Transforming Regional Economies: Challenges and Accomplishments

Final Report of the Evaluation of Generation I Workforce Innovation Regional Economic Development (WIRED) Grants

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Executive Summary

In 2006, U.S. Department of Labor's Employment and Training Administration (ETA) awarded \$195 million in grants to 13 sub-state regional consortia under the Workforce Innovation in Regional Economic Development (WIRED) Initiative. Each regional consortium received \$15 million to effect "transformations" in their regional economies and public systems for workforce development over a three-year period of performance. Eligible regions were those that were economically vulnerable because of global trade, natural disaster, or dependence on a single industry. There were eventually two other rounds or "generations" of grants and ETA ultimately awarded a total of 39 WIRED grants, for a total of \$325 million (with Generation II and III projects receiving only \$5 million).

As with all three generations of grants, the Generation I consortia had representatives from business and industry, Chambers of Commerce, workforce investment areas, organized labor, universities, community colleges, school districts, and not-for-profit organizations. ETA gave the consortia considerable discretion in targeting specific economic sectors and in devising, funding, and managing activities to promote economic competitiveness and transform multiple parts of system for developing workforce skills. The projects were also tasked with developing and nurturing strong partnerships, expanding employment in high-skill/high-wage jobs, and increasing the skills and work readiness of low-wage workers.

ETA encouraged grant managers and partners to develop new models of geographic and institutional collaboration, creating "boundary-spanning" networks and new professional relationships, in the hope that these would lead to long-lasting change that might outlive the grants' periods of performance of three or four years.

To facilitate implementation of the WIRED grants, ETA deployed consultants to assist each project, assigned senior or mid-level staff (apart from the usual Federal project officers) as "ETA leads" to communicate with and mentor each project, and provided training and information-sharing through webinars, quarterly "academies," and online collaborative workspaces. ETA also required grantees to develop detailed implementation plans that included performance goals on both region-defined and ETA-defined metrics.

Basic Premises and Activities

The WIRED Initiative was based on a number of assumptions about how the U.S. might become more globally competitive. The key premises were that:

- 1) Science, technology, engineering, and math (STEM) skills are vitally important to innovation and to new and emerging products and industries and to global competitiveness;
- 2) The locus of economic competitiveness is intensely regional, arising through collaboration among industrial, research, education, and commercializing institutions that can respond rapidly to challenges and opportunities; and
- 3) Improving current and future workers' skills is critical to regional economic growth and requires major alterations to workforce training and educational institutions.

Building upon these premises, the major work of the WIRED grant was to involve:





- Identifying within each region critical gaps, areas for innovation and economic growth, and ways to create or stimulate systemic change that would effectively integrate previously separate assets;
- Mobilizing inputs to prepare workers whether they were currently employed, displaced, underemployed, or just entering the workforce with the skills and knowledge needed in growth sectors and to adapt to increasingly science- and technology-rich workplaces; and
- Supporting transformative changes in existing workforce and economic development systems to assure their continuing contributions to regional economic growth and prosperity, by expanding employment and advancement opportunities for workers and catalyzing the creation of high-skill and high-wage opportunities.

More specifically, the grantees undertook a broad spectrum of activities and strategies including:

- Strategic planning and leadership activities involving data development, asset mapping, and gap analysis, and collaborative efforts to define the vision for the region;
- Economic development efforts such as entrepreneurship support (e.g., mentoring, classes, resource directories, and facilitating access to capital) and promoting innovation and technology transfer (through projects with universities and other research facilities to create or improve products, processes, and services);
- Efforts to promote an enhanced "talent pipeline" that would ensure secondary and postsecondary education institutions produce students with the skills employers need, through promoting science, technology, engineering and mathematics (STEM) careers and curricula, creating new courses and curricula, and developing industry-specific training facilities; and
- Workforce development activities such as training incumbent or dislocated adult workers in a range of growth-oriented occupations and industries, exploration of different workforce development strategies such as focusing on "green jobs" and use of online curriculum as well as promoting credentials and certifications.

The Evaluation of Generation I WIRED Projects

In 2006, ETA competitively selected Berkeley Policy Associates (BPA) and its subcontractor, the University of California, San Diego Extension (UCSD), to evaluate the Generation I WIRED grants. The evaluation began in October of that year and aimed to provide a comprehensive understanding of the implementation of the grants and "transformations," if any, in regional economic and workforce systems. The evaluation focused on describing and assessing three critical aspects of the Generation I projects:¹

1) **Partnership, collaboration, and identity-building.** The evaluation team explored whether and how grant partners worked collaboratively, leveraged regional economic, education, and training resources, and developed a shared identity and common sense of purpose.

¹ See the evaluation's design report for more detail on study methods: Almandsmith, Sherry, Mary Walshok, et. al. (2007). Evaluation of Generation I of the Workforce Investment Regional Economic Development (WIRED) Initiative: Design Report.





- 2) Specific organizational and programmatic strategies and their outcomes. The evaluation documented the various strategies as well as results in terms of enrollments, program completion, degree attainment, job placement and retention.
- 3) **Progress toward sustainable regional transformations.** The evaluation attempted to determine if the WIRED grants influenced regional economies and public agencies involved in workforce development, education, and economic development.

Multiple sources of data were used in the evaluation, including: documents, site visits, a survey of partner organizations in each region, quantitative data from grantee reports and the WIASRD database; and existing data sets on regional economic conditions and other factors just before and close to the end of grant implementation.

Two interim reports were produced on implementation while this third report focuses on the accomplishments of and challenges encountered in the Generation I WIRED grants. A joint report documenting findings from all three generations of grants was also produced in collaboration with the team evaluating Generation II and III projects.

Overview of the Projects

The Generation I regions were quite diverse geographically but all nonetheless faced significant economic challenges such as:

- Dependence on a single industry, or on a small number of giant companies along with their suppliers, which left the regions vulnerable if those companies or industries declined,
- Large manufacturing companies with many workers with high wages who had low or few transferrable skills relevant to advanced manufacturing or other knowledge-rich industries with high-wage jobs.
- Lack of a culture of innovation and entrepreneurship,
- Weak STEM education and lack of strong connections between secondary schools, postsecondary institutions, and vocational training providers,
- A "brain drain" seen in out-migration of the best-educated young people because of a lack of jobs and amenities to hold them., and
- Marked differences across sub-areas within the region (e.g., urban and rural), based on discrepant histories and needs.

The locations of the 13 "regions" that received Generation I grants can be seen in Figure ES.1..





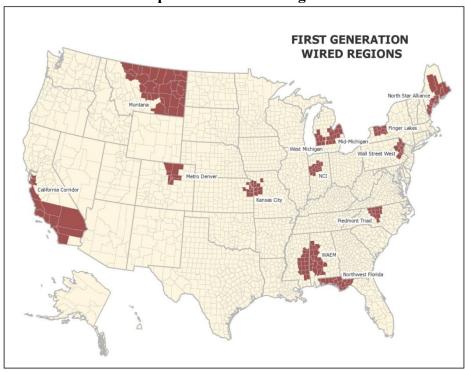


Figure ES.1
Map of Generation I Regions

Source: ETA web site, http://www.doleta.gov/wired/regions/

The regions were highly varied in their culture, social and political climate, population characteristics, dominant industries, and workforce and educational systems. The consortia and their partners also were highly varied in terms of their professional backgrounds and roles, history of working together, and trust between players.

Each project targeted specific industries as engines for economic growth. Most grantees picked one or more of the following industrial sectors: advanced manufacturing; bio-energy; bioscience; health care; agribusiness; and information technology. Several grantees also focused on industry clusters such as finance, construction, animal health, aerospace, logistics/distribution, and creative arts.

The type – and membership – of the governance structure for each grant could have a large effect on what direction(s) the initiative followed and, potentially, on how well it succeeded in meeting its objectives. Governance structures for the grants varied considerably as did the way in which the grants were managed. In some cases, the managing organization decided to follow its customary practices, while others were subject to the imposition of a standard or a preference by a person or group in authority (such as a state agency's required grant processes). For some grants, however, partners seized the opportunity to do something new and different.



Strategies Undertaken by the Generation I Regions

The overall strategies that Generation I regions used to implement the Initiative were complex, and often changed in response to outside circumstances. The regions did not rely on a single strategy, but most of them did begin the initiative with an overall approach that emphasized one of the following three systems: economic development or target industries, education system, or workforce system.

Naturally, the regions' strategies combined this initial emphasis with efforts to promote collaboration across systems and to align the endeavors of public and private partners with a common goal of transforming the regional economy. At the center of each region's strategy was a collaborative design and decision-making process that involved a wide variety of partners – professionals representing the workforce system, the education system, state and local government, economic development, and the private sector.

Progress toward Regional Transformation

The challenge for this evaluation is that regional transformation is an amorphous thing that is very difficult to measure directly. Consequently, the evaluation team approached the task from numerous directions. First, we looked at increases in collaboration, connections between partners, and sharing resources, customers, and facilities. Second, the study examined regional identity by examining changes in how the region's residents see themselves and their larger community. Next, we explored transformation of the workforce development system, including any changes in the public workforce system's reach and impact, changes in the definition of who is a customer, and signs of increased flexibility in service areas. The evaluation team also investigated whether and how stakeholders from the economic development system expanded their focus to a regional scale, and altered their relationships with workforce development, community college, and university partners. Similarly, we assessed any changes in the post-secondary education system, including increased integration among community colleges, relationships with employers and industry, flexibility in scheduling, and movement toward models of lifelong learning and career ladder training.

Collaboration, Building Alliances, and Regional Identity

Under the Initiative, the Generation I grants shared a vision of regional economic transformation; a vision of complete change in all aspects of workforce development, education,-developing workforce skills, and economic development in the region that required not only the establishment of numerous new practices, but a major shift in mindset. System transformation, however, can take many years, certainly more than the Initiative's three-year grant period; the literature on economic change and innovation, for example, suggests that it may take five to ten years for large-scale changes in culture, attitudes, and behavior to get any real traction. Most of the stakeholders in the Generation I regions took the long view, and considered the creation of collaborative relationships through the Initiative as but a first step in achieving system transformation over the long term. According to an evaluation visit respondent in one region, the





grant funding from DOL/ETA should have been considered as a jump start for an undertaking that would require continued effort and investment "so that they would not run out of wind in a sailboat race."

At the same time, it is necessary to consider how much progress the Generation I regions made in regional system transformation over the timeframe of the Initiative. Did the regions at least accomplish the kind of intermediate goals that would indicate that they were moving toward such transformation? To answer this question, evidence from this evaluation demonstrates significant shifts in service delivery, partnering arrangements, or, perhaps most importantly, mindset, such as increased integration of the workforce development and talent development systems, or changes in the nature of regional collaboration. Examples of innovative ways in which the different regions have brought together – and in some cases, aligned – the systems and structures that support regional economic development may serve as useful indicators that regional system transformation is beginning to occur.

Importance of Partnerships to Regional Transformation

New partnerships contributed in important ways to accomplishing WIRED objectives. Repeatedly over the four-year grant period and beyond, interview respondents point to the many lasting benefits of the collaborative relationships formed during the WIRED grant. One potentially important outgrowth of collaboration among individuals with different professional perspectives is an increase in innovation capacity. Innovative ideas often result when people interact face-to-face with other people who think differently than they do. Ideas come together in new ways as diverse individuals work to understand each others' points of view or frames of reference.

Survey respondents were asked to characterize the efforts to transform their region's economic competitiveness, including the nature and importance of collaborative efforts. The majority of respondents agreed with all of the benefits suggested including: a diversity of stakeholders, valuable cross-professional networks, open communication, the willingness to compromise, adaptability, and out-of-the-box thinking eliciting agreement from the highest proportion of respondents.

Many WIRED participants and observers emphasized the importance to regional transformation of efforts to break down traditional barriers to collaboration. They believed that the partnerships formed within Generation I regions could be instrumental in building a resilient regional economy and a well-prepared talent base, enhancing the regions' efforts to maximize economic recovery and prosperity. In nearly all regions, some of the new partnerships were expected to continue beyond the end of the grant and become a long-lasting legacy of the WIRED initiative.

Barriers to Transformation

The fact that such preliminary evidence of system transformation through the Initiative exists does not mean that the journey has not been challenging. Whether seeking to transform the workforce development, economic development, or educational system, the regions encountered barriers that included the following:





- Individual organizations are unlikely to see system-wide goals as part of their core work or a priority activity. Often, they see a grant project such as the Initiative as additive, not transformative, as one more project that they are doing rather than as something that changes all of their projects.
- Furthermore, unless they are already a part of a regional system, local workforce, education or economic development entities have difficulty participating in regional efforts without feeling as if they are losing their local brand and local control. In addition, a significant element of competition may exist between individual organizations or actors, which also hinders letting go of parochial approaches. A particular concern is who gets credit for successes?
- In many regions, there was no historical collaboration among the different entities in the regional collaboration, such as WIBs, community college districts, or economic development agencies. A continuing challenge for the regions has been the need to build collaborative relationships almost from scratch.
- The sheer size of several of the regions, especially the California Innovation Corridor, and complicating factors such as the bi-state nature of WAEM and One KC, was "daunting." One site visit respondent noted that, "You're talking about 100 different kinds of transformation, depending on where in the region it's happening."

Enablers of Transformation

Despite barriers and challenges like those described above, the Generation I regions did have the benefit of a variety of enablers of system transformation, including:

- Each region's grant program was tailored to meet its specific needs and to achieve its specific goals for transformation of its own regional economy. Activities and partnerships intended to achieve transformation of the region's workforce development, economic development, and educational systems, were similarly "customized."
- The Initiative was multi-layered, involving individuals and organizations at all levels of the workforce development, economic development, and educational systems. This meant that a wide range of talent was generally available as needed to develop and implement the activities and collaborations of the Initiative that were intended to lead to system transformation.
- The regions faced a nationwide economic downturn necessitating a change from the status quo.

Levels and Stages of Collaboration

Survey respondents were asked to characterize the current level or stage of collaboration within their region. They were given the following definitions of stages of collaboration:

- 1. **Co-Existence:** Entities are aware of each other, but have no prior history of interaction and know little about each others' composition or way of conducting business.
- 2. **Communication:** Entities know of each other, have some history of interaction and know the basics of each other's composition or way of conducting business. Communication is informal, without a commonly defined mission, or planning.





- 3. **Coordination:** Entities have committed to sharing resources in order to accomplish shared goals, and have implemented activities that depend upon these shared resources. Few changes have been made in how core businesses operate, however, and limited sharing of information or decision-making occurs outside the area of coordination.
- 4. **Cooperation:** Entities have established policies and practices that involve ongoing exchange of information integrated into routine practice/business. They negotiate mutual roles and share resources to achieve joint goals. Collaborating organizations have shared interests, joint decision-making, and integrated efforts.
- 5. **Collaboration:** Entities have engaged in shared planning and decision-making that is taken seriously in the business decisions of each entity, such that each entity is willing to change its practices to achieve a shared goal. Authority is vested in the group rather than in individuals or an individual agency.

Although respondents might vary in their interpretation of the words in the five response categories, it is nonetheless meaningful that well over three-quarters of respondents were involved in partnerships that went beyond "communication." Very few respondents considered their regional efforts still to be at the co-existence stage and almost one fifth considered their region to be at the highest level of collaboration.

Workforce Development System Transformation

The Initiative's call for transformation of the workforce development system required a change in how government workforce agencies work in coordination with economic development and education agencies and with private industry in order to increase the size of the region's workforce and improve its quality. The focus of the transformed workforce development system needed to shift from "simply" providing a skilled workforce for local businesses and assisting individual workers to obtain existing jobs, to developing, in partnership with both the education and economic development systems, new jobs, as well as improved education and workforce preparation. Transformation of the workforce development system was complicated by the fact that the leadership and management of the Generation I regions largely came from organizations outside of the Department of Labor workforce development system; New York and Montana are the only initiatives led by a workforce system entity.

Evidence of workforce development system transformation in the Generation I regions may be found in the amplification of the public workforce system's reach and impact in most, if not all, of the regions, achieved through such means as creative partnerships with community colleges, universities, and training providers, increased integration with business and industry, integration of workforce development and economic development efforts, and the leveraging of private sector funds. A broader definition of the client base, and movement toward more flexible service areas, may be other indicators of workforce system transformation. Some efforts in the Generation I regions to achieve transformation of the workforce development system are discussed in the sections below.

Amplification of the Public Workforce System's Reach and Impact





In complex training arenas, such as cross-industry training or expansion into new training fields, integration of the workforce development system, the educational systems, and employers is critical. One important way the workforce system increased and enhanced its reach and impact in Initiative-funded regions was through looking beyond the silos of the different agencies and funding streams, and developing creative and innovative partnerships with a wide variety of educational institutions, training providers and employers.

Expanding the Definition of "Client Base"

Public workforce agencies in some of the Generation I regions took advantage of the availability of Initiative funds – and their flexibility with regard to program eligibility – to expand their reach to individuals not previously engaged in the workforce development system. Key partners in Kansas City, for example, had a specific goal of bringing new people into the AJCs, which they tried to accomplish by increasing public awareness of the overall workforce development system, especially the benefit of the training and vocational certificates. Other regions expanded their concept of who their business clients were; instead of simply seeing the businesses in the region as potential employers of the workers who were AJC clients, they looked at ways to provide more, and more different types of, employers with services designed to create jobs and grow the regional economy.

Movement toward More Flexible Service Areas

In many of the regions, "thinking regionally" meant that the many WIBs and other entities in the workforce development system needed to think not only about what was taking place within their own boundaries, but what needed to be done in different parts of a larger and/or more spread-out geography of the region. Many WIBs and AJCs became more flexible in defining what their service areas included. One strategy for dealing with a more spread-out geographic area was to develop alternative forms of service delivery, particularly distance learning.

Economic Development System Transformation

An important aspect of the Initiative's vision to transform regional economies and improve America's competitiveness in the global economy was the transformation of the economic development systems in the Generation I regions. Historically, most, if not all, of the Generation I regions defined economic development as business attraction and relocation. In particular, everyone "knew" that the way to create new jobs was to bring new business to the area. Such economic development efforts depended heavily on incentives such as tax breaks, or free or low-cost use of land or business amenities in the region. However, in recent years, those involved in economic development have come to realize that the factor most valued by companies engaged in site selection is the presence of a skilled workforce. A region's economic success in business attraction thus depends on its ability to produce and retain, through its education and workforce development programs, a sufficiently large, high-quality workforce.

In addition to business attraction, economic development organizations in some Generation I regions, such as Florida, New York, and Mid-Michigan, placed an emphasis on investing Initiative funds in existing businesses, in order to build the economic capacity of the region overall and, in some cases, provide assistance to individual business concerns in need of financial support or technical assistance. Traditional industrial regions such as Mid-Michigan and New York understood that they had a solid foundation or "heritage" on which to build,





which remained strong even in the context of declining income and economic security. Often, economic development entities in these regions strove to transform the regional economy by supporting existing businesses in diversifying their products into related industries or expanding their customer base though regional, or even global, marketing strategies.

Economic development system transformation in the Generation I regions was seen in an increased regional focus; increased importance of workforce development as important partners; and increased partnership with community colleges and universities.

Transformation of the Post-Secondary Education System

It has become increasingly obvious in recent years that community colleges, four-year colleges and universities, and other post-secondary institutions have an important role to play in improving America's competitiveness in the global economy. Additionally, it has become clear that this role is regional in nature, and that regional collaboration is essential to transforming the post-secondary education system so it can meet the demands for a high-quality workforce, i.e., one that is both well-trained and well-educated. For a number of reasons, including the size and coverage areas of community college districts as well as the way state or local educational assets may be distributed, many communities lack the capacity to meet the training and education demands of the 21st century economy on their own. Furthermore, economic development now tends to take place in industry or occupational clusters that do not necessarily correspond to the geographic boundaries of a community college district or even a state university. Approaching training through a regional approach, and leveraging funding through partnerships, can greatly expand access to education and increase the training capacity of the partner institutions.

The beginnings of transformation of the post-secondary education system in the Generation I regions may be seen in the strengthening of such regional partnerships, including more integration – and less competition – among community colleges, and an increased number of partnering arrangements with employers and industry. The regions showed other early signs of system transformation as well, such as more emphasis on lifelong learning and career ladder training; more flexibility in scheduling (away from only semester-long courses); and the provision by community colleges of training (or re-training) for higher skill levels.

Formal agreements, including articulation agreements, between schools not only provided an effective mechanism for student transitions from one educational institution to another, but also helped distribute educational assets more efficiently across institutions and reduce competition for resources. Also, in some regions where colleges didn't have all the faculty they needed to teach specific skills, Initiative partners invested in teaching industry partners to become the faculty for the educational programs. A number of the Generation I regions were able to use Initiative funds to develop programs at post-secondary institutions in their region that offered increased schedule flexibility within the existing system.





Outcomes

Enrollment, Completion and Employment Placement:

Data on enrollment, completion and employment were found in grantees' quarterly reports and in WIASARD (reporting system that WIA-funded programs use). The quarterly reports included data on three categories of Initiative metrics: education and training, capacity-building, and "region-defined" indicators. While it should be noted there were significant discrepancies between these two sources of data, and very significant problems with the data quality and consistency across the grants, the data overall showed the following:

<u>Enrollment</u>: Across all 13 projects, 89,419 individuals were reported to be enrolled in WIRED-funded education or training programs in Generation I. All but one region met their enrollment goals, and half of the regions exceeded these goals by 25% or more. However, there were 26,245 participants entered into the WIASRD data base, over 60,000 less than reported in the WIRED quarterly reports. Further, the WIASARD suggests that only 20 percent of Generation I participants used training services (a figure that is probably not accurate due to obvious inputting errors). On average, across all of the grantees participants spent 19 weeks in training.

As per WIASRD, the typical WIRED participant was a 36 year old white male with a high school education who was enrolled in services for 24 weeks. Less than half of participants were co-enrolled in a WIA formula program. Across the regions, 19 percent were enrolled in WIA Adult services, ten percent in Dislocated Worker services, seven percent in TAA, and one percent in youth services. Over one-quarter (27 percent) of WIRED participants used Core services and 30 percent were in Intensive services. Participants who used Intensive services appear to have received them via a WIA program instead of the WIRED grant while over one-third (36 percent) of participants used Wagner-Peyser services.

<u>Completion</u>: Over 75,000 participants in the quarterly reports were identified as having completed training, or 84 percent of those who had enrolled in an Initiative education or training program. The proportion of trainees who completed training ranged from 41 to 100 percent and a total of 68,085 participants (or 86 percent of those who completed training) attained a degree, certificate, or credential. The grants varied widely on the outcomes reported for this measure, in part because some regions included various certifications in their totals. The grants also served many incumbent workers, but only one region included working participants in their numbers.

<u>Employment</u>: Aggregated data from the quarterly reports showed that only 20 percent of all Generation I WIRED participants were reported to have obtained jobs in their target industries.

² The study team interviewed both regional managers and state data managers to explore reasons for this discrepancy. Factors that emerged included: grantees using WISARD to record participants who received more intensive training; grantees' difficulty in collecting data on incumbent workers who were trained at their work sites; and grantees misunderstandings the definition of participants and "countable" job placements.





WIASRD data reported very similar proportions of participants who entered employment (22 percent). The grantees were split evenly between those that had more than half of their participants enter employment, and those that had less than 30 percent who found jobs after leaving their programs.

Overall, average quarterly earnings reported in WIASRD after program exit were \$3,288. Half of the participants who were employed at program exit were still working 12 months later. Across all participants, the average change in quarterly earnings from program exit to 12 months later was -\$732, though for half of the grants, there was an increase in average quarterly wages over the 12 months.

Capacity-Building

Grantees used multiple measures related to building capacity such as through teacher training, curricula development and work-based training strategies. Results are discussed below, but may be an underestimate since, except for one grantee, none of the projects provided information on all of the capacity-building metrics and two grantees provided no data at all on this. Many of the measures were open to interpretation by the grantees and so there are likely inconsistencies as to what was counted and how results could be attributed to the grants. Nonetheless, aggregating across the projects that did report on this produced the following:

- A total of 18,278 teachers were prepared for instruction in identified industries, with an expectation that 173,015 students would benefit as a result (with the majority of these students being in Pennsylvania).
- A total 527 new curricula were developed, and 10,913 additional students were projected to be trained annually as a result.
- There were 1,369 work-based strategies (clinical experiences, internships, etc.) that were developed or implemented.
- There were 82 total career guidance strategies reported by the grantees and 4,090 students projected to benefit annually as a result of these new approaches.
- Five regions reported spending a total of \$2.2 million on instructional equipment, and estimated that 11,796 students would use the equipment annually.

Region-Defined Measures

Grantees also could identify their own measures of progress (within three categories). All of the grantees provided some information about business incubation and entrepreneurship outcomes. While such information was not required by ETA and was not reported by all projects for any given measure, aggregating reported information showed the following activities related to economic development:

- Five grantees sponsored a total of seven business plan contests.
- Six regions developed business incubators for their target industries.
- Two grantees reported serving 178 business incubator customers.





- Eight regions facilitated 767 business start-ups and expansions. Seven grantees indicated that 2,351 new jobs were created as a result of their efforts.
- Ten regions created a total of 43 different business training programs.

Many grantees tracked the creation of partnerships with business and industry, civic leaders, universities, community colleges, and other key stakeholders. Other metrics documented the implementation process, reflecting the completion of specific implementation steps that initiative staff and partners believed were critical to achieving the region's goals.

Changes in Regional Economies

An analysis of extant data from a number of sources, conducted to assess the WIRED grants influence on regional economies via proxy measures, found some small, statistically significant, incremental changes in the period between August 2007 and the end of 2009. Using a "difference- in-differences" analysis that compared changes that occurred over the period in each region to changes that occurred in the region's host states, the evaluation team found a few common patterns across the regions. The most consistent change was the increase in the number of angel networks in five regions. But overall, these data should be interpreted cautiously for at least two reasons: 1) they reflect a relatively short period in terms of economic development and regional transformation and 2) the economic recession substantially dampened the potential impact of WIRED on some of these measures while having the opposite effect on others (for example, community college enrollments rose in several regions after the start of the economic crisis). Indeed one unforeseen obstacle for many regions, particularly those that emphasized community college programs, were skyrocketing enrollment levels in the institutions.

The economic downturn also constrained sustainability options, as foundation funding became less available for future initiative-related efforts because of declining endowments. Downsizing in target industries caused several regions to re-think their industry focus. While the initiative was intended to help regions cope with economic changes posed by globalization, the rapid pace of the downturn became, in some regions, a more immediate challenge.

Lessons Learned

The key lessons that the evaluators identified and synthesized with regard to the regions' complicated four-year journey can be summarized in terms of six major ideas that encapsulate what happened within many regions. These conclusions have emerged from a cumulative evaluation process which may also provide insights on how to evaluate complex, multiyear regional transformation efforts more effectively in the future.

Lesson #1: The importance of using data to inform and integrate workforce and economic development efforts

One of the keys to regional success in implementing and sustaining WIRED-funded efforts was having sufficient data available to assess the local workforce development landscape and coordinate workforce development activities with economic development activities. Several regions used their WIRED grants for long-term, post-grant infrastructure to enable future





coordination between entities brought together by WIRED through both asset mapping and investment in data systems and training.

These efforts offer an important lesson for WIRED sustainability and the workforce development system in general: local workforce agencies should be encouraged to rely on diverse, robust databases and metrics for the workforce system. The importance of developing shared databases cannot be underestimated as this strategy enables collaborative work by providing a shared understanding of regional needs and challenges, and moves the discussion from particular employers or agencies to what is in the best interest of the region.

Lesson # 2: The importance of evolving a shared regional identity and strategies for overcoming jurisdictional boundaries

For many WIRED regions, the requirement to think regionally, rather than according to city, county, or state lines, provided a unique opportunity to rethink economic competitiveness. While the regions all faced the challenge of developing a regional identity, they devised a variety of strategies to help define and promote their regions' identities, create a common vision of a transformed economy for their regions among key partners, and promote that vision across both geographic and professional boundaries within their regions.

Typically, developing a regional identity involves an element of cultural and attitudinal change, in addition to the more concrete components represented by shifts in economic strategies and approaches to workforce development. Most of the regions reported that they were working to build a culture of collaboration within their communities. Individual regions such as WAEM and West Michigan sought to build or encourage an entrepreneurial culture, and other regions promoted thinking globally among the region's residents (for example, North Carolina's work on logistics), or aimed to increase the perceived value of education and training. Such shared values are critical to developing a regional identity, and given the importance of regional identity for local economic development initiatives, a regional approach, as well as tools to assist grantees in building regional identity should be included in future economic transformation initiatives. A clear lesson from WIRED is that it is important that regions are defined in a logical, intuitive way -- that is, that the pairings of counties, states and cities are appropriate given the history, culture and politics of the region.

Despite the aforementioned opportunity to build regional identity, regions still faced the challenge of working across jurisdictional boundaries. For example, many respondents reported that education and training providers, especially community colleges, faced significant challenges in thinking regionally because of their defined service areas. Individual community colleges that attempted to respond to the growing education and training needs of the broader community experienced particular difficulty in being responsive to workforce development needs, especially when the development of new curricula required considerable time and effort. Additionally, the fact that boundaries often do not align across agencies -- for example, economic development regions may not align with workforce areas -- meant creative thinking about regional development was hampered.

One of the conclusions by the partners involved in these and other initiatives that cross jurisdictional boundaries was that the full support of the leaders of the participating institutions is





essential, and that these partners must make clear to their staff that collaboration is a priority. Another conclusion was that leveraging additional resources can be mutually beneficial for partners and, in practice, yield dividends for the colleges and the entire region. The ability to quantify these benefits can be of great help in gaining organizational support for continuing joint efforts. For example, in North Carolina, the Aerotropolis Board, which will continue the work begun under WIRED of promoting the region as a logistics hub, will include representatives from the airport, several planning departments and multiple local city councils in acknowledgement of necessity of collaborating across jurisdictional boundaries. Incentives for cross-jurisdictional collaboration are thus paramount to successful transformation initiatives, and the workforce development system needs to position itself nationally to support such collaboration. Depending upon how a given state's local workforce areas are configured, more than one local workforce board (LWIB) might be involved in a regional initiative. Furthermore, LWIBs could be associated with more than one region, depending upon whether the criteria used to define a particular region are based on geography, the configuration of a targeted industry sector, or other considerations. Greater and more meaningful collaboration can be achieved by removing any existing regulatory or structural barriers to collaboration, and/or providing incentives to LWIBs that pursue joint initiatives.

Lesson # 3: The importance of assuring alignment of expectations and metrics when monitoring and evaluating integrated, regional workforce and economic development efforts.

Within days of getting into the field and at every one of the joint meetings of the Generation I regions, the evaluation team heard about the importance of alignment between Federal, state, and regional expectations and performance measures. In some regions, as pointed out in previous chapters, there was strong alignment; in other regions, there was miscommunication and/or minimal communication; and in a few regions, there was an outright conflict between the expectations about *what* would be achieved and *how* it would be achieved. This, in turn, related directly to the varying performance measures the regions identified in addition to the Common Measures required by ETA.

Early on, the evaluation team realized that, in addition to the Common Measures required by the Department of Labor for programs it funds, there was a need for what we called, "Uncommon Measures," to capture the collaborative processes and activities underpinning regional efforts to integrate workforce and economic development. Achieving new kinds of partnerships, sharing databases, developing strategies collaboratively, and valuing similar or at least parallel outcomes at the regional level requires many organizational steps that can be enabled or inhibited by the industrial legacies, social dynamics, and cultural values of a region. Additionally, because many of the WIRED Gen I regions were organized on economic synergies rather than according to traditional jurisdictional boundaries, issues of place, identity, jurisdictional authority, and, especially, funding authority, created challenges for efforts at collaboration in the workforce and economic development space.

The Department of Labor's Common Measures have a generally a transactional emphasis. They focus on numbers of participants in programs, job placements, employment retention, and average earnings. The field of economic development also has "common measures" that are





primarily transactional and that include such indicators of success as new business formation, levels of external investment, revenue growth, and increase in the tax base. These are all very important measures. However, communities that must engage new technologies and markets as sources of new jobs, simultaneous with providing worker training, may require the development of new resources or partnerships. How communities develop new capabilities and what the indicators of progress and success are may be important to capture. The idea of Uncommon Measures is anchored in the need for metrics that can capture the relative success with which regions build the collaborative platforms that enable integrated approaches to workforce development. They include such indicators of collaboration as shared agenda setting; diverse and inclusive gatherings of civic, education, and business leaders; the evolution of agreements about regionally appropriate performance measures; and co-investments. In a modest way, the evaluation of Generation I tried to capture some of these Uncommon Measures in addition to reporting the array of standard metrics the regions provided for ETA.

A primary lesson from Generation I is that regions with close alignment of expectations and metrics were able to demonstrate clear economic progress. Agreement on what is to be accomplished; consensus about how to invest resources appropriately in order to accomplish shared outcomes, and the use of jointly developed regional performance measures can help greatly. Evaluation of these sorts of regional programs needs to capture whether the process that can achieve workforce change under new conditions is actually working as a process, as well as traditional metrics of desired outcome.

Lesson # 4: The importance of collaborative platforms to the integration of workforce and economic development efforts

In order to support collaboration, regions need sufficient infrastructure to initiate and nurture these partnerships. In addition to traditional economic development agencies, educational institutions at all levels (K-16, public and private), workforce development agencies, and employer groups increasingly have become essential contributors to an overall economic development strategy. Civic organizations and political leaders play key roles in developing common agendas and coordinated approaches to regional economic revitalization and growth. In some communities, local history and politics resulted in the economic development agency (or sometimes multiple agencies) not being well-positioned to convene traditionally disconnected entities, and the LWIB stepped into the breach with great success. In many instances, the LWIB itself is uniquely positioned to convene these diverse groups. While not all LWIBs can or should act as the central convener, nevertheless they must play an active supportive role in order to stay in sync with evolving workforce development needs. These interconnections among partner organizations can maximize the opportunities for aligning and leveraging resources in the pursuit of shared goals. In order to serve this role, however, LWIBs—or other entities deemed appropriate for this role—may need training and support in the following areas:

• Leadership skills. Leadership of regional initiatives is an inherently collaborative process that requires great sensitivity to the needs and interests of each potential partner, as well as skill in bringing these partners together in the pursuit of greater needs and rewards. A top-down style of leadership is unlikely to achieve success. Staff at any central organization needs training to increase their knowledge and capacity to play the convener role, which means facilitating a shared approach to leadership.





- Strategic planning. LWIBs and other leaders of collaborative initiatives must ensure that partners structure the time needed to create a common vision. The process of strategic planning—including planning for a regional initiative—provides an opportunity for teambuilding and developing new social relationships through which shared goals, co-investment, and a renewed sense of regional purpose and confidence can develop. Furthermore, inclusion of all partners in the early visioning and planning processes helps ensure that all "buy into" and support the initiative.
- Data-driven decision-making. As described earlier, using data to enhance workforce development and integrate with economic development is one of the most important practices used in successful WIRED regions. Research and analysis of data are critical to identifying shared needs and common goals, which can also help with establishing common ground. Evidence supports the notion that by using data strategically, convener organizations can move the conversation from a discussion of the individual needs and interests of individual companies and organizations to a broader discussion of industry trends and talent development needs that are apparent when examining the data and the strategic implications for the region as a whole. This approach can make the process of identifying common needs and goals easier and can help build commitment and trust among leaders and their participating organizations.
- Leveraging others' management expertise. Convening a large group of diverse stakeholders is a complex and challenging undertaking that requires careful attention to creating n organizational structure, decision-making process, and implementation plan. Creating a governance structure is not the sole responsibility of the convener, however. Evaluation findings have shown that these challenges can be addressed by tapping into the organizational knowledge of partner organizations, and that the resulting structures are often stronger when they are developed by partners as a group.
- Collaboration between LWIBs. In most states, the workforce system consists of numerous local WIBs, each of which has a defined service area that may be as small as a single county (or subcounty area in an urban center), or as large as a multicounty expanse. Typically, states draw the boundaries of local workforce areas service areas to correspond with county jurisdictional boundaries; however, those boundaries do not necessarily correlate with local and/or regional labor markets. As LWIBs become more involved as strategic partners in efforts to revitalize and transform regional economies, the challenges of working across the boundaries of local workforce areas have emerged as a critical issue. Competing priorities, long-standing personal disputes, competition for funds, and other trust issues have made establishing meaningful partnerships difficult. Collaborative groups for LWIBs like Mid-Michigan Innovation Team, however, have managed to address these issues in ways that have been mutually beneficial.

In addition to ensuring that the above lessons are integrated by the convening organization(s) in future initiatives such as WIRED, the Federal government also can play a role in supporting collaboration by providing clear guidance and innovative funding options for local work. First, it will be important to craft grant compliance restrictions that allow for sufficient accountability while enabling regions to effectively carry out their mandate. Ideally, restrictions on Federal funding should strike a balance between effectiveness and accountability. In considering future





collaborative initiatives, Federal agencies should seek feedback from the field to help inform decisions on exactly where that balance may be found.

Second, blended funding offers specific promise in supporting the creation and success of collaborative work. The impact of Federal grant-making could be improved if multiple Federal agencies (for example, ETA, the Economic Development Administration, and the U.S. Department of Education) pooled their resources and issued one combined solicitation. Such a solicitation would be for projects of interest to all agencies, with funding coming from several sources. It would provide for a single application, one set of outcome measures, and one reporting requirement. The grantee would be permitted to use the funds for any purposes specified in the grant, and any differences among the funding agencies would be transparent. This mode of grant-making might be of particular value in supporting entrepreneurship. The creation and success of new and growing enterprises is critical to the future of most regions of the nation. Traditionally, few workforce development agencies have focused resources on this activity, since other Federal agencies do so already. Nonetheless, the conception, development, launch, and success of a new business enterprise relies upon a knowledgeable and skilled workforce. That element encompasses working with a prospective business owner on meeting his or her workforce needs—that is, identifying needed skills and recruiting appropriate workers—but it also can mean education and training for the new business leader. While the U.S. Small Business Administration (SBA) and the Small Business Development Center (SBDC) network provide financing and counseling, a local American Job Center (AJC, formerly the One-Stop Career Center) could play an important role in ensuring that new business owners are able to acquire the skills needed for success. A joint venture of ETA and the SBA could target resources for leaders of small, growing businesses to learn technical or management skills that would improve the odds that their businesses would succeed. At the local level, AJCs, SBDCs, and community colleges could collaborate to serve as the delivery system. Effective collaboration will be necessary at both the Federal and local level to support future initiatives like WIRED.

Lesson # 5: The importance of sector initiatives to assuring workforce/ economic development integration

In some cases, the Generation I regions had uneven success with targeted industry work due to volatility in the economy during the grant period. However, many of the workforce needs of businesses varied substantially by industry, regardless of the presence or absence of stability in the economy. The sector-based strategy used by many regions for WIRED was vital to workforce development actors seeking to develop strong relationships with key employers beyond the WIRED grant. In addition, thorough, insightful intelligence about workforce trends and challenges that specific industries face is crucial in order to prepare workers to meet the evolving workforce needs of companies in the targeted industry sector(s). In fact, organizing a sector initiative for each important industry in a regional economy offers strategic benefits for the workforce development system: the realization that industry sector experiences and trends have broad implications for the economy can serve as a powerful source of motivation for organizations that have a stake in the continued vibrancy of their communities. Joint efforts can contribute to economic growth by diversifying existing companies and creating new ones; this realization can similarly motivate community leaders to participate in collaborative initiatives.





Heeding the lessons of WIRED, local workforce development agencies seeking strategic relationships with employers can engage a particular sector to identify shared workforce challenges and opportunities; work with partner organizations to devise strategies for addressing those challenges and opportunities; and take necessary steps to advance those strategies. Knowledge is an essential ingredient in playing this role effectively, requiring sector-oriented workforce development agencies to supplement their basic projections of occupational needs with background research and analysis about the key industries in their regional economies. Local agencies must then become highly skilled at analyzing trends through the use of a wide range of data, learn from and show employers how external factors—such as technology innovations—are likely to change work processes and pay close attention to studies and forecasts of regional economic change. These agencies can increase their credibility with employers and other important collaborators by becoming a principal source of such relevant and useful data.

To ensure that the needs of employers in key sectors are addressed and that job seekers receive the training needed to be competitive for current and future job openings, LWIBs and other convener organizations may work in conjunction with economic development entities. A deeper analysis of demographic and industry data can help to identify the companies involved in the supply chain for those industries, identify specific workforce challenges and opportunities that may affect multiple employers within the sector, and zero in on possibilities for synergies among firms. With these data in hand, LWIBs can reach out to companies in a key industry and offer a venue for discussion, insight, decisions, and actions to address challenges and capitalize upon opportunities. In addition to demonstrating an interest and understanding of industry needs, this approach can help set the stage for the collection of employer-specific workforce data about recruiting and retaining talent, skill development needs, and observed gaps in the skills and readiness of the emerging workforce. When overlaid on other industry data, such discussions may suggest specific areas for action.

This integrated approach to assessing industry needs is a win-win situation for LWIBs and employers. Employers can gain a better understanding of the evolution of their industry and the interrelationships among companies within the sector, and can use that knowledge to prepare for the future. The workforce system gains an understanding of the needs of employers that is much deeper than would otherwise be possible—needs that go far beyond simply filling the next vacancy to encompass worker pipeline issues, skill audits, development of new training programs, joint venturing to share worker capacity or compete for larger contracts, and many other common and related workforce issues.

Lesson # 6: The regional gains that come with better integrating the workforce development system into the larger talent development system.

One of the most appealing features of the WIRED grant to grantees was the emphasis on a demand-driven workforce strategy that would move beyond the WIA mandate and focus on talent development as well. Successes in the definition of biosciences career ladders in Kansas City, the development of industry certifications such as the Bilingual Financial Workforce Certificate Program in Pennsylvania, and the progress of STEM initiatives such as the Career Academies in Metro Denver represent progress towards such a strategy. Moving forward, these





talent development initiatives should be both encouraged on their own *and* integrated into workforce development activities rather than occurring alongside them.

One way to ensure continuing support for talent development within the workforce system is to craft a broader definition of leveraged funds that would allow for expenditures by partners and co-investors that benefit the overall talent development system. The Obama administration is calling for more financial aid for community college students, development of more online curriculum, employer-driven curriculum development, and hands-on education at work sites. It also is calling for the provision of a wider array of personal, vocational, and career support services, which will necessitate involving partners and resources that will extend beyond the current capabilities of AJCs. The people who run workforce partnerships and AJCs will, in the future, need to develop more diverse partnerships and business models, as well as new kinds of linkages with regional resources in order to both provide services and to fund services. Thus, the guidelines for what are appropriate direct investments and/or matching funds from other agencies and resources need to be spelled out so that Federal workforce education and training dollars can be appropriately applied with an eye to encouraging talent development.

Summary: The need for a cumulative evaluation model that can better document and capture the outcomes of regional transformation efforts

What the lessons above point out is that, over time and with the proper incentives, regions learn how to work together in new ways to achieve shared goals; in particular, enhancing their regional economies through sustainable businesses and good jobs for all. This journey to building collaborative programs that leverage the synergies between workforce and economic development efforts not only takes time, but challenges existing practices. It often requires new platforms for problem solving. Of necessity, this becomes a social and cultural change process that evolves over time. Models for the evaluation of outcomes must evolve. The model presented below suggests the sorts of things that happen in a community or a region, as it begins the journey of realigning organizational assets and leveraging education and development resources for transformative purposes. The model suggests that there are four stages in this process of regional transformation, each of which can be evaluated based on distinctive metrics which, in turn, can inform policy.

The first stage involves the early conversations and relationships that cross traditional institutional and jurisdictional boundaries and that are essential in order to find common ground and build consensus as to what the regional challenges are and how it might be possible to meet them more effectively with a regionalized and collaborative institutional strategy. The metrics in this stage need to focus on such things as the number of meetings, inclusiveness of participants, and indicators of jointly developed goals and strategies.

The second step in the process has to do with the formalization of partnerships or collaboratives and indicators of an agreed upon mission with regard to specific economic and workforce development initiatives. Critical to this phase of development is a shared agenda for action that can lead to new outcomes for the region. Identification of the distinctive assets and resources the members of the partnership bring to the table and the implementation of programs with defined





targets endorsed by all are critical. The extent to which the direct investment by the Federal government in workforce development leverages other investments and activities in the regions also can be measured. Indicators such as the Research and Development activities within the region, SBIR, and STTR funds coming into the region, and angel and venture capital that target the industrial sectors and skill areas that are generating new business or substantial changes in the content of existing work, are relevant to workforce development strategy and can be documented and evaluated over time. These are indicators of *progress towards* the "hard" outcomes represented by the Common Measures.

The action stage occurs when the implementation of workforce and economic development initiatives happen and roles and responsibilities are assigned to support such things as growing new companies or teaching new skills. The evaluators of the Generation I regions observed education and training for skilled workers, education in entrepreneurship, investment in K-12 STEM initiatives, and the establishment of incubators and technical assistance programs, all of which can be documented and counted. These efforts on the part of the regions -- many for the first time, and with completely new partners -- clearly represented coordinated implementation of programs that can affect change.

Finally, if shared vision and relationships have been built, the formalization of partnerships and diversification and coordination of input is in place and an array of shared programs are implemented; one should expect transformational outcomes that correspond to Common Measures used by organizations such as the Department of Labor and the Department of Commerce: Job placement, job growth, job retention, increased average earnings, decreased unemployment, new business startups, and growth in business taxes. So, in addition to the specific six lessons extracted from the four years of WIRED investments in the Generation I regions, it also created the opportunity to rethink how evaluation studies on programs of this character might be done moving forward. Quantitative data is essential and evidence is needed to support public policy initiatives. However, we must also learn how to measure what on the surface seems highly qualitative -- an important lesson from WIRED. Regional transformation is a slow process, often characterized by fits and starts. It is a process which challenges the status quo, in terms of what the proper boundaries in a regional economy are; what the most significant organizations in the region needed for sustainable transformation are; and what types of industries -- established, declining and emerging -- need to be at the table. Thus, the social and cultural dimensions are important: they can be managed and they can be measured.

The WIRED experience represents an incredible collection of lessons about how the diverse economies across the nation deal with the everyday challenges of adapting and, in more and more cases, transforming the very core of their economy activities. The WIRED experience provides a nuanced insight into how regionally anchored workforce development and economic development organizations deal with these challenges and how differences in industrial legacies, jurisdictional boundaries, and regional culture affect how the change is made. The WIRED experience also provides insight into how the workforce development system is and can continue to transform its operations in order to engage with economic development in a more direct way, incorporating sector strategy to be more comprehensive in its services, engaging in new program delivery partnerships and alliances in order to leverage Federal dollars and regional education and training assets. Our hope, as evaluators, is that both the hard outcomes shared in this final





report, as well as, the more process oriented observations, described in this report, will provide value to practitioners, moving forward, as well as encourage ETA to think about a broader range of metrics of success and more cumulative models for evaluating progress towards success.



1. Introduction

"The rules have changed. In a single generation, revolutions in technology have transformed the way we live, work and do business... Today, just about any company can set up shop, hire workers, and sell their products wherever there's an Internet connection."

-President Obama's State of the Union Address, January 25, 2011

The President's message underscores the recent results of the World Economic Forum's Global Competitiveness Report showing that in 2010, the U.S. moved from second to fourth place in the ranking of the most competitive economies in the world.³ Increasingly the world economy is replacing the U.S. economy in determining where Americans work, how much money they earn, and the level of prosperity that American communities experience.⁴ As Americans lose jobs and markets to globalization, small entrepreneurial and innovative companies continue to create new markets and new jobs. The vast majority of these new jobs, however, are in what many refer to as "the new economy." These forces affect all industries and communities and are often outside their control, and each community needs some component of globally competitive economic activity in order to sustain regional prosperity.

Global competition is a compelling national challenge; however, mobilizing knowledge and equipping organizations and workers with the essential strategies, tactics, and competencies appropriate to these new conditions occur primarily at the regional level. Emphasizing regional action in a world where the Internet has virtually erased boundaries of space and time may seem paradoxical. Both economic research and experience have shown, however, that most innovations still occur through face-to-face interactions among highly skilled individuals with diverse knowledge and interests. At the regional level, individuals and organizations can connect powerfully, build bridges across traditional institutional and industrial boundaries and, as a result, enable the sorts of "open systems" that enhance rapid flows of knowledge and new ideas.

⁸ Chesbrough, Henry (2006). *Open Innovation: the New Imperative for Creating and Profiting From Technology*. Boston, Massachusetts: Harvard Business School Publishing Corporation.





³Schwab, Klaus (2010). *The Global Competitiveness Report* 2010 – 2011. Geneva: World Economic Forum. Downloaded 1/26/11 from http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2010-11.pdf

⁴ Kenny, Martin and R. Florida (2004). *Locating Global Advantage – Industry Dynamics in the International Economy*. Stanford, CA: Stanford University Press.

⁵ Atkinson, R.D. and D.K. Correa (2007). "2007 State New Economy Index: Benchmarking Economic Transformation in the States," The Information Technology and Innovation Foundation and the Ewing Marion Kauffman Foundation.

⁶ Saxenian, Annalee (1994). *Regional Advantage: Culture and Competition in Silicon Valley and Route 128*. Cambridge, Massachusetts/London, England: Harvard University Press.

⁷ Krugman, Paul (1993). "First Nature, Second Nature, and Metropolitan Location." Journal of Regional Science 33(2): 129-144.

The recent dramatic downturn in the U.S economy has focused the attention of Federal officials and other economic/social analysts on the importance of regions as key agents in bringing about economic transformation. A clear consensus is developing ^{9,10,11,12,13} on the critical components of an adaptive, regional ecosystem. Experts from varied disciplines and institutions have observed that healthy regional economies, well-positioned to sustain existing enterprises and create new businesses and new jobs, have the following characteristics:

- 1) A robust infrastructure that supports creative enterprises and/or ongoing research and development (R&D) activity, innovation, new product development, startups and growth industries;¹⁴
- 2) A knowledge/skill rich talent pool; 15,16
- 3) Availability of capital and resources to fund new experiments and new enterprises; 17
- 4) Partnership opportunities that link creative and R&D opportunities with new business development and entrepreneurial know-how; ¹⁸
- 5) Collaboratives (i.e., incubators, boundary spanning networks, civic organizations focused on innovation and growth) that build relationships around shared goals; ¹⁹
- 6) Open systems that promote sharing knowledge and resources, as well as building interpersonal, inter-institutional trust and comfort with risk. Typically these represent bottom up organizations and processes; ²⁰ and
- 7) Triggering events, catalytic leadership, or entrepreneurial successes that create momentum for change.²¹

²¹ Casper, S. (2006). "How Do Technology Clusters Emerge and Become Sustainable? Social Network Formation and Inter-Firm Mobility within the San Diego Biotechnology Cluster," *Research Policy*, 36: 438-455.





⁹ Mumo, Mark and B. Katz (2010). *The New 'Cluster Moment': How Regional Innovation Clusters Can Foster the Next Economy*. Washington, DC: Brookings Institute.

¹⁰ Leiken, Samuel and R. Kempner (2010). "Collaborate: Leading Regional Innovation Clusters," Council on Competitiveness.

¹¹ Sallet, John, E.Paisley, and J. Masterman (2009). "The Geography of Innovation: The Federal Government and the Growth of Regional Innovation Clusters," *Science Progress*.

¹² Polenske, Karen (2007). *The Economic Geography of Innovation*. Cambridge and New York: Cambridge University Press.

¹³Coccia, Mario (2008). "Spatial Mobility of Knowledge Transfer and Absorptive Capacity: Analysis and Measurement of the Impact within the Geoeconomic Space," *Journal of Technology Transfer*, 33(1): 105-122. ¹⁴Porter, Michael (2008). *On Competition*. Boston, MA: Harvard Business School Press.

¹⁵ Zucker, L.G., M.R. Darby, and M.B. Brewer (1998). "Intellectual Human Capital and the Birth of U.S. Biotechnology Enterprises," *The American Economic Review*, 88(1): 290-306.

¹⁶ Florida, R (2008). Who's Your City?, New York: Basic Books.

¹⁷ Hallen, B (2008). "The Causes and Consequences of Initial Network Positions of New Organizations: From Whom do Entrepreneurs Receive Investments?" *Administrative Quarterly*, vol. 53, pp 685-718.

¹⁸ Johansson, M., M. Jacob, and T. Hellström (2005). "The Strength of Strong Ties: University Spin-Offs and the Significance of Historical Relations," *Journal of Technology Transfer*, 30: 371-286.

¹⁹ Tallman, S. and A. Phene (2007). "Leveraging Knowledge across Geographic Boundaries," *Organization Science*, 18: 252-260.

²⁰ Saxenian, A. (2000). "Networks of Regional Entrepreneurs," *The Silicon Valley Edge: A Habitat for Innovation and Entrepreneurship*, C.M. Lee, W.F. Miller, M.G. Hancock, and H.S. Rowen, editors. Stanford, CA: Stanford University Press.

Finally, a growing body of literature, both theoretical and empirical, emphasizes the importance of highly networked communities to the innovation and economic growth process.²² Boundary spanning networks engaged in collaborative goal-setting activities and performance assessments tend to outperform communities in which industrial, business, and workforce development sectors are isolated from one another.²³ These networks benefit from shared knowledge, resources, and trust, so that people can move quickly in the face of risk and uncertainty.^{24,25}

The goal of the Workforce Innovation in Regional Economic Development (WIRED) Initiative (the Initiative) was to support regions in transforming their economies. The Initiative fostered boundary-spanning networks, and used new models of geographic and institutional collaboration to encourage the integration of traditional workforce investment systems and resources with traditional economic development systems and resources.

This chapter discusses the genesis of the Initiative, presents the Generation I regions, and describes the evaluation design. The chapter concludes by introducing the contents of the rest of the report.

The WIRED Initiative

The U.S. Department of Labor, Employment and Training Administration (ETA), recognized that the typically separate, "siloed" resources of the business and economic development community and the education and workforce development systems must come together for economic growth and transformation to occur. Late in 2005, ETA used a competitive process to award13 regions across the country (known as Generation I, see Figure 1.1) approximately \$5 million each per year in grant funds over the course of three years. As Volume I of the WIRED evaluation final report indicated, ultimately, ETA funded 39 regions in three generations of grants. This volume focuses on the Generation I grantees, while Volume III describes Generation II&III grantees.

ETA designed the grant program for regions in need of economic transformation, including those affected by global trade, dependent on a single industry, or recovering from natural disasters. The Initiative built upon four key principles that influenced the concept of innovation and, in particular, human capital development for globally competitive enterprises:

²⁵ Cross, R., A.B. Hagedon, and S. Parise (2005). "Critical Connections: Driving Rapid Innovation with a Network Perspective," Network Roundtable White Paper, University of Virginia; Powell, Walter and Stine Grodal (2005). "Networks of Innovators," in *The Oxford Handbook of Innovation, J. Fagerberg, D.C. Mowery, R.R. Nelson, editors. New York: The Oxford University Press; and Springer, Berlin, Robert Huggins, and Hiro Izhushi (2007). Competing for Knowledge, London: Routledge.*





²² Gloor, Peter (2006). *Swarm Creativity: Competitive Advantage through Collaborative Innovation Networks*. New York: Oxford University Press.

²³ Garcia, Maria (2006). *Social Capital, Networks and Economic Development: An Analysis of Regional Productive Systems.* New York: Edward Elgar Publishing.

²⁴ Audretsch, David (2007). *The Entrepreneurial Society*. New York: Oxford University Press.

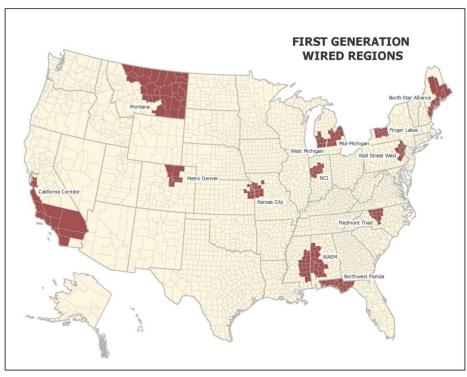


Figure 1.1
Map of Generation I Regions

Source: ETA website, http://www.doleta.gov/wired/regions/

- 1) The importance of science, technology, engineering, and math (STEM) to new and emerging products and industries;
- 2) The recognition that innovation is critical to global competitiveness;
- 3) The locus of economic competitiveness is intensely regional, arising through collaboration between industrial, research, education, and commercializing institutions that can respond rapidly to challenges and opportunities; and
- 4) An emphasis on developing workforce skills, integrating education and workforce training institutions within each region.

In brief, the work of the Initiative's grantees included:

- Stimulating the development of regional systems that effectively linked previously separate assets, mobilizing the shared resources needed to realize those opportunities, and ultimately contributing to sustainable economic prosperity in the region;
- Preparing workers (including those who were displaced, currently employed and underemployed, and entering the workforce) with the skills and knowledge they needed to find employment in growth sectors and to adapt to changes in increasingly science- and technology-rich workplaces; and





• Supporting changes in existing workforce and economic development systems to assure their continuing contributions to the ecosystem of regional change and economic prosperity.

ETA hired consultants to assist the regions and assigned senior or mid-level staff (apart from the usual Federal project officers) as "ETA leads" to communicate with and mentor the regions. In addition, ETA sponsored webinars, quarterly academies, and online collaborative workspaces to help the regions share information.

The WIRED Initiative offered the potential for enormous rewards, not only to participating entities, but also to the broader regional economy and business sectors. Initiative partners pursued an ambitious goal: creating a truly integrated, effective, and responsive education and workforce/economic development system to meet the needs of employers in emerging industries as well as job seekers aiming for high-skill training and occupational opportunities. In doing so, grantees pursued the potential of transforming their regional economies, a competitive advantage in the global marketplace through innovation, and prosperity to the residents of their regions. Their ultimate success could represent a boost to the competitiveness of the U.S. economy as a whole, as well as a model for continued innovative growth and competitiveness.

Overview of Generation I Regions

Figure 1.2 lists the 13 Generation I regions by state, provides a brief description of the geographic area that each region encompasses, and lists the "nickname" by which this report refers to the region. Details on each region are in Appendix A, consisting of profiles of each region. This section summarizes the initiatives "26 goals, structures and partner roles, collaboration mechanisms, and funding issues. The evaluation team's previous reports on the Initiative provide more detail on the regions' varied goals and strategies, and describe the process of soliciting grant proposals.²⁷

The solicitation for grant applications (SGA) for the Generation I WIRED grants identified state governors as eligible applicants for Initiative funds, and required governors to submit an application on behalf of a specific, defined multi-county regional team of public and private partners. The process of defining the regions varied depending upon their context and the range of regional needs present in each state. Some states (like California) asked regions to submit proposals to the governor, who, in collaboration with the state's workforce investment agency, picked which proposals would be forwarded to ETA. In other states (e.g., Maine, Montana), staff from the state workforce agency worked with regional players to define the region's boundaries and develop the proposal submitted to ETA.

²⁷ Almandsmith, Sherry, M. Walshok, et. al. (2008). Early Implementation of Generation I of the Workforce Innovation in Regional Economic Development (WIRED) Initiative: 2007 Interim Evaluation Report, ETA Occasional Paper 2008-03, Washington, DC: U.S. Department of Labor Employment and Training Administration; and Almandsmith, Walshok, et. al. (2009). The Power of Partnership: American Regions Collaborating for Economic Competitiveness, 2009 Generation I WIRED Interim Evaluation Report, ETA Occasional Paper 2009-18. Washington, DC: U.S. Department of Labor Employment and Training Administration.





²⁶ This report distinguishes between the national and local efforts by using Initiative (with a capital "I") for the national effort and initiative (with a lower case "i") for projects and programs associated with local regions.

The identification of which geographic areas were included in the Generation I regions also varied. Governors defined some regions by existing regional identities and entities. For example,

Figure 1.2 Generation I Regions

State	Initiative Name	Location	Major Metropolitan Areas	Referred to in this report as:
Alabama/ Mississippi	WIRED Initiative for Western Alabama & Eastern Mississippi	18 counties in W. Alabama; 19 counties in E. Mississippi Meridian, MS Tuscaloosa, AL		WAEM
California	California Innovation Corridor	13 counties from Oakland to San Diego Los Angeles, San Diego, Silicon Valley		California Corridor
Colorado	Metro Denver WIRED	9 counties around Denver Denver, Boulder, Ft. Collins		Metro Denver
Florida	WIRED Northwest Florida Initiative	16 counties in the Florida Panhandle	Tallahassee, Pensacola	Florida
Indiana	North Central Indiana WIRED	14 counties including Lafayette	Lafayette, Kokomo	NCI
Kansas/ Missouri	OneKC WIRED Initiative	Greater Kansas City (10 Missouri counties; 8 Kansas counties)	Kansas City, MO Kansas City, KS	Kansas City
Maine	North Star Alliance Initiative	12 coastal counties	Portland, Bangor, Augusta	Maine
Michigan	WIRED for Mid-Michigan	13 counties including Lansing, Flint, and Saginaw	Flint, Lansing	Mid-Michigan
Michigan	WIRED for West Michigan	7 counties in Western Michigan	Grand Rapids, Holland, Muskegon	West Michigan
Montana	Montana Agro-Energy Plan	32 counties in Northeast Montana	Havre, Miles City	Montana
New York	Finger Lakes Partnership	9 counties upstate	Rochester	New York
North Carolina	Piedmont Triad Partnership	12 counties in the north- central area of the state	Greensboro, Winston- Salem	North Carolina
Pennsylvania	Wall Street West	10 counties in northeast part of the state	Allentown, Bethlehem, Scranton, Wilkes-Barre	Pennsylvania

Source: ETA website, http://www.doleta.gov/wired/regions/ and BPA/UCSD Evaluation Team

Metro Denver, Florida, Kansas City, and West Michigan, all had existing regional alliances focused on regional economic development and growth, and built upon these in defining their regions. State policies defined the boundaries of other Generation I regions, including Montana and New York. Michigan had already consolidated its economic development and workforce development agencies and aligned the boundaries of its corresponding intrastate regions prior to release of the SGA. Similarly, the North Carolina General Assembly designated the Piedmont Triad as one of seven economic development regions in the state many years ago, and Indiana





created the NCI region shortly before the Initiative began. Finally, new partnerships formed to apply for the Generation I funding, creating regions such as Maine, Pennsylvania, WAEM, and the California Corridor.

The initiatives began operations in spring 2006, at which time ETA required that they develop implementation plans that described grant activities and linked activities to the grant's goals. This and other factors resulted in a longer start-up period than is usual for most grants. Consequently, ETA approved a one-year no-cost extension for all of the regions. In the end, only three regions (Maine, Montana, and West Michigan) actually ceased operations on the revised end date of January 31, 2010. As Figure 1.3 illustrates, one grantee, (California Corridor) ended earlier, in December 2009, and the rest of the initiatives ended later. Two grants ended in March 2010 (NCI and Pennsylvania), five in June 2010 (WAEM, Kansas City, Mid-Michigan, New York, and North Carolina), one in July 2010 (Metro Denver), and one in January 2011 (Florida). The range of these completion dates is but one reflection of the variety of strategies and approaches that the WIRED regions employed.

Figure 1.3
Completion Dates for Generation I Grants

December 2009	January	March	June	July	January
	2010	2010	2010	2010	2011
California Corridor	Maine Montana West Michigan	NCI Pennsylvania	WAEM Kansas City Mid-Michigan New York North Carolina	Metro Denver	• Florida

Source: Interviews with Generation I Regions

Regional Goals

The goals of each of the Generation I initiatives reflected how the regional partners chose to address changes in demand for their core economic capabilities, and how the regions planned to redirect those capabilities for renewed prosperity. The regions adopted goals that targeted specific industries as engines for economic growth. Most of the regions worked with businesses in one or more of the following industrial sectors: advanced manufacturing; bio-energy; bioscience; health care; agribusiness; and information technology (see Figure 1.4). Additionally, several regions focused on unique industry clusters such as finance, construction, animal health, aerospace, logistics/distribution, and creative arts.



Figure 1.4
Targeted Industrial Sectors of Generation I Regions

Generation I WIRED Regions	Advanced Manufacturing	Bio-Fuels	Life, Health, & Agricultural Sciences	IT, Software & Broadband	Other
WAEM	Х		X	X	 Warehousing & Distribution Tourism/Culture Business Services Entrepreneurship
California Corridor	Х		X	X	AerospaceEntrepreneurshipSupply ChainBio/Nano-Technology
Metro Denver		Х	Х	X	Aerospace
Florida	Х	Х	Х	Х	Aerospace/ Defense, Construction
NCI	Х		Х		Entrepreneurship
Kansas City	Х		Х		
Maine	Х				Boat Building Composite Materials
Mid-Michigan	Х	Х	Х		Construction Supply Chain
West Michigan	Х	Х	Х		
Montana		Х	X		 Energy Value-Added Agriculture/ Bio-Products Transportation Construction
New York	Х	Х	Х	Х	Entrepreneurship
North Carolina	Х		Х		Logistics/Distribution Creative Enterprises/ Arts
Pennsylvania	Х		X	X	FinanceLogistics & TransportationSTEM Occupations

Source: Generation I Regions' Implementation Plans

Beyond focusing on specific industry sectors, however, the Initiative's purpose was to increase the regions' capabilities to respond to significant global economic challenges. The Generation I regions selected specific objectives that cluster under three distinct but interrelated categories of goals (see Figure 1.5 for goals by region):





1) **Workforce Investment** – including goals such as:

- Creating quality, high-skilled jobs;
- Assessing and addressing labor needs and worker skill gaps;
- Retaining workers in the region;
- Creating a high-skilled workforce;
- Providing entrepreneurial training;
- Increasing knowledge of global competitiveness;
- Increasing graduation rates;
- Training teachers from kindergarten to twelfth grade (K-12); and
- Mentoring high school math and science students.

2) **Workforce Investment** – including goals such as:

- Creating quality, high-skilled jobs;
- Assessing and addressing labor needs and worker skill gaps;
- Retaining workers in the region;
- Creating a high-skilled workforce;
- Providing entrepreneurial training;
- Increasing knowledge of global competitiveness;
- Increasing graduation rates;
- Training teachers from kindergarten to twelfth grade (K-12); and
- Mentoring high school math and science students.

3) **Economic Development** – including goals such as:

- Increasing innovativeness;
- Increasing competitiveness;
- Identifying, assessing, and aligning regional resources;
- Adapting to global manufacturing transformation;
- Expanding current markets and creating new ones; and
- Increasing investment from external sources.

4) **Social and Community Development** – including goals such as:

- Building new organizational relationships;
- Increasing a support network:
- Creating and adopting a regional identity and mindset;
- Adapting to global manufacturing transformation;
- Changing employment expectations;
- Creating a leadership structure;
- Creating collaboration across business, education, and government sectors;
- Creating broad community engagement; and
- Creating an entrepreneurial culture.

This range of goals provides insight into the ways the Generation I WIRED regions defined economic prosperity. In addition, the goals underscore the extent to which regions recognized and grappled with the important cultural and social dynamics that affect the manner and extent to which they could renew or build prosperity in the face of rapid changes in technology and the global business environment.





A number of major themes served as unifying issues across goals in many regions. These include capacity-building, leveraging assets, transforming community expectations, innovation and entrepreneurship, globalization and a readiness and ability to turn globalization trends to their own advantage, and better coordination of previously fragmented efforts and resources. These will emerge in the discussions that follow.



Figure 1.5
Goals of Generation I Regions

		1											
Generation I Regions	WAEM	California Corridor	Metro Denver	Florida	IO _N	Kansas City	Maine	Mid-Michigan	West Michigan	Montana	New York	North Carolina	Pennsylvania
Workforce Development Goals													
Create Quality, High- Skilled Jobs	Χ	Χ	Χ	Х	Χ	Χ	Х	Χ	Χ	Χ		Χ	
Assess Labor Needs & Worker Skill Gaps		Х		Х		Χ	Х					Χ	Χ
Retain Workers in Region	Χ			Х	Х		Х			Х			
Create High Skilled Workforce	Χ	Х	Χ	Х		Х	Х	Χ	Χ			Χ	Χ
Train Entrepreneurs	Χ	Х			Х	Х	Х	Χ	Χ	Х	Х		Χ
Increase Knowledge of Global Competitiveness		Х		Х	Х	Х	Х	Χ		Х	Х		
Increase Graduation Rates				Х				Χ				Χ	
Train K-12 Teachers		Х				Х							
Mentor High School Math & Science Students		Х	Х	Х	Х	Х		Х	Х		Х	Х	Χ
Economic Development Goals													
Increase Innovation		Х		Х	Х		Х	Χ	Χ		Χ	Χ	Χ
Increase Competitiveness	Х	Х	Χ	Х		Χ	Х						
Identify, Assess & Align Regional Resources	Χ	Х		Х		Х				Х	Х	Χ	
Adapt to Global Manufacturing Transformation	Х	Х			Χ		Х	Χ	Χ			Χ	
Expand Current Markets & Create New Ones	Х			Х			Х			Χ		Χ	
Increase Investment from External Sources				Х			Х			Χ			
Social & Community Development Goals													
Build New Organizational Relationships	Χ	X	Χ	Х		Χ		Χ			Χ		Χ
Increase Support Network		Х		Х			Х	Χ		Х		Χ	
Create & Adopt Regional Identity & Mindset	Х				Х	Х		Χ		Х	Х	Χ	
Change Employment Expectations	Х			Х	Х			Χ	Χ			Х	
Create Leadership Structure	Х					Х						Х	
Collaboration Between Business, Education & Govt.	Х	Х	Χ	Х		Х	Х		Χ	Х	Х	Х	Х
Broad Community Engagement	Χ				Х			Χ		Х			



Regional Structures and Governance

Implementing the WIRED grants involved three major organizational roles: 1) the grantee; 2) the fiscal agent; and 3) the initiative manager. In all Generation I regions, the governor delegated "grantee" responsibilities to the state agency responsible for workforce investment services. The Generation I SGA allowed governors to designate a fiscal agent for the grant, but did not require the fiscal agent to be a governmental agency. In about half of the regions, universities or community-based nonprofit organizations served as the initiative's fiscal agent; in the rest of the regions, the state workforce agency was responsible for fiscal oversight.

The choice of an organization to operate and manage the local initiative was typically made at the time the initial proposal was written. In most of the Generation I regions, the program management organization led the proposal development process. As Figure 1.6 illustrates, the types of organization that managed the grants were much more diverse than the grantees or fiscal agents. Among the 13 regions, the most common host organization was one with economic development as its primary focus, such as the Piedmont Triad Partnership.

Figure 1.6 also shows that the grant represented the majority of the organization's activities for about half of the Generation I program management organizations. All of these lead organizations were small nonprofit agencies that existed prior to the WIRED grant award; however, the initiative eclipsed their previous activities. Program management organizations for the other half of the regions consisted of a range of different types of larger organizations.

Regions used a Steering Committee, ²⁸ to guide and govern their initiatives. These committees typically consisted of representatives from the private sector, workforce investment system, K-12 education system, higher education, economic development, the nonprofit sector, local government, and state government. Many Steering Committees included individuals with expertise in entrepreneurship, such as a Small Business Development Center representative. A few also included individuals representing the venture capital or angel investment community.

The roles that Steering Committees played varied considerably across the Generation I grantees. In some regions, the Steering Committee was responsible for hands-on decision-making for certain operational decisions, while in others it served in a less directive oversight role, or was concerned more with policy and overall direction than with strategy. In all regions, Steering Committees were important sources of leadership, creative ideas, momentum, problem-solving skills, and accountability. The Steering Committees, also served as important mechanisms for: 1) the interaction of partners from workforce and economic development, education, and industry; and 2) the initiative to obtain involvement, buy-in, and support from stakeholders.

²⁸ This report uses the term Steering Committee to designate the group that was responsible for governing, overseeing, or setting overall direction for the local initiatives. Individual regions used a variety of names for this group: Governing Board, Executive Committee, WIRED Action Committee, Leadership Team, Governance Council, High Skills Leadership Council, Governing Commission, and WIRED Policy Council.





Figure 1.6
Organizational Home of WIRED in Generation I Regions

Type of Organization	# of WIRED Regions	WIRED is Organization's Largest Activity	WIRED is One of Many Activities
Economic Development	5	FloridaNorth CarolinaWest Michigan	Metro Denver Pennsylvania
State Agency ^a	2		Montana Maine
University	1		• NCI
Other (Planning, Civic/Leadership, Industry-Specific, Workforce Board)	5	California CorridorKansas CityWAEM	New York Mid-Michigan

Source: BPA/UCSD Evaluation Team interviews and site visits

The Steering Committees' roles often changed over time. Respondents in several regions noted that as their initiatives moved from the design and start-up phase steady-state operations, their Steering Committees became less active and assumed more of a "big picture" policy oversight role than they had when their activities first began. In addition, all but a few regions added or subtracted subcommittees or implementation teams as the functional needs of their initiatives shifted. Some added advisory or similar groups to expand input from stakeholders, while others created subcommittees to explore strategies for sustainability. These changes were made to address the initiatives' evolving needs and often reflected lessons learned over time.

Finally, the Generation I regions used a range of structures for staffing their initiatives. At least five of the grantees invested heavily in staff centralized within the program management organization. These regions employed nine or more staff members to implement grant activities. In contrast, six regions used from two to four employees to run their initiatives, and usually passed on both funds and the operation of specific grant activities to partner agencies.

Partnerships and Resources

The grantees did not share a common definition of "partner" but used the term in many different ways, even within a single region. Partners may be one of at least four types:

• **Decision-Maker** partners included the individuals (or the organizations they represented) who served on the management team, the Steering Committee, and other key committees that were part of the governance structure.





^aMontana's workforce agency manages the state's initiative, while staff from the Office of the Governor manage Maine's Maine.

- Inner Circle partners tended to be members of the group that developed the grant proposal, along with individuals or organizations that contributed ideas or letters of support at the proposal stage. Others in this category may be members of advisory groups and leadership groups that contributed in important ways to the content of initiative-funded work, but were not responsible for making decisions.
- **Program** partners were usually the organizations that operated and managed projects funded by the initiative.
- Stakeholder partners included a host of organizations that initiative leaders regarded as "key players" in the region. These may include local government entities, economic development organizations, industry associations, foundations, workforce investment boards (WIBs), organized labor, universities, colleges, school districts, R&D centers, training providers, angel networks, Chambers of Commerce, and a variety of civic and not-for-profit organizations.

A region typically had partners that met several of these descriptions, and a single organization or individual often played more than one of the above roles.

A group of partners could be relatively homogeneous and have a well-defined set of goals. An example of this was North Carolina's Industry Cluster Roundtables, in which most members were inner circle partners, i.e., owners or managers of businesses in a particular industry, such as health care. In other instances, a relatively heterogeneous group of partners could share a particular interest, such as assuring that the region's young adults were well prepared to enter the workforce; its members could include educators, workforce system professionals, employers, labor organizations, non-profits focused on youth development, parents, and social service agencies. Such groups could serve in an advisory capacity, or be central to the region's decision-making (such as Metro Denver's Solution Teams).

Though Generation I regions varied in the magnitude of their success in leveraging partnerships and resources, respondents from each of the initiatives reported an increased capacity to sustain their work due to forming new relationships and obtaining additional funding. Among the notable achievements in many Generation I WIRED regions were the unprecedented partnerships that stakeholders have forged. Their creation often consumed enormous time and energy and, in some instances, may have delayed measurable progress in implementing grant activities. In several regions, partnership groups were formal subcommittees of the Steering Committee. Notable partnerships included those that spanned professional barriers, those that transcended geographical boundaries (especially where organizations and governments have traditionally competed), and those that operated successfully despite differences in partner organizations' cultures and missions. While some partners had never worked together or even considered doing so, other partnerships began to form prior to the grant as a result of previous collaboration efforts (for example, local or state governments created collaborative structures by streamlining agency operations in several regions). In some regions, initiative leaders encouraged such relationships by only awarding sub-grants to multi-partner collaboratives.

ETA did not require applicants to secure matching funds to receive a Generation I grant, nonetheless, the original SGA encouraged applicants to leverage the resources of all strategic





partners whenever possible. The majority of regions took ETA's advice to heart, and all secured additional, leveraged funds from other sources. Other Federal grants were the largest source of leveraged funding to support initiative activities. Foundations and other private sources also represented substantial proportions of leveraged funds; these funds represented a particular success for the regions since they meant that diverse stakeholders supported the initiative. A key challenge to spending Initiative grants was that the source of these funds was fees paid by employers for securing H-1B visas for foreign workers needed in the U.S. Particularly for regions in which the grantee and/or fiscal agent was not familiar with ETA regulations, the Department's clarifications of the allowable uses of these funds required the grantees to redirect funds from some of the uses they planned during the proposal phase. For example, the restriction against using grant funds as investment capital for entrepreneurs required several regions to seek other sources of support for their entrepreneurs, while at least one region had to find sources of funding outside the grant to support development of a regional marketing plan.

Activities

The initiatives relied on their partners to plan, fund, and implement the wide array of projects they used to achieve their goals. In addition to activities focused on promoting their target industries, all of the Generation I regions were also involved in other activities intended to support the transformation of the regional economy, including:

- Data Collection, Analysis, and Planning. Many regions had completed some form of asset mapping, gap analysis, employer surveys, strategic planning, or other analysis prior to the start of the Initiative. In some regions, research was a minor activity, while in others it was a major element of the grant's first year activities.
- Entrepreneurship and Business Services. In the context of the grant, entrepreneurship took on a much broader definition to include shifting the paradigm of existing firms, or instilling an attitude of ownership and creativity in the regional workforce and culture. Many of the Generation I regions pursued activities that both supported the formation and growth of new businesses, and encouraged this type of revitalization among existing businesses, including opening business incubators, providing entrepreneurship mentoring and support, preparation of entrepreneurship curriculum for both the high school and college level, and compiling best practices and resource directories. In addition to supporting and developing entrepreneurship, the Generation I regions supported small businesses through rural business programs, business cluster initiatives, and improving access to investment capital.
- Education and Development of Work Skills. Development of the "talent pipeline" is a phrase sometimes used to describe the process of ensuring that an ongoing supply of workers is prepared to meet the needs of employers in a particular community. Activities of the Generation I regions included, but were not limited to, serving as a liaison between schools and industry, offering internships, providing career readiness and STEM education programs in K-12 and postsecondary settings, developing postsecondary programs, and contributing to the development of industry-specific training facilities.
- Workforce Training. Workforce training included activities targeting incumbent or dislocated adult workers. The regions funded job training for a range of industries including green jobs, but also funded projects to promote training and employment of older workers, develop online curriculum for occupational skills training, provide incumbent worker training onsite





at their jobs, and provide mentoring and skills upgrading for health care professions. Several regions placed heavy emphasis on promoting credentials and certifications, while at least one initiative focused on underserved workers.

- *Innovation and Technology Transfer*. Several regions funded projects that connected universities and other research facilities with businesses to create or improve products, processes, and services. These activities aimed to build on research and development in the region in order to create or increase high-skill jobs.
- Leadership Development. A number of regions devoted resources to leadership development in an effort to engage business and civic leaders in their initiatives' activities, and to help develop a shared vision for the region. Respondents in one region said that such projects were essential to addressing the "need to build new civic habits of collaboration," an effort necessary for the initiative to be successful.

The rest of this report discusses these aspects of the grantees' operations in more detail. The next section of this chapter presents a summary of the evaluation's study methods.

Evaluation Overview

In October 2006, ETA contracted with Berkeley Policy Associates (BPA) and the University of California, San Diego Extension (UCSD), to evaluate the Generation I regions. The evaluation aimed to provide a comprehensive understanding of the implementation and cumulative effects of collaborative and innovative strategies in the Generation I initiatives, including transformations in their regional economic and workforce systems.

More than a study of workforce training or economic development activities, the evaluation described how regional organizations concerned with economic growth and building human capital came together in new social relationships through which shared goals, co-investment, and a renewed sense of regional purpose and confidence could develop. The evaluation, therefore, focused on three critical aspects of regional economic transformation, all of which contributed to the evaluation's assessment of the regions' success:²⁹

1) Alliance and identity-building across geographic and professional boundaries. Regions challenged themselves to work collaboratively to transform existing industries or create new, globally competitive industries. This systems change required integrating and leveraging the resources of local economic development institutions, education and training institutions, private sector know-how, capital providers, and the intellectual capital resident in universities and R&D centers. Genuine system change requires a shared identity within the region and a common sense of purpose. Integration must occur not only across systems (economic development, workforce development, education) and across agencies, but also across parallel entities from different political jurisdictions within the region (WIBs, counties, cities, universities, etc.) and across different offices within organizations. The evaluation focused on the extent to which the regions successfully built alliances that crossed traditional

²⁹ See the evaluation's design report for more detail on study methods: Almandsmith, Sherry, Mary Walshok, et. al. (2007). *Evaluation of Generation I of the Workforce Investment Regional Economic Development (WIRED) Initiative: Design Report.*





geographic boundaries and strong collaborative groups across a variety of institutions committed to the economic transformation agenda.

- 2) Strategies in governance, co-investment, business, and developing workforce skills. To successfully implement their grants, regions had to be committed to changing practices, reorienting workforce training, and focusing educational credentialing on the skills and competencies essential to regional economic transformation in the context of a global knowledge economy. The evaluation examined several dimensions of progress toward meeting those goals, including the extent to which the grantees were able to: 1) build a common vision of the future among institutions and citizens; 2) stimulate and reward collaborative work; 3) encourage entrepreneurship, support start-ups, and assist existing firms in securing new customers, upgrading technology or attracting investment; 4) work with their chosen industrial sectors to ensure that business influenced the content and delivery of training; and 5) implement their training and collaboration strategies in a way that ensured the sustainability their initiatives efforts over time.
- 3) Outcomes in regional economic well-being and workforce preparedness. Critical components of economic transformation included a) sustainability through multiple investments in new alliances, b) clarity in articulating desired region-specific outcomes that enhances regional prosperity, and c) diligence in tracking progress toward those outcomes. The evaluation assessed the regions' progress toward long-term economic transformation across a number of dimensions, including early documentation of economic growth, success of workforce development and training programs in training workers and assisting them to obtain well-paying jobs, relationship-building among various types of stakeholders, and the extent of optimism about the future among leadership and citizens talking about their region.

Figure 1.7 illustrates the evaluation's data collection methods. To assess collaboration, alliance-building, and development of a regional identity, the research team analyzed documents and plans, conducted site visits and interviews, and surveyed partner organizations in each region. The team used the same methods to explore the specific organizational and programmatic strategies that each region employed, and used information from existing databases to analyze enrollment in training or education programs. Finally, to examine regional progress toward sustainable economic transformation, the evaluation analyzed information from documents, interviews, surveys, and existing data sources on regional economic and other factors. Each of these data collection methods is discussed briefly below.

Annual Visits to Regions

A team of two researchers visited each of the 13 regions in the autumn of 2007, 2008, and 2009. On average, site visits lasted four days. Site visitors conducted semi-structured interviews using protocols that probed 12 broad aspects of the local initiative: 1) context, 2) goals, 3) planning, 4) structure, 5) partnerships, 6) collaboration, 7) activities, 8) funding, 9) innovations, 10) challenges and successes, 11) evaluating success, and 12) sustainability. Site visitors interviewed executives, program managers, and administrative staff of the regional grantees, their partners, supporters, and sub-grantees. Evaluation staff also observed meetings, classes, workshops, and other initiative-funded activities.





During the first year of the evaluation, site visitors focused on topics such as collaboration, building alliances, development of the original grant proposals, partnership structures, partner roles and relationships, and building a regional identity. Interviews during the second round of visits concentrated on more specific organizational and programmatic issues, and collecting upto-date information about: 1) specific steps that fostered innovation, new business development, and improved workforce education and training services; 2) implementation successes and challenges to date; and 3) changes in structure and/or activities. The third set of site visits focused on assessing progress toward sustainable economic transformation, the influence of the initiative on the regional community and its service systems, how project staff measured outcomes and impacts, and the ongoing sustainability of each region's efforts.

Additionally in the autumn of 2010, site visitors conducted follow up telephone interviews with each region's leaders after conclusion of the grants to explore the sustainability of initiative efforts. Based on information gathered from the phone calls, the evaluation team selected two sites to visit a fourth time (Mid-Michigan and Florida). The selection criteria included the availability of initiative and partner staff for interviews, the presence of interesting continuing activities, and the likelihood of long-term sustainability.

Survey of Partners

A key source of evaluation data was a survey of initiative partners that focused on the nature and function of the collaborative networks in each region. While the evaluation had originally anticipated administering the survey at least twice, delays during the design process and in obtaining the appropriate Paperwork Reduction Act approval from the Office of Management and Budget (OMB) prevented the study team from conducting the second survey.

This report incorporates the survey results throughout the chapters, particularly in Chapters 2, 3, and 4. Appendix B contains a description of the survey methodology including the survey instrument, compilation of the sample, characteristics of non-respondents, and additional results.

Extant Data Analysis

To supplement the qualitative measures collected through site visits, the evaluation team selected existing national data sets to track indicators that represented different aspects of long-term economic transformation, and to provide external, independent, and unbiased information about the regions' progress toward economic and workforce system transformation. The evaluation's baseline values for these indicators created a snapshot of the regions before transformation efforts began. Ohapter 4 briefly describes the measures and the results of their analysis, while Appendix C presents a more detailed discussion of this task.

Social Network Analysis

A key component of the Initiative model was the development of partnerships and working relationships that fostered collaboration among key players from the workforce investment, economic development, and education systems, as well as community leaders and other

³⁰ See Almandsmith, Sherry, M. Walshok, et. al. (2008). *Early Implementation of Generation I of the Workforce Innovation in Regional Economic Development (WIRED) Initiative: 2007 Interim Evaluation Report*, ETA Occasional Paper 2008-03. Washington, DC: U.S. Department of Labor Employment and Training Administration.





stakeholders. The evaluation's social network analysis is based on the hypothesis that regions that build strong networks will be more competitive in the new economy than those with more diffuse networks. By mapping these networks, the evaluation team can better understand the connections of which they are made, and their overall strength.

Figure 1.7
Analytical Framework for the Evaluation

	Master Themes				
Research Tools	Collaboration; Building Alliances & Regional Identity	Specific Organizational & Programmatic Strategies	Progress Toward Sustainable Regional Transformation		
Analysis of Documents & Plans (Qualitative)	Activities planned and documented that build collaboration and foster awareness of the region as a cohesive economic unit; media reports about region	Specific steps planned and completed that foster innovation, new business development, improved workforce education and training	Reports of new businesses started, new products and markets developed; outside funding attracted to the region; lasting changes in education and training institutions		
Site Visits & Interviews (Qualitative)	Respondent reports about communication and decision-making, how collaboration affects their work lives; observation of the region; social network analysis showing new relationships among leaders in business, government, and intermediary organizations	Observation of meetings and visits to new or changed programs and organizations; discussions about defining and implementing various WIRED strategies	Extent of respondents' genuine optimism about the region's future; reports that outmigration of talent is slowing; reports that jobs are being created and institutions are changing		
Surveys (Quantitative)	Awareness among "non-leader" respondents of the region and its goals; reports of collaborative efforts and effects	Strategies used to communicate and strengthen integration and partnerships	Optimism about economy and converging beliefs that region is "on the move;" how collaboration has affected partners' activities, practices, and policies		
Analysis of Existing Data (Quantitative)		Workforce Investment Act Standardized Record Data (WIASRD) enrollments; data from education systems on achievements, numbers of graduations, numbers of faculty (with emphasis on STEM)	Quarterly census inventories of employment and wages from the Bureau of Labor Statistics; patents applied for, research and development activities; entrepreneurial activity and small business innovation research (SBIR) ³¹ funding; labor force participation and average wage by industry; payroll		

Source: BPA/UCSD Evaluation Team

³¹ The Small Business Innovation Research (SBIR) Program is a highly competitive award system that provides small businesses with opportunities to propose innovative ideas that meet the specific R & D needs of the federal government.



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The evaluation collected social network data through both site visits and the survey. Data collection consisted of asking respondents to identify individuals with whom they had significant contact in the context of the initiative, along with key characteristics of those collaborators, such as the type of collaborating organizations, respondents' level of responsibility within the participating organization, frequency of contact, geographical location, and nature of the contact.

Social network analysis uses simple descriptive statistics to summarize the nature and frequency of contacts between individuals in the social networks, and then uses specialized analysis tools that map those relationships graphically. The social network map (sometimes called web or net) displays key features of the regional networks such as strength of relationships, centralization, centrality, and betweenness, and provides visual images of the types of organizations and the levels within those organizations where most interaction is taking place. Chapter 4 includes a discussion of the evaluation's social network maps and the study team's analysis.

The Initiative's grant period (even with the one-year extension) represented an extremely short timeline by which to effect regional economic transformation. The evaluation's study period extended beyond the end of the Generation I grants. Still, changes in the regional economies that may ultimately be attributable to the Initiative might take ten years or longer to develop. As Chapter 4 discusses, the Initiative's timeframe was too short to detect significant improvements in the regions' economies. Thus, the findings presented in this report focus on the significant qualitative changes that have occurred as a result of the WIRED grants.

Contents of This Report

The remainder of this report includes:

- Chapter 2 presents an overview of the regional context including the demographics, local economies, and workforce development systems.
- Chapter 3 describes the Generation I regions' leadership and governance structures.
- Chapter 4 highlights specific types of partnerships and collaborative activities that were the basis for the initiative's key relationships.
- Chapter 5 discusses the strategies that the regions used to foster collaboration.
- Chapter 6 describes the region's progress toward sustainable regional transformation.
- Chapter 7 offers the evaluation team's conclusions about the lesson learned from the Initiative and their impact for future Federal investments in sector-based workforce development strategies implemented at the regional level.

Appendices to this report include:

- A: Profiles of Generation I Regions
- B: Partner Survey Methods and Detailed Findings
- C: Analysis of Extant Data





2. Context for the Generation I Initiatives

West Alabama-East Mississippi (WAEM)

WAEM's goals were to 1) provide high-quality training leading to a credentialed workforce; 2) promote entrepreneurship; and 3) develop strong partnerships to support economic development in this bi-state region. The Montgomery Institute (TMI) in Meridian, MS led grant planning and implementation, while the Alabama Department of Economic and Community Affairs (ADECA) Office of Workforce Development served as the grantee and fiscal agent. Both states consider their community and junior colleges to be the primary mechanism for providing workforce training and education and WAEM thus focused its grant activities on the region's eight college districts, four in Mississippi, and four in Alabama. Key to WAEM's success was the commitment of the community college presidents to the initiative. WAEM sought to become an "Enterprise-Ready region" in the target industries of health care, wood products, advanced manufacturing, warehousing and distribution, entrepreneurship, and tourism.

To create a strong workforce, WAEM developed the Modern Multi-skill Manufacturing (M3) credential, which assesses and documents entry-level and intermediate skills in advanced manufacturing. In addition, WAEM developed an innovative approach to rural place-building that combined the traditional urban planning charrette process with the community and leadership development workshops of Your Town Alabama and other successful community engagement programs in the region.

The region's rural nature and limited resources, combined with decline in the economy overall, have meant slow economic growth. In addition, bi-state collaboration for regional economic development has been difficult—but not impossible—to maintain.

The U.S. Economy and the Role of Regions

Over the four years of the WIRED Generation I Initiative and evaluation, 2006 - 2010, the United States underwent significant changes in its overall economy, its competitiveness globally, and its ability to generate the jobs and prosperity Americans had come to expect.³² Within a year of the 2006 award of the Generation I grants, a wrenching nationwide economic crisis was beginning to overshadow and exacerbate the economic woes experienced within the Generation I regions. By late 2008, the United States clearly was experiencing a major downturn across multiple sectors of the economy. Banking, manufacturing, construction, and retail sales all declined precipitously.³³ The inexorable forces of globalization, changing technology, and demographic shifts all contributed to a gloomy outlook. 34,35

As President Obama took the oath of office in January 2009, the prospect of a major recession was on the horizon. Already considered "at risk" regions in 2006, the Generation I regions were affected significantly by the recession. By 2008, because many of them had focused on growth opportunities in strategic sectors that had been disproportionally affected by the economic downturn (manufacturing in Mid-Michigan, financial services in Pennsylvania, manufacturing and distribution in the North Carolina), their shaky economies seemed nearly hopeless.

Between 2008-2010, respected analysts, observers, and policymakers provided provocative discussions of the challenges of rebuilding the workforce development

³⁵ Sallet, John, E.Paisley, and J. Masterman (2009). "The Geography of Innovation: The Federal Government and the Growth of Regional Innovation Clusters," *Science Progress*.





³² Murno, M., and B. Katz (2010). *The New 'Cluster Moment': How Regional Innovation Clusters can Foster the Next Economy.* Washington, DC: The Brookings Institution.

³³ Abraham, Katharine G., J. R. Spletzer, and M. Harper (2010). *Labor in the New Economy (National Bureau of Economic Research Studies in Income and Wealth)*. Chicago: University Of Chicago Press.

³⁴ Gills, B.K. (2010). *Globalization, Crisis and Transformation: World Systemic Crisis and the Historical Dialectics of Capital*. London: Routledge.

system in the face of these difficult economic times. For example, the Corporation for a Skilled Workforce pointed to the need for all regions to address three key elements of a regional workforce agenda:

- A shift in culture and values which recognizes the need for lifelong education and learning in an economy that is being challenged by globalization factors and technologies;
- 2) The need to address growth strategies that are going to be effective at the regional level; and
- 3) The need for system alignment, which means developing workforce skills that employers need among workers located where the actual opportunities will be.³⁶

In a similar vein, Senator Patty Murray, the Chair of the Senate's Health, Education, Labor & Pensions (HELP) Committee, pointed out that thousands of jobs were waiting for skilled workers, so we need to do a better job of matching up the skills of our workers with the needs of our industries.³⁷ Her comments also reinforced the need to improve our systems of education and worker training (and retraining) to produce the high-skilled workers that employers need.

Other discussions on this issue included:

- Ongoing discussions among Federal policymakers and elected officials that emphasized the need for the WIA reauthorization to provide more accountability and collaboration.³⁸
- both DOL and the Department of Commerce to develop cross-agency regional strategies aligned to assure that jobs were created simultaneous with business growth. ³⁹
- Jane Oates, Assistant Secretary of the ETA, commitment to creating "a modernized system that provides seamless career advancement services." "This system," she continued, "should

California Innovation Corridor

To increase California's global competitiveness, the Corridor sought to optimize the region's innovation and workforce competitiveness by integrating systems and strategies among education, workforce, and economic development entities. California Space Authority (CSA), an aerospace industry association, managed the WIRED grant. The project's strategic goals were: 1) designing an "innovation support architecture" to increase innovation and entrepreneurship; 2) helping partners adapt to changes in global manufacturing, resulting in industrial rejuvenation and improved competitiveness of the region's supply chain; and 3) talent development via projects that supported math, science, and engineering education, and lifelong learning. Targeted industries included advanced aerospace. R&D, and manufacturing supply chain. The initiative used collaborating organizations in four roles: partners linked to specific projects for completion of specific tasks; supporters provided specific project support: collaborators worked on project teams in support of a task; and affiliates provided support and endorsement of the initiative's larger objectives.

Notable successes included the valuable partnerships that formed; the process and results of data collection; increased involvement of the workforce system after CSA partnered with the California Workforce Association, particularly its increased role in economic development efforts; development of the valuable and high-profile STEM Collaborative Action Plan; and the extensive and growing "Innovation Asset Mapping Inventory."

³⁸ Ganzglass, Evelyn, M. Jensen, N. Ridley, M. Simon and C. Thompson (2001). *Transforming State Workforce Development Systems: Case Studies of Five Leading States*. Washington, DC: National Governors Association. ³⁹ Murno, M., and B. Katz (2010). *The New 'Cluster Moment': How Regional Innovation Clusters can Foster the Next Economy*. Washington, DC: The Brookings Institution.





³⁶ Corporation for a Skilled Workforce (2010). A Summary of State Sector Strategies.

³⁷ Murray, Patty (2009). Chair of the Senate's Health, Education, Labor & Pensions (HELP) Committee. *Hearing on Preparing Workers for Jobs of the Future*.

Denver Metro WIRED

Metro Denver's initiative was designed to address the "Colorado Paradox:" the region's workforce is highly educated overall, but native residents lag behind the nation in high school graduation rates, college attendance, and science and math skills. The grant aimed to: 1) develop a home-grown skilled workforce for four targeted industries with labor shortages – aerospace, bioscience, energy, and information technology; 2) lead in STEM education and develop a workforce with the nation's best STEM skills; 3) provide an entrepreneurial climate for business creation and expansion; 4) become a region where a post-secondary certificate or associate degree is the minimum acceptable education; and 5) create a regional system that integrates workforce, education, and economic development to meet individual and business needs.

The project's biggest challenge was difficulty engaging K-12 partners or addressing stakeholders' interests in starting career education early due to the age limitations of H1B funds. Successes included a closer alignment of education policy with workforce and economic development: increased collaboration between education and workforce partners; more "buzz" in state and local policy circles about the regional economy, targeted industries, and workforce training; helping the governor's office obtain a grant to develop the Colorado STEM network; and successfully partnering higher education with high schools to prepare students for high-demand occupations or career-track degree programs. Notable examples of leveraged funding included CU Denver's \$3 million grant from the Gates Foundation to create a K-12 level STEM center.

embody a dual customer approach which meets the needs of both workers and employers, in developing thriving communities where all citizens succeed and business prospers."⁴⁰

In calling for a seamless system in which employer and employee systems are aligned from day one, these officials reaffirmed the core principles that gave rise to the Initiative in 2005.

This chapter provides an overview of four major contextual factors that contributed to the character and amount of progress that the regions made. The discussion first addresses how the contexts of the regions varied in terms of the history of economic activity, the industrial legacies and leadership characteristics that framed their economic horizons, and the social dynamics that affected how they responded to the challenges of globalization and technology development. Then, it describes the demographics of each of the regions, as well as ethnic and cultural factors, wages, and overall GNP.

Pre-Existing Conditions: Generation I Regions' Perceived Assets and Gaps

While the Generation I regions were quite diverse, they came to the grant with a shared sense that "business as usual" could no longer assure long-term prosperity. The usual business at the regional level, and the challenges that needed to be addressed, were quite diverse across the regions, however, as shown in Figure 2.1 below. The overall intent of the Initiative – to increase global economic competitiveness – meant that most regions focused on economic development, education and developing workforce skills. The study team identified several commonalities across the local

contexts of the Generation I regions, such as:

⁴⁰Oates, Jane (July 16, 2009), Assistant Secretary for the Employment and Training Administration, U. S. Department of Labor. Testimony before the committee on Health, Education, Labor and Pensions, Subcommittee on Employment and Workplace Safety, United States Senate.





Figure 2.1 Pre-Initiative Economy, Regional Assets and Gaps

		ve Economy, Regional Assets and	Gaps
Region	Historical Economic Base	Self-Reported Assets	Self-Reported Gaps
WAEM	Agriculture, service, timber, health care, some manufacturing & warehousing	Community colleges strong in workforce development; existing relationships between government officials, college presidents, business community, & other potential partners; high motivation to achieve economic growth	Slow economic growth; lack of industrial base; need for workforce training & certification in high skill jobs; need for education in STEM & other fields leading to jobs
California Corridor	Diversified economy including agriculture, tourism, technology, entertainment	History of innovation; strong technology & aerospace industries; strong R&D resources—major universities & Federal labs; space industry strategic plan	Shortage of technical workers; off- shore manufacturing & global competition creating a negative trade balance
Metro Denver	IT, aerospace, bioscience, energy	Thriving technology sector; strong regional identity; strong mayor leadership	Low high school completion & college enrollment rates; poor K-12 STEM education
Florida	Military & other government, service sector	Strong existing regional identity; political champions for initiative goals; existing partner network between parent organization, regional WIB consortium, local economic development, businesses	Non-diverse economy; lack of housing, transportation; brain drain; high cost of living/ low income jobs; need for STEM education
NCI	Manufacturing, agriculture	Major research university (Purdue); reorganized workforce system focused on business needs	Decline in large firms & suppliers; low education; aging workforce; brain drain
Kansas City	Animal health & biotechnology, cattle, agriculture, logistics	Strong civic leadership; regional identity; history of collaboration – industry & economic development across state lines	Poorly coordinated training resources; little public sector collaboration across state lines
Maine	Strong industrial history; government support for industry	Small state; pre-existing relationships; world class composites expert; strong regional and brand identity	Transportation challenges; lack of adequately trained workers; brain drain
Mid-Michigan	Heavily dependent on declining auto industry & supplier networks	Pre-existing state initiatives combining workforce & economic development; strong civic & foundation support; involvement of research universities in technological solutions; high motivation to address state's economic problems	Dramatic decline of auto manufacturing & related industries; brain drain
West Michigan	Heavily dependent on declining auto industry & other manufacturing	Pre-existing state initiatives combining workforce & economic development; pre-existing leadership; good infrastructure & transportation; proximity to large cities	Difficulty attracting & retaining young workers; brain drain; over-dependence on auto industry & heavy manufacturing
Montana	Mostly agricultural, some mining & oil	Entrepreneurial, independent spirit; highly motivated; SWOT analysis	Limited R&D capacity; transportation challenges; declining population
New York	History with now- declining optics firms; agriculture	Legacy of business vitality; good links between workforce & business; regional name brand recognition	Over-reliance on 3 large firms discourages entrepreneurship; disparate vision– rural & urban
North Carolina	History of dominance by tobacco, furniture, textiles; agriculture	New FedEx hub; pre-existing regional identity & organizational structure; new strategic plan for economic development	Manufacturing legacy in which education was not valued; low-skill workforce
Pennsylvania	Steel; manufacturing, mining, tourism, some financial services	Proximity to NYC with sufficient separation from NYC infrastructure fitting Federal specs for Wall Street backup; some prior sub-regional collaboration	Regional boundaries combined 3 very disparate areas with history of competition & differing industrial mix; brain drain

Source: BPA/UCSD Evaluation Team interviews, site visits, and document review





- Several regions had a history of dependence on a single industry, or on a small number of giant companies along with their suppliers. When those companies or industries declined, the regions were ill-prepared to replace them.
- Regions with economies dominated by large manufacturing companies had many workers
 with a history of high wages, but with low skills or with few transferrable skills. Their hope
 was to move from a once-competitive old economy industrial base to advanced
 manufacturing or other knowledge-rich industries with high-wage jobs.
- Some regions wanted to leverage R&D resources more effectively, build a culture of innovation and entrepreneurship, and develop a support infrastructure that maximizes the odds of new business survival.
- Many regions expressed the need to develop strong connections between secondary school systems, colleges and universities, and vocational training providers, with emphasis on strengthening STEM education.
- Several regions reported a "brain drain" or a tendency of the best-educated young people to migrate elsewhere. They hoped to create conditions within the region (jobs and amenities) that would help them retain more of the region's talent.
- Some regions reported marked differences across sub-areas within the region (e.g., urban and rural), based on discrepant histories and needs. Tensions or perceived inequities often accompanied these differences.
- Many regions reported a major need for education for high-skill jobs.

Cultural Context for Change in Generation I Regions

Social scientists and cultural geographers have validated the significance of the interplay between cultural and structural factors in shaping regions' efforts to transform their economies. Regional cultural "grooves" and industrial legacies shape the ability of specific communities to support the development of the economic infrastructure and collaborative mechanisms needed to transform their regional economies. Regions differ culturally in terms of their perceived sources of solutions and opportunities. They also differ in terms of their ability to absorb and respond effectively to change to build momentum for regional transformation. These variations in cultural "grooves" were evident across the Generation I regions, and fall into three⁴¹ categories, as shown in Figure 2.2:

⁴¹ Anderson's original typology included five categories: Dependent; Stagnant; Accommodative; Resilient; and Inventive. In this report, the "Traditional" category combines Anderson's "Dependent" and "Stagnant" categories to describe certain Generation I regions. For Anderson, "Inventive" regions were hubs of creativity, with new product development, market/business development, significant research and development, patenting, and business formation, as well as new investment, angel and venture capital. These characteristics were not often found in within the Generation I regions prior to the Initiative, and when they did appear, they were sporadic and/or geographically limited within a region, rather than a characterization of the region as a whole.





Figure 2.2
Pre-Initiative Context for Change within Generation I Regions

Categories	Generation I Regions	Cultural Factors				
	Metro Denver	Constant population expansion of young, educated & upwardly mobile newcomers. Focus on high tech & bioscience with great diversification.				
Resilient	California Corridor	Diverse economy with high tech manufacturing sectors. Creating aero-space diversity capabilities & developing STEM pipeline.				
Ready to transform existing practices in the face of new challenges	West Michigan	High % manufacturing jobs. Auto, furniture, & chemical jobs lost. Many home furnishing supply chain companies moved to auto industry. Unique culture of family-owned business & community philanthropy. After WWII, more entrepreneurs				
	Maine	Seafaring roots with 400 years of boat-building & international recognition of product quality. High school grads unaware of boat building/composite industry.				
	Florida	Reliance on military & tourism led to barbell economy (high & low paying jobs, zero in the middle). Ignored by rest of the state &/or stereotyped as not much happening. Need for diversification & raising economic profile within the state.				
	Indiana	Central to the region is agribusiness food processing & technology, advanced manufacturing, & advanced materials. Indiana is not a one industry state it is a one sector state: manufacturing. Many automotive layoffs at Delphi. Workers were used to cyclical layoffs & were waiting for companies to start hiring again.				
Forced to change if required by legislation or crisis		"Subregions dominated by GM & Delphi; blue collar, union, manufacturing cities alongside university town (Lansing) with both auto industry & government jobs. 81% of college grads leave because no job opportunities. Many who remained were waiting for the auto industry to come back as it had before.				
	Kansas City	Traditional manufacturing mostly gone by 1980's, leaving freight distribution & back office jobs. Pharmacy & animal health industries fueled reemergence in 1990's. Low levels of R&D, lacks strong research university. High racial segregation.				
	Pennsylvania	Region developed in waves: first coal mining, then manufacturing & steel with many low-skill jobs, & more recently, services. Reputation for strong work ethic, self-motivation. Worker recruitment hard because of perceived lack of jobs.				
Tuoditional	WAEM	Agricultural history, with little industry or new economic prospects. Individualistic & not trusting of outsiders, with strong sense of belonging to one's local area. 88% of people who live in the region, work in the region. Ability to work together relies heavily on personal contact & connections: "You gotta go whittle, & spit in the fire, you gotta go look at the other fella's place."				
Traditional Anchored in a particular mindset or industry; often historically reliant	North Carolina	Historical legacy of encouraging students to drop out of high school & work in tobacco, textiles, & furnishing industries that had dominated & were declining. Even some recent successes (the aerotropolis & related logistics/ distribution growth) built on a "legacy" asset: the location at a hub of major freeways.				
upon big companies or government	Montana	Independent, hard working people with "pioneer spirit." Entrepreneurial - 90% of businesses have up to 3 employees, but history of reliance on ag subsidies. "If there was a category below rural we'd be that one." 2 people/ sq. mile.				
	Finger Lakes	Economic hits early with Kodak, Xerox, & Bausch & Lomb. Once an innovation hub but large companies discouraged innovative thinking. "Culture doesn't value learning beyond what employer requires. History of high pay for low skills." Developed paternalistic & relatively closed society.				

Source: BPA/UCSD Evaluation Team interviews, site visits, and document review





Florida's Great Northwest

Florida's initiative aimed to improve the region's global competitiveness through talent development in: 1) life sciences; 2); aerospace and defense; 3) software development and electronics engineering; 4) alternative energy; 5) construction. The initiative also aimed to facilitate regional partnerships among education, training, workforce investment, and economic development systems to create and expand employment opportunities. Florida's Great Northwest, Inc. (FGNW), a regional economic development organization, managed the grant with input from industry Advisory Councils. FGNW brought to the grant close, established working relationships with all of the region's WIBs. FGNW also incorporated initiative activities into its programs to ensure sustainability.

In selecting its target industries and strategies, Florida undertook four large data analyses over three years to comprehensively understand projected changes and labor trends in the target industries, the region's assets for training workers to fill demand occupations, and the skill and training requirements of the region's most critical occupations.

The initiative funded several types of training projects, including: high school career academies; accelerated high school math and science programs; customized incumbent worker skills training in high-tech industries; entrepreneurial job creation and skills training; capacity-building programs with the region's colleges and universities; and innovative ways to expand access to training for high-tech, high-growth jobs.

The nation's weak economy and the effects of the Deepwater Horizon oil spill presented the initiative's biggest challenges. Its biggest successes included creating mechanisms to foster stronger partnerships, and building the region's training capacity.

- 1) **Traditional** regions were often anchored in past and traditional ways of "doing business" that may serve as barriers to change or collaboration (e.g., industrial modes of production, centralized decision-making, undervalued and underdeveloped human capital). They also tended to rely on large companies or government agencies and initiatives to provide solutions and the resources needed to get enterprises moving again and get people back to work. Independent thought and innovation were undervalued, while loyalty to existing structures and institutions was rewarded.
- 2) Accommodative regions had the social institutions and the coordinative functions in place to change direction if required by legislation or a crisis. While institutions and individuals within the region tended toward the status quo, they could be mobilized to change direction if change were forced upon them.
- 3) Resilient regions had enough diversity and enough momentum in their regional economies that they were able to transform their existing practices in the face of new challenges or opportunities. Governmental organizations and civic groups were involved in activities aimed at regularly scouting new economic opportunities as they simultaneously supported existing enterprises and their requirements.

These distinctions are important because understanding the Generation I regions' socio-cultural context is key to an appreciation of the nature and the value of the progress they made during the initiative. Many of the 13 regions lacked the assets needed to grow robust regional innovation clusters, whether by transforming existing company strategies and practices in order to sustain competitiveness in existing jobs, or via creative breakthroughs that could seed new companies and thus create new jobs.

Over the four-year initiative, the regions evolved in ways that had them focusing increasingly on the importance of diversification and transformation for their long-term economic security, through collaborative activities focused on entrepreneurship and development of workforce skills. The Initiative experience was encouraging and, in some specific areas, the beginning of a transformative process.





NCI

Working with the partners listed below, NCI's goals were to: 1) build Talent Networks to support lifelong learning among mature incumbent workers in declining industries and to increase enrollment in post-secondary education (local WIB and community college); 2) strengthen Entrepreneurship and Innovation Networks in the region to nurture start-up businesses (state university); 3) develop Business Clusters in health care, energy efficiency, advanced materials, agribusiness supply chains, nanotechnology, and green workforce certification (small business and economic development organizations); 4) develop networks, communities of practice, and regional forums to increase Civic Collaboration among regional communities; and 5) invest in innovative partnerships that could be replicated statewide through a \$5 million Opportunity Fund.

Purdue University's Center for Regional Development (PCRD) managed the grant. Local economic development organizations (LEDOs) participated through a panel that informed, solicited input, and built collaboration with workforce development agencies.

NCI required the programs it funded to build in mechanisms of sustainability. Examples included small business curricula for niche farmers that partner colleges continue to offer, a pilot program to help manufacturers increase energy efficiency that was subsequently funded by a US Department of Energy grant, a community college position teaching advanced manufacturing subsequently funded by the college, and curricula on green manufacturing that partner colleges and MEP staff still offer.

This report documents the ways in which Generation I regions, because of their experience with the grant, have prepared themselves to address the deeper challenges that have emerged with the recent economic downturn. The partnerships that have developed, the leadership that has emerged and the collaborative programs that have been put in place by the Generation I regions over their grant's four years point to a trajectory of progress overall that is encouraging moving forward.



Population and Economic Context in Generation I Regions

Understanding the Generation I regions' efforts to transform their economies required an understanding of the populations and economic contexts within the regions. The regions are quite diverse, as indicated in Figures 2.3 and 2.4 below.

Figure 2.3
Selected Population Characteristics and Education by Region

Region	Population per Square Mile 2008 ^a	Percent Other than "White Only" 2008a	Percent with Less than High School Education 2008-09 ^b	Percent College Aged Enrolled in 2 or 4 Year School, 2008 09°
WAEM	39.3	39%	29% ^d	63%
California Corridor	447.7	24%	21%	72% ^d
Metro Denver	294	11%	11%	68%
Florida	116.9	24%	18%	65%
NCI	96.6	6%	16%	75% ^d
Kansas City	260.6	16%	10%	70%
Maine	62.7	4%	10%	56% ^d
Mid-Michigan	204.5	13%	11%	67% ^d
West Michigan	273.8	11%	12%	50%
Montana	1.9	24%	17% ^d	33%
New York	247	14%	12% ^d	60%
North Carolina	268.8	24%	19% ^d	58% ^d
Pennsylvania	359.6	8%	14% ^d	54%

^aU.S. Census 2008 estimates (FactFinder tables T1, T3, T6, T8 and Quickfacts)





^bPercentage of persons age 25 or older, 2006-8 average, American Community Survey (ACS) Table B15002, except regions WAEM, NCI, Florida, and Montana that used 2000 U.S. Census SF3-P37 due to ACS censoring of counties with fewer than 20,000 residents.

^cPercentage of population age 15-24, including full and part time enrollment. Integrated Post Secondary Education Data System, U.S. Department of Education 2008-9; U.S. Census 2008

^dThese regions' percentage was at least two percentage points higher than the state(s) as a whole.

Appendix C shows detailed information, including information for the states in which regions are located. The evaluation team gathered data on the regions from a variety of publicly available and commercial sources, to illuminate the positioning of each region along six major dimensions:⁴²

- Population characteristics;
- Economic characteristics;
- Workforce makeup and employment;
- Population educational attainment and current enrollments;
- Innovation; and
- Entrepreneurship.

Measures such as these provided independent and unbiased information about conditions within each region while the initiative was working toward economic and workforce system transformation. To this end, the evaluation team collected data on a number of measures beyond the usual workforce metrics, identifying sources of data that track innovation, entrepreneurship, and migration, as well as education and population characteristics.

This section summarizes highlights from the evaluation's assessment of measures relevant to the regions' goals for long-term economic transformation and improved quality of life for its residents. Many of the regional measures differ noticeably even from the same measure for the host state(s). Quite clearly, the U.S. does not have a single economy, it has many regional economies.

Kansas City

The Kansas City initiative (One KC) aimed to: 1) develop a seamless and comprehensive system of economic and workforce development; 2) align training and educational programs to meet industries' growing staffing needs; and 3) market the 18-county, bi-state region as "One KC." The grant targeted three industries: advanced manufacturing, biotechnology, and healthcare. The Mid-America Regional Council (MARC), the federally-designated regional Metropolitan Planning Organization and fiscal agent for One KC, hosted the One KC project director.

The initiative's challenges included a lack of fiscal oversight and strategic management, reluctance to participate – or even opposition – from the public workforce system, and a lack of state level workforce system engagement after the departure of two active state workforce leaders. One KC received a no-cost extension to July 30, 2010 to spend the grant's remaining \$3.67 million on training activities.

One KC was successful in branding the region, despite challenges of working across the state line. The initiative also raised \$13 million in leveraged funds for developing relevant curricula and programs for high schools and community colleges; involved thousands of youth in Project Lead the Way; and increased the effectiveness of industry liaisons in linking industry with grant-funded activities, thus creating a competitive advantage for industry in the Kansas City region. Lastly, all four healthcare sector initiatives exceeded participation goals and are now sustained without grant funds.

⁴² The cost-effective way to achieve this in-depth analysis is to use data sets collected by others, usually for other purposes. The evaluation team selected national data sets, gathered at least annually using reproducible methods, in fine geographic granularity, with zip code or county/state identifiers available so that data for the regions could be aggregated. When researchers use data in ways that were not envisioned by the gatherers, they must take care to identify any hidden assumptions that are not spelled out in the data dictionaries, and to assess the quality and completeness of all fields, particularly those fields that were not central to the original use. In some cases, data dictionaries must be developed *ab initio* with the help of the originators. The evaluation team was fortunate to enjoy the cooperation of nearly all of the third-party data providers in obtaining additional documentation of their data sets to ensure the validity of the data for evaluation purposes.





Maine's North Star Alliance Initiative

NSAI integrated education, workforce, and economic development systems to create and sustain skilled jobs in boat-building, marine services and repair, and advanced composites. NSAI organized activities under four pillars of economic development: 1) Workforce Development trained new and incumbent workers through collaborative efforts by industry and education; 2) Research & Development identified new industry-based research and leveraged existing R&D resources to increase Maine's industryfocused R&D workforce; 3) Market/Business **Development** expanded marketing initiatives within boat-building and composites industries; and 4) Capitalization & Infrastructure **Development** provided capital and management assistance for business and industry growth. Industry participation was integral to the NSAI initiative. Representatives from businesses and three major industry associations participated in all four pillars and the Executive Committee. A key feature of the Committee was that it made all decisions by consensus.

Challenges included: ETA's disallowed costs, which caused financial burden and reduced trust between partners and the initiative; the economic downturn and the resulting business realignment from luxury to commercial boatbuilding; and low participation from small companies without resources for training. Successes included improved outreach to industry and communication among partner organizations; increased alliances and trust among previously independent business owners: and the involvement of state and local workforce staff as key players. NSAI's most notable success was the creation of two training facilities with national accreditation that continue to be self-sustaining.

Population Characteristics by Region

As shown in Figure 2.3, above, all but three of the Generation I regions have relatively high population densities (population per square mile), which is a surrogate variable for the urban/suburban/rural distinction. The California Corridor and Pennsylvania are the two most dense/urban of the 13 regions. The three most rural regions are Montana, WAEM, and the Maine. These initiatives faced the challenges of fewer community resources spread over distances (large distances in Montana).

To simplify presentation of data on race/ethnicity, Table 2.3 only shows the proportion of each region's population that is Asian, Black, or Other ethnicities; the column is labeled "Ethnicity Other than 'White Only" (racial designation are those of the U.S. Census). Most of the Generation I regions have populations that are over 80% white. 43 The region with the highest percentage of nonwhite residents is WAEM at 39%, while 24% of the populations of the California Corridor, Florida, Montana, and North Carolina are nonwhite. The more detailed data in Appendix C show that in these five regions, the most predominant ethnic group in WAEM is Black (37%); in the California Corridor, Asian (13%); in Florida, Black (20%); in Montana, American Indian (22%); and in North Carolina, Black (21%).

The U.S. Census collects Latino ethnicity as a separate measure from race. The data in Appendix C further indicate that the California Corridor has a high proportion of Latino residents (40%), and that Metro Denver also has a substantial Latino community, with 21% of its population being Latino.⁴⁴ Most of the rest of the regions have single-digit percentages of Latino residents.

Educational Attainment and Current Enrollment

As many of the higher wage job opportunities in emerging markets will require some education beyond high school, the educational baseline of the region as well as the relative number of

⁴⁴ Latino is a separate data item from race. As a result, the proportions of Latino residents in California Corridor and Metro Denver are higher than the total percentage of nonwhite residents in those regions.





⁴³ Population measures come from the U.S. Census 2008 estimates. U.S. Census Factfinder tables T1, T3, T6, T8 and Quickfacts http://factfinder.census.gov/servlet/DCSubjectShowTablesServlet? ts=290449586416.

students in college is useful information. Figure 2.3 includes two different measures describing the educational status of each region. The first, *educational attainment*, based on the highest grade completed by each person in the region over the age of 25, is presented as the proportion of residents who did not graduate from high school. The second measures the *current college enrollments* in the region as a fraction of the population ages 15-24.⁴⁵

Of the 13 Generation I regions, WAEM had the highest percentage (29%) of the population lacking a high school diploma, followed by California Corridor (21%), and North Carolina(19%). The Midwest regions (Mid-Michigan, Kansas City, West Michigan, Metro Denver) tended to have a larger proportion of their residents with at least high school educations. Maine had the smallest percentage (10%) of residents not completing high school. The data in Appendix C shows that for nine of the regions, the largest proportion of residents completed high school, ranging from 31% in North Carolina to 42% in NCI. Florida was the only region in which the largest percentage (31%) of residents had attended some college or earned an Associates degree. Finally, three regions had the highest proportions of their populations holding Bachelor's or post-baccalaureate degrees: Metro Denver (38%), Kansas City (32%), and California Corridor (30%).

⁴⁵ Most of the educational attainment measures are an average over the period 2006-8, from the American Community Survey project of the U.S. Census Bureau. Because this is a survey and not a full census, censoring of small-population counties limits the utility of this data set for some of our regions. Even using the 2006-8 average (with a 20,000 population censoring limit) rather than a more recent one-year measurement, WAEM, NCI, Northwest Florida and Montana suffer more than 10% censoring. For these regions, the evaluation team had to rely on older 2000 census data.





The other education measure shown in Figure 2.3 is the number of students enrolled in two- or four-year colleges in 2008-09, both full and part time, as a proportion of college-aged young adults.⁴⁶ Although the actual ages of the enrollees are not known, the research team compared the number of enrollees to the population age group most closely associated with college-age: 15-24. Enrollments as a fraction of this age group look high, especially considering that few actual students are younger than 18. Conversely, some students – particularly in community colleges – may be older than 24. Nonetheless, this surrogate measure for the regions' enthusiasm for higher education gives cause for optimism. WAEM, with a relatively low overall educational attainment, has an estimated 63% of its college age cohort enrolled in college. NCI appears to have the largest proportion (75%) of its college aged youth enrolled in school, with California Corridor a close second (72%). Montana has the lowest percentage enrolled in school: 33%. This fact emphasizes another shortcoming of this estimation approach. The Montana region has very few educational institutions, suggesting that the number of students enrolled is dependent upon the number of colleges in the region.

Economic Conditions in Generation I Regions

As shown in Figure 2.4 below, the average per-capita income in Generation I regions ranges from a high of \$44,074 in Metro Denver to \$23,517 in WAEM. The average per capita income measure comes from the Regional Economic Information System of the Bureau of Economic Analysis,

U.S. Department of Commerce.⁴⁷ Note that this measure is "income per person" for the population as a whole, including those persons not working – not income per household, and not income per job.

Mid-Michigan Innovation Team (MMIT)

The Mid-Michigan Innovation Team (MMIT) focused on five industry sectors— the bioeconomy, building and construction, entrepreneurship, advanced manufacturing, and health care—and on a rethinking of the region's relationship to the automotive industry, its traditional industrial base. With Michigan State University (MSU) as the fiscal agent for the grant and the Prima Civitas Foundation (PCF), a nonprofit regional community and economic development organization, as its managing entity, the MMIT had the goals of: 1) innovation in future industry and growth in entrepreneurial firms; 2) talent development through business- and entrepreneurship-based learning; and 3) collaboration among the region's partners to maximize the use of resources.

The initiative funded a number of workforce training initiatives, among them, training in bioeconomy careers through MSU; programs in advanced manufacturing, nursing and health care, and building and construction at the partner community colleges; retraining programs in the health care field for dislocated workers; and support for entrepreneurship and technology commercialization. Each new set of activities that the MMIT developed built on the successes of prior activities, and not only improved job growth or entrepreneurship but also increased collaboration.

In addition to having to face the dire economic situation that has existed in the State of Michigan in recent years, the initiative also encountered the major challenge of trying to build a regional identify among a diverse set of counties that had not been considered a region prior to WIRED. However, despite the lack of a natural regional focus, the MMIT was successful in creating partnerships and promoting networking across its 13 counties.

Therefore, the numbers may look low to someone accustomed to evaluating household income. The income data is as current as the population data, however, and the measure can provide useful information. Other measures of income available by county are reported as medians, not

⁴⁷ Regional Economic Information System, BEA Table CA1-3-3.0, 2008, updated Apr 21, 2010 http://www.bea.gov/regional/reis/.





⁴⁶ The study team used data from the Integrated Post Secondary Education Data System (IPEDS) of the U.S. Department of Education to tabulate enrollments in two-year and four year colleges for the academic year 2008-9 from enrollments reported by all schools in the regions that received Title IV funding.

averages, and medians cannot be combined when examining a multi-county region. The study team computed the regional average per capita income by weighting the averages of each county by the population of the county. All dollar values are in current dollars, not adjusted for inflation.

Figure 2.4
Selected Economic and Innovation Characteristics by Region

Region	Per-Capita Income, 2008 ^a	\$Million Wage Migration 2007- 2008 ^b	Percent Unemployment September 2009 ^c	SBIR/STTR Awards, Per- Capita \$ Amount 2008d	New Business Starts, 2008 ^e
WAEM	\$23,517 ^f	- \$56	11.2% ^g	\$0.56	14.7
California Corridor	\$37,199 ^f	- \$2,626	11.9%	\$12.94	31.2
Metro Denver	\$44,074	+ \$859	6.8%	\$24.39	40.6
Florida	\$28,103 ^f	+ \$86	8.4%	\$2.64	44.6
NCI	\$31,833 f	- \$82	10.0% ^g	\$12.61	18.3
Kansas City	\$33,735	- \$94	8.5%	\$1.21	21.6
Maine	\$34,971	+ \$80	7.4%	\$3.98	22.2
Mid-Michigan	\$34,116	- \$380	13.5%	\$2.40	29.3
West Michigan	\$28,313 ^f	- \$118	12.7%	\$0.23	29.5
Montana	\$31,612	- \$15	5.5%	\$0.00	8.5
New York	\$32,100 ^f	- \$158	7.9%	\$8.82	20.4
North Carolina	\$32,657	+ \$204	11.0% ^g	\$0.81	29.7
Pennsylvania	\$34,866 f	+ \$48	9.0%9	\$0.13	23.2

^aUS Census 2008 estimates (FactFinder tables T1, T3, T6, T8 and Quickfacts)

The *wage migration* measure uses IRS data⁴⁸ compiled from tax filers who changed mailing addresses between filings, allowing the tracking of workers between any pair of counties in the U.S., migration to other states, and migration to foreign countries. Summing the adjusted gross income of workers moving into a region and subtracting the adjusted gross income of those

⁴⁸ Source: U.S. Internal Revenue Service Statistics of Income Program, available for purchase at http://www.irs.gov/taxstats/indtaxstats/article/0,.id=96816,00.html.





^bChange in total adjusted gross income from IRS 1040's due to filer migration, between 2007 and 2008. Source: U.S. Internal Revenue Service.

^cSource: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics table laucntycur14.xls, Montana data excludes Indian reservations

^dSource: U.S. Small Business Administration TECH-Net, 2008.

^eSource: Dun and Bradstreet custom report; U.S. Census Bureau, UCSD, 2008

^fThese regions' per-capita income was less than 90% of the per-capita of the state(s) as a whole

gThese regions' unemployment rate was higher than that of the state as a whole

moving out gives the net wage migration. A positive number means more income is coming into the region; a negative number means more wages are leaving the region than are arriving.

Wage flow is not the same as worker flow, which is why this measure is useful in addition to counting number of jobs. In all regions in the year between 2007 and 2008 filings, the net number of workers who filed 1040 forms each region for the first time was positive.⁴⁹ But in most regions (WAEM, California Corridor, NCI, Kansas City, Mid-Michigan, West Michigan, Montana, and New York) the net wage migration was negative, meaning the fewer number of workers leaving the region had higher wages than the larger number of lower-paid workers entering. Even though more workers were coming into these regions, income was still flowing out. Metro Denver, Florida, Maine, North Carolina, and Pennsylvania, on the other hand, apparently attracted higher paid workers coming into their regions than those that left, since their adjusted gross income flow was positive.

The amount of the wage migration is perhaps of less interest than whether the number is positive or negative, since regions with larger total working populations will likely have a larger wage migration.

Note that this measure is an addition to the usual measure of total wages in the region and does not replace it. Workers who newly gain or lose jobs without changing addresses beyond the region are not included. Workers who receive changes in pay but do not change addresses are also not included.

Unemployment Rate

Since the recent recession changed the character of the labor force and the unemployment picture, this overview uses a snapshot of the unemployment rates for a single recent month (September,

West Michigan

WIRED West Michigan aimed to transform the region's workforce investment and education systems to provide the skilled workers needed to compete in today's economy by funding a range of activities that encouraged innovation and met the training and workforce needs of regional employers. The initiative had four types of innovation projects: Market Intelligence, Enterprise Development. Innovation Infrastructure, and Workforce System Transformation.

Challenges included: pre-existing tension between the region's three major cities; and resolving ETA's questioning of the spending of \$8 million in grant funds. Successes included the creation of a shared portal/website where regional manufacturing companies can share best practices, experiences, and ideas; increased collaboration among health care employers, the workforce investment system, and local community colleges and training systems through the Health Care Regional Skills Alliance; exceeding the initiative's goals for testing and issuing of NCRC WorkKeys certificates; actively engaging rural partners through two major initiatives; funding a statewide internship program aimed at retaining college graduates; and successfully promoting the use of WorkKeys among WIBs. With the inclusion of all three WorkKeys modules on the Michigan Merit Exam (for 12th grade graduation), Michigan is the first state to have an alignment between the workforce system and the K-12 education system. Many of the region's innovation projects derived revenue from employer or participant fees that continued to sustain these activities after the grant ended.

⁴⁹ Data not shown, available upon request.





considers individuals as unemployed if they were available for work, had sought work within the previous month, and were not employed during the reference week. The Montana region labor

force numbers do not include workers on Indian reservations, so both the labor force and

2009). The labor force metric used by the U.S. Bureau of Labor Statistics (BLS) includes all paid employees and self-employed persons including farm workers who were employed at least one hour in a reference week. The snapshot month, September 2009, was part of the recent recessionary period. The BLS counts workers holding more than one job only once, and

Montana Agro-Energy Plan

MAP aimed to: 1) develop a world-class bioproducts industry that creates a value-added economy; 2) develop a highly trained and stable/ growing workforce; 3) develop a workforce training system responsive to business needs and economic opportunities; and 4) create a sustainable regional leadership structure for innovation and longterm success. Montana's Department of Labor & Industry (DLI) was both the manager and fiscal agent of the grant. The state's education, agriculture, and commerce agencies played key roles in both collaborative and training activities. To sustain relationships built through the grant, Montana's governor issued an executive order requiring cooperation among these agencies.

Challenges included: delays in securing ETA approval for equipment purchases; difficulty finding qualified staff; and the reluctance of farmers to grow bio-fuel crops given their federal crop insurance for wheat. Due to changes in commodity markets, in 2008 MAP expanded its target industries to include construction, energy, truck driving/ transportation, and value-added agriculture. Successes included: expansion of MSU-Northern's Bio-Energy Innovation and Testing Center to both train students and serve local businesses through its new Biodiesel Fuel Certification lab; community college curricula and associate degree programs in biofuel production that allow the transfer of A.A. degree credits toward a bachelor's degree at the state's universities; and expansion of workforce training services on Crow and Blackfeet reservations. In 2009, DLI created a new 21st Century Workforce Technology Apprenticeship and Training Bureau to improve coordination between workforce services, industry, education, and economic development. DLI also aligned its local workforce areas with regional economic development offices statewide.

unemployment values may be distorted. Overall, the unemployment rates ranged from 14% in Mid-Michigan down to 6% in Montana and 7% in Metro Denver. Appendix C shows that the WAEM, NCI, Kansas City, North Carolina, and Pennsylvania regions had higher unemployment rates than their respective states.

Innovation

The evaluation also tracked each region's capacity for innovation, since exploiting innovations is an important avenue to continuing economic growth and prosperity. The evaluation used several measures of innovation activity. The amount of the regions' Small Business Innovation Research (SBIR) and Small Business Technology Transfer Program (STTR) awards, shown in Figure 2.4 above, indicates the capacity to transition new technologies to commercial practice. Appendix D shows two additional measures: 1) each region's governmental R&D awards, showing the capacity for pure research; 2) and the number of patent applications, an indicator of the capacity to commercialize innovations.

The R&D data is from two sources, SBIR/STTR awards, and National Institutes of Health (NIH) and National Science Foundation (NSF) extramural funding. Many Federal agencies award SBIR/STTR funds to small businesses seeking to translate innovations to commercialization. Phase I awards are typically in the neighborhood of \$100,000 per year. A small fraction of awardees receive much larger Phase II awards upon successful completion of Phase I. Although the dollar amount is relatively small, these awards are valuable to small companies attempting to bring a new product to market. SBIR/STTR awards per capita ranged from lows of \$0.13 (Pennsylvania) and \$0.56 (WAEM) to highs of \$147 (North Carolina) and \$179 (Metro Denver).

NIH/NSF funding is fairly consistent across all fields. NIH predominantly funds biomedical research and NSF funds all other fields of science and engineering. Larger regions have more research institutions, therefore the total research budget was normed to the region's population. Appendix D shows that the combined amount of this funding in FY2009 equaled \$6 per person in research institutions in Pennsylvania, and \$180 per person in Metro Denver research institutions.





The evaluation tracked *patent applications* rather than patents granted, because although the Patent Office approves roughly half of all applications, the time lag between application and grant is long enough that patents tend to reflect the creativity of the previous decade. New York had the highest rate of patent applications per capita, surpassing the California Corridor (see Appendix D).

Entrepreneurship

One measure of entrepreneurship is the start of a new business. Since any company that does business with a bank or a government agency needs a Dun and Bradstreet (D&B) number, and applying for that number is free, the D&B database provides an excellent monitor of new business activity. The evaluation team purchased the D&B database of new business starts for 2008, and normed them to the regional population. Even though 2008 included the beginning of a recessionary period, some regions showed remarkable entrepreneurial energy. As Figure 2.4 illustrates, entrepreneurs in Florida started 45 new businesses per 10,000 residents; in Metro Denver, 41; in California Corridor, 31; and in Mid-Michigan, 29.

Workforce System

Reflecting the wide range in geographic size across the Generation I regions, the number of WIBs that the regions covered varied from one (in Montana and North Carolina) to 25 (California Corridor). Figure 2.5 below presents information on the number of WIA customers that WIBs in each region served in 2006, as well as the proportion of the region's population that those customers represent. Finally, the figure shows the placement rate for the WIBs in each region. Appendix C

New York

The Finger Lakes region's goal was to innovate, invest in entrepreneurial operations, and educate workers. Targeted industries included optics, life sciences, agriculture, alternative energy, advanced manufacturing, and information technology. Rochester Works!, Inc., a local workforce investment board, managed the grant.

The initiative faced challenges in building partnerships among educators and, initially, in resolving tensions between urban and rural leaders. By the end of the grant, however, strong working relationships had emerged, particularly among the region's WIBs and community colleges. Sustaining the work of the initiative was another key challenge. As the grant ended, leaders were uncertain about how to continue activities in the absence of grant funds.

A notable success was the region's strong support for a wide range of projects related to entrepreneurship. In particular, five universities and business incubators collaborated to develop a strong technology commercialization capability. Members of the group developed a common model of technology commercialization and, by leveraged talent and other resources across the five institutions, established a valuable resource for job creation in the region.

The region's signal achievement was the Scholarship program, an investment of nearly \$6 million to support employer-initiated training of 8,400 workers in 308 companies. Employers appreciated the program's flexibility and lack of administrative burden, and provided matching funds in excess of \$6.6 million.

presents more detail on the regions' WIA customers, the services they used, and their outcomes.

Local WIBs within the boundaries of the New York and California Corridor regions served the largest numbers of WIA customers in 2006 (382,980 and 143,818, respectively). In contrast, WIBs located in the Montana region served fewer than 2,500 customers and those in Maine served 3,761. Nonetheless, most WIBs within the Generation I regions served a very small proportion of their local populations, ranging from .2% to 6% of the region's residents. North Carolina stood out because its workforce development system served 26% of the region's population.





Figure 2.5 Selected Information on Local WIBs by Region

Region	Number LWIAs	Number WIA Customers	WIA Customers as % of Population	% Customers Entered Employment
WAEM	8	181,745	6%	74%
California Corridor	25	143,818	0.6%	74%
Metro Denver	2	14,077	0.5%	68%
Florida	6	76,099	6%	47%
Kansas City	7	29,057	0.5%	68%
NCI	3	17,753	3%	71%
Maine	4	3,761	0.2%	72%
Mid-Michigan	5	11,182	1%	79%
West Michigan	4	10,523	1%	75%
Montana	1	2,468	1%	60%
New York	3	382,980	3%	73%
North Carolina	1	34,955	26%	69%
Pennsylvania	5	34,070	2%	58%
TOTAL	74	966,565	2%	72%

Source: Workforce Investment Act Standard Record Data (WIASRD) for 2006 and U.S. Census data from WITS

Table C.3 in Appendix C illustrates that WIA customers are more likely to experience barriers to employment than the general population using two characteristics: race and education. WIA customers are 35% more likely to lack a high school diploma than the general population, and 2% more likely to be a race other than white. Thus, the workforce development system serves individuals who are less likely to be successful in finding and keeping a job than other residents of a region.

On average, WIBs in the Generation I regions assisted 72% of their customers to find jobs in 2006. Within specific regions, the proportion ranged from 47% in Florida to 79% in Mid-Michigan. The placement rate reflects the local economy as much as it does the quality of services that these WIBs provided. While different parts of the country had experienced economic slowdowns between 2001 and 2006, the actual recession did not start affecting most of the U.S. until 2008, after the Initiative began.

The next section discusses social and political factors that influence the ability of regions to build partnerships.





Regional Context for Building Partnerships

In addition to the factors that this chapter described above, the context in which grantees implemented their initiatives included social and political variables such as partners having a history of working together in the past, and the existence of trust between players from different professional backgrounds, communities, and political parties. Using findings from the evaluation's survey of initiative partners, this section describes how the region's partners viewed its "readiness" for the initiative in the period just before the Initiative began.

Partner Survey Findings

The evaluation team surveyed Generation I WIRED stakeholders in late 2009.⁵⁰ At the time of the survey, some regions were about to end grant activities; in others formal operations were already complete. Even with these potential barriers to responding, a total of 1,041 individuals completed the survey.

The survey asked respondents to think back to 2006, as the Initiative was beginning, and recall the extent to which:

- Agencies in our community had a history of working together;
- People and organizations in our region had trust in one another; and
- The political and social climate seemed to be "right" for starting a collaborative project related to regional transformation.

As Figure 2.6 shows, a large majority (86%) of respondents reported that they believed the political and social climate seemed to be "right" for starting a collaborative project focusing on regional transformation. More than half (59%) reported that

North Carolina

North Carolina's grant focused on four industries: logistics/distribution, advanced manufacturing, creative enterprise/arts, and health care. Business partners participated in industry-specific Cluster Roundtables to identify workforce needs, establish project goals, and determine training priorities. A regional economic development organization, the Piedmont Triad Partnership, managed the project.

Challenges included: a slow start due to staff turnover and revisions to the implementation plan; obtaining buy-in from the workforce system; establishing a culture of innovation and entrepreneurship given the region's manufacturing legacy; restrictions on the use of H-1B funds; and the economic downturn.

Successes included: strong private sector involvement that continued after the grant; sub-grantee matches of over \$2 million; increased collaboration among community colleges, and between community colleges and four-year colleges and universities; and successful promotion of the NCRC's WorkKeys system at high schools, community colleges, and major area employers.

The project's Leadership Group identified three projects with the highest priority to continue after the grant ended: supporting and promoting the region's 1) life sciences and 2) home furnishings industries, and 3) developing the region as an aerotropolis.* By the end of the project, the Group had solicited more than \$1 million to cover these activities for one year, and will continue fund-raising for four more years.

* The aerotropolis is new urban form with an airport as the core surrounded by a cluster of hotels, distribution/logistics facilities, and other aviation-intensive businesses.

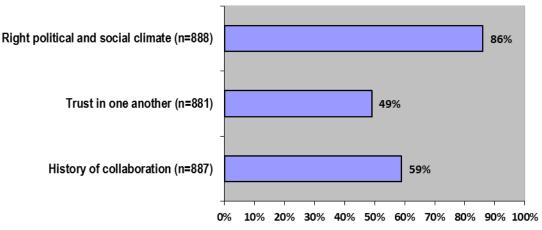
agencies in their community already had a history of working together, and almost half (49%) reported that trust among individuals and between organizations was already in place.

⁵⁰ See Appendix B for a more detailed description of survey methods. The evaluation team asked each region to nominate approximately 100 partners and stakeholders as survey respondents. The survey was conducted via email, using an online survey protocol and with telephone follow-up. A total of 1,041 individuals responded.





Figure 2.6
Overall Collaboration Context



Source: BPA/UCSD Evaluation Team

The study team looked at these findings for different subgroups of respondents. For instance, no significant differences in perceptions emerged between respondents at different levels within the collaborating organizations. On the other hand, as Figure 2.7 illustrates, the type of organization in which the respondent worked made a significant difference in the extent to which respondents reported a history of collaboration: 74% of government respondents agreed with the statement, while only 40% of research respondents agreed. The difference did not hold for the other two questions about the region's readiness for the initiative. The proportion of respondents who indicated that people and organizations trusted each other did not vary significantly across types of organizations, nor did those who indicated that the time was "right" for collaboration.

Figure 2.7
Collaboration Context by Respondent's Organizational Type

Organization Type	History of Collaboration**	Trust in One Another	Right Political and Social Climate
N	887	881	888
Business & Industry	56%	48%	82%
Education	61%	55%	87%
Workforce System	67%	50%	91%
Economic Development	54%	39%	89%
Research	40%	42%	81%
Other Government	74%	57%	88%
Other	63%	50%	94%
TOTAL	59%	49%	87%

**Differences between groups are significant at the 99% confidence level.

Source: BPA/UCSD Evaluation Team





Responses also differed significantly by region, as shown in Figure 2.8. The percentage of respondents reporting that agencies in their community had a history of working together ranged from a high of 76% in Montana to a low of 43% in Mid-Michigan. Similarly, 70% of respondents in West Michigan reported that people and organizations in their regions had a lot of trust in one another, compared to 28% in North Carolina. Differences between regions in the proportion of respondents who believed that the political and social climate seemed to be "right" for starting a collaborative project related to regional transformation were not statistically significant, however. A large majority of respondents (82-92%) agreed with this statement in all of the regions.

Figure 2.8 Collaboration Context by Region

Region	History of Collaboration**	Trust in One Another**	Right Political and Social Climate
N	887	881	888
WAEM	47%	35%	90%
California Corridor	56%	47%	83%
Metro Denver	67%	62%	90%
Florida	66%	58%	86%
NCI	56%	40%	82%
Kansas City	70%	57%	92%
North Star Alliance	64%	53%	91%
Mid-Michigan	43%	40%	85%
West Michigan	72%	70%	90%
Montana	76%	68%	86%
New York	60%	43%	87%
North Carolina	45%	28%	85%
Pennsylvania	59%	50%	83%
Total	59%	49%	87%

Source: BPA/UCSD Evaluation Team





Pennsylvania

Wall Street West (WSW) initially aimed to attract investment from New York-based financial services firms by building a fiber optic cable for synchronous data transfer, creating a disaster-proof Wall Street backup operation. With the collapse of the financial sector in 2008, WSW shifted its focus to building career pathways and increasing workers' transferable skills in target industries such as financial services, diversified manufacturing, health care, logistics, and advanced materials. Ben Franklin **Technology Partners of Northeast** Pennsylvania, part of a state-funded economic development network, managed the grant.

The region's greatest challenge was developing cohesion across a "patchwork" of sub-regions with diverse economic histories and a history of competition. Redirecting the initiative's goals increased the challenge. Without the common vision that united diverse partners, communicating the importance of the initiative, both to partners and to a wider audience, became difficult.

WSW's successes were its projects using innovative strategies for workforce development. Several projects involved region-wide collaboration among local WIBs, which were still meeting together monthly in late 2009. In addition to training and educating thousands of individuals, partners improved curricula and relationships to make future education and training systems more effective.

At the end of the grant, the Northeast Pennsylvania Technology Institute took over administrative responsibility with the intent of building a strong workforce development capacity in the region to train and credential professionals in the field of business continuity.

Summary

The Generation I regions exhibited variation across all of the factors that can influence the implementation and success of the regional initiatives, including assets and gaps, culture, social and political atmosphere, population characteristics, major industries, history of working together in the past, and trust between partners.



3. Governance and Leadership

Managing staff and other leaders shaped the initiative's goals and priorities and determined the action steps needed to implement the initiative. Their effectiveness in bringing together the regions' key partners and uniting them in collaboration and innovation influenced whether and how the initiatives will affect the regions' future economic well being. This chapter first describes the structures that the regions used to govern their initiatives, and then discusses leadership across the 13 Generation I regions.

Governance

This report uses the term Steering Committee to designate the group that was responsible for governing, overseeing, or setting overall direction for the local initiatives. Individual regions used a variety of names for this group: Governing Board, Executive Committee, WIRED Action Committee, Leadership Team, Governance Council, High Skills Leadership Council, Governing Commission, and WIRED Policy Council. These committees guided and governed the Generation I initiatives, and were as diverse as the efforts they oversaw. Almost all committees included representatives from the private sector, the workforce investment system, the K-12 education system, higher education, economic development, the nonprofit sector, and local and state government. In addition, many Steering Committees included members with expertise in entrepreneurship, such as a Small Business Development Center representative. A few also included individuals who represented the venture capital or angel investment community.

The regions varied in the number of members representing specific types of organizations that participated on their Steering Committees. Using economic development as an example, 25% (two out of eight) of the Steering Committee members for both WAEM and Montana consisted of representatives from economic development. In contrast, only two of the 17 members of Pennsylvania's committee were from economic development (12%) while two representatives of such agencies participated on New York's 36-member Steering Committee (6%). Furthermore, these representatives could work for local (e.g., New York), state (e.g., Maine), or Federal (e.g., NCI – USDA Rural Development) agencies.

As Volume I of this report⁵¹ described, the Steering Committees operated using one of three approaches to decision-making. *Staff-Dominant* regions relied on staff from the managing organization to make important decisions, although they may have received input from other regional leadership. Steering Committees played advisory roles, focused more on the initiative's policy and overall direction than on strategy, and were not directly in the "chain of command." Kansas City and WAEM used this model throughout the grant period, while NCI adopted it during their second year of implementation (see Figure 3.1).

⁵¹ Hewitt, N., Hollenbeck, K., Almandsmith, S., and Walshok, M. *Draft Workforce Innovation in Regional Economic Development National Evaluation, Volume I: Cross-Generational Findings*, Public Policy Associates and Berkeley Policy Associates, August 16, 2011.





Figure 3.1
Generation I Models Management and Governance: Dominance Styles

Region	Staff-Dominant	Partner-Dominant	Partner-Leadership /Staff Support
WAEM	TMI leadership used input from Gov. Commission & others		
California Corridor			Many projects led by partner organizations supported by staff liaison
Metro Denver		Supply-Side & Demand-Side Panels	
Florida		Many partners, especially from business & industry involved in decisions	
NCI	Core Team changed from being hands-on to being more an advisory body		
Kansas City	Fiscal agent & project management centralized in same agency, with PD making most decisions		
Maine		4 Pillars; Concensus decision- making	
Mid-Michigan		Large group of partners, very involved in decisions	
West Michigan		Policy Council reviews & approves grant proposals	
Montana			Responsibility lies with Steering Committee, with executive support from the state DOL
New York		Members increasingly "own" initiative & take leadership roles	
North Carolina		Stakeholders on team that reviews, selects, & oversees grants	
Pennsylvania		Executive Committee Human Capital Committee Sustainability Committee Business Advisory Group	



In *Partner-Dominant* regions, Steering Committees were the main decision-makers, with relatively limited contributions from staff. Comprised of representatives from various partners and stakeholders, the committees assumed ultimate responsibility for achieving their region's goals and project staff reported to them. Eight of the Generation I grantees used some version of this model. In these regions, Steering Committees and their subcommittees took on tasks such as reviewing sub grant applications (West Michigan), and awarding and overseeing sub grants (North Carolina).

Finally, two regions used the *Partner-Leadership Model with Staff Support*. Here the staff identified emerging issues, developed options and recommendations, and briefed the Steering Committee members, who then made the major decisions. The Steering Committee set the direction for the region, and was an important source of leadership, problem-solving skills, and accountability. The committee developed policies that governed the region's operations, but did not play a direct role in project management. Montana's Steering Committee is made up of state agency heads and members of the State WIB who are not involved in project management. The regional manager is a state employee who briefs the committee before they make major decisions. California had over 20 large projects that partner organizations managed with the support of a staff liaison from the managing organization. All were highly involved and kept the Steering Committee informed, however, the committee was not involved in project management.

In many regions, the Steering Committees were much more hands-on and directive during the start up of their grants than they were later, after the initiative's projects were up and running. The committees then tended to assume more of a "big picture," policy oversight role. The Steering Committees also evolved over time as the initiatives streamlined their management structures and leaders in each region began to focus on sustainability. For example, Mid-Michigan expanded its committee to include stakeholders who could help ensure the sustainability of the initiative's efforts. On the other hand, regions such as WAEM, Maine, and New York eliminated subcommittees that had concentrated on establishing goals and initiative activities.

Another important aspect of program governance is the role that key leaders within the region play. Leadership takes many forms and includes multiple functions, and only rarely is a single individual able to perform all those functions, as the next section discusses.

Leadership

Any initiative that aims to mobilize business, industry, government agencies, education, and social service institutions, as well as individual citizens, will depend for its success on the effectiveness of the economic, political, and civic leaders who drive the initiative. The evaluation used both site visits and survey responses to analyze salient aspects of leadership and governance in the Generation I regions.

The evaluation distinguished three distinct but related aspects of leadership that appeared to make a difference within the Generation I regions: *championing* the initiative's vision and mission; *catalyzing* the region's efforts to accomplish specific goals and to build partnerships that spanned geographic, economic, and institutional boundaries; and *integrating* plans and programs to maximize the value of available resources. Typically, a variety of individuals carried





out these functions, including initiative staff, leaders of funded projects, and even individuals who volunteered their time in support of the initiative's goals. Dispersed leadership may multiply the initiative's opportunities for sustainability, as any one of the individuals who "took on" leadership may prove effective in catalyzing post-grant collaboration and economic progress.

Observations from Site Visits

Leadership took on many forms within the local initiatives. Leaders were tested even more severely than they had anticipated, given the multitude of unexpected events within each region, not to mention two factors that affected all regions:

- The nationwide economic downturn almost universally complicated regional efforts to bring about economic transformation.
- The complexity of implementing the initiative itself was heightened by changing instructions from the funder.

A few regions lacked a strong visionary leader (champion and catalyst) or found that those who might have played those roles were not able to devote sufficient attention to the initiative. Some of those individuals managed organizations that had multiple goals, including goals not sufficiently aligned with those of the initiative. Other regions experienced personnel changes in key positions, such as leaders of workforce agencies or educational institutions who had been committed to the initiative as a means for improving both the organization's and region's future. Such changes resulted in leadership deficits for the initiative as a whole, particularly when their newly-appointed replacements did not value the initiative as highly as their predecessors did.

Regions characterized with effective leadership were able to build on existing, acknowledged leadership within their communities. Examples included:

- Stakeholders across the state had long held Florida's Great Northwest (FGNW) in high regard. The organization began the initiative already well positioned to serve, in a non-competitive way, as the focal point for the region's efforts to achieve economic transformation. In large part because of the initiative, FGNW enhanced its stature further and engendered trust and cooperation from a variety of partners, including the workforce investment system, industry, and education. Stakeholders increasingly recognized the organization as a useful and often powerful force in leveraging resources for the region.
- As NCI's management organization, Purdue University, was a respected institution, but some within the region were concerned that its leadership of the initiative might prove overdominant. Purdue staff worked hard to allay those concerns. The university proved to be an able manager and fiscal agent for the grant and received high marks from site visit respondents in many partner organizations. On many levels, Purdue provided a good example of how four-year universities can make a unique contribution to economic development and workforce initiatives for high technology and emerging industries.
- In North Carolina, Piedmont Triad Partnership's (PTP) leadership development initiatives were integral to the initiative's original implementation plan, and proved decisive in shaping the region's future. PTP carefully selected a group of leaders that included the region's most prominent business leaders and elected officials. These individuals received training and





coalesced as an ongoing Leadership Group, tasked with identifying the region's priority efforts for economic transformation. They targeted logistics/distribution, life sciences, and home furnishings, building on the region's recognized strengths. The group also successfully leveraged private dollars to replace public funds from the Initiative, signaling strong support from the business community for collaborative activities to increase the region's economic competitiveness.

Other grantees (NCI and WAEM) also invested in leadership-building activities as a long-term strategy to promote collaboration and growth in their regions. One of NCI's transformative strategies was to build civic networks that fostered collaboration across jurisdictional boundaries by identifying initiatives on which to work together. The initiative hosted quarterly regional forums on topics such as clean energy and economic development to bring people together around specific ideas, build networks, and develop communities of practice.

WAEM embarked upon an ambitious program of community strategic planning and entrepreneur development based on upon two insights: 1) successful economic development in rural areas grows out of entrepreneurship and 2) community leadership skills are as important as physical infrastructure to that success. The region first implemented the Rural Policy Research Institute's (RUPRI) community leadership development model. WAEM substantially simplified the model to speed the process, with an emphasis on concrete efforts such as Start It! cards to connect entrepreneurs to local resources. The region also adapted and implemented other community development programs, such as Your Town Alabama and the First Impressions program at Mississippi State University to provide local leaders with basic skills in asset-based planning. As the grant ended, initiative partners committed to continuing these programs.

The individuals who led and managed their initiative's collaborative partnerships – however diverse their stories and styles – had much in common. They shared a commitment to building opportunity across their regions, pulling together the disparate cities, towns, and rural areas within the regions, and convincing other leaders of the advantages of working together. They encountered the difficulties brought on by a faltering economy, such as reluctance to take risks or invest within the private sector, tightening purse strings, and budget deficits within the public sector. They adapted to changes at the Federal level. Finally, they assembled a large number of talented individuals and key organizations within their regions – all with time constraints and conflicting priorities – to create common missions, action plans, and the partnerships needed to bring those plans to fruition.

Survey Respondents' Insights

The evaluation's survey of initiative partners asked respondents to identify their role in regional governance efforts. The most frequently cited role in governance of regional transformation efforts, as shown in Figure 3.2, was leadership for a subregion, specific activity, community, or initiative-funded project (41%). Another large group (37%) of respondents either did not play a significant role in the governance or leadership of a regional initiative, or provided leadership unrelated to the Initiative or regional transformation efforts. Roughly one-fifth of respondents (22%) belonged to a formal leadership structure involved in regional transformation efforts.





Conclusion

The type – and membership – of the governance structure each region established for its initiative could have a large effect on what direction(s) the initiative went in and how well the initiative succeeded in achieving its goals for economic transformation. The governance structures the evaluation encountered in the regions varied considerably. In some cases, for example, due to the nature of a managing organization that decided to follow its normal way of doing business, in others due to the imposition of a standard or a preference by a person or group in authority (such as a state agency's required grant processes), and in still others, due to the creativity of participants in the grant proposal process who seized an opportunity to do something new and different. No matter the reason for the form they took, the regions' Steering Committees or other governance bodies served as important mechanisms for bringing together representatives of the different systems encompassed by the Initiative – economic development, the public workforce system, local and state government, higher education, the K-12 education system, and business and industry – as well as an initiative's target industries. Not only did participation in an initiative's governance confer formal responsibilities and expectations on each individual member, it also brought specific expertise to the initiative, such as ability to serve on a goal-setting or implementation team, or ensure an initiative's sustainability

Key leaders in the Generation I WIRED initiatives typically served at least one of the following functions that appeared to make a difference to a region's success: championing the initiative's vision and mission; catalyzing the region's efforts to accomplish specific goals and to build partnerships that spanned boundaries; and integrating plans and programs to maximize the value of available resources. In addition, they tended to share certain characteristics often found in true leaders: passion for their "cause" (i.e., the initiative); resilience; a spirit of collaboration and cooperation; flexibility; and a dedication to bringing others along on his or her path to success.



4. Partnership and Collaboration

Introduction

The Initiative's original SGA emphasized the importance of partnerships. Grant applicants accordingly ensured that a large and varied group of the region's key individuals and organizations were on board with their proposals. The events that shaped each region's partnerships began with the process of writing the proposal. For many, this process built upon pre-existing working relationships and friendships. In several regions (such as California Corridor, New York, and Florida), partners were heavily involved in the project design and collaborated in the proposal writing process. In several of those regions, decisions about how Initiative funds were to be allocated were largely made at the time the proposal was written. In those regions, implementation did not require lengthy committee deliberations to create or implement a process for deciding on priorities and expenditures.

In several other regions, program design and establishing funding priorities required work over a longer period after the grant award. These efforts were sometimes difficult and typically involved a large number of participants, many of whom were new to the initiative. Site visit respondents pointed to their participation in recurring meetings as a key reason they had come to know and had forged partnerships with new individuals.

- In North Carolina, partners worked long and hard to prepare their implementation plan. All major partners reviewed and commented on the draft before submitting it to ETA. The version of the implementation plan that ETA finally approved was revision number four; thus, the group's efforts to design the details of the grant collectively were considerable. It may be no coincidence, therefore, that the initiative's implementation closely paralleled the plan developed in 2006.
- Maine similarly invested a great deal of effort and partner participation in developing the
 grant's implementation plan. The process was time-consuming in part because of the
 commitment of the Executive Committee to make decisions by consensus, however that
 same process appeared to be the foundation for lasting partnerships. Interview respondents
 repeatedly mentioned the extent of collaboration, especially among private sector partners.
- WAEM experienced changes in leadership in its early days and numerous disagreements among its partners about how and how quickly to move on implementing initiative activities. Working through those issues was a key step in building partnerships, which were strongest among the community colleges primarily responsible for grant activities.

Generally speaking, partners who spent a great deal of time in face-to-face interactions – who came to know the other partners as individuals and to understand their professional frame of reference – thereby solidified their ability and willingness to collaborate with those individuals. Trust is a valuable asset in any partnership, and the Initiative showed that trust was often the payoff for time-consuming efforts to solve problems in pursuit of commonly-held objectives.





Partnerships and Partner Roles

Grantees did not share a common definition of "partner," but used the term in many different ways, even within a single region. Partners were one of at least four types:

- **Decision-Maker** partners included the individuals (or the organizations they represented) who served on the management team, the Steering Committee, or other key committees that were part of the governance structure.
- Inner Circle partners tended to be members of the group that developed the grant proposal, along with individuals or organizations that contributed ideas or letters of support at the proposal stage. Others in this category were members of advisory groups and leadership groups that contributed in important ways to the content of initiative-funded work, but were not responsible for making decisions.
- **Program** partners were the organizations that operated and managed grant-funded projects.
- Stakeholder partners included a host of organizations that initiative leaders identified as "key players" in the region. These could include local government entities, economic development organizations, industry associations, foundations, WIBs, organized labor, universities, colleges, school districts, R&D centers, training providers, angel networks, Chambers of Commerce, and a variety of civic and not-for-profit organizations.

Regions typically had partners that met several of these descriptions, and a single organization or individual often played more than one of the above roles.

A group of partners could be relatively homogeneous and have a well-defined set of goals. For example, North Carolina's Industry Cluster Roundtables consisted primarily of inner circle partners, i.e., owners or managers of businesses in a particular industry, such as health care. In other instances, a relatively heterogeneous group of partners shared a particular interest, such as assuring that the region's young adults were well prepared to enter the workforce; its members could include educators, workforce system professionals, employers, labor organizations, non-profits focused on youth development, parents, and social service agencies. Such groups often served in an advisory capacity, or could be central to the region's decision-making (such as Metro Denver's Solution Teams).

Stakeholders consistently identified the partnerships developed through participation in the initiative as being among a region's most valued assets and most sustainable outcomes. Staff of the managing organization spent an enormous amount of time communicating with partners, keeping them informed of the initiative's activities and accomplishments, seeking their input, inviting them to upcoming events, and soliciting their support. Some regions – such as Pennsylvania and Kansas City – dedicated a full-time staff position to the role of communicating with partners and the general public.

The discussions that follow define "partners" as the individuals and organizations involved in an initiative activity. This chapter discusses the ways partnership arrangements changed between the first and third site visits, the evolution of partnerships involving previously competing organizations, partnerships with the workforce system, and the roles that different types of





partners played. The second part of the chapter describes strategies that regions used for building and nurturing collaboration.

Expanding Partnerships beyond the Initial Inner Circle

Partnerships tended to change most dramatically in regions where a previously well-defined group of organizations collaborated in creating the grant proposal or were chosen at the proposal stage to operate pre-designated projects. Some regions found that to accomplish their goals, they needed to expand their partnerships. Others needed to reallocate unspent grant funds, and this process allowed them to bring new partners onboard.

The Generation I regions had to identify and recruit partners on a very short timeline to meet the SGA deadline. This impacted the degree to which the proposal writers were able to engage their partners in the process of creating a vision for the grant. For example, the California Corridor was one of the regions that defined decision-making partners and project partners during the proposal stage. Most of the partners did not participate in the process of identifying the initiative's mission, goals, and philosophy. Several respondents said that while they understood the intent to get funded projects underway quickly, the quick launch also meant that the region lost the benefit of time to develop a common vision among its more than 70 partners.

The California Corridor's early implementation included few key stakeholders from the workforce system and education/academia in the region's Steering Committee. Over the course of the grant, the region addressed this issue by convening several advisory panels and committees to assist specific projects. The Supply Chain Industry Advisory Group, the STEMCAP Steering Committee, the Project Pipeline Advisory Group, and the Santa Clara University Advisory Panel brought in numerous company representatives – along with high-level government and education partners – to broaden stakeholder engagement in these projects and the initiative. Respondents frequently cited service on these and other committees as a valuable path to forming new and lasting partnerships that have benefited their organizations.

The New York grant proposal also allocated most of the region's funding to partners before the grant began. Many stakeholders in that region noted that important changes in partnerships occurred between 2007 and 2008. During the first two years of the initiative, representatives of the region's rural counties saw themselves as outsiders, with the Governing Board dominated by Rochester organizations. As the Governing Board later took on the challenge of finding a new Managing Director and designing an RFP process to spend recaptured funds, members from rural counties took on active roles in the process.

The need to spend unallocated and recaptured funds presented an opportunity to expand partnerships in Kansas City as well. The region initially defined its partner organizations as those included in its proposal and allocated the entire grant at the time of application. During the first round of evaluation visits, several respondents noted that this arrangement limited expansion of the network to new partners. During 2008, Kansas City reclaimed unspent sub-grant allocations and undertook a request for application (RFA) process to reallocate \$800,000 to local WIBs. Several of the region's Executive Committee members described this process as an opportunity for the initiative to gain new partners and projects and to leverage their other investments. While the RFA was open only to current sub-grantees, the initiative encouraged





these partners to include other organizations in their proposals. The RFA process provided an opportunity "to look at new partnerships with evidence of synergistic connectivity"

WAEM adopted a very broad definition of partnership that encompassed more than 500 individuals and organizations that were involved in implementing the region's activities. In addition to its contracted partners, the region's partners included municipal governments, business and industry, local economic development organizations, university/college coalitions, regional commissions, the Mississippi Band of Choctaw Indians, business associations, and regional foundations. During the last grant year, the initiative added many new partners including the University of Alabama's (UA) Center for Community-Based Learning, the UA Rural Entrepreneurship through Action Learning (REAL) program, and members of the WAEM region's Mayors' Network. These new partners played a variety of roles in the initiative. For example, the faculty and students at the UA Center for Community-Based Learning assisted in creating and maintaining the MyBiz website, while members of the Mayors' Network joined forces with WAEM to promote a regional vision and take action on regional issues.

Forging Partnerships among Traditionally Competing Organizations

Working together allowed organizations that previously regarded themselves as competitors to recognize the extent to which they shared goals. Many discovered that they were stronger working together than in isolation or in competition. The most notable examples of these newfound symbiotic partnerships were those between economic development organizations, post-secondary education institutions, and businesses, many of which learned to de-emphasize rivalries and jurisdictional boundaries in order to meet common challenges.

Economic Development Organizations

Local economic development organizations, whether private or public, traditionally compete with each other rather than collaborate. Contrary to this tradition, NCI fostered working relationships between the region's 14 county economic development organizations (LEDOs). Together, the LEDOs developed a Regional Marketing Packet that included regional workforce and industry profiles and a catalogue of available manufacturing sites. Through an NCI-sponsored advisory committee, the LEDOs jointly provided input into planning how to strengthen the regional economy. As the grant ended, they were sharing advice and assistance and pursuing joint endeavors. Several local projects – such as a wind farm in Howard County, a business park in Miami County, and a job fair in Tippecanoe County – benefited from regional communication and cooperation. Turnover among LEDO management during the grant's second year meant that NCI staff had to spend time building new relationships. NCI continued to seek ways to build deeper relationships with the LEDOs, including networking with individual board members of each organization.

Many stakeholders had considered Mid-Michigan's Midland, Bay, and Saginaw counties as a region, but its LEDOs traditionally did not work together before the initiative. Economic development leaders from all three counties collaborated on a new photovoltaic study for the initiative. Furthermore, the grant created the Center for Entrepreneurship and Commercialization at Saginaw Valley State University (SVSU), which worked to develop lateral connections across economic development organizations, with a focus on fostering "high expectation entrepreneurship."





Economic development organizations in the Pennsylvania region began collaborating in 2007 to attract New York-based financial firms to invest in the region. The collapse of the financial sector in 2008 made that goal no longer feasible in the short run, however, and economic developers retreated from what had appeared to be promising partnerships.

Post-Secondary Education Institutions

Post-secondary educational institutions, particularly community colleges, often compete with each other for enrollments and funding, particularly when they are part of different jurisdictions and funded by separate and distinct tax districts. Many regions reported that community college systems, while appearing to cooperate, had not yet formed genuine partnerships. Other regions report significant progress in this direction. For example:

- Several regions (e.g., North Carolina, New York, and Metro Denver) required that sub-grant applicants form new partnerships in order to receive funding through their competitive RFP processes. The result was the creation of a number of partnerships to operate specific projects. Some of these partnerships folded grant-funded projects into their ongoing structures, ⁵² increasing the sustainability of those projects since outside funding was not needed to keep them in operation.
- In the NCI region, Purdue University, Ivy Tech, and Indiana University (IU), Kokomo, had a history of competition before the grant. By collaborating on initiative projects, IU-Kokomo and Ivy Tech recognized the strong similarities and complementary strengths of their institutions. While Purdue excelled in technology transfer, entrepreneurship resources, and policy innovation, the smaller institutions recognized their suitability for providing vocational training.
- Pennsylvania's Higher Education Consortium helped the region's education institutions better
 understand industry needs and design appropriate curricula and training to meet those needs.
 The consortium's industry members benefitted by learning about the region's educational
 resources and how best to work with the schools to get the training they needed to be more
 responsive to changing talent needs.
- Three community colleges in the New York region created the Workforce Excellence Regional Center (WERC) in response to the initiative's 2008 RFP. WERC is a virtual center, a collaboration between Finger Lakes, Genesee and Monroe Community Colleges to facilitate access to education and training. The Center functions as an articulation agreement between the colleges, and supports online academic programs. The colleges host 19 locations, online and classroom courses, workforce and job skill training, GED completion, career services, entrepreneur and small-business services, community libraries, arts/cultural events and more than 180 degrees and certificates, including academic programs completed entirely online.⁵³
- Partnerships among community colleges were central to the structure of WAEM's initiative. WAEM developed partnerships among community colleges that had previously not

⁵³ Both Monroe and Genesee Community Colleges maintained WERC websites as of August 2011, however, Finger Lakes Community College did not.





⁵² Examples include several of the health care programs undertaken by community colleges in the North Carolina.

collaborated with each other even within their respective states, much less across the state line. The community and junior college systems in the two states are very different: Mississippi colleges are operated locally and are very different from each other. Alabama colleges are centralized under a state Board of Education and have common reporting requirements that tend to standardize the way the colleges are organized. Thanks to the introduction of regional collaboration activities, WAEM was able to "marry the top-down system in Alabama with the bottom-up system in Mississippi." At the same time, however, high turnover among the Alabama community college presidents complicated these partnerships. Bringing new partners up to speed was time consuming, nonetheless; WAEM staff members reported that "some of the newer presidents really became engaged in workforce development and community development" and were becoming more active in collaborating with each other and the initiative.

- Three of North Carolina's community colleges partnered to develop the first Associate Pharmacy Technician program in the state. In addition, Piedmont Community College created a regional group of community colleges focused on the Governor's "12-in-6" program (providing training for 12 careers that each can be completed within six months) to share knowledge and help other community colleges with their models. This was the first time community colleges had convened such a regional group. As the grant ended, the group was ongoing and the state's community college system planned to replicate the model throughout North Carolina.
- In Montana too, the initiative fostered closer collaboration between the region's community colleges, and between the colleges and state universities. Colleges that competed for many years cooperated on events, shared expertise, and coordinated course offerings. The region's emphasis on collaboration also led to joint projects between the community and tribal colleges and programs with MSU, Billings. Some of these connections were subcontractual; others consisted of more frequent informal contact and information sharing.
- One of the most interesting collaborations between post-secondary institutions was an
 alignment of the programs in heavy truck diesel maintenance offered at both Montana State
 University Northern (MSU-Northern) and Mid-South Community College (MSCC) in West
 Memphis, Arkansas, part of the Generation II Arkansas Delta region. MSU-Northern
 mentored and trained MSCC faculty so that Mid-South students could have a more seamless
 path to a four-year degree in this field.

Business Partners

The role of employers in the workforce and talent development system is as important as it has ever been. Consequently, workforce and economic development systems need to forge partnerships with businesses across a wide range of industries to effectively shape the WIB's assessment, training, and job placement strategies. At the same time, developing a sector initiative means bringing together companies from the same industry, some of whom will be competitors. The Generation I regions learned both how to engage employers who might be leery of sharing too much information with their competition, and how to ensure that they continued to work with the initiative and establish relationships with potential business rivals.

The Generation I grantees provided many interesting examples of how the initiatives engaged employers in workforce development. Though specific strategies varied from region to region,





one very strong common theme emerged across the regions in connecting with employers: **Trust was the critical factor in forming partnerships.** Trust was the basis for meaningful employer engagement and collaboration. Trust evolved over time and had to be nurtured to thrive and grow. Early successes often encouraged partners to tackle more difficult and complex issues later.

<u>Recruit employers by emphasizing benefits of the initiative.</u> Regions that were effective in recruiting employers to participate in an initiative and work closely with their competitors usually emphasized the benefits of participation in the project and articulated how the initiative would be of value. These benefits included:

- Strategic workforce training. Training initiatives can provide employers access to worker training aligned with national industry standards. Businesses often can get training at less cost and with higher quality than if they had obtained it independently.
- Improved products or outputs. Trained workers are more likely than other employees to create better quality products and/or do so more efficiently. Higher quality products and services can lead to improved customer satisfaction and higher sales.
- Improved knowledge and stronger relationships in the community. Participation in training
 initiatives can increase an employer's professional and/or business connections, and
 potentially his community standing as a business leader. Links to other businesses in an
 industry or training providers can inform employers about the latest technology or regulatory
 changes in the industry.
- Community benefits. The existence of such initiatives provides greater access to worker training for small companies that might not have been able to afford it. Training also creates a pool of skilled workers that could attract new businesses to the community.

Emphasize common interests and needs. Data from surveys was useful in identifying businesses with similar concerns and training needs as a starting point for bringing them together. Virtually every Generation I region surveyed employers to: 1) collect information about worker training needs; 2) spread the word about the project's existence and engage employers in initiative activities; and 3) identify potential business partners. For example, Montana, Maine, and West Michigan surveyed employers in their target industries to gather information about their workforce demands and training needs. Similarly, in implementing its agribusiness initiative, NCI surveyed small niche market farmers (e.g., wool producers, small wineries) to determine their needs for entrepreneurial training. In all of these cases, local WIBs and/or community college used the findings for strategic planning and to develop curricula addressing needs that the respondents identified.

Pennsylvania's Wall Street West Invitational Golf Outing took advantage of a different type of common interest. Solidifying relationships over a game of golf is relatively common in the business world but not in the workforce development system. The region's economic development partners organized and sponsored the initiative's first golf outing, inviting prospective financial services clients from New York, as well as business partners, community leaders, and representatives from the region's education system to participate. The outing





allowed the region's partners to learn about each other while pursuing a shared interest in a neutral environment.

<u>Trust takes time</u>. As a later section of this chapter discusses in more detail, even with shared interests, overcoming the tension of competition takes time. Metro Denver addressed this issue by starting its activities with a research-based structure that promoted the development of relationships between partners. During its first year, the initiative convened eight panels representing the region's key industry sectors – aerospace, bioscience, energy, information technology – as well as school districts, higher education, the workforce system, and local small businesses. The panels spent the year identifying training needs and the existing education and training programs that prepare workers for high tech jobs.

North Carolina's Piedmont Triad Leadership Institute (PTLI), an initiative-funded activity that encompassed both an intensive leadership course and development of projects to improve the region's economy, offered a similar opportunity for employers and other partners to develop relationships over time. PTLI began with a four-day session consisting of individual development and team building exercises. The Institute also explored the needs of the region and, over eight months, identified projects aimed at reinvigorating the region's furniture and global logistics industries. Key respondents believe that the cohesiveness of this group bodes well for continuation of region wide collaboration after the end of the grant.

The Finger Lakes WIB sponsored The Entrepreneurs Network (TEN), a six-month intensive program designed to bolster economic growth by supporting life sciences, early stage technology, and scalable, high-revenue potential start-up companies. Based on best practices from several fields, TEN promotes job growth and business creation and provides its members with access to national experts and funding resources. Its maximum class size of 20 allows for maximum interaction and mentoring.

While companies compete in the marketplace, the potential for securing funding for worker training was a powerful motivator for collaboration. After participating in the initiative, business partners began to see mutually beneficial ways to work together. Grantees also helped competing employers identify what they had in common, and reminded them of these commonalities when they were resistant to collaborating on workforce issues. This process helped shift the focus away from perceived differences, including those between large and small firms.

In addition to training customized for a single employer, most of the regions sought to maximize the grant's impact by identifying common training needs across a number of employers in their target industry, and address those needs jointly. Grantees were also able to build on common training needs to establish sector groups that eventually addressed larger issues of concern to the industry. For example, West Michigan's Health Care Regional Skills Alliance (RSA) brought together five of the region's six WIBs, along with health care employers, local universities, and other advocates to develop and retain the health care workforce in the region. The RSA formed a Health Care Workforce Employer's Council, which held its first meeting in 2007 and continues today in affiliation with Alliance for Health.





Address fairness concerns. Key trust-building strategies included making sure that all interests were fairly represented when a decision was made, e.g., ensuring that steering committees had a balanced representation of small and large firms, and using agreements that described how conflict-causing issues would be handled. At least two of the regions laid out their expectations of how partners should behave. Both Maine and NCI crafted ground rules – Partnership Principles, Regional Compact – that clearly expressed the commitment of the partners to the initiative and to each other. These rules stressed honesty (including disclosing conflicts of interest), equality, respect, conflict resolution, and information sharing. Such agreements fostered trust between competing businesses that were involved with the initiatives, as well as between the region s various other partners.

Solidifying Partnerships among WIBs

Local WIBs in many regions formed new partnerships, formal and informal, by undertaking collaborative efforts in response to funding opportunities. In at least a few regions, WIBs strengthened their pre-existing partnerships through joint efforts to operate initiative-funded projects. This section presents several examples of collaboration between workforce system partners.

- Pennsylvania added an additional county to the region so that its boundaries would be contiguous with those of its local WIB partners.
- The three WIBs in the New York region joined in creating a Regional Skills Alliance and a regional website for job seekers.
- North Carolina increased the scope of region-wide WIB activities to include periodic "virtual job fairs" in which employers host online "booths" to advertise vacancies and take online applications from job seekers. Respondents from WIBs in this region differed in their opinions about the extent to which the initiative strengthened partnerships that pre-dated the initiative. As the grant ended, their regional partnership, TriadWorks!, had state support and the WIB directors planned to continue participating since they believed that collaborating across jurisdictional lines strengthened their ability to respond to employers' needs.
- Some California Corridor WIBs learned that by forming partnerships, they could eliminate duplicative efforts or take on projects that would have been impractical for a single WIB to undertake alone. Collaboration was not region-wide, but rather driven by the advantages that particular WIBs saw in working together on specific initiatives. Several initiative projects required WIBs to undertake extensive data collection efforts. While these usually took longer than anticipated, respondents noted that the collection process itself proved to be valuable in nurturing partnerships and collaboration. The majority of California Corridor stakeholders saw data collection, both in terms of results and process, as one of the most valuable outcomes of the grant. One respondent remarked that the initiative's goals "brought about collaboration," and "led to asking 'why everybody is doing the same thing, why there is so much duplication of effort." Another respondent reported that key relationships were formed at the staff level, where things really get done, and not just among leaders.
- West Michigan WIBs worked together and with school districts, community colleges, and businesses to promote and implement WorkKeys, a skills assessment program that is the basis for the National Career Readiness Certificate (NCRC). American Job Centers (AJCs,





formerly One-Stop Career Centers) were very active in promoting WorkKeys, and some companies began including NCRC credential levels in their job postings. Following on the region's success, the state passed legislation in August 2008 requiring Michigan high school students to take all three WorkKeys tests annually. Another region-wide effort – the Health Care Regional Skills Alliance – brought five of the region's six WIBs together with health care employers and other stakeholders, to develop and retain the health care workforce in the region.

• The Kansas City initiative's goal of regional collaboration motivated the Regional Workforce Council (RWC) to move toward integrated services across the area's WIBs, with mixed results. The RWC focused was on creating a common brand – defined as a consistent customer experience – throughout the region. The logic behind this decision was that WIBs region-wide would benefit if employers and job seekers were consistently satisfied with their experience regardless of which jurisdiction they contacted. WIB respondents saw some value in being able to share information with their peers through the RWC, but enthusiasm for the partnership waned due to differences in opinion and lack of ongoing communications. As one respondent noted, belonging to multiple overlapping regional bodies was difficult without a common, universally-accepted definition of the region's boundaries. Another respondent, however, believed that the RWC facilitated information sharing and fostered many informal connections, and that these would support collaboration on future grant proposals because of the existing pool of established partners from which to draw.

In most Generation I regions, the Initiative's new approach to regionalism enabled WIBs to undertake collaborative efforts. For some, these alliances continued beyond the end of the grant. WIB respondents believed that their participation in the initiative ultimately would strengthen their partnerships.

Building Boundary-Spanning Partnerships

The evaluation's first Interim Report focused on partners' *structural* roles in creating and implementing their regions' initiatives – roles such as grantee, fiscal agent, project management organization, and Steering Committee. In later rounds of site visits, the study team found that partnerships and roles that emerged as important were those related to *accomplishing the regions' missions*. This chapter described many of those partnerships above. What is in common among many of these efforts is that they required partners to reach beyond their accustomed "turf" and become knowledgeable about – and respectful of – the capabilities, priorities, funding constraints, and even vocabularies of organizations with which they previously had little in common or shared only a few interests. This section offers examples of partnerships that cross professional boundaries.

NCI employed strategies to build civic networks that fostered collaboration across professional and jurisdictional boundaries. The region's civic leadership initiative hosted quarterly regional forums that brought people together around specific issues to establish trust. For example, NCI convened forums with elected officials that focused on topics such as clean energy and regional economic development.





In several regions, partnerships between economic development organizations and the workforce investment system were virtually unknown prior to the Initiative. Participation in grant-funded committees and activities exposed economic developers to workforce system partners and, as a result, they became even more aware that companies looking for possible new sites pay close attention to the skills of the workforce in the local areas under consideration. Economic development staff sometimes introduced "prospect" companies to WIB personnel, who explained to the companies how WIBs could assist with recruiting and screening workers.

Montana's Business Expansion and Retention (BEAR) teams link new, expanding, or troubled businesses with a coordinated set of public and private resources at the local level. BEAR is a partnership of the Governor's Office of Economic Development, Department of Commerce, Department of Labor, and the Montana Economic Developers Association. Locally, the program is supported by staff time and resources donated by the organizations that make up the network. Although BEAR predated the grant, the program's government partners did not ioin the partnership until after the Initiative ended. The teams play an especially important role in remote rural areas. A BEAR team's membership will vary, but generally includes banks, business associations like the Chamber of Commerce, local government and economic development corporations, Small Business Development Centers, community colleges or universities, and Job Service representatives. Any organization in a BEAR network can be the point of first contact and referral. Once a business has expressed interest in BEAR services, two team members will do a detailed business needs assessment. The team then meets and makes recommendations for appropriate services and resources, including employee training. Team members follow up with business-level case management, helping to make specific connections to public, private, and non-profit assistance (including other BEAR teams) as needed. Initiative-funded staff members were active in several pre-existing BEAR teams and were instrumental in starting new teams in several parts of the region. Some respondents saw BEAR as a key to sustaining transformativetype operations in the long term.

Another type of cross-functional collaboration operating in many areas prior to the Initiative was business-education partnerships. Such partnerships often focused on the connection between what young people are learning while enrolled in K-12 schools and the talent of workers who will be available to the business community several years in the future. Several of these partnerships were active in Generation I regions, and often joined the initiative as advisors to specific funded projects. One very active business-education partnership in New York is the Finger Lakes Advanced Manufacturing Enterprise (FAME), which continued after the end of the initiative. While FAME was in place before the grant began, the initiative's funding facilitated its growth, and its leader – the president of a manufacturing company – was a staunch partner and advocate for the initiative.

New York was home to another initiative-funded partnership involving educators and private business that focused on technology commercialization. The region's university-based R&D centers, entrepreneurship education centers, operators of incubators, and entrepreneurship experts joined to create the Technology Commercialization (TC) Project. TC Project partners included High Tech Rochester, University of Rochester, The Technology Farm (Cornell Agriculture & Food Technology Park), Infotonics, and Rochester Institute of Technology. The project trained researchers, students, faculty, and entrepreneurs in how to increase skills and





realize success with technology commercialization. The TC project also provided an integrated approach among partners to improve business development, and demonstrated how to integrate research and new product design with the benchmarks associated with key industries.

WAEM's partner colleges became an important tool for attracting large manufacturers to the region, a role typically filled by economic development entities. From a business standpoint, WAEM's credentialed training removed many concerns about labor force quality; thus, companies were more likely to accept the "local first hires" policies that states typically attach to industry attraction subsidies. Some colleges helped employers organize their initial screening and hiring programs and provided other forms of relocation assistance. The community colleges became more proactive partners in WIA Rapid Response activities, and worked closely with WIBs and local government in assisting workers affected by large-scale lay-offs.

California Corridor's partnership between the workforce system, economic development agencies, and higher education to develop 21st Century Job Profiles gave all of the partners a more complete understanding of the skills the future workforce needs. The profiles revealed that technicians in the high tech industries soon will be required to have higher education and skill levels; they will need a combination of conceptual and applied knowledge and skills and will need to bring business skills to the workplace. Employee candidates need the ability to obtain high security clearances, which means that prospective job seekers in high tech (at least aerospace and defense) will need to focus greater attention on lifestyle choices and decisions.

These sorts of boundary spanning partnerships represent an important platform for the future. Groups that have had the experience of working together on these activities were well positioned to work together beyond the grant period. Most had positive experiences based on new forms of respect and trust, as well as evidence that sharing resources can enhance and even enlarge their success. In sum, by the time the evaluators conducted the third annual visits to the regions, partnerships were seen to be evolving in a number of ways. They were: 1) expanding beyond the original inner circle; 2) fostering relationships among traditional competitors; 3) solidifying connections among WIBs; and 4) building boundary-spanning activities.

Partner Survey on How Partnerships and Collaboration Work

The evaluation team conducted a survey of Initiative partners, including stakeholders interviewed during site visits, individuals that respondents named as their most significant contacts in the context of regional transformation efforts, and others from local WIBs, community colleges, and economic development agencies. The survey aimed to collect detailed and systematic information on how partnerships and collaboration actually work across all of the regions.

Types of Organizations in Regional Networks

The survey asked its 1,015 **respondents** to identify the types of organizations they represented. Figure 4.1 shows the results across all 13 Generation I regions. Respondents most frequently were associated with educational institutions (27%), followed closely by business and industry





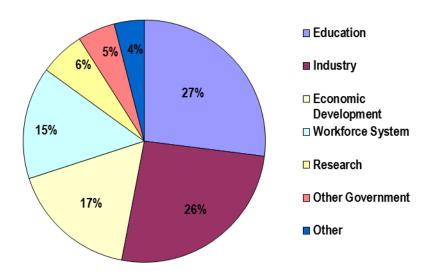
(26%). The workforce system and economic development shared fairly similar representations (15% and 17% respectively).⁵⁴

Figure 4.1

Types of Organizations of Survey Respondents

(n = 1,015)

Individuals involved in the initiative represented different types of organizations, with education, industry, economic development and the workforce system representing the largest proportion of respondents.



Source: BPA/UCSD Initiative Partner Survey

As Figure 4.2 illustrates, the regions varied significantly in the kinds of organizations that survey respondents represented. This is to be expected, given the regions' different structures and goals. For example:

- California Innovation Corridor, Florida and West Michigan had high levels of business and industry representation (34-48%), reflecting the central role that business and industry played in launching the initiative in those regions.
- Kansas City had the highest level of education representation (46%) among the regions, reflecting the initiative's focus on serving youth and developing curricula.
- WAEM also had a high representation of education organizations (41%) reflecting the fact that the region based their initiative in the community and junior colleges.
- NCI also had a high level of education representation (37%), reflecting the central role of the university as the host organization.
- Maine had a high level of business and industry representation (32%) reflecting the key role of business leaders in the initiative's governance structure.

⁵⁴ The survey included 20 possible organization types, which were collapsed here into seven categories. For a table of <u>fr</u>equencies for all 20 codes, please refer to Appendix B.





• Metro Denver respondents had a high level of economic development (28%) and education (25%) representation, reflecting the fact that the region's host organization was an economic development agency, and a key focus of the region was developing the K-12 talent pipeline.

Figure 4.2 Respondents' Type of Organization by Region

Regions varied significantly in the types of organizations represented among survey respondents.

			Type of Organization										
Regions	N	Business & Industry	Education	Workforce System	Economic Development	Research	Other Government	Other					
WAEM	66	15%	41%	9%	21%	3%	9%	2%					
California Corridor	74	34%	23%	18%	19% 4%		1%	1%					
Metro Denver	57	16%	25%	18%	28%	28% 7%		4%					
Florida	73	42%	18%	15%	16%	5%	1%	1%					
NCI	98	15%	37%	8%	15%	16%	2%	6%					
Kansas City	41	5%	46%	24%	10% 0%		5%	10%					
Maine	96	32%	14%	22%	15%	3%	9%	5%					
Mid-Michigan	116	22%	33%	14%	20%	6%	3%	3%					
West Michigan	90	48%	16%	11%	13%	4%	1%	7%					
Montana	76	11%	30%	26%	9%	0%	17%	7%					
New York	82	24%	29%	9%	13%	7%	11%	6%					
North Carolina	72	31%	28%	11%	15%	10%	3%	3%					
Pennsylvania	74	28%	26%	16%	20%	4%	0%	5%					
TOTAL	1,015	26%	27%	15%	17%	6%	5%	4%					

Source: BPA/UCSD Initiative Partner Survey

The survey asked respondents to name five individuals with whom they had significant contact over the prior year in the context of regional transformation efforts. This information allowed the evaluation team to gain a more complete picture of the types of partners working together in the regional networks. Many of the contacts that respondents identified were respondents





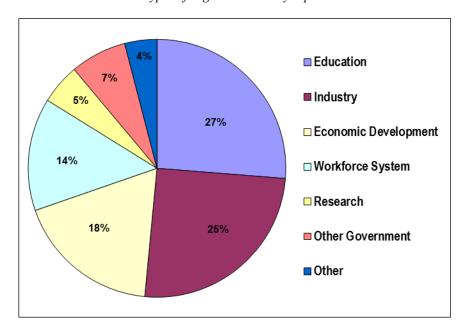
themselves. Thus, the evaluation had basic information (i.e., type of organization, level within organization) for a total of 1,537 partners, two-thirds of whom were respondents. This group does not represent all of the members of each region's network of partners, but it does represent a proportion of the total network at a point in time, and particularly those who were most likely to have been closely associated with the initiatives. Nonetheless, for convenience, this chapter refers to that group of partners as the regional network. Figure 4.3 shows the breakout of types of organization for these partners. A comparison of Figures 4.1 and 4.3 reveals that the distribution of organizations types represented by respondents is very similar to the distribution for the regional networks.

Figure 4.3

Types of Organizations in Regional Networks

(n=1,537)

The group of partners captured by the survey mirrored survey respondents in the types of organizations they represented



Source: BPA/UCSD Initiative Partner Survey

Just as the survey respondents' organizations varied, the types of organizations that members of the regional networks represented varied substantially. As shown in Figure 4.4 below, business and industry representation among the regional networks ranged from a high of 35% in Florida, to a low of 9% in Kansas City. Education ranged from 36% of regional network members in North Carolina to only 16% in Maine and West Michigan. Workforce system representation ranged from a high of 26% in Kansas City to a low of 4% in WAEM. Economic development representation ranged from a high of 24% in WAEM to a low of 12% in New York.

Much of the similarity between the respondents' types of organizations and those of the regional networks is a result of the respondents comprising the majority of regional network members. One might assume in addition that the similarity between the types of organizations that survey respondents and the regional networks represented is simply because individuals within each



Figure 4.4 Network Members' Types of Organizations by Region

(N=1,537)

The regions varied significantly in the types of organizations represented among the survey contacts.

Region	N	Business & Industry	Education	Workforce System	Economic Development	Research	Other Government	Other
WAEM	116	20%	34%	4%	24%	3%	14%	2%
California Corridor	129	32%	25%	12%	19%	4%	4%	5%
Metro Denver	98	20%	22%	23%	22%	5%	2%	4%
Florida	99	35%	22%	9%	23%	7%	3%	0%
NCI	132	21%	27%	13%	19%	11%	4%	5%
Kansas City	53	9%	34%	26%	15%	0%	6%	9%
Maine	92	33%	16%	21%	15%	7%	7%	2%
Mid-Michigan	184	25%	26%	15%	17%	6%	6%	5%
West Michigan	125	32%	16%	11%	21%	21% 3%		10%
Montana	128	13%	27%	21%	15%	4%	18%	3%
New York	113	26%	27%	16%	12%	6%	10%	3%
North Carolina	153	30%	36%	9%	14%	3%	5%	3%
Pennsylvania	115	25%	28%	14%	23%	4%	1%	4%

Source: BPA/UCSD Initiative Partner Survey

type of organization tended to work most closely with individuals within the same type of organization. Figure 4.5 shows this is not the case. In fact, in every region, most of the ties between respondents and contacts were relationships between individuals from different types of organizations. Overall, in 74% of all Generation I respondent-contact pairs, the partners represented different types of organizations. Pennsylvania appears to have had the most diverse initiative relationships, with 81% of respondents and contacts coming from different types of organizations, while Metro Denver appears to have had the least diverse (67%).





Figure 4.5 Working across Organizational Boundaries

Most collaborative relationships between survey respondents and their contacts were between individuals from different types of organizations.

Region	N	Network Ties Across Types of Organizations
WAEM	147	74%
California Corridor	162	72%
Metro Denver	133	67%
Florida	150	69%
NCI	185	73%
Kansas City	87	78%
Maine	197	76%
Mid-Michigan	292	75%
West Michigan	158	75%
Montana	189	71%
New York	173	69%
North Carolina	225	79%
Pennsylvania	189	81%
Total	2,287	74%

Source: BPA/UCSD Initiative Partner Survey

Collaboration across Levels or Roles within Organizations

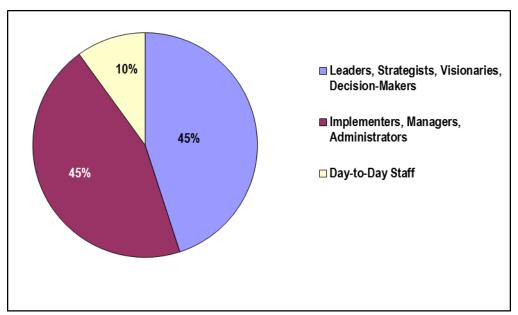
A key area of interest in assessing how effective partnerships work is how multi-organization collaboration works at different echelons within organizations. The evaluation team collected data on a simplified indicator of organizational roles, categorized into three levels:

- 1. *Leaders, Strategists, Visionaries, Decision-*Makers Examples in this category could include regional initiative leadership, company presidents, CEOs, upper level managers, executive directors, members of Boards of Directors, benefactors and foundations, civic leaders, or chancellors;
- 2. *Implementers, Managers, Administrators* Individuals in this group have the authority to make things happen, and could include initiative managers, partner organization managers, directors of operations, mid-level management, division heads, or college deans; and
- 3. *Day-to-Day Staff* These individuals conduct the day-to-day business of the organization, and may include front-line employees, clerical and supporting staff, professors, project service providers, instructors, and trainers.





As Figure 4.6 illustrates, only a small proportion of the regional networks were day-to-day staff (10%), with the rest of the group evenly divided between the highest level of strategists/visionaries/decision-makers and mid-level implementers/managers. In terms of the roles individuals play within their own organizations, again the survey respondents and the regional network members were very similar.



Source: BPA/UCSD Initiative Partner Survey

The evaluation examined whether regional partners linked primarily with individuals at their same level within partner organizations. Figure 4.7 below shows that while 64% of the visionaries/decision-makers reported ties with partner staff at the same level, less than half of the implementers/managers reported ties at the same level, and only 14% of day-to-day staff reported ties to their peers at a partner organization. Company presidents and university chancellors were more likely to work with their peers at other organizations on policy and strategic level tasks. Day to day staff were more likely to interact with those in upper echelons regarding the initiative than they were with their peers, while middle managers were equally likely to interact with high level administrators as with their peers.



Figure 4.7 Proportion of Respondents Reporting Relationships at Each Level Within Collaborating Organizations

(n = 1,015)

	Type of Respondent								
Contact within the Network	Leaders, Strategists, Visionaries, Decision- Makers	Implementers, Managers, Administrators	Day-to-Day Staff						
Total (percent of total)	398 (42%)	221 (46%)	149 (12%)						
Leaders, Strategists, Visionaries, Decision-Makers	64%	45%	38%						
Implementers, Managers, Administrators	32%	48%	47%						
Day-to-Day Staff	3%	6%	14%						
TOTAL	100%	100%	100%						

Source: BPA/UCSD Initiative Partner Survey

Partners' Roles within Regional Networks

The survey asked respondents about their role or the role of others in their organization in regional transformation efforts. As shown in Figures 4.8 and 4.9, the regional roles varied to some extent depending on respondents' roles within their own organizations. Those in leadership roles were most likely to report that they or others in their organization participated in strategic planning, community leadership, representing the initiative in the community, and providing policy and program direction. Those in management or administrative positions were more likely to report that they were involved in staff training. Front line day staff were less likely to report that they or their organization participated in any of the roles than the other respondent groups.

In addition to these overall roles, the survey also asked respondents to indicate how often (often, sometimes, rarely/never) they personally participated in a range of more specific collaboration tasks and activities in the context of regional transformation. Figure 4.9 shows much greater participation in regional efforts among individuals at the leadership and decision-making levels, and less participation among day-to-day staff, as might be expected.





Figure 4.8 Organization's Role in Regional Efforts by Respondent's Level in Their Organization (n=1,015)

Respondents in leadership positions were more likely to report playing key roles in strategic planning, community leadership, community representation, policy, and program direction than other respondents.

In which of the following collaborative functions do you or others in your organization participate in the context of efforts to increase your region's economic viability?	Leaders, Strategists, Visionaries, Decision-Makers	Implementers, Managers, Administrators	Day-to-Day Staff	Total
Strategic Planning**	71%	63%	54%	65%
Information Dissemination	62%	58%	54%	59%
Community Leadership**	60%	54%	44%	55%
Community Representation*	55%	53%	39%	52%
Resource Acquisition	47%	48%	40%	47%
Policy and Program Direction*	47%	39%	37%	42%
Resource Allocation	41%	42%	37%	41%
Program Operations	34%	41%	35%	37%
Staff Training*	28%	37%	35%	33%
Program Evaluation	31%	35%	35%	33%

Source: BPA/UCSD Initiative Partner Survey



^{*} Differences between groups are significant at the 95% confidence level

^{**}Differences between groups are significant at the 99% confidence level.

Figure 4.9 Role in Regional Transformation by Respondents' Level in their Organization (n=1,015)

Within the past 12 months, how often have you played the following different roles in efforts to increase collaboration for transforming your region?	Leaders, Strategists, Visionaries, Decision- Makers	Implementers, Managers, Administrators	Day-to-Day Staff	Total
Often attend meetings regularly**	78%	66%	55%	69%
Often talk at meetings**	73%	60%	49%	64%
Often provide access to resources	53%	50%	44%	51%
Often serve as a member of an action committee or task force**	60%	44%	28%	48%
Often participate in the implementation of a regional transformation or initiative program*	47%	50%	40%	47%
Often help organize activities*	45%	43%	33%	42%
Often communicate with external constituencies/media**	53%	36%	21%	41%
Often facilitate group process**	39%	29%	16%	31%
Often chair/lead a committee or sub- group**	39%	26%	9%	29%
Often assist in selecting recipients of funds*	27%	20%	13%	22%
Often write grant proposals/raise funds*	24%	26%	8%	22%

Source: BPA/UCSD Initiative Partner Survey

Characteristics of Collaboration Efforts

Survey respondents were asked to characterize integrative efforts to transform their region's economic competitiveness along a range of dimensions. As Figure 4.10 shows, over 80% of respondents agreed that the collaborative effort in their regions were willing to compromise and to communicate openly with one another, able to adapt to change in climate or leadership, and open to "out-of-the-box" thinking where diverse and unique ideas are highly valued. The dimension that the fewest respondents (58%) thought characterized their regional collaborative was a high degree of tolerance for risk taking, although over half of the respondents considered it evident in their regions. There were no significant differences in responses according to respondent's roles within their organizations or by type of organization.

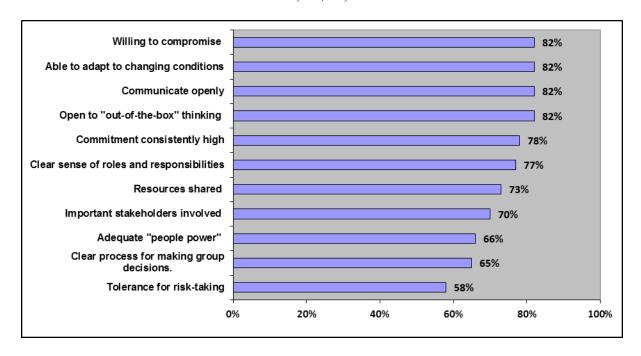




^{*} Differences between groups are significant at the 95% confidence level

^{**}Differences between groups are significant at the 99% confidence level.

Figure 4.10
Overall Characteristics of Collaborative Efforts
(n=1,015)



Source: BPA/UCSD Initiative Partner Survey

Substantial differences existed across regions in the degree to which respondents believed that several of the integration characteristics represented their collaborative, however. As Figure 4.11 illustrates, 93% of respondents in NCI thought that their colleagues in the regional transformation effort were willing to compromise, compared to 75% of respondents in Mid Michigan and Maine. The proportion of respondents who indicated that most people involved had a clear sense of roles and responsibilities ranged from a high of 89% in NCI and North Carolina to a low of 64% in West Michigan. Those reporting that all the most important stakeholders were involved in the integration process ranged from a high of 81% in Kansas City and North Carolina to a low of 55% in New York. More Florida respondents (82%) thought that their region had adequate "people power" to meet its goals than California Corridor respondents did (53%). The proportion of respondents reporting their regional efforts had a clear decision-making process ranged from a high of 88% in Florida to a low of 52% in West Michigan. Finally, those reporting a high degree of tolerance for risk taking and change ranged from a high of 74% in NCI to a low of 39% in Metro Denver.

In summary, survey respondent most frequently came from education and industry organizations, followed by workforce and economic development organizations. These findings, like most discussed in this report, do vary across the 13 Generation I regions. Respondents were equally likely to be in the top echelon of their organizations as they were to be middle managers and administrators. They assumed roles within their regional initiatives that corresponded to their work roles, though most of their significant contacts in their regional collaborative were top-



Figure 4.11 How Regional Integration Works by Respondent's Region

Do You Agree with the Following Statements About Efforts to Transform Your Region's Economic Competitiveness?	WAEM	California Corridor	Metro Denver	Florida	NCI	Kansas City	Maine	Mid-Michigan	West Michigan	Montana	New York	North Carolina	Pennsylvania	Total
Willing to compromise*	91%	78%	84%	84%	92%	83%	73%	85%	73%	88%	75%	86%	80%	82%
Able to adapt to change in climate or leadership	81%	84%	75%	89%	86%	81%	78%	90%	77%	83%	72%	90%	79%	82%
Communicate openly	77%	85%	87%	89%	90%	81%	78%	79%	76%	80%	78%	94%	78%	82%
Open to "out-of-the-box" thinking	78%	81%	74%	86%	91%	76%	83%	85%	81%	75%	77%	84%	85%	82%
Level of commitment is consistently high	75%	65%	74%	84%	83%	76%	80%	80%	69%	80%	68%	85%	83%	78%
Clear sense of roles and responsibilities**	75%	80%	58%	88%	89%	73%	70%	76%	64%	85%	74%	89%	70%	77%
Resources are shared among groups/organizations	74%	65%	77%	79%	79%	70%	71%	70%	71%	79%	68%	78%	70%	73%
The most important stakeholders are involved*	67%	70%	63%	77%	74%	81%	66%	77%	61%	68%	55%	81%	63%	70%
Adequate "people power" to do what is needed**	75%	53%	73%	82%	67%	65%	54%	65%	54%	66%	64%	81%	69%	66%
Clear process for making group decisions**	65%	57%	53%	88%	75%	58%	54%	74%	52%	60%	58%	68%	66%	65%
High degree of tolerance for risk-taking and change*	58%	52%	39%	65%	74%	60%	54%	60%	58%	56%	47%	69%	59%	58%

Source: BPA/UCSD Initiative Partner Survey





^{*} Differences between groups are significant at the 95% confidence level

^{**}Differences between groups are significant at the 99% confidence level.

level leaders, strategists, and decision-makers. Finally, the majority reported that colleagues in their regions were committed, adaptable, creative, important stakeholders with excellent communication skills who were willing to compromise, share resources, and tolerate risk. Together, they had created collaborative that clearly delineated the group's decision-making process, as well as the roles and responsibilities of each partner.

Strategies for Fostering Collaboration

Of the many possible strategies for building collaboration that emerged from the Initiative experience, regions reported that their most successful approaches included: thinking creatively about common goals; allowing relationships to develop over time; building on personal relationships; and making expectations clear while expecting the best of collaborators. This section discusses each of these strategies.

Thinking Creatively About Common Goals

Many of the regions began their initiatives successfully by beginning slowly. After a group of "insiders" outlined the initiative's goals and strategies in their proposals and received funding, they invited other stakeholders to participate in developing the program's implementation plan. The partners generally made notable changes to the initiative between the early planning represented in their initial proposal and the implementation plan that ETA finally approved. Regions that skipped this early "visioning" or extensive planning process, (e.g., the California Corridor, Mid-Michigan) reported that their initiatives might have benefited from the teambuilding that naturally occurs during the slower process.

Perhaps the most notable example of a group that spent considerable time thinking about the goals for the regional economy and how to achieve them, was North Carolina's Piedmont Triad Leadership Institute (PTLI), an initiative-funded activity that encompassed both an intensive leadership course and development of projects to improve the region's economy. The Leadership Council, a group of more senior regional leaders, identified "up and coming" leaders within the region and invited them to participate in PTLI. The first step was a four-day session delivered by the Center for Creative Leadership that consisted of individual development and team-building exercises based on action learning in a no-boundary, no leader setting. PTLI teams then explored the needs of the region and, over eight months, identified projects aimed at reinvigorating the region's furniture and global logistics industries. The resulting PTLI report went to the Leadership Council and became the basis for subsequent planning within the region's broader initiative. Key respondents believe that the cohesiveness of this group boded well for continuation of region-wide collaboration after the end of the grant.

Allowing Relationships to Develop Over Time

The gradual process of increasing collaboration that took place in the California Corridor was an example of the value of recurring face-to-face contact over time. The California Corridor's most ambitious STEM project was developing the STEM Collaborative Action Plan or STEMCAP, in which 19 collaborative across the state brought together K-12 schools with community colleges, four-year universities, businesses, and community-based organizations. STEMCAP faced major





challenges within the education system, including an entrenched spirit of competition among education stakeholders, inexperience in collaboration, a perception that education/academia and industry have different agendas, the misperception that the chief role of industry should be to provide funding rather than input, the shift in DOL directives regarding use of funds for K-12 activities, and finally, political issues around the potential systemic changes needed. The region's management addressed these challenges through a carefully facilitated, extensive collaborative planning process. The result was a STEMCAP that is now receiving positive attention at the highest state policy levels.

Build on Personal Relationships

In the Metro Denver region, relationships formed over the first two years of the grant were important in facilitating success in the initiative's transfer to a major new governance structure. During the initiative's first year, Metro Denver convened eight panels representing the region's key industry sectors – aerospace, bioscience, energy, information technology – and K-12 school districts, higher education, the workforce system, and local small businesses. The panels: 1) conducted an employer needs assessment; 2) identified existing education and training programs that prepare students for high tech jobs; and 3) identified and designed ways to address gaps in these programs. The High Skills Leadership Council consisted of the 16 co-chairs of the eight panels. Once the panels completed their work, that structure gave way to a new set of Solutions Teams that identified training and collaboration strategies that could work across industry sectors. Making such a major shift in Metro Denver's structure would have been difficult without the personal relationships built over the two previous years of work.

Several respondents in Montana noted that the policy of encouraging staff to attend conferences was invaluable for promoting collaboration. Said one, "Conferences are such an obvious tool that we sometimes forget how important they are for improving relations with other folks face-to-face. It's not that people don't try to communicate by other means, but phone and email only gets you so far. With our distances, face-to-face opportunities are essential. That's where you build personal bonds that pay off in real action. That's where you share the excitement that keeps you going." In-person interaction is important to building the kinds of personal relationships that support effective partnerships and can be sustained over time.

Making Expectations Clear – Expecting the Best of Collaborators)

At least two of the regions laid out explicit expectations of how partners should work together. NCI leaders created a collaborative framework for the region – a Regional Compact – designed to serve as ground rules for working together in the region:

- 1. Tell the truth and build trust and mutual respect. We are committed to behavior that builds trust and mutual respect.
- 2. *Do not steal, poach, or plagiarize.* We will not behave in ways that a reasonable person would consider deceitful or dishonest.
- 3. *Commit to learning and sharing information*. No one can predict our future. Our economy depends on our collective ability to learn and act quickly. We learn more quickly when we share information and insights.





- 4. Focus on new ideas, our assets, and our opportunities. We will build our future prosperity on the foundation of our current assets. We will appreciate and invest in new ideas to develop and connect our assets.
- 5. *Listen, link, and leverage.* We will find the new opportunities in our region by listening to each other and then "linking and leveraging" our assets in new and different ways.
- 6. *Collaborate and cross boundaries*. We are dedicated to building an inclusive region with people who value diverse viewpoints. We are committed to crossing organizational, ethnic, social, and political boundaries.
- 7. *Disclose conflicts of interest*. We agree to disclose any personal or professional conflict of interest that may compromise our objectivity and damage the trust others have in us. We share a responsibility to avoid even the appearance of impropriety.
- 8. Resolve controversies quickly. Controversies are inevitable in our communities and region. We are committed to working through these controversies quickly by focusing on our underlying interests, not personalities. We are dedicated to finding solutions that promote mutual benefits.
- 9. *Concentrate on outcomes, not activities*. We will focus on our outcomes. While we will take responsibility for completing our activities and tasks, our outcomes will teach us "what works"
- 10. *Teach our next generation*. Our children are messages we send to a world we will not see. We have a responsibility to pass on simple rules of civility to the next generation. Civility is strategic; it fosters trust, and trust accelerates the speed with which we can learn and act in a complex world.

The Compact was one component of NCI's strategy of developing civic habits of collaboration through leadership training offered in various communities across the region. In addition to collaboration across geographic and political boundaries, collaboration among the region's higher education institutions also increased significantly in the context of this regional compact.

Similarly, Maine's North Star Alliance crafted a set of ground rules called the Partnership Principles that clearly expressed the commitment of the partners to the initiative and to each other (see Figure 4.12). These guidelines – along with the region's commitment to decision-making by consensus, clearly stated roles and responsibilities for key players in the initiative, and a conflict of interest policy – helped shape a highly collaborative initiative.

Proactive Efforts to Promote Partnerships

Realizing the importance of partnerships to the success of the Initiative, many Generation I regions brought together diverse leaders to form Steering Committees and empowered those groups to make important decisions about implementing the grant, or about one specific aspect of it. Some examples of situations that served to solidify partnerships include:

• WAEM, like several other regions, established several mechanisms at the beginning of the grant to stimulate and reward collaboration. One example was using a committee structure to ensure communication and committee participation across all of the college partners, and



rotating the location of committee meetings and events across the two states in order to promote collaboration and regional identity. Other regions also used recurring meetings as a way to foster partner relationships, by causing participants to work together sufficiently that they formed unexpected partnerships.

Figure 4.12 Maine's Partnership Principles^a

- 1. Maine's North Star Alliance Initiative is industry-driven, industry-led.
- 2. Maine's North Star Alliance Initiative's partners all have an equal voice.
- 3. Maine's North Star Alliance Initiative's partners will be treated respectfully and professionally and be shown due courtesy.
- 4. Maine's North Star Alliance Initiative's partners will make every attempt to resolve conflicts where they occur and accordingly be responsible for their actions.
- 5. Maine's North Star Alliance Initiative's partners will be encouraged to actively participate in all Initiative activities by bringing forth pertinent and creative thought while demonstrating a "universal" and open approach to new information, and by a demonstration of positive support of the Initiative, both within the partnership structure and to the State of Maine as a whole.

- Michigan State University served as a role model of collaboration by contributing in selfless
 or generous ways to the common good. On several occasions, when discussion appeared
 stalemated because of lack of resources or "the grant can't pay for that," the university
 stepped forward and offered to contribute its own money to the effort. Interview respondents
 in Mid-Michigan believed that these contributions served to build teamwork, reasoning that
 thinking collectively can be contagious.
- Pennsylvania and North Carolina, among others, used RFP processes to select initiative activities. Particularly in the early rounds of RFPs, these RFPs stipulated that 1) sub-grant applicants must form new partnerships to be eligible for funding, or 2) proposals showing evidence of partner participation received preference points in scoring. Furthermore, many of these RFPs required a considerable cash or in-kind match. In addition to leveraging funds to augment available grant funds, the matching requirements meant that program operators were co-investors in the funded activity. Co-investment is likely to strengthen commitment to the activity being undertaken, and shared commitment to a common purpose is equally likely to strengthen integration.

Non-Traditional Partnerships, Including Business Partnerships

Many participants in Generation I regions noted the importance of partnerships that crossed geographical boundaries. When the Initiative began, rivalries among neighboring geographical and political jurisdictions were a commonly-cited barrier to the formation of partnerships. One respondent told the story of the "bidding war" between two adjacent cities trying to lure a large



^a Maine's North Star Alliance. "A Partnership to Transform the Workforce and Economy of Coastal Maine," (WIRED Implementation Plan), September 2006.

company to locate its new plant within its city limits. The city that won the competition, of course, incurred considerable cost for incentives and tax breaks. The neighboring city, without the cost of tax breaks and incentives, nonetheless enjoyed the benefits of new jobs for its residents and the growth of supplier companies and service companies. Observers in both cities noted the irony and sometimes wondered aloud: "Who really won?" Regional leaders often referred to that experience in making the case for breaking down geographical barriers and building partnerships across jurisdictional lines.

Among the non-traditional partnerships that emerged as important in Generation I regions were those involving businesses that came to see the benefits of working with other like businesses to solve common problems. The California Corridor was building on a long tradition of public-private partnerships and the Initiative both benefitted from and accelerated that tradition. Some examples of successful partnerships include:

- The pairing of WIBs and economic development entities on specific projects which is fostering better understanding of the economic development community among WIBs and of the workforce community within economic development agencies;
- The partnership between Naval Postgraduate School and the initiative that has generated the Naval Postgraduate School Cubesat Launcher prototype, a significant means of supporting university and other student payloads to provide experiential training for aerospace. Other U.S. government organizations have taken an interest in the Cubesat program and have provided some funding.
- An initiative-initiated partnership between a small supplier and a supply chain management research team at the University of Southern California that is going forward under sponsorship of the Air Force Research Laboratory.

In other regions, business partnerships and effective involvement in government-funded ventures were not the norm prior to the grant. Therefore, interview respondents emphasized the benefits of these partnerships to the regions. For example,

- North Carolina invested heavily in Business Roundtables designed to bring together leaders in four distinct industries; they created four staff positions for the full duration of the grant, and those individuals' principal responsibilities were to convene and support the business roundtables. Before the end of the grant, North Carolina leaders raised funding from the business community to support continuation of several of the roundtables' most important functions; the expected level of funding is at least \$1 million annually for five years.
- Maine was another region in which business partnerships were primary. Several employer partners remarked that Maine business owners are traditionally quite independent, and prior to the initiative had never seen the value of working together. They were surprised at the extent to which the grant had helped transform this attitude; one industry representative noted that "honesty among the boat-building community is really much better, and people are sharing with each other that their businesses aren't doing as well due to the economic downturn." They saw that honesty as an advantage, enabling them to work together to improve their business prospects.





• One Florida respondent observed that Business Advisory Committees at the community college were "often just figureheads – bring them in, feed them, put them on the letterhead, and then they leave." In contrast, he believed that the Business Advisory Board for his grant really contributed, that it provided genuine feedback on the program, and that partners took the feedback seriously. Everyone recognizes that industry has to be at the table in a meaningful way. All the largest contractors are involved; they want to meet on a monthly basis and the convener sometimes "has to slow them down." They have organized subcommittees to address specific topics, and created "a whole different conversation where the college is not operating on its own." In summary, this individual believes that "the stars have aligned – and the Initiative is part of that."

To understand more about the social networks supporting partnerships and collaboration in the region, the evaluation included a social network analysis. Social network maps depict the types of organizations participating in the initiative, individual roles within their organizations, and frequency of contact.

Social Network Analysis

Social network analysis is based on the assumption that relationships among interacting units are important. The unit of analysis is not the individual, but the network that consists of a collection of individuals and the linkages among them. By mapping these networks, one can better understand the connections that make up the networks, and their overall strength. A network map shows the nodes (e.g., people or organizations) and links (e.g., relationships or flows) in the network.

As mentioned above, the evaluation team asked each survey respondent to identify "five individuals with whom you have significant contact in the context of the Initiative, outside of your own organization," and to provide the contact's organization, job title, and frequency of contact. (The term "significant" was defined to include meaningful and important contact, but not necessarily the most frequent contact.) Thus, the social network dataset consisted of the name, type of organization, and level within organization for a respondent and his or her five important contacts (see Figures 4.1 - 4.3, above), plus the frequency of contact that a respondent reported for each contact.

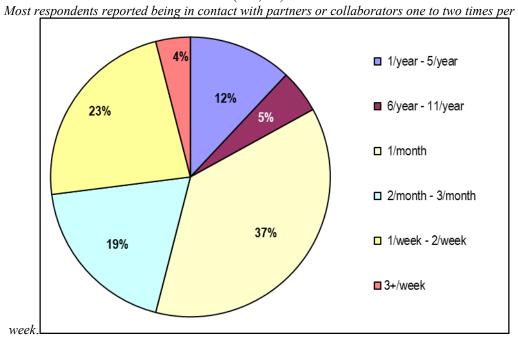
Figure 4.13 shows that 37% of respondents were in contact with key players in their regional networks once a month, however, almost half (46%) were in contact more frequently than monthly. Only 17% reported contact less than once a month. This variation in frequency of contact is shown in the SNA maps that follow by the thickness of the lines or ties between the individuals, with the thicker lines indicating more frequent contact.





Figure 4.13
Frequency of Contact in Regional Networks

(n=2,287)



Source: BPA/UCSD Initiative Partner Survey

Generation I Regions' Social Network Maps

The social network map (also sometimes called a web or net) is a powerful analysis tool that allows a closer look at the nature of the linkages between partners in a network. The maps present data graphically. Because the universe of potential participants in the regional social networks is not bounded or limited and there is no way to analyze statistically how representative the survey results are, these maps are not necessarily a fully accurate characterization of the regions' social networks. These illustrations do shed light on some of the interesting variations in networks among regions, however. While they may not include every possible link, the maps do appear consistent with the evaluation's qualitative findings about the nature of the regions' social networks.

Social network analysis offers insights into several key aspects of social networks: centralization, strength of relationships, betweeness. This section presents observations based on a review of the maps or network graphics that follow. These observations do not reflect quantitative analysis of these measures for this preliminary analysis, in part because of the relatively small sample sizes. The observations are interpretations of some of the patterns apparent in the graphics themselves.

Centralization – The maps for most regions, such as California Corridor, Metro Denver, North Carolina, have no obvious single network center (see Figures 4.15, 4.16, and 4.25, respectively). Other regions, such as North Central Indiana, Maine and Pennsylvania, are examples of fairly centralized networks (see Figures 4.18, 4.20 and 4.26, respectively) with a small number of key





players who are linked with a significant number of collaborators (in the middle of the map) and have frequent contact with each other (thick lines).

Some of the maps, such as those for Metro Denver, Mid-Michigan, New York, and North Carolina, show groups of contacts that are not linked to the rest of the network, indicating that none of the other respondents named them among their contacts (see Figures 4.16, 4.21, 4.24, and 4.25, respectively). While, this may be due to limiting respondents to five contacts, it also seems consistent with site visit discussions about the nature of linkages in those regions.

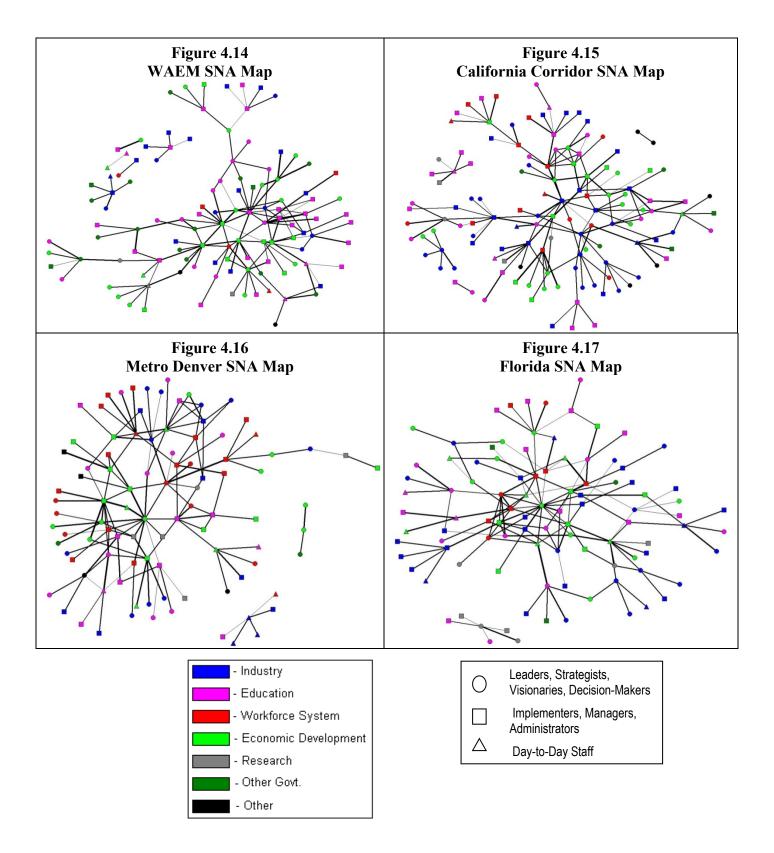
Strength of Relationships – Some regions, such as Maine, and West Michigan, have a relatively large number of collaborators who are in frequent contact (see Figures 4.20) as indicated by the thickness of the lines between collaborators. In other regions, such as New York, only a few key players have frequent contact (see Figure 4.24). NCI's map suggests that the active leaders in the center of the network (those with the most links to other individuals) tend to be the ones with the most frequent contacts (see Figure 4.18). In regions such as Metro Denver, Montana, and North Carolina, on the other hand, the frequency of contact is scattered throughout the network (see Figures 4.16, 4.23 and 4.25, respectively).

Betweeness – North Carolina and New York (see Figures 4.18 and 4.19) both offer examples of networks with several bridges or individuals who link clusters of contacts. These individuals are vital to the network as bridges between groups of collaborators.

In addition to these dimensions, the maps also provide a visual representation of the roles of different types of organizations in the regional networks. For example, in Metro Denver, several central players were from economic development, consistent with the fact that an economic development agency managed the region. In Pennsylvania (Figure 4.26), educators tended to collaborate with colleagues within the education field and a few industry contacts, while economic development and industry were more frequently linked together. The California Corridor map shows industry, workforce investment, and economic development in the center of the network, with education well represented but less central in the network (see Figure 4.15).

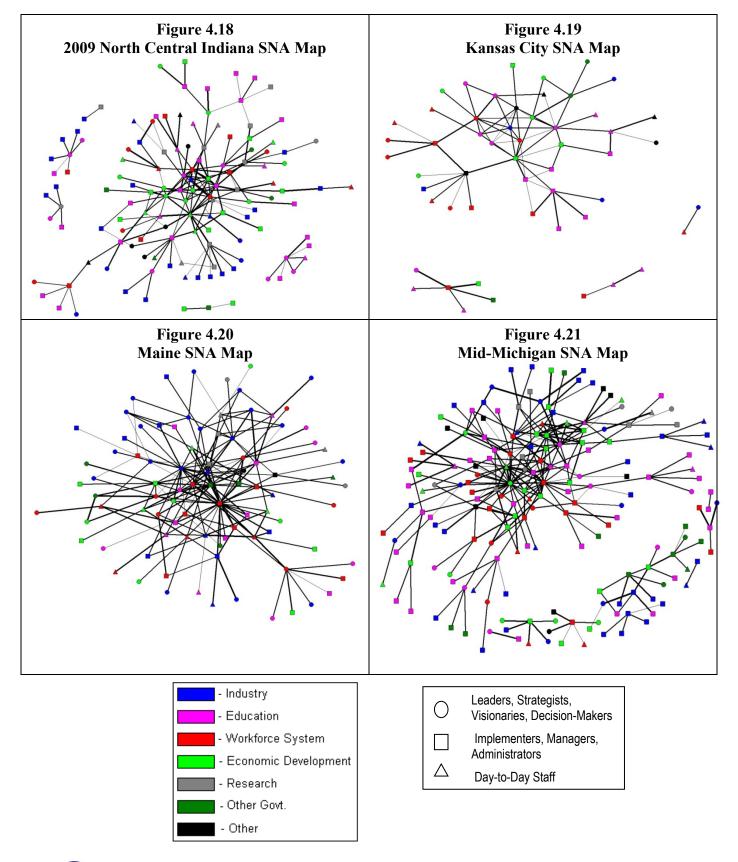
These visual representations of the regions' social networks are a useful tool for looking across regions and identifying key similarities and differences in collaborative networks. Some of the regions (e.g. California Corridor) also found the mapping tool useful in understanding how partnerships and linkages worked within their own regions. Most importantly for the evaluation effort, these maps further illustrate the enormous variation in how regions worked together to form partnerships and system changing collaboration to further their regional goals.



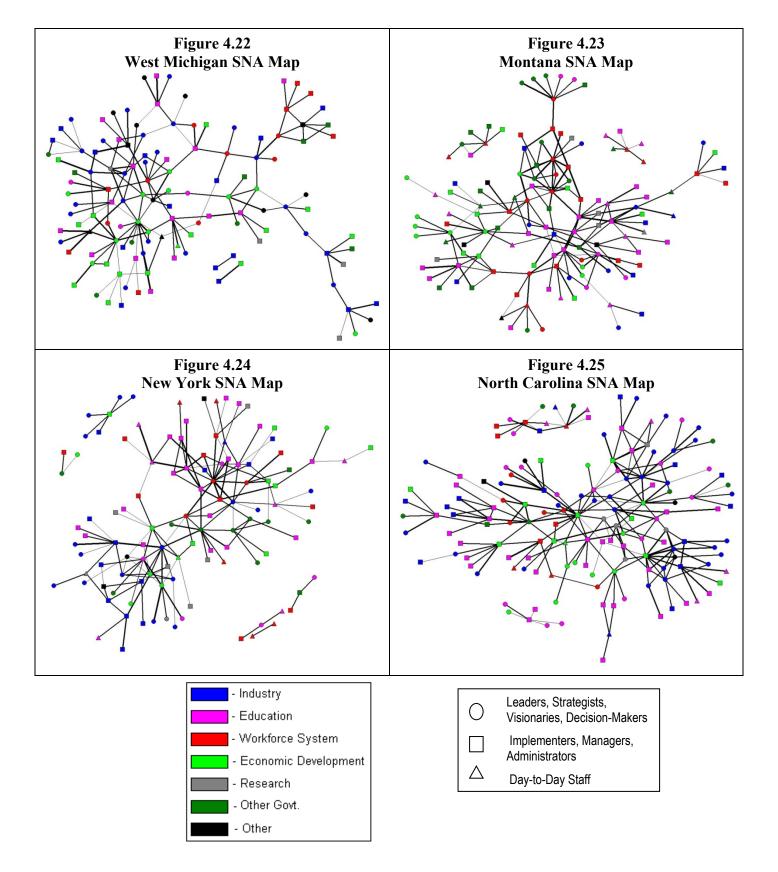






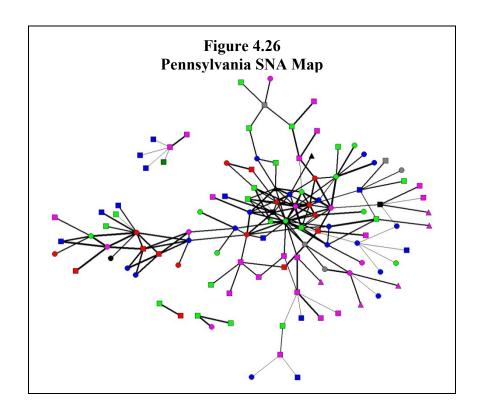


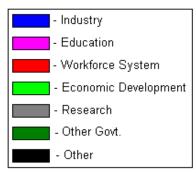














5. Initiative Strategies and Activities

This section reviews the regions' policies, programs, and resources as they were at the time of the third round of evaluation visits in late fall and early winter of 2009. The section is an overview and is not intended to be a comprehensive record of every program and project in the regions. Instead, it offers examples of the regions' key activities that were underway, or in some cases, completed. The type and level of activity varied across regions depending upon the extent to which grantees had completed implementing their projects. Some regions – such as West Michigan and the California Corridor – had all but ended their grant-funded activities by the fourth year of the Generation I initiatives. ETA granted no-cost extensions to other regions – such as Florida and Metro Denver – so they could continue some or all of their programming. Still other regions – such as NCI and Maine – were in the process of transitioning grant-funded activities into a "post-Initiative world."

Strategies Undertaken by the Generation I Regions

The overall strategies that Generation I regions used to implement the Initiative were complex, and often changed in response to outside circumstances. The regions did not rely on a single strategy, but most of them did begin the initiative with an overall approach that emphasized one of the following three systems: economic development or target industries, education system, or workforce system (see Figure 5.1).

Naturally, the regions' strategies combined this initial emphasis with efforts to promote collaboration across systems and to align the endeavors of public and private partners with a common goal of transforming the regional economy. At the center of each region's strategy was a collaborative design and decision-making process that involved a wide variety of partners – professionals representing the workforce system, the education system, state and local government, economic development, and the private sector.

Initiative Activities

The regions implemented activities designed to grow and develop their target industries. Those strategies and activities fell into four categories:

- 1) Workforce activities;
- 2) Entrepreneurship and business services;
- 3) Education and workforce preparation; and
- 4) Data analysis and planning.

This section presents examples of each type of activity.





Figure 5.1: Generation I Regions' Overall Approach to Implementing the Initiative

	Strongest Emphasis in Overall Strategic Approach						
Region	Economic Development/ Target Industry	Education System	Workforce System				
WAEM		Central leadership role of community colleges in the initiative					
California Corridor	Space industry was organizing principle; focus on supply chain						
Metro Denver		One major focus was on workforce preparation, internships	Incumbent worker training was another key focus				
Florida	Economic development approach						
NCI		Major partners were educators, focus on needs of target industries and dislocated workers					
Kansas City	Overall demand-driven approach to workforce and education programming						
Maine	Major focus on target industries and economic development						
Mid-Michigan	Emphasized innovation, collaboration						
West Michigan		Focus on changing both systems to meet employer needs					
Montana			State workforce system was primary implementation mechanism				
New York	Emphasis on R&D, support for entrepreneurs, technology commercialization		Increased reliance in later years as partnerships strengthened				
North Carolina	Four industry clusters were key focal points; sustainability in the hands of private sector leaders	Secondary emphasis, with numerous key partners and programs					
Pennsylvania	Initially defined as finance industry, economic development	Later changed to reliance on a variety of p	artners and programs				





Workforce System Activities

The Generation I grantees adopted a range of activities aimed at improving the education and occupational skills of their regions' workforce. These strategies included worker "re-skilling," continuing education, apprenticeships, and on-the-job training, as well as any supportive services to supplement participants' ability to complete a program or acquire and hold employment. This section first discusses job training approaches, followed by credential and certification programs, training for underserved populations, and incumbent worker training.

Job Training

Worker training was prominent in the portfolio of activities throughout the regions. Examples of the types of job training programs that the Generation I regions funded included the following:

- Mid-Michigan's Liquid Web On-the-Job Training project began in January 2009. Based in Lansing, Liquid Web is a server barn with dozens of computer servers that provide customers with around-the-clock Internet service. The firm paid trainees \$10-\$28 per hour, while grant funds covered administration and screening costs. All 40 of the trainees obtained full-time jobs within the company.
- Genesee Community College (GCC) in the New York region launched its health careers program in summer 2008, with six Certified Nursing Assistants (CNAs) working towards certification as Clinical Patient Care Technicians. This certification meant they could take on more Licensed Practical Nursing (LPN) duties on the job, qualifying them for wage increases and job advancement opportunities. In 2009, GCC staff continued efforts to recruit business participation for its second cohort of trainees, and discussed expanding the program with Finger Lakes Community College. Project leads reported, however, that the state of the economy hindered business involvement in the program. Staff postponed the 2009 Clinical Patient Care Technician training cohort as a result.
- In Metro Denver, grant funding augmented existing Individual Training Accounts (ITA) in seven AJC. The initiative selected AJCs and training providers most likely to increase job placement statistics and most likely to utilize surplus funds as the grant entered its final year. Granting money directly to the workforce centers was also a mechanism for integrating the initiative directly and quickly into the established workforce system.
- In NCI, Vestas Inc., an international windmill company, wanted regional certification centers
 for its technicians. They chose Ivy Tech Community College, Lafayette Campus, as one of
 the centers. Initiative funds supported the development of the Big Wind certification
 program. With three more wind energy companies looking to locate in the region, NCI
 partners were confident that the certification program had attracted businesses to the region.

Credentials and Certifications

Many of the Generation I regions' workforce training programs included assessments, certifications, and credentialing, including WorkKeys, a job skills assessment system that provides certification of an individual's competence in basic skills. Examples of career readiness certification found in the regions include:

• In the third year of the grant, North funded local WIBs and Forsyth Technical Community College to develop a logistics-based WorkKeys profile in the region. The process included





developing four job-specific profiles of the four transportation, distribution, and logistics companies that had expressed interest in participating in the project (Old Dominion Freight line, Tyco Electronics, Best Services, and Packaging Service Solutions) and creating occupational profiles based on roundtable consensus about which industry-wide occupations were most in demand.

- Local WIBs in the Kansas City region assessed more than 2,400 individuals for the OneKC Career Readiness Certificate (CRC). Approximately 25% of these customers tested out at the Gold level; 51% at Silver; and 24% at the Bronze level.
- In NCI, the Manufacturing Skill Standard Certification (MSSC) program at Ivy Tech, Kokomo awarded Certified Production Technician (CPT) certificates to individuals who passed any or all of its four Production modules: Safety; Quality Practices & Measurement; Manufacturing Processes & Production; and Maintenance Awareness. The curriculum was computer-based, led by an instructor, and had an online component. Grant funds paid for instructional materials and some laptop computers for offsite training as well as scholarships for all of the 140-150 students who enrolled. The program certified 92 students during 2008. The training cost \$2,500 per person. After the grant ended, the Indiana Department of Workforce Development continued the program using WIA funds.
- Local WIBs, community colleges, and private businesses collaborated in the Pennsylvania
 region to develop a Bilingual Financial Workforce Certificate Program so that adult English
 language learners could become bilingually proficient in the basic concepts of the financial
 services industry. Partners in the collaboration included Lackawanna/Luzerne/ Schuylkill
 WIBs, the King's/Lackawanna/Luzerne County Community Colleges, CAEL, Prudential
 Retirement Services, and GARD Insurance. The initiative provided additional support for
 participants to obtain a GED, computer literacy skills, and further ESL education.

Incumbent Worker Training

In addition to training new and prospective employees, the regions also funded training for current workers employed by their business partners. For example:

- Most if not all of the participants who received training funded by the Maine initiative were incumbent workers. One of Maine's key partners, The Landing School (which teaches boat building) organized "T3" (Train The Trainers), a program to certify incumbent workers as trainers so that training can occur on-site at individual companies to minimize the disruption to workers' lives and companies' production schedules. The T3 Training is hands-on, and T3 trainers will use hands-on curricula in their on-site instruction. The program aims to have at least 24 trainers throughout the state trained in the established T3 curriculum, and able to both teach on-site and be available for regional presentations.
- Florida awarded worker training grants to more than a dozen businesses in targeted high-tech industries to train their existing employees in topics and/or skills that meet specific industry workforce needs, thus encouraging employee retention and advancement. For example, the initiative awarded a tool and die business funds to train its employees on how to use new computerized equipment for making machine parts. Similarly, a helicopter maintenance company used grant funds to train workers to use new technology, such ultrasonic testing or computed tomography scanning equipment, for required inspections of parts instead of





disassembling the aircraft. The region required each business that received grant funds to provide matching funds of at least 100%, and many provided much more than a 1:1 match.

• Both Maine and Kansas City offered Lifelong Learning Accounts (LiLAs) – employer-matched, portable, employee-owned accounts used to finance education and training. Workers could use the combined employee/employer contributions for education, training and qualified expenses that enhanced worker productivity. ⁵⁵ Kansas City exceeded its enrollment goals for both employers and employees and, with the initiative contributing one-third along with the worker and employer, leveraged training dollars represented a more than 2:1 commitment of private-sector contributions from these participants. The trainees' current employer and the LiLA program manager were required to approve the particular training for which these funds could be used, and the training advanced employees' professional development in their current fields. Kansas City also developed a successful, replicable LiLA website and debit card system.

Underserved Populations

While serving disadvantaged populations was not originally a goal of the Initiative, some regions developed such services nonetheless. This section discusses some of the programs in the regions that provided supportive services to non-traditional workers, reached out to minority businesses, or targeted hard-to-serve populations.

- NCI's was instrumental in expanding the existing Maturity Matters program that Tecumseh Area Partnership (TAP, the local AJC operator) ran. The program's goal was to place a "mature workers hub" in the each of the region's Work One Centers to help mature workers secure paid or unpaid internships. In addition, TAP encouraged employers to plan for their aging workforce by addressing intergenerational issues that might arise with older workers or with mature entry-level workers. The sustainability of Maturity Matters was assured when ETA awarded TAP an Aging Workforce Initiative grant to continue the program.
- The North Carolina region funded the East Market Development Corporation to implement the Latino Demonstration Project to develop a sustainable approach to enhancing the business capacity and success of existing minority-owned businesses within the region. In collaboration with Latino Pathways and the Rockingham County Business & Technology Center, the initiative funded three pilot projects to serve primarily African-American and Latino businesses in both urban and rural settings. The project assessed and provided management training to small businesses and connected them with key players in their industry sector.
- Blackfeet Manpower in Browning, Montana operates the first certified tribal AJC Center in the country. The Montana initiative funded Blackfeet Manpower to organize several training programs that prepared tribe members to obtain work with ARRA-funded construction projects on the reservation and in neighboring Glacier National Park. One program repeated several times was commercial driver's license training (Bear Traxx, a Native Americanowned firm, taught one session). Blackfeet Manpower worked with LIUNA, the Laborer's union, to arrange other training programs for concrete and pipe work. LIUNA developed the

^{55 &}lt;u>http://www.cael.org/lilas.htm</u> Note that the DOL/ETA LiLA demonstrations did not require employer approval of the workers training program.





curricula, retired union workers served as teachers, and the 40 participants received a certificate upon completion.

Entrepreneurship and Business Services

The initiative supported a range of services for entrepreneurs, including training and technical assistance, business incubators, assistance for rural businesses, youth entrepreneurship training, cluster initiatives, small business assistance, and help in accessing investment capital. This section presents examples of these services.

Entrepreneurial and Small Business Support

Several regions funded projects that provided technical assistance to support small companies, some focusing on technology and process and others on operations and management. Many regions targeted small businesses, and some focused on small, family-owned rural enterprises.

- NCI granted \$2.5 million to Purdue University's Tecumseh Area Partnership (TAP) to assist businesses in NCI. Although about one-third of TAP's general work is consultative problem-solving for individual businesses, the grant-funded activity was broad-based training provided to over 2,080 trainees from 50 different businesses in Program Year 2008 alone. While this sub-grant represented only a small portion of Purdue's business technical assistance efforts, it was significant in that it allowed Purdue to develop and pilot several new programs, such as energy efficiency, health care cost reduction, and green collar worker certifications that are now offered state-wide.
- Almost all of the companies in Maine's target industries (advanced composites and boatbuilding) are small businesses, so the initiative offered several types of assistance for this group. First, initiative staff trained 21 Maine Small Business Development Center (SBDC) counselors to provide professional development to entrepreneurs, covering such topics as an industry overview and update, legal structures, financial analysis and planning, and strategic planning. Second, working with the SBDC staff, the region provided customized one-on-one management instruction for business and industry partners. A total of 26 companies used these services in the fourth quarter of 2009 alone. Third, the initiative funded three separate training seminars directed at senior management on the "7 Habits" series, customized to the needs of the industry cluster. Fourth, Maine staff provided instruction on how to prepare for global trade missions, and finally, they provided virtual training to start-up companies on how to use the Web.
- The New York region funded several projects designed to assist startup businesses, including training and assistance in obtaining seed capital. In 2009, the region reported that four Small Business Innovation Research/Small Business Technology Transfer grants had been awarded to regional businesses that received training through the SBIR, resulting in over \$2.9 million in funds entering the region. In addition, a woman-owned business was awarded a Phase I National Institute of Health (NIH) grant totaling over \$110,000.
- NCI funded the Sustainable Workforce Development in Agriculture, which allowed Ivy
 Tech, Kokomo to start an agriculture program, the first of its kind in the state's community
 college system. The initiative funding supported a survey project exploring the
 entrepreneurial training needs for farmers who produce non-conventional commodities. This
 needs survey targeted non-conventional agricultural producers operating in niche markets, or





- who sell directly to retail customers. Examples were small wineries, wool producers, and beef producers with direct marketing operations. Survey findings indicated that these producers tend to be self-educated, focusing on business topics. Ivy Tech, Kokomo, was to use to the findings to develop course offerings in entrepreneurship for this population.
- The Montana initiative funded Miles Community College (MCC) to develop a 30-credit hour, two-semester certificate course in entrepreneurship. The course can be taken several different ways: 1) in person at MCC or its two partner tribal community colleges Chief Dull Knife College (Cheyenne) and Little Big Horn College (Crow); 2) through a combination of online and ITV (interactive TV) courses; or 3) using a web-based format.

Youth Programs

Young people are an important target group for entrepreneurship programs throughout the regions. At least five of the regions offered programs to motivate the next generation of economic pioneers, including WAEM, Florida, New York, and Pennsylvania.

- WAEM and the region's community colleges worked with high schools and youth programs to integrate entrepreneur programs into the high school curricula. East Mississippi Community College, for example, partnered with a local high school to provide a class on how to start your own business, and Meridian Community College's initiative-funded staff put on an event using a "high-school" version of WAEM's entrepreneurship program. Finally, the initiative funded the University of Alabama's REAL (Rural Entrepreneurship through Action Learning) program, an experiential learning effort for students and teachers in rural high schools.
- Florida's initiative supported the development of the CHOICE Career Academies, which
 provide high school students with skills training for high school and college credit and for
 industry certification. The Academies give participants a chance to undertake hands-on
 activities related to the target industries in which they are interested. For example, the
 finance academy operates a credit union for students on a high school campus.
- NCI's Entrepreneurship Youth Institute worked with each of the 49 public high schools in the region to implement an entrepreneurship program. The program included a fall semester entrepreneurship boot camp for teachers and students, tools for teachers to incorporate entrepreneurship principles into curricula for both business/economics and STEM, and a spring follow-up where students presented business plans.
- Through the New York Region's ongoing Young Entrepreneurs Academy (YEA!), students
 ages 16 and up develop business ideas, write business plans, pitch their ideas to investors for
 funding, and launch real businesses and social movements. The program was designed to
 foster and nurture the entrepreneurial spirit and mindset, and offered classes in eight of the
 nine counties in the region.
- Pennsylvania supported the Junior Achievement program for youth ages 14 and older. Junior
 Achievement gives teens the skills to start and run their own businesses under the mentorship
 of a local business volunteer. It is the nation's largest organization dedicated to teaching
 youth about economics, business, entrepreneurship, and financial literacy, and uses
 experiential learning.





Accessing Investment Capital

In addition to skill and inspiration, entrepreneurs' most important need is investment capital. Often these financial (as well as technical and motivational) resources reside within the entrepreneurs' own communities. Many of the Generation I regions funded programs that connected entrepreneurs to these sources.

- Capitalization and Development was one of Maine's four Pillars the basic components of initiative activities. The Capitalization and Development Pillar focused on providing capital and management assistance for business and industry growth, and for facility improvement and expansion in order to provide the necessary backdrop for workforce development. The region's implementation plan laid out its process for establishing a revolving loan program for small business in the target industries. After ETA approved the implementation plan, clarification came from ETA's finance office that such a program was not allowable under H-1B funding (which is limited to worker training). The Department disallowed funds that the initiative had spent on this Pillar's activities, which placed a significant financial burden on some partners, and injured the trust that the initiative had started to develop with these businesses, industry representatives, and the state Department of Commerce.
- Florida's initiative offered grants of up to \$100,000 to start-up technology companies. Grant awards required job creation and a match of at least \$100,000 in new equity investment into the company. The \$1 million in grants leveraged at \$6.95 million and created 160 new jobs. The program was so popular that the four-year allocation was exhausted in two years.

Business Cluster Initiatives

The following are examples of technical assistance programs that engaged clusters of similar businesses within a given region, as an alternative to providing one-on-one services. These endeavors focused on process – how to streamline manufacturing or bring new products to market – as opposed to managerial issues such as how to write a business plan or attract angel investment.

- Some of the activities in Maine's Advanced Engineering Wood Composites Center (AEWC) included evaluating renewable opportunities in Maine associated with the ocean, e.g. tidal power, wave power, offshore wind. AEWC estimated that 150 gigawatts of offshore wind power is available in Maine. The AEWC received \$5 million from the Maine Technology Asset Fund to do offshore wind power research, one-half million dollars from MTI to develop training curriculum, and \$600,000 from Partnership for Innovation to do model and tank testing. AEWC also created a partnership with the Maine Maritime Academy to help with the offshore and ocean engineering aspect. AEWC developed a proposal for the "Deep C Wind" Consortium (30 institutions and companies focused on all aspects of offshore wind development). The Consortium received \$7 million in ARRA funds from DOE. This project will result in the deployment and testing of three offshore floating wind turbines. A major goal of this work was to bring the price per installed watt down the AEWC estimated that alternative energy prices need to range between \$2-\$4 per installed watt to be competitive with other fossil fuel options.
- Metro Denver's industry coordinators convened a series of industry-specific forums, bringing together industry leaders (especially human resource professionals who were aware of current and future employment needs) with workforce development partners to identify





mutual priority activities across the industry. The forums focused on building a shared workforce training capacity that would mutually benefit all companies in the region. They also looked at early education (starting in elementary school) to cultivate career interest and develop soft and technical skills to address the goal of "grow your own" from an employment "pipeline" perspective. The forums helped companies to focus both on their own future worker needs as well as the needs they had in common with others in the same industry.

• Because timber is an abundant local resource in the WAEM region, the initiative contracted with the University of Alabama to analyze future opportunities for the forestry industry. The study identified wood chips and chemicals from cellulosic breakdown as potential growth products. The economic opportunities identified included developing chip mills to generate electricity and converting wood products for fuel. The researchers published their report findings and other information on WEAM's MyBiz website to aid forest landowners in developing alternative uses for their timber resources.

Talent Development Activities

Education and workforce preparation *activities consisted of projects focused largely on training future entrants to the workforce*. This strategy included emphasis on science, technology, engineering, and math (STEM) education in both K-12 and postsecondary schools, along with internships, curriculum development, teacher training, and professional development. This section presents examples of programs for youth in high school, career awareness programs, and postsecondary programs.

Programs for Youth

Along with STEM education programs, activities designed to increase young people's awareness or preparation for employment in targeted industries were quite common across the regions.

- Metro Denver's Career Academies were small learning communities organized around a career theme. Partnerships with local employers provide industry-based learning opportunities. The initiative allowed Career Academies to successfully partner with higher education institutions, especially community colleges, and with high schools to prepare students for high-demand occupations upon graduation or for enrollment in career-track, post-secondary degree programs. Efforts supported by the grant included: developing and providing career-oriented, classroom-based, experiential learning programs; training teachers to teach the new curriculum; exposing students to higher education opportunities; and connecting students with potential employers in the region. These programs not only addressed business and industry needs for cultivating the future workforce, but also reached many young people who might otherwise have slipped through the cracks. In August 2009, the initiative awarded five schools approximately a total of \$400,000 to fund Career Academies. As part of the Career Academies investment, Metro Denver partnered with Colorado Succeeds to host a day-long conference to explore the best practices of career academies that prepare students for post-secondary and workforce success.
- Maine also launched a Career Awareness campaign—including the website, www.mainemarinecareers.com, a brochure, posters, and pop-up banners for career fairs.





While the grant for this activity was time-limited, the result was the ongoing presence of Career Awareness materials in every high school in the state.

 Florida developed an Online Career Portal for information on target industries, including salary information, career progressions, skill requirements for success, and regional facilities that offer corresponding education and training programs. Workforce and employment data was collected to support this outreach effort and the Online Career Portal was launched in 2010.

Postsecondary Programs

Several regions funded the development of curricula that resulted in a new degree or post-secondary certificate programs. For example:

- The University of Florida REEF program changed its coursework offerings in areas such as computational mechanics (modeling metallic materials) and computational energetic (modeling the behavior of energetic, i.e., explosive materials). The program was offered initially to graduate students with completion of the curriculum leading to a Ph.D., Master's, or postgraduate certificate. REEF is near the Eglin Air Force Base and about 20% of its students are active military. (The Air Force offers incentives to officers to pursue graduate studies.) Much of the curriculum was made available on DVD so that active military students could take the discs with them when posted abroad, for example, in Iraq or Afghanistan. REEF invited the University of West Florida to bring its undergraduate program to the University, where UWF students could take graduate courses and provide research help. This arrangement also allowed military personnel at Elgin to pursue undergraduate education.
- In Kansas City, three healthcare education initiatives have concluded their activities and exceeded their goals as outlined under the grant. All three initiatives were sustained beyond the grant period with ongoing support and resources from other organizations. The Nurse Preceptor Initiative recruited bedside nurses to serve as mentors and preceptors to new nursing graduates and existing nurses in an effort to encourage retention within the field. The Nurse Re-entry Initiative/RN Refresher Academy provided opportunities for training and refresher courses for non-practicing licensed nurses to return to the nursing profession and to learn the latest medical techniques and practices.
- In 2007, Indiana University, Kokomo launched the initiative-funded Project Complete Scholarship demonstration program. Beginning with the 2008 spring semester, the program offered 134 former students scholarships to return to school and complete their degrees. The scholarships, up to \$250 per semester for four semesters, were available to students who had a 3.0 GPA or higher and who had completed at least 98 credit hours. From this cohort, 11 students were accepted and three actually enrolled. In the second round of the program (2008 fall semester), the university offered scholarships of a total of \$500 for four semesters to 331 former students; for the second round, the required GPA was reduced to 2.5 and only 90 credit hours were required to qualify. From this cohort, 31 students accepted the offer, and 17 actually enrolled.





Data Analysis and Planning

The Generation I regions conducted a host of research activities, including asset mapping,⁵⁶ gap analysis, employer surveys, and other strategic planning efforts, all of which were important tools guiding the implementation of the initiatives.

- One of the Maine Liaisons developed a Maine State Service Tree Asset Map to demonstrate
 to partners, graphically, where resources are in the state in workforce development, R&D,
 economic development, market development, and capital resources. The asset map includes
 contact information for resources such as LWIBs, Career Centers, DECD regional offices,
 and industry associations.
- A Hoosier Heartland Corridor Asset Map was requested by the Regional Leadership Institute
 and funded by a NCI Opportunity Fund grant. The RLI commissioned a study to include
 timely, accurate, relevant and widely- understandable graphic-rich information to assist in the
 challenges of pursuing their goals, and a document providing a common framework for
 identifying resources within the region. PCRD staff prepared the asset map.
- The Bureau of Business and Economic Research at the University of Montana completed a second Initiative Manufacturers Survey in the second quarter of 2009. The results showed that 338 manufacturers in the region that met the operational definition of bio-manufacturer. Of these, 84.3% consisted of the proprietors working alone or with a maximum of four other employees. Only 15.7% employed five or more additional workers. MMEC field staff followed the survey with visits to qualifying respondents to offer services.

Implementation Challenges

Generation I regions identified several obstacles in implementing the grant, which can be characterized as contextual challenges and challenges related to design and oversight. The most common contextual challenges included a lack of regional identity and the unexpected hurdles occasioned by the national economic downturn during the grant period. Several issues related to design and oversight proved challenging: the lack of clear and consistent guidance from the Federal government, the lack of coordination or collaboration among the Federal agencies that oversee and fund the activities regions were undertaking; and the initiative's limited timeline.

Regional Identity

Several regions struggled to implement the initiative in the context of a lack of regional identity—in some cases, even facing an active competition between different parts of the designated region. Regional identity and coordination were particularly challenging in regions that include both urban centers and rural areas, such as West Michigan and New York. In North Carolina, the initiative's leaders foresaw that they would face similar challenges and therefore dedicated significant effort to resolving them; a staff person devoted nearly 100% of his time in the initiative's early years to reaching out to rural areas and other underserved parts of the

⁵⁶ An asset map can be defined as an inventory of the resources in a given geographical area. In the context of regional transformation, the asset-mapping concept has been used to identify stakeholders and partners, enumerate facilities and programs, or assess regional economic conditions.





region. In New York, initial tensions lessened as relationships developed among leaders across county lines.

Bi-state regions often faced different rules and constraints across jurisdictions; in WAEM one respondent noted that "[the people in the region] haven't had the attitude that they're all in it together, and they haven't really had the leadership to promote such an attitude." Several regions, including Mid-Michigan and Pennsylvania, found it challenging to create a unified region out of a seemingly unconnected collection of counties. A lesson from these experiences is that paying attention to how a region is defined—the economic and historical factors that bind the proposed region together, and the extent of buy-in for this definition—is a critical component of success in promoting regionalism.

Economic Downturn

The nationwide recession that began in 2007 overshadowed and exacerbated the Generation I regions' economic challenges during the middle and ending months of the grant. One unforeseen obstacle for many regions, particularly those with substantial emphasis on community college programs, was responding to skyrocketing enrollment levels. As one community college representative in NCI stated, "people are opting for training [over] unemployment." In North Carolina, respondents reported a reduction in community college facility space due to excess student demand.

The economic downturn also constrained sustainability options, as foundation funding became less available to sustain the initiative-related efforts because of declining endowment levels. For example, in West Michigan, the region's West Michigan TEAM project had been asked to write a letter of intent for the Charles Stewart Mott Foundation, but the foundation later decided not to fund new projects due to the economic climate.

Downsizing in target industries caused several regions to re-think their industry focus. The most notable example was Pennsylvania. The initiative's initial goal was to create real-time emergency back-up systems for the New York-based finance sector, a goal that depended for its success on substantial investment by major New York firms. The region needed to redefine and broaden its goals in response to the finance sector's near-collapse. Downturns in the energy industry also dampened new worker enthusiasm in Montana, where potential trainees lost interest in entering the energy industry because of the news that the industry was contracting. Trainees who did enter the industry found themselves struggling to find jobs, because they were competing for jobs with more experienced unemployed workers. While the initiative was intended to help regions cope with economic changes, the rapid pace of the downturn actually became, in some regions, a more immediate challenge than the ongoing threats posed by outsourcing and globalization.

Need for Clear and Consistent Guidance

The Generation I regions were extremely diverse, as were the strategies they set out to pursue. It was in large part because of this diversity that clear and consistent guidance was needed. Several or the organizations managing the initiative at the regional level had little or no experience managing Federal grants; others had little or no experience working with the workforce system.





Given the learning curves such organizations faced, changes in guidance and instructions from DOL/ETA created obstacles to implementing the Initiative as originally planned.

Because many grantees were not initially aware of the restrictions on the use of ETA funding and/or specifically H-1B funding, regions were forced to discontinue or modify planned activities involving economic development or working with youth in order to comply with allowable costs regulations. During our third site visit, this midcourse correction continued to be an issue for several regions, particularly after their audits revealed additional disallowed costs. In several regions, the audits and disallowed costs meant that partners had to assume responsibility for costs that they had believed the grant would cover. In Pennsylvania, Maine, and West Michigan, partners perceived a sudden shift in responsibility and a significant financial burden. The result was, in some instances, a loss of trust between the partners and the initiative. One such partner, a representative of a small trade organization that has had to cover disallowed costs, observed that "they should have found other funding to fill in when H-1B wasn't available...it feels like [they are] punishing the states." The lack of guidance around grant restrictions thus undermined one of the key goals of the initiative: encouraging trust and cooperation between industry and workforce development.

Regions also noted that they felt pressure to re-design the activities outlined in their implementation plans when, because of changes in Federal leadership, ETA returned to its traditional emphasis on serving "most in need" populations (such as TANF recipients and exoffenders) after an initial emphasis on a more demand-driven workforce strategy. In Pennsylvania, one partner noted that this shift in priorities contradicted their planned strategy, noting that Pennsylvania had focused on business attraction in the prioritized industry areas, leading to future high-wage job creation. Several regions were able to adjust to this changed guidance—notably, in West Michigan, the region issued an RFP for projects serving disadvantaged individuals during, acknowledging a renewed Federal focus on this population. Nevertheless, the change in directive represented a significant departure from the innovation grantees had been primed to expect from the Initiative. The return to what many considered "business as usual" for ETA, then, dampened the initial enthusiasm experienced by many partners about a perceived shift towards more industry-focused workforce policies.

Across regions, respondents also expressed a need for earlier and more comprehensive technical assistance from ETA at the beginning of the grant. However, the extent to which the changes in ETA guidance mentioned above affected the regions largely varied according to who was managing each region's grant. While some regions' managing organizations were familiar enough with standard ETA regulations and process to spend cautiously and track necessary performance measures, several of the managing organizations were economic development organizations or other "nontraditional" grantees that had not previously managed a DOL/ETA grant or even a Federal grant. These organizations had particular difficulty complying with funding restrictions and reporting requirements when they were clarified after several months of operations.

In some regions, even if a grantee or fiscal agent was familiar with grant management procedures, other events complicated compliance. In Kansas City, for example, the Missouri Director of Workforce Development and the Kansas Director of Workforce Services, who were





active leaders and participants in the initiative and provided much-needed guidance and oversight, both left their positions during the course of the grant, due to changes in gubernatorial administration in both states. Without these intermediaries and their familiarity with Federal regulations, respondents felt that there was no one at the state level to take on the role of champion, visionary and watchdog in relation to the project management organization. In West Michigan, the fiscal agent organization, a state university, was familiar with Federal grants but lamented that they were unable to use this knowledge to rein in questionable spending because the initiative "gave us the responsibility but not the authority—we were a subcontractor without authority to stop contracts." Absent earlier and clearer instructions from ETA at the Federal level, many regions needed guidance at the local and state level to comply with grant regulations, which was not possible in these two regions due to structural and institutional issues.

Need for Collaboration at the Federal Level

The initiative had the extremely ambitious agenda of innovation through local collaboration, often combining efforts as well as coordinating among education, industry and workforce development. It was initially intended that this regional effort would be mirrored by crossagency efforts within the Federal government – at least provision of technical assistance and support. In many regions, success would have required even stronger cross-agency Federal innovation. In particular, it would have been helpful if the relevant oversight agencies had been able to coordinate their metrics, regulations, and funding. Although it may not have been possible to change entire systems because of a single initiative, the creators of the initiative could have foreseen the conflicts and responded with waivers of the regulations and restrictions that in many regions hindered transformation.

Site visit respondents noted that siloed funding streams and regulations in economic development, workforce development and education made it difficult to carry out the initiative's goal of multi-sectoral collaboration on workforce transformation. For example, in several regions, partners initially encountered difficulty implementing planned training activities through the community college system because community college calendars did not align with businesses' need for seasonal or quick-turnaround training; in Maine, one respondent noted that it has been a challenge to even generate critical demand sufficient to sponsor community college training programs because local companies are so small, and in New York, respondents noted that while community colleges are beginning to be aware of their role in providing customized training, the system has yet to dedicate sufficient funds to this effort. A business representative in North Carolina noted that community colleges are interested in filling seats and do not screen applicants sufficiently, which leads to students entering training programs and then realizing that they are not interested in pursuing their chosen career path. In this businessman's words, "that means employers are left hanging, students feel bad about themselves for dropping out, and someone else has been waiting in line!" This cross-region frustration about priorities within community colleges relative to other actors points to a need for more collaboration across agencies at the Federal level, and hence better coordination of requirements and funding. Metro Denver's program manager highlighted the need for such an alignment of funding streams in a "Lessons Learned" piece, noting that sponsorship of such initiatives needs to come from ETA for workforce programs, the Department of Education for STEM programs, the National Science Foundation for university research and the Department of Commerce for incubators and entrepreneurship training.





Regions also identified a need for better collaboration at the Federal level with respect to performance metrics. Many regions felt that the traditional performance measures required by ETA (largely focused on documenting the number of trainees rather than on, for example, collaboration of investment in research and development) did not acknowledge the ambitious mandate of transformation of the workforce development system. In Pennsylvania, one respondent noted that the region's progress would have been better captured by incorporating metrics from the Departments of Education and Commerce. A respondent in Kansas City pointed to a need for Federal alignment across funding streams for this reason, noting that the initiative asked the workforce development system to step out of its box, but their staff is still funded by WIA (and accountable to WIA measures), not by the grant.

Need for Additional Time

During our third site visit, as projects were drawing to a close, respondents noted that the time period of the grant was so short that there had barely been time for meaningful work and change. In North Carolina, for example, the chair of the WIRED Action Committee lamented that "three years is so little time to get anything done in this field. By the time you get staff in place and connections made, you're a third of the way through the grant and then the money's going to run out so you really need a few more years to run the program of work all the way through." A Policy Council member in West Michigan agreed that "systemic change takes time and three years is not a very long time." Though regions were proud of the progress they had made during the grant period, many wished they had had more time to both implement and measure the effects of the Initiative.

Summary

The Generation I regions engaged in a multitude of activities ranging from training workers and developing young talent, to supporting start-up firms in growth industries. The underlying connection within the breadth of programming between and within the regions was economic transformation. Thus worker programs sought not to simply train individuals for jobs, but also to expand the population of trainees and to expand the types of training services available to better fit a more global and technology based economy. While many trainees were the factory workers and other semi-skilled employees displaced by the changes in the global economy, trainees also included degreed professionals who were increasingly falling victim to structural economic shifts. Training programs sought to provide job-seekers with both technical skills and "soft skills"—communication and management skills—vital to success in a knowledge based economy.

If traditional economic development focused on attracting business (and consequently jobs) to a region, grant-supported efforts invested significantly in developing existing businesses and industries in a region to achieve the promise of high growth and global competitiveness. Initiative-funded entrepreneurship and business support services attempted to "re-skill" individual business owners and even whole sectors for participation in an innovation-based economy. In addition, in an economy based on knowledge and ideas, the importance of brainpower over manpower is clear. Accordingly, all of the regions concentrated on developing human capital. These interventions ranged from inspiring young people to pursue interests in





science and math to supporting career professionals in expanding technical knowledge. Also, throughout the grant period, the regions used research and data to shape and guide their programming. Even in the final year of grant activities, the regions sought more knowledge about their industrial, labor, and educational resources and how those resources could be best deployed.

Ultimately, the common thread among virtually all Initiative programming was to try to create, adapt or enhance the conditions necessary for economic growth—workforce, business climate, and talent pipeline.



6. Progress toward Sustainable Regional Transformation

Introduction

The challenge for this evaluation is that regional transformation is an amorphous thing that is very difficult to measure directly. Consequently, the evaluation team approached the task from numerous directions. First, we looked at increases in collaboration, connections between partners, and sharing resources, customers, and facilities. Second, the study examined regional identity by examining changes in how the region's residents see themselves and their larger community. Next, we explored transformation of the workforce development system, including any changes in the public workforce system's reach and impact, changes in the expanding definition of who is a customer, and signs of increased flexibility in service areas. The evaluation team also investigated whether and how stakeholders from the economic development system expanded their focus to a regional scale, and altered their relationships with workforce development, community college, and university partners. Similarly, we assessed any changes in the post-secondary education system, including increased integration among community colleges, relationships with employers and industry, flexibility in scheduling, and movement toward models of lifelong learning and career ladder training.

The evaluation conducted quantitative analyses of a range of data, including the employment outcomes of initiative training participants as documented by the Common Measures, Initiative metrics, and WIASRD. We looked at capacity-building metrics and region-defined measures of progress to determine which activities the regions valued the most. Finally, the evaluation team analyzed data from existing databases to explore any leading edge indicators of economic transformation within the regions. Chapter 6 discusses our findings from each of these study components.

Collaboration, Building Alliances and Regional Identity

Under the Initiative, the Generation I regions shared a vision of regional economic transformation, a vision of complete change in all aspects of workforce development, education, developing workforce skills, and economic development in the region that required not only the establishment of numerous new practices, but a major shift in mindset. System transformation, however, can take many years, certainly more than the Initiative's three-year grant period; the literature on economic change and innovation, for example, suggests that it may take five to ten years for large-scale changes in culture, attitudes, and behavior to get any real traction. Most of the stakeholders in the Generation I regions took the long view, and considered the creation of collaborative relationships through the Initiative as but a first step in achieving system transformation over the long term. According to an evaluation visit respondent in one region, the grant funding from DOL/ETA should have been considered as a jump start for an undertaking that would require continued effort and investment "so that they would not run out of wind in a sailboat race."





At the same time, it is necessary to consider how much progress the Generation I regions made in regional system transformation over the timeframe of the Initiative. Did the regions at least accomplish the kind of intermediate goals that would indicate that they were moving toward such transformation? To answer this question, evidence from this evaluation demonstrates significant shifts in service delivery, partnering arrangements, or, perhaps most importantly, mindset, such as increased integration of the workforce development and talent development systems, or changes in the nature of regional collaboration. Examples of innovative ways in which the different regions have brought together – and in some cases, aligned – the systems and structures that support regional economic development may serve as useful indicators that regional system transformation is beginning to occur.

Importance of Partnerships to Regional Transformation

New partnerships contributed in important ways to accomplishing WIRED objectives. Repeatedly over the four-year grant period and beyond, interview respondents point to the many lasting benefits of the collaborative relationships formed during the WIRED grant. One potentially important outgrowth of collaboration among individuals with different professional perspectives is an increase in innovation capacity. Innovative ideas often result when people interact face-to-face with other people who think differently than they do. Ideas come together in new ways as diverse individuals work to understand each others' points of view or frames of reference.

Survey respondents were asked to characterize the efforts to transform their region's economic competitiveness, including the nature and importance of collaborative efforts. Figure 6.1 summarizes the answers. As the figure shows, the majority of respondents agreed with all of the benefits suggested, with the diversity of stakeholders, valuable cross-professional networks, open communication, the willingness to compromise, adaptability, and out-of-the-box thinking eliciting agreement from the highest proportion of respondents.

Many WIRED participants and observers emphasized the importance to regional transformation of efforts to break down traditional barriers to collaboration. They believed that the partnerships formed within Generation I regions could be instrumental in building a resilient regional economy and a well-prepared talent base, enhancing the regions' efforts to maximize economic recovery and prosperity. In nearly all regions, some of the new partnerships were expected to continue beyond the end of the grant and become a long-lasting legacy of the WIRED initiative.

Barriers to Transformation

The fact that such preliminary evidence of system transformation through the Initiative exists does not mean that the journey has not been challenging. Whether seeking to transform the workforce development, economic development, or educational system, the regions encountered barriers that included the following:

• Individual organizations are unlikely to see system-wide goals as part of their core work or a priority activity. Often, they see a grant project such as the Initiative as additive, not transformative, as one more project that they are doing rather than as something that changes all of their projects.





Figure 6.1 Perceived Value of Collaboration

The majority of survey respondents agreed with a wide range of benefits to collaboration, with the diversity of stakeholders, valuable cross-professional networks, open communication, the willingness to compromise, adaptability, and out-of-the-box thinking at the top of the list.

Opinions of WIRED Partnerships and Collaborative Efforts	Agree	Disagree ^b
The collaborative group includes a diverse range of stakeholders involved in many different aspects of regional transformation.	90%	10%
Valuable cross-professional networks are developing in this region.	88%	12%
Most people involved in efforts to achieve regional transformation are willing to compromise on important aspects of our joint efforts.	83%	17%
Most people in this collaborative group communicate openly with one another.	82%	18%
This collaborative group is able to adapt to changing conditions, such as changes in political climate, business climate, or leadership.	82%	18%
The collaborative group is open to "out-of-the-box" thinking where diverse and unique ideas are highly valued.	82%	18%
Significant cross-industry networks are developing in this region.	79%	21%
Collaboration has resulted in leveraging new sources of funds beyond those used in the past for these kinds of efforts.	75%	25%
All the most important stakeholders are involved in the collaborative process.	69%	31%
The partners in this collaboration have a clear process for making group decisions.	65%	35%
Most members of the collaborative group have a high degree of tolerance for risk-taking and change.		42%

Source: BPA/UCSD Evaluation Team

- Furthermore, unless they are already a part of a regional system, local workforce or education or economic development entities have difficulty participating in regional efforts without feeling as if they are losing their local brand and local control. In addition, a significant element of competition may exist between individual organizations or actors, which also hinders letting go of parochial approaches. A particular concern is, who gets credit for successes?
- In many regions, there was no historical collaboration among the different entities in the regional collaboration, such as WIBs, community college districts, or economic development agencies. A continuing challenge for the regions has been the need to build collaboration relationships almost from scratch.





^a Combines "Strongly Agree" and "Agree" responses.

^b Combines "Strongly Disagree" and "Disagree" responses.

• The sheer size of several of the regions, especially the California Innovation Corridor, and complicating factors such as the bi-state nature of WAEM and One KC, was "daunting." One site visit respondent noted that, "You're talking about 100 different kinds of transformation, depending on where in the region it's happening."

Enablers of Transformation

Despite barriers and challenges like those described above, the Generation I regions did have the benefit of a variety of enablers of system transformation, including:

- Each region's grant program was tailored to meet its specific needs and to achieve its specific goals for transformation of its own regional economy. Activities and partnerships intended to achieve transformation of the region's workforce development, economic development, and educational systems were similarly "customized."
- The Initiative was multi-layered, involving individuals and organizations at all levels of the workforce development, economic development, and educational systems. This meant that a wide range of talent was generally available as needed to develop and implement the activities and collaborations of the Initiative that were intended to lead to system transformation.
- The regions faced a nationwide economic downturn necessitating a change from the status quo.

Levels and Stages of Collaboration

Survey respondents were asked to characterize the current level or stage of collaboration within their region. They were given the following definitions of stages of collaboration:

- **Co-Existence:** Entities are aware of each other, but have no prior history of interaction and know little about each others' composition or way of conducting business.
- **Communication:** Entities know of each other, have some history of interaction and know the basics of each other's composition or way of conducting business. Communication is informal, without commonly defined mission, for or planning.
- Coordination: Entities have committed to sharing resources in order to accomplish shared goals, and have implemented activities that depend upon these shared resources. Few changes have been made in how core businesses operate, however, and limited sharing of information or decision-making occurs outside the area of coordination.
- Cooperation: Entities have established policies and practices that involve ongoing exchange of information integrated into routine practice/business. They negotiate mutual roles and share resources to achieve joint goals. Collaborating organizations have shared interests, joint decision-making, and integrated efforts.
- Collaboration: Entities have engaged in shared planning and decision-making that is taken seriously in the business decisions of each entity, such that each entity is willing to change its practices to achieve a shared goal. Authority is vested in the group rather than in individuals or an individual agency.

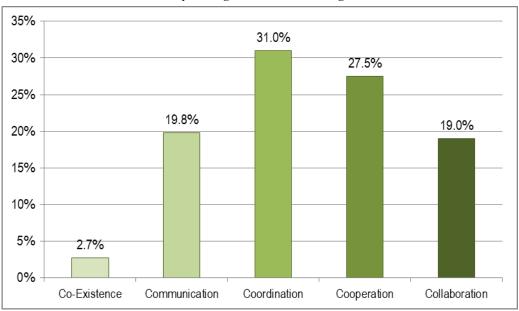




Figure 6.2 shows how survey respondents characterized the strength of the collaborative relationships with which they were involved. Although respondents might vary in their interpretation of the words in the five response categories, the fact well over three-quarters of respondents were involved in partnerships that went beyond "communication" is meaningful nonetheless.

Figure 6.2 Strength of Collaborative Relationships

The vast majority of respondents reported their collaborative had reached at least the coordination phase of collaboration, with almost 20% reporting their region's collaborative efforts having fully matured into shared planning and decision-making.



Source: BPA/UCSD Evaluation Team

Although respondents might vary in their interpretation of the words in the five response categories, it is nonetheless meaningful that well over three-quarters of respondents were involved in partnerships that went beyond "communication." Very few respondents considered their regional efforts still to be at the co-existence stage and almost one fifth considered their region to be at the highest level of collaboration.

Another way to look at these results is to collapse these five stages of collaboration into three simple levels of high, medium and low levels of collaboration:

- High -- "Full Collaboration Stage"
- Medium -- "Coordination or Collaboration Stage"
- Low "Co-Existence or Communication Stage"

Figure 6.3 shows significant variation across regions in how respondents perceived the level of collaboration achieved by or near the end of the Initiative. NCI, North Carolina had the fewest respondents who reported a low level of collaboration, and they are joined by Pennsylvania and

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Florida in having the largest percentage of respondents reporting a high level of collaboration in their regions.

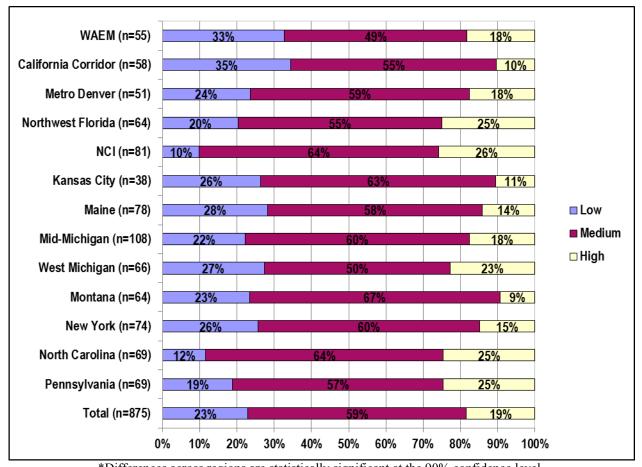


Figure 6.3
Stages of Collaboration Across Regions*

Figure 6.4 summarizes the level of collaboration across regions a little differently by showing the average score across respondents in the region. The results are fairly consistent with Figure 6.3, but are displayed here along a single scale. It is interesting to note that although the differences between regions are statistically significant, the actual range of variation in average scores is really quite small, ranging from 3.0 in California Innovation Corridor to 3.72 in North Carolina.



^{*}Differences across regions are statistically significant at the 90% confidence level.

Figure 6.4 Average Level of Collaboration Score Across Respondents by Region

Although Average respondents' ratings of collaboration ranged only from 3.0 to 3.72, the differences across regions were statistically significant and consistent with the percentages of respondents rating collaboration in their region at each leve.

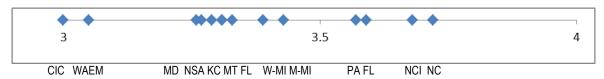
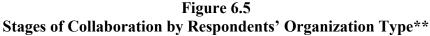


Figure 6.5 illustrates that respondents from business/industry and other government were most likely to believe that the initiative had achieved low levels of collaboration.



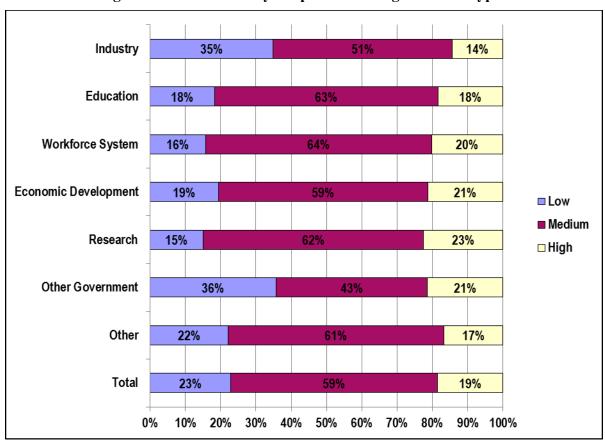




Figure 6.6 summarized how respondents from different echelons in the organization rate various aspects of their initiative. Overall, respondents from upper management were more positive about the region's progress.

Figure 6.6 Collaboration Success by Respondent's Organizational Role

Do you agree with the following statements about efforts to transform your region's economic competitiveness? [% yes]	N	Leaders, Strategists, Visionaries, Decision-Makers	Implementers, Managers, Administrators	Day-to-Day Staff	Total
My organization is benefiting from being involved in regional transformation efforts	881	93%	94%	95%	94%
The collaborative group includes a diverse range of stakeholders involved in many different aspects of regional transformation	848	92%	89%	92%	90%
My involvement (and/or that of my organization) in this collaborative effort is increasing over time	860	69%	68%	59%	67%
My organization has committed substantial resources to this collaborative effort	860	78%	78%	82%	79%
Significant cross-industry networks are developing in this region	851	81%	78%	77%	79%
Valuable cross-professional networks are developing in this region	850	90%	86%	89%	88%
Collaboration has resulted in leveraging new sources of funds beyond those used in the past for these kinds of efforts	849	76%	75%	70%	75%
I feel optimistic about our ability to improve the job skills of our regional workforce*	867	94%	92%	86%	92%
I feel optimistic about the future of our regional economy*	866	91%	88%	82%	88%

^{*} Differences between groups are significant at the 95% confidence level

In particular, Figure 6.7 illustrates that respondents who were involved in their initiative's leadership, or who helped implement regional projects, were significantly more likely to be optimistic about the future of the region and the grant's impact on the workforce development system. On average, a strong correlation existed between respondents' level of involvement in the Initiative and their rating of the initiative's success (r = 0.469).**





^{**} Differences between groups are significant at the 99% confidence level

Figure 6.7
Optimism by Respondent's Governance Role

Do you agree with the following statements about efforts to transform your region's economic competitiveness?	N	Part of formal leadership structure	Provide leadership for a sub-region or specific activity as part of WIRED	Not part of WIRED's formal leadership structure	Total
I feel optimistic about our ability to improve the job skills of our regional workforce*	872	96%	93%	89%	92%
I feel optimistic about the future of our regional economy*	872	92%	90%	84%	88%

^{*} Differences between groups are significant at the 95% confidence level

Workforce Development System Transformation

The Initiative's call for transformation of the workforce development system required a change in how government workforce agencies work in coordination with economic development and education agencies and with private industry in order to increase the size of the region's workforce and improve its quality. The focus of the transformed workforce development system needed to shift from "simply" providing a skilled workforce for local businesses and assisting individual workers to obtain existing jobs, to developing, in partnership with both the education and economic development systems, new jobs, as well as improved education and workforce preparation. Transformation of the workforce development system was complicated by the fact that the leadership and management of the Generation I regions largely came from organizations outside of the Department of Labor workforce development system; New York and Montana are the only initiatives led by a workforce system entity.

Evidence of workforce development system transformation in the Generation I regions may be found in the amplification of the public workforce system's reach and impact in most, if not all, of the regions, achieved through such means as creative partnerships with community colleges, universities, and training providers, increased integration with business and industry, integration of workforce development and economic development efforts, and the leveraging of private sector funds. A broader definition of the client base, and movement toward more flexible service areas, may be other indicators of workforce system transformation. Some efforts in the Generation I regions to achieve transformation of the workforce development system are discussed in the sections below.

Amplification of the Public Workforce System's Reach and Impact

In complex training arenas, such as cross-industry training or expansion into new training fields, integration of the workforce development system, the educational systems, and employers is critical. One important way the workforce system increased and enhanced its reach and impact





in Initiative-funded regions was through looking beyond the silos of the different agencies and funding streams, and developing creative and innovative partnerships with a wide variety of educational institutions, training providers and employers, for example:

- In the California Innovation Corridor, WIBs that included the North (Santa Clara) Valley WIB (NOVA) and the South Bay WIB partnered with community colleges and universities such as El Camino College and University of Santa Cruz Extension to address the needs of dislocated workers in the manufacturing sector and the IT, software, and aerospace industries.
- In Montana, the Initiative was credited with helping the workforce agency achieve "deeper penetration" into the region, primarily by broadening the network of training providers, businesses and other organizations that were at least aware of its presence, whether they were formal partners or not. Evaluation visit respondents reported that, under the Initiative, front-line workforce staff in the Job Service centers began looking more closely at training opportunities in community colleges and four-year colleges, and developed a better understanding of the linkages between industry and training. The Initiative also "deeply influenced" the thinking and actions of staff in the partner organizations, including community colleges and tribal organizations, with regard to working integrally with a wider range of actors.
- Stakeholders in the Metro Denver region described certain workforce centers in the region as places of vision and creativity where Initiative involvement and funds were changing the way centers serve their clients and interact with educational and industry partners. In the Tri-County Workforce Region, for example, new partnerships with the Colorado Association for Manufacturing and Technology (CAMT), 8th Continent, and the International Center for Appropriate and Sustainable Technology (iCAST), and an enhanced partnership with Red Rocks Community College, had resulted in the provision of "outstanding" training products and services to support the needs of the regional, state, and national economies.

Expanding the Definition of "Client Base"

Public workforce agencies in some of the Generation I regions took advantage of the availability of Initiative funds – and their flexibility with regard to program eligibility – to expand their reach to individuals not previously engaged in the workforce development system. Key partners in Kansas City, for example, had a specific goal of bringing new people into the AJCs, which they tried to accomplish by increasing public awareness of the overall workforce development system, especially the benefit of the training and vocational certificates. Other regions expanded their concept of who their business clients were; instead of simply seeing the businesses in the region as potential employers of the workers who were AJC clients, they looked at ways to provide more, and more different types of, employers with services designed to create jobs and grow the regional economy. Examples of how the workforce development systems in the Generation I regions worked to define their client base more broadly are:

• In CIC, there has been a shift in focus in the workforce development system to concentrate more on dislocated white-collar workers, and assist them in "repurposing" their skills for the current – and future – job market. According to a number of respondents, the Initiative opened the eyes of many in the workforce system to the existence of a wider constituency and the need to expand services to this constituency. In addition, it was noted that San Diego's program for displaced white-collar workers would not have existed without its championing





by an individual who had been brought into the system through the Initiative and who, with key project staff, had worked to institutionalize many of the concepts and goals of the Initiative.

- In NCI, the Work One Center operator of the Regional Workforce Board, the Tecumseh Area Partnership (TAP), supported the creation of Regional Employment and Assessment Centers for Hiring (REACH) program with the Initiative funds. The two REACH centers established by TAP serve a back office human resources function for "premium" employers in the region, offering such services as WorkKeys assessments, background and reference checks, and drug screening. Regional Business Consultants at the REACH Centers provide assistance in connecting employers to resources in the workforce system, including a regional business retention and expansion system.
- One purpose of West Michigan's TEAM Program was to recruit employers who would hire ex-offenders who participated in the region's transitional employment program for this population.

Movement toward More Flexible Service Areas

In many of the regions, "thinking regionally" meant that the many WIBs and other entities in the workforce development system needed to think not only what was taking place within their own boundaries, but what needed to be done in different parts of a larger and/or more spread-out geography of the region as well. Many WIBs and AJCs became more flexible in defining what their service areas included. One strategy for dealing with a more spread-out geographic area was to develop alternative forms of service delivery, particularly distance learning. Some examples of these efforts are:

- The Initiative helped take Montana's workforce development system beyond the grant-funded portions of the state to consider much larger regions with similar needs. For example, although it's not "WIRED territory," the workforce development agency is now thinking in terms of the wind potential of the entire Rocky Mountain front region with regard to developing wind power-related skills.
- The Florida region used initiative funds to expand its use of Mobile AJCs, increasing access to workforce services in rural areas.

Economic Development System Transformation

An important aspect of the Initiative's vision to transform regional economies and improve America's competitiveness in the global economy was the transformation of the economic development systems in the Generation I regions. Historically, most, if not all, of the Generation I regions defined economic development as business attraction and relocation. In particular, everyone "knew" that the way to create new jobs was to bring new business to the area. Such economic development efforts depended heavily on incentives such as tax breaks, or free or low-cost use of land or business amenities in the region. However, in recent years, those involved in economic development have come to realize that the factor most valued by companies engaged in site selection is the presence of a skilled workforce. A region's economic success in business





attraction thus depends on its ability to produce and retain, through its education and workforce development programs, a sufficiently large, high-quality workforce.

In addition to business attraction, economic development organizations in some Generation I regions, such as Florida, New York, and Mid-Michigan, placed an emphasis on investing Initiative funds in existing businesses, in order to build the economic capacity of the region overall and, in some cases, provide assistance to individual business concerns in need of financial support or technical assistance. Traditional industrial regions such as Mid-Michigan and New York understood that they had a solid foundation or "heritage" on which to build, which remained strong even in the context of declining income and economic security. Often, economic development entities in these regions strove to transform the regional economy by supporting existing businesses in diversifying their products into related industries or expanding their customer base though regional, or even global, marketing strategies.

As described in the sections that follow, indicators of economic development system transformation in the Generation I regions include: increased regional focus; increased importance of workforce development as important partners; and increased partnership with community colleges and universities.

Increased Regional Focus

Even if a strong regional identity existed prior to the Initiative, most Initiative stakeholders recognized that regional collaboration was key to achieving economic transformation. By focusing on the region as a whole, and operating according to a shared (if not always perfectly clear) vision of what economic transformation might look like, the Initiative's different economic development partners could work together to advance solutions to concerns affecting the wider area while at the same time continuing to take advantage of their own local strengths and opportunities. Most of the Generation I regions took specific steps to increase the regional focus of their economic development systems; a few examples of these efforts are:

- With "WAEM Town," The Montgomery Institute (TMI), the economic development organization that was the grantee for the West Alabama-East Mississippi region, took a regional approach to building local leadership and strengthening economic development efforts in the many small towns in the region. Building on Mississippi Main Street, a design and planning program that uses Charettes an economic development tool used for uncovering tangible information about local assets and Your Town Alabama, a project of the University of Alabama that provides local communities with training in how to do Charettes, TMI held WAEM Town retreats and trainings for the region's local elected officials, city planners, partner community colleges, and Indian tribes. With Initiative funding, TMI assisted eight communities in Alabama and 14 in Mississippi to do Charettes. The WAEM Town training effort will be sustained by the Community Action Team at Mississippi State University.
- With the collapse of the financial services industry and Wall Street, Pennsylvania began to
 look at expanding its vision from a "laser-like focus" on the specific financial services model
 it had developed to achieve its economic development goals for the region to a broader view
 of the region's overall economic prospects. Pennsylvania hoped to maintain its education and
 training investments in the financial services workforce and position itself for the "eventuality





of improvement in the financial sector," and at the same time, make new investments in skills training that was transferable to related industries across the region. The region began to invest grant funds to prepare people to work not only in financial services but in transportation, logistics, health care, and computer and technology fields.

- North Carolina's goal in bringing together the movers and shakers in the region in the North Carolina Leadership Institute (PTLI) was to change "the behavior, relationships, activities, and actions of the people, groups, and organizations that comprise key components of the regional economic development system." Leadership in this regional economic development system identified three priority projects to support and promote, each of which had a strong presence in one of the region's major cities: an aerotropolis cluster in Greensboro; a furnishings cluster in High Point; and a life sciences cluster in Winston-Salem. The region successfully leveraged private dollars for these priority projects to replace grant funds, signaling strong support from the business community for collaborative activities to increase the region's economic competitiveness. (It should be noted that, the future of the Creative Arts and Advanced Manufacturing clusters was not yet clear at the time of the final site visit; respondents expressed their hope of "latching onto" the three priority projects where possible, rather than trying to sustain their project effort on their own).
- Interview respondents repeatedly noted that business owners in Maine are traditionally very
 independent, and had never seen the value of regional collaboration in the past, but that NSAI
 helped transform this attitude to a great extent. Industry liaisons noted, for example, that
 there was now increased cross-regional and within-industry integration as well as sharing of
 information about regional economic prospects.
- Metro Denver's focus on supporting workforce needs in the bioscience industry engaged industry and educational partners throughout the region. It also brought Metro Denver into contact with the Utah Generation III Initiative region, and, because the two regions have a similar understanding of the Initiative's cross-sector, integrative approach to workforce and economic development, they were exploring ways to generate new grant projects and continue collaboration after the grant funding ended.

Increased Importance of Workforce Development Partners

The partnerships and relationships developed through the Initiative were frequently crucial in changing how actors in the Generation I regions' economic development systems thought about how to make economic transformation happen. Seen as especially important – and effective – in most of the regions were the Initiative's partners in the workforce development system. The efforts of these partners focused on developing and maintaining a high-quality workforce, the presence of which could catalyze economic development and "attract new business without just throwing money at it," which served to convince many individuals and organizations involved in economic development that the public workforce development system played a central role in transformation of the economic system. In addition, Initiative-facilitated partnerships with the workforce development system often provided a region's economic development agencies with many new opportunities for leveraging support and capital for business growth. Following are examples of instances where transformation of the economic development system was beginning to come about through partnerships with the workforce development system:





- During the grant period, the state of North Carolina issued an RFP for regional collaboration, and received responses from six regional groups across the state; all but six Workforce Development Boards (WDBs) in the state were part of a regional grouping. Part of the Memorandum of Agreement was that at least one economic development partner needed to be included. According to one respondent, the challenge for these regional collaboratives was not only how to build a regional structure, but how to make decisions on a regional basis, and how to speak with one voice when necessary.
- Although significantly challenged with regard to its economic development goals, Pennsylvania has, as a result of the Initiative, recognized the connection between investment in training (workforce development) and job creation and business attraction (economic development). The belief now is that the region will be in a stronger position if they have a trained workforce, or "short term investments for long term dividends."

Increased Partnership with Community Colleges and Universities

For all of the Generation I regions, the Initiative's goal of improved American competitiveness in the global economy meant that more – and more effective – partnerships with educational institutions that had the capacity to train and educate the 21st century workforce was of the utmost importance. Examples of partnerships between the regions' economic development organizations and each region's community colleges and universities are:

- WAEM Town in the West Alabama-East Mississippi region was developed in conjunction with the Center for Economic Development at University of Alabama (which developed Your Town Alabama), Auburn University, Mississippi Main Street, a design and planning program that uses Charettes, and First Impressions, an economic development program of the Community Action Team at Mississippi State that is based on historic preservation. The Mississippi State team will sustain WAEM Town as it "morphs into Your Town Mississippi" and continues to coordinate with Your Town Alabama.
- A key goal of the Mid-Michigan Innovation Team (MMIT) was economic development through the diversification of the Mid-Michigan economy. In addition to requiring what some respondents called a "cultural transformation" to a more entrepreneurial mindset, achieving this goal necessitated new and increased partnerships with community colleges and universities to provide programs to train workers in design, manufacturing, and servicing skills that were transferable to non-automotive industries and to provide training and technical assistance in entrepreneurship and customer/market diversification. With Initiative funds, MMIT made grants to such programs as Saginaw Valley State University's Center for Entrepreneurship, Mott Community College, and Lansing Community College, which are continuing with fund from the educational institutions themselves.
- North Carolina's University Transformation Team (UTT), a collaborative effort of the presidents and chancellors of the 11 four-year colleges and universities in the North Carolina region, provides an institutional home for the ideas begun under the Initiative. The idea of and vision for bringing together the region's colleges and universities behind an organizing, focused economic development effort came from the Piedmont Triad Partnership. The UTT initiative has two major goals: to create meaningful economic development and entrepreneurial opportunities in the region and to provide a platform for institutions of higher education to collaborate. UNC campuses include UNC-Greensboro, North Carolina A&T,

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and Winston-Salem State. Private universities, such as Wake Forest, Elon and High Point, and colleges, such as Guilford, Greensboro, Salem, and Bennett, are also participating in the efforts. The Presidents and Chancellors chose to focus the UTT initiative on design and innovation in developing the creative enterprise cluster in the North Carolina, which employs 22,356 creative workers.

Transformation of the Post-Secondary Education System

It has become increasingly obvious in recent years that community colleges, four-year colleges and universities, and other post-secondary institutions have an important role to play in improving America's competitiveness in the global economy. Additionally, it has become clear that this role is regional in nature, and that regional collaboration is essential to transforming the post-secondary education system so it can meet the demands for a high-quality workforce, i.e., one that is both well-trained and well-educated. For a number of reasons, including the size and coverage areas of community college districts as well as the way state or local educational assets may be distributed, many communities lack the capacity to meet the training and education demands of the 21st century economy on their own. Furthermore, economic development now tends to take place in industry or occupational clusters that do not necessarily correspond to the geographic boundaries of a community college district or even a state university. Approaching training through a regional approach, and leveraging funding through partnerships, can greatly expand access to education and increase the training capacity of the partner institutions.

The beginnings of transformation of the post-secondary education system in the Generation I regions may be seen in the strengthening of such regional partnerships, including more integration – and less competition – among community colleges, and an increased number of partnering arrangements with employers and industry. The regions showed other early signs of system transformation as well, such as more emphasis on lifelong learning and career ladder training; more flexibility in scheduling (away from only semester-long courses); and the provision by community colleges of training (or re-training) for higher skill levels. These indicators of transformation in the post-secondary education system are described below.

Increased Integration among Community Colleges

Taking a regional approach to economic transformation required a shift in thinking for many of the community colleges in the Generation I regions, as such an approach was counter to the way most of them had worked in the past, with their focus on their own local economies and their own jurisdictional boundaries. However, many of the community and technical colleges in Initiative-funded partnerships recognized that not only could they access more and better resources when integrating with other institutions, they also were themselves well-positioned to address local needs that had been placed within a regional context by a the regional group.

In addition to informal arrangements, formal agreements, including articulation agreements, between schools not only provided an effective mechanism for student transitions from one educational institution to another, but also helped distribute educational assets more efficiently across institutions and reduce competition for resources. For example, with Memoranda of Understanding and other formal agreements, regional resources may be allocated across





institutions in the region that share a vision for transformation of the educational system. Examples include:

• The WAEM Alliance of the eight grant-funded community college districts provided a mechanism not only for collaboration during the grant period but also a platform for sustainability, especially with administration of the Modern Multi-skill Manufacturing (M3) Credential. To establish the WAEM Alliance, a Memorandum of Agreement was signed by TMI; Alabama Southern Community College, Bevill State Community College, Shelton State Community College, and Wallace Community College in the State of Alabama; and East Central Community College, East Mississippi Community College, Jones County Junior College, and Meridian Community College in the State of Mississippi.

Increased Working with Employers and Industry

Partnering arrangements between the post-secondary educational system and employers are also crucial to regional economic transformation, not only because business and industry rely on having the kind of high-quality workforce that can be developed through high-quality education and training, but because the involvement of post-secondary institutions extends education and workforce preparation into higher skill – and higher growth – areas of economic development. An additional benefit of such partnerships is that they can help expand the training capacity of educational institutions. For example, in some regions where colleges didn't have all the faculty they needed to teach specific skills, Initiative partners invested in teaching industry partners to become the faculty for the educational programs. Other examples of instances of increased working with employers are:

- Metro Denver attributed to the Initiative their success of training hundreds of educators who could bring real-world applications into the classroom. According to one respondent, this investment in educators "led to tens of thousands of students who will better understand the relevance of their classroom work and, as a result, will be more prepared for their future in the workforce."
- In Coastal Maine, the Boat School became accredited through the American Boat and Yacht Council (ABYC), and rolled out a 12-week Master Composite Repair and Construction training program to fast-track students into composite careers. This partnership with ABYC was especially useful when the Landing School had a staffing shortage and couldn't do training and ABYC stepped in to offer introductory classes as well as certification classes.

Stronger Emphasis on Lifelong Learning and Career Ladder Training

Even in the recent past, it was possible for an individual with a high school diploma or even less to find a job as a skilled or unskilled worker and earn enough to support a family and have a reasonable quality of life. Those jobs have now largely disappeared, and the ones that remain tend to be low-paying, with little opportunity for advancement or increased income. Career ladder training programs and opportunities for lifelong learning provided through grant-funded initiatives offer workers the chance to move up from low-paying and entry-level jobs, and achieve jobs that allow a decent standard of living for most people. In addition, in some regions, Initiative-funded educational programs focused on re-training workers with advanced skills to enter jobs in high-value, high-wage occupations that require a significant level of education and skills training. For example:





- The Nursing Program at Lansing Community College (LCC) in the Mid-Michigan region received grant funding from MMIT for an accelerated nursing Associate degree program for individuals with a B.A. in any subject, the first and only accelerated program in the state. The program is laddered, allowing students to take the LPN exam at the end of four quarters so that they can obtain employment as an LPN if they do not get a job right away as an RN: "You always have that license." LCC established an additional laddered program with Initiative funding, the Preceptor Program, to provide scholarships to practicing nurses to obtain a B.A. degree, qualifying them to teach classes in the A.A. degree program. LCC is continuing the accelerated nursing track and the preceptor program with college funds; additionally, students in the nursing program can get funds from Michigan Works!, the state workforce development system.
- In West Michigan, the Health Care Regional Skills Alliance (RSA) an alliance of five Michigan Works! agencies and WIBs to align training systems with the requirements of the health care industry identified strategies to meet employer needs in six key occupations and initiated a career ladder program between Montcalm Community College and Ferris State University for nursing students to move seamlessly from an Associate degree to Bachelor of Science degree in nursing.
- In the State of Maine, Lifelong Learning Accounts (LiLAs) are individual investment accounts administered by Maine Career Centers that are designed to enable working adults, with help from their employers in the form of matching funds, to finance higher education, skills development, and lifelong learning. In addition to supporting development of technical curricula in higher education and offering supplemental funding for apprenticeships and OJT programs, the training grants provided by NSAI in Coastal Maine (which constituted approximately 80 percent of the region's initiative-funded contracts) were used to subsidize employers' contributions to the state's LILAs.

Increased Flexibility in Scheduling

A major challenge to the existing post-secondary educational institutions setting up training programs for business and industry is that the traditional semester-based training at most such institutions limits their ability to build and deliver training modules on the timeline industry wants and needs. A number of the Generation I regions were able to use Initiative funds to develop programs at post-secondary institutions in their region that offered increased schedule flexibility within the existing system, for example:

- In Coastal Maine, the schedule for all grant-funded training was based on when workers could attend. For example, the Landing School organized a train-the-trainers program to certify incumbent workers as trainers who could offer training on-site at their companies to minimize disruption of workers' lives and companies' production schedules.
- In the California Corridor, the Dislocated Software Specialists project established a program of short-term courses to retrain dislocated software engineers for IT positions in the aerospace industry. Developed by the California Space Authority and NOVA, the North (Santa Clara) Valley WIB, this project created a certification program designed to ease employees' transition from the IT industry into aerospace and assure employers that graduates of the program were qualified for employment in their industry. University of Santa Cruz Extension

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delivered coursework for "Software Development for Aerospace/Defense Applications" in two short-term cohort sessions.

• In Montana, the flexibility of initiative funding meant that not only was it possible for the partner community colleges to offer a variety of short-term training programs, but also provide longer-term training than was allowed with WIA funds. In addition, both the short-and long-term training programs were flexible enough so that training modules could be delivered either on-site or via distance learning.

Training/Retraining by Community Colleges for Higher Skill Levels

- In CIC, the California Space Authority, Antelope Valley Community College, El Camino Community Colleges, and other supply chain project partners developed "Introduction to Supply Chain Management," a seminar designed to improve the international competitiveness of California's supply chain by aiding suppliers in developing knowledge of the theoretical principles and the skills necessary to address the global manufacturing transformation.
- In Florida Initiative partnerships with community colleges and universities resulted in more certifications and college degrees in higher skill areas; more students having higher level skills, increased awareness of higher-level skills in the business community.

Employment Outcomes

ETA developed the Initiative's Accountability Framework⁵⁷ early in 2007 to provide guidance to regions on how measuring their success. The goal of the framework was to ensure that the grantees systematically captured their initiative's results and outcomes – both quantitative and qualitative – as well as any information that would demonstrate their achievements and the value of their regional strategies to stakeholders. This section discusses the three components of the Framework:

- 1. The ETA Common Measures;
- 2. Initiative and region-specific metrics; and
- 3. The Initiative evaluation, of which this report is a part. The additional source of quantitative data for this study was participant demographics, service use, and outcomes from the Workforce Investment Act Standard Record Data (WIASRD).

Common Measures

In partnership with the Office of Management and Budget (OMB), ETA designed the Common Measures to provide a singular definition for key outcome measures for over 40 Federally funded employment programs. The value of these measures is their ability to describe each region's achievement of the core purposes of Federal workforce investments, i.e., how many people find jobs, whether they remain employed, and how much they earn. The Common Measures served

⁵⁷ U.S. Department of Labor, Employment and Training Administration. "WIRED Performance Reporting – Implementing Your Regional Accountability Framework (Generation I and II Grantees)," Memorandum to WIRED Regions, April 27, 2007.





as outcome metrics for the regions' talent development goals. ETA acknowledged that the common measures are the conclusion of the "regional transformation success story" and not the beginning, nevertheless examining these metrics is important because they allow for comparability across programs, which is why ETA uses them when monitoring all of its grants.

The Common Measures include data items for both adult and youth programs, however, because very few of the regions formally served youth, this discussion will focus on the three measures for programs serving adults:

- Entered employment;
- Employment retention; and
- Average quarterly earnings.

Unfortunately, very few of the Generation I initiatives included the Common Measures in their quarterly metrics. As Figure 6.8 indicates, four regions (WAEM, Maine, New York, and North Carolina) reported these measures in their final reports. Only North Carolina reported average quarterly earnings, but the results for all of this region's measures were cumulative for previous quarters, not through the end of the grant. Staff from one region pointed out the complication of calculating the employment retention rate when many initiative participants were incumbent workers.

Several factors may contribute to the lack of Common Measures data. First, in order for the initiative or its workforce development partners to access Unemployment Insurance (UI) wage records to obtain the data needed to calculate the measures, the initiative and/or its partners must collect Social Security Numbers (SSNs) from participants. Not all local WIBs – and certainly not all training providers – gather this information because of concerns about the confidentiality of their participants' personal information.

Figure 6.8
Common Measure Results for Generation I Regions

Region	Entered Employment	Retained Employment 12 Months	Average Quarterly Earnings
WAEM	64%	N/A	N/A
Maine	59%	55%	N/A
New York	93%	96.8%	N/A
North Carolina ^a	82.2%	90.7%	\$12,738

^a Figures are for previous quarters, not for total through end of grant

Second, because employers may submit wage records up to three months after the end of a quarter, a significant time lag is usually involved in accessing the UI wage records. Several of





the regions noted that this was the reason that they had not provided data on the Common Measures in some of their quarterly reports.

Third, whether a state or local workforce agency is assisting the initiative in accessing the needed data, the region would need to make special arrangements with the agency. Most state workforce agencies calculate the Common Measures only for the state as a whole and for local workforce areas. Similarly, local WIBs may calculate these metrics for their own local workforce areas, but most of the Generation I initiatives have a footprint that is larger than the geographic area for which a single WIB is responsible. In either case, calculating the Common Measures for the region is a separate step from what the workforce agency usually does.

Finally, a number of the regional managers disliked the fact that the Common Measures were not designed to adequately capture information on the Initiative's networking strategies, or about training for entrepreneurs. Many entrepreneurs start out as self-employed, and thus their wage information would not be included in the UI wage records.

Initiative Metrics

The Accountability Framework presented a set of performance measures for the grantees to use in their quarterly reporting, which ETA included in an "Addendum" to its regular grantee quarterly reporting format. This spreadsheet provided a template for the regions to report on the three categories of Initiative metrics: education and training, capacity-building, and economic indicators. In addition to the performance measures from the Accountability Framework, the metrics template included space within each of the three categories for regions to identify their own measures of progress.

Site visit respondents made several observations about the metrics and the process by which they were implemented. They suggest that both the metrics themselves and related communications from ETA affected the consistency and quality of the data that the regions provided. For example:

- ETA suggested that the grantees use the Initiative metrics, but did not require that the regions use these measures.
- ETA introduced the metrics a year after the grants started, and many regions thought that the metrics did not address the type of work they were doing at all.
- ETA encouraged the regions to define and adopt region-specific metrics to tell their story and to complement information gathered via the suggested metric framework. Each region uses additional measures to document their progress usually the measures included in their grant proposals and implementation plans. Some initiatives used their own metrics exclusively.

The remainder of this section describes the Generation I initiatives' results for the three categories of metrics.

<u>Education and Training Measures</u>. This category of data items includes the number of participants who: a) enrolled and b) completed workforce education or training programs using Initiative funds; attained degrees, certificates, or credentials as a result of the Initiative's workforce training; completed Initiative-funded training and obtained employment in target





industries; and the region's total investment in worker training and incumbent worker training. Figure 6.9 shows the results that the regions reported for these measures through the end of the grant period in 2010.

Across all 13 regions, 89,419 individuals enrolled in education or training programs using Initiative funds. Enrollment by region ranged from 1,638 (West Michigan) to 25,351 (NCI) participants. The figure also indicates whether the initiative succeeded in meeting its enrollment goal with the proportion of the enrollment target that the number of participants represented. Not all regions set enrollment targets, however, so this data item is unavailable for five grantees (Kansas City, West Michigan, Montana, New York, and North Carolina). Only one grantee (WAEM, 81%) did not meet its enrollment goal, while the remaining seven regions exceeded their targeted enrollments. NCI enrolled 289% of its target, the highest rate among the Generation I regions.

Over 75,000 participants completed training, representing 84% of those who enrolled in an Initiative education or training program. ⁵⁸ By region, the number of trainees who completed training ranged from 692 (California Corridor) to 16,355 (NCI). Completion rates by region ranged from 39% in Florida to 100% in Maine and New York. New York's completion rate is actually somewhat less than 100% because its actual number of enrollments was unknown.

Across all of the Generation I regions, 68,085 Initiative participants attained a degree, certificate, or credential. This measure had the widest range of numbers achieving this outcome, with New York having six certified participants while West Michigan had almost 25,000. These figures highlight the inconsistency in reporting across the 13 regions. Given the variety of approaches that the initiatives used, ETA was reluctant to define the data items included in the Initiative metrics. As a result, different regions counted participants in different ways. The section below that covers findings from the WIASRD data discusses this in more detail.

A total of 14,855 graduates of Initiative-funded training obtained jobs in their target industry (and presumably related to the training they received). This represents 20% of those that completed training. NCI had the most program graduates (3,361) enter training-related employment, and WAEM had the fewest (4). The rate of graduates entering work in the region's target industry varied from 91% in Maine, to zero in WAEM. These findings reflect the fact that the majority of trainees in Maine were incumbent workers who already worked in the target industry. WAEM, on the other hand, experienced a number of challenges during its start-up phase, and lagged behind the other regions in implementing its training activities.

The Initiative metrics template asked regions to report the total grant dollars used for incumbent worker training. Many of the regions also provided information on the amount they spent on training overall, either in their budgets or in quarterly report narratives. Because this data item was not a standard part of the metrics reporting format, the figures shown in Table 6.9 are likely to undercount funds dedicated to training overall. The initiatives allocated an estimated \$58 million toward worker training. By region, NCI spent the most, a total of \$7.7 million. The regions reported spending over \$73.5 million on incumbent worker training, with North Carolina spending the least (\$239,704) and Kansas City the most (\$34 million).

⁵⁸ Table C.4 in Appendix C shows how well each region met its training completion target





Figure 6.9
Generation I Education and Training Metrics Results by Region, Cumulative Through 2010^a

	# Enro Educa Training Initiative	ition/ Using	# Com Educa /Training Initiative	ation g Using e Funds	# Atta Deg Certific Crede Using In Fund	ree, cate, or ential nitiative	Entere	ained & d Jobs in Industry	Total Grant	Total Grant \$ Used for
Region	Total	% of Target	Total	% Enroll ed	Total	% of Target	Total	% Complet ers	\$ Used for Worker Training	Incumbent Worker Training
WAEM	4,275	81%	2,516	59%	11,740	467%	4	0%	\$4,128,412	\$2,613,382
California Corridor	1,687	125%	692	41%	63	9%	561	81%	\$1,000,000+	\$1,000,000+
Metro Denver ⁵⁹	3,537	147%	2,883	82%	2,443	85%	703	24%	\$6,964,705	\$954,071
Florida	7,468	159%	2,949	39%	2,317	157%	1,876	64%	\$7,596,060	\$638,957
NCI ⁶⁰	25,351	289%	16,355	65%	1,860	11%	3,631	22%	\$7,686,327	\$1,428,520
Kansas City ⁶¹	14,693	N/A	13,839	94%	266	1%	374	3%	\$4,244,535	\$33,958,917
Maine	1,871	120%	1,864	100%	1,423	76%	1,696	91%	\$3,665,000	\$2,334,000
Mid-Michigan ⁶²	4,675	263%	4,498	96%	20,828	463%	2,319	52%	N/A	\$9,180,624
West Michigan	1,638	N/A	1,437	88%	24,839	1729 %	109	8%	\$5,040,379	N/A
Montana ⁶³	4,926	N/A	3,618	73%	1,510	42%	940	26%	\$7,493,344	\$4,408,001
New York	11,584+	N/A	11,584	100%	6	0%	2,271	20%	\$6,100,000	\$7,750,423
North Carolina ⁶⁴	4,416	N/A	3,269	74%	721	22%	328	10%	\$3,949,752	\$239,704
Pennsylvania ⁶⁵	3,298	220%	1,725	52%	69	7%	43	2%	\$3,360,000	\$9,000,000
Total	89,419	N/A	75,374	84%	68,085	86%	14,855	20%	\$57,871,874	\$73,506,599

^aSource: WIRED grantee final reports

⁷ Wall Street West grant funds spent on training were estimated and may not represent actual total.





^{**} The number of certifications may exceed the number enrolled because programs often did not enroll individuals who obtained WorkKey certificates through the grant.

¹ Denver grant funds spent on training were estimated and may not represent actual total.

² NCI grant funds spent on training were estimated and may not represent actual total.

³ Kansas City metrics were calculated by adding up sections of the region's narrative report; the figures are likely to underestimate the actual totals. Enrollment and certification goals for Kansas City metrics were not available.

⁴ Mid-Michigan metrics were calculated by adding up the figures from the region's quarterly metrics report and may underestimate the actual totals.

⁵ Enrollment goal for Montana metrics was not available.

⁶ Enrollment goal for Piedmont Triad metrics was not available. Grant funds spent on training were estimated and may not represent actual total.

As indicated in the table, not all regions specified a target number for their training and employment measures. Among the grantees that did, the regions themselves determined their targets and, the proportion of target achieved reflects the initiatives' performances relative to their internal goals and expectations rather than a comparison of performance amongst the regions.

Capacity-Building Measures

Figure 6.10 presents findings for measures reflecting the degree to which the initiatives increased the capacity of their partner organizations to improve the skills of the region's workforce. These measures include:

- Number of educators prepared for instruction in identified industries, along with the projected number of additional students that will be trained annually as a result;
- New curriculum developed, and the projected number of additional students to be trained annually as a result;
- Work-based strategies developed or implemented (clinical experiences, internships, etc.), and the number of additional students projected to be trained annually as a result;
- Career guidance strategies developed or implemented, and the number of additional students projected to be trained annually as a result; and
- Instructional equipment purchased with grant funds, and the projected number of additional students to be trained annually as a result.

The Generation I regions were less consistent in reporting their achievement on the capacitybuilding metrics than they were in reporting employment related outcomes. Two regions provided no data at all on this set of items. As indicated by Table 6.11, Pennsylvania (9,271) and Kansas City (5,504) reported the largest number of educators prepared to teach curricula related to STEM or the target industries, and the 11 regions that had this data trained a total of 18,278 teachers. Seven initiatives estimated that 173,015 would benefit from the teacher preparation that the regions provided. Conversely, Metro Denver (18,056), North Carolina (15,315), and Pennsylvania (130,978) reported the highest number of students projected to be trained annually as a result. 491 new curricula were developed, with Mid-Michigan reporting the highest number with 242 new curricula. The projected number of students to be trained annually as a result of new curricula is 11,633. The regions developed or implemented 1,226 work-based strategies, with Metro Denver and West Michigan constituting 80.6% of those efforts; the resulting number of students trained is estimated to be 3,553, each region projecting between 51 and 1,600 students trained as a result. California Corridor developed or implemented 46 of the 82 total career guidance strategies; the projected number of students trained annually as a result of all career guidance strategies is 4,090. Lastly, the total value of instructional equipment purchased is \$2.2 million, with the students trained annually as a result estimated to be 11,596.

As Figure 6.10 illustrates, the total calculations may be an underestimate of both the extent of the activities developed or implemented for the following reasons:





Figure 6.10 Capacity-Building Metrics Results by Region, Cumulative Through 2010 $^{\rm a}$

Region	# Educators Prepared to Teach in identified industries	Projected <u># Students</u> to be Trained Annually as a Result	# New Curricula Developed	Projected # Students to be Trained Annually as a Result	# Work-Based Strategies Developed/ Implemented	Projected <u># Students</u> to be Trained Annually as a Result	# Career Guidance Strategies Developed/ Implemented	Projected <u># Students</u> to be Trained Annually as a Result	Instructional Equipment Purchased with WIRED Funds	Projected # Students to be Trained Annually as a Result
WAEM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
California Corridor	279	N/A	9	N/A	55	805+	46	1,500+	N/A	N/A
Metro Denver	532	18,056	53	2,852	488	334	11	2,445	\$26,329	N/A
Florida	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCI	405	3,542	51	3,812	51	51	2	N/A	\$97,800	9,749
Kansas City	5,504	N/A	12	N/A	110	1,600	1	N/A	\$214,714	N/A
Maine	127	3,175	5	674	10	N/A	9	N/A	\$479,000	N/A
Mid-Michigan	214	100	242	N/A	10	N/A	N/A	N/A	N/A	N/A
West Michigan	501	N/A	3	2,300	500	500	N/A	N/A	N/A	N/A
Montana	634	1,849	101	1,275	N/A	N/A	N/A	N/A	\$1,425,092	1,447
New York	68	N/A	N/A	N/A	1	163	9	145	N/A	N/A
North Carolina	743	15,315	15	720+	1	100	4	N/A	3 pieces	600
Pennsylvania	9,271	130,978	36	N/A	143	N/A	4	N/A	N/A	N/A
TOTAL	18,278	173,015	527	10,913	1,369	2,748	86	\$,590	\$2,242,935	11,796

^aSource: WIRED grantee final reports





- 1. Two regions (WAEM and Florida) did not report data for any of the metrics, and none of the grantees provided data for all of the measures.
- 2. Some of the measures were open to interpretation and grantees sometimes supplied unexpected answers. For example, one of the last capacity-building measures was "Instructional Equipment Purchased with WIRED Funds and Projected Number of Additional Students That Will Be Trained Annually as a Result." While the five other initiatives that provided data for this question submitted the dollar amounts they invested, North Carolina's answer was three items. Without further clarification of what was being measured, both types of answers were correct.

This table summarized grantee-reported information on the capacity-building efforts initiatives undertook with WIRED funds and their estimates of the number of students to be impacted by these activities. With missing data and variability in how grantees responded to the measures, the results presented in Figure 6.10 only approximate their capacity-building efforts and influence.

Region-Defined Measures of Progress

The Generation I regions used the ETA's Progress Report Template for the Initiative as the major building block in developing their own systems of metrics. Many regions created their own metrics at the beginning of the grant as part of the implementation plans that they submitted to ETA for approval. Because the measures were unique to each region, they are not easy to summarize in a single chart. Appendix D, however, includes example measures from six initiatives, including WAEM, California Corridor, Maine, Montana, New York, and Pennsylvania. This section discusses examples of the grantee's distinctive measures of progress, including those that reflect specific activities in each region, and those that track achievement of the regions' specific goals.

Outcome Measures Reflecting Region-Specific Activities

Most regions did not go substantially beyond the standard items in the WIRED Progress Report Template, but they did track and report outcomes separately for each major category of activity – such as worker skills development, entrepreneurial training, secondary and post-secondary education, support for innovations, and incumbent worker training. Accordingly, regions tailored some individual outcome measures to fit the type of activity in question. For example:

- For West Michigan's "Restoring Lives Recycling Resources" program, outcomes included the numbers of ex-offenders enrolled, completing, entering jobs, and receiving green jobs training certificates.
- Several regions measured entrepreneurial outcomes as well as training activity. Pennsylvania reported on the total number of new patents, new seed or venture capital investments, and new government investments (se Appendix D.6). Similarly, North Carolina reported the number of SBIR applications submitted. Mid-Michigan tracked not only the number of participants enrolled in entrepreneurial training in community colleges, but also the number





attending angel investor training (using the Kauffman curriculum) with the goal of enabling creation of locally-based investment group. NCI reported not only on the number receiving angel investor training, but on the number of angel investments made.

- Maine tracked a several different types of measures reflecting different aspects of its initiative (see Appendix D.3). Reflecting the region's close ties with the AEWC, a world class composites R&D lab at the University of Maine, the program reported the number of patent applications that partners submitted as well as the number of patents granted. Maine also tracked the region's total investment in new hire training, as well as the amount and source of leveraged funds.
- New York' incumbent worker program was one of the region's hallmark achievements. The region tracked the number of employers and workers participating in each target industry, the grant funds invested, and the matching funds that employers invested (see Appendix D.5).
- Several regions included WorkKeys/CRC as part of their workforce or education
 programming and, in various ways, kept track of the results associated with WorkKeys.
 Mid-Michigan reported the number of high school seniors earning National Career Readiness
 Certificates. WAEM measured the system's use in the state workforce system. North
 Carolina measured its use in workplaces, reporting the number of employees tested and
 remediated, and the number of jobs profiled.
- WAEM reported on the outcomes of its efforts to connect communities and entrepreneurs to local, regional, state, and national resources and training opportunities (see Appendix D.1).
 Project staff tracked the number of hits to MyBiz, an entrepreneur referral website, the number of registered users, and the number of users reporting that they started their own business.

Process Measures Reflecting Regions' Specific Goals

Most regions included at least some metrics that simply documented achievement of a milestone in the implementation of the initiative. For example:

- One Montana measure reflected the region's goal of creating a centralized information clearing house, specifying that it must include networking contacts, oil seed production information, biodiesel production information, biodiesel co-products, ethanol information, bio-fuel industry news, Department of Commerce programs, related community college curriculum, state workforce programs, industry news in the state, energy development news, and state and national conferences and events (see Appendix D.4)
- Mid-Michigan tracked the number of businesses that assisted in identifying new markets.
- WAEM was challenged to build the capacity of its partners and also build a sense of region in 37 mostly rural counties. The grant created a category called "region-building activities" and tracked a combination of process and outcome measures such as the number of staff training events, the number of outreach/networking events (regional roundtables, WAEM town retreats, summits, conferences, community roll-outs, teacher/business leader sessions, etc.) and the number of individuals attending each. Related measures were the number of communities that initiated place-building planning (strategic planning, entrepreneur support planning, Small Town Design Initiative, Main Street planning), the number of place-building





plans completed, the number of newsletters published, and the number of conference presentations.

- North Carolina placed a great deal of emphasis on business participation in setting priorities for the region and creating a detailed agenda of activities to support each target industry. Accordingly, the region reported the number of employers engaged in Industry Roundtables. Another distinguishing feature of the region's approach was an emphasis on engaging recognized regional leaders in creating and promoting the region's action agenda. The grant reported on the number of regional leadership projects implemented.
- Several regions emphasized the involvement of rural and minority partners. For North Carolina, the measures of that activity included the number of minority and rural 1) assets and 2) leaders that were profiled and engaged. Metro Denver tracked the number of education and training programs targeting low income/minority participants, as well as the number who completed these programs.

NCI and the California Corridor used the most distinctive and voluminous systems of regionspecific metrics. NCI tailored most of its measures to a particular named activity. For example:

- For Top Line Growth-Eureka! Winning Ways, the grant tracked the number of companies that participated in each training, the estimated savings to companies resulting from their participation (e.g., capital expenditures, labor, materials, inventory), and the estimated number of existing jobs retained and new jobs created.
- For Civic Networks, NCI reported the number of civic leaders engaged, new spin-off forums generated (Energy, IESN, IHIF, MWEDC, WISER, Economic Gardening, Strategic Doing), elected officials engaged, and nominations received for Institute participation.
- In addition to the number of participants who enrolled and completed training, for its nanostructured coating technology transfer project, the region measured the number of companies engaged, Purdue faculty and staff engaged, innovations integrated into the industry, and the resulting increase in sales and reduction in costs.

The California Corridor's metrics were even more intricate and project-specific (see Appendix 2). The region developed goals for each of its funded activities, and designed detailed metrics to document the accomplishment of those goals. Some metrics simply noted the completion of a step in implementing the project, but even some of those measures included numerical expectations. For example:

- Completion of the WIB Toolkit with three major components;
- Development and administration of pre- and post- surveys of all 50 WIBs in the state to benchmark and track transformative activities, with a minimum of 30 responses in each pre- and post- effort, and with a focus on the 23 WIBs in the region;
- Development of a consortium comprised of representatives of space science, research, and university communities, with a minimum of three universities and three companies represented;





- Recruitment of at least six industry engineers for student mentoring, and relationships established with minimum of six employers regarding mentoring sustainability;
- Recruitment of at least one elementary school and one high school, with a minimum of five teachers total to support a mentoring program.

WIASRD Data on Participant Demographics, Service Use, and Outcomes

Rather than burdening the grantees with a new and separate participant database, ETA opted to have the initiatives enter data on their participants into the same database that the rest of the WIA-funded programs use – the Workforce Investment Act Standard Record Data, or WIASRD. In doing so, the agency hoped to send the message that the Initiative was not separate from the existing workforce development system, and that it expected to see measurable transformation in each region's workforce system as a result of grantee activities. Other benefits included the fact that using the WIASRD would require the initiatives to engage with local WIBs to enter data on the region's participants, if they had not already done so.

The Generation I grantees entered data on 26,245 Initiative participants into the WIASRD. This number alone raises questions, since the aggregate data reported in the Initiative metrics indicated that the regions had served over 89,000 individuals, with a total difference between the two data sources of 63,173 participants. As Figure 6.11 indicates, this pattern was consistent across all grantees with the exception of WAEM, and the discrepancy between the databases ranged in size from 108 to 13,159 enrollees. The study team interviewed both regional managers and state data managers to explore reasons for the difference. Several factors emerged during the course of these conversations, including intensity of services provided, difficulty collecting data on incumbent workers who were trained at their work sites, and misunderstandings about the definition of participants and "countable" job placements. The last column in the figure summarizes information that these respondents provided.

The most frequent factor (mentioned in at least eight regions) that regional managers cited for smaller numbers of participants in the WIASRD was the intensity of services that a participant may have received. For example, Metro Denver made a distinction between customers who were "served" versus those who were "enrolled." Maine chose not to enter WIASRD data on those who participated in training of one day or less. Two specific groups also were related to the intensity issue: individuals who obtained WorkKeys certifications through the Initiative, and high school students. Several of the regions sponsored thousands of people for WorkKeys testing and certification, particularly Mid-Michigan, West Michigan, NCI, Kansas City, and North Carolina. Because contact with these customers was so brief, most of these initiatives chose not to enter data on such individuals in the WIASRD. Some regions that worked with high school youth did not enter those participants in the WIASRD because their involvement had been in a two hour workshop. Other initiatives offered youth more in-depth services but their service providers would not collect Social Security Numbers from high school students, either because of concerns about confidentiality, or because they would have to obtain parental approval to collect that information.





Figure 6.11
Initiative Enrollment Discrepancy: Metrics vs. WIASRD

Region	Total Enrolled in Initiative per Metrics	Total Enrolled in Initiative per WIASRD	Comments
WAEM	4,275	5,000	Didn't include in initiative participants in calculation of common measures
California Corridor	1,687	1,043	Training was add-on & never planned to collect WIASRD data. Many incumbent workers trained using state employed worker training funds not entered in WIASRD. Participants not willing to give SSNs
Metro Denver	3,537	2,890	Didn't enter into WIASRD customers who used less intensive services ("served") vs. those who got more training ("enrolled")
Florida	7,468	212	Only entered people in new jobs created per DOL instruction. Also served 5056 high school students & 818 incumbent workers
NCI	25,351	3,622	Entered WIASRD data only for participants served in One Stops. WIA staff reviewed all programs to determine which should be entered. Didn't include Project Lead the Way or high school programs. Lots of sub-grantees couldn't get SSNs from participants.
Kansas City	14,693	1,534	WIASRD only includes participants co-enrolled in WIA and served in AJCs.
Maine	1,871	1,763	Didn't enter into WIASRD 108 participants who received only 1 day training or had no draft registration
Mid-Michigan	4,675	54	Mid-MI used other funding sources to pay for training. Didn't enter WorkKeys certifications or incumbent workers in WIASRD
West Michigan	1,638	423	Didn't enter WorkKeys certifications or incumbent workers in WIASRD
Montana	4,926	1,008	None of incumbent worker participants enrolled in WIASRD
New York	11,584	6,627	None of incumbent worker participants enrolled in WIASRD
North Carolina	4,416	1,988	Didn't enter WorkKeys certifications, incumbent workers, entrepreneurs in WIASRD, only job seekers who actually received training.
Pennsylvania	3,298	81	N/A
Total	89,418	26,245	

Source: Generation I Metrics Reports and WIASRD data

Another issue that frequently came up was the difficulty in collection data on incumbent workers. In many cases, employers hired specialized training providers using Initiative funds, and the training was provided in the work place. One respondent stated that he had tried to tell the region's ETA lead that CEOs of the initiative's partner companies were not about to fill out a WIA registration form.

Finally, several regions had very different definitions of who could be counted as a participant. For example, Florida only entered WIASRD data on individuals who entered employment in a new job that the initiative helped to create. Both NCI and Kansas City only entered data on





participants who were served in an AJC (presumably because the WIA case managers there could access the WIASRD while other partners could not).

<u>Participant Characteristics</u>. Figure 6.12 displays data on the demographic characteristics of the 26,245 participants in the WIASRD database by region. Almost two-thirds (63%) were male and just under half were from various minority groups. Several regions has relatively high representation from one or more of such groups:

- Montana indicated that 38% of its participants were American Indian.
- WAEM and Kansas City reported relatively high representation of Black participants at 29% and 39%, respectively.
- California had comparatively high percentages of Asian and Hawaiian/Pacific Islander participants, both at 6% of the grantees' total enrollment.
- Metro Denver (14%) and North Carolina (21%) had the highest percentage of Hispanic participants.
- California (15%) and West Michigan (18%) had the highest numbers of participants identifying with multiple races.

The average age of participants was 36. Across all regions, 11% of participants had less than a high school diploma, 44% had a high school diploma or equivalent, 23% had at least some college education, and 18% earned Bachelor's degree or higher.

Prior to participation in 46% of enrollees were employed and had an average quarterly wage of \$3,693. The utilization rate for public assistance services was low; however, grantees were not required to provide this information and the rate may underestimate actual utilization. Thus, Table 6.12 may underestimate the extent of these barriers among Initiative participants. Again, because the initiatives did not target disadvantaged populations for the most part and many customers were incumbent workers, levels of other employment barriers were not particularly high. Overall, 2% of participants identified as having a disability, however the rate for Pennsylvania was much higher at 11%. Similarly, only 1% of all participants had limited English abilities, however for 6% of WAEM participants limited English skills was a barrier to employment.

Figure 6.12 2009 WIASRD for WIRED Participants: Characteristics by Region

Demographics	WAEM	California Corridor	Metro Denver	Florida	NCI	Kansas City	Maine	Mid- Michigan	West Michigan	Montana	New York	North Carolina	PA	TOTAL
N	5.000	1.043	2.890	212	3.622	1.534	1.763	54	423	1.008	6.627	1.988	81	26,245
MALE	66%	40%	74%	84%	69%	35%	87%	85%	39%	73%	62%	39%	59%	63%
RACE/ ETHNICITY	0070	70 /0	7 7 70	07/0	0370	3370	07 70	00 /0	3370	1370	02 /0	33 /0	3370	00 /0
American Indian	3%	2%	1%	1%	0%	1%	1%	2%	1%	38%	0%	0%	1%	2%
Asian	1%	6%	3%	1%	1%	1%	0%	2%	1%	0%	0%	1%	2%	1%
Black	29%	2%	8%	10%	7%	39%	1%	7%	5%	0%	0%	5%	7%	10%
Hawaii Native/Pacific Islander	1%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%
Hispanic	0%	0%	14%	1%	3%	2%	0%	0%	0%	2%	0%	21%	6%	4%
White	56%	70%	59%	79%	87%	52%	95%	83%	75%	55%	0%	72%	68%	51%
Multiple Race	1%	15%	6%	5%	1%	2%	2%	6%	18%	2%	0%	0%	7%	2%
AGE (mean years)	31	35	38	39	40	35	40	43	40	34	43	31	39	36
EDUCATION	01	00	00	- 00	40	00	40	40	40	04	40	01	00	00
Less than High School Diploma	39%	7%	8%	7%	6%	3%	3%	6%	7%	8%	1%	2%	2%	11%
High School Diploma or Equiv	33%	52%	30%	44%	55%	39%	53%	37%	54%	59%	32%	96%	47%	44%
Some College	23%	33%	18%	22%	26%	21%	20%	32%	33%	22%	28%	1%	38%	23%
College Graduate	6%	8%	29%	27%	11%	7%	23%	9%	5%	4%	38%	1%	12%	18%
VETERAN	7%	6%	9%	10%	8%	8%	10%	11%	4%	10%	3%	1%	19%	6%
Employed at Registration	33%	47%	24%	97%	20%	33%	50%	7%	15%	28%	76%	94%	21%	46%
Average Qtrly Wages Before Entry	\$6,123	\$4,251	\$1,159	\$6,655	\$6,075	\$3,236	\$6,915	\$2,462	\$3,795	\$2,999	\$2,283	\$6,239	\$6,582	\$3,693
BARRIERS	ψ0,120	Ψ1,201	ψ1,100	φο,σσσ	φο,στο	ψ0,200	ψ0,010	ΨΣ, 10Σ	Ψο,του	Ψ2,000	Ψ2,200	ψ0,200	ψ0,002	ΨΟ,ΟΟΟ
Low Income	0%	41%	22%	10%	9%	36%	1%	50%	51%	6%	1%	0%	15%	9%
Disability	3%	3%	4%	4%	2%	2%	2%	0%	3%	3%	1%	1%	11%	2%
Limited English	6%	1%	1%	0%	0%	0%	0%	0%	2%	0%	0%	1%	1%	1%

Source: WIRED WIASRD for third quarter Program Year 2009





As Figure 6.13 illustrates, customers participated in initiative programs for an average of 20 weeks, ranging from the lowest in Florida with two weeks up to the highest in Maine with 59 weeks. The duration of services averaged 24 weeks, ranging from 5 weeks (Florida) to 67 (North Carolina). The programs served youth, adults, veterans, and dislocated workers, and had high enrollment rates across the 13 regions:

- Mid-Michigan (65%) and West Michigan (63%) had high WIA program enrollment for dislocated workers.
- All of NCI's participants enrolled in the WIA adult program.
- Almost half (49%) of NCI's enrollees participated in the Trade Adjustment Assistance program.
- 100% of NCI and West Michigan participants enrolled in both the Core and Intensive programs.
- Florida, Maine, and Pennsylvania had particularly high training rates at 99% of total enrollees.
- California Corridor, NCI, and Montana particularly utilized vocational rehabilitation services (98% or higher).
- California Corridor enrolled 43% of participants in supportive services.
- 27% of Pennsylvania enrollees received a Pell Grant.

Enrollees can make use of multiple programs and services; West Michigan, most notably, employed cost sharing practices between WIA and WIRED funds, with 76% of individuals had services purchased with Individual Training Accounts (ITAs) and funded by WIA title I.

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Figure 6.13
2009 WIASRD for WIRED Participants: Service Use by Region

WIASRD Services	WAEM	California Corridor	Metro Denver	NW Florida	NCI	Kansas City	Maine	Mid- Michigan	West Michigan	Montana	New York	North Carolina	PA	Total
N WIAGRD SERVICES	5,000	1,043	2,890	212	3,622	1,534	1,763	54	423	1,008	6,627	1,988	81	26,245
	3,000	1,043	2,030	212	3,022	1,004	1,700	34	723	1,000	0,021	1,300	01	20,243
WIA PROGRAM ENROLLMENT	00/	00/	3%	00/	F00/	9%	5%	67%	C20/	00/	00/	0%	470/	10%
Dislocated Worker	0%	0%		0%	52%				63%	0%	0%		47%	
Adult	0%	0%	7%	2%	100%	65%	1%	33%	32%	0%	0%	0%	54%	19%
Youth	0%	1%	3%	0%	1%	1%	0%	0%	5%	0%	0%	0%	3%	1%
Veterans' Programs	0%	0%	6%	4%	4%	0%	1%	0%	0%	0%	0%	0%	9%	1%
TAA	0%	0%	0%	0%	49%	0%	1%	2%	0%	0%	0%	0%	1%	7%
Core	0%	100%	0%	8%	100%	48%	2%	74%	100%	99%	0%	1%	67%	27%
Intensive	0%	1%	13%	2%	100%	75%	6%	100%	100%	0%	0%	0%	100%	30%
Training	0%	0%	75%	99%	5%	30%	99%	41%	77%	0%	0%	0%	99%	20%
ITA	0%	0%	15%	0%	3%	25%	5%	13%	76%	41%	0%	1%	26%	7%
OTHER PROGRAMS														
Vocational Education	0%	14%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Vocational Rehabilitation	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wagner-Peyser Act	0%	100%	65%	35%	98%	19%	19%	33%	19%	99%	15%	0%	79%	36%
Youth Build Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Older Workers (Title V)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Food Stamps Employ. & Training	0%	1%	0%	0%	0%	7%	0%	0%	0%	0%	0%	0%	0%	0%
Other WIA & Non-WIA Programs	0%	19%	0%	0%	1%	25%	1%	17%	3%	1%	0%	0%	1%	3%
Supportive Services	3%	43%	19%	0%	3%	27%	1%	28%	7%	28%	0%	0%	19%	8%
Needs-related Payments	1%	0%	0%	0%	0%	1%	0%	0%	0%	45%	0%	0%	0%	2%
Disaster Relief Payments	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Pell Grant	9%	19%	0%	0%	0%	0%	1%	0%	1%	2%	0%	1%	27%	3%
YOUTH SERVICES														
Prevocational Services	2%	0%	16%	0%	3%	1%	1%	0%	1%	0%	13%	0%	99%	6%
Educational Achievement	0%	3%	3%	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	1%
Employment Services	0%	5%	2%	0%	0%	1%	0%	0%	1%	1%	0%	0%	3%	1%
Summer Youth Employment	0%	1%	1%	0%	0%	0%	0%	0%	5%	0%	0%	0%	1%	0%
Youth Additional Support	0%	2%	1%	0%	0%	1%	0%	0%	4%	1%	0%	0%	1%	0%
Citizen And Leadership	0%	0%	0%	0%	0%	2%	0%	0%	3%	0%	0%	0%	0%	0%
Follow-up Services	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
AVG. LENGTH SERVICES (WEEKS)	12	56	23	5	18	53	61	41	45	37	14	26	67	24
AVG. DURATION TRAINING (WEEKS)	17	46	11	2	14	33	59	23	24	42	13	23	46	20





Of the enrollees, 70% were terminated (e.g. health or relocation purposes) while only 12% completed training and earned a diploma, credential, or certificate (see Figure 6.14). The overall average quarterly wage after exiting the WIA programs was lower than prior to participation; the steepest decline in the average quarterly wage was North Carolina, which dropped by \$5,585. Other grantees, like Metro Denver, Florida, and Mid-Michigan experience notable gains in participants' quarterly wage, with California Corridor having the greatest gains at \$5,451 per quarter. Of the regions that had improvements in the average quarterly wage, only Florida, Maine, and Mid-Michigan respectively made additional gains of \$1,832, \$1,651, and \$596 per quarter 12 months after exiting the program(s). Of the six regions that had a lower average quarterly wage after the program, WAEM, North Carolina, and Pennsylvania has a positive change in earnings 12 months following training completion. Overall, 12-month job retention was 50%, ranging from the lowest at 4% in Maine to the highest in California at 88%

Figure 6.14
2009 WIASRD for WIRED Participants: Employment Outcomes by Region

WIASRD Services	WAEM	California Corridor	Metro Denver	Florida	NCI	Kansas City	Maine	Mid- Michigan	West Michigan	Montana	New York	North Carolina	PA	Total
N	5,000	1,043	2,890	212	3,622	1,534	1,763	54	423	1,008	6,627	1,988	81	26,245
COMPLETED TRAINING (Diploma, Credential, or Certificate)	41%	29%	0%	2%	1%	2%	14%	31%	53%	1%	2%	0%	47%	12%
TERMINATED	81%	85%	69%	100%	69%	48%	77%	69%	89%	77%	97%	100%	93%	82%
Employed at Termination	23%	72%	11%	74%	24%	15%	12%	54%	66%	50%	17%	11%	47%	22%
Employment Shows in Wage Records	1,167	753	314	157	880	225	214	29	279	504	1,116	215	38	5,891
Average Quarterly Wages After Exit	\$6,052	\$9,702	\$5,163	\$9,853	\$4,445	\$2,935	\$7,005	\$5,448	\$4,280	\$3,387	\$1,959	\$654	\$5,187	\$3,288
Average 12-month Earnings Change	\$443	-\$849	-\$2,650	\$1,832	-\$1,315	-\$2,370	\$1,651	\$596	-\$297	-\$323	-\$733	\$1,022	\$3,481	-\$732
Training-Related Employment	100%	18%	2%	3%	0%	20%	89%	34%	60%	0%	1%	2%	53%	30%
12-month Job Retention	31%	88%	6%	64%	47%	19%	4%	69%	62%	71%	53%	86%	47%	50%

Source: WIRED WIASRD for third quarter Program Year 2009





Extant Data Measures for the Generation I WIRED Regions

The Generation I WIRED regions all focus on economic transformation through new integrated approaches to collaboration, innovation, workforce investment, and economic development. Each region has a strategy to achieve this goal that is based on the region's distinctive geography, assets, and economic history. The regions exhibit an extraordinary diversity as is summarized in Figure 6.15. The study team gathered demographics of the regions from a variety of publicly available and commercial sources, to illuminate the positioning of each unique region along six major dimensions:

- Population characteristics;
- Economic characteristics;
- Workforce makeup and employment;
- Population educational attainment and current enrollments;
- Innovation; and
- Entrepreneurship.

These sorts of measures, carefully chosen, can provide external, independent, and unbiased information about the region's status as it works toward economic and workforce system transformation. To this end, the evaluation team has been collecting data on a number of measures beyond the usual workforce metrics, identifying sources of data that track innovation, entrepreneurship, and education and talent development, as well as elucidating population demographics.

The cost-effective way to achieve this in-depth analysis is to use data sets collected by others, usually for other purposes. The evaluation team has identified and selected national data sets, gathered at least annually using reproducible methods, in fine geographic granularity, with zip code or county/state identifiers available so that data for the regions may be aggregated. When researchers use data in ways that were not envisioned by the gatherers, they must take care to identify any hidden assumptions that are not spelled out in the data dictionaries, and to assess the quality and completeness of all fields, particularly those fields that were not central to the original use. In some cases, data dictionaries must be developed *ab initio* with the help of the originators. The evaluation team has been fortunate to enjoy the cooperation of nearly all of the third-party data providers in obtaining additional documentation of their data sets to ensure the validity of the data for evaluation purposes.

This brief chapter summarizes a few highlights from the evaluation's assessment of measures relevant to the regions' goals for long-term economic transformation and improvement of quality of life for its inhabitants.

Figure 6.15 displays the region's measures next to those of its home state (or states). It becomes obvious, when region measures differ noticeably even from the same measure for their host state, that *the US does not have a single economy, it has many regional economies*.





Table 6.15
Demographic Measures: Comparing Generation I WIRED Regions with Their States

	W	WAEM		a Corridor	Metro I	Denver	Flo	orida	ı	NCI
Measure	Region	State	Region	State	Region	State	Region	State	Region	State
Total Population	1,080,155	7,600,518	26,158,884	36,756,666	3,288,404	4,939,456	1,349,082	18,328,340	541,803	6,376,792
Population Density ^a	39.8	77.8	447.7	235.7	294.0	47.6	116.9	339.9	96.6	177.8
Race/Ethnicity										
White	61%	67%	76%	77%	89%	90%	76%	80%	94%	88%
Black	37%	31%	7%	7%	5%	4%	20%	16%	3%	9%
American Indian	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%
Asian or Pacific Islander	1%	1%	13%	13%	3%	3%	2%	2%	2%	1%
Other/Multiple Race	1%	1%	2%	3%	2%	2%	2%	1%	1%	1%
Hispanic Ethnicity ^b	2%	3%	40%	37%	21%	20%	4%	21%	5%	5%
Age										
15 to 24	15%	14%	15%	15%	13%	13%	15%	13%	16%	14%
25 to 34	13%	13%	14%	14%	15%	15%	13%	13%	14%	13%
35 to 44	12%	13%	15%	15%	15%	15%	13%	14%	13%	14%
45 to 54	14%	14%	14%	14%	15%	15%	14%	14%	14%	15%
55 to 64	11%	11%	10%	10%	11%	11%	12%	12%	11%	11%
65 and older	14%	13%	11%	11%	10%	10%	13%	17%	14%	13%
Education Level ^c										
Less than HS Diploma	29%	26%	21%	20%	11%	11%	18%	20%	16%	18%
High School Graduate	32%	30%	22%	22%	22%	24%	28%	29%	42%	37%
Some College, No Degree	24%	26%	28%	28%	28%	29%	31%	29%	24%	26%
Advanced Degree	14%	18%	30%	29%	38%	35%	23%	22%	18%	19%
Labor Force	441,295	3,358,308	13,074,994	18,373,695	1,803,004	2,683,788	681,691	9,227,641	261,480	3,138,483
Percent Unemployment	11%	10%	12%	12%	7%	7%	8%	11%	10%	9%

^a Population density is population per square mile





^c Education level for population age 25 and older

b Hispanics may be of any race, so also are included in applicable race categories.

Table 6.15 (continued)

	Kansa	as City	Ма	ine	Mid-M	lichigan	West N	/lichigan	Mon	tana
Measure	Region	State	Region	State	Region	State	Region	State	Region	State
Total Population	2,427,683	8,713,739	1,106,805	1,316,456	1,750,016	10,003,422	1,324,516	10,003,422	169,233	967,440
Population Density ^a	260.6	57.8	62.7	42.7	204.5	176.1	273.8	176.1	1.9	6.6
Race/Ethnicity										
White	84%	86%	96%	96%	87%	81%	89%	81%	76%	90%
Black	11%	10%	1%	1%	9%	14%	7%	14%	0%	1%
American Indian	0.7%	1%	1%	1%	1%	1%	1%	1%	22%	6%
Asian or Pacific Islander	2%	2%	1%	1%	2%	2%	2%	2%	0%	1%
Other/Multiple Race	2%	2%	1%	1%	2%	2%	2%	2%	2%	2%
Hispanic Ethnicity ^b	7%	5%	1%	1%	4%	4%	8%	4%	2%	3%
Age										
15 to 24	14%	14%	13%	13%	15%	14%	15%	14%	14%	14%
25 to 34	14%	13%	11%	11%	12%	12%	14%	12%	10%	12%
35 to 44	14%	13%	14%	14%	13%	14%	14%	14%	11%	12%
45 to 54	15%	15%	17%	17%	15%	15%	15%	15%	16%	16%
55 to 64	11%	11%	13%	14%	12%	12%	10%	12%	13%	13%
65 and older	12%	13%	15%	15%	13%	13%	11%	13%	16%	14%
Education Level ^c										
Less than HS Diploma	10%	13%	10%	11%	11%	12%	12%	12%	17%	13%
High School Graduate	29%	32%	35%	36%	34%	32%	32%	32%	33%	31%
Some College, No Degree	29%	29%	27%	27%	33%	31%	31%	31%	32%	32%
Advanced Degree	32%	26%	28%	26%	23%	25%	25%	25%	17%	24%
Labor Force	1,286,265	4,526,293	599,616	701,124	844,725	4,823,758	658,236	4,823,758	80,058	498,464
Percent Unemployment	9%	8%	7%	8%	14%	15%	13%	15%	6%	6%

^a Population density is population per square mile





^C Education level for population age 25 and older

b Hispanics may be of any race, so also are included in applicable race categories.

Table 6.15 (continued)

	New	York	North C	Carolina	Penns	sylvania
Measure	Region	State	Region	State	Region	State
Total Population	1,192,301	19,490,297	1,603,101	9,222,414	1,900,058	12,448,279
Population Density ^a	247.0	412.8	268.8	189.3	359.6	277.8
Race/Ethnicity						
White	86%	73%	76%	74%	92%	85%
Black	10%	17%	21%	22%	5%	11%
American Indian	0%	1%	1%	1%	0%	0%
Asian or Pacific Islander	2%	7%	2%	2%	2%	2%
Other/Multiple Race	1%	2%	1%	1%	1%	1%
Hispanic Ethnicity ^b	5%	17%	8%	7%	10%	5%
Age						
15 to 24	16%	14%	13%	14%	14%	14%
25 to 34	12%	13%	13%	13%	12%	12%
35 to 44	13%	14%	15%	15%	14%	14%
45 to 54	16%	15%	15%	14%	15%	15%
55 to 64	12%	11%	12%	11%	12%	12%
65 and older	14%	13%	13%	12%	16%	15%
Education Level ^c						
Less than HS Diploma	12%	16%	19%	17%	14%	13%
High School Graduate	30%	29%	31%	29%	39%	38%
Some College, No Degree	29%	23%	27%	28%	24%	23%
Advanced Degree	29%	32%	23%	26%	23%	26%
Labor Force	619,095	9,677,777	803,609	4,526,072	964,912	6,350,399
Percent Unemployment	8%	9%	11%	10%	9%	8%

^a Population density is population per square mile

Source: US Census 2008 estimates (FactFinder tables T1, T3, T6, T8 and Quickfacts and US Bureau of Labor Statistics, Local Area Unemployment Statistics table laucntycur14.xls





b Hispanics may be of any race, so also are included in applicable race categories.

^C Education level for population age 25 and older

Measures and their Data Sources

Population

Population measures come from the US Census 2008 estimates.⁶⁶ Population is displayed by age groupings and by race. We also display population density (population per square mile), which is a surrogate variable for the urban/suburban/rural distinction.

All regions except Montana, NCI, and Maine have relatively high population densities. As is to be expected, California Corridor has a high Latino/Hispanic ethnic base (40%), but Metro Denver also has a substantial Latino community, with 21% of its population being Latino. Most of the rest of the regions have single-digit Latino percentages. WAEM has a 37% black population while North Carolina and Florida have roughly 20%. Montana's population is 20% American Indian, with the rest of the regions being largely "white only". (Racial designation names are those of the US Census).

Economics

The *average per capita income* measure comes from the Regional Economic Information System of the Bureau of Economic Analysis, US Department of Commerce. Note that this measure is "income per person" for the population as a whole, including those persons not working -- not income per household, and not income per job. Therefore the numbers may look low to someone used to evaluating household income. However, the data is as current as the population data, and it is as useful to compare regions to other regions and regions to their states, using per capita income as a measure. Other measures of income available by county are reported as medians, not averages, and medians cannot be combined when evaluating a multi-county region. The regional average per capita income is computed by weighting the averages of each county by their populations. All dollar values are in current dollars, not adjusted for inflation. Per capita income in the Generation I regions ranges from \$23,500 per year in WAEM to \$44,000 in Denver Metro. It may be surprising to those not familiar with Michigan's economic status that in 2008, the yearly per capita income in West Michigan was \$28,000 whereas it was only \$34,000 in Mid-Michigan.

The *wage migration* measure uses IRS data⁶⁸ compiled from filers who changed mailing addresses between filings, allowing tracking of workers between any pair of counties in the US, migration to other states, and migration to foreign countries. Summing the adjusted gross income of workers moving into a region and subtracting the adjusted gross income of those moving out gives the net wage migration. A positive number means more income is coming into the region; a negative number means more wages are leaving the region than are arriving. Wage flow is not the same as worker flow, which is why this measure is useful in addition to counting number of jobs. In all regions in the year between 2007 and 2008 filings the net

⁶⁸ Source: US Internal Revenue Service Statistics of Income Program, available for purchase at http://www.irs.gov/taxstats/indtaxstats/article/0,,id=96816,00.html





⁶⁶ US Census Factfinder tables T1, T3, T6, T8 and Quickfacts

http://factfinder.census.gov/servlet/DCSubjectShowTablesServlet? ts=290449586416

⁶⁷ Regional Economic Information System, BEA Table CA1-3-3.0, 2008, updated Apr 21, 2010 http://www.bea.gov/regional/reis/

number of workers newly filing 1040 forms with addresses in each region was positive⁶⁹. But in most regions (WAEM, California Corridor, NCI, Kansas City, Mid-Michigan, West Michigan, Montana, and New York) the net wage migration was negative, meaning the fewer number of workers leaving the region had higher wages than the larger number of lower-paid workers entering. Even though there were net workers coming into these regions, income was still flowing out. Metro Denver, Florida, Maine, and North Carolina, on the other hand, apparently attracted higher paid workers coming into their regions than those that left, since their adjusted gross income flow was positive.

The amount of the wage migration is perhaps of less interest than whether it is positive or negative, since regions with larger total working populations will likely have larger wage migration.

Note that this measure is an addition to the usual measure of total wages in the region and does not replace it. Workers who newly gain or lose jobs without changing addresses beyond the region are not included. Workers who receive changes in pay but do not change addresses are also not included.

Workforce

The previous two sections in this chapter discussed workforce development outcomes for the regions and initiative participants. Thus, this discussion is limited to unemployment rates for a snapshot in time across the regions. Since the recent recession has changed the character of the labor force and the unemployment picture data from a single recent month (September, 2009) is used. The labor force metric used by the US Bureau of Labor Statistics includes all paid employees and self-employed persons including farm employees who worked at least one hour in a reference week. Workers holding more than one job are counted only once. Workers are counted as unemployed if they were available for work and had sought work within the previous month and had no employment during the reference week. The Montana region labor force numbers do not include workers on Indian reservations, so both the labor force and unemployment values may be distorted.

Figure 6.demonstrates that WAEM, NCI, North Carolina and Pennsylvania had higher unemployment rates than their host states. Overall, the unemployment rates ranged from 14% in Mid-Michigan down to 6% in the rural Montana region and 7% in Metro Denver. The snapshot month, September 2009, was part of the recent recessionary period.

Educational Attainment and Current Enrollment

Two different sets of measures describe the educational status of each region. The first, educational attainment, categorizes the amount of education completed by each person in the region over the age of 25. The second measures the current enrollments in the region as a fraction of the population in the region in the most appropriate age cohort.

Most of the educational attainment measures are an average over the period 2006-8, from the American Community Survey project of the US Census Bureau. Because this is a survey and not

⁶⁹ data not shown, available upon request.





a full census, censoring of small-population counties limits the utility of this data set for some of our regions. Even using the 2006-8 average (with a 20,000 population censoring limit) rather than a more recent one-year measurement, WAEM, NCI, Florida and Montana suffer more than 10% censoring. For these regions, the evaluation team had to rely on older 2000 census data. As many of the higher wage job opportunities in emerging markets will require some education beyond high school, it is useful to know what the educational baseline of the region is, in addition to tracking the current enrollments that will be filling the educated-worker pipelines in the near future.

California Corridor and WAEM have 21% and 29% of their population without even a high school diploma. 19% of North Carolina's population also lacks a high school diploma. The more urban regions (Mid-Michigan, Kansas City, West Michigan, Metro Denver) tend to have more of their population educated to the high school level or beyond. Also Maine has the low 10% of its population lacking a high school diploma, nearly three times lower than WAEM, the highest.

Most regions have 25-30% of their populations with some college or an Associates degree. Montana runs at 32%, with fewer of its inhabitants going on for more advanced degrees. As may be expected, the urban regions have higher proportions of their populations holding bachelor's or post-baccalaureate degrees.

Enrollments in two-year and four year colleges for the academic year 2008-9 are tabulated from enrollments reported by all schools in the regions receiving Title IV funding in the Integrated Postsecondary Education Data System of the US Department of Education. Although the ages of the enrollees are not known, it is useful to compare the number of enrollees to the population age band most closely associated with college-age: 15-24. Enrollments as a fraction of this age group look high, especially considering that few actual students are younger than 18. However, some students, particularly in community colleges, may be older than 24. Also the enrollment numbers count both full and part time students.

Nonetheless, this surrogate measure for the regions' enthusiasm for higher education gives cause for optimism. WAEM, with its less educated general population has 63% of the college age cohort enrolled in college. The highest fraction, 75%, is in North Central Indiana, with California Corridor a close second. Montana has only 17% of the age cohort in regional schools, but since there are few educational institutions within the region, some of their students may be attending outside the region.

Innovation

It is also of interest to track each region's current capacity for innovation as exploiting innovations is one avenue to continuing economic growth and prosperity. The measures chosen to measure innovation are the amount of the region's governmental research and development (R&D) awards which sample the capacity for pure research; their Small Business Innovation Research (SBIR) and Small Business Technology Transfer Program (STTR) awards, which sample the capacity to transition new technologies to commercial practice; and the number of patent applications, which also samples the capacity to commercialize innovations.





National Institutes of Health (NIH) and National Science Foundation (NSF) extramural funding, while not the entire Federal government's investment in regional R&D, constitutes a fraction of the total which is fairly consistent across all mixes of fields of R&D, since NIH predominantly funds biomedical research and NSF funds all other fields of science and engineering. Since larger regions have more research institutions, the total research budget is normed to the region's population. The NIH and NSF combined, in FY2009, invested \$6 per person in research institutions in Pennsylvania, and \$180 per person in Metro Denver research institutions.

SBIR/STTR awards are made by many agencies of the Federal Government to small businesses seeking to translate innovations to commercialization. Phase I awards are typically in the neighborhood of \$100,000 per year, with a relatively small fraction of awardees receiving much larger Phase II awards upon successful completion of Phase I. Although the dollar amount is relatively small, these awards are valuable to small companies attempting to bring a new product to market. SBIR/STTR awards per capita range from \$0.13 (Pennsylvania) and \$0.56 (WAEM) to \$147 (North Carolina) and \$179 (Metro Denver). Yet again, the tremendous variability across regions is demonstrated.

Patent applications are tracked rather than patents granted, because although only roughly half of all applications are ultimately granted, the time lag between application and grant is long enough that grants tend to sample the creativity of the previous decade. New York had the highest per capita patent application rate, surprisingly surpassing the California Corridor.

Entrepreneurship

One manifestation of entrepreneurship that can be tracked is the start of a new business. Since any business that does business with a bank or a government agency needs a Dun and Bradstreet number, and applying for that number is free, the Dun and Bradstreet database provides an excellent monitor of new business activity. The evaluation team purchased the D&B database of new business starts for the year 2008, and normed them to regional population. Even though the year 2008 included the beginning of a recessionary period, some regions showed remarkable entrepreneurial energy. Florida started 45 new businesses per 10,000 population; Metro Denver started 41; California Corridor started 31; Mid-Michigan started 29.

Summary

The regions' measures of progress tracked the processes or outcomes that were most important to the designers of each initiative. Because the Generation I grant proposals did not focus on training workers, many of the individual measures from each grantee tracked the creation of partnerships with business and industry, civic leaders, universities, community colleges, and other key stakeholders. Other metrics documented the implementation process, reflecting the completion of specific implementation steps that initiative staff and partners believed were critical to achieving the region's goals.





7. Conclusion and Policy Implications

Over a four year period of observation and evaluation, it has been possible to learn a great deal about the journey the thirteen Generation I regions traveled in order to link workforce development and economic development with the goal of accelerating the economic transformation of their communities. They faced enormous challenges, as the previous chapters have pointed out, but they also made progress on a variety of important dimensions. Their challenge was to transform the way in which the workforce development system connects to regional economic strategy development while demonstrating actual growth in job placement and job retention. The economic crisis of the last three years created enormous barriers to achieving the desired job outcomes originally envisioned by the regions and expected by DOL/ETA, so outcomes are mixed. Nonetheless, as the preceding chapters have documented, many things happened over the life of WIRED that will position these regions, moving forward, to identify targets of opportunity more precisely, mobilize forces for education and training more effectively, and continue to monitor employment trends and workforce needs in a comprehensive manner.

The key lessons that the evaluators identified and synthesized with regard to the regions' complicated four-year journey can be summarized in terms of six major ideas that encapsulate what happened within many regions. Our conclusions have emerged from a cumulative evaluation process which, we suggest at the end of this chapter, may provide insights on how to evaluate complex, multiyear regional transformation efforts more effectively in the future.

Lesson #1: The importance of using data to inform and integrate workforce and economic development efforts

One of the keys to regional success in implementing and sustaining WIRED-funded efforts was having sufficient data available to assess the local workforce development landscape and coordinate workforce development activities with economic development activities. Several regions used their WIRED grants for long-term, post-grant infrastructure to enable future coordination between entities brought together by WIRED through both asset mapping and investment in data systems and training. Coastal Maine offers two relevant examples of useful long-term information strategies:

• First, the region hosted a training on the use of DecisionData (formerly the WITS web-based GIS software solution database) for representatives from all of the state's workforce boards, several regional economic development agencies, the state's business attraction agency, the Maine Departments of Labor and Economic and Community Development, and the State Planning Office, and all of these organizations are currently sharing the five DecisionData licenses purchased under the region's WIRED grant.





Second, the region's Mobilize Maine initiative, unveiled in April of 2009, promises to
continue the focus on regional economic development after WIRED funding expires. A
collaborative effort between the state's main telecommunications provider, the Department
of Economic and Community Development, the state Chamber of Commerce, representatives
of the workforce development system and the six regional economic development districts,
Mobilize Maine aims to foster locally-driven development strategies, including asset
mapping and regional forecasting.

These efforts offer an important lesson for WIRED sustainability and the workforce development system in general: local workforce agencies should be encouraged to rely on diverse, robust databases and metrics for the workforce system. The importance of developing shared databases such as DecisionData cannot be underestimated. This strategy enables collaborative work by providing a shared understanding of regional needs and challenges, and moves the discussion from particular employers or agencies to what is in the best interest of the region.

Lesson # 2: The importance of evolving a shared regional identity and strategies for overcoming jurisdictional boundaries

For many WIRED regions, the requirement to think regionally, rather than according to city, county, or state lines, provided a unique opportunity to rethink economic competitiveness. While the regions all faced the challenge of developing a regional identity, they devised a variety of strategies to help define and promote their regions' identities, create a common vision of a transformed economy for their regions among key partners, and promote that vision across both geographic and professional boundaries within their regions.

Typically, developing a regional identity involves an element of cultural and attitudinal change, in addition to the more concrete components represented by shifts in economic strategies and approaches to workforce development. Most of the regions reported that they were working to build a culture of collaboration within their communities. Individual regions such as WAEM and West Michigan sought to build or encourage an entrepreneurial culture, and other regions promoted thinking globally among the region's residents (for example, North Carolina's work on logistics), or aimed to increase the perceived value of education and training. Such shared values are critical to developing a regional identity, and given the importance of regional identity for local economic development initiatives, a regional approach, as well as tools to assist grantees in building regional identity should be included in future economic transformation initiatives. A clear lesson from WIRED is that it is important that regions are defined in a logical, intuitive way -- that is, that the pairings of counties, states and cities are appropriate given the history, culture and politics of the region.

Despite the aforementioned opportunity to build regional identity, regions still faced the challenge of working across jurisdictional boundaries. For example, many respondents reported that education and training providers, especially community colleges, faced significant challenges in thinking regionally because of their defined service areas. Individual community colleges that attempted to respond to the growing education and training needs of the broader community experienced particular difficulty in being responsive to workforce development





needs, especially when the development of new curricula required considerable time and effort. Additionally, the fact that boundaries often do not align across agencies -- for example, economic development regions may not align with workforce areas -- meant creative thinking about regional development was hampered.

One of the conclusions by the partners involved in these and other initiatives that cross jurisdictional boundaries was that the full support of the leaders of the participating institutions is essential, and that these partners must make clear to their staff that collaboration is a priority. Another conclusion was that leveraging additional resources can be mutually beneficial for partners and, in practice, yield dividends for the colleges and the entire region. The ability to quantify these benefits can be of great help in gaining organizational support for continuing joint efforts. For example, in North Carolina, the Aerotropolis Board, which will continue the work begun under WIRED of promoting the region as a logistics hub, will include representatives from the airport, several planning departments and multiple local city councils in acknowledgement of the necessity of collaborating across jurisdictional boundaries. Incentives for cross-jurisdictional collaboration are thus paramount to successful transformation initiatives, and the workforce development system needs to position itself nationally to support such collaboration. Depending upon how a given state's local workforce areas are configured, more than one LWIB might be involved in a regional initiative. Furthermore, LWIBs could be associated with more than one region, depending upon whether the criteria used to define a particular region are based on geography, the configuration of a targeted industry sector, or other considerations. Greater and more meaningful collaboration can be achieved by removing any existing regulatory or structural barriers to collaboration, and/or providing incentives to LWIBs that pursue joint initiatives.

Lesson # 3: The importance of assuring alignment of expectations and metrics when monitoring and evaluating integrated, regional workforce and economic development efforts.

Within days of getting into the field and at every one of the joint meetings of the Generation I regions, the evaluation team heard about the importance of alignment between Federal, state, and regional expectations and performance measures. In some regions, as pointed out in previous chapters, there was strong alignment; in other regions, there was miscommunication and/or minimal communication; and in a few regions, there was an outright conflict between the expectations about *what* would be achieved and *how* it would be achieved. This, in turn, related directly to the varying performance measures the regions identified in addition to the Common Measures required by ETA.

Early on, the evaluation team realized that, in addition to the Common Measures required by the Department of Labor for programs it funds, there was a need for what we called, "Uncommon Measures," to capture the collaborative processes and activities underpinning regional efforts to integrate workforce and economic development. Achieving new kinds of partnerships, sharing databases, developing strategies collaboratively, and valuing similar or at least parallel outcomes at the regional level requires many organizational steps that can be enabled or inhibited by the industrial legacies, social dynamics, and cultural values of a region. Additionally, because many





of the WIRED Gen I regions were organized on economic synergies rather than according to traditional jurisdictional boundaries, issues of place, identity, jurisdictional authority, and, especially, funding authority, created challenges for efforts at collaboration in the workforce and economic development space.

The Department of Labor's Common Measures have a generally transactional emphasis. They focus on numbers of participants in programs, job placements, employment retention, and average earnings. The field of economic development also has "common measures" that are primarily transactional and that include such indicators of success as new business formation, levels of external investment, revenue growth, and increase in the tax base. These are all very important measures. However, communities that must engage new technologies and markets as sources of new jobs, simultaneous with providing worker training, may require the development of new resources or partnerships. How communities develop new capabilities and what the indicators of progress and success are may be important to capture. The idea of Uncommon Measures is anchored in the need for metrics that can capture the relative success with which regions build the collaborative platforms that enable integrated approaches to workforce development. They include such indicators of collaboration as shared agenda setting; diverse and inclusive gatherings of civic, education, and business leaders; the evolution of agreements about regionally appropriate performance measures; and co-investments. In a modest way, the evaluation of Generation I tried to capture some of these Uncommon Measures in addition to reporting the array of standard metrics the regions provided for ETA.

A primary lesson from Generation I is that regions with close alignment of expectations and metrics were able to demonstrate clear economic progress. Agreement on what is to be accomplished; consensus about how to invest resources appropriately in order to accomplish shared outcomes, and the use of jointly developed regional performance measures can help greatly. Evaluation of these sorts of regional programs needs to capture whether the process that can achieve workforce change under new conditions is actually working as a process, as well as traditional metrics of desired outcome.

Lesson # 4: The importance of collaborative platforms to the integration of workforce and economic development efforts

In order to support collaboration, regions need sufficient infrastructure to initiate and nurture these partnerships. In addition to traditional economic development agencies, educational institutions at all levels (K-16, public and private), workforce development agencies, and employer groups increasingly have become essential contributors to an overall economic development strategy. Civic organizations and political leaders play key roles in developing common agendas and coordinated approaches to regional economic revitalization and growth. In some communities, local history and politics resulted in the economic development agency (or sometimes multiple agencies) not being well-positioned to convene traditionally disconnected entities, and the LWIB stepped into the breach with great success. In many instances, the LWIB itself is uniquely positioned to convene these diverse groups. While not all LWIBs can or should act as the central convener, nevertheless they must play an active supportive role in order to stay in sync with evolving workforce development needs. These interconnections among partner





organizations can maximize the opportunities for aligning and leveraging resources in the pursuit of shared goals. In order to serve this role, however, LWIBs—or other entities deemed appropriate for this role—may need training and support in the following areas:

- Leadership skills. Leadership of regional initiatives is an inherently collaborative process that requires great sensitivity to the needs and interests of each potential partner, as well as skill in bringing these partners together in the pursuit of greater needs and rewards. A top-down style of leadership is unlikely to achieve success. Staff at any central organization needs training to increase their knowledge and capacity to play the convener role, which means facilitating a shared approach to leadership.
- Strategic planning. LWIBs and other leaders of collaborative initiatives must ensure that partners structure the time needed to create a common vision. The process of strategic planning—including planning for a regional initiative—provides an opportunity for teambuilding and developing new social relationships through which shared goals, co-investment, and a renewed sense of regional purpose and confidence can develop. Furthermore, inclusion of all partners in the early visioning and planning processes helps ensure that all "buy into" and support the initiative.
- Data-driven decision-making. As described earlier, using data to enhance workforce development and integrate with economic development is one of the most important practices used in successful WIRED regions. Research and analysis of data are critical to identifying shared needs and common goals, which can also help with establishing common ground. Evidence supports the notion that by using data strategically, convener organizations can move the conversation from a discussion of the individual needs and interests of individual companies and organizations to a broader discussion of industry trends and talent development needs that are apparent when examining the data and the strategic implications for the region as a whole. This approach can make the process of identifying common needs and goals easier and can help build commitment and trust among leaders and their participating organizations.
- Leveraging others' management expertise. Convening a large group of diverse stakeholders is a complex and challenging undertaking that requires careful attention to creating an organizational structure, decision-making process, and implementation plan. Creating a governance structure is not the sole responsibility of the convener, however. Evaluation findings have shown that these challenges can be addressed by tapping into the organizational knowledge of partner organizations, and that the resulting structures are often stronger when they are developed by partners as a group.
- Collaboration between LWIBs. In most states, the workforce system consists of numerous local WIBs, each of which has a defined service area that may be as small as a single county (or subcounty area in an urban center), or as large as a multicounty expanse. Typically, states draw the boundaries of local workforce areas service areas to correspond with county jurisdictional boundaries; however, those boundaries do not necessarily correlate with local and/or regional labor markets. As LWIBs become more involved as strategic partners in efforts to revitalize and transform regional economies, the challenges of working across the boundaries of local workforce areas have emerged as a critical issue. Competing priorities, long-standing personal disputes, competition for funds, and other trust issues have made





establishing meaningful partnerships difficult. Collaborative groups for LWIBs like Mid-Michigan Innovation Team, however, have managed to address these issues in ways that have been mutually beneficial.

In addition to ensuring that the above lessons are integrated by the convening organization(s) in future initiatives such as WIRED, the Federal government also can play a role in supporting collaboration by providing clear guidance and innovative funding options for local work. First, it will be important to craft grant compliance restrictions that allow for sufficient accountability while enabling regions to effectively carry out their mandate. Ideally, restrictions on Federal funding should strike a balance between effectiveness and accountability. In considering future collaborative initiatives, Federal agencies should seek feedback from the field to help inform decisions on exactly where that balance may be found.

Second, blended funding offers specific promise in supporting the creation and success of collaborative work. The impact of Federal grant-making could be improved if multiple Federal agencies (for example, ETA, the Economic Development Administration, and the U.S. Department of Education) pooled their resources and issued one combined solicitation. Such a solicitation would be for projects of interest to all agencies, with funding coming from several sources. It would provide for a single application, one set of outcome measures, and one reporting requirement. The grantee would be permitted to use the funds for any purposes specified in the grant, and any differences among the funding agencies would be transparent. This mode of grant-making might be of particular value in supporting entrepreneurship. The creation and success of new and growing enterprises is critical to the future of most regions of the nation. Traditionally, few workforce development agencies have focused resources on this activity, since other Federal agencies do so already. Nonetheless, the conception, development, launch, and success of a new business enterprise relies upon a knowledgeable and skilled workforce. That element encompasses working with a prospective business owner on meeting his or her workforce needs—that is, identifying needed skills and recruiting appropriate workers—but it also can mean education and training for the new business leader. While the U.S. Small Business Administration (SBA) and the Small Business Development Center (SBDC) network provide financing and counseling, a local AJC could play an important role in ensuring that new business owners are able to acquire the skills needed for success. A joint venture of ETA and the SBA could target resources for leaders of small, growing businesses to learn technical or management skills that would improve the odds that their businesses would succeed. At the local level, AJCs, SBDCs, and community colleges could collaborate to serve as the delivery system. Effective collaboration will be necessary at both the Federal and local level to support future initiatives like WIRED.

Lesson # 5: The importance of sector initiatives to assuring workforce/ economic development integration

In some cases, the Generation I regions had uneven success with targeted industry work due to volatility in the economy during the grant period. However, many of the workforce needs of businesses varied substantially by industry, regardless of the presence or absence of stability in the economy. The sector-based strategy used by many regions for WIRED was vital to





workforce development actors seeking to develop strong relationships with key employers beyond the WIRED grant. In addition, thorough, insightful intelligence about workforce trends and challenges that specific industries face is crucial in order to prepare workers to meet the evolving workforce needs of companies in the targeted industry sector(s). In fact, organizing a sector initiative for each important industry in a regional economy offers strategic benefits for the workforce development system: the realization that industry sector experiences and trends have broad implications for the economy can serve as a powerful source of motivation for organizations that have a stake in the continued vibrancy of their communities. Joint efforts can contribute to economic growth by diversifying existing companies and creating new ones; this realization can similarly motivate community leaders to participate in collaborative initiatives.

Heeding the lessons of WIRED, local workforce development agencies seeking strategic relationships with employers can engage a particular sector to identify shared workforce challenges and opportunities; work with partner organizations to devise strategies for addressing those challenges and opportunities; and take necessary steps to advance those strategies. Knowledge is an essential ingredient in playing this role effectively, requiring sector-oriented workforce development agencies to supplement their basic projections of occupational needs with background research and analysis about the key industries in their regional economies. Local agencies must then become highly skilled at analyzing trends through the use of a wide range of data, learn from and show employers how external factors—such as technology innovations—are likely to change work processes and pay close attention to studies and forecasts of regional economic change. These agencies can increase their credibility with employers and other important collaborators by becoming a principal source of such relevant and useful data.

To ensure that the needs of employers in key sectors are addressed and that job seekers receive the training needed to be competitive for current and future job openings, LWIBs and other convener organizations may work in conjunction with economic development entities. A deeper analysis of demographic and industry data can help to identify the companies involved in the supply chain for those industries, identify specific workforce challenges and opportunities that may affect multiple employers within the sector, and zero in on possibilities for synergies among firms. With these data in hand, LWIBs can reach out to companies in a key industry and offer a venue for discussion, insight, decisions, and actions to address challenges and capitalize upon opportunities. In addition to demonstrating an interest and understanding of industry needs, this approach can help set the stage for the collection of employer-specific workforce data about recruiting and retaining talent, skill development needs, and observed gaps in the skills and readiness of the emerging workforce. When overlaid on other industry data, such discussions may suggest specific areas for action.

This integrated approach to assessing industry needs is a win-win situation for LWIBs and employers. Employers can gain a better understanding of the evolution of their industry and the interrelationships among companies within the sector, and can use that knowledge to prepare for the future. The workforce system gains an understanding of the needs of employers that is much deeper than would otherwise be possible—needs that go far beyond simply filling the next vacancy to encompass worker pipeline issues, skill audits, development of new training programs, joint venturing to share worker capacity or compete for larger contracts, and many other common and related workforce issues.





Lesson # 6: The regional gains that come with better integrating the workforce development system into the larger talent development system

One of the most appealing features of the WIRED grant to grantees was the emphasis on a demand-driven workforce strategy that would move beyond the WIA mandate and focus on talent development as well. Successes in the definition of biosciences career ladders in Kansas City, the development of industry certifications such as the Bilingual Financial Workforce Certificate Program in Pennsylvania, and the progress of STEM initiatives such as the Career Academies in Metro Denver represent progress towards such a strategy. Moving forward, these talent development initiatives should be both encouraged on their own *and* integrated into workforce development activities rather than occurring alongside them.

One way to ensure continuing support for talent development within the workforce system is to craft a broader definition of leveraged funds that would allow for expenditures by partners and co-investors that benefit the overall talent development system. The Obama administration is calling for more financial aid for community college students, development of more online curriculum, employer-driven curriculum development, and hands-on education at work sites. It also is calling for the provision of a wider array of personal, vocational, and career support services, which will necessitate involving partners and resources that will extend beyond the current capabilities of AJCs. The people who run workforce partnerships and AJC Career Centers will, in the future, need to develop more diverse partnerships and business models, as well as new kinds of linkages with regional resources in order to both provide services and to fund services. Thus, the guidelines for what are appropriate direct investments and/or matching funds from other agencies and resources need to be spelled out so that Federal workforce education and training dollars can be appropriately applied with an eye to encouraging talent development.

Summary: The need for a cumulative evaluation model that can better document and capture the outcomes of regional transformation efforts

What the lessons above point out is that, over time and with the proper incentives, regions learn how to work together in new ways to achieve shared goals; in particular, enhancing their regional economies through sustainable businesses and good jobs for all. This journey to building collaborative programs that leverage the synergies between workforce and economic development efforts not only takes time, but challenges existing practices. It often requires new platforms for problem solving. Of necessity, this becomes a social and cultural change process, one that evolves over time. Models for the evaluation of outcomes must evolve. The model presented below suggests the sorts of things that happen in a community or a region, as it begins the journey of realigning organizational assets and leveraging education and development resources for transformative purposes. The model suggests that there are four stages in this process of regional transformation, each of which can be evaluated based on distinctive metrics which, in turn, can to inform policy.





The first stage involves the early conversations and relationships that cross traditional institutional and jurisdictional boundaries and that are essential in order to find common ground and build consensus as to what the regional challenges are and how it might be possible to meet them more effectively with a regionalized and collaborative institutional strategy. The metrics in this stage need to focus on such things as the number of meetings, inclusiveness of participants, and indicators of jointly developed goals and strategies.

The second step in the process has to do with the formalization of partnerships or collaboratives and indicators of an agreed upon mission with regard to specific economic and workforce development initiatives. Critical to this phase of development is a shared agenda for action that can lead to new outcomes for the region. Identification of the distinctive assets and resources all the members of the partnership bring to the table and the implementation of programs with defined targets endorsed by all are critical. The extent to which the direct investment by the Federal government in workforce development leverages other investments and activities in the regions also can be measured. Indicators such as the R&D activities within the region, SBIR, and STTR funds coming into the region, and angel and venture capital that target the industrial sectors and skill areas that are generating new business or substantial changes in the content of existing work are relevant to workforce development strategy and can be documented and evaluated over time. These are indicators of *progress towards* the "hard" outcomes represented by the Common Measures.

The action stage occurs when the implementation of workforce and economic development initiatives happen and roles and responsibilities are assigned to support such things as growing new companies or teaching new skills. The evaluators of the Generation I regions observed education and training for skilled workers, education in entrepreneurship, investment in K-12 STEM initiatives, and the establishment of incubators and technical assistance programs, all of which can be documented and counted. These efforts on the part of the regions -- many for the first time, and with completely new partners -- clearly represented coordinated implementation of programs that can affect change.

Finally, if shared vision and relationships have been built, the formalization of partnerships and diversification and coordination of input is in place and an array of shared programs are implemented; one should expect transformational outcomes that correspond to Common Measures used by organizations such as the Department of Labor and the Department of Commerce: Job placement, job growth, job retention, increased average earnings, decreased unemployment, new business startups, and growth in business taxes. So, in addition to the specific six lessons extracted from the four years of WIRED investments in the Generation I regions, it also created the opportunity to rethink how evaluation studies on programs of this character might be done moving forward. Quantitative data is essential and evidence is needed to support public policy initiatives. However, we must also learn how to measure what on the surface seems highly qualitative -- an important lesson from WIRED. Regional transformation is a slow process, often characterized by fits and starts. It is a process which challenges the status quo, in terms of what the proper boundaries in a regional economy are; what the most significant organizations in the region needed for sustainable transformation are; and what types of industries -- established, declining and emerging -- need to be at the table. Thus, the social and cultural dimensions are important: they can be managed and they can be measured.





The WIRED experience represents an incredible collection of lessons about how the diverse economies across this extraordinary nation deal with the everyday challenges of adapting and, in more and more cases, transforming the very core of their economy activities. The WIRED experience provides a nuanced insight into how regionally anchored workforce development and economic development organizations deal with these challenges and how differences in industrial legacies, jurisdictional boundaries, and regional culture affect how the change is made. The WIRED experience also provides insight into how the workforce development system is and can continue to transform its operations in order to engage with economic development in a more direct way, incorporating sector strategy to be more comprehensive in its services, engaging in new program delivery partnerships and alliances in order to leverage Federal dollars and regional education and training assets. Our hope, as evaluators, is that both the hard outcomes shared in this final report, as well as, the more process oriented observations, described in this report, will provide value to practitioners, moving forward, as well as encourage ETA to think about a broader range of metrics of success and more cumulative models for evaluating progress towards success.

