firms throughout Maine, is able to provide these services to clients as a fee-based service and a cost buy-down, where resources are available. Common services include financial restructuring, buyouts, succession planning and ownership transition, and operations and cost management.

The diversity of Maine's manufacturing sector also plays a key role in our industrial success. The manufacturing economies of some states are tied to one key industry, such as automotive or aerospace products. When that industry experiences a decline, the effects on the state are devastating. Maine's diverse manufacturing base ensures that we are better able to weather the ups and downs of any one given industry and still retain our strong economy. According to the Manufacturing in Maine 2009 Industry Report, Maine's share of national production for several manufacturing sectors is larger, comparatively, than the nation's share of global production in these same sectors.

Maine's Share of National Manufacturing Production



Maine's prosperity has long been tied to a strong and innovative manufacturing base. As Maine emerges from the current global downturn, it is becoming increasingly evident that we need a strong, advanced manufacturing sector to sustain the recovery and to build long-term, sustainable growth. An ongoing, concrete commitment to investments, education, and assistance for manufacturers will ensure that Maine's manufacturing sector will continue to provide career opportunities for our workers and a strong economic foundation for our communities.

CURRENT INDUSTRY PARTNERSHIPS IN MAINE

This section examines successful Industry Partnerships whose innovative approach to addressing critical partnership components has established them as exceptional advanced manufacturing and health care partnerships in Maine.

Two sectors—manufacturing and health care are moving in parallel to establish and implement the Maine Industry Partnership (MIPI) model. Below are examples of strategies and projects:

Manufacturing

1. Since 2007 the Manufacturers Association of Maine houses the Maine Aerospace Alliance (MEAA). In order to increase market share in the aerospace industry, a cluster of 78 companies has been assessed to determine their certification and training needs. In 2009-2011, MEAA has provided 44 companies with ISO, AS9100, and NADCAP certifications; welding certifications; ITAR registrations; Lean Manufacturing; Project Management; and Operational Performance assessments. We've established Aeronautical/Astronautical courses at UMaine – Orono and are advising on programmatic development at SMCC, PATHS, UM/MET, and other educational institutes. MEAA has developed business contacts with NASA, Boeing Military, Boeing Commercial, L-3 Communications, SAIC, Pratt & Whitney CT, Jet Engineering Corp. and others leading to requests for quotes from Maine aerospace businesses. Working with the Canadian Chamber of Commerce, we invited three members to meet with Airframe manufacturers and primary aerospace suppliers in Quebec Province. We also established and promoted contacts with Ontario Aerospace Alliance to foster business relationships with their members.
2. Supported by USM's Manufacturing Applications Center (MAC), the Manufacturers Association of Maine (MAMe) and the Bioscience Association of Maine (BAM) are collaborating to study the emerging medical device technology cluster in Maine. The goals are to understand the scope and scale of medical device-related activity in Maine and identify the challenges faced by firms currently engaged in medical device technology and experiencing workforce development issues.
3. The Maine High Performance Textile Consortium is emerging as a cluster of traditional and advanced textile companies in Maine. The issues facing this sector are numerous; however, workforce issues are consistently a challenge. This has become a major factor in the binding

growth of this sector. MAMe will be conducting a feasibility study, gap analysis, and overall assessment of this industry in 2011.

4. The RF/wireless communications/electronics industry has been in decline due to overseas competition. In Maine, a small, but technologically advanced group of companies has identified workforce development as a major impediment to growth and prosperity. MAMe is organizing the RF cluster that will take direct action within the education and training system to develop customized and consortium training for this industry.
5. The fabrication and welding companies are experiencing a major shortage of skilled workers. In October, 2011, MAMe convened a group of businesses in the Lewiston/Auburn area and has begun assessing the training needs of this consortium of companies. Using the New England School of Metal Work in Auburn and private trainers, the welding consortium will determine their training needs, and MAMe will organize the training providers, customized to each company, as well as the full consortium.
6. A group of York County manufacturing plants has been working on a machining consortium to determine the availability of a pool of skilled workers and what the consortium can do to recruit and train high level machinists. MAMe and YCCC are working with the consortium to establish recruitment and training needs. Each group has knowledge of what its needs are and has strongly voiced the ability to coordinate the consortiums. MAMe is requesting funds to lead the coordination of the Maine Manufacturing Industry Partnerships.

Health Care

1. The Maine Health Workforce Forum was established in 2005 by the Maine Legislature to address Maine's current and projected workforce needs due to shortages of health care professionals, such as dentists, mental health providers, nurses, pharmacists, primary care doctors, and home care workers. Workforce planning is essential to ensure a sufficient supply of qualified professionals to meet health care, long-term care, and public health needs. The Maine Health Workforce Forum is an independent, public/private, employer-led consortium of stakeholders, including employers, health professional and trade associations, licensing boards, adult education programs, public and private universities, organized labor, private foundations, consumer groups, community colleges, and state agencies. Key recommendations for addressing Maine's health workforce needs include coordination of leadership to implement effective workforce strategies, collect, analyze, and report data needed to inform health workforce planning. This will result in
 - effective solutions, both short and long-range
 - alignment of resource with demand
 - coordination of resources from multiple sources, including state agencies and private resources
 - elimination of duplication of effort
 - promotion of employment strategies that will help address immediate and future workforce needs

MAMe MANUFACTURING SUMMIT OUTCOMES

This section describes the most recent manufacturing summit outcomes for five manufacturing sectors. Overall, the manufacturing sector strongly voiced its belief that workforce training and education is the greatest need in maintaining and growing this industry.

METALS AND METAL FABRICATION

The number one issue for this sector is the availability of skilled labor. Since the early 1960s through today, this sector has been challenged in finding skilled workers. Contributing factors include a lack of young people entering secondary and post-secondary programs, more technology in shops requiring advanced skills, training programs not able to keep up (financially) with new technology, and the overall perception that manufacturing is a dying industry, keeping parents and students from considering this sector as a viable career. The top job openings include 1) Machinists, 2) Welders, 3) CAD/CAM/CNC Programmers, 4) Robotics & Programming, and 5) Engineers.

The industry identified the challenges associated with the lack of skilled workers in this sector.



BIOSCIENCE

The top issues identified in the bioscience sector are training and workforce. Education topped the list for concerns—a need to increase higher education program offerings and improve graduation rates among students in the bioscience field. They noted a lack of collaboration between the sector and the government and feel that collaboration would create a dialogue between academia and industry as well as address funding distribution issues. The sector also

suggested that the association could assist in these efforts by bridging the gap between educational institutions and the sector through the Industry Partnership Initiative.

PLASTICS/COMPOSITES AND BIOPLASTICS

The bioplastics, composites, and plastics sectors all identified training and workforce issues as their top concerns. These sectors cited a lack of communication between educational facilities and manufacturing sectors. Obstacles identified included poor outreach to schools, a lack of success stories to spark excitement and interest, and little sector involvement with the schools. The government could help these efforts by introducing new programs and expanding existing programs geared toward these sectors as well as offering scholarships that reward graduates for choosing to work in Maine. They called upon the association to assist in facilitating dialogue between the industry and educational facilities. The sectors also suggested that the association organize activities such as education and training consortium development and field trips to sector facilities or school visits by industry professionals.

ELECTRONICS/RF/WIRELESS COMMUNICATIONS

The top issues identified in the electronics sector were training and workforce. Although the industry has declined, technology-based wireless communications towers, microwave towers, and semiconductors comprise a thriving industry. The majority of these companies need entry level technicians as well as highly skilled professionals (engineers). Workers with the prerequisite skills to fill these jobs are extremely difficult to find in Maine.

Because of the lack of established education programs at the secondary and post-secondary levels, the industry indicated that specialized training is the only available option. Another major area of concern is the well-documented aging workforce and the historical knowledge they will take with them when they retire. Another concern is that automated machinery technicians and electronics technicians are only micro-trained; however, they need macro-training to understand the entire manufacturing process. Industry trainings are needed to ensure all workers grasp the macroscopic view.

ADVANCED AND HIGH PERFORMANCE TEXTILES

The issues identified for this sector are training and workforce. The sector wants to collaborate with education, non-profits, and state agencies to create industry-led education programs. Through the Association, the sector would engage workforce and other textile companies in Maine through partnerships, clusters and consortiums. The MAME Industry Partnership model has been instrumental in teaching skills and encouraging manufacturing best workforce practices. An example of success is the “New Mainer” lean training developed by the Manufacturers

Association for the Maine Adult Education System for immigrants. This training teaches immigrants about the American culture of manufacturing and integrates lean manufacturing concepts into the training.

ATTACHMENT 2

LOOKING AHEAD

CREATING AND MAINTAINING EMPLOYER BUY-IN & ENGAGEMENT

One of the biggest challenges for Industry Partnerships in Maine will be the ability to create buy-in and active engagement among employer partners. However, the Manufacturers Association of Maine has clearly demonstrated not only a strong employer base within the manufacturing sectors but also an elevated level of employer involvement that, traditionally, many partnerships struggle to achieve.

The Manufacturers Association of Maine will take a statewide approach to manufacturing workforce development. The Association will manage the partnerships and focus its efforts on supporting the manufacturing sector of Maine. Partnership stakeholders will include employers, secondary and vocational technical schools, postsecondary community colleges and universities, workforce intermediaries, industry associations, and nonprofit organizations.

MISSION

To provide programs and services that will continually improve the competitiveness of the manufacturing workforce in Maine.

PARTNERSHIP OBJECTIVES

- Expand demand for incumbent worker training by the region's manufacturers through incentives and process facilitation.
- Build capacity for the best and most cost-effective pipeline development, pre-service training and incumbent worker training.
- Assist companies to design regular and meaningful training and evaluation
- Assist companies to recognize and adopt best practices related to workforce development and human resources

ACTIVE EMPLOYER ENGAGEMENT

The Maine Manufacturing Industry Council for Excellence, within the Manufacturers Association of Maine, will concentrate on creating an environment where employer partners are regularly surveyed (utilizing the MAMe Manufacturing Data System) and asked to provide feedback on a number of issues affecting the manufacturing industry and, ultimately, their company's bottom line. The MAMe has identified three areas where employers can actively contribute to partnership initiatives that result in visible outcomes that keep employers engaged.



Consortium-Based Training Through actively and continuously soliciting feedback from partners, the partnership will be able to deliver content and services that spark the greatest amount of interest and engagement among its partners. It is critical that partnerships view training programs as beneficial to both the employer and the employee. The ability to provide portable, widely recognized skills to workers enables them to be more marketable and highly valued within the industry.

Needs Assessments The data system survey conducted for aerospace, medical device manufacturing, alternative energy, and advanced textiles allows MAMe to tailor its training schedule to meet the specific needs of its partners and to identify third-party providers who could assist with consortium training for partner firms. The partnership can use this method to assist the Maine Manufacturing Industry Council for Excellence to establish programs, one of which focuses on innovations in the content and delivery of training for the manufacturing industry. By regularly assessing the needs of employers, the partnership ensures that precious resources go toward programs and initiatives that will ultimately address those needs and benefit the industry and the region as a whole.

Ownership and Contribution Expressed needs must be measured against industry surveys. Employers will be expected to demonstrate responsible engagement with a particular program or service that may include a contribution of time or money. The Maine Manufacturing Industry Council for Excellence allows opportunities for employers to actively participate in ways that allow them to feel an ownership or real contribution to solutions to workforce problems that affect them. All stakeholders work collaboratively to create and sustain programs and services that address the partnership's overall goals.

PROGRAMS AND EVENTS

The partnership offers subsidized training with a focus on process improvement, technology integration, and market expansion for member firms—leading to productivity improvement. The training will increase and augment the skills of workers.

YOUTH PIPELINE AND SCHOOL TO WORK INITIATIVES

The success of Industry Partnerships in Maine hinges substantially on the partnerships' ability to develop strong connections with youth and regional educational institutions. An analysis of the aging workforce, prepared by the Maine's CWIR, found 45% of the workforce is 56 years or older. As these older workers leave the workforce, the industry will face the challenge of replacing, not only the positions, but the skills of these employees.

MISSION

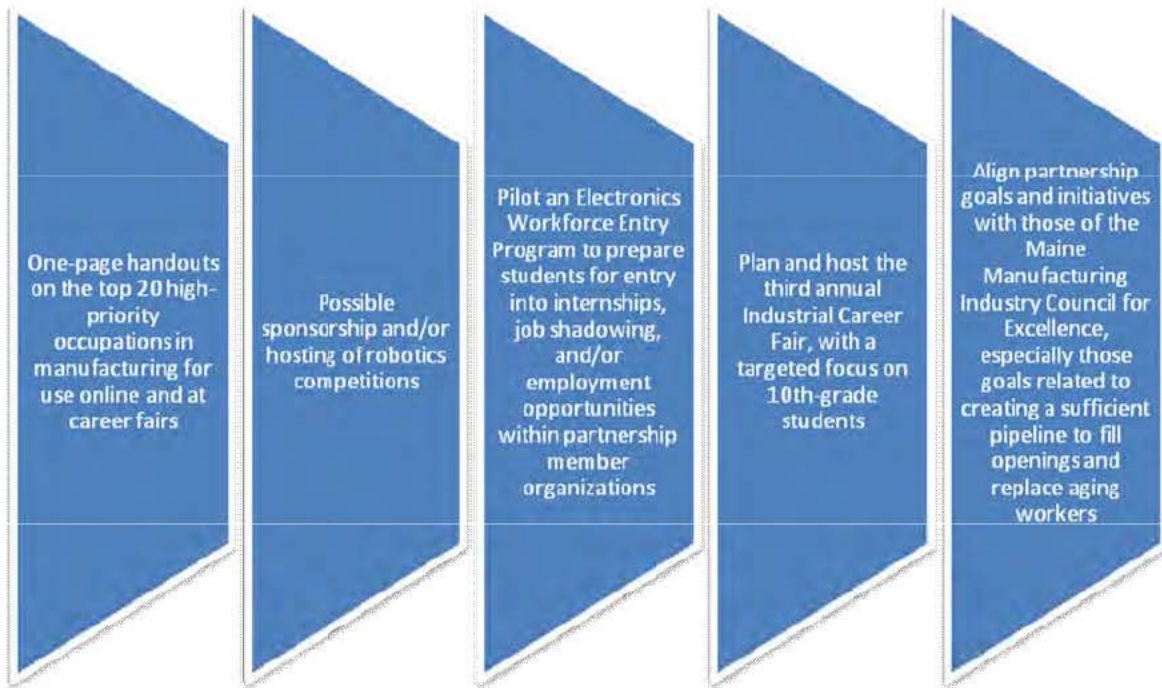
The Maine Manufacturing Industry Council for Excellence mission is to develop human resources internally and track and support local educational initiatives toward the development of a highly skilled local manufacturing workforce that will continue to keep Maine competitive in an increasingly global marketplace.

VISION

The Maine Manufacturing Industry Council for Excellence seeks to advance its mission through pipeline development, promotion of career ladders, increased retention, and advancement of incumbent workers. The Council will accomplish this through coordination of training, attracting more manufacturing companies, and supporting infrastructure in the region. This will assist established businesses in their growth and expansion efforts and increase awareness and positive image of manufacturing occupations through outreach to youth, parents, educators, and the community at large.

LOOKING AHEAD

The Maine Manufacturing Industry Council for Excellence will focus on the importance of career awareness and pipeline development among young adults. The following examples outline how the Council intends to build on its already existing programs to create new and innovative approaches that will address this critical workforce component:



KEY POINTS OF FOCUS FOR MIPI

1. Occupational Skills Training Benefits Employer and Employee

Workers gain skills that make them more productive and valuable to the employer. Employers increase the productivity and retention of a skilled workforce. Aggregated demand reduces cost of training per individual.

2. The Utilization of Labor Market Information to Inform Hiring and Training Decisions

The collection, analysis, and dissemination of current labor market information can help businesses make critical decisions concerning the hiring and training of their workforce. It also assists in programmatic decisions for education and workforce development organizations. The association data systems can supplement this data with Just-in-Time data on current hiring, skills sets, and education levels which will help to identify specific training needs.

3. Development of the Workforce Pipeline

The MIPI can help by responding to current workforce opportunities, as well as developing long term strategies in anticipation of future workforce challenges. The recommendations from the ICs can include both short- and long-term activities to address sector workforce needs. The education community and youth service provider organizations (Jobs for Maine Graduates, Learning Works, Pre Apprenticeship, ...) can assist in the development of the workforce (of the future) pipeline.

IN SUMMARY

Maine is strategically positioned to implement the Maine Industry Partnership Model. It is industry and data driven and provides the education and workforce system with meaningful direction in which to provide training. Maine has two major economic sectors, manufacturing and health care, which are positioned to take the MIPI model and develop a statewide, sector wide strategy that will, within 18-24 months, be a significant change in the way Maine structures and delivers workforce training.

We will develop and answer the following questions on the MIPI:

How its impact will be measured?

What is the cost to the employer / tax payer?

How can we deliver more comprehensive employer based training initiatives, apprenticeships, and consortiums?

The Manufacturers Association of Maine, along with government, business associations and organizations will focus on measureable impact for the state and the citizens of Maine.