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## HOW WORKFORCE INVESTMENT BOARDS CONNECT TO WIRED PROJECTS



### Background

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In January 2006, “the California Space Authority (CSA) was selected to lead a 13 county economic region comprising the “California Innovation Corridor” to work in cooperation with the U.S. Department of Labor Employment and Training Administration, the State of California’s Labor and Workforce Development Agency and over 60 industry, workforce and economic development partners in a joint effort to drive the Corridor’s entrepreneurship, global manufacturing competitiveness and 21st Century workforce development.”<sup>1</sup> The three primary Corridor goals of the WIRED grant were Innovation Support, Industrial Rejuvenation, and Talent Development.

In the realm of talent development, the goals of the project evolved to include the transformation of California’s public workforce system from a reactive supply-focused approach, to a dynamic demand-driven set of strategies designed to meet the skill needs of California’s business community, with particular emphasis on those industries most linked to innovation and requiring workers with technical skills.

**Talent Development –**  
*“Accelerate development of a highly skilled 21st Century talent pool by creating pilot projects and activities capable of supporting a continuum of math, science and engineering education (K-U), and lifelong learning relevant to the 21st Century worker.”*

The California Workforce Association was funded to develop a “Collaboratory,” – a learning community of Workforce Investment Board (WIB) members and staff – who could learn from each other, from experts, and from other projects in the WIRED initiative to accelerate the transformation of the system. A number of WIBs were funded to develop projects in the WIRED grant, and other organizations, such as Bay Area Science and Innovation Consortium/Bay Area Economic Forum (BASIC) and the California Space and Education Workforce Institute (CSEWI), played critical roles in projects also focused on the talent development aspects of the WIRED grant.

This final monograph examines the key WIRED projects that are the most relevant to the WIBs, and points to ways that WIBs can use the information and results of these projects in order to continue to transform the workforce system beyond the WIRED grant.

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<sup>1</sup> WIRED Corridor 4 page Summary [www.innovatecalifornia.net](http://www.innovatecalifornia.net)

## Talent Development

The California Space Authority describes the issues around talent development as follows:

*The shortage of qualified technical workers is also a challenge to the Corridor. Nearly every sector of California's high-tech economy shares this problem. It is compounded by the graying of the workforce and the low number of such talent in the pipeline. A significant portion of the Corridor's 1.5M manufacturing workforce is rapidly reaching retirement age, creating a technical worker crisis of major proportions. Retirements are exacerbated by the fact that 37% of the University of California technical grads are foreign students ineligible to work on high-security projects. The State is just not graduating enough science and math majors since, for example, 2100 math teachers are needed, not counting those needed in industry, and only 1389 math majors graduated in California in 2004. The unemployment level within the Corridor has averaged more than 1% higher than the national average for the 1990-2004 period and job growth for 2001-2004 showed a disturbing trend—industries with a net increase in employment paid an annual wage almost \$15,000 lower than industries showing a net decrease. Thus the new jobs tend to be lower-wage. The many projects listed below were created to both better understand the California workforce and improve its competitive advantage.<sup>2</sup>*

In the last few years, WIBs in California have moved towards a talent development approach in a number of ways. Most recently, 12 WIBs have become engaged in a strategy to integrate services in their One-Stop Career Centers to focus on skills development of every person who walks through the door of the One-Stop, rather than a more traditional approach to operating a One-Stop, in which most customers are “self-service” and only a few receive intensive career counseling, job placement and training services. More broadly, virtually all WIBs have adopted an industry sector approach, in which they analyze their local and regional labor market, and select key industries that are driving the economy, and then work with employers in those industries to better understand their needs, and help find the solutions to those needs.

The five strategies listed in this monograph are intended to continue to move WIBs towards a talent development system by capitalizing on the work done through WIRED.

- Develop Strategy using the 5 Roles of the WIB
- Collaborate with Economic Development
- Collaborate with Education
- Know Everything about Your Labor Market – Supply and Demand
- Cultivate networks

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<sup>2</sup> Talent Development [www.innovatecalifornia.net](http://www.innovatecalifornia.net)

## Develop Strategy using the 5 Roles of the WIB

WIBs have three key functions. The first is oversight of the WIA program and funds, to act as a steward of the public dollar, and to ensure that they are operating high quality programs. The second is to align resources and services, so customers – both job seekers and employers – are receiving “seamless” services across agencies and organizations, and that funding and staffing are leveraged. The third function of the WIB is to provide community leadership around workforce and talent development issues, so that regions and communities understand and respond to the needs of their employers and residents. The WIB Resource Toolkit looks at the community leadership function, and lays out 5 roles, along with case studies and examples that WIBs can use to catalyze their own thinking and action.

The WIB Resource Toolkit WIRED project was a collaborative effort between three nonprofit organizations: California Council for Science and Technology (CCST), the project lead, which offers science and technology-related policy solutions to the state government; California Space Education and Workforce Institute (CSEWI), dedicated to the enhancement and development of space-related education and workforce; and CWA.

The "Racing for the Future" online toolkit was designed to help provide WIBs with essential tools for understanding their environment and adapting successfully to it. Every WIB has its own charter, organization, and unique context. What they share, however, is a set of central roles. The toolkit is designed to help WIBs build upon and support those functions, with over 150 pages of material, sorted into five easy to navigate, cross-linked sections. It includes 11 original downloadable support documents and links to dozens more that are potentially useful to WIBs.<sup>3</sup>

The Toolkit describes 5 community leadership roles of the WIB:

- **Convener:** Bringing together business, labor, education, and economic development to focus on community workforce issues.
- **Workforce Analyst:** Developing, disseminating and understanding current labor market and economic information and trends
- **Broker:** Bring together systems to solve common problems and broker new relationships with businesses and workers
- **Community Voice:** Advocating for the importance of workforce policy, providing perspective about the need for skilled workers
- **Capacity Builder:** Enhancing the region’s ability to meet the workforce needs of local employers.

Many WIBs have started to use the WIB Toolkit as a way to think about their work, to help in strategic planning, and in educating new WIB members in orientations. CWA

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<sup>3</sup> Racing Towards the Future Toolkit [www.wibtoolkit.net](http://www.wibtoolkit.net)

staff have used the WIB Toolkit both in California, training WIB members, new WIB directors, and in strategic planning, and outside California in training other systems about workforce development and the roles that WIBs can play.

The San Diego Workforce Partnership, who was funded to do several projects with WIRED, answered our question about the role of the WIB and WIRED in this way:

*WIRED strengthened our commitment to developing demand-driven strategies. Another impact of WIRED was the cementing of the vision that WIBs need to look beyond the traditional WIA-focused activities to a new way of doing business that really understands what the businesses in our region demand.*

## Collaborate with Economic Development

In the last 10 years, workforce and economic development systems have been urged to work together in collaborative projects and initiatives, to improve the economic vitality of their regions. The US Department of Labor, through the WIRED initiative, clearly was focused on increasing this collaboration; in fact, the former ETA Secretary stated that workforce programs had become “economic development programs with social benefit, rather than social programs with an economic benefit.” What has made this collaboration more challenging in the last few years is that thinking about the roles of the WIB and economic development organizations has been changing. The Economic Development Innovation Toolkit, funded by WIRED, proposes fundamental rethinking of the role of the economic development professional away from a “job creation” framework and towards an innovation broker framework. In this new model, WIBs can play a key role.

The Economic Development Innovation Toolkit WIRED project goal was to develop and implement a toolkit to be used by economic development professionals and WIBs to provide support to entrepreneurial businesses that drive innovation across the California Innovation Corridor. Its long-term goal is to create an atmosphere in which the culture, environment and systems are characterized and driven by robust innovation and flourishing entrepreneurship.<sup>4</sup>

The Toolkit states:

*If innovation is now the imperative, what does it mean for strategy? It means that the focus of public and private sector action must be on those factors that are crucial to improving a region’s ability to innovate. We need to ask how existing economic development, workforce development, and other strategies promote innovation—keeping or expanding those that are making an important contribution. We must also consider new strategies that promote the kind of*

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<sup>4</sup> Innovation Driven Economic Development Model [www.innovatecalifornia.net](http://www.innovatecalifornia.net)



*innovation needed to compete in today's fast-changing global economy, not just other U.S. communities or states.*

This new way of thinking about economic development calls for new kinds of collaboration between the economic development and workforce systems. Clearly defining the community condition is one of the single best investments that can be made to ensure successful collaboration. The greater the diversity of people and opinions involved the greater the potential for tailoring solutions and strategies to the community. Having workforce, education and economic development agencies at the table together in evaluating the opportunities in their regions is a key way of ensuring closer collaboration, and the Toolkit lays out very clear steps in this process.

New collaboration may be as straightforward as sharing information or as complex as defining whole “new” systems of services. Communities must recognize that complex issues require complex solutions. Agencies and organizations that traditionally have dealt with the problems must realize that many problems grow faster than they have the capacity to address them.

A collaborative effort to achieve a common goal goes well beyond signing a memorandum of understanding, attending meetings, or agreeing to serve as a chair of a committee. The ultimate goal is to create a climate in which broad-based business and citizen commitment to community problem solving is expected and which wide ranges of individuals and groups have the opportunity, skill and resources to act on that commitment.

As the chart from the Toolkit (on the next page) lays out, new ways of engaging in economic development that are focused on the innovation economy provide a number of ways for WIBs to collaborate. Specifically, there are “investments in talent,” and a cluster based approach, which require good workforce intelligence and investments in the right education and training. WIBs can participate with economic development agencies as brokers and conveners, adding value with their knowledge of the labor market, the skills and talents of the region’s workforce, the region’s education and training assets, and the support systems for those who need help connecting to the new innovation-based jobs.

Chuck Flacks, project director for the WIRED project at the San Diego Workforce Partnership said this about their WIRED grant, and the opportunity it gave them:

*We have greater collaboration with economic development agencies. While we were involved at the senior executive level with the economic development agencies in San Diego, WIRED taught us how to better speak the same language and learn more about how to discover the needs of business. More junior level staff, such as myself, were able to interface directly with our counterparts at the local EDC's.*

Key Characteristics	Cost Driven Economic Development Model	Regional Innovation Driven Economic Development Model
Focus	Domestic competition Zero sum game	Global competition and collaboration Positive sum game
Logic	More inputs (land, labor, capital) create more output  The lower the costs of inputs, the higher the profitability of outputs	More efficient and innovative use of higher-value inputs (physical, human, knowledge resources) creates more profitable output
Goal	Growth of jobs	Increasing productivity and per capita income
Approach	Incentives to attract or retain cost-driven firms and industries	Investments in talent and infrastructure to support innovation-driven clusters
Role of economic development practitioners	Lead industry attraction and marketing efforts to firms and industries	Broker innovation networks, connecting inventors, financiers, and transformers, to produce results
Performance metrics	Quantity of jobs, number of firms attracted/retained	Quality jobs, wage and income growth, innovation (e.g., patents, commercialization, start-ups, etc.)

Source: Innovation Toolkit, page 21

## Collaborate with Education

Collaboration between the education and workforce systems has been a hallmark of good programs around the State for many years. WIBs have worked closely with both the K-12 system and the higher education systems, and in particular with the community colleges. What is different in the current economy is that jobs are requiring higher levels of skill attainment and education, and that workers need to continually upgrade their skills throughout their working life. California’s WIRED initiative is also designed to address the pressing needs of key industries that need science, math, and engineering skills.

There are a number of WIRED projects that WIBs can look to in regard to collaboration with education. One is the monograph CWA wrote about collaborating with the community colleges within the framework of “communities with a competitive workforce advantage.” Second is the paper written by the San Diego Workforce Partnership, titled “Innovating Workforce Development By Supporting Business Innovation: Case Studies from California.” These both provide examples of WIBs working with education and training organizations to increase the skilled workforce within certain industries. The San Diego paper includes practical lessons



learned and potential for expanding these programs.

The California Space Education and Workforce Institute and The Alliance for Regional Collaborations to Heighten Educational Success developed a STEM Collaborative Action Plan to increase the number and support the development of Science, Technology, Engineering, and Math students, graduates, teachers, professors and mentors. The recommendations of the STEMCAP are focused around four categories to increase involvement – inspire, engage, educate and employ. The STEMCAP plan includes many recommendations pertinent to WIBs.

There were a whole series of WIRED projects that included education partners in both specific training projects and system building. All of them are listed on the [www.innovatecalifornia.net](http://www.innovatecalifornia.net) website, along with contact information for the project leads, and many may be worth researching to both use as models, and to get additional information; they include such projects as: expanding university internships and mentoring programs, developing outreach of systems engineering training programs creating science and math middle and high school teachers institutes, an industry-driven training program to retrain dislocated software specialists for space related computer science technician work, a program to bring engineers, technicians and scientists who are retiring or separating from industry into grades 6-12 classrooms as new teachers, model university and high school mentoring programs, a community college industrial technology-based degree in Mechatronics, and real-world curriculum for educator conferences focused on STEM education and space science.

Collaboration with education can take many forms. We offer some suggestions adapted from a community collaboration workbook, to consider as WIBs think about different projects and the extent to which collaboration is critical to their success.

**Networking:**

- Dialog and common understanding
- Clearinghouse for information
- Create base of support
- Serve on WIB committees or workgroups

**Cooperation or Alliance:**

- Match needs and provide coordination
- Limit duplication of services
- Ensure tasks are done
- Co-locate K-12 and community colleges in One-Stop

**Coordination or Partnership:**

- Share resources to address common issues
- Merge resource base to create something new
- Teach GED prep and college classes on-site at One-Stop
- Apply for grants from State Labor Agency and Chancellor's Office together

**Coalition:**

- Share ideas and be willing to pull resources from existing systems
- Develop commitment for a minimum of three years

**Collaboration:**

- Accomplish shared vision and impact benchmarks
- Build interdependent system to address issues and opportunities
- Merge advisory committees and boards into single entity

## Know Everything about Your Labor Market – Supply and Demand

WIBs have a statutory responsibility to collect and disseminate labor market information in their communities. The opportunity to go way beyond this requirement is something that every WIB should be engaged in. Many WIBs publish “State of the Workforce” reports, or are working with regional organizations on community benchmarking reports. In the last few years, the California Workforce Investment Board, in partnership with the Economic Strategy Panel, has launched a “Clusters of Opportunity” methodology, and has been providing training to WIBs, community colleges, and economic development partners around the State.

The Economic Development Innovation Toolkit states:

*One effective method for engaging innovators is through a “cluster of opportunity” mobilization process. This process has been documented by Collaborative Economics in a step-by-step fashion for the California Economic Strategy Panel, with a detailed user guide available at [www.labor.ca.gov/panel](http://www.labor.ca.gov/panel). [The Innovation Driven Economic Model includes] a brief summary of the key elements of this process.*

*Cluster mobilization engages employers from the region’s driving industry clusters and gains their insight and commitment to strengthen a region’s asset base. Through this method, employers actually become partners in developing a regional innovation strategy.*

Several WIBs have used the Clusters of Opportunity methodology to create the framework for strategic planning, and for engagement of their key industries. This is an excellent way for WIBs to engage in one of the 5 WIB roles – becoming an expert in workforce intelligence.

There are a number of WIRED projects that focused on gathering, understanding and disseminating labor market information – in particular, information about the skills requirements of employers in key driving industries. One was the 21<sup>st</sup> Century Supply Chain Transformation Survey. The California Space Authority designed and conducted a survey to collect all information from all levels of the supply chain. The survey included questions designed to identify priority supplier training needs and changing training needs driven by supply chain transformation.

The survey also sought to characterize the current supply base and common requirements, and to characterize foundational “smart supplier” competitiveness skills. Local Workforce Investment Board members will be most interested in the survey questions and response around training priorities. The responses to questions around training delivery, preparation skills, and workforce development practices will be of interest to all workforce development practitioners.

Other WIRED projects included 21st Century Job Profiles to define future workforce skills and needs, which included surveying 200 companies and writing a final report of the survey results, and developing strategies to address identified training and education gaps, and share strategies across the entire Corridor; and an Innovation Asset Inventory to foster innovation and entrepreneurship. These inventories provide excellent information for both WIBs to use in their work and business partners to use in assessing their assets and needs. The Connectory contains detailed profiles of California primary industry companies across all industries at every level of the supply chain. California businesses can link to each other and the inventory provides information about the industrial/technology base of the U.S. largest economy.

In response to the question “How did your involvement in the WIRED project change your work, the South Bay WIB, who worked on a labor market information project responded: *“The project was challenging and interesting. It did result in encouraging our focus on evidence e.g. labor market information and economic data. It helped us understand opportunities and demands in the economy.”*

## Cultivate networks

Last, WIBs can become a critical player in their regions by taking seriously their role as convener, and network builder. As seen in CWA’s Social Network study, WIBs have been developing networks that both define regions of the State, and span across regions in “boundary crossing.” The diverse membership of WIBs is an asset that can not be underestimated; business, labor, economic development, community organizations, education and other public sector partners are all WIB members, and can be seen as resources to help build strong and effective regional networks. The Economic Development Innovation Toolkit says about networks:

*Assets are leveraged through personal and institutional networks. Networks are a complex web of tight relationships among people who know how to translate ideas into new products, services, policies, or initiatives fast enough to stay on the innovation curve. These complex networks continually connect people with good ideas and test the changing environment, always searching for the next innovation.*

*Well-established networks that spark creativity and facilitate knowledge sharing are often the performance difference between regions. In her path breaking research comparing Silicon Valley and Boston’s Route 128, Regional Advantage, Anna Lee Siberian found that the performance difference between two technology*

*regions was the “network model” in Silicon Valley that connected companies and sped up the innovation process. Route 128 had similar assets but different results because it failed to collaborate and build open networks for information sharing.*

*More broadly, in two books published in the past decade (Grassroots Leaders and Civic Revolutionaries), Collaborative Economics has documented dozens of regions across the United States that have advanced through networks of economic, social, and environmental innovators or “civic entrepreneurs.”*

## **Conclusion**

The WIRED grant gave the California workforce system many gifts. Almost every project provides information and products that can help WIBs move forward in transforming their regions and building competitive workforce solutions. The resources that are now available on [www.innovatecalifornia.net](http://www.innovatecalifornia.net) are invaluable for WIBs to use as they think through their work, the ways in which they need to collaborate and design new strategies to develop the talent that businesses need. Just as important, the WIRED grant has built a cadre of people throughout the State who understand the WIRED principles, who care about transformation of our systems, and who can continue to serve as the stewards of the WIRED goals. Our hope is that all of California’s 49 WIBs will continue to be key players in that stewardship.