

Report:
AIM TO WIN RIG REGION: ACTION PLAN



Presented to:
Iowa Workforce Development, Region 1
SE MN Workforce Investment Board
Winona County Workforce Investment Board
Workforce Connections, Inc.

REPORT:
AIM to WIN RIG Region: Action Plan

TABLE OF CONTENTS

EXECUTIVE SUMMARY 2

REGIONAL TARGET INDUSTRIES: RECAP 4

REGIONAL CHALLENGES AND OPPORTUNITIES: RECAP 6

ACTION PLAN 8

GOAL: SUPPORTING ENTREPRENEURSHIP 9

GOAL: CLOSING THE NEAR TERM SKILLS GAP 13

GOAL: ENHANCING THE PIPELINE OF TALENT 17

GOAL: SPURRING INNOVATION BY CONNECTING BUSINESSES 20

GOAL: ESTABLISHING A GOVERNANCE STRUCTURE 22

SECTOR-SPECIFIC ACTIONS 24

IMPLEMENTATION MATRIX 28

Delivered to:

Iowa Workforce Development, Region 1
SE MN Workforce Investment Board
Winona County Workforce Investment Board
Workforce Connections, Inc.

Prepared by:



EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Communities today are operating in an increasingly global and knowledge-based economy. Transnational corporations are driving economic growth and are, themselves, fueled by skilled and highly educated employees. Local economic prosperity, then, is dependent on the extent to which communities can position themselves to compete on this global stage to attract both investment and talent.

More and more communities are learning that competitive advantages in this advanced and integrated economy are gained through a “regional” approach that transcends county and even state boundaries. Communities need to look beyond their local borders to build relationships and combine resources in order to more effectively expand recognition in the marketplace. In comparing this new regionalism approach to the more conventional localized efforts, Richard Florida has noted that regional collaboration supports economic activity on a larger scale, “generating a large share of the world’s economic activity and an even larger share of its scientific discoveries and technological innovations.” Regions, not individual cities, are the locus of competitive advantage in the new economy – an economy where human capital plays a much more important role in company and community prosperity.

AIM TO WIN RIG REGION

The Minnesota, Iowa, Wisconsin tri-state Regional Innovation Grant (RIG) Region – formally called the AIM to WIN RIG Region – has potential for this type of regional dynamism. Incorporating 27 contiguous counties across the tri-state area, the region is defined by its shared demographic and economic challenges, its common labor shed, as well as its service to the health care and manufacturing industries.

The roughly 25,000 square mile RIG Region includes 992,000 people and 29,900 businesses that provide more than 472,000 jobs. The region includes the metropolitan areas of Rochester, La Crosse, and Dubuque, and an array of rural agricultural counties all intersected by the upper Mississippi River.

With a rapidly aging workforce, a steady loss of manufacturing jobs, and per capita incomes below state and national levels, the region faces significant economic hurdles. Recent crises have magnified these challenges: the severe Midwest floods of 2007 resulted in significant loss of life and property in the area, and the current national economic downturn has led to numerous industrial relocations and increases in foreclosures and unemployment.



EXECUTIVE SUMMARY

Despite these issues, the region bears a multitude of vital assets that can position the area for economic growth, making regional collaboration worthwhile. It has a central U.S. location, strong network of higher education institutions, and, in the Mayo Clinic, Hormel Institute, IBM, and others, world-class medical research facilities and a technology-based corporate presence. These assets, if properly leveraged can not only help offset the near-term economic challenges confronted by the region, but can set a long-term path toward strengthening and transforming common predominant industry sectors while building a foundation for emerging value-add ones – all of which can be significant sources of jobs and prosperity for the region

The region is served by four workforce investment boards: Iowa Workforce Development, Region 1, SE MN Workforce Investment Board, Winona County Workforce Investment Board; and Workforce Connections, Inc. Over the last several years, this group has formed a network and, together, have laid a strong regional foundation, defining common issues and setting priorities. The AIM to WIN RIG project has built on this work, identifying the economic and workforce assets of the region and devising specific regional strategies that capitalize on these strengths – all through a unified vision for building the long-term talent pipeline for the right jobs and spurring innovation regionally.

RIG PROJECT WORK TO DATE

The first RIG project report (*Economic Scan*) examined the common and unique characteristics of the 25,000 square mile tri-state RIG area, identifying the underlying economic factors that define it as a potentially viable economic “region.” It identified a series of demographic and labor market trends and challenges and laid the framework for which to examine new target industry opportunities.

With input from public and private leaders throughout the twenty-seven-county RIG region, the *Asset Map and Target Industry Analysis* report (report #2) inventoried and mapped information that has never been aggregated for the full region. The report provides an understanding of the region's wealth of economic, workforce, entrepreneurial, and other assets for creating jobs within specific high value industries. The asset map also identifies a series of challenges that the region will face in pursuing these industry opportunities and building the pipeline of talent that supports them.

This final document serves as the *RIG Action Plan* that aims to strengthen the linkages between economic and workforce development efforts and transform the area into a more competitive region predicated on innovation and a highly skilled workforce. The plan includes a set of strategies that advance the notion of regionalism – connecting, networking and leveraging important economic and workforce development assets to upgrade skills of the current and future workforce and strengthen existing companies, all while making the region more competitive for new industry opportunities.

While there are challenges to developing initiatives across three states (different requirements, policies, politics), the region must also recognize that there are greater opportunities for widespread success. Very few inter-state economic development “regions” exist in the U.S. and this represents a real opportunity to create a true best practice.

REGIONAL TARGET INDUSTRIES: RECAP

TARGET INDUSTRY SUMMARY

The *Asset Map and Target Industry Analysis* report provides an in-depth analysis of key strengths, opportunities, and areas for improvement in the region as it attempts to build strong industry clusters in six target areas. Through supplier connections, shared workforce requirements and mutual business activities, these target opportunities, and specific niches, share a symbiotic relationship. They represent both traditionally strong regional industries (health care) as well as important emerging opportunities (renewable energy and biotechnology) that can help the region become a much more competitive location.

Advanced Manufacturing

Despite job losses over the past several years, the RIG Region has existing strengths in certain manufacturing niches (e.g. composites, metal machinery, components), which can be further strengthened through a focus on emerging areas with cross-industry ties, such as bio-composites, which draw research from and have potential applications in biotechnology, health care, and renewable energy.

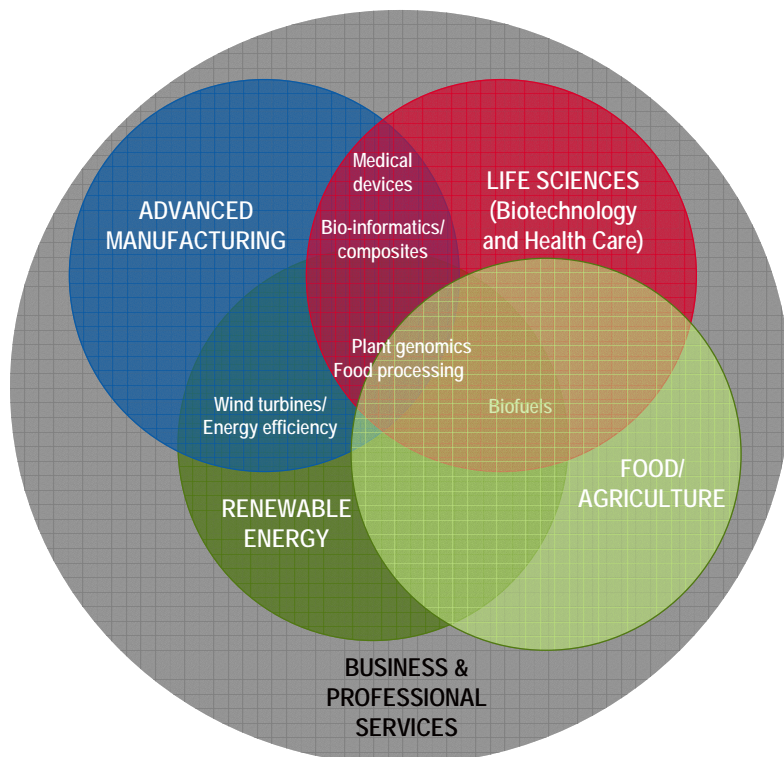
Health Care

As the service arm of the broader life sciences industry, health care both draws from and fuels activities in a range of other sectors, including biotechnology, advanced manufacturing, agriculture, and business and professional services. The region's aging population and reputation as a medical destination will likely continue to support existing strengths in the health care industry, but enhancing the connections with other sectors should accelerate and support overall economic development efforts.

Agriculture and Food Processing

With fertile lands in the Mississippi River Valley and extensive distribution networks, the RIG Region has a firm geographic foundation in the agriculture sector. When combined with historical strengths and existing firms in food processing, this sector is likely to remain stable if it continues to move toward "value-add" agriculture producing foods with a higher intrinsic value. Western Wisconsin's and southeast Minnesota's growing organic foods industry and Iowa's strong bio-agriculture university research capabilities in food quality, pharmaceuticals and bio-fuels provide key short and long-term opportunities for the region.

INTERRELATIONSHIP OF THE RIG REGION'S PROFILED SECTORS



REGIONAL TARGET INDUSTRIES: RECAP

Business and Professional Services

Underlying all of the target industries is a business and professional services sector that provides needed services (e.g. consulting, processing, information technology support) to all of the other industries. This sector, while still small in the region in terms of total employment, has grown rapidly over the past several years and remains, over the long-term, one of the fastest growing sectors nationally. In the coming years, as certain sectors like health care and data processing continue to grow, demand for business and professional services (e.g. engineering, legal, and management support, etc.) will likely increase as well. The newly announced 1,300-employee IBM datacenter facility in Dubuque, is a good example of expansion in this sector and reinforces the region's potential.

Biotechnology

While the national battle to attain status as a major biotech center appears to be over, the industry is expanding and will establish many secondary hubs in the coming years. The RIG Region, especially southeast Minnesota, has a number of key assets (e.g. historically strong medical and electronics manufacturing sector; vast research resources in the Mayo Clinic, and Hormel Institute; and strong partnerships with high-technology firms like IBM) that make this sector a potentially viable option, particularly in bioinformatics, medical device manufacturing, and pharmaceuticals. Additionally, with the right resources, the region stands to capture biotechnology activities related to plant genomics, biofuel applications, and other agriculture related subsectors.

Renewable Energy

The renewable energy sector has traditionally been only a small segment of the overall energy industry, but in recent years, as the costs associated with fossil fuels continue to increase, these alternative energy sources have become more commercially competitive, and areas such as wind, solar, and biofuel have been growing rapidly. Although development has been occurring in this field for many years, it is still relatively new as an industry and does not fit into traditionally measured economic data and workforce skill databases. Fortunately, much of the manufacturing in this sector (i.e. wind and solar components), bears remarkable similarities to traditional advanced manufacturing methodologies, such as for automobiles and farm machinery, and the RIG Region has a workforce well trained in many of the skills necessary for work in this industry. Additionally, with some of the nation's largest wind resources and numerous wind farms located within, the RIG Region is well positioned to stake a claim in this emerging sector, along with weatherization efforts tied to the energy efficiency subsector.

REGIONAL CHALLENGES AND OPPORTUNITIES: RECAP

RIG REGIONAL CHALLENGES AND OPPORTUNITIES

As the region positions itself to take advantage of these industry opportunities, foster innovation, and build a pipeline of skilled workers, it must address five critical issues – represented here as both challenges and opportunities for the region.

- **Limited regional innovation and commercialization**

The RIG region is located within states with high “innovation” indicators (e.g. University of Wisconsin system ranks second in the U.S. in university R&D flow; Iowa and Minnesota are ranked in the top ten in venture capital funding per capita for life science applications, etc.). However, these indicators do not necessarily translate regionally, where there is minimal R&D outside of Rochester and limited early-stage capital funding for innovative entrepreneurs in all parts of the region. With some of the most cutting edge advances in patient care and cancer prevention in the world (and hundreds of millions of R&D dollars allocated annually through the Mayo Clinic and the Hormel Institute), the opportunity for the region lies in the ability of firms and entrepreneurs in and outside of Rochester to receive the necessary support and services to facilitate the transfer of technology and take innovations to market.

- **Pressing occupational shortages**

Because of its traditional manufacturing base, the region has occupational strengths within industrial design (manufacturing engineers, process engineers) and machine operation and production – the latter of which are mostly lower on the value chain. Meanwhile, engineering talent (namely industrial, electrical, mechanical and civil) will continue to be in demand across targeted industries but is greatly underrepresented in the RIG region’s workforce. The region must meet immediate demand for higher-wage jobs found most prominently in the health care (e.g. medical assistants, registered nurses, and dentists) and manufacturing fields, and begin to better position itself to tap into the growing and emerging specialized science and engineering occupations expected in the long term.

- **Low educational attainment rates and loss of young professionals**

The region benefits from some of the top high school graduation rates in the country and extremely positive employer perceptions of K-12 school systems. However, low college attainment rates (especially in science, technology, and math areas where less than 3,000 students graduate annually) will continue to make it challenging to attract the future high-growth industry opportunities. In addition, the region’s rapidly aging population and “brain drain” trends are both symptoms and results of a limited presence of new “knowledge-based” sectors.

- **Disconnected supply chain**

The region has already formed (intentionally or not) some beginnings of a biotechnology cluster as evidenced by the number of firms that fall within every part of the industry value chain (e.g. R&D; medical device manufacturing; medical testing; product sales; and, of course, health services). Opportunities exist for understanding these connections more deeply and strategically aligning resources and partnerships to take advantage of shared networks. Similarly, as the region begins to build a renewable energy cluster it should be mapping these chain components (e.g. R&D; wind/ethanol production, turbine manufacturing; sales and installation, etc) and identifying critical supply needs (e.g. composites, components, glass) that are already existing strengths within the region.

- **Limited regional thinking**

While the RIG Region has numerous leadership and connective organizations, they are primarily focused on economic and workforce development issues within specific sub-regions, and not necessarily larger “regional”

REGIONAL CHALLENGES AND OPPORTUNITIES: RECAP

efforts across the AIM to WIN area. If this AIM to WIN initiative is going to be a sustained effort, regional identification, governance, and leadership will be important principles. The project started as the "7 Rivers RIG Partnership," but that moniker means something different (with regards to geographic boundaries) to stakeholders depending on which sub-area in which they reside. In addition, the AIM to WIN Region, as it begins to implement the regional plan, may wish to explore which regional boundaries really make the most sense economically.

Regardless, additional networking and strategic collaboration between existing organizations will certainly play an essential part in any future regional development activities. The identification of a particular public-private coalition or body (whether currently in existence or not) will be critical in executing project strategies identified in the RIG Action Plan

REGIONAL CHALLENGES AND OPPORTUNITIES: RECAP

ACTION PLAN INTRODUCTION

The *Economic Scan* and *Asset Map* reports shed light on the RIG region's greatest economic and workforce development opportunity: **To be competitive the region must transition to a knowledge-based economy that supports innovative industry clusters where entrepreneurship and highly skilled workers will be the driving forces of the economy.**

The RIG Action Plan comprises a set of strategies that support this transition and advance the concept of regionalism. It sets a framework for connecting, networking and leveraging important economic and workforce development assets to upgrade skills of the workforce and strengthen existing companies, all while making the region more competitive for new industry opportunities.

This plan identifies five key economic development goals and fifteen underlying strategies:

GOALS	STRATEGIES
Expand resources to foster entrepreneurship	<ul style="list-style-type: none"> Develop a regional entrepreneurship resource portal and training initiative Establish regional financing consortia for Stage 1 and Stage 2 businesses Expand existing incubation/acceleration efforts and focus on target industries Expand Inventors & Entrepreneurs Club model into the whole region Encourage entrepreneurship from a young age through regional K-12 programs
Close the near term skills gap	<ul style="list-style-type: none"> Leverage postsecondary assets through the development of a Higher Education Coordinating Council Align job training programs with regional target industries by building a more holistic response through new and enhanced programs Develop a regional "career readiness" certification initiative
Enhance the pipeline of young talent	<ul style="list-style-type: none"> Increase the number of students who pursue STEM studies through the formation of a regional STEM consortium and innovative networking programs Develop/refine career pathways for life science and renewable energy sectors Increase experiential learning and career awareness opportunities of K-12 students through career academies
Spur innovation through the connection of existing businesses	<ul style="list-style-type: none"> Develop a regional "smart" supplier initiative Enhance connection between regional companies and innovative life science technologies emanating from Mayo and University of Minnesota.
Build and integrate leadership	<ul style="list-style-type: none"> Develop a RIG implementation governance structure Enhance integration of economic and workforce development entities

This plan provides the region a strategic workforce development framework to implement over the next 3-5 years. The framework represents achievable options for the region that are designed to be implemented with the regional workforce system as the lead agent. Importantly, however, the plan must be integrated with other traditional economic development planning activities that are critical for attracting high-growth companies, including regional transportation enhancements, physical infrastructure improvements, and business cost adjustments.

While there are challenges to developing initiatives across three states (different requirements, policies, politics), the region must also recognize that there are greater opportunities for widespread success. Very few inter-state economic development "regions" exist in the U.S. and this represents a real opportunity to create a true best practice.

RIG ACTION PLAN

GOAL: EXPAND RESOURCES TO FOSTER ENTREPRENEURSHIP

A critical aspect of sustainable economic competitiveness for the RIG region is building a strong support network that encourages innovation through the development of “home grown” entrepreneurship. Efforts to provide aspiring entrepreneurs with the appropriate resources will help not only attract and retain young educated workers but assist older dislocated workers – an increasingly critical target population.

With a number of promising small business development and entrepreneurial support initiatives already in place, the RIG region has a real opportunity to build on this foundation by connecting existing assets, taking them to scale, and ensuring they align to target industry opportunities. The following strategies describe a broad entrepreneurial initiative with three supporting pillars: information and technical assistance, training, and access to capital and networks. These components are essential for supporting the entrepreneurial cycle especially in a large and rural region where resources and connections are limited and a maze of service providers exists.

These strategies, along with strategies aligning to Goal #4, will create specific collaborative opportunities between entrepreneurs, small businesses, and medical, life science, and energy researchers to spur the commercialization of bio- and other technology applications that can define the region.

Strategy: Develop a regional entrepreneurship resource portal and training initiative

A regional resource portal with an integrated training initiative can be a systemic effort designed to help communities better connect to entrepreneurs and entrepreneurs to services. This can be especially useful as a tool to expose dislocated and rural workforce to new opportunities, train them in understanding the process, and, once an idea is formulated, position them to connect to capital and social networks.

The effort should be built with several integrated components:

A user-friendly web portal that includes an inventory of all regional entrepreneurial assets (venture capital firms, SBDCs, technology alliances, training programs, loan programs, funding sources, etc.) within

BEST PRACTICE: MyBiz: Entrepreneur SourceLink for Alabama and Mississippi



MyBIZ is a comprehensive approach to connecting entrepreneurs and service providers in Alabama and Mississippi. Designed by eight community and junior colleges in East Mississippi and West Alabama (across 37 counties) and associated WIBs, the initiative includes:

- A resource partner database of entrepreneurial and small business development professionals who are to assist aspiring entrepreneurs through the process of developing ideas and accessing funding.
- A website that provides information about all regional enterprise development resources, training programs, and networking opportunities

Trained staff (which include staff from the junior and community colleges) are available to work on individual “cases” at no cost and provide a customized approach depending upon on the level of advancement of the entrepreneur or small business. The initiative features a standard set of processes, including intake, referral, and evaluation and is widely marketed externally so that entrepreneurs recognize a “single regional voice.” The MyBiz model is based on KCSOURCELINK (www.kcsourcelink.com), an on-line one-stop shop for small businesses across an 18-county region that has been adopted in 12 regions and states across the country.

The next phase for the MyBiz initiative in Mississippi and Alabama includes a comprehensive training component where entrepreneurs will receive academic credit through the community college system for a series of business and specialized training courses. MyBiz partners are seeking current state stimulus funding (ITAs) to support this component

RIG ACTION PLAN

the region. The portal should be a virtual gateway (not a static inventory) that provides information and links aspiring entrepreneurs to service providers including coaches, mentors and partners based on need. The portal should serve as an online one-stop shop providing direct access to service providers that can help navigate local, state, and national systems.

A mentoring program that provides start-ups with experienced mentors that help these companies focus efforts effectively. This program can also be expanded for more advanced entrepreneurs and small businesses to match them with larger corporations within the region who agree to become early trial adopters of the start-up company's technology, product or service.

A training component that is embedded within the regional community college and 4-year university systems where entrepreneurs can receive training around aptitudes related to establishing and running a business (e.g. developing a business plan, leasing office space, product research and development, and computer software skills). Ultimately, the region should explore using proven training curriculum initiatives (see Jumpstart or FastTrac) that can be used to attain academic credit at one or more of the regional institutions. Once training is received, entrepreneurs can get referred back to Small Business Development Centers for additional assistance.

AIM to WIN Entrepreneurial Assets

As the region builds this entrepreneurial infrastructure for a web portal, several existing initiatives and entities will be important connection points for the effort:

- **The Southern Minnesota Initiative Foundation:** Supported by the Minneapolis-based McKnight Foundation, the foundation is designed to provide finance and technical assistance to entrepreneurs, especially around bio-businesses. The foundation has made \$38 million in total investments since 1986.
- **Project Gate (MN):** Sponsored by the Minnesota Department of Employment and Economic Development, Project Gate assists dislocated workers more effectively engage in entrepreneurial and microenterprise training and assistance programs. Minnesota is one of the national pilot states for this program funded by the U.S Department of Labor and Small Business Administration.
- **BioBusiness Resource Network:** Within the biotechnology sector, specifically, there is an opportunity in the RIG region to connect to important entrepreneurship efforts (mostly occurring in the Twin Cities and throughout the state of Minnesota) including the BioBusiness Resource Network, a tool to help investors and companies navigate the region's business start up support services.
- **Iowa's Myentre.net:** Free online statewide networking tool to connect grassroots entrepreneurial clubs and provide resource information. Managed by the University of Northern Iowa.
- **Wisconsin "Quick-Start LLC":** An on-line corporate information database and registration service designed to ease the process for creating Limited Liability Corporations.
- **UW-System** is one of a handful of recent Ewing Marion Kauffman grant pilot projects throughout the U.S. designed to enhance training in entrepreneurship.

Action Items

- Form regional work group of technical assistance experts (SBDCs, SCORE, Inventors & Entrepreneurs Clubs), chambers of commerce, banks, entrepreneurs, and other stakeholders to identify specific barriers to entrepreneurs and processes to resolve.
- Building off the RIG asset map, map specific entrepreneurial resources and funds-flow in the region (including states and federal sources). Identify grants (USDA Rural Business Opportunity Grant or Rural Business Enterprise Grant), sponsorships, in-kind donations, etc to initiate effort.
- Design a framework for the initiative and a funding strategy and short and long-term work plan for primary and supporting stakeholders.
- Build inventory/database and network of service providers.
- Identify information needs and requirements and develop an outline for the portal.
- Establish training modules/programs.
- Build capacity at regional community colleges to provide support, technical assistance, and training to aspiring entrepreneurs.

RIG ACTION PLAN

- Market the initiative region-wide.

Strategy: Establish regional financing consortia for Stage 1 and Stage 2 businesses

There is consensus from employers, economic and workforce developers that, regionally, more can be done to spur commercialization of new products through access to early stage capital. The VC and angel networks that do exist in the region are just emerging and, as one economic developer suggested, “much too immature” to provide seed funding on a comprehensive basis. The region should seek to establish a formal regional angel investor network and seek opportunities to tie into existing networks in target industry areas. In addition, using different university and lab spaces throughout the region, the region can host regional venture forums where technology entrepreneurs get acquainted with and can discuss their business plans, ideas, and technologies with potential investors. A dynamic regional consortia can and should be tied into the very latest technological innovation that is occurring between IBM, Mayo, Hormel Institute, and should be used as a tool to help spur additional innovation coming out of other regional areas.

Action Items:

- Create one new regional angel capital network
- Host a regional venture capital forum to introduce angel networks and VC firms from throughout the region to local businesses and entrepreneurs.
- Tie into existing angel networks in target industry areas

Strategy: Expand existing incubation/acceleration efforts and focus on target industries

The region is home to a number of business accelerators and incubators that provide lab space, business services, and technical assistance, although these are often localized efforts focused on a wide range of industries. The region can build on the existing incubator efforts and expand the overall concept through a *regional incubator network* – an organized alliance of the area’s university, business, government, entrepreneurial, and community leaders dedicated to supporting small business growth and commercializing innovations. A regional network would allow for increased synergies and expanded resources for connecting to the various universities and colleges, mentoring, and access to venture capital. This effort would connect not only the smaller less-sophisticated incubators together but to the relatively new dynamic initiatives around the Biotechnology Center at Elk Run in Minnesota and the Medical Health Science Consortium in La Crosse. With the development and connection of technology incubators tied to the target industries, the region can build its entrepreneurial niche around incubation and acceleration efforts aligned to bio-ag and broader life science technology.

See examples in Michigan <http://www.annarborusa.org/start-ups/spark-incubator/> of a regional incubator concept.

Action Items:

- Survey best practice regional incubator networks throughout the U.S.
- Using the Asset Map as a starting point, conduct a resource inventory of accelerator and incubator services, staff expertise, and facility specs.
- Determine the feasibility of initiating a regional incubator network (identify the current status of incubator projects in the region, assess the need for additional incubator development).
- Develop regional alliance and planning framework that promotes the sharing of “expertise” across incubators.
- Seek funding opportunities from EDA and other sources.

RIG ACTION PLAN

Strategy: Expand Inventors & Entrepreneurs Club model into the whole region

Wisconsin's Inventors & Entrepreneurs Clubs are promising initiatives designed to provide education and networking opportunities for entrepreneurs and would-be entrepreneurs. More than 50 clubs are active throughout Wisconsin and several in the Western Wisconsin RIG sub-area. They are proving to be effective means for engaging rural would-be entrepreneurs especially around innovations in agriculture and natural resources. Wisconsin's Commerce Department has provided operational funding for these entities and they are typically staffed by local and regional economic development corporations. Although not as refined, Iowa and Minnesota also have these grassroots groups beginning to form.

The region should focus on expanding this model throughout the region; educate these groups about the target industry opportunities and latest technological needs; and provide opportunities to connect these groups together periodically to identify synergies and business opportunities.

Action Items:

- Provide opportunities for I&E network leaders in Wisconsin to brief the rest of region's WIBs, SBDC staff, and EDOs on I&E operational model.
- Create a social network of I&E club members using Facebook or other service.
- Disseminate target industry information (e.g. niche sectors and their workforce and technology requirements, etc.) to I&E club members.
- Use groups as venues to unveil entrepreneurial portal (see Strategy #1)
- Host periodic regional networking and information sharing I&E events with members, potential funders, and other key stakeholders, and to connect to supplier needs (see Goal #4)

Strategy: Encourage entrepreneurship from a young age through regional K-12 programs

Seven out of ten high school students want to start their own businesses, according to the first national Gallup Poll on entrepreneurship education commissioned by the Ewing Marion Kauffman Foundation. This statistic illustrates why it is important to encourage and nurture innovative entrepreneurial ideas from a young age. Some of these efforts already occur within the region and the region may wish to convene K-12 leaders to share ideas and common challenges as a means to expand these programs throughout the region.

Action Items (Programs to be expanded/implemented):

- **Annual business plan competitions** among UW-La Crosse, Winona St, UMN-R faculty and students in connection with the development of technologies that grow region's target industry clusters of renewable energy, life sciences, and/or food processing/agriculture, and high tech manufacturing. Launch a competition in which students submit a business plan and where winners receive college scholarships or seed capital.
- **Expand the offering of entrepreneurial project initiatives** at middle and high schools, similar to Junior Achievement or the Kaufman Foundation's Entrepreneurship Week.
- **Establish a regional Young Entrepreneurs Network** to meet on a regular basis and support professional, civic, and social opportunities for young entrepreneurs. These can be modeled after the regional entrepreneurial clubs but aimed at a younger, student-based population.
- **Develop regional summer training programs for teachers.** Iowa's John Pappajohn Entrepreneurial Center provides summer teacher training in entrepreneurship skills where participating teachers access on-line course materials, presentations, and interactive lessons to bring back to the classroom.

RIG ACTION PLAN

GOAL: CLOSE THE NEAR TERM SKILLS GAP

The asset mapping exercise identified a number of short-term occupational competency shortages in targeted industry sectors within the region¹:

- Machine & equipment operation/maintenance
- Engineering (industrial, mechanical, electrical, and civil)
- Engineering technician (mechanical and electrical)
- Production supervision
- Sales & marketing
- Business operations (HR and finance)
- Computer systems (analysts and managers)
- Medical/Medical assistance (dentists, physician assistants, medical secretaries, RNs)

The region must ensure that current firms have the qualified and skilled people they need to grow now. While challenging in a region that includes several diverse post-secondary institution systems, the region should explore the potential for shared higher education resources, expanded distance learning opportunities, and capacity-building efforts to train more people in occupations that the region already knows are in demand. This also includes focusing dislocated worker programs toward the repurposing of skills into emerging target industry areas.

Successfully building target clusters for the region will mean more than the silo-ed development of a short-term training program or two but a collaborative review of an array of core curricular competencies that could apply across the spectrum of target industry jobs. Regional networking is the most effective way of achieving that objective.

Strategy: Leverage postsecondary assets through the development of a Higher Education Coordinating Council

While the region benefits from a strong network of two- and four-year higher education institutions with a mix of program offerings, there is a real opportunity to leverage this asset to develop a more unified 'system' that anticipates and effectively responds to existing and future industry needs across the region. A network of institution leaders who come together to share best practices, common challenges and individualized needs can lead to creative strategies for increasing resource sharing, enhancing distance learning opportunities, designing new programs and curriculum, and enhancing collaboration on institution R&D efforts. It can also be a forum to discuss state-level best practices and ultimately push for potential legislative changes (e.g. loan forgiveness programs, etc.) where appropriate.

As federal (e.g. U.S. Department of Labor) and state higher education and job training grant funding sources increasingly require communities to demonstrate regional collaborative community college, university, economic development organization and industry relationships, this Higher Education Council can become an important asset to implementing much of this plan.

Similar efforts to coordinate regional higher education forums from around the country have typically started small (bringing groups of four-year university chancellors together to discuss programmatic changes) followed by invitations to two-year college presidents.² In this region, given the strong relationships the AIM to WIN WIBs have with area two-year colleges (MNSCU, RCTC, Western Tech, NICC, Riverland Community College, among others) it may be more appropriate to begin there.

¹ See Asset Map report for full list

² Best practice examples often include groups that have eventually formed a 501c(3). However, a series of strategy sessions were conducted prior as an informal networking group.

RIG ACTION PLAN

In industries as rapidly growing as biotechnology and renewable energy, where technology is evolving, constant communication between post-secondary institutional leaders is imperative. Over time, this group can also bring in a collaborative board of target industry company leaders within the region to provide additional regular exchanges of ideas.

Action Items:

- Convene a forum of regional community college leaders to initiate discussion of target industry areas, documented “in-demand” occupations and competencies, and general program best practices and common challenges.
- Identify a short list of priority areas for council.
- Draft MOU outlining organization structure, responsibilities, and processes.
- Identify one or two target industry initiatives with which to begin addressing programmatic/policy enhancements and further discussion.

Best Practice: North Carolina Higher Education Council

Within the 501 (c)(3) Piedmont Triad Partnership, a Higher Education Innovations Council has been established to cultivate collaboration between 20 two- and four-year postsecondary chancellors and presidents across the 12-county region. The group meets quarterly to exchange information about program best practices, R&D initiatives, and faculty resources. The council has developed a cross-institution asset map of academic programs that support the region’s target clusters and a gap analysis to determine potential new initiatives. The council has reshaped enrollment policies to encourage students of one school to take advantage of learning opportunities of another. A regional, shared video conferencing system will be unveiled soon designed to provide real time learning opportunities for students across institutions.



Strategy: Align job training programs with regional target industries by building a more holistic response through new and enhanced programs

Higher education institutions in the region appear to have a mix of program offerings that respond well to where the market is headed. Associates and Bachelors and non-credit programs in nursing, engineering technician, and specialized offerings in bioinformatics, nuclear medicine technology, and plant science are areas that regional economic developers and employers identified as growing areas that they will be pursuing – and programs which the 2 and 4-year institutions offer. However, more can be done to meet immediate occupational demand within the target industries and even small programmatic changes may help better align to the target industry areas.

Given the largely unknown (i.e. renewable energy) and constantly evolving (i.e. biotechnology, agribusiness) industries, the workforce system’s value is its ability to ascertain the specific future hiring expectations (demand) regionally in these sectors, help to identify post-secondary program gaps, and then leverage best practices from across the country to build specific short-term certification and longer-term programming. Because the occupations within the region’s target industries share many of the same competencies (especially between medical device manufacturing and renewable energy, as identified in the Asset Map report), WIBs and community colleges can create job training programs that integrate a core foundational curriculum with an array of specializations (see Austin Community College example below). While some of these programs exist within the region, it can explore, specifically, how renewable energy programs feed from core curriculum.

Similarly, the RIG region should expand the utilization of specific “Bridge” training programs that have been effective in retraining workers from declining industries (e.g. automotive and component manufacturing) into growing fields (e.g. renewable energy, medical device manufacturing). Because automotive manufacturing jobs share many of the same skill requirements, bridge programs are quick and effective ways to assist workers in refining core competencies to reflect technologies and tools used in the life science and renewable industries. The central Texas region has done this effectively quickly retraining semiconductor manufacturing workers for work as solar panel

RIG ACTION PLAN

manufacturers. See http://www.repp.org/articles/static/1/binaries/Wisconsin%20Report_Long.pdf for information on Wisconsin's component manufacturing industry and applications for the renewable energy sector.

While bridge training programs are effective ways to address shorter-term occupational needs, the region may also wish to explore longer-term program changes and partnership building designed to enhance high school-community college-university

connections. While a number of articulation agreements exist within the region, the region may wish to further explore additional programming (or capacity building) between Winona State and MNSCU system (around the convergence of

Best Practice: Flexible Curriculum Modules

Austin Community College has designed an Electronics and Advanced Technologies curriculum that includes a set of core based competencies in electronics with eight integrated specialization modules that provide certifications in key emerging sectors such as renewable energy (e.g. Solar

Photovoltaic Installer), biotechnology (e.g. Bio-instrumentation) and advanced manufacturing (Automation, Robotics and Controls). The model also includes an engineering technology 4-year transfer program with the University of Texas system.



composites, renewable energy and nanotechnology); NICC and Iowa State University (around bio-ag), and Western Technical and Viterbo University and the UW system (around information management and business education). Eventual 2+2+2 arrangements, especially within the life sciences may also be worth exploring and done in conjunction with career academy objectives (within goal #3).

As the community college system continues to examine more closely the renewable energy, biotechnology and value-added agriculture sectors, the workforce system should push to more deeply understand specific employer occupational demand, existing regional post-secondary and job training programs and gaps, and strategize about additional programs to be developed or refined. In addition, the system should enhance efforts to promote programs around bioinformatics, nuclear medicine technology, and plant science, among others to generate interest.

Action Items:

- Conduct a series of sector-based roundtables to identify specific occupational demand within each target industry (i.e. #s of hirings expected, types of competencies most critical, specific types of training and certifications needed for most "in-demand" occupations, etc).
- Host regional forum to learn about new and emerging occupations and regional workforce system program best practices.
- Inventory list of regional job training programs and resources and identify specific programmatic gaps.
- Use information to inform Higher Education Council discussions and potential program changes.
- Support development of curriculum and new equipment investments.
- Post specific target industry information on workforce system websites and align them to specific job training programs in the region.

Strategy: Develop a regional "career readiness" certification initiative

The RIG employer survey and asset mapping interviews revealed a potential mismatch between the skills required and the existing skills of the regional workforce. Specifically, employers, primarily within the manufacturing sector, identified critical foundational and employability skills to ensure they are hiring the most qualified, trainable candidates. Although the manufacturing sector has been, and continues to, shed jobs in the region, there are still higher paying production career opportunities for those who possess the necessary skills (that especially may be in demand as the region better positions itself to take advantage of manufacturing within emerging industries like renewable energy and biotechnology). Regionally, RIG can develop a career readiness initiative that helps employers measure real world skills.

RIG ACTION PLAN

Western Wisconsin's Manufacturing Skills Standards Certification (MSSC) system – an industry-led training, assessment and certification system focused on the core skills and knowledge needed by the nation's production workers is an excellent opportunity upon which to build. Most importantly, it offers an opportunity to connect with an initiative that has already gained momentum within the region. Western Technical College is an official MSSC certification provider. In addition, the Iowa governor recently announced an investment of \$500,000 to take the Career Readiness Certificate (a similar, but broader, certification system) statewide.

The region can look to leverage western Wisconsin's early MSSC work and expand testing places throughout the region.

Action Items:

- Identify and convene group of Western Wisconsin MSSC administrators and state leaders in Iowa and Minnesota to discuss status of certification programs.
- Conduct survey and/or interviews of manufacturing industry representatives/sector groups within the region to determine interest in certification.
- Explore feasibility of cross-state regional administration,
- Explore options for additional community colleges to partake as testing centers.
- Engage regional manufacturing sector groups (e.g. EMMA, Composites group with 7 Rivers Alliance, etc) to help shape program.

RIG ACTION PLAN

GOAL: ENHANCE THE PIPELINE OF TALENT

High school graduation rates in the RIG are strong but, comparatively, fewer adult residents have associate's or bachelor's degrees. This indicates a trend of high school graduates directly entering the workforce (likely through farming or manufacturing jobs) and/or college graduates relocating to other areas they perceive to have additional amenities and higher wage job opportunities. Specifically, the asset map identified a significant occupational shortage of engineers (industrial, electrical, mechanical, and civil) that will continue to be in high demand across future high-wage industry opportunities – and that can position the region to “move up the value chain” where it is developing and retaining talent especially in the science and engineering disciplines. Cultivating this talent from an early age is important – especially as the region could potentially be in danger of losing existing engineering and technology workers from recessionary impacts.

Strategy: Increase the number of students who pursue STEM studies through the formation of a regional STEM consortium and innovative networking programs

Both state- and regional-level efforts to initiate and expand STEM programs are starting to take shape individually within each state (e.g. Wisconsin Tech Council, Minnesota's GetStem program, Rochester Area Math Science Partnership, Corridor STEM Initiative (IA), among others). The region should build on these efforts and expand successful models. The region should convene government, school district, postsecondary, workforce system, and industry leaders to develop a regional strategy to increase the number of students engaging in STEM programs and identify ways to link these programs together to leverage resources and take them to scale.

Best Practice: Dayton (OH) Regional STEM Initiative

Managed by the Dayton Development Corporation, and in partnership with more than 80 organizations including county school districts, Sinclair Community College, the University of Dayton, and Wright State, EDvention is a regional STEM initiative to create new curricula and training and support for teachers in the STEM disciplines.

The coalition has created a transformative regional STEM plan and launched the state's (OH) first P-12 STEM Center that, through input from educators and private sector scientists, developed hands-on math and science curriculum in four targeted industry sectors:

- Power and Propulsion
- Sensors
- Advanced Manufacturing and Materials
- Medicine/Human Effectiveness



STEM teachers and private sector researchers from across the region receive fellowships to develop curriculum applying the principles of science and math to meet the technological needs of the target industry opportunities. The STEM Center was established with the help of a \$500K grant from NGA.

Some specific programs and initiatives to explore expanding include:

- **Project Lead The Way**, offered in all three states, forms partnerships with public schools, higher education institutions and the private sector to increase the quantity and quality of engineers and engineering technologists graduates. Curriculum can be expanded into more regional schools and can be “branded” as a regional effort. Program also includes teacher summer academies.
- **The GetStem Web** portal in MN connects teachers to innovative ideas and business resources to school needs.
- **Rochester Area Math Science Partnership**, a partnership between IBM, the Mayo Foundation and area school districts to improve science and math learning.

RIG ACTION PLAN

- **Corridor STEM Initiative**, a coalition of Iowa superintendents from school districts, community colleges, University of Iowa and area chambers of commerce within the Iowa City/Cedar Rapids area. Outside of the region but a model to explore for the AIM to WIN Region.

In addition to program expansion the workforce system should be more actively engaged in local existing economic development organization STEM initiatives. Several of the larger economic development organizations within the region, including Rochester Area Economic Development, Inc., conduct periodic “sub-regional” STEM forums. WIBs must be an active partner in planning these efforts and promoting area training programs that align to STEM principles.

Action items:

- Identify current regional K-12 reform efforts in region that support RIG goals
- Identify STEM programs applicable to target industries in K-12 (through asset-mapping)
- Identify STEM programs applicable to target industries in regional 2-year and 4-year programs (through asset-mapping)
- Identify workforce center and incumbent-worker programs to strengthen STEM skills of participants
- Map STEM program funding flows (federal agencies, foundations, etc)
- Convene group of STEM stakeholders to identify which new/existing programs should be expanded
- Use consortium to develop overall regional framework.
- Communicate STEM careers to teachers, students, parents, through written materials

Strategy: Develop/refine career pathways for life science and renewable energy sectors

The region should design career pathways for the emerging renewable energy and energy efficiency jobs that are likely to be in demand in the coming years. New pathways are likely to be needed specifically within the emerging wind and biofuel subsectors of renewable energy, while existing pathways within life sciences may need to be refined to reflect the newest technology and occupations (e.g. Informatic Nurse Specialists, Genetic Counselors, Bioinformatics Scientists, Clinical Research Coordinators, etc.) that are confirmed focuses of regional economic development efforts. In addition, as the region takes advantage of additional value-add food processing and agriculture niches, additional pathways (e.g. organic farming/sustainability) should be mapped and designed. Specific career pathways should be developed in collaboration with industry sector groups to ensure that there are known careers for students interested in technical and vocational education. Career pathways should be developed with the recognition that multiple levels of entry into the industry are available, and different technologies will require different skills.

Increased communication of these opportunities to area high schools to generate interest is also an important step toward sparking interest in already-existing higher education programs (that may receive little student interest).

Action Items:

- Using occupations identified in the Asset Map report, validate amongst coalition of education, workforce, economic development, employer, and labor groups.
- Map the requirements of entry and advancement at successive levels in each field.
- Develop and disseminate materials highlighting requirements.
- In the longer term: Conduct a gap analysis to assess how well existing education, workforce, and social services support worker advancement in the target fields, identifying common barriers to entry.

RIG ACTION PLAN

Strategy: Increase experiential learning and career awareness opportunities of K-12 students through career academies

In larger school districts across the three states, career academies have been established in the fields of construction, health services, computer programming, and other industries. These programs, which prepare students to successfully advance from high school through post-secondary education into high-tech, high-wage careers, can be expanded with additional sub-regional (i.e. within each state's geographic portion of the RIG region) articulation agreements and a greater connection to regional target industries.

A "regional" career academy approach would include the identification of opportunities for start-up academies and exploring ways to expand high school/community college articulation agreements within each RIG sub-region, while connecting sub-regional academy programs together through cross-state information-sharing sessions. In the longer term the region may seek to establish a regional STEM Career Academy or Center for Excellence.

Life sciences is an ideal sector with which to focus. Each sub-region should explore academy expansion within each's target industry niche: southeast Minnesota expanding health care and R&D programs, northeast Iowa in bio-agriculture, and Wisconsin in health care and high tech manufacturing. While some of these types of academies exist, they can be better aligned to niche target sectors through appropriate certifications, etc.

The Northeast Iowa Community College Regional Academy for Math and Science, a partnership between Northeast Iowa Community College, the City of Oelwein and Oelwein Economic Development, area school districts, and the Regent Universities may be a good model upon which to build.

Any expansion of career academy programs must be tied to efforts in attracting qualified instructors and providing them appropriate professional development opportunities through the higher education network. This will continue to be a challenge especially in the area of biotechnology where, like many regions around the country, there is a shortage of teachers with the appropriate science and math backgrounds.

Action Items:

- Inventory existing career academy programs throughout the region and identify potential target industry gaps
- Convene regional implementers of career academies and larger career and technical programs to share learnings and best practices.
- Explore the formation of a formalized career academy association or working group to develop a regional action plan.
- Identify sequential courses of study and design skill standards specific to the target industries.
- Delineate skill standards specific to the industry.
- Roll out as necessary.

RIG ACTION PLAN

GOAL: SPUR INNOVATION THROUGH THE CONNECTION OF EXISTING BUSINESSES

The region has already formed (intentionally or not) some beginnings of a biotechnology cluster as evidenced by the number of firms that fall within every part of the industry value chain (e.g. R&D; medical device manufacturing; medical testing; product sales; and, of course, health services). These firms interact with each other based on buyer-supplier relationships, shared technology, and a common workforce.

Opportunities exist for understanding these connections more deeply and strategically aligning resources and partnerships to take advantage of shared networks. Similar to biotechnology, in renewable energy, wind turbine component manufacturing plants are likely to be located in areas near wind farms because turbine blades are difficult to transport over long distances due to their size. With the component and auto part manufacturing presence in Wisconsin, for example, there is an opportunity to produce wind blades for wind farms emerging in southern Minnesota and northern Iowa.

In addition to connecting current firms, this goal aims to enhance technology transfer between the inventions emanating primarily from the Mayo Clinic and the University of Minnesota and other sector companies, with workforces with the skills necessary to help construct and utilize these complex devices and components. Channeling the significant R&D that is occurring in the region, promoting technologies for licensing, and supporting financial capital strategies (outlined in goal #1), are paramount in bringing these products to market.

Strategy: Develop a regional “smart” supplier initiative

The region, through a series of organized events, can link regional suppliers to primes (buyers) to enhance competitiveness across the supply chain network. This effort becomes more than a supply chain analysis – but an in-depth mapping of existing tier 1 and tier 2 supplier companies within the region, their competencies, and their capacities to expand into different growing markets. The region may consider conducting a customized survey to identify supplier capacity and capabilities and common workforce skill gaps. It can develop a framework for addressing identified supplier needs and culminate in a series of supplier forums to validate key issues and provide opportunities for companies to network and visit different production facilities.

Best Practice: California Aerospace Smart Supplier Initiative

Designed to stimulate manufacturing sector competitiveness, the “Smart Supplier” initiative mapped regional suppliers and, through a survey developed by area technical colleges, identified firm capabilities and workforce requirements. A subsequent series of information and networking forums educated companies about regional product development resources and linked suppliers to other regional firms.



Forums included:

- Overview of supply chain management concepts, analysis of supply chain management problems, best practices, etc.
- Production facility tours and networking with Original Equipment Manufacturer supplier management and engineering management

One of the key outcomes of initiative was identifying future skill needs and development of Career Readiness Certificate Program

The immediate focus for the region should be on the biosciences (specifically a look at medical device manufacturing and bio-composite and nanotechnology applications). The region may even wish to integrate work with the upcoming Bio-Composites cluster forum in La Crosse in October 2009.

RIG ACTION PLAN

Subsequent steps may include a supply chain examination of the agribusiness and renewable energy sectors.

Action Items:

- Working closely with the metro economic development entities, generate list of life science and other applicable manufacturers.
- Conduct survey of existing life science companies (most EDOs should have some of this information) to determine industry needs and supplier capabilities.
- Host regional forum/conference to identify overall supply chain value, sub-assembly processes, critical analysis of supply chain management problems, and best practices, etc.
- Use forum to identify workforce training issues, interest in career readiness certification initiatives, etc.
- Forum can also serve as a “reverse trade show” where regional buyers are showcasing procurement needs to interested suppliers.
- Develop materials and create tools for regular communication between respondents.

Strategy: Enhance connection between regional companies and innovative life science technologies emanating from Mayo and University of Minnesota.

While a “SMART” supplier initiative can be a useful initiative to understand industry competencies and supply chains while providing networking opportunities for firms, a regional technology transfer matching program can sustain the effort. This tool would be designed to get the expansive R&D that is occurring largely in southeast Minnesota to market across the wider region.

Building off of (likely) existing economic development organization business retention programs, the region can develop a database that matches regional business’ core competencies with Mayo Clinic and University of Minnesota Office of Technology innovations that are available for licensing. Companies, through or with their EDOs, can search the database for technologies that could replace or supplement their own existing products and services. The program can also serve as a critical feedback loop where businesses communicate technological gaps or innovative ideas back to the university for further exploration. The program can be a stand-alone web-based data system (the software exists and can be adapted to the region). See www.innovationslink.com for information about a similar tool developed by Purdue University in partnership with area economic development organizations.

Action Items:

- Convene UMN-R and Mayo research and technology transfer offices to discuss opportunity and frame concept.
- Utilizing regional EDOs (through their existing business retention and expansion programs), identify set of firm core competencies.
- Share competencies with Mayo’s/UMN-R Research groups.
- Explore the development of a notification system for university technologies that are available for licensing and build the capability of Mayo research staff to undertake “matching” efforts of catalogue of new technology.
- Market program regionally.
- In the longer term, seek to expand program to other regional R&D universities (UIA, UW Stout, Winona, etc).

RIG ACTION PLAN

GOAL: BUILD AND INTEGRATE LEADERSHIP

Strategy: Develop a RIG implementation governance structure

The RIG project has further cemented an existing tri-state WIB partnership while engaging additional community college leaders and economic development stakeholders. Sustainability for this RIG network, and this action plan specifically, however, lies in the ability of the partners to establish a governance body that oversees, coordinates, facilitates – and is ultimately accountable for – the plan’s execution.

While this ‘governance’ aspect of the project is challenging for all RIG projects that have limited direct resources with which to guide plan implementation, it is especially difficult in the AIM to WIN RIG region that covers 27 counties and crosses three states.

The AIM to WIN RIG partners have set some initial pieces in place to create a formalized steering committee that will oversee the implementation of the RIG action plan and position the region for additional funding opportunities to support execution. The committee will include a small number of high level leaders from each of the sub regions (including a mix of college presidents, economic development heads, key WIB stakeholders, sector group leads, **[NEED MORE INFO FROM RIG PARTNERS]**). A Memorandum of Understanding has been created that outlines roles and responsibilities, decision-making processes, and other operational issues. **[ON DATE OF ROLLOUT]** the committee will meet to identify plan priority areas and frame a fund raising plan to support the plan’s implementation.

The selection of members for the steering committee will be a critical task. It will be important not only to create a board representative of the different sub-regions, but across workforce and economic development entities. The economic development organizations in the metropolitan areas, including Rochester, La Crosse and Dubuque, *must* be engaged in this process. They are most in-tune with business attraction efforts at the state and regional levels and have direct ties to the employer community who will also need to play a part on this committee. Successful implementation of the plan will not occur unless these key players are driving the effort. Other stakeholders, from state leaders to industry leaders to educators to entrepreneurs should also be included.

In addition, much of the implementation plan can be accomplished through existing groups (e.g. 7 Rivers Alliance, sector partnerships) so the governance structure needs to include a specific engagement strategy of these efforts. To that end, the RIG partners, as they establish a governance structure, may wish to build from key regional alliances such as the 7 Rivers Alliance. This group, in particular, has made some inroads in the region (albeit a smaller geography) and has strong leadership and important regional relationships already in place.

The governance structure is critical not only to the success of this plan but in building an overall project identity. However, the MOU is only a first step. There must be a dedicated project administrator pushing the agenda and coordinating plan activities (i.e. the solicitation of funds, assigning task managers, communicating internally and externally, and monitoring the overall progress).

Action Items:

- Establish the formalized steering committee through an MOU.
- Develop committee processes (internal/external communication, performance management, etc.).
- Gain commitment from committee members.
- Host an implementation plan “Kickoff” where priorities are set and tasks assigned.
- Assign an operational “driver”.
- Prioritize strategies and confirm agreement.
- Consider translating implementation plan components into committee working groups.

RIG ACTION PLAN

- Meet quarterly to monitor progress and re-prioritize as necessary.
- Develop an internal and external on-line communication forum for the project.

Strategy: Enhance integration of economic and workforce development entities

While strong cases of economic and workforce development entity collaboration have occurred (see northeast Iowa and recent IBM datacenter success) more can be done to integrate efforts to address existing industry (or prospect) needs. The formalized steering committee, if properly organized, can help to ensure workforce development is consistently part of strategic business attraction and retention conversations (e.g. Mayo system expansions, emerging bio-science company opportunities, etc) and that economic developers understand the wide range and quality of existing training programs. This information flow happens sporadically at sub-regional levels and rarely at a wider regional point.

In the shorter-term, however, better integration (across economic and workforce development) can occur through collateral (i.e. website, marketing materials, etc.) development/changes as well as joint involvement in key planning exercises.

In addition, one of the first tasks of the committee should be developing a marketing “brand,” an identifiable name that stakeholders recognize, understand, and associate with the implementation actions.

Action Items:

- WIBs and regional EDOs should create stronger links to each’s webpages, (via posting of each’s reports, labor market data, and strategic plans).
- The region may consider developing an online toolkit designed to help economic development and workforce system efforts across the region build upon and support common functions. The toolkit can be an online sourcebook which includes:
 - AIM to WIN project background information
 - Description of WIB roles
 - Target industry profiles
 - Case studies (description of existing regional programs that are considered “best practices”)
 - Resources (reports, asset maps, and other information) that are developed through the execution of the action plan.

SECTOR-SPECIFIC STRATEGIES

In addition to the strategic framework above that outlines important workforce development strategies cutting across industry clusters, the plan identifies several specific sector-based strategies that the region should pursue. While sector growth is stimulated through a comprehensive economic development strategic package (i.e. physical infrastructure improvements, transportation and mobility enhancements, and access to capital, etc), the following are workforce development-specific strategies that can be executed by the regional workforce boards to help ensure a strong pipeline of talent exists for attracting and growing firms in these sectors.

As a next step, the region should consider developing more detailed cluster strategies and expanding/ establishing sector groups within each cluster.

Health Care

Synopsis: With the Mayo Clinic, Franciscan Skemp, and Gundersen Lutheran (and approximately 80,000 health care employees), the region is already an international health care destination. However, like many regions throughout the U.S., the region is facing continued occupational shortages in higher-wage patient care opportunities (nurses, physicians, dentists, etc).

- **Address immediate shortages through postsecondary resource and program sharing**
While state higher education requirements may prevent postsecondary systems from collaborating in some circumstances there is an opportunity for higher education leaders to develop a roadmap for how distance learning and shared resource programs can be implemented to address regional shortages in nursing and medical assistant (physician and dental), specifically.
- **Leverage state best practices to increase the number of qualified health care instructors including Minnesota’s Nurse Faculty Loan Forgiveness Program**
This program provides funds for repayment of qualifying educational loans for students studying to become nursing instructors. Other states may wish to pursue this – and even explore cross-state loan forgiveness programs.
- **Enhance health care career academies**
While health care academies, health-specific STEM programs, and other K-12 career awareness programs exist (with important partners Mayo, Gundersen Lutheran, and Franciscan Skemp) within the region they can be expanded and connected together to leverage resources. These initiatives make sense due to the existing interconnection between these sub-regions and employers who regularly recruit university students from UW-La Crosse, Winona State, University of Minnesota-Rochester, among others spread throughout.

Advanced Manufacturing

Synopsis: Even as the sector sheds jobs regionally, it is still a major employer (19% of the total workforce) and, with the right support, can strengthen firm competencies and tier I and tier II supplier networks to take advantage of emerging manufacturing opportunities in renewable energy and biotechnology.

- **Support firms and dislocated workers seeking to retool competencies to take advantage of growing/emerging industries**
Given the competency overlap between biotechnology (e.g. medical device manufacturing), renewable energy manufacturing and installation, and more traditional advanced manufacturing (composites, auto

RIG ACTION PLAN

components, glass, etc) community colleges should explore customized and flexible bridge programs building core manufacturing competencies with specification modules to short-term certifications.

- **Explore regional career readiness programming**
The region can look to leverage western Wisconsin's early MSSC work and expand testing places throughout the region.
- **Continue to support existing regional strengths especially in areas like composites.**
The region has demonstrated a strength in composites manufacturing for some time. To build upon this success, the region should seek opportunities (through new masters degree programs at Winona State, expanded supply chain connections, and enhanced venture capital networks) to support the integration of composites with the renewable energy and life sciences sectors (especially within the nanotechnology sub-sector that is likely to shape the industry's long-term future).

Food/Agriculture

Synopsis: When combined with historical strengths and existing firms in food processing, this sector is likely to remain stable if it continues to move toward "value-add" agriculture producing foods with a higher intrinsic value. Western Wisconsin's and southern Minnesota's growing organic foods industry and Iowa's strong bio-agriculture university research capabilities in food quality, pharmaceuticals and bio-fuels provide key short and long-term opportunities for the region.

- **Market/brand the region as a learning center for organic farming and identify "emerging" associated jobs**
Research increasingly points to this region as a hotbed for organic farming. The workforce system can play a leadership role in marketing this externally – especially as a means to attract and retain youth interested in sustainability issues. In addition, the workforce system can help push area higher education institutions to revamp their internal policies (prioritizing and purchasing locally grown foods, etc.) as a mechanism to helping develop the market.
- **Enhance partnerships with Iowa research universities, and national research labs to help commercialize technologies especially within renewable energy and plant genomics**
Universities around the country are under increasing pressure from state legislators to commercialize the technologies produced on campus. A regional agriculture tech initiative must work closely with officials from the University of Iowa, Iowa State, in connecting inventors with promising entrepreneurs. The smart supplier and entrepreneurial strategies outlined in this action plan are important foundational mechanisms to make those connections.
- **Establish an organic food incubator model**
As the region develops a regional incubator network (see goal #1) it should explore cooperative ventures in specialty foods (through farmers' cooperatives or local colleges).

Biotechnology

The RIG Region, especially southeast Minnesota, has a number of key assets (e.g. historically strong medical and electronics manufacturing sector; vast research resources in the Mayo Clinic, and Hormel Institute; and strong partnerships with high-technology firms like IBM) that make this sector a potentially viable option, particularly in bioinformatics, medical device manufacturing, and pharmaceuticals. Additionally, with the right resources, the region stands to capture biotechnology activities related to plant genomics, biofuel applications, and other agriculture related subsectors.

RIG ACTION PLAN

- **Strengthen university/industry relationships (and promote programs to ensure enough graduates)**
The region's 2-year college systems must continue to prepare the workforce for emerging occupations into which the region is likely to weigh (e.g. bio-engineering technicians, bio-informatics technicians, etc) and refine career pathways information to reflect these emerging opportunities.
- **Enhance connections between innovations and entrepreneurs and businesses**
A regional technology transfer matching program, identified in this plan, can be an important technology transfer tool as it taps the expansive life science R&D that is occurring in Mayo Clinic to market across the wider region.
- **Increase the number of STEM graduates**
The region should convene government, school district, postsecondary, workforce system, and industry leaders to develop a regional strategy to increase the number of students engaging in STEM programs and identify ways to link these programs together to leverage resources and take them to scale.

Business and Professional Services

Synopsis: Underlying all of the target industries is a business and professional services sector that provides needed services (e.g. consulting, processing, IT support) to all of the other industries. This sector, while still small in the region in terms of total employment, has grown rapidly. In the coming years, as certain sectors like health care and data processing continues to grow, demand for business and professional services (e.g. engineering, legal, and data management support, etc.) will likely increase as well.

- **Enhance business degree programs especially around legal and insurance competencies and identify which new jobs will be created from new health care policies (e.g. digitizing health care, increased data management, etc.)**
The region needs to ensure that the appropriate BA and MBA programs exist with the capacity in the region to meet specific occupational demand of this growing sector, and should conduct a higher education program gap analysis to determine future needs.
- **Create workforce sector group (now that there is a regional industry "presence")**
Even with recent job losses within this sector, it has grown to a size within the region where it merits the establishment of an industry-driven sector strategy and organization. Similar to other regional efforts in equipment manufacturing and health care, this group should bring some increased awareness of the industry's workforce, infrastructure, R&D, and land use requirements.

Renewable Energy/Energy Efficiency

Synopsis: With some of the nation's largest wind resources and numerous wind farms located nearby, the region is well positioned to stake a claim in this emerging sector, along with biofuel production and weatherization efforts tied to the energy efficiency subsector. For the AIM to WIN RIG Region this sector provides many opportunities, and because the industry is in its nascent stages, can be an excellent "pilot" sector to examine whether regionalism can be achieved. Fortunately, much of the manufacturing in this sector (i.e. wind and solar components), bears remarkable similarities to traditional advanced manufacturing methodologies, such as for automobiles and farming equipment, and the RIG Region has a workforce well trained in many of the skills necessary for work in this industry. The region must now really define the market space (wind production, turbine installation, manufacturing, etc) that it wants to pursue – and examine what that means for the region's workforce system so that there can be a coordinated job training approach.

RIG ACTION PLAN

- **Establish regional leadership and define market space (wind generation, wind product manufacturing, biofuels, etc)**
Create a regional sector group convening appropriate city leaders, industry heads, and economic and workforce development professionals to set a specific industry framework for the region to determine which industry sub-sectors it will pursue (See Twin Cities "Making it Green" report and task force).
- **Identify workforce demand and postsecondary program gaps**
Compile list of sector firms and survey employer hiring and training needs (including specific certifications) to project the demand for certain occupations. Catalog what types of companies exist within the region and which are likely to expand as new federal and state policies are put in place. Inventory existing training programs within the region and coordinate a unified regional workforce response.
- **Connect existing business through supply chain initiative**
The region, through a series of organized events, can link regional industry suppliers to resources to enhance competitiveness across the supply chain network. This effort becomes more than a supply chain analysis – but an in-depth mapping of existing tier 1 and tier 2 supplier companies within the region, their competencies, and their capacities to expand into different growing markets.

IMPLEMENTATION MATRIX

AIM to WIN RIG Implementation Plan

GOAL 1: EXPAND RESOURCES TO FOSTER ENTREPRENEURSHIP				
Strategy	Action Steps	Partners	Milestones	Outcomes
1.1 Develop a regional entrepreneurship resource portal and training initiative	<ul style="list-style-type: none"> ▪ Form work group of technical assistance experts (SBA, SBDCs, SCORE, IDED, etc.) chambers of commerce, banks, entrepreneurs, and other stakeholders to identify specific barriers to entrepreneurs and process to resolve. ▪ Building off the RIG asset map, map specific entrepreneurial resources and funds-flow in the region (including states and federal sources). Identify grants (USDA Rural Business Opportunity Grant or Rural Business Enterprise Grant), sponsorships, in-kind donations, etc to initiate effort. ▪ Design a framework for the initiative and a funding strategy and short and long-term work plan for primary and supporting stakeholders. ▪ Build inventory/database and network of service providers. ▪ Identify information needs and requirements and develop an outline for the portal. ▪ Establish training modules/programs. ▪ Build capacity at regional community colleges the capacity to provide support, technical assistance, and training to aspiring entrepreneurs. ▪ Market the initiative region-wide. 			

IMPLEMENTATION MATRIX

GOAL 1: EXPAND RESOURCES TO FOSTER ENTREPRENEURSHIP				
Strategy	Action Steps	Partners	Milestones	Outcomes
1.2 Establish regional financing consortia for Stage 1 and Stage 2 businesses	<ul style="list-style-type: none"> ▪ Create one new regional angel capital network ▪ Host a regional venture capital forum to introduce angel networks and VC firms from throughout the region to local businesses and entrepreneurs. ▪ Tie into existing angel networks in target industry areas 			
1.3 Expand existing incubation/acceleration efforts and focus on target industries	<ul style="list-style-type: none"> ▪ Survey best practice regional incubator networks throughout the U.S. ▪ Using the Asset Map as a starting point, conduct a resource inventory of accelerator and incubator services, staff expertise, and facility specs. ▪ Determine the feasibility of initiating a regional incubator network (identify the current status of incubator projects in the region, assess the need for additional incubator development). ▪ Develop regional alliance and planning framework that promotes the sharing of "expertise" across incubators. ▪ Seek funding opportunities from EDA and other sources. 			
1.4 Expand Inventors & Entrepreneurs Club model into the whole region	<ul style="list-style-type: none"> ▪ Provide opportunities for I&E network leaders in Wisconsin to brief rest of region's WIBs, SBDC staff, and EDOs on I&E operational model. ▪ Create a social network of I&E club members using Facebook or other service. ▪ Disseminate target industry information (e.g. niche sectors and their workforce and technology requirements, etc.) to I&E club members. 			

IMPLEMENTATION MATRIX

	<ul style="list-style-type: none"> Use groups as venues to unveil entrepreneurial portal (see Strategy #1) 			
GOAL 1: EXPAND RESOURCES TO FOSTER ENTREPRENEURSHIP				
Strategy	Action Steps (programs to be expanded)	Partners	Milestones	Outcomes
1.5 Encourage entrepreneurship from a young age through regional K-12 programs	<ul style="list-style-type: none"> Annual business plan competitions Expand the offering of entrepreneurial project initiatives Establish a regional Young Entrepreneurs Network Develop regional summer training programs for teachers. 			

IMPLEMENTATION MATRIX

GOAL 2: CLOSE THE NEAR TERM SKILLS GAP				
Strategy	Action Steps	Partners	Milestones	Outcomes
2.1 Leverage postsecondary assets through the development of a Higher Education Coordinating Council	<ul style="list-style-type: none"> ▪ Convene a forum of regional community college leaders to initiate discussion of target industry areas, documented “in-demand” occupations and competencies, and general program best practices and common challenges. ▪ Identify a short list of priority areas for council. ▪ Draft MOU outlining organization structure, responsibilities, and processes. ▪ Identify one or two target industry initiatives with which to begin addressing programmatic/policy enhancements and further discussion 			
2.2 Align job training programs with regional target industries by building a more holistic response through new and enhanced programs	<ul style="list-style-type: none"> ▪ Conduct a series of sector-based roundtables to identify specific occupational demand within each target industry (i.e. #s of hirings expected, types of competencies most critical, specific types of training and certifications needed for most “in-demand” occupations, etc). ▪ Host regional forum to learn about new and emerging occupations and regional workforce system program best practices. ▪ Inventory list of regional job training programs and resources and identify specific programmatic gaps. ▪ Use information to inform Higher Education Council discussions and potential program changes. ▪ Support development of curriculum and new equipment investments. ▪ Post specific target industry information on workforce system websites and align them to specific job training programs in the region. 			

IMPLEMENTATION MATRIX

GOAL 2: CLOSE THE NEAR TERM SKILLS GAP				
Strategy	Action Steps	Partners	Milestones	Outcomes
2.3 Develop a regional "career readiness" certification initiative	<ul style="list-style-type: none"> ▪ Identify and convene group of Western Wisconsin MSSC administrators and state leaders in Iowa and Minnesota to discuss status of certification programs. ▪ Explore feasibility of cross-state regional administration. ▪ Explore options for additional community colleges to partake as testing centers. ▪ Engage regional manufacturing sector groups (e.g. EMMA, Composites group with 7 Rivers Alliance, etc) to help shape program. 			

IMPLEMENTATION MATRIX

GOAL 3: ENHANCE THE PIPELINE OF TALENT				
Strategy	Action Steps	Partners	Milestones	Outcomes
3.1 Increase the number of students who pursue STEM studies through the formation of a regional STEM consortium and innovative networking programs	<ul style="list-style-type: none"> ▪ Identify current regional K-12 reform efforts in region that support RIG goals ▪ Identify STEM programs applicable to target industries in K-12 (through asset-mapping) ▪ Identify STEM programs applicable to target industries in regional 2-year and 4-year programs (through asset-mapping) ▪ Identify workforce center and incumbent-worker programs to strengthen STEM skills of participants ▪ Map STEM program funding flows (federal agencies, foundations, etc) ▪ Convene group of STEM stakeholders to identify which new/existing programs should be expanded ▪ Use consortium to develop overall regional framework. ▪ Communicate STEM careers to teachers, students, parents, through written materials 			
3.2 Develop/refine career pathways for life science and renewable energy sectors	<ul style="list-style-type: none"> ▪ Using occupations identified in the Asset Map report, validate amongst group of education, workforce, economic development, employer, and labor groups. ▪ Map the requirements of entry and advancement at successive levels in each field. ▪ Develop and disseminate materials highlighting requirements. ▪ In the longer term: Conduct a gap analysis to assess how well existing education, workforce, and social services support worker advancement in the target fields, identifying common barriers to entry. 			

IMPLEMENTATION MATRIX

GOAL 3: ENHANCE THE PIPELINE OF TALENT				
Strategy	Action Steps	Partners	Milestones	Outcomes
3.3 : Increase experiential learning and career awareness opportunities of K-12 students through career academies	<ul style="list-style-type: none"> ▪ Inventory existing career academy programs throughout the region and identify potential target industry gaps ▪ Convene regional implementers of career academies and larger career and technical programs to share learnings and best practices. ▪ Explore the formation of a formalized career academy association or working group to develop a regional action plan ▪ Identify sequential courses of study and design skill standards specific to the target industries. ▪ Delineate skill standards specific to the industry. ▪ Roll out as necessary. 			

IMPLEMENTATION MATRIX

GOAL 4: SPUR INNOVATION THROUGH THE CONNECTION OF EXISTING BUSINESSES				
Strategy	Action Steps	Partners	Milestones	Outcomes
4.1 : Develop a regional “smart” supplier initiative	<ul style="list-style-type: none"> ▪ Working closely with the metro economic development entities, generate list of life science and other applicable manufacturers. ▪ Conduct survey of existing life science companies (most EDOs should have some of this information) to determine industry needs and supplier capabilities. ▪ Host regional forums to identify overall supply chain value, sub-assembly processes, critical analysis of supply chain management problems, and best practices, etc. ▪ Use forum to identify workforce training issues, interest in career readiness certification initiatives, etc. ▪ Develop materials and create tools for regular communication between respondents. 			
4.2 Enhance connection between regional companies and innovative life science technologies emanating from Mayo and University of Minnesota.	<ul style="list-style-type: none"> ▪ Convene UMN-R and Mayo research and technology transfer offices to discuss opportunity and frame concept. ▪ Utilizing regional EDOs (through their existing business retention and expansion programs), identify set of firm core competencies. ▪ Share competencies with Mayo's/UMN-R Research groups. ▪ Explore the development of a notification system for university technologies that are available for licensing and build the capability of Mayo research staff to undertake ‘matching” efforts of catalogue of new technology. ▪ Market program regionally. ▪ In the longer term, seek to expand program to other regional R&D universities (UIA, UW Stout, Winona, etc). 			

IMPLEMENTATION MATRIX

GOAL 5: ENHANCE INNOVATION THROUGH THE CONNECTION OF EXISTING BUSINESSES				
Strategy	Action Steps	Partners	Milestones	Outcomes
5.1 : Develop a RIG implementation governance structure	<ul style="list-style-type: none"> ▪ Establish the formalized steering committee through an MOU. ▪ Develop committee processes (internal/external communication, performance management, etc.). ▪ Gain commitment from committee members. ▪ Host an implementation plan "Kickoff" where priorities are set and tasks assigned. ▪ Assign an operational "driver". ▪ Prioritize strategies and confirm agreement. ▪ Consider translating implementation plan components into committee working groups. ▪ Meet quarterly to monitor progress and re-prioritize as necessary. ▪ Develop an internal and external on-line communication forum for the project. 			
5.2 Enhance integration of economic and workforce development entities	<ul style="list-style-type: none"> ▪ WIBs and regional EDOs should create stronger links to each's webpages, (via posting of each's reports, labor market data, and strategic plans). ▪ The region may consider developing an online toolkit designed to help economic development and workforce system efforts across the region build upon and support common functions. 			