

INDUSTRY GROUPS DRIVING CHANGE:

The Michigan Industry Cluster Approach (MICA)

Introduction

Michigan's Workforce Development Agency (WDA) is pursuing a thoughtful progression of strategies leading to a focus on real demand for actual jobs in the labor market rather than an overreliance on job market forecasts. In partnership with the Michigan Works! System, a demand-driven approach to workforce development has emerged where the employer is served as the primary customer of the system and the primary source of information is actual employment demand and related job characteristics.

Working directly with employers one-by-one to better understand the jobs in demand can be inefficient with respect to staff resources. This is especially true when several industries claim to be having difficulty finding a sufficient number of skilled workers and a skills mismatch is widely recognized. The "industry cluster strategy" emerged from this skills mismatch environment. This cluster strategy involves convening companies generally from a single industry for the purpose of identifying solutions to the industry's talent challenges and thereby using staff resources wisely during times of scarce resources.

"This is a much more efficient model than we've used in the past. By joining forces, we are able to meet workforce needs faster and more effectively than individual employers could do on their own."

- Sean Newell, Dean of Ford Motor Co.'s College of Engineering in the July 2011 edition of *Workforce Management*.

Beginning in 2004 with the Michigan Skills Alliance (MSA) initiative, the workforce system continues to strive toward encouraging employers to shape the talent development system through their input on talent challenges. WDA formed a cluster strategy team in 2011 organized around five key industries based on key metrics such as employment, skills, earnings and related factors. The industries are: Agriculture, Energy, HealthCare, Information Technology and Manufacturing.

The cluster team staff supports activities to help stimulate industry group formation at the local level and support state and local business team coordination using the Business Solutions Professional (BSP) model. Guidelines on local cluster formation – the Michigan Industry Cluster Approach (MICA) - were released in July 2012 to kick-off the effort. Later a "Readiness Index" was provided to the local MWAs to gauge their preparedness to begin forming industry cluster groups.

The BSP model is a service approach to addressing an employer's talent needs. Generally it involves a partnership of the WDA, local Michigan Works! Agencies (MWA) – their Business Services lead staffer, educational institutions, economic developers and other local partners

teaming up to address a company's talent challenges. The BSP model may also be applied to an industry cluster group and large employers with multiple Michigan locations.

With the establishment and implementation of the MICA and utilization of an expanding statewide BSP network as the backdrop, this paper examines how the MICA team is building on this foundation to promote industry cluster work by leveraging national and regional best practices, collaborating with other WDA program areas, the Michigan Economic Development Corporation, and industry associations, and fostering new and expanding partnerships through regionalism efforts with a focus on creating a demand-driven talent delivery system.

Brief History of the Michigan Cluster Strategy

Since 2004, WDA has fostered an industry demand-based approach to workforce development at the state, regional, and local level initially through its MSA initiative and now through the MICA. The MSA initiative offered local regions one-year start-up grants to develop local strategies to increase the skills and labor market success of individuals, and provide a collaborative approach through which local employers would benefit from a more skilled workforce. More than 40 employer-led skills alliances were formed representing a diverse group of industries including agriculture, construction, health care, hospitality and tourism, manufacturing, and utilities.

The most important characteristic of a MSA was that employers had a forum to communicate their workforce needs directly to training institutions and other partners. WDA also helped MSAs by providing a cluster-type analysis of the local labor market and forecasts of employment trends and occupational needs. The implementation strategies varied by region and were based upon the identified needs of the targeted businesses as well as the collective thinking of the local partnership. By providing employers this opportunity, training was developed that truly met the needs of industry.

Overall, during their operation, MSAs were successful in identifying key industries that faced labor shortages and other employment issues in designing skills strategies and in implementing them. The networking and collaboration that occurred through alliance activities also seemed to be an unquantifiable benefit of the initiative. Geographic concentrations of alliances across the state, convened by approximately 50 percent of the MWAs, were instrumental in producing exemplary outcomes for employers and jobseekers alike. For example, at the conclusion of the MSA initiative in 2010, active Skills Alliances were reporting talent enhancement impacts of: 8,950 projected number to be trained; 5,436 projected jobs to be retained; 2,351 trained to date; 816 jobs committed; and 200 jobs retained to date.

Clusters Now Established Across the United States

Cluster strategies for workforce and economic development have been adopted by more than 25 states and are increasingly the accepted way to do

A cluster-based workforce training system, for example, will train workers to fill actual jobs in the cluster and meet the actual skill needs of these jobs. This demand-driven approach stands in stark contrast to today's supply-driven training system, organized heavily by training providers.

business in states and regions. The model appears to be reaching a “tipping point” as a best practice. Clusters are being institutionalized through state policies and funding. The cluster approach is inherently employer-driven through local engagement of employers to provide direct information on jobs in-demand, skill sets required for jobs, training program requirements, and candidate assessment factors to improve successful transition from training to employment.

There is growing evidence that industry clusters are an effective organizing framework for positively impacting economic and workforce development activities. Studies of the impacts of state and regional strategies show: increased earnings for workers using the marker of decreased poverty levels from (64% to 35%); higher quality jobs using the marker of increase in employer-offered health insurance plans (49% to 73%); increase in positions with paid sick leave (35% to 58%); increase in worker satisfaction through indication that sector (cluster) initiatives prepared them for work in their priority sector within a cluster (83%); employer belief that sector initiatives provided mechanisms enabling them to remain competitive, exemplified by 41% identifying that participation led to a decreased turnover rate.

The January 2012 U.S. Government Accountability Office Study (GAO) examined 14 local initiatives listed by experts as among the most promising or innovative efforts in which local workforce boards collaborated with employers and other partners to achieve positive results. The results demonstrated an increased supply of skilled labor and job placements and a decrease in employer recruitment and turnover costs, as well as averted layoffs.

The Michigan Academy for Green Mobility Alliance (MAGMA) was one of the programs in the GAO Study. Employers in southeast Michigan were engaged through the MSA Initiative, which identified common employer needs and produced innovative labor force solutions. MAGMA forged greater collaboration among education and training providers and resulted in adjustment of course content in response to shifting industry needs. The alliance helped employers develop a talent base that allowed them to compete internationally. MAGMA demonstrated benefits for jobseekers/workers (312 completed training); and employers (provided training to 15 employers). The result of MAGMA is that these employers now embrace the workforce system. This successful industry sector program, now in its fifth year of operation, spurred additional regional initiatives such as convening employers to discuss their skill need in the area of battery storage technology.

Cluster Strategies Promote “Collaboration – Connections – Creation”

Although data for all 25 MWAs is not available, partial survey data (fall of 2013) from approximately 15 of 25 MWAs indicate the extent of collaboration by industry groups. Manufacturing clusters involved 465 employers and 117 stakeholders; health care cluster groups had 205 employers and 94 stakeholders; information technology engaged 150 employers and 30 stakeholders; and energy collaboratives had 130 employers and 45 stakeholders; and 90 employers and 30 stakeholders in agriculture. Partners and stakeholders

include universities, community and 4 -year colleges and universities, K-12 districts, economic development groups, and community-based organizations.

WDA Program Collaboration

The Cluster Strategies team continues to actively engage with other WDA program areas to support industry cluster work. A case in point is the Northwest Michigan Developer Consortium project. Staff from the WDA Education & Career Success Division helped review and approve the proposals submitted for both the “visioning/planning” and “implementation” phases of the project, and in July 2013 approved a multi-year award of Perkins Funds to support the consortium through its next “implementation” phase. The WDA Veterans Services Division was also instrumental in helping the team explore/leverage military crosswalk tools which will be used to develop strategies for targeting and recruiting veterans with specific Military Occupational Specialty (MOS) codes including those most likely to sit for and pass the Microsoft Technology Associate (MTA) certifications and potentially test out of a portion of the program. In addition, one of the consortium members, Northwest Michigan Council of Governments, applied for, and was able to successfully secure additional Trade Adjustment Act (TAA) funding through the WDA’s “Employer Based Training Foundation” for supporting various employer outreach/engagement activities related to the project.

Business Solutions Professionals (BSP) Approach Fosters Partnerships

The *Cluster Strategic Plan* identifies the BSP model as one of the key components of developing and expanding cluster strategies. Business services staff across the MWA network has been trained in the critical tools to develop comprehensive strategic partnerships and develop operational plans to focus on the employer talent demands. By concentrating and aligning internal and external partner resources, efficiencies to address talent strategic solutions for implementing an employer demand-driven system may be developed. BSP partners work together to focus on and serve business. They overcome and reduce duplicative efforts and work outside of their silos by helping identify all appropriate local and regional partners to develop a business solutions plan by leveraging all resources to deliver positive solutions to assist employers. This process is instrumental in understanding employer’s workforce challenges and identifies opportunities by diagnosing problems and designing solutions that integrate workforce and economic development, education and government assets to address pressing issues. This collaborative problem solving approach is imperative to implementing the cluster strategy.

The following chart may be thought of as both a general outline of a local industry group action plan and BSP model:

- Talent issues are the focus
- Teamwork is at the heart of the model where the necessary partners bring proposed talent solutions to the table after industry fact-finding

- The three areas of effort are:
 - Recruitment – finding workers now
 - Training – offering training programs to meet labor market demand
 - Pipeline – building interest among youth and students so future worker demand will be met

**Local Cluster Action Plan and
Business Solutions Process (BSP) Model**



Partnerships in Funding

A key characteristic for success and sustainability for a cluster is a plan for leveraging and aligning resources across multiple funding sources. Training to increase the skills of workers is at the heart of MICA. Where significant workforce needs and skill gaps exist in high-demand industries or clusters, maximizing training resources is extremely important. Collaboration among industry, WDA, MWAs, and education and training providers is the key to maximizing resources.

Partnerships with the Michigan Economic Development Corporation

There are a number of instances where the Michigan Economic Development Corporation (MEDC) has reached out to the Cluster Strategies team to provide expertise or support on initiatives which include a talent component. For example, the WDA Information Technology cluster helps oversee/manage Shifting Code, one of the MEDC Talent Enhancement programs designed to prepare IT professionals through custom short-term training programs in combination with an internship/practicum experience to meet some unmet need that has been identified by industry. The WDA IT cluster has also been working with the Michigan Film Office to explore the possible establishment of an IT industry sub-cluster focused on Video Game development. The Michigan Film Office has been coordinating with MEDC Business Development Managers to conduct outreach to several dozen existing Michigan-based game development companies and at the same time, the Film Office has started to partner with educational institutions, MEDC Capital Access, etc. to develop a strategy for marketing Michigan as a viable destination to other such firms on the west coast who may be looking to relocate or establish satellite offices. In both cases, for these businesses to start up or expand here in Michigan they will require access to talent so the Cluster Strategies team has been leading efforts to engage local MWAs and leverage the statewide BSP network to ensure that these companies will be able to grow and sustain their Michigan workforce now and into the future.

Another example of engagement with MEDC is the partnership between the WDA Energy Cluster, the Michigan Energy Office, and the Midwest Energy Efficiency Alliance to expand the Building Operator Certification (BOC) training program. The BOC program is a competency-based training and certification program designed to achieve significant energy savings by training those individuals directly responsible for day-to-day building operations on how to help their facilities save energy, reduce costs and improve the efficiency of their buildings. The Energy Cluster's assistance with connecting the BOC program with the talent system, especially the community colleges, to integrate this training in existing curriculum and establish trainers within current college faculty, was vital to expanding the program beyond the initial pilot.

Collaborating with Associations

There are many opportunities to work with industry associations. One such example is how Michigan State University's College of Agriculture and Natural Resources has partnered with the Michigan Agri-Business Association (MABA) and Greenstone Farm Credit Services to support high school counselor information workshops on careers in agriculture. Two workshops were held in 2012 and six were held in 2013. Workshops were held around the State at agricultural businesses. Participating counselors develop a better understanding of jobs and careers available in agriculture. In addition, "Careers in Agriculture – Welcome to Our World!" was developed with MABA and took place at their annual conference on January 15, 2013. This event was designed to provide high school and college-aged young people the opportunity to be exposed to agriculture and career opportunities in the industry.

The Michigan Manufacturing Association (MMA) for the first time in its history got involved with talent issues beginning in 2012 as membership expressed concerns about talent shortfalls. The MMA responded with seven regional summits blanketing the state during mid-2012 and concluding with a statewide summit in October 2012. The purpose of these meetings was to place the workforce issue on the “front burner” and encourage companies to take action. The statewide Talent Summit was labeled the single largest event in the MMA’s history as nearly 250 people attended. Attendance at the regional summits exceeded 200. In 2014 the MMA followed-up with Talent Summit II – “Manufacturing a Career-Ready Generation” – focusing on collaboration with the K-12 system. Participants were provided a potential action item list and asked to select three talent action items for 2014.

Prosperity Regions Encourage Partnerships

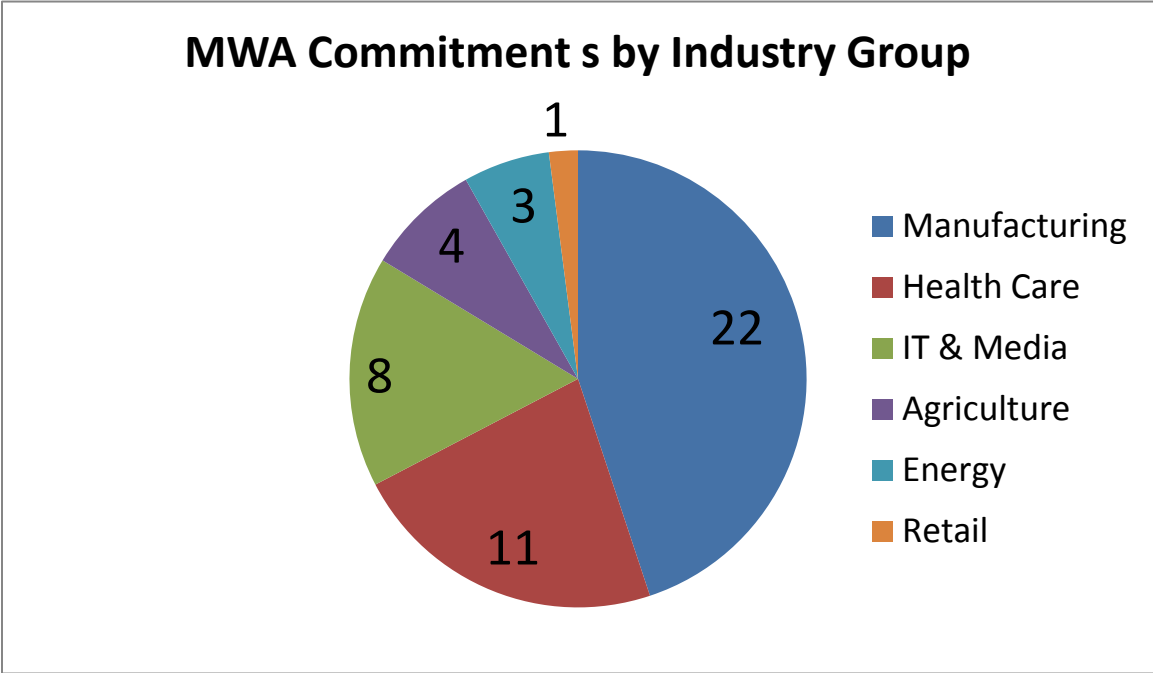
In some cases, work that was initiated by the Cluster Strategies team has enhanced WDA’s contributions to broader initiatives like the “regionalism” effort, or has enabled our agency to be more responsive to priority requests coming from the Governor’s office. Occasionally opportunity and need converge, which was the case with the Prosperity Regions Talent Map prototype. In late 2012, a group of WDA and MEDC cluster staff had formed an ad hoc, cross-agency team to begin collaborating on cluster development strategies in an effort to identify new and better ways that they could work together to more effectively serve their employer customers and other constituents. The group’s initial broad focus evolved over time as they recognized many opportunities for collaboration and alignment and the need to “connect the dots” between their activities—which eventually culminated in the development of the statewide *IT resources* asset spreadsheet.

Eventually, the team planned on developing the statewide *IT resources* asset spreadsheet into some sort of web-based tool. Around this same time, feedback from participants who attended the Governor’s 2013 summits on economic development and education expressed a vital need for more and better systems for locating and accessing people and resources that their business and industry need for success. Envisioned as a tool for key stakeholders from each of the three domains (workforce development, economic development, and education and training—which constitute the “supply side” of the system) to help them better serve their employer customers, this web-based tool enables stakeholders to actively participate in reinventing Michigan’s talent delivery system by continuing to be invested as “collaborators, connectors, and creators” since the system is designed to be partner inclusive. Creation, promotion, and continuous enhancement of the Prosperity Regions Talent Map is a meaningful strategic advantage for Michigan economic development to grow existing companies and attract new ones.

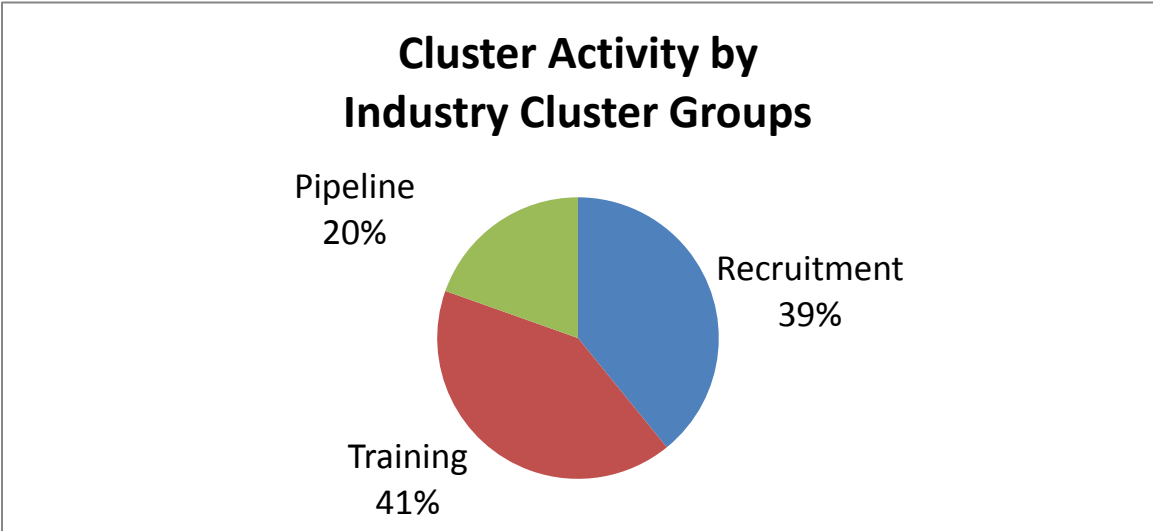
Comprehensive Coverage of Michigan by Industry Cluster Groups

By September 2013, all 25 MWAs reached a condition of “readiness” to commit to the cluster initiative. As of that date, the MICA team documented nearly 50 instances where MWAs had committed to local cluster groups spanning the entire state. Subsequent efforts have identified more than a dozen additional local industry cluster efforts, and through extensive outreach to

the local partners, this information is systematically being documented and incorporated into the Prosperity Regions Talent Map tool. The “Industry Group” chart provides an accounting of clusters by major industry sector as of September 2013:



The activities of the industry cluster groups may be broadly classified into three categories: Recruitment, Training and Pipeline. Training and Recruitment efforts are the leading activity areas. Pipeline undertakings are about half as numerous as training and recruitment with one-fifth of the cluster groups pursuing talent development here compared to 40% for both training and recruitment.



Listing exemplary practices from the 50 cluster groups would make for a long list here. However, presenting a sampling of these brings MICA to life and provides better understanding of what is being accomplished:

The Southwest Michigan Advanced Manufacturing Consortium worked with industry to identify a shortage of computer numerical control (CNC) candidates in the region as well as skills related to mold making and quality control. Working through the Workforce Development Board for Kalamazoo-St. Joseph Michigan Works! they assembled ten manufacturing companies from the consortium to apply for funds under the Skilled Trades Training Fund (STTF) and were awarded \$235,364. Both new hires and incumbents are being trained with the funds for a total of approximately 40 workers involved.

“Employers in our fine state are struggling to find qualified technical manufacturing employees who have the skill sets to carry us forward. The grant has given us an opportunity to both develop our current staff and hire and grow new employees with the technical ability but not the training they need to be successful in an advanced manufacturing environment.”

- Jan Opalewski, HR Manager at Fabri-Kal

The existence of the Capital Area IT Council, a Michigan Regional Skills Alliance housed at Capital Area Michigan Works!, has resulted in the formation of diverse, multi-partner coalitions, which has in turn, allowed local employers to benefit from several significant grant funded projects. This includes a Regional IT Training Program through a mid-michigan Workforce Innovation through Regional Economic Development (WIRED) Grant to support classroom and on-the-job training for more than 70 individuals placed with local IT companies as well as a recent \$4.4M H-1B Technical Skills Training Grant award from the U.S. Department of Labor to fund the Capital Area Tech Knowledge E-Pathways Project. This project will create educational and career pathways related to information technology for increasing the supply of Computer Science students/graduates in the region.

The Michigan Utility Workforce Development Consortium is an example of industry working together with workforce and education partners to build a pipeline of talent. Since 2009, Consumers Energy and DTE Energy, municipal utilities, and utility cooperatives have worked together to address a graying workforce and the need to invest in training to prepare for the wave of retirements from the industry. With a staggering projection of 40 – 60 percent of the workforce eligible to retire in the next few years, the Consortium: 1) identified demand and the competencies required to meet that demand; 2) identified and now coordinates where training takes place to help balance supply and demand for specific skills; and 3) developed the Michigan Get Into Energy Career Pathway to create a “work-ready” pool of qualified job candidates that have proven knowledge of the industry and demonstrated trainability. In 2010, the State of Michigan on the Consortium’s behalf was awarded a \$4.4 million U.S.

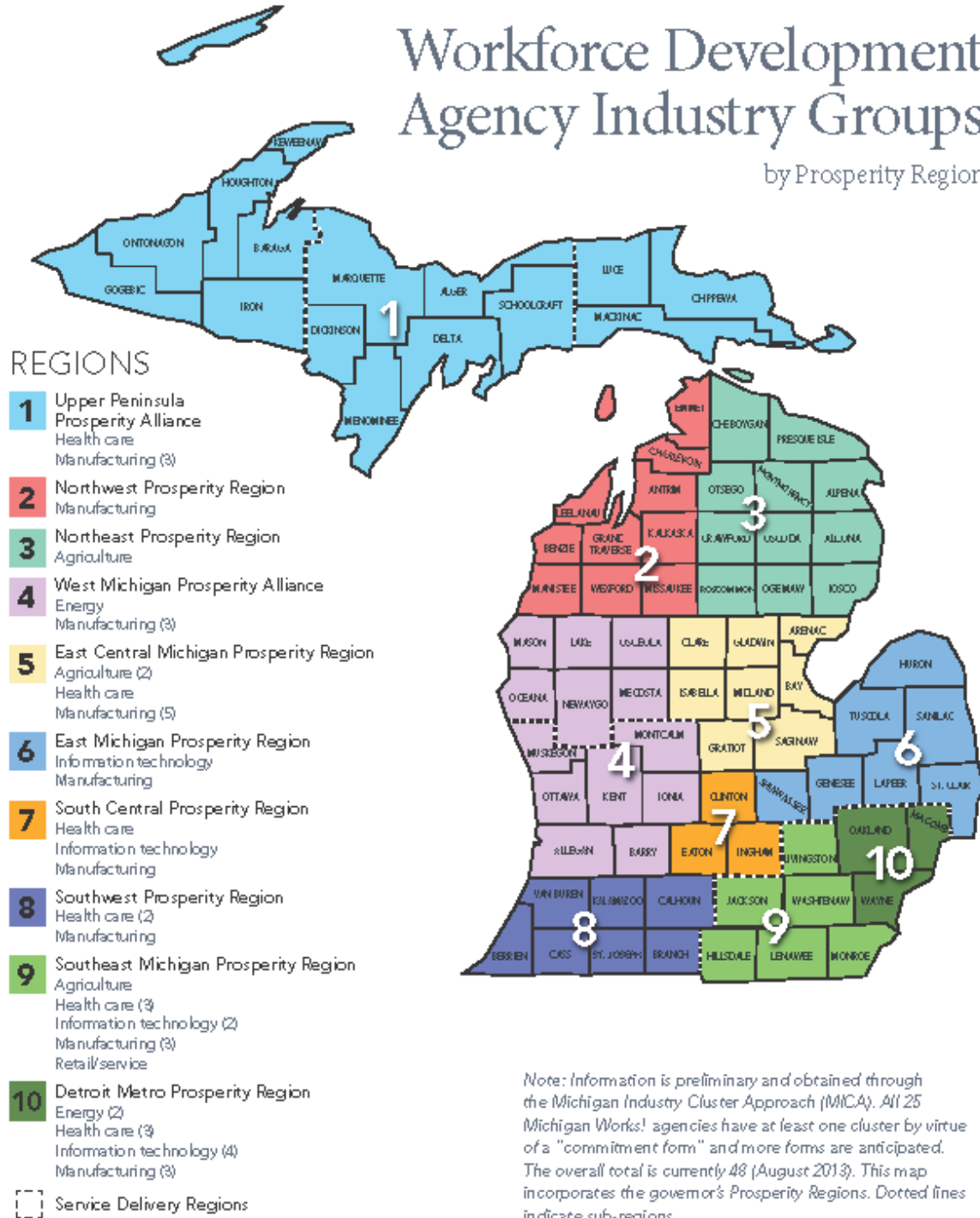
Department of Energy grant designed to support pre-employment, pre-apprenticeship, apprenticeship, and other incumbent worker training. To date, nearly 600 individuals have received training, over 150 have been placed into jobs, and more than 170 incumbents have retained their jobs.

More Work To Do On Clusters – A Call to Greater Action

Much has been accomplished under MICA without any additional funding to the MWAs. The MWAs have successfully leveraged the activities of others in their region and their own resources to form business service units to focus delivery of a demand-driven system for Michigan and for the formation of industry cluster groups. Clearly the cluster approach is valued, supported, and successful in the state of Michigan. However, while a strong foundation has been built over the past decade, there is more work to be done to continuously improve the state's demand-driven service delivery. There is a "Call to Greater Action" at all levels - state, regional, and local – to encourage the formation of additional industry clusters.

Workforce Development Agency Industry Groups

by Prosperity Region



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MICA Activities and Benefits

Activities	Benefits
<ul style="list-style-type: none"> • Emerging occupations, technology, and accompanying skills needs are identified. • Training funds targeted toward in-demand occupations in a local region. • Job candidates trained to employer’s specifications leads to reduced turnover. • Career ladders built to upskill entry level workers. • Reduced training costs by utilizing economies of scale when multiple employers partner. • Improved outcomes for federal training resources by meeting employer’s needs. • Industry-recognized training credentials developed. • Recruitment programs effectively meet industry’s needs. • Education providers develop or re-design curricula for new college, high school and/or technical programs in response to industry’s needs. 	<ul style="list-style-type: none"> • Emerging occupations, technology, and accompanying skills needs are identified. • Training funds targeted toward in-demand occupations in a local region. • Job candidates trained to employer’s specifications leads to reduced turnover. • Career ladders built to up skill entry level workers. • Reduced training costs by utilizing economies of scale when multiple employers partner. • Improved outcomes for federal training resources by meeting employer’s needs. • Industry-recognized training credentials developed. • Recruitment programs effectively meet industry’s needs. • Education providers develop or re-design curricula for new college, high school and/or technical programs in response to industry’s needs.