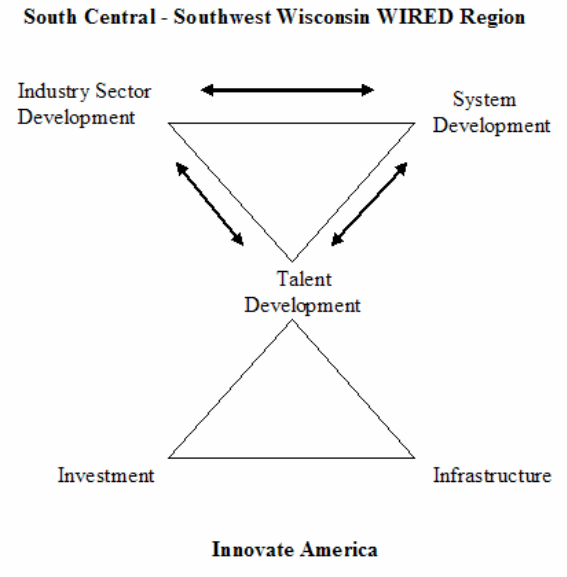
South Central - Southwest Wisconsin GROW Region
WIRED Grant Overview

The South Central – Southwest Wisconsin GROW Region (SCSW) has joined together to more carefully examine ways to grow the regional economy while preserving and enhancing the quality of life for the residents. The WIRED opportunity will align a regional understanding of how a workforce development system functions. Diagram 1 illustrates this alignment.

Diagram 1: WIRED Alignment



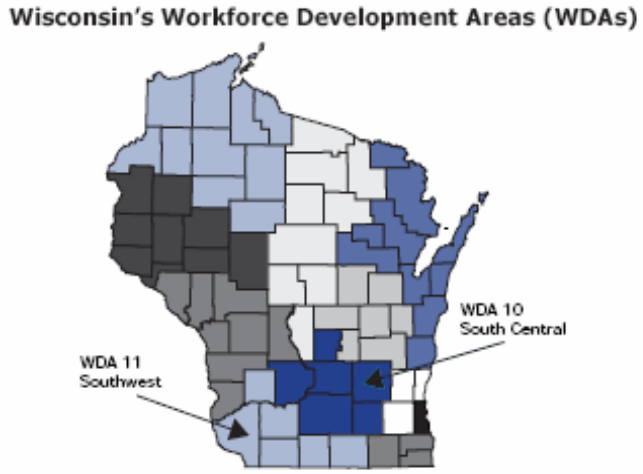
The Innovate America analysis suggests that Talent along with Investment and Infrastructure are the keys to long-term economic security. For 10 years, the GROW region has been guided by a tripartite analysis of a workforce development system. We have focused on the elements of Talent, Industry Sector Development and Systems Development. Each of these components requires attention as do their mutual interrelationships. Our Strategies for Transformation will center on augmentation of these three key components of our workforce development system.

We are committed to strengthening and improving regional collaboration across a diverse 12 county area, designed to build the talent, infrastructure and investment needed to develop a skilled workforce aligned with our high-growth and emerging industries. Receiving a WIRED grant will take major steps toward becoming a more vibrant region where collaboration becomes a fundamental process for developing the talent important to retaining and expanding the competitiveness of area employers and economic prosperity of the region.

IDENTIFICATION OF REGION

The South Central - Southwest GROW region includes the twelve Wisconsin counties of Columbia, Dane, Dodge, Grant, Green, Iowa, Jefferson, Lafayette, Marquette, Richland, Rock and Sauk. This includes 6 counties from WDA #10 – South Central and 6 counties from WDA #11 – Southwest. The area is shown in Diagram 2. The major cities are Madison, Janesville, and Beloit.

Diagram 2



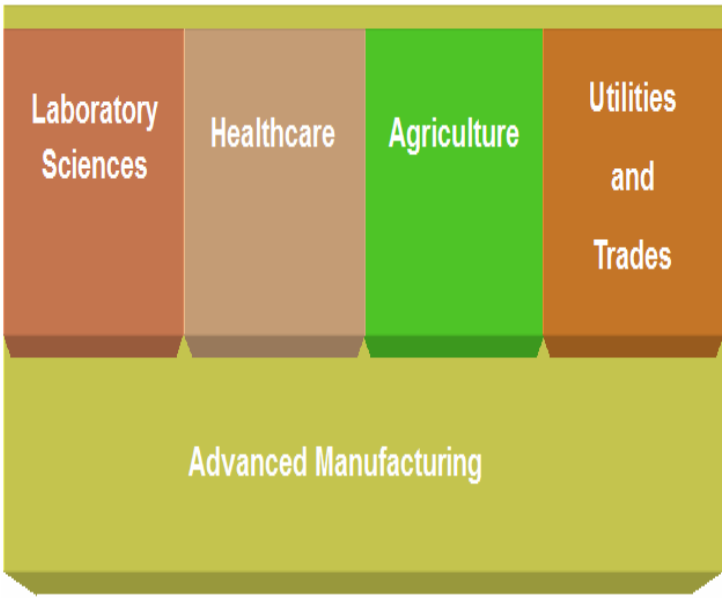
STRATEGIES FOR TRANSFORMATION

WIRED resources will enable us to achieve the economic, educational and workforce integration that we have been working toward as the South Central - Southwest GROW Region. As demonstrated in the results of our partnerships, we continue to focus on aligning our regional resources to support economic growth. However, the pace of change in our region at all levels of our economic fiber demands that we find the resources to accelerate the rate at which we develop the infrastructure, the resources (both financial and intellectual) and the talent to position the workforce not only for the knowledge economy but just as importantly for innovation to support our economic growth.

Our GROW region's efforts are also aligned with the Governor's "Jobs For a Future" program, the Wisconsin Department of Workforce Development's partnership with the Joyce Foundation's "RISE Initiative", as well as the goals of the Capital Region Collaboration Council, the Southwest Wisconsin Regional Planning Commission and the Southwest Economic Development Coalition.

Working toward a regional approach to any topic in a region as diverse as the South Central – Southwest's 12 counties is a challenge. Our region transitions quickly from the City of Madison, the second largest city in the State of Wisconsin, to the very rural countryside where the family farm is still the center of the economy. We have discovered that the way to find common ground is to work on a platform focused on our high-growth and emerging industry sectors. By working together on projects focused on developing the capacity of our industry sectors, we are able to discover the talents each partner has and demonstrate the benefit of working as a region. Sector-based work has been identified as an essential support needed by industry.

Targeted Sectors: These targeted industry sectors are shown below.



SCSW region has identified Laboratory Sciences, Healthcare, Agriculture and Utilities/Trades as targeted sectors. The Advanced Manufacturing sector represents the production application across all sectors. Nanotechnology, an emerging industry, will influence all of our targeted sectors.

Partner regional utility companies are focused on replacement of retiring skilled workers such as engineers, utility maintenance and skilled trades' workers.

The strategies in Table 5 will strengthen the region's industries by building infrastructure and channeling our investments to develop the talent that is needed to support innovation and economic growth. These strategies are the direct result of the collaborative analysis represented by the studies and surveys just described. See Part II, Attachment 1A for Activities and Timeline.

Table 5: Summary of Challenges/Strategies/Impacts/Outcomes

Sector Development Challenge	**System Development Challenge**	**Talent Development Challenge**
Address the rapid changes in Industry Sectors to support future growth and innovation. Landmark changes in manufacturing and agriculture include global competition and worker shortages. Converging technologies are creating a need for workers with a broad range of skills.	Keep pace with the skill development needs of our targeted high-growth industry sectors through flexible/ nimble industry-driven training. Address constraints (staff, equipment, facilities) of educational partners' resources to create new flexible instructional platforms to meet sectors' talent development needs.	The current talent pool is not replacing the high skill profiles of the retiring workers. Many potential workers demonstrate deficiencies in basic workplace and technical skills.
Strategy #1 Develop modular/career pathway based industry-driven training to support high-growth and emerging sectors.	**Strategy #2** Develop robust and regional infrastructure to support talent development.	**Strategy #3** Establish cross industry strategies to develop skills within emerging, under-prepared and incumbent workers.
Goals: ▪ Organize and launch new degree and certificate programs in: o Sustainable and Entrepreneurial Agriculture. o Laboratory Sciences o Utility Worker	**Goals:** ▪ Expand technical facilities/ training tools through shared technology-based facilities for Health Care and Advanced Manufacturing including: medical Sim Lab, robotics training center, and mobile maintenance trainers. ▪ Expand distance learning capacity including networked "Workplace Skills Centers" at One Stops. Continue expansion of technology-driven services: compressed interactive video, data casting and Internet-based delivery. ▪ Create job learning-	**Goals:** ▪ Develop Workplace Skills Centers that focus on applied basic skills and foundational industry skills with bilingual curriculum features. ▪ Develop industry-based internships and youth and adult apprenticeship to support workforce development opportunities within our targeted sectors. ▪ Launch Career Pathway Academies focused on 8th through 12th grade students.

Table 5: Summary of Challenges/Strategies/Impacts/Outcomes		
	networking opportunities for industry and economic/workforce development partners, K-12 & technical college educators, parents and students.	
Impact: A collaborative environment for sector growth. Changes in how companies hire and train employees. A multi-path platform supported by industry, education, workforce and economic development partners to support sector-based skill pathways. **Impact, continued** Flexible instructional content to support talent development, growth and innovation.	**Impact**: Worker recruitment, training and development infrastructure that provides maximum access to workers seeking to participate as the talented workforce of our growing and emerging industries.	**Impact**: Clear, accessible and effective solutions built on a 12-county platform to prepare the under prepared and emerging worker to be successful within career pathways in our targeted sectors.
Total Outcome: Train 350 people Agriculture – 100 Laboratory Science – 100 Utilities – 150	**Total Outcome:** Train 880 people Health Care Excellence Centers – 350 Robotics and portable systems – 330 Learning Academies – 200	**Total Outcome:** Train 850 people Workplace Skills Centers – 500 Career Pathway Academies – 350

How will these strategies transform our workforce development, economic development and educational systems?

1. Sector Development:

General Sector Work: Experience with over thirteen years of the Jobs with a Future program has proven that the first step to long-term sector development is the formation of industry partnerships. These collaborative ventures overcome competitive suspicion and move to cooperation in training, marketing and even hiring. Globally competitive companies learn that growth and productivity gains are grounded in investments in a highly trained workforce. Industry partnerships will be formed or strengthened in all targeted industries. To maximize the time workers dedicate to acquiring new skills, training will be organized around clear skill pathways driven by industry competency requirements and aligned with formal technical college programs at all levels from certificate through Associate degree. One of the

substantial results of our current regional work is a long standing and integrated commitment to a sector-based strategy utilizing a Career Pathway platform within growth industry sectors as a basis of our system's talent development. Based on the understanding that we have gained from the Capital Region Collaboration Council and our work with sector-based Industry Partnerships, we will organize and launch new certificate and degree programs in the Agriculture, Laboratory Sciences and Utility sectors.

Agriculture - Agriculture is a major strength of the region and, indeed, of the entire Upper Midwest. Few areas of the state and country can match the region's production output. But agriculture is changing and farmers and others are swiftly entering emerging markets in organics, food processing, specialty products and value-added agriculture. Madison Area Technical College (MATC) and Southwest Technical College (SWTC) will collaborate to organize and launch a new degree and certificate program in Sustainable and Entrepreneurial Agriculture. This program, based on a successful model in Iowa, will assist farmers to introduce new value-added products, sustainable and organic practices. It will have equal focus on farming as well as entrepreneurial skills such as business plans, marketing and accounting. The program will be available as a full degree program as well as certificates for experienced farmers. MATC and SWTC will collaborate with The Wisconsin Bio Ag Gateway, a 350-acre Bio Ag economy research, commercialization and business center located in Madison. The Wisconsin Bio Ag Gateway is presently home to the Wisconsin Department of Agriculture, Trade and Consumer Protection, and over 20 agricultural, biotech and biomedical businesses. Collaboration with the Bio Ag Gateway provides a regional opportunity to solidly and visibly position Wisconsin as a Bio Ag leader in the new economy, focusing on such salient directions as pharmaceuticals, energy, food security and biomaterials.

Laboratory Sciences – Madison Area Technical College is a 2007 recipient of a $1.9 million Department of Labor grant to develop a five-stage training program for an industry-designed technician career ladder. With MATC in the lead, we will work to increase the number of companies developing sub-bachelor job classifications that will serve as a portal for the entry-level worker in the region. The Laboratory Sciences sector has broad application across our targeted industries. The Dane County area – largest population center for the GROW region – is recognized as a hotspot for biotechnology in the Midwest; however, the need for laboratory workers with broad-based training has grown with no corresponding source of labor. Our goal will be to collaborate with the four technical colleges and the workforce development system to expand this effort to the entire 12-county GROW region.

Utilities – There is an impending demographic crisis facing the utility industry. By 2010, 60% of the region's experienced utility workers will retire. Additionally, the traditional entry point for new workers to the industry (meter reader) will be eliminated within the next five years as the function is automated. We will work with the regional energy companies to form an industry partnership which will identify and address shared solutions to prepare new workers for the industry.

2. System Development

The educational and WIA systems that support workforce development in the region operate at a high degree of collaboration. Their commitment to career ladders and integrated vision and systems has gained recognition through substantial state and national grant awards. However, capacity issues plague both systems. The following strategies will go a long way to increasing capacity in targeted areas to support regional economic development.

Health Care Training: The project will establish health care excellence training centers in three locations within the region. The training centers will be managed by the area technical colleges and lead by Health Care Excellence Consortiums comprised of the leadership of the area hospitals and clinics supported by the workforce and economic development professionals. The health care industry is a driver of economic growth within our region. In Wisconsin, the sector expects to grow by more than 30% over the next ten years, generating 10,000 health care jobs annually. For the strength of this industry to persist, it is imperative that we build and maintain a focused, efficient and cohesive economic and workforce development system around it, composed of employers, educators, community-based organizations and public sector representatives.

The Capital Region Collaboration Council in consort with South Central - Southwest GROW Region partnered to establish a workforce development "design team" charged with developing a sectoral health care workforce development strategy. As an extension of these efforts, the Health Care Workforce Excellence Center Planning Committee was formed with the goal to connect existing/planned training and outreach initiatives and link them to identified employer needs by creating joint training initiatives, coordinating community outreach, and even cooperatively managing and sharing training space.

Phase 1 of our work will focus on working with the current Health Care Excellence Center Team which represents the major hospitals and clinics in Dane County. This team proposes working collaboratively to explore a shared physical training infrastructure. Currently one of the significant challenges to maintaining a health care workforce is the lack of physical space and the expense of more efficient simulation equipment strategically located near the care facilities as well as the emerging workforce.

Phase 2 of our work will focus on translating this work to a smaller scale strategically with our regional hospitals and clinic networks in Beaver Dam (located in Dodge County in the South Central area) and a location to be determined in our rural Southwest area. Our metro and regional healthcare networks are connected by the Dean Health Systems. Dean Health Systems has built significant outreach and provider networks that create a healthcare web within our region. We will also look to statewide partners to participate and advise our efforts to include the Wisconsin

Hospital Association, the Wisconsin Rural Health Care Association, Wisconsin Area Health Excellence Center Association, the Long-Term Care Health Association, the associated health care unions.

Advanced Manufacturing Training: The project will establish an Advanced Manufacturing Training Center that would combine a centrally-located Robotics training facility augmented by mobile trainers for PLC and other maintenance systems. This center will include skill building instruction provided on a 24/7 schedule in the following areas identified by a recent survey of regional companies: manufacturing technical training and related IT, Lean and Quality Improvement, automated manufacturing, team, supervisory and performance assessment. The regional Training Center will be located on the east side of Madison, Wisconsin, which is adjacent to all major highway transportation corridors in the region.

Technology Augmentation of the One Stop System: We will strengthen the One Stop workforce development system structure to support industry needs through the continued development of technology-driven One Stop service solutions. Creating flexible tools that maximize interface between workers and industry is essential to our workforce recruitment and development efforts. The following two infrastructure solutions will improve our One Stop System effectiveness. The State of Wisconsin has made an initial investment in 2000 of $200,000 to build these infrastructural platforms on a six-county basis. Our goal is to create a 12-county operational platform.

Virtual Job Center: The Virtual Job Center will be an enhanced website that can be accessed from anywhere there is Internet access – participants' personal/home computer as well as through local Job Center locations, and numerous off-site locations (i.e., libraries or local chambers of commerce). Job seekers will use the website much like they use the physical Job Center to obtain help and information about local job opportunities, training programs and other services that will assist them in obtaining a job. Many job seekers will simply access information using the website as a portal to a comprehensive variety of core services provided by Job Center partners such as Job Service, Unemployment Insurance and Food Stamps. Instant messaging capability along with a "call center," staffed by Job Center partners, will provide an opportunity for participants to obtain the information they need directly without having to travel to a Job Center site. The Virtual Job Center will be linked to the region's distance learning capability.

Distance Learning Applications: In collaboration with the Educational Communication Board, University of Wisconsin Extension and our technical colleges, we will continue to work to combining the technologies of compressed video, Internet protocol and Integrating Data Casting to transmit both live instruction and educational materials in the form of video, audio, graphic and text. Data casting will also give us the ability to download, store and deliver instruction at a later date or time including non-traditional instruction hours (2nd or 3rd shifts). We will be able to

package our training into workshop or series formats that can be simultaneously broadcast throughout our region including directly to all of the region's Job Centers.

Workplace Skills Centers: The project will network "Workplace Skills Centers" via distance learning technology including compressed interactive video, data casting and Internet-based instruction. Networked Workplace Skills Centers will position foundational industry instruction so that the under-prepared workers who enter a community-based site make a smooth transition into a company-based instruction after hire. This will enable us to optimize the expertise of the staff throughout the region and provide high quality service to our rural communities. Features will include: career counseling; adult basic education operations; industry-applied English as a Second Language instruction; Manufacturing Skills Standard Assessment and Certification testing; and foundational industry skill instruction focused on the application of science and math to health care, laboratory sciences and advanced manufacturing sectors.

Learning Communities: We will create joint learning and networking opportunities for sector-based industry partners, economic development partners, K-12 – technical college educators and workforce development professionals, parents and students. All of our current partners tell us that one of the key problems to talent development is lack of understanding of the workforce and economic development trends, resources and challenges. We believe that by creating cross discipline learning and then moving that learning into collaborative projects, we will maximize and focus our region's resources to effectively support our economic growth.

3. Talent Development

The final element of our project focuses on the third component of the Workforce Development System: Talent Development. We must develop cross industry strategies targeted to developing skills within our emerging, under-prepared and incumbent workers. In order for our region to remain competitive, we must focus on assuring that we are developing the talent of our emerging and under-prepared worker.

Foundational Skills: We will transform Workplace Skills Centers to focus on applied basic skills and foundational industry skills with bilingual curriculum features. We will expand the capacity of these centers, both community-and industry-based, beyond providing Adult Basic Education (preparation for high school equivalency). Centers will serve the dual function of providing support to persons participating in sector-based training and foundational support to the under-prepared and emerging worker. We will work with our variety of Workplace Skills Centers (community-based, One Stop Center-based and industry-based) to operate as a networked instruction that enables the under-prepared workers who enter a community-based site to make a smooth transition into a company-based instruction after hire.

Internships and Apprenticeships: We will develop industry-based internships and youth and adult apprenticeships to support workforce development opportunities within our targeted sectors. It is clear that for many under-prepared and underemployed workers, traditional educational settings are not effective ways for them to gain workplace skills. But regional experience with partners like Operation Fresh Start has demonstrated that a combination of paid work and related learning is an effective method to integrate even hard-to-reach individuals into workforce systems. We will work with the United Way of Dane County and their study of Disconnected Youth to experiment with work and learning programs. In addition, successful high school students also benefit from work-based learning. We will work with the K-12 system to introduce Youth

Apprenticeship programs into our targeted industries. Finally, many of the traditional apprenticed trades are having difficulty finding a skilled and diverse workforce. We will work with our One Stop partners and local employers to introduce and reinvigorate apprenticeships in the selected targeted industries.

Career Pathway Academies: We will establish Career Pathway Academies focused on 8th through 12th grade students and targeted to our selected industry sectors. Career Pathway Academies will be managed by the regional School to Work Consortiums in collaboration with the Workforce Development Boards' Youth Councils and our Technical Colleges Tech Prep Consortium. Initial academy engagement will start with 8th grade students within our region. The goal for each student will be to develop a "Career Pathway Plan of Study" identifying courses that student will need in order to reach their post-education employment goal. Career

plans will be created using materials already developed by Wisconsin's Career Clusters Initiative, which breaks down the core educational components required by career cluster. Yearly check in will occur for the 8th through 10th grades with guidance from parents.

After the first semester of the sophomore year, the student would apply for enrollment in a Career Pathway Academy. Students accepted in to the academy would begin contextual learning opportunities and workplace learning opportunities in their junior year and continue that through their senior year. Classroom coursework will articulate to the technical college system.

The overarching goal of our three strategies is to achieve alignment, integration and synergy among the workforce, economic and educational systems' resources to build a sustainable infrastructure to support talent development within our GROW region. The WIRED grant will also give us the opportunity to create tools that can be shared throughout the State of Wisconsin and the country to strengthen our vital talent development systems.