

National Governors Association Center for Best Practices

***The Next Generation of Workforce Development Project:
A Six-State Policy Academy to Enhance Connections Between
Workforce and Economic Development Policy***

Final Project Report

December 2004

**Report to: U.S. Department of Labor, Employment and Training
Administration**

National Governors Association Center for Best Practices

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Table of Contents

	Page
Preface and Acknowledgements	ii
Executive Summary	1
Section 1: Introduction.....	5
Section 2: Background - Next Generation of Workforce Development Project	7
Section 3: The Six-State Workforce Policy Academy Demonstration.....	9
Section 4: Conclusions.....	29
Appendix A: Cluster-Based Economic Development Project.....	36
Appendix B: Key Challenges Facing States	45

Preface and Acknowledgements

This report is the culmination of a four year project focused on defining the next generation of workforce development policy in response to rapid technological advances, globalization of markets and demographic changes that are transforming the United States' economy and its labor markets.

The National Governors Association (NGA) Center for Best Practices joined with three leading university policy centers as initial partners in developing this project. They included the (former) Institute for Public Policy and Management, University of Washington, the John J. Heldrich Center for Workforce Development at Rutgers University, and the Ray Marshall Center for the Study of Human Resources at the University of Texas at Austin. Northern Illinois University's Business and Industry Services became a partner at a later stage in the project.

The project partners recognized that America's economic future depends on the strengths of its workforce. Businesses need skilled workers to continue producing the innovative, high quality products and services that give U.S. firms a competitive advantage in the global economy. They also recognized that state economies are the economic engines of the United States both in driving innovation and building human capital. This places governors in a pivotal leadership role to address the challenges of a global economy while ensuring the prosperity of their businesses and citizens.

The Next Generation of Workforce Development project was designed to assist governors in developing the policy infrastructure and strategies that help workers and businesses stay competitive. This requires a close alignment of workforce development and education with economic development. This alignment was the primary focus of the project and at the core of the strategies and activities planned and implemented by the six states (Idaho, Missouri, Montana, New Jersey, Ohio, and Virginia) that participated in the Policy Academy phase of the project. This report provides a close look at the initiatives underway in these states as a result of their participation in the Policy Academy.

There are numerous people who contributed to the success of Next Generation of Workforce Development Policy project. The initial concept for the project grew out of lengthy discussions among the members of the initial project team including, Evelyn Ganzglass (formerly with NGA) and Martin Simon, NGA Center for Best Practices; Christopher King, University of Texas at Austin; Betty Jane Narver, University of Washington (who passed away during the project and is remembered with deep appreciation); and Carl Van Horn, Rutgers University. Neil Ridley formerly with the NGA Center for Best Practices and Robert Sheets at Northern Illinois University joined the project after the planning phase and made significant contributions during the research and policy academy phases. Christopher King, Robert Sheets and Carl Van Horn deserve special recognition for their valuable research papers and for their considerable conceptual and time commitments to the project. NGA Center staff that made valuable contributions to the project includes Stephen Crawford, Jan Dunlavey, Linda Hoffman, Sam Leiken, Bob Masciarelli, and Debbie Woods. During the Policy Academy phase, many faculty members made valuable contributions working with the state teams. Two faculty members

deserve special recognition, Larry Good with the Corporation for a Skilled Workforce and Steward Rosenfeld with Regional Technology Strategies.

The six state Policy Academy teams deserve special appreciation for taking the conceptual framework for this project and translating it into successful state policy initiatives. Their considerable hard work, innovation, and commitment have paid off in numerous short-term achievements and will continue to pay off in longer-term results that will benefit individuals, businesses, and communities in their states.

This project would not have been possible without the funding support from the Ford Foundation and the commitment and conceptual support from Ford's project officer, John Colborn. Funding support from the U.S. Department of Labor, Employment and Training Administration made the Policy Academy possible and was greatly appreciated along with the commitment and support from ETA staff, particularly David Balducci.

Executive Summary

In order to achieve long-term economic success in the 21st Century and compete in a global economy, governors and state policymakers must create, attract and retain an educated and skilled workforce. A key factor in building a flexible and knowledgeable workforce is the integration of education, economic development, and workforce development policies that provide a continuum of lifelong learning opportunities and work supports.

To assist states in preparing for the demands of the new economy, the National Governors Association (NGA) Center for Best Practices implemented an initiative titled "State Leadership in the Global Economy." The initiative was developed to provide governors with the critical knowledge and policy tools needed to support long-term cluster-based economic development by leveraging regional workforce, science, and technology capabilities and to restructure workforce development in response to the changing economy. There were two separate, yet intersecting projects that were at the core of this initiative including an economic development project focused on cluster-based strategies and a workforce development project focused on linking workforce development with education and economic development.

Cluster-Based Economic Development Project

Underwritten by the U.S. Department of Labor, U.S. Department of Commerce, and the Ford Foundation, the economic development project was a yearlong effort to assist governors in developing strategies for a global economy. This project focused on building cluster-based economic development strategies, maximizing public leadership in promoting international trade, and strengthening science and technology capacity in states. During this project, NGA partnered with the Council on Competitiveness to form a Task Force on State Leadership in the Global Economy. Under the guidance of the Task Force, NGA and the Council conducted a series of workshops, roundtables, and other research and technical assistance activities to assist states in developing cluster-based economic initiatives. As a result of these efforts, several governors' guides were developed to help promote new ideas regarding economic development and to assist states in modernizing their workforce. Major findings from one of these guides, *A Governors' Guide to Cluster-Based Economic Development*, are presented in Appendix A of this report.

Next Generation of Workforce Development Project

Key to the success of the economic strategies outlined in the governors' guide on cluster-based economic development is the provision of lifelong learning and training for employees and employers. The theme of lifelong learning was woven into the fabric of the second project, focused on creating the next generation of workforce development policy. This project was a partnership between the NGA Center for Best Practices and three university-based policy centers and was conducted in two phases - research and planning activities in phase one and a policy academy in phase two.

Phase One - Research and Planning

The research and planning phase was a two-year effort underwritten by the Ford Foundation, which led to the development of a conceptual framework and action plan for the next generation workforce system. Several activities were carried out during this phase including holding national discussions on workforce development system reform, conducting environmental scans

of workforce development efforts among states, holding regional forums to obtain input from state and local policymakers on workforce issues, and conducting research and writing papers on key issues identified through the former activities.

Emerging from this body of work was a shared vision of the next generation workforce development policy, along with a clearer understanding of the challenges faced by states in transforming current approaches to achieve the shared vision. These were set forth in the NGA Center policy paper entitled *Governors' Guide to Creating a 21st Century Workforce*. Policy changes recommended in the guide include: 1) connecting workforce development to economic needs, 2) building a stronger education pipeline to produce skilled workers, 3) expanding opportunities for continuous learning, 4) enhancing workers' ability to manage their careers, 5) strengthening work supports to promote employment retention and career advancement, and 6) strengthening governance and accountability in the workforce system. These recommendations served as the conceptual framework for phase two of the project, the Next Generation of Workforce Policy Academy.

Phase Two - The Next Generation of Workforce Development Policy Academy

The Next Generation of Workforce Policy Academy was a two-year, intensive technical assistance effort to assist six states (Idaho, Missouri, Montana, New Jersey, Ohio, and Virginia) in developing and implementing new policies to address the challenges of a global, knowledge-based economy. Some of the key challenges facing the Policy Academy states included shortages of skilled workers, barriers to partnerships between state and local agencies, slow economies, few targeted skills-based training programs, and lack of alignment between educational, economic development, and workforce development programs. After identifying key challenges, the policy teams from the Academy states developed goals and strategies necessary to build more effective workforce development systems. Overall, the Academy teams were able to take concrete and positive steps to ensure that their respective workforce systems will address the needs of the 21st Century economy.

The Academy process proved to be an excellent strategy for building state policymaking capacity and resulted in very concrete state strategies to meet the goal and objectives of the project. For complex policy challenges, especially those involving multiple state agencies as well as private and local partners, the Academy provides state policymakers a structured format to focus on a key policy issue (or a set of related issues) and resolve conflicts with the support of an expert faculty. It requires a strong commitment from the state teams, as well as intensive work both during and after the formal Academy meetings, in order to complete their goals.

There were several key lessons learned from the Academy process including:

- There is value in providing a structured forum for policy teams to meet and plan;
- The Academy process can help accelerate progress on related state initiatives;
- The Academy process must continuously be customized to the needs of the state teams;
- A structured planning process with defined tasks and deliverables is important to achieve results; and
- It is critical to maintain a focus on the desired outcomes of the Academy.

Key Lessons Learned in Addressing the Project Goals

The six states participating in the Academy acquired the tools and knowledge which are critical in developing effective policies that foster a competitive and knowledgeable workforce. The lessons learned in addressing the project goals include:

- **Aligning workforce and education with economic development requires a clear understanding of the industries in the state and a common understanding of the knowledge and skills required to compete successfully.** Each of the Academy states understood the importance of identifying their state's key industries and needs for skilled workers in order to define a common agenda between their workforce and economic development programs and initiate activities to become better informed.
- **Building a stronger education pipeline of skilled workers requires seamless connections between the components of the system and with the skill demands of the workplace.** Each of the Academy states faced the challenge of producing a continuous flow of skilled workers to meet the needs of business, yet they often found gaps between the systems responsible for producing a skilled workforce. The most common gaps found in the Academy states were between the secondary and postsecondary systems, between education and workforce programs, and between these programs and the skill demands of the workplace. To address these gaps, the states focused on creating seamless connections between education programs, integrating with workforce programs, and strengthening the connections to business and industry.
- **Expanding opportunities for continuous learning requires building partnerships with business and education and ensuring that individuals have the literacy skills necessary to advance.** More than ever the Academy states recognized the importance of building business-education partnerships to ensure that workers have the opportunities to continually upgrade their knowledge and skills. They also recognized that without a solid foundation of literacy skills, individuals cannot take advantage of learning opportunities. With this understanding, several of the states expanded learning opportunities by building on existing partnerships with business and education that were established in creating their one-stop systems.
- **Building career pathways requires good information, ongoing assessment and certification of skills, and access to learning opportunities.** The Academy states recognized that career pathways require bridges between levels of education, and between education and the workplace in order for individuals to succeed and employers' needs to be met. Precise information on labor market needs and learning opportunities is also required along with common ways of assessing and communicating skills. Several of the Academy states initiated activities to build bridges across the gaps in the career pathways in their state.
- **Strengthening the governance of workforce programs requires meaningful outcome measures that are system-wide and tied to the economic goals of the state and communities.** One key barrier to improving the governance of the workforce systems, encountered by the Academy states, is lack of cross-system performance indicators that

demonstrate the systems collective contribution to the states economic goals. Several of the states made significant progress in addressing this issue by identifying a common set of measures across programs and using tools such as performance scorecards to report on the measures.

Recommendations Related to Federal Workforce Programs

The conclusion of this project comes at a time when the Workforce Investment Act, the primary federal workforce development program is up for reauthorization along with other key workforce-related programs such as the Carl Perkins Vocational Technical Education Act, Temporary Assistance for Needy Families, and the Higher Education Act. This presents a major opportunity to eliminate barriers to effective service delivery caused by inconsistent definitions, planning and reporting requirements, administrative structures and accountability measures. The Academy states discussed the following recommendations that, if adopted, could enhance the alignment of workforce and education programs with economic development.

- **Reform all federal workforce-related programs in tandem**
- **New information systems are needed by policymakers, employers, and individuals**
- **Better strategies to engage the private sector**
- **Encourage greater access to training and certification**
- **Allow for flexible service delivery structures, not one-size fits all**
- **Promote cross-system measures and integrated performance information systems**

Section 1: Introduction

Transitions to the knowledge-based economy, fluctuations in the economy, current worker dislocations and future skill shortages have brought workforce development to the forefront of state economic policy. Governors recognize that states' long-term economic success in the 21st Century will depend on their ability to create, attract and retain an educated and skilled workforce and to provide an environment that supports innovation, entrepreneurship, and economic growth. State workforce policies therefore must be closely integrated with education and economic development policies so that they provide a continuum of lifelong learning opportunities and work supports. This is necessary to meet employers' needs for a more skilled and adaptable workforce and workers' desire for economic security and career advancement.

To prepare states to address these challenges, the National Governors Association carried out an initiative called "State Leadership in the Global Economy." Under the leadership of former NGA Chair and former Michigan Governor John Engler, this initiative was designed to provide governors with the critical knowledge and policy tools needed to support long-term cluster-based economic development by leveraging regional workforce, science, and technology capabilities and to restructure workforce development in response to the changing economy. There were two separate, yet intersecting projects that were at the core of this initiative: 1) an economic development project focused on cluster-based strategies, and 2) a workforce development project linking workforce development with education and economic development.

Cluster-Based Economic Development Project

The economic development project, underwritten by the U.S. Department of Labor, U.S. Department of Commerce, and the Ford Foundation, was a year-long effort to help governors develop economic strategies for a global economy. This project focused on building cluster-based economic development strategies, maximizing public leadership in promoting international trade, and strengthening science and technology capacity to foster an economy based on innovation. To implement this project, NGA partnered with the Council on Competitiveness and formed a Task Force on State Leadership in the Global Economy. Under the guidance of the task force, NGA and the Council conducted a series of regional workshops for state policy teams to discuss and learn approaches for cluster-based economic development. Following the regional workshops, customized technical assistance was provided to several states interested in developing cluster-based strategies in their states. Through this project several governors' guides were developed to help foster a new understanding of economic development and to ready states for the 21st Century. Major findings from one of these guides, *A Governor's Guide to Cluster-Based Economic Development*, are presented in Appendix A. This guide served as an important resource for the Next Generation of Workforce Development Project and the six states that participated in the Policy Academy phase of the project.

Next Generation of Workforce Development Project

Key to the success of the economic strategies outlined in the governors' guide on cluster-based economic development is the provision of lifelong learning and training for employees and employers. The theme of lifelong learning was woven into the fabric of the second project, focused on creating the next generation of workforce development policy. This project was a partnership between the NGA Center for Best Practices and three university-based policy centers

including the John J. Heldrich Center for Workforce Development at Rutgers University, the Ray Marshall Center for the Study of Human Resources at the University of Texas at Austin, and Northern Illinois University, Business and Industry Services.¹ The workforce development project was conducted in two phases; research and planning activities in phase one and a policy academy in phase two.

The research and planning phase was a two-year effort underwritten by the Ford Foundation. It led to the development of a conceptual framework and action plan for the next generation workforce system. The work during this phase drew on the extensive and collective knowledge, experience, and connections of the NGA Center and its university partners to carry out a series of activities in support of building the next generation of workforce development. It also built on the principles and reforms initiated under the Carl Perkins Vocational Education Act, the Workforce Investment Act, the Personal Responsibility and Work Opportunity Reconciliation Act as well as reforms carried out across the states to address the broader, more fundamental set of policy challenges related to the changing, globally competitive economy.

Several activities were carried out during the research and planning phase:

- national discussions on workforce development system reform;
- an environmental scan of system-oriented workforce development efforts among the states;
- a series of regional forums to gather input from state and local policy makers and practitioners from the public and private sector on the next generation workforce development system; and
- three research papers were developed by the university partners which summarized key policy issues identified through these activities.²

Emerging from this body of work was a shared vision of the next generation workforce development policy, along with a clearer understanding of the challenges faced by states in transforming current approaches to achieve the shared vision. These were set forth in the NGA Center policy paper entitled *Governors' Guide to Creating a 21st Century Workforce*. Section 2 of this report highlights the challenges and recommendations from this guide. The recommendations presented in this guide served as the conceptual framework for phase two of the project, the Next Generation of Workforce Policy Academy, which is discussed in Section 3 and is the primary focus of this report. In Section 4, lessons from the Academy process and conclusions from the Academy states' experiences are discussed along with recommendations for federal workforce legislation drawn from these experiences.

¹ The former Institute for Public Policy and Management, University of Washington was a partner in the project during the planning and research phase. They withdrew from the project after the death of Betty Jane Narver, their representative to the project. Betty Jane is remembered by the other partners with great respect and appreciation.

² The three research papers are: *Performance Measurement and Management for Next-Generation Workforce Systems* by Christopher King, Daniel O'Shea, and Ying Tang, Ray Marshall Center for the Study of Human Services, University of Texas at Austin; *Meeting Global Competitiveness Challenges: The Next Generation of Workforce Policy* by Robert Sheets, Business and Industry Services, Northern Illinois University; and *Enhancing Lifelong Learning Opportunities for Adults* by Carl Van Horn, John J. Heldrich Center for Workforce Development, Rutgers, the State University of New Jersey

Section 2: Background - Next Generation of Workforce Development Project

The NGA Center conducted a multi-year initiative to understand the challenges states face in building a workforce development system capable of creating a 21st Century workforce. The research and planning phase of the project culminated in the publication of the NGA Center policy paper, entitled *A Governors' Guide to Creating a 21st Century Workforce*. Key findings from this report are highlighted in this section as background for the discussion of the Workforce Policy Academy in Section 3, which was the second phase of the project and is the primary focus of this report.

A New Vision for Workforce Development

The next generation of workforce development policies must engage the private sector and the entire public-private enterprise of training and education, starting with elementary and secondary school and continuing through college and working life. In this vision, workforce policies no longer address just the “second chance” system as they have in the past. Rather, they address the workforce development needs of all employers, all workers and all future workers. Ultimately, the success of workforce policy and programs must be measured by their contributions to the economy and the economic well-being of all individuals.

Challenges in Building a Skilled Workforce

States and communities face major challenges in preparing U.S. workers for high-skill, high-wage employment. While they are succeeding in overcoming many barriers to building a skilled workforce, the major fluctuations in the economy demand flexible and timely responses. Key challenges include the following:

- **Many state workforce systems do not reflect market needs.** A key problem is that many publicly-funded programs are narrowly focused on entry-level jobs for low-income workers and therefore do not meet most employers' immediate or long-term need for skilled workers. These programs also fail to adequately link education and workforce policies to the economic needs of states and communities.
- **Public education is falling short in preparing individuals for the new economy.** Employers frequently complain that the nation's schools are failing to teach the basic skills needed for most 21st Century jobs and its postsecondary education institutions are failing to produce enough graduates with advanced math, science, and engineering degrees.
- **Workers must navigate a more uncertain career path.** The 1990s were marked by an acceleration of “churning” (high business and job turnover), a breakdown in the internal career ladders for workers, and greater worker mobility. The end result is that responsibility for career advancement is shifting from companies to individuals, but post-secondary education, student financial aid, training programs, and consumer information are not changing fast enough to meet the expanding needs of working adults.
- **Many low-wage workers need work supports to advance.** Low-wage workers often need further training and support—child care, health care coverage, transportation assistance, etc.—to help them move up the job skills and wage ladder. For many of these

individuals and families, work support services are crucial to their self-sufficiency and advancement.

- **Effective governance and accountability structures are missing.** Multiple agencies, administrative fragmentation, and a lack of system wide accountability conspire to reduce the effectiveness of the public workforce system. Programs that should be closely connected, such as education, welfare to work, and workforce training, are spread among multiple agencies that often have competing priorities. Consequently, individuals cannot take advantage of linked education and training services, and employers are put off by the arcane and complex administrative requirements of different public programs.

State Policy Actions

Governors can provide leadership in achieving a more effective workforce development enterprise by implementing key policy changes that address the challenges to building a skilled workforce. Outlined below are six policy changes recommended in the *Governors' Guide to Creating a 21st Century Workforce*.

- **Connect workforce development to economic needs.** Public workforce programs should forge stronger connections to the business community to identify the jobs and skills needed for the regional economy. States should combine the resources of various programs to provide training and education to workers and employers to fulfill those needs.
- **Build a stronger education pipeline to produce skilled workers.** States should harmonize workforce development, early childhood education, and elementary, secondary, and postsecondary education with goals for economic competitiveness. In addition, states should maximize the benefits from the dollars invested in postsecondary education, a primary source of highly skilled entrants to the workforce.
- **Expand opportunities for continuous learning.** Governors should create an education and training environment that builds skills throughout an individual's career.
- **Enhance workers' ability to manage their careers.** In the new economy, individuals must assume greater responsibility for keeping their knowledge and skills current. The public and private sectors can help by developing easier ways for people to gain necessary certifications and navigate the increasingly complex and confusing learning marketplace.
- **Strengthen work supports to promote employment retention and career advancement.** States' experiences under welfare reform highlight the important role work supports play in helping families successfully move from dependency to economic self-sufficiency.
- **Strengthen governance and accountability in the workforce system.** Governors can create a robust workforce enterprise that combines the resources of many programs, engages the private sector, and focuses on meaningful outcomes. This requires improved governance and accountability.

These recommendations served as the guiding framework for the six states that participated in the Next Generation of Workforce Policy Academy, which is discussed in Section 3. Each state team developed goals, strategies and initiatives that addressed many of these recommendations.

Section 3: The Six-State Workforce Policy Academy Demonstration

The Next Generation of Workforce Policy Academy was a two year, intensive technical assistance effort to assist six states in developing and testing new policies to address the challenges of a global, knowledge-based economy. As part of the Academy process, states formulated many of their workforce development strategies around the policies recommended in *The Governor's Guide to Creating a 21st Century Workforce*. Some of the key challenges facing Policy Academy states included shortages of skilled workers, barriers to partnerships between state and local agencies, slow economies, lack of targeted skills-based training, and lack of alignment between educational, economic development, and workforce development programs. After identifying key challenges, the Academy state teams developed goals and strategies necessary to build more effective workforce development enterprises. Overall, the Academy teams were able to take concrete and positive steps to ensure that their respective workforce systems will address the needs of the 21st Century economy.

An overview of the policy academy model is presented in the first part of this section and provides the backdrop for an in-depth look at the experience of the six states that participated in the Next Generation of Workforce Policy Academy.

The Policy Academy Model

The academy process provides states an opportunity to come together to gain exposure to new knowledge and ideas, work collaboratively on major policy challenges, and receive ongoing consultation and technical support. This is done in an effort to bring about change in their respective states and communities. States that participate in an academy must organize a high level team of decision makers from across agencies with a team leader designated by the governor. The teams form the core of the state's commitment to working on the policy challenges selected.

An academy is a highly interactive and iterative, team-based process for crafting policy strategies and solutions to complex policy challenges. Most academies involve two or three formal meetings, each lasting up to three days, at which team members:

- work intensively with their state's own team members to explore issues and solutions in-depth;
- engage in cross-team analysis and critiques of policy proposals; and
- have access to a "faculty" of national and state policy experts.

The meetings are structured to provide opportunities for cross-state exchange of ideas and strategies, time for individual state team work sessions, and opportunities for state teams to consult with Academy faculty.

The Next Generation of Workforce Policy Academy

In August 2002, the NGA Center for Best Practices issued a solicitation to states regarding participation in the Next Generation of Workforce Policy Academy underwritten by the Ford Foundation and the U.S. Department of Labor. Based on the recommendations of a panel of experts including NGA staff, university partners, and an ETA representative, six states were

selected to participate in the Academy: Idaho, Missouri, Montana, New Jersey, Ohio and Virginia. As part of the Academy process, the state teams participated in a series of activities to assist in developing and implementing a plan for reforming their states' workforce development systems.

Academy Meeting

Three meetings were conducted as part of the Workforce Policy Academy at approximately six month intervals. These meetings were structured to provide opportunities for cross-state exchange of ideas and strategies, time for individual team work on goals, strategies and implementation plans, and opportunities for state teams to consult with the Academy faculty.

Learning Networks

In addition to the Academy meetings, NGA along with the university partners and outside experts supported a series of learning networks that were created around issues of particular concern to two or more of the participating Academy states. The learning networks involved a subgroup of the participating states that identified a common issue to resolve by working together outside of the regular Academy meetings. States had the option of participating in one or more networks over the duration of the Academy.

Site Visits

The Academy meetings and learning networks were supplemented by site visits to each state by NGA Center staff, university partners and other outside experts. The site visits provided further opportunities for teams to undertake in-depth analysis of the current status of the state's workforce and policies, learn more about specific policy options and strategies, address specific issues that the team identified as a priority, and consider implementation challenges and barriers.

State Team Work

Between formal meetings of the Academy, state teams were expected to make significant progress in policy development and implementation. Conference calls were conducted between meetings to enable state teams to interact with each other on an ongoing basis for sharing issues and solutions as they developed and implemented policy changes.

Implementation Plans

As part of their participation in the Academy, each state team developed an implementation plan to monitor and measure their progress in meeting their goals and objectives. The plan was reviewed with the NGA project team on a regular basis and culminated in progress reports prepared by each state team.

Evaluation

Each state was required to prepare an interim report outlining their progress in meeting the goals of the Academy and for the state for participation in the Academy. These reports provided the basis for modifying their strategies and activities for the remainder of the Academy. A final report was also required of each state team, which summarized their achievements and described how they had benefited from the Academy.

The Six States Academy Experience

This section provides an overview of key initiatives developed by the six Workforce Policy Academy state teams to create a 21st Century workforce. The descriptions of the state experiences are based on information from their implementation plans, progress reports, observations from the Academy meetings, and site visits to the states. This section is organized around the six policy recommendations presented in *The Governors' Guide to Creating a 21st Century Workforce* as highlighted in Section 2. Further information is presented in Appendix B which gives a detailed description of the key workforce challenges facing each state and the goals that were created to address these issues.

Connect Workforce Development to Economic Needs

Academy participants recognized the importance of connecting the economic development needs of their states with workforce development systems in order to create robust state economies. These efforts are critical, especially as states recover from the economic downturn and tight budgets. As part of the Academy process, participating states identified key challenges, goals, and outcomes resulting from their efforts to connect workforce development to economic needs.

Idaho

In order to address the slower growth in the economy and a shortage of skilled workers in some industries, Idaho is actively pursuing goals to create an adaptive workforce development system that is able to respond to the needs of businesses. Strategies that have been developed as a result of the Policy Academy are being piloted in the health care and science and technology industries.

One goal, devised to improve the linkages between economic development and workforce development, is to identify and integrate data sources to enhance labor market supply-demand information. Strategies employed to achieve this goal include combining data from multiple agencies, developing an outreach system to obtain data analysis and input from a wide variety of businesses, and modifying data so that it is useful to both government and private sector businesses.

New data sources have been identified and efforts have begun to coordinate with industry and licensing associations to enhance supply-demand information for the health care industry. In light of this goal, an interagency committee has been formed to produce health related supply-demand information and a Nursing Workforce Center was established. The new center will work with existing partners to develop curricula and to further develop supply-demand information in nursing.

Idaho also has conducted several joint meetings and leadership activities with various officials from workforce, education, and economic development agencies to enhance and further develop partnerships. In addition to these activities, the state has merged the Departments of Labor and Commerce and has established a Science and Technology Council. The Department of Commerce and Labor is currently developing a Business Retention and Expansion campaign, which will promote available workforce services and incentives to Idaho businesses. A new website also was launched in September 2004 which describes all state-supported business services (<http://www.business.idaho.gov>).

Idaho also is working to improve its approaches for marketing workforce development programs. In this regard, the state has devised new logos under the *IdahoWorks* brand and has held major public events to promote workforce development programs.

Missouri

Missouri focused on several key challenges that must be met to create an economically competitive workforce, including: identifying the essential and technical skills demanded by business and industry; positioning the workforce system to effectively respond to these identified needs; investing in targeted skills-based training; and integrating workforce, education, and economic efforts in order to empower the workforce investment system.

To address these challenges, in 2004 Missouri merged the research divisions from several agencies to form the Missouri Economic Research and Information Center (MERIC). The Center will now be able to better serve local workforce investment boards with a variety of comprehensive services. In collaboration with local boards and other organizations, MERIC has conducted supply/demand gap analyses for each of the fourteen workforce investment regions in the state. The objective of the research was to help local areas address the “true” economic needs of their specific region. Local workforce investment boards will be responsible for developing regional workforce reports as well, reflecting the goals of the state. Importantly, the findings from the analyses will also be shared with local educational institutions in order for curricula to reflect the skills needed by local employers. Students also will be counseled on local career choices and the skills that are in demand in their local area.

The Missouri Division of Workforce Development has collaborated with various private sector companies to develop career ladders for workers. The initial emphasis has been on biotech, healthcare, and information technology industries. The partnership with private sector organizations has been critical in helping the state identify the specific technical skills needed by businesses. In addition, career pathways have been designed for TANF clients as a result of the partnerships that have emerged between the state and private businesses. The state also is working with Southeast Missouri State University to develop an entrepreneurship program for TANF clients.

In addition to partnering with private industry to develop career ladders, the state is working with private industries to develop skill alliances. Currently, skills alliances have been identified in the life sciences and advanced manufacturing industries. Private sector organizations have worked closely with the state to identify the essential and technical skills that are needed by businesses in these industries. These efforts are assisting Missouri in identifying the training opportunities that are needed to further economic growth in the state.

Montana

A major component of Montana’s efforts to improve the linkages between workforce, education, and economic development programs was an analysis of industry clusters conducted in 2003 by the Governor’s Office of Economic Opportunity. Six major industry clusters were identified through this process, with leadership councils developed in two of the clusters. Leadership councils are designed to serve as liaisons between government, education, and business. Specifically, the councils will provide leadership to workforce development efforts, sponsor

networking functions, disseminate information to government and education regarding business and industry issues, and provide feedback on the quality and effectiveness of state sponsored programs.

Another effort to link workforce to economic development activities in Montana was a supply and demand analysis of employees in home healthcare and hospital occupations. This study was co-authored by the state and the healthcare industry to provide information on the current and projected demands in healthcare occupations by hospitals and regions. The state plans to replicate the methodology used in this study and survey other industries in the near future.

In order to develop a comprehensive and accurate assessment of healthcare needs throughout Montana, the state is evaluating surveys and studies conducted over the past few years to measure healthcare worker shortages. The intent is to determine common data requests that various agencies seek through these surveys in order to develop a comprehensive system of measuring these workforce needs.

New Jersey

Two of the goals that New Jersey focused on through the Policy Academy process relate to strengthening the relationship between the workforce and economic development systems. One is to develop a flexible and adaptive workforce development system that is demand driven and responsive to the needs of workers, job-seekers, and employers. The second is to strengthen the direct services provided to the business community.

To address these goals, four Workforce Investment Boards participated in a demand-side skills assessment project initiated by gathering data on the skills required by specific industry clusters in their region. Information gathered through this process was made available online (www.NJNextStop.org) and distributed to various state agencies, one-stop centers, and institutions of higher education to further align workforce and economic development efforts. The John J. Heldrich Center for Workforce Development at Rutgers University also hosted a one-day symposium for K-12 school counselors and higher education personnel to demonstrate the utility of the website and to explain demand skills.

During the demand side skills assessment project, each of the four participating WIBs developed Industry Advisory Groups comprised of local employers, educational providers, economists, and training specialists. These groups assisted the local WIBs in identifying key demand occupations in their areas and the skills needed by employers in these occupations. Several of the WIBs continued their collaborative efforts with the Industry Advisory Groups after the completion of the demand side skills assessment project to stay abreast of relevant changes in the local economy and to recognize the needs of employers in their respective areas.

New Jersey is establishing Business Resource Centers (BRC) in every comprehensive one-stop center, which offer employers access to a wide variety of resources and services and will provide businesses with a professional environment for employee recruitment activities. Each WIB has identified private and public agencies to become partners in the Business Resource Centers, enabling the centers to accurately meet the needs of the local business community. Business Resource Centers will foster a strong connection between the state and local businesses and will

represent partnerships among agencies such as Chambers of Commerce, community colleges, local banks, and other community-based organizations. Through the partnership at BRCs, strategies and services will accurately reflect the needs of local businesses.

As a result of the Academy, New Jersey has placed a greater focus on efforts to provide training and support services to businesses in particular industries. One such effort has been assistance in establishing the Retail Skill Center, an educational and training resource for merchants and surrounding employers of the Jersey Gardens Mall. The state, local business and educational institutions have partnered to provide incumbent worker training and have leveraged resources to further enhance the capabilities of the Center.

Another example of a focused effort to assist existing industries in New Jersey has been the recruitment and training assistance provided to the Atlantic City casino industry. To effectively address the workforce needs of the casino industry, a partnership was formed between at least eight casinos, a local WIB, a community college, one-stop career center, and a local housing authority. As a result of this partnership, training has increased substantially for entry level workers as well as for non-native English speaking employees of the casino industry. Another related result of participating in the Academy, the state has efforts under way to provide support services to small and mid-sized manufacturers in the state who employ entry-level workers.

The New Jersey Department of Labor and Workforce Development (LWD) is committed to strengthening its relationships with other state agencies in order to develop a truly integrated approach in workforce and economic development activities. Executive staffs from several different agencies have formed a core group that meets on a regular basis with private sector companies to facilitate economic development activities. The team works with industry to address issues related to business expansion, employee retention, relocation, and other areas. One result is that training has been provided to manufacturers to gain ISO 9000 registration.

New Jersey recognized that economic sustainability and growth is dependent on the availability of a skilled workforce capable of assuming the jobs of the future. To develop a truly integrated system that can provide all individuals with labor market skills, New Jersey consolidated the employment-directed and workforce development programs and activities that were being administered by the Departments of Human Services and Education into the Department of Labor and Workforce Development. This included the Work First New Jersey Program (WFNJ) and Food Stamp Act (FSA), Adult Basic Education/English as a Second Language (ABE/ESL), part of the functions associated with New Jersey's Private Vocational Schools, and the Youth Corp Program. The consolidation took place concurrently with New Jersey's participation in the Academy and was aided by the work of their Academy team.

The formation of this comprehensive and integrated system is enabling New Jersey to focus on the employment and career development goals of all individuals in conjunction with the needs of employers and future labor market trends and demands.

Ohio

Ohio focused on creating a demand-driven workforce system that reflects the economic needs of the state and is more closely aligned with local labor markets. One of the main methods of

creating a demand-driven workforce system has been the formulation of sector-based workforce advisory councils to provide information, share best practices, and develop policy recommendations reflecting the current and future needs of business and industry. Each sector-based advisory board will receive an employment and economic profile to assist in developing specific, demand-driven policies. The information generated by sector councils will be conveyed to the Ohio Workforce Policy Board to facilitate a more integrated approach to address the workforce and economic needs of the state.

As a result of these efforts, the first sector-based council, addressing the needs of the manufacturing sector, was launched in May 2004. Since its inception, the Manufacturing Workforce Advisory Council has compiled data on the manufacturing sector in the state and has developed a survey which will be used to collect standardized information on the workforce development needs of manufacturers. Ohio plans to launch other sector-based workforce advisory councils in the future.

Also as a result of participating in the Policy Academy, Ohio is forming regional councils throughout the state to evaluate and address important workforce issues in other sectors of the economy. These councils will be formed through a competitive selection process. Several councils will be launched simultaneously, which will help foster a more demand-driven workforce system throughout the state.

Ohio also is implementing a business-led planning process as part of its effort to create a more demand-driven workforce system. Each WIB is developing a business plan to serve as guide for activities to be conducted in that area. A template for creating business plans has been created and approved by the state board. The language included in the plans is “business friendly” and has eliminated many of the government terms that are often described as confusing by the private sector. The plans will encourage local private sector business leaders to assist in the development of policies leading to a more demand-driven system.

In September 2004, the Hire Smart, Train Smart and Ohio SkillsLink initiatives were announced to help assist businesses with effective recruiting and training strategies. These initiatives are based on the goals and outcomes identified through the Policy Academy including support of business growth and stronger connections between economic and workforce development efforts in Ohio.

Efforts also were undertaken to increase awareness and promote the services that the Ohio workforce system can offer local businesses. In April 2004, a group of workforce professionals was convened to discuss branding workforce operations throughout the state. An outside expert was also contracted to help facilitate branding discussions with local workforce professionals and to assist local areas in developing marketing tools to promote their services to businesses.

Virginia

One of Virginia’s strategic goals is to implement a market-driven workforce system that will provide a single point of entry to employment and training services. Under this goal, the Virginia Workforce Council piloted “demand plans” in two WIB regions and plans to expand these efforts state-wide. The purpose of a “demand plan” is to develop a specific and realistic

assessment of jobs and skills that are needed by employers in each area, which will be used to drive the local WIBs' training plans.

In each of the pilot sites, an Industry Advisory Committee was formed consisting of representatives from local government, business, postsecondary education, economic development and local workforce investment boards. The Industry Advisory Committees were responsible for initiating the demand analysis in each of the pilot sites. Based on information collected from the two pilot projects, the Virginia Workforce Council issued a system-wide "Strategic Planning Guidance" and protocol to all WIBs in 2004, which includes information on demand planning. The state workforce council also produced and issued a "System Governance Guidance" to all WIBs in order to improve the workforce infrastructure throughout the state.

In order to connect workforce and economic activities throughout Virginia, a demand driven econometric framework was developed to identify specific training requirements needed by business. Community profiles also were provided to local areas based on local labor market information data. In addition to these efforts, a study was conducted to identify potential gaps that could arise in the state based on projected changes in employment trends and the projected supply of graduates to fill these positions. The state also provided technical assistance to local WIBs through a "consultant-on-call" model to assist in demand planning.

Build a Stronger Education Pipeline to Produce Skilled Workers

One of the challenges facing states in developing a highly skilled workforce is the failure of public education to adequately prepare individuals for the demands of the 21st Century workforce. Employers frequently complain that the nation's schools are failing to teach the basic skills needed for most jobs and postsecondary institutions are failing to produce enough graduates with advanced math, science, and engineering degrees. In light of these challenges facing both the public and private sectors, one of the goals of the Workforce Policy Academy was to assist states in building a stronger education pipeline to produce skilled workers. To address this goal, several Academy states are developing strategies to align the workforce development, economic development, and secondary and postsecondary educational systems.

Idaho

One of the key issues facing the state of Idaho is preparing the workforce for future job opportunities, especially in the health care and science and technology industries. As part of developing a workforce system that reflects the needs of business, Idaho has focused on increasing the capabilities and responsiveness of the postsecondary education system as well as strengthening secondary education.

In August 2003, the State Board of Education adopted policies to facilitate credit transfer among various higher educational institutions. Following this action, progress has been made in allowing dual-credit between K-12 and postsecondary institutions, and credit transfer is now mandated for academic programs of study among postsecondary institutions.

One of the major outcomes from the Policy Academy is a plan to develop a new community college in Idaho. A team has been developed to provide policy and leadership expertise to the

project and includes individuals from Boise State University, business leaders, and community leaders. The plan has received wide support and in September 2004 the Workforce Development Council endorsed the establishment of new community college services. The Council is currently developing a recommendation for the project to be presented to the Governor and to the State Board of Education.

Policy makers in Idaho are developing system measurements and evaluating information systems that will allow for the implementation of an accountability system within the higher education system. The State Board of Education also implemented standards for high school graduation to help ensure that students are prepared for the workforce and higher education. Beginning with the class of 2005, high school students must pass a new test in order to graduate.

Missouri

The state recognized the importance of increasing continuous learning opportunities to equip students with the skills and knowledge needed to succeed in the workplace. One strategy to reach this goal has been for Missouri Career Centers to refer more individuals to vocational education and community colleges. The Missouri Training and Employment Council is currently developing an implementation plan to assist the Career Centers in becoming pathways for students to reach the community college system. The Missouri Training and Employment Council is also working with the Missouri Coordination Board for Higher Education, the Board of Elementary and Secondary Education, and the Governor's Business/Education Roundtable on reform proposals to ensure that these systems work with one another to achieve truly integrated reforms.

The state also developed strategies to expand participation in literacy programs. Some specific efforts include working through the Missouri Career Centers to identify those who need literacy training, incorporating literacy instruction in adult training programs, and promoting the benefits of literacy in the workplace. Overall, these efforts are designed to build effective bridges between employers and students to strengthen Missouri's economy.

Montana

One of the ways that Montana is increasing the responsiveness of the postsecondary education system and strengthening the educational pipeline is to expand registered apprenticeship programs in the healthcare industries. The first healthcare apprenticeship program is for pharmacy technicians and the first participant has already been enrolled. This apprenticeship program will provide participants with both direct work experience and education. The required coursework is being conducted through correspondence courses, on-site college course work, and distance learning activities.

Montana also is strengthening its educational pipeline by making career cluster development a priority at its two-year colleges. Four grants were awarded to two-year colleges to develop career pathways that are aligned with one of sixteen identified career clusters. The career pathways will be developed through partnerships between secondary schools, adult education institutions, WIA training partners, and other educational organizations. Upon successful completion of the pilot grant for creating a career pathway model in the healthcare sector, the

model will be applied to other career clusters. The career pathways also are designed to reflect the six industry clusters identified by the state.

The Office of the Commissioner of Higher Education is working with community partners at the local and regional level to identify industry clusters. This work has resulted in the formation of Business and Education Councils, which are work groups representing a specific industry cluster. The state also has restructured departments in some participating two-year higher education institutions to serve as learning centers for identified clusters, with plans underway to develop a career pathway for each identified cluster.

Montana has used WIA discretionary funds to help support a partnership to develop and deliver two healthcare programs designed to provide a stronger educational pipeline for workers and students. A bridge program has been created to connect two-year health information technology programs to four-year informatics programs and a partnership has developed between two colleges to share the online delivery of radiology technology courses.

In addition to aligning career pathways with the identified industry and career clusters in the state, a conference was convened by the Montana Conference of Education Leadership and the Office of Public Instruction including business leaders, private sector industries, and economic and workforce development partners. The purpose of the conference was to further coordinate and enhance partnerships in designing curricula to match the needs of businesses.

New Jersey

One of New Jersey's goals as a part of the Policy Academy was to align the state's community college and workforce development systems. New Jersey has one of the most highly educated workforces in the country, however a growing proportion of the population lacks English literacy and other basic skills needed to succeed in the workforce.

As part of its efforts to align education and workforce development activities, New Jersey is expanding apprenticeship programs throughout the state. The Department of Labor and Workforce Development is in the process of aligning college credits for apprenticeship training and is expanding the apprenticeship model to occupations that are critical in a knowledge-driven economy. The first initiative to provide college credit for apprenticeship programs was introduced in the building and construction trades industry, a program known as the NJ Pathways Leading Apprentices to a College Education (NJ PLACE). This project was endorsed by former Governor McGreevey and highlighted at a June 2004 AFL/CIO conference. The state plans to expand the model to other apprentice programs.

Stemming from discussion at the Academy on the need to create strong educational pipelines, the New Jersey Department of Education developed Career Academies that are currently offered at seven high schools located throughout the state. Career Academies are partnerships between the private sector and schools in which teachers provide information on specific career opportunities available in their local area. Students are provided with information on the training that is required for occupations in these areas as well as the chance to earn college credits towards a related degree or hands-on experience with business partners.

In a related effort, the state has created a website, www.NJNextStop.com, to inform career counselors, teachers, students, and parents of the skills that are needed for demand occupations in New Jersey. The state also conducted a successful marketing campaign designed to increase awareness of the website. Further expansions will be added to the website to provide information on specific skills that are needed for additional occupations. The website is a result of the demand-side skills assessment project that was conducted to identify critical skills needed by employers.

Ohio

To facilitate a more coordinated effort between education and workforce development, Ohio instituted a standards-based reform effort in the primary and secondary educational systems. The effort was strengthened by what was learned through the Policy Academy, which reinforced the importance of a solid academic foundation in the development of a skilled and highly productive workforce. As a result of its work through the Policy Academy process, Ohio formed a Joint Council to develop approaches which encourage the P-16 education system to more effectively prepare individuals for the workforce.

Virginia

During the Academy process, Virginia identified a growing concern with the gap between the skills that workers need to succeed in certain fields and the skills that workers actually possess. This concern is underscored by the growing dissatisfaction by employers with the job skills of recent high school and college graduates. To address these concerns, Virginia has initiated several strategies to develop skilled workers who meet the needs of business and industry. One strategy focuses on aligning career pathways in the K-12 and postsecondary education system with high demand industries and occupations. This career pathway model is first being piloted in both the nursing and maritime-based industries. The state plans to expand the pilot to other industries.

To support these pilot projects and help expand them to other high demand industries, the Virginia Community College System (VCCS) will work to realign workforce development services with identified industry clusters. Efforts are underway at the VCCS to identify competencies in existing curricula that should be redefined and incorporated into a competency profile for workforce preparation programs. The VCCS is currently developing “Virginia Competency Assessment Profiles” (VCAP) for demand occupations or industry clusters throughout the state. The nursing and maritime task forces will incorporate these into their career pathways model.

Expand Opportunities for Continuous Learning

Similar to the need to produce new workers with skills required in today’s job market, incumbent workers also require career training and skills development opportunities if businesses are to remain competitive. It is important that training and educational opportunities exist throughout a person’s career. To address this need, states are working on expanding opportunities for continuous learning. Several Academy states have created “seamless” lifelong learning systems that will be valued by job seekers, workers, and employers alike.

Idaho

To create an adaptive workforce development system which responds to the needs of businesses and workers, Idaho is focusing on delivering education and training services to targeted industries. The Policy Academy team will identify career clusters and work with businesses to determine the specific skills that are needed to work in these cluster areas. The goal of this strategy is to help improve professional-technical education at secondary and postsecondary levels to more accurately reflect the needs of business. The partnerships developed while identifying career clusters will help foster ongoing relationship between business, education, and workforce development.

In addition to identifying career clusters, Idaho developed business pilot programs in each of the six workforce regions throughout the state. The pilot programs offer a model on how to effectively involve local level businesses with workforce efforts. One of the pilot programs, for example, worked to develop a health care consortium with local businesses. Through the pilot project, the training needs of entry level healthcare workers in the area were evaluated by the state. The pilot program approach continued through the fall of 2004, with specific projects developed for high growth industries.

The state also developed strategies to ensure that workers and businesses have access to a broad range of educational services through enhancements to the one-stop system. One way this is accomplished at the one-stop centers is through automated support systems, such as *IdahoWorks*, which allow individuals to access information on a variety of workforce and education programs and other supports. Idaho also is creating “seamless” information connections through their Career Information Systems (CIS) which are available in all one-stop centers, workforce development agency locations, and postsecondary institutions.

Missouri

Findings from *The State of Missouri’s Workforce* report recommend that the state adopt skill standards including Work Keys, National Occupational Competency Testing Institute (NOCTI), Competency-Based Curriculum (DESE Profiles), and National Institute for Metalworking (NIMS). Based on these findings, the Division of Workforce Development, Department of Economic Development, has adopted the Work Keys skill standard throughout the state in order to provide a consistent method of assessing the skill levels of workers. Work Keys also will allow workers to obtain education and training in a systematic way that can lead to a certification within a particular field. Another finding from the *Workforce* report recommends that students complete a nationally recognized work-readiness certificate as part of high school graduation requirements in order to prepare students for the workforce.

Montana

To expand continuous learning opportunities, particularly in rural areas, the Montana Department of Labor and Industry and the Office of the Commissioner of Higher Education have worked together to convert existing curricula to online formats. A pharmacy technology curriculum has already been converted and plans are moving ahead to convert a radiology technology curriculum. In addition to providing these educational resources online, the state will provide an open entry/open exit format which will help meet the needs of working adults, with a focus on individuals enrolled in apprenticeship programs.

Another tool developed by Montana to expand learning opportunities throughout the state is the Primary Business Workforce Training Program. This program will assist economic development efforts at the local level by providing training for incumbent workers. It also will be an incentive and resource for businesses to locate and expand in Montana. Specific efforts have been conducted to address the needs of the healthcare industry. WIA incentive funds have been provided to local workforce investment boards to support initiatives designed to help train and place eligible individuals in the healthcare industry.

To streamline practices and enhance participant outcomes, WIA incentive funds are being used to train local community partners in using the Test of Adult Basic Education (TABE). TABE tests are used to assess reading and math proficiency levels of individuals seeking workforce services. In an effort to ensure high standards of quality, the state is currently developing a certificate of training for WIA partners who administer the TABE. The state also has awarded six Health Occupations Incentive grants to provide literacy services to incumbent workers or those who are seeking employment within the healthcare industry.

New Jersey

As part of their efforts to ensure that opportunities exist for continuous learning, New Jersey has made adult education and literacy a top priority within the Department of Labor and Workforce Development. Some examples of their efforts include grants to dislocated workers to help with retraining costs and assisting businesses with technology training fees. A statewide literacy program also has been established at one-stop centers to help workers acquire basic reading and writing skills necessary for the workforce.

In conjunction with the U.S. Department of Labor and the Sloan Foundation, New Jersey has developed and piloted a distance learning project to help enhance the skills of low-income workers. This project was advanced through the state's participation in the Academy and ensuing discussions regarding the use of technology to expand opportunities for continuous learning. The project primarily focused on how to increase the skill levels of low-wage single mothers through the use of distance learning. In September 2004, the state hosted a conference that was attended by representatives from fifteen states to share the distance learning model that has been developed. New Jersey now plans to expand the project to five additional WIB areas and connect it to career paths and demand occupations.

In addition to the distance learning project, community colleges in the state have partnered to establish the New Jersey Virtual Community College Consortium (NJVCCC). This partnership will allow member community colleges to share distance learning resources and increase students' access to online courses. Courses taken online through the NJVCCC will automatically be transferred to a student's home college.

Ohio

As a result of participating in the Policy Academy, Ohio is improving and expanding specific targeted outcomes in various programs that are designed to provide opportunities for continuous learning. One way of accomplishing this goal has been to focus efforts on increasing the Ohio Higher Skills Partnership Initiative. This initiative was originally established to encourage

relationships between community colleges, technical colleges, university regional campuses, and Ohio's Adult Workforce Education centers. The state now plans to increase partnerships throughout the state.

Virginia

To expand opportunities for continuous learning, Virginia has created a transportable and transferable skills credential system. The Career Readiness Certificate will allow individuals to gain a standardized credential that indicates workplace skills in reading, math, and locating information. The Career Readiness Certificate has three levels and is based on the WorkKeys employability skills assessment system. The certificate was piloted at five Virginia Community Colleges. Currently, a consortium of states contiguous to Virginia is working to implement the program which will provide workers with an interstate portable credentialing system. The goal for Virginia is to have the nursing, construction, and maritime industries use the Career Readiness Certificate for entry-level jobs by September 2005.

In addition to the Career Readiness Certificate, Virginia also created a Career Readiness Program for use in the southern region of the state. The program is a 64-hour course which provides instruction in reading, math, and interpersonal skills, as well as a hands-on assessment component. The course has been authorized for use in all 23 Virginia community colleges.

Access to continuous learning also is being expanded in the state by increasing consumer information systems. Virginia will participate in the expanded Census/ETA Local Employment Dynamics (LED) program.³ This will allow the state to collect new and more useful data on the employment trends of workers. The program also will provide the state with information on where individuals live in relation to their employment, intrastate commuting trends, whether employers rely on local labor markets to fill positions, the types of industries located in various areas, and more. The specific data generated through the LED program will allow the state to devise more specific policies to assist both local workers and local businesses.

Enhance Workers' Ability to Manage Their Careers

Due to high turnover rates of businesses and jobs, many workers now face more employment instability than in the past. It is therefore important for states to create opportunities that allow workers to manage their careers. These efforts can include developing career ladders, creating apprenticeship programs, instituting industry certifications, and improved career and labor market information systems. Through effective policy development, both public and private organizations can assist individuals in gaining necessary certifications and navigating complex workforce systems to ease transitions between jobs and to enhance the overall effectiveness of the economy. Several of the Academy states addressed this challenge as part of their participation in the Workforce Policy Academy.

³ Local Employment Dynamics, LED, is a voluntary program between the Census Bureau and state labor market agencies. The program provides specific local labor market information to participating partners on a wide set of economic indicators. Information can be queried based on different geographic levels including the state, metro, county, and workforce investment area.

Missouri

As part of Missouri's efforts to assist workers in managing their careers and to provide employees with the tools needed to advance within their profession, the state will institute a portable certification system. The system will meet business standards and allow youth and adult learners to demonstrate their knowledge and skill levels.

The state also has made a concerted effort to increase the marketing of Missouri Career Center services to both job seekers and employers. As part of this increased outreach, the state has deployed an updated version of the Great Hires job matching system to assist students and job seekers in finding employment opportunities.⁴ The job matching system will continue to be updated as needed. The marketing efforts have been successful. Thirty percent of all jobs filled in the 3rd quarter of 2004 were with employers who had registered on the Great Hires system. Fifty percent of job seekers who obtained a new job in the 3rd quarter of 2004 had their resume listed on the Great Hires system as well.

New Jersey

One of the main goals of New Jersey is to provide workers with better access to information that is critical for career management. The state's strategy is to inform residents of jobs and careers that are in demand throughout the state and the skills that are needed to obtain these jobs. In line with these strategies, the state has invested over \$1 million to upgrade the www.WNJPIN.com website which provides comprehensive workforce related information and resources for workers. The state has also developed a website (www.NJTrainingSystems.org) which allows workers to obtain information on schools and other organizations that provide job training opportunities. Website users have the ability to compare training providers based on employment outcomes of past program participants. Also, in the near future, they will be able to post and read comments regarding the quality of training providers.

In addition to helping workers manage their careers, the state also concentrated on improving transitions between postsecondary institutions. New Jersey has developed a project to help facilitate the smooth transfer of students from community colleges to four-year institutions of higher education. The NJ Transfer program and website (www.njtransfer.org) provides students with information on whether community college courses satisfy four-year requirements, contacts for colleges and universities located in the state, options for transferring to a four-year school, and other pertinent data.

The state also has adopted the Equipped for the Future (EFF) work readiness credential as part of a consortium with three other states. The EFF credential is based on adult literacy standards that are necessary for effective job performance. A common standard will be instituted through the work readiness credential, certifying that an individual has the knowledge, skills, and abilities necessary for entry-level work.

⁴ The Great Hires website provides resources for both employers and job seekers and can be accessed through an online database (www.greathires.org). Employers can list job openings, research business resources, and access Missouri workforce information. Resources for job seekers include information on job openings, strategies for periods of unemployment, career information, and training and education information.

Ohio

Several strategies that Ohio has initiated to improve the success of residents in managing their careers include enhancing the quality and effectiveness of available career information, and conducting an inventory of career information resources throughout the state. In March 2004, an interagency team was convened to determine critical elements for an effective web portal that will provide assistance to job seekers in managing their careers. The creation of a new and improve web site to assist Ohio residents is currently a priority in the state and efforts are continuing to develop an effective product.

Other specific activities that the state has undertaken to help Ohio residents manage their careers include using the ACT/WorkKeys programs to aid in job profiling, assessment, and follow-up training within the adult workforce system. Ohio's network of colleges and universities are also employing the SkillsMAX system of assessment services to help individuals improve their job and career decisions as well as to assist employers in hiring and promotion policies.⁵

Strengthen Work Supports to Promote Employment Retention and Career Advancement

In order for many low-wage workers to advance in the workforce, additional support services such as childcare, transportation, and health care coverage need to be available and readily accessible. Work supports can provide the critical links that allow many individuals and families to become self-sufficient. The experience of welfare reform has shown the critical role that work supports play in assisting families in moving from dependency to economic self-sufficiency. As part of the Academy process, several of the Academy states sought to enhance the work supports provided to individuals as an important component in improving their workforce system.

Missouri

One of the recommendations from the Missouri *Workforce* report is for the state to provide an interagency approach in delivering integrated support services to persons traditionally underserved by the labor market such as low-income families, women, at-risk youth, ex-offenders, and others. One of the first steps to address this recommendation has been to transfer the responsibility and funding of training and job placement services for TANF clients from the Department of Social Services to the Department of Economic Development. Local workforce investment boards and Missouri Career Centers will now have the responsibility of assisting TANF clients with critical skills training that is necessary for self-sufficiency and providing necessary support services.

New Jersey

As part of its goal of building a comprehensive workforce system, New Jersey is strengthening work supports by mandating that all core one-stop partners be located at comprehensive One-Stop Career Centers. In addition, comprehensive planning processes have been designed and implemented at the state and local level. To emphasize the importance that all stakeholders fully participate in the One-Stop Career system, the New Jersey State Employment and Training Commission (SETC) has developed certification standards for One-Stop Centers, to ensure that

⁵ The SkillsMax system provides information to both individuals and employers to facilitate better job matches and career decisions. The system is offered by the EnterpriseOhio Network, an alliance of Ohio's public community and technical colleges and universities. SkillsMax centers are located at eleven colleges throughout the state. More information can be found at <http://www.skillsmax.org>

centers provide integrated, comprehensive, quality services to customers including support services.

New Jersey is currently discussing how to support career ladders for low-wage workers through the use of online learning models and career advancement vouchers (CAV). CAVs are used to assist with the costs of training or classes and are given to former welfare recipients who are currently employed. The vouchers can help pay for training costs worth up to \$4,000. As a result of participating in the Academy, the Department of Labor and Workforce Development and the Department of Human Services are currently looking at the possibility of linking CAVs directly to employers of TANF clients rather than offering the vouchers to individual recipients. The state believes that this will help increase the use of CAVs, which will, in turn, lead to increased wages.

Virginia

As part of efforts to strengthen work supports for career advancement, Virginia has initiated a strategy to employ and retain workers from at-risk populations in the primary labor market. Through this initiative, a list of factors and characteristics are being developed to help identify persons likely to have difficulty finding and retaining employment in the primary labor market. A pilot program will then be developed to assist these individuals in gaining employment in the primary labor market. Individuals will be given a comprehensive initial screening and assessment to identify potential barriers to success and to identify needed services. A plan to help move these individuals will then be developed and implemented along with one-year of post employment support services. Individuals likely to be assisted through this program include welfare recipients, high school dropouts, and recently laid-off employees. The implementation of this strategy has been delayed due to current budget constraints. The anticipated implementation time frame is October 2004 through March 2006.

Strengthen Governance and Accountability in the Workforce System

The public workforce development system has often been criticized for being ineffective due to administrative fragmentation, few system-wide accountability requirements, and multiple agencies with varying regulations. Meaningful outcomes that contribute to the improvement of local economies can result from strengthening governance and accountability within the workforce development system. In an effort to reduce current inefficiencies, the Academy states developed strategies to streamline services, strengthen governance within the workforce system, and design and implement effective performance accountability measures.

Idaho

One of Idaho's primary goals is to create a governance and policy framework that aligns workforce related services across multiple agencies and programs. As a result of the efforts in this area, progress has been made in identifying various resources in the workforce system which can be re-aligned to streamline services. In March of 2004, a draft report was completed which outlines the various workforce services and resources available throughout the state. Information also was compiled on planning cycles, performance management, and recommendations to help improve and streamline the current workforce system. A report which maps system resources

will be provided to the Workforce Development Council for their strategic planning session scheduled for 2005.

As a result of participating in the Policy Academy, the foundation for system-wide accountability measurements has been laid. The selected measures will use existing data, be few in number, and reflect the performance of the whole system. A tiered approach has been recommended, with individual program measurements as the first tier and cross program measurements as the second tier. To more accurately reflect key goals, system-wide accountability measures will be further developed and adopted after the Workforce Development Council completes its strategic planning process in early 2005.

Missouri

In an effort to enhance workforce development accountability and governance processes throughout the state, in 2003 the Missouri Training and Employment Council published *Workforce and Economic Development: An Agenda for Missouri's Workforce Investment System*. In addition, the Council published *The State of Missouri's Workforce* report. This report presented recommendations for system reform and proposed a performance scorecard for the system to be used by the Governor. As previously mentioned, the state also will develop similar reports for each workforce investment region in the state.

Missouri formerly operated under a system where each agency reported its performance measures to the Governor, the Missouri Training and Employment Council, the General Assembly, and the general public. The Missouri Workforce System Scorecard altered this system to include leading and lagging indicators for the economy as a whole, the education/training system, and the Missouri Career Centers. The performance scorecard system also measures changes in the number of people moving out of poverty and the results of fully integrated services across programs. The first published results from the scorecard were available at the end of November 2004 and will be posted on the web early in 2005. Overall, the balanced scorecard system will provide critical information for planning and communicating activities and will clarify Missouri's priorities and policy directions.

In order to implement some of the recommendations included in the *Workforce* report, local workforce investment boards will be able to receive funds through a competitive application process. The awards are being provided through a joint venture between the Division of Workforce Development (Department of Economic Development) and the Division of Career Education (Department of Elementary and Secondary Education), which have contributed WIA and Perkins Act incentive funds.

Montana

In an effort to strengthen governance and accountability within the workforce system, Montana has worked to bring economic development and educational organizations together to devise integrated and comprehensive strategies. State agency organizational options and policy waivers have been identified and explored for possible implementation to enhance the effectiveness of the workforce system. To strengthen accountability within the system, the Montana State Workforce Investment Board has identified indicators to be considered when developing system-wide measures. Some of these indicators include: increase in wages and quality of life, lower

unemployment rate paid by employers, net new jobs, and per capita income. The measures that are being developed will reflect an alignment of economic development, education, and workforce development activities as well as the current and emerging needs of businesses.

In tandem with their work in the Policy Academy, Montana was one of six states to participate in the Integrated Performance Information (IPI) project. This project has helped the state move forward on developing system measurements across programs. The Governor's Workforce Investment Board has been working closely with the team from the IPI project to coordinate activities and help develop comprehensive accountability standards that will measure productivity, reductions in poverty, earnings, and returns on investment.

New Jersey

The former governor of New Jersey established workforce development as a priority for his administration and promoted its importance in order to enhance economic development and growth. In addition to the commitment from the governor, various state agencies are working collaboratively to establish a comprehensive and integrated workforce system. A New Jersey state advisory committee was formed with individuals representing both the private and public sector to provide input into the consolidation planning process at a statewide level. Progress also has been made on strengthening governance and accountability systems through the establishment of local advisory committees for WIBs to assist in planning processes.

One of the greatest efforts to strengthen accountability and governance in New Jersey has been the "To Work Reorganization Plan." The reorganization plan consolidated all employment-directed and workforce development efforts to the New Jersey Department of Labor and Workforce Development. This was done in an effort to consolidate employment-related services, programs, and activities that were previously operated by a variety of agencies including the Department of Human Services and the Department of Education. Some of the programs now operated by the Department of Labor and Workforce Development include: Adult Basic Education/English as a Second Language; private vocational school approval; apprenticeship programs; TANF, Food Stamps and General Assistance employment-directed programs; and the New Jersey Youth Corps.

Ohio

To strengthen governance and accountability in the workforce system, one of the goals of the Ohio Academy team was to develop and implement system-wide performance measures. A comprehensive set of performance measures was initially identified reflecting various dimensions of the workforce system in the state. The measures were reviewed by the Ohio Workforce Policy Board and the general public over a six-month period. Based on the comments received, a revised set of system-wide measures was developed and finally adopted by the state board. The measures will be used as a "framework" for an annual report on Ohio's workforce and the competitiveness of the system. The annual report will assess the integration and performance of workforce development, economic development, and education and training services. Ohio plans to use information learned from these annual reports to continuously improve program services and effectiveness. Other strategies that Ohio is pursuing to strengthen governance and accountability measurements include aligning data collection sources and developing sharing arrangements, and communicating broad-based performance measures.

Benefits from the Academy Experience

The six Workforce Policy Academy state teams highlighted key benefits from their participation in the Academy. Several states indicated significant progress in establishing positive and productive working relationships with various state and local agencies and with leaders from the private sector. In particular, the Academy process allowed state leaders to collaborate and develop a broad understanding of issues facing workforce development and the need to link workforce development and education with economic development to effectively address these issues. Through collaborative discussions, duplicative activities have been identified in the workforce system and integration efforts are under way that will improve the delivery and availability of services. Additionally, many of the states have become more aware of the need to develop a common language between workforce and economic development which has resulted in most of the states using industry clusters as a common organizing strategy. In addition to these positive results, several states noted that a major success was reinforcing, with their governors and other policymakers, the importance of workforce development to the state's economic competitiveness.

Beneficial Aspect of the Academy Model

In an effort to improve the Academy process, states were asked to describe aspects of the Next Generation Workforce Policy Academy that were most beneficial. Frequently mentioned benefits included:

- having access to Academy staff and additional experts who provided considerable insight into workforce development issues;
- gaining information regarding the successes and challenges of other states; and
- bringing together high level state officials from across agencies to help coordinate workforce, economic development, and education policies.

Benefits Translated into Policy and Practice

States also were asked how the benefits of the Academy translated into changes in workforce policy or practice. State responses included:

- the Academy helped to broaden collaborative policy initiatives between departments, state and local agencies, and private and public entities;
- relationships have been strengthened between education, workforce development, and economic development agencies; and
- partnerships between various state agencies have become more important on the public agenda.

Beneficial Features of the Academy Model

Participants also were asked to describe features or components of the Academy model that were the most beneficial for their respective state. Some of the most frequently noted beneficial features were:

- having access to consultants, participating in learning networks, and sharing information with other states;
- having state team meetings during the Academy sessions and holding these meetings in a relaxed atmosphere away from the pressures of the work place;
- working on structured and specific activities with due dates; and
- cross-functional dialogue among individuals from various state agencies.

Section 4: Conclusions

The goal of the Next Generation of Workforce Development Policy initiative was to identify and test new strategies to address major policy challenges that confront state workforce and economic development systems. Through the research and planning phase of the initiative, a new vision of the next generation workforce development policy emerged along with a clearer understanding of the challenges faced by states in transforming current policy and strategies to implement the new vision. A set of recommendations were formulated for governors' leadership and action in addressing these challenges to achieve the new vision. These were presented in the NGA policy paper entitled *Governors' Guide to Creating a 21st Century Workforce*. Addressing the challenges outlined in this guide and developing strategies to implement the recommendations in the guide were established as the objectives for the Workforce Policy Academy.

The Policy Academy approach was chosen because of its demonstrated effectiveness in providing a highly structured strategic planning process for states to address key policy issues they are confronting. In this section of the report conclusions drawn from the Academy are discussed. First, conclusions related to the Academy process are highlighted, followed by conclusions from the states experience in addressing the goals of the project. Finally, based on the states experiences, recommendations related to federal programs are presented.

Lessons from the Policy Academy Process

The Academy process proved to be an effective strategy for building state policymaking capacity that resulted in concrete state strategies to meet the goals and objectives of the project. For complex policy challenges, especially those involving multiple state agencies as well as private and local partners, the Policy Academy provides state policymakers a structured format to focus on a key policy issue (or a related set of issues) and resolve conflicts with the support of an expert faculty. It requires a strong commitment from the state teams as well as intensive work both during and outside the formal Academy meetings in order to complete their goals. There are several key lessons learned from the Workforce Policy Academy process.

- **Providing policy teams a structured forum to meet and plan strategies, which is removed from their normal work setting, is important.** The Academy provides a forum that allows intense, non-competitive focus on the issue, away from the distractions of everyday work. This enables state policymakers with demanding schedules to step back from the pressures of their daily work and think about how to achieve long-term, cross-cutting, shared goals and design strategies and implementation plans to achieve the goals.
- **Developing trusting relationships through the Academy process can help accelerate progress on other related state initiatives.** Several states entered the Workforce Policy Academy at a time when their state was initiating other key changes that involved multiple stakeholders. They found that the relationships developed through the Academy contributed to progress on these other change initiatives. For example, in Idaho progress on establishing a new community college had been slow. The work of their Academy team, aligned with efforts by education leaders, focused attention on the need for the

college. This, in turn, re-energized and moved the project forward. In New Jersey, a major consolidation of workforce programs had been initiated by the governor and there were key issues impeding progress. The Academy provided an “off line,” less threatening forum for addressing some of these issues so that progress could continue.

- **Adapting the Academy process to the evolving needs of the state teams is important.** It is important for the Academy faculty to continually monitor the needs of the state teams, recognize their progress or barriers, and adapt the process to meet their needs. Several changes were made to the Academy meeting format to improve the process for the state teams including the addition of more team time and using a variety of formats for cross-team sharing.

One key activity was significantly changed after it proved to be ineffective. The “learning networks” were a new feature introduced at the start of the Workforce Policy Academy designed to provide two or more states that had identified a common issue to work together on resolving the issue. At the first Academy meeting, three common issue areas were identified (performance measurement, industry cluster strategies, and information systems). Learning networks were established to address each area using conference calls, e-mail and short briefing papers as the vehicles for working on the issue. After a series of three conference calls supported by briefing papers and e-mail communications, it became apparent that the progress was slow and cross-team engagement was difficult. A decision was made to move the networks into the regular Academy meeting by providing special cross-team working sessions to discuss the issues. This change was successful and incorporated into the third Academy meeting.

- **Structuring the Academy planning process with defined tasks and deliverables is important to achieving results.** Starting with the orientation meeting, through the Academy meetings, and ending with the progress reports, state teams had a defined set of tasks to accomplish, which led to specific deliverables. For example, for the on-site orientation meetings, each state team was asked to clarify the problem they planned to address in relation to the purpose of the Academy. In addition, state teams completed an assessment of the problem along with an analysis of the state’s strengths and weaknesses in addressing the problem. This was reviewed at the orientation meeting and then incorporated into a presentation on their goals, strategies and outcomes at the first Academy meeting. There also was a set of questions to guide the work of each team during their working session at the Academy meeting. This structure helped monitor the progress of the state teams and to keep the focus on developing their implementation plan. While each state team progressed at their own pace and continually adjusted their plan to changes occurring in the state, those state teams that were disciplined in staying on task tended to show stronger results.
- **Maintaining a focus on the desired outcomes throughout the Academy process is critical.** One of the first tasks the state teams were asked to work on was defining their goals for participating in the Academy along with the outcomes they hoped to achieve. As the teams worked on developing the strategies and activities to achieve the goals, one of the difficulties was keeping a “clear line of sight” between the goals and outcomes.

State teams that developed a clear consensus on the outcomes they planned to achieve and gave time to defining measures to gauge their progress tended to be more successful in communicating their plan to a broader group of stakeholders, were able to take fuller advantage of the Academy process, and seemed more satisfied with their results.

Lessons in Addressing the Project Goals

In Section 3, the experiences of the six Workforce Policy Academy states were described in relation to the policy recommendations outlined in the *Governor's Guide to Creating a 21st Century Workforce*. Highlighted below are lessons drawn from the state teams' experiences.

- **Aligning workforce and education with economic development requires a clear understanding of the industries in the state and a common understanding of the knowledge and skills required to compete successfully.** Each of the Academy states understood the importance of identifying their state's key industries and the industries' needs for skilled workers in order to define a common agenda between their workforce and economic development programs. With this understanding, the states initiated activities to become better informed. Idaho identified healthcare and science and technology industries as critical to the future of their state and worked on integrating multiple government data sources to have a clearer understanding of the supply and demand needs of these industries. This information allows their education and training organizations to be better informed and to design curricula to meet these needs.

Several of the states, including Montana, New Jersey and Missouri, organized their analysis around key industry clusters in their state and identified the specific skill sets required by these industries. The information gathered from this process was then shared with business, state agencies, one-stop centers, and education and training organizations to better align their services with the identified needs. Ohio and Virginia initiated similar activities by first identifying the key industries in their states. Ohio created a template for developing an employment and training profile of the manufacturing sector which will then be used for other sectors of their economy. Virginia successfully piloted demand-side planning activities in two regions of the state to better understand the needs of employers in these areas. They plan to expand the demand planning to other regions and conduct gap analysis of the programs needed to address the training requirements for high demand industries.

- **Building a stronger education pipeline of skilled workers requires seamless connections between the components of the system and with the skill demands of the workplace.** Each of the Academy states faced the challenge of producing a continuous flow of skilled workers to meet the needs of business, yet they often found gaps between the systems responsible for producing a skilled workforce. The most common gaps identified by the Academy states were between the secondary and postsecondary systems, between education and workforce programs, and between these programs and the skill demands of the workplace. To address these gaps, the states focused on creating seamless connections between the education programs, integrating with workforce programs, and strengthening the connections to business and industry.

Idaho and Montana focused their efforts on strengthening the connections between key growth industries in their states and education. In Idaho, work is being conducted on enhancing the system of professional technical and community colleges to respond to the needs of business. In addition, they have facilitated the transfer of credits among the various educational institutions to make the system more seamless. Montana focused on developing career pathway models and aligning basic skills curriculum, two-year postsecondary education programs, and apprenticeship training with these models. Virginia has adopted a similar strategy by aligning career pathways with the K-12 and postsecondary education systems and with high demand industries and occupations in the state.

Missouri faced the challenge of growing dissatisfaction with the academic and job skills of recent high school graduates. To assist students in gaining the skills to advance, the state is developing partnerships between business and education, promoting the benefits of literacy in the workplace, and setting up career academies. New Jersey faces a slightly different literacy challenge. Even though they have one of the most highly educated workforces, a growing proportion of their population lacks English literacy skills. To address the problem, the former governor issued an Executive Order to strengthen the relationship between the community colleges and workforce development system.

- **Expanding opportunities for continuous learning requires building partnerships with business and education and ensuring that individuals have the literacy skills necessary to advance.** More than ever, the Academy states recognized the importance of building business-education partnerships to ensure that workers have the opportunities to continually upgrade their knowledge and skills. They also recognize that without a solid foundation of literacy skills, individuals cannot take advantage of learning opportunities. With this understanding, several of the states are addressing this challenge by building on existing partnerships with business and education that were established in creating their one-stop systems.

To develop a system that is both responsive to businesses and workers, Idaho is developing business-education partnerships to improve the quality and expand the capacity of continuing education. They also are enhancing their one-stop system to deliver education and training services to targeted industries. Missouri is promoting the expansion of participation in literacy programs and using their one-stop centers to identify those who need literacy training and working with the adult education providers to incorporate literacy instruction into their programs. New Jersey has established a statewide literacy program at the one-stop centers to provide workers with the basic academic skills needed to advance in the workplace.

- **Building career pathways requires good information, ongoing assessment and certification of skills, and access to learning opportunities.** The Academy states recognized that career pathways require bridges between the levels of the education system and between education and the workplace in order for individuals to succeed and employers' needs to be met. High-quality information on labor market needs and learning opportunities is also required along with common ways of assessing and

communicating skills. Several of the Academy states initiated activities to build bridges across the gaps in the career pathways in their state.

Two of the states, Missouri and Virginia, initiated work-readiness certificates to give individuals the tools to better communicate to employers their readiness for entry-level employment. In Missouri, the certificate will be included in high school graduation requirements. The state also is developing a skill assessment mechanism that will be applicable for both youth and adults. Virginia's career readiness certificate communicates an individual's cross-industry, core employability skills. Montana and New Jersey have recognized the importance of apprenticeship programs and are connecting these programs to postsecondary education. New Jersey is in the process of allowing college credit for apprenticeship training in the building trades.

Idaho focused on expanding access to learning opportunities by establishing a new community college that will address the technology industry's needs in the state while increasing access to lower cost education and training services for individuals. Ohio pursued strategies to assist workers in managing their careers by creating a web portal for easy access to workforce, education and career information. They also have created a system of assessment services through a network of colleges and universities to help individuals improve their job and career decisions.

- **Strengthening the governance of workforce programs requires meaningful outcome measures that are system-wide and tied to the economic goals of the state and communities.** One key barrier to improving the governance of the workforce systems, encountered by the Academy states, is a lack of cross-system performance indicators that demonstrate the systems collective contribution to the states economic goals. Several of the states made significant progress in addressing this issue.

Ohio set out to develop system-wide performance measures as one of its goals for participating in the Academy. A high-level, multi-agency team came together and identified a set of performance measures that cut across a broad range of programs. After the measures are refined they will form the basis for an annual scorecard that will assess the performance of workforce development, education and economic development services. To strengthen this effort they are aligning data collection sources and developing sharing arrangements across agencies. Missouri took on a similar effort and developed a cross-agency performance scorecard that will include leading and lagging indicators for the economy as a whole. Idaho is researching system-wide performance measures for workforce programs and is expanding this effort to develop policies for measuring the performance of postsecondary education institutions.

Recommendations Related to Federal Workforce Programs

The conclusion of this project comes at a time when the Workforce Investment Act, the primary federal workforce development program is up for reauthorization along with other key workforce-related programs such as the Carl D. Perkins Vocational and Technical Education Act, Temporary Assistance for Needy Families, and the Higher Education Act. This presents a major opportunity to eliminate barriers to effective service delivery caused by inconsistent

definitions, planning and reporting requirement, administrative structures and accountability measures. The Academy states discussed the following recommendations that, if adopted, could ease the alignment of workforce and education programs with economic development.

- **Reform all federal workforce-related programs in tandem**

One of the biggest challenges identified by the Academy states as they try to align workforce and education programs with economic development is the inflexibility across the major federal programs that invest in the development of the workforce. This problem will not be solved unless there are reforms that reach across all these programs and allow the investments to become part of integrated solutions to meet the needs of employers and current and future workers.

- **New information systems are needed by policymakers, employers, and individuals**

As the Academy states worked on new policies and strategies to reform their workforce development systems, they identified limitations with the current information systems that inform policy makers, individuals and employers. New integrated performance information systems are needed to better inform policy makers on system results and policy options. The work of leading states like Florida, Missouri, Oregon, Texas, and Washington in developing system measures and integrated performance information systems show considerable promise in addressing this need. Current and future workers need timely, high quality information to manage their careers. Employers need good labor market information to inform their staffing and hiring decisions. It is important for federal programs to recognize the critical importance of quality information for efficient management of the system across programs and as a service to individuals and employers.

- **Better strategies to engage the private sector**

Employers are recognized as primary customers of workforce development by the Academy states. They dedicated considerable time devising better strategies to engage the private sector as true partners in workforce development. While they see workforce development boards at the state and local levels as valuable vehicles for involving employers, these boards are often unwieldy due to mandatory membership requirements and often appeal to the “community service” conscious of employers, but do not result in leveraging business investments in the development of the workforce. Federal programs should provide greater flexibility in leveraging private investments through public-private partnerships.

- **Encourage greater access to training and certification**

A common challenge faced by each of the Academy states is the shortage of skilled workers. They recognize the importance of providing a continuum of skill development ranging from initial preparation to ongoing career advancement if they are to have a pipeline of skilled workers to match the needs of employers. Workers also must be able to demonstrate their skills and knowledge through industry recognized credentials. Federal workforce programs should facilitate the efficient transition between levels of training and education and between training and employment, and eliminate barriers such

as rigid application of sequencing of services under WIA or restrictions on access to training or combining of multiple resources to support comprehensive training.

- **Allow for flexible service delivery structures not one-size fits all**

In order to respond to the changing needs of employers in a dynamic economy, the Academy states recognize the importance of an agile workforce development system. They also recognize the uniqueness of their states and the regions that comprise the state. Federal workforce programs must allow states to design systems that address their unique needs and not hardwire “one size fits all” service delivery structures in federal legislation. Examples include the WIA one-stop system that emphasizes “brick and mortar” approaches over technology solutions and the eligible training provider lists that are closed rather than open systems that often result in restricting access to training.

- **Promote cross-system measures and integrated performance information systems**

One of the frequent barriers encountered by the Academy states in aligning their workforce system with education and economic development is the multiplicity of measures across programs coupled with the inability to provide good information across programs. What is needed is a new streamlined performance measurement framework based on state and local input and consensus. The framework should include a core set of measures that are meaningful across workforce development and related programs and the flexibility to establish consistent information systems across federal and state programs.

Appendix A: Cluster-Based Economic Development Project⁶

As part of the year-long economic development project undertaken by NGA, activities were conducted to help governors develop strategies to increase their state's competitiveness in a global market-place. One of the major findings resulting from these efforts was the importance that cluster-based economic development initiatives can play in allowing states to achieve their full potential. This section provides information on cluster-based economic development drawn from research studies, case studies, and site visits by NGA staff and the Task Force on State Leadership in the Global Economy. It highlights some of the key aspects of cluster-based economic development and important strategies that states can employ to prepare themselves for the 21st Century economy. Specifically, this section provides information on the definition of clusters, benefits of clusters, new policies for economic development, and the importance of human resource development and lifelong learning in effective clusters initiatives.

Definition of Clusters

There is surprisingly little disagreement over the formal definition of a "cluster." Most experts define it as a geographically bounded concentration of similar, related or complementary businesses, with active channels for business transactions, communications and dialogue that share specialized infrastructure, labor markets and services, and that are faced with common opportunities and threats. Stated differently, clusters are distinct groups of competing and cooperating companies, suppliers, service providers, and research institutions that are located in a particular region.

Conceptually, industry clusters have become the *sine qua non* of economic development policy across the United States. State economies, because of historical accident or investments, targeted recruitment, or geographic peculiarities, have distinctive structures. Certain industries are more highly concentrated in some places than in others. The competitive advantages of various regions of a state are best understood by the competitive advantages of their most prominent industries. Every place wants to be exceptionally good at something that can be translated into reputation and success in the marketplace.

A *cluster* differs from a sector in its geographic boundaries; the inclusion of resource, supply, and knowledge chains; and the importance of how they are connected. Clusters are best understood and used as regional systems.

Sectors, which states have traditionally used for planning purposes and identifying economic opportunities, are treated mainly as concentrations.

The most obvious reason states should think about and act on clusters is businesses do. Companies tend to locate near one another, including competitors, because the advantage of external economies and access to labor and knowledge outweigh the disadvantages that competitors may steal their employees or find out their trade secrets.

⁶ This section is excerpted from the NGA Center report, *A Governor's Guide to Cluster-based Economic Development* prepared by Stuart Rosenfeld of Regional Technology Strategies, Carrboro, North Carolina

Benefits to Business from Clustering

Concentration, or clustering, gives businesses an advantage over more isolated competitors. It provides access to more suppliers and customized support services, to experienced and skilled labor pools, and to the inevitable transfer of knowledge that occurs where people casually meet and talk business. Clustering enables companies to focus on what they know and do best; they need not do things they do not do well. Firms also benefit from synergy. Companies able to operate more or less as a system can use their resources more efficiently and collectively produce more than the sum of their individual outputs.

Among all of the advantages of clustering, none is as important as access to innovation, knowledge, and know-how. In the New Economy—defined by knowledge-intensive traditional and emerging industries—companies look for their main competitive advantages in access to ideas and talent, which requires geographic proximity to professional colleagues, cutting-edge suppliers, discriminating customers, highly skilled labor pools, research and development facilities, and industry leaders. Industry-specific knowledge and know-how accumulate and disperse through entrepreneurial areas and innovative companies. Clustering gives firms quicker information about advances in technologies and changes in customer or consumer preferences. Not incidentally, it reduces transaction costs.

Hard and Soft Benefits from Clustering

These advantages can be separated into “hard” benefits and “soft” benefits. Hard benefits are gained from more efficient business transactions, wiser investments, and reduced expenditures that produce profits and jobs. Soft benefits are derived from the learning, benchmarking, and sharing that expands knowledge and leads to innovation, imitation, and improvement.

The most quickly recognized and easily measured advantages to firms are those resulting from the concentration of the resources necessary to do business. Clustered firms can choose from a greater number of more tailored services. These services include bankers and accountants who understand their technologies and markets, trusted consultants who can solve specific problems, marketing and advertising companies that know their customers and the small business center that can assess their procedures and give advice. Moreover, local firms can purchase these resources faster and at a lower cost than their more distant competitors.

Among the most important hard benefits is access to a knowledgeable and experienced workforce, particularly the mid-skilled workers who are deeply rooted in the region and who typically have attended the local vocational schools and community and technical colleges (see Table 1). Except for the small number of jobs that are electronically transmittable, such as back office workers in Asia, these skills cannot be purchased over the Internet and delivered overnight.

The presence of potential local suppliers is an advantage, but mainly in industries where significant knowledge is embedded in the product. In today’s economy, overnight deliveries and Internet communications reduce the importance of proximity for standardized parts and supplies. Companies increasingly use electronic auctions for parts, and proximity matters most for critical components or supplies that are knowledge-intensive and depend on interactive research and

design or special support in assembly or utilization. Supply chains are advantageous, but less so today than in the 20th Century.

Table 1: “Hard” Benefits of Clusters

Asset	Benefits
Local supply chains	Design efficiencies
Specialized workforce	Higher productivity
Specialized services	Faster and easier access
Choice of inputs	Lower costs, higher quality
Range of firms	Joint ventures, network opportunities

The soft benefits of clustering are the intangible assets that are not so directly transferred to a profit-and-loss statement, but potentially have an even greater impact on the bottom line than the hard externalities (see Table 2).

The advantages of these assets are derived from a mobile workforce and the flow of knowledge among firms through formal and informal discussions with peers, suppliers, and customers. Innovation is a collective and iterative process, and an environment that encourages people to share and play off one another’s ideas promotes innovations in technologies, products, and processes.

Advantage also comes from the more efficient acquisition of tacit knowledge—sometimes called know-how—that is carried in the heads of individuals and in the routines of organizations and is not published or otherwise formally recorded. Transfer of this knowledge requires the face-to-face contact that occurs in business-to-business interactions and social, professional, and trade meetings. The greatest advantage of social capital and trust is derived from planned collaboration and network formation.

Table 2: “Soft” Benefits of Clusters

Asset	Benefits
Association	Collective vision, planning, influence
Trust	Inter-firm collaboration and networks
Learning (1)	Technology transfer and innovation
Learning (2)	Tacit knowledge and know-how
Informal labor markets	Efficiencies, career ladders

The precursors of programs to develop clusters typically were state programs designed to form networks among groups of firms. These programs concerned addressing business needs collectively and achieving economies of scale. In retrospect, states’ emphasis on networks put the cart before the horse, because networks naturally develop out of the relationships that exist in strong clusters. Although the terms “network” and “cluster” are sometimes used interchangeably, there are critical differences. Networks create economies of scale by

deliberately sharing resources, expertise, or information. There is nothing necessarily deliberate about the naturally occurring efficiencies that are part of the cluster's business environment.

New Policies for Economic Development

Economists and geographers have studied spatial concentrations of companies for more than a century. Yet economic development policymakers have paid little attention to the advantages of concentration and specialization. Instead, they have supported diversification, considering industry concentration more a liability and threat to long-term sustainability than an asset to be nurtured.

Where clusters have developed and flourished, the public sector's main contributions has been through segmented agencies that serve specific functions (e.g., financing, training, technical assistance, or exporting) common to all kinds of businesses.

Why change now?

- The needs of a state's customer-companies are systemic and rarely defined by single business functions, so companies have difficulty trying to find and assemble the help they need to solve problems.⁷ State agency personnel cannot have detailed knowledge of all the industries they are expected to serve.
- Cluster-directed policies increase the efficiency of government in light of increasingly volatile and competitive markets and discriminating customers who expect rapid and customized responses and have eschewed loyalties. Successful companies must continually innovate to survive in the new environment and want a government that understands their special conditions, will be innovative itself, and can provide services in the same quick and customized ways that companies are expected to act. This poses a real challenge for public agencies that are often mired in bureaucracy.
- Clusters may lead to more self-sustaining state economic growth. The advantages of place draw similar and complementary enterprises; with encouragement, these enterprises can ultimately breed other clusters. The textile cluster in South Carolina attracted enough machine and tool builders to become an industrial machinery cluster in its own right. The conversion to Web-based printing, publishing, and advertising created a new media cluster in New York City.

As any good business manager knows, most changes that occur in a plant are systemic and affect the functioning of the entire production process. Effective interventions take into account the entire system. Similarly, regional economies are systems defined by interdependent business elements. Interventions that are systemic will have the greatest impacts. Thus government agencies are gradually turning their attention from individual firms and places to collections of firms or "clusters."

Clusters Can Expand Opportunities

Clusters can, but do not automatically, expand opportunity for low-income places or populations. Clusters that have organized to set their priorities and articulate their interests have rarely placed

⁷ There have been notable exceptions around technology in the past two decades, such as Ohio's Edison centers.

equity very high on their agenda. For demand-driven development efforts to include social goals there must also be a payoff in profits (e.g., increased productivity, goodwill that results in additional sales, or reduced turnover). In tight labor markets, that payoff might be an ability to maintain a full workforce. This benefits some poorer regions that may have surplus labor forces, and it causes companies to invest more heavily in the training of less-educated populations to meet their employment needs. In weak labor markets, companies may prefer to operate in places where educational levels and wages are lower or to find employees for occupations that despite good salaries are associated with lower socioeconomic status, such as machinists and tool-and-die makers. Through clusters states can better understand economies as systems and leverage change. This suggests new policies for strengthening and sustaining economies that enable governments to be more strategic, systematic, and efficient in their uses of public monies. No single sequence of actions fits all clusters, just as no solution fits every business situation. Each cluster has its own culture and conditions, and its needs and potential must be individually assessed. Policies have to be tailored, but there are experiences on which states can draw and some guidelines to help design appropriate policies. The policies address service delivery, investments, accelerated learning, and workforce preparation.

- **Policies to more efficiently organize and deliver services.** Government services typically are organized by function. Small business services, training, technology extension, marketing, and recruiting are separate programs staffed by specialists in a particular discipline, not industry. Clusters provide a better organizational framework for delivering services that are more tailored to industry demand because they are problem-oriented, not program-oriented; address needs interdependently, not independently; and work with customers collectively, not individually.
- **Policies that target investments to clusters.** States already make investments to strengthen their key industries or gain a foothold in emerging industries. They support university-based research and development (R&D) and its commercialization and build industrial sites. Some regions have tried, with mixed success, to buy clusters with incentives and investments. However, states have been less sensitive to their mature clusters when investing in innovation and entrepreneurship. Investment strategies will help less research-oriented cluster members absorb new technologies and become more innovative.
- **Policies to increase clusters' networking and learning.** Government agencies that recognize clusters—and, where appropriate, help clusters organize—become more effective partners and negotiators. They are better able to learn about and react to industry needs, monitor clusters' progress, and help clusters adjust to environmental changes. Strengthening clusters this way also helps regions develop unique expertise and “brands” that can supplement regions' general competitive advantages.
- **Policies that improve the clusters' workforce.** The single most important resource of any cluster in today's economy is its human capital. Access to a labor pool that knows how to apply its knowledge to the business of the cluster is a key to success. The challenge for states is to effectively interject the right level of cluster context into postsecondary education and the appropriate degree of specialization into higher institutions to meet the needs of clusters that operate in diversified regional economies. Finally, states have a responsibility

to see that the economic outcomes from their policies ultimately have a chance to reach all corners of the state and all segments of the population. Clusters offer ways to restructure equity policies to more effectively serve less-advantaged regions and lower-income and less-educated populations.

Develop Human Resources for Clusters

Nothing is more important to clusters than the development of their human resources, and in no area are they more dependent on the state. States are the biggest investors in education and training. Since the 1950s, they have linked vocational education and customized training to their economic development efforts, providing subsidies to new and expanding industries. Yet few states have tried to provide the specialized skills that clusters value. Companies value access to a labor pool that is familiar with the operations of their businesses and able to apply their skills in the particular work environment of the cluster. Employers also want “commodity skills” that are easily transferable, but the “leveraged skills” that are industry-specific are scarcer. Firm-specific “proprietary skills” that are learned on the job are even scarcer; these skills entail how companies build internal intelligence, but also how knowledge “leaks” between firms when people change jobs.

- **Develop a more skilled and specialized labor force.** The context in which learning occurs is important. Educators classify their programs by occupation, but the skills used in the workplace are defined by the context in which they are applied. The context varies from industry to industry, from small firm to large firm. The network administrator working in a division of a large multinational corporation, a government agency, or a small service company have different skill requirements and must operate in a different business culture. Mississippi employers comment that they expect more knowledge of “industry practice,” that they expect their employees to “understand the information technology sector and its paradigm shifts,” and that they want schools to “learn more about the business for which they’re providing the training.”

Further, a worker in a small firm is likely to have to work directly with a more diverse set of customers, work on small office systems, work within budgets, and be much more flexible. The cluster as context can be adopted throughout the education system, including elementary and secondary schools, to make the learning more meaningful and introduce youth early to the economy. By designing curricula around the workplace and business of firms in a local cluster, learners can come to appreciate the value of the cluster, understand more about their regional environment, and perhaps be more inclined to follow career paths in the cluster. At the same time, contextualized education has been shown to raise school retention rates and education achievement levels by making the content of the education more relevant to a locality.

- **Establish Cluster Skills Centers.** Rather than expecting every technical and community college to meet the specific needs of all businesses, states could designate centers of excellence around clusters. Cluster skills centers could become the lead entities for surveying industry needs, developing new curricula, staying in touch with cluster councils, updating skill standards, benchmarking practices in other places, and collecting information about cluster occupations and programs. The center’s principal goals are to give students a

solid contextual and systemic knowledge and technical skills that relate directly to a cluster (see “Characteristics of Cluster Skills Centers”). Skills centers can serve as gateways, for example, to help firms bombarded with more information than they can handle determine which training programs are the most familiar with the industry and have the most relevant staff experience, latest technologies, and best track record. Centers also provide onsite outreach and access to socially excluded populations.

This need not be a bricks-and mortar center, but it could take the form of a virtual center that would organize teams from various colleges to work on specific problems, conduct R&D, or develop curricula—with all products and information available statewide. Such an approach has been designed for, but has not yet been implemented in, North Carolina’s community college system.

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| <p style="text-align: center;">Characteristics of Cluster Skills Centers</p> <ul style="list-style-type: none">• Is cluster-based, not technology-based• Emphasizes industry-specific knowledge• Provides critical links to industry associations• Uses business, not equipment, as context• Functions as information repository and information portal• Stresses staff and curricula in budget, not bricks and mortar• Shares curricula and information statewide and trains faculty from other places• Has lead responsibility for cluster needs assessments• Works with cluster association on skill standards and certifications• Provides outreach to socially excluded populations |
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• **Qualify people for employment.** The first major hurdle for people lacking relevant work experience is a record of basic educational and/or skill attainment to qualify them to climb onto the first rung of a career ladder. Few employers in value-added clusters will hire a person with less than a high school education, and an increasing number want some postsecondary education or certification. Yet dropout rates in some city school systems approach 50 percent. Raising educational levels has long been considered fundamental to achieving a region’s social and economic goals, but the aging of the skilled labor force is making it a necessity. Community colleges are the open-door institutions that serve most low-income people and are a primary resource for basic and mid-level job skills. Ensuring that everyone has an opportunity to get through a technical career program, however, requires considerable basic education and institutional support. Programs such as Community College Career Pathways in Chicago, Illinois, and at Portland Community College in Oregon work with employers to create modular programs to move individuals from any point toward a marketable credential.

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| <p style="text-align: center;">Tips for Qualifying People for Employment</p> <ul style="list-style-type: none">• Create career paths and ladders• Use cluster context for adult basic education and English-as-a Second-Language programs• Establish short modules that reward accomplishment and can be aggregated• Work with workforce investment boards |
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Cluster connections have the potential to strengthen entry-level programs. The most effective pre-employment and employment programs embody real experiences and are directly linked to good jobs. Focusing efforts on clusters introduces reality and context into the education and aligns the programs with actual workplace needs. Readiness and basic skills programs that teach in the context of the cluster can accomplish both at once. Even the most basic programs, such as vocational English, can be taught more effectively if the vocabulary relates to the terms the cluster uses.

Mine Maintenance Training Program. Nevada is the world's third largest producer of gold, which is mined mainly in the sparsely populated northeastern part of the state. That industry, despite falling prices, is the region's economic engine. Yet skilled workers in occupations critical to the success of modern-day mining's sophisticated operations are scarce. The primary source is Great Basin College (GBC) in Elko, which serves a five-county region that is geographically larger than Indiana but has only about 70,000 people. To create a pipeline of qualified technicians for the industry, GBC created the Mine Maintenance Training Program, a collaborative effort between the college and cluster. It began in the late 1980s, when high prices and new technologies expanded employment to 2,700 employees. The program condensed scheduling and added flexibility and greater industry participation. The industry went so far as to form an independent, nonprofit entity to coordinate industry involvement. Companies offer scholarships to students who work for summers at the sponsoring company, attend classes full time for a semester, and then spend a fourth of their time at school and the rest at work for the remaining 1.5 years. After two years, students earn an associate of science degree.

- **Engage community-based employment intermediaries.** Much of the responsibility for preparing low-income and unemployed people for employment with career advancement has been delivered or coordinated by sectoral workforce development intermediaries supported mainly by private foundations. The Aspen Institute's in-depth study of six programs found that 87 percent completed their training and, on average, participants increased their earnings by 41 percent in one year. The best sectoral organizations are more than brokers or bridges between disadvantaged communities and industry; they help articulate career paths and advancement opportunities, develop standardized industry training, establish standards for job quality and working conditions, assist with market coordination, broker business networks, and help develop strategic plans. Successful intermediaries employ staff with solid cluster experience and expertise who understand employers' needs but also have the trust of the communities they serve. Staff members also recognize the importance of connections. In any economy, whether skill-based or knowledge-based, people get ahead based as much on whom they know as on what they know because hiring decisions rely on referrals and informal networking. In Silicon Valley, private-sector intermediaries, including temporary help agencies, workforce investment boards, and professional associations, help with the initial contacts for those seeking new or different jobs.

The Jane Addams Resource Corporation (JARC) in Chicago, Illinois, works in collaboration with small and mid-sized companies to help low-income people obtain decent employment and move up career ladders in metalworking industries. JARC offers a range of training, from pre-employment training to advanced technology skills training. It also helps organize companies into networks.

The Garment Industry Development Corporation (GIDC) was started in 1984 as a tripartite effort of government, industry, and labor to help New York City, New York's struggling garment industry, an important source of employment for low-income people. Yet GIDC also sought to introduce systemic changes in the industry that would improve wages and career opportunities. The corporation became a catalyst and information broker, helping to identify new markets and introducing more modern production technologies and methods. In addition, GIDC focused on getting unskilled, displaced, and immigrant workers ready for the new workplace.

- **Support regional skills alliances.** Regional skill alliances (RSAs) are networks of firms that come together to acquire—or reduce the costs of—incumbent worker training programs. Connecticut, for example, has funded eight of these regional alliances, which it calls “training networks,” as of February 2001. They included the Metal Manufacturers Training and Education Alliance (11 members), Housatonic Education for Advanced Technology (seven electronics companies), the Fairfield County Information Technology Consortium (eight information technology companies), and the Connecticut Association of Metal Finishers (six finishers). Broad-based RSAs also include the public sector, education and training organizations, and, frequently, organized labor. The most common cause of an alliance’s failure is poor choice of vendors. Clearly, the vendor must have the capacity to provide the training—the required expertise and familiarity with the industry. The vendor must know its customer and be flexible enough to offer training where and when the customer needs the training.

Appendix B: Key Challenges Facing States

As part of the Academy process, states were asked to describe key workforce challenges that they were facing which would be addressed through their participation in the Academy. Appendix B provides a detailed description of the various challenges that states have encountered within their workforce development systems and the goals that were developed to address these challenges.

Idaho

Key Challenges

After fourteen years of rapid economic expansion, Idaho has experienced a slow down in employment and income growth since 2001. As the economy improves, analysts forecast that growth in Idaho's economy will occur at a lower rate than experienced in the 1990s but higher than the national average. One of the challenges they face is preparing a workforce that is ready to fill the opportunities that arise. This is critical to attracting the high wage technical jobs that fueled the economic expansion of the 1990s. While they have a high graduation rate from secondary education, they have a low transition rate to postsecondary education. To remain competitive in the technology area that fueled the growth in their economy in the 1990s they have to build, attract and retain a highly skilled technical workforce.

Even in the economic downturn they are facing skill shortages in a couple of key areas, health care and science and technology. In the health care industry there is inadequate training capacity in the state's educational institutions and in the industry itself to meet the demand. They are facing a potential threat to continued expansion in the technology industry because of insufficient investments in education and the lack of relevant and responsive programs to address the need.

The state faces another challenge with a highly urbanized population center where most of the growth occurred in the 1990s and large, lightly populated rural areas that did not share in the growth. This problem will persist even as the economy begins to grow.

Goals to Address Key Challenges

- Idaho will have an adaptive workforce development system that responds to the needs of workers and business.
- Idaho's workforce development, education, and economic development systems will be connected.
- Idaho will support an entrepreneurial workforce.

Missouri

Key Challenges

- Missouri must eliminate systemic barriers to effective partnering among state and local agencies.

- Upon identifying the essential and technical skills needed by business and industry, Missouri's entire workforce investments system (including the education system) must reform business practices to become highly responsive.
- To maintain a skilled and competitive workforce, Missouri must increase its investment in targeted skills-based training. Missouri's two customized training programs have effectively targeted new economy industries and provided skills-based training. Other states are dramatically increasing funding of training programs. Missouri must respond to remain competitive.
- While state agencies have worked diligently to improve results for their own customers, until recently, a lack of integration has stymied the full realization of an empowered workforce investment system that is capable of generating improved results for Missouri students, job seekers and businesses.
- While improving, the Missouri Assessment Program test scores of Missouri students are below targeted levels and the percentage of students requiring remedial post-secondary education/training is also too high.
- As with many states, Missouri has experienced General Revenue shortfalls over the past several years. These shortfalls have resulted in downsizing of state government and elimination of programs. It is anticipated that Missouri will continue to operate on reduced revenues over the next several years.

Goals to Address Key Challenges

- The three major sectors of Missouri's workforce investment system [workforce (supply), business (demand) and education/training (capacity building)], will implement policies, plans and standards that bridge gaps and strengthen the interdependence among system sectors to ensure growth in Missouri's human capital, and thereby growth in Missouri's economy.
- Missouri's full integration of workforce and economic development functions will result in better outcomes for students, job seekers and businesses and will be evidenced by an increase in market share for the public workforce investment system.
- The education system will be highly responsive to the needs of business and industry, while preparing youth to be competitive in the workforce.
- Missouri government will be a catalyst for creating productive partnerships that focus on identifying a common set of essential and technical skills needed by business.
- Through effective business/education partnerships, performance testing, innovative capacity building, career academies, or promoting literacy, Missouri will be effective at equipping students with the knowledge and skills needed to compete in the workplace.
- Missouri will build effective bridges between our students and careers in Missouri's new economy.
- Missouri will deploy a portable certification system that meets business standards and allows youth and adult learners to demonstrate their knowledge and skills.
- Missouri will deploy an integrated response to educational, workforce and economic issues.

- State agencies will mine existing databases to provide an integrated picture of economic, workforce and education information.

Montana

Key Challenges

Like many other states, Montana faces worker shortages in various occupations - primarily in health care. The Governor's Blue Ribbon Task Force on Health Care Workforce Shortage found that shortages in this field pose serious problems especially in a frontier state like Montana with a growing population of elderly citizens. Of Montana's 56 counties, 50 have been designated in whole or in part as Health Professional Shortage Areas by the federal government.

The Montana workforce continues to grow fastest in jobs requiring lower worker skill levels that have correspondingly lower wages. The Governor's Office of Economic Opportunity developed a strategic plan to make fundamental changes in the way Montana attracts and retains businesses and creates jobs. Their plan to enhance existing industry clusters to grow our economy requires workforce development efforts be aligned.

Montana workforce development efforts are comprised of more than 30 separate and distinct programs, funded by a variety of federal and state sources and are not organized or coordinated as a system to support state and local economic development efforts. Montana's education systems are beginning to actively respond to the educational aspects of building a workforce that supports growing and expanding industries in the state.

Goals to Address Key Challenges

- The workforce development system anticipates and responds to employers' current and emerging needs for skilled workers.
- Postsecondary education is responsive to workforce development training which supports industry clusters and economic development.
- Workforce development policy is based on an efficient system that supports economic development.

New Jersey

Key Challenges

Over the last decade, New Jersey has seen dramatic changes in its economy with semi-skilled manufacturing jobs declining and replaced by jobs, in both manufacturing and other types, which demand more skills. New Jersey cannot compete as a low-skill, low-wage economy. Therefore its economic future must be based on high-skill, high wage jobs. To achieve this they must address the broad disparity in the skill levels of their workforce. New Jersey has one of the most highly educated workforces in the nation but they have a growing immigrant population that lacks English literacy and other populations, that lack the basic skills needed to advance, that are concentrated in certain areas of the state.

New Jersey is currently engaged in building an educated and skilled workforce by improving the workforce investment systems. Their efforts are frequently frustrated by bureaucratic intransigence and parochialism. This can be seen in the state's k-12 school system that is the foundation for building a skilled workforce. It is spread across 611 local districts which have a long history of creating their own curricula based on local goals and decisions without much state direction. Added to this challenge is the persistence of "program silos" that separate education from labor market strategies, and academic from vocational approaches to learning.

New Jersey has a history of being committed to improving the workforce development system. This puts them in a good position to take advantage of the Workforce Policy Academy. An example of this commitment is the establishment of the State Employment and Training Commission in 1989 that foreshadowed the State WIBs under the Workforce Investment Act. The SETC has provided New Jersey with the policy-making dialogue between the public and private sector that is crucial to improving workforce investment policy. Last year the SETC issued a white paper, "New Jersey in Transition: The Crisis of the Workforce" that recommends major structural changes to deal with the problem of program silos in the workforce development system.

The SETC also has provided leadership in establishing the State Council on Adult Literacy and Education. The Council brings together all the major state agencies, providers and private sector organizations involved in adult literacy to develop a State Literacy Master Plan.

To address the challenge of a decentralized K-12 education system, in 1996 the New Jersey State Board of Education adopted the state's first core curriculum content standards. These standards established what every child, regardless of school district, should have the opportunity to learn. Building on this initiative, they adopted the *Equipped for the Future Core Standards Training*, developed by the National Institute of Literacy, as the literacy standard for the state, thereby creating a strong link between literacy and workforce issues.

Other important initiatives include their comprehensive system for chartering one-stop career centers. The chartering process provides clear standards for assessing one-stop processes and performance to assure continuous improvement. Added to this, they have developed a One-Stop Process Improvement Plan that is designed to assist one-stop centers in integrating technology into the work processes and cross-training staff to be knowledgeable about all one-stop partner programs while improving customer flow. They also implemented an Internet-based Consumer Report Card that goes beyond the requirements of WIA by including all participants in occupational education courses that provides a true and comprehensive assessment of training vendors to assist individuals in making informed choices in selecting training providers.

Goals to Address Key Challenges

- With a business focus, link workforce development, economic development, and education.
- Increase the effectiveness, efficiency, and accountability of the workforce development system.
- Increase workers' wages to a self sustaining level.

Ohio

Key Challenges

As Ohio enters the 21st Century, the demographic data shows that it has the second oldest workforce in the country, the third slowest population growth and the sixth highest out-migration of people in the country. Both the median household income and per capita income of Ohioans lags that of the national averages. This suggests that Ohio employers will face tremendous challenges in the coming years to attract and retain employees with the necessary skills to fully participate in the nation's economic growth. It also suggests that Ohio will have to maximize the skills of its workforce to stay competitive and to retain and attract good jobs to the state.

To address this challenge, Ohio has a well developed workforce development and education infrastructure with 612 public school districts, 92 career-technical planning districts and 41 full service adult workforce education centers. In addition there are 24 two-year public community and technical colleges, 15 four-year public colleges and universities and numerous other branch campuses, and 59 four-year private colleges and universities. Also as part of this infrastructure is a sizable and diverse system of apprenticeship programs. Aligning this diverse infrastructure to focus on a common goal of developing a skilled workforce presents another set of challenges.

During the past few years Ohio has pursued an aggressive agenda of improvements, reforms and alignment of workforce development policies and activities that demonstrate their readiness to benefit from the Workforce Policy Academy. One of the most significant initiatives is the strategic planning process lead by the Governor's Workforce Policy Board. The Board has been involved in a year-long process of developing a strategic plan to align and guide the state's workforce development efforts. The plan, called *Advance Ohio*, provides an aggressive blueprint for the future of Ohio's workforce development system.

Recognizing the importance of a solid academic foundation to building a skilled workforce, the state also embarked on an aggressive agenda of standards-based reform in its primary and secondary education system. The recommendations of the Governor's Commission on Student Success called for the development of comprehensive student standards, a revised system of achievement testing, increased accountability structures, and increased interventions for underperforming students. These recommendations were enacted by the state legislature and are being implemented.

The Governor also convened a Commission on Teacher Success that is focused on issues of teacher recruitment, education, licensure, professional development, retention, and advancement. Additionally, the Governor initiated *OhioReads*, which has successfully combined the efforts of over 45,000 tutors to reinforce classroom instruction in reading. To improve the math competencies of Ohio students, the Governor has initiated *MathRules!*, a program that supports e-learning and teacher development strategies. All of these efforts have shown measurable results in improving student achievement in Ohio.

Other reforms are under way to build a total education continuum (P-16). The State Board of Education and the Board of Regents formed a Joint Council to address issues concerning the preparation of students entering higher education and work careers. Last year the Joint Council

identified a series of focused work goals to move beyond the scope of project-level initiatives to a systemic approach for long-range improvement of the P-16 educational system. Improving student achievement in math and science is a key focus for continued systemic reform.

Ohio recognized that the state's public providers of adult training services must work together in new ways with Ohio employers to make continuous employee training a shared priority for employers and employees. To achieve this, Ohio established the Higher Skills Partnership that provides funding support to encourage cooperation between the 53 community and technical colleges and university regional campuses and Ohio's Adult Workforce Education centers so the needs of employers and employees for training are met in a coordinated and strategic manner.

Ohio also recognizes the importance of supporting workers as they seek to manage their own careers. They are using the ACT/WorkKeys system of job profiling, assessments, and follow-up training within the adult workforce education system and the network of colleges and universities' newly developed assessment services known as SkillsMAX to assist individuals in making better job and career decisions and employers in making better hiring and promotion decisions.

After the Workforce Investment Act was enacted, Ohio took on the challenge of integrating its welfare-to-work activities under TANF with its workforce investment activities. This integration resulted in the merger of the former Ohio Bureau of Employment Services and the Department of Human Services into the Department of Job and Family Services. While the merger was a painful and lengthy process it was an important step in reforming their workforce development system.

Goals to Address Key Challenges

- Improve the success of employers in hiring and retaining workers.
- Improve the success of Ohioans in managing their careers.
- Develop and implement workforce development system-wide performance measures.

Virginia

Key Challenges

Virginia is a state of paradoxes and diversity. According to the Southern Growth Policies Board, more than 50% of the world's Internet traffic moves through Virginia. Virginia is the only state in the South to have proportionately more people employed in the 64 technology-driven industries than are employed in the U.S. as a whole. The state also has a large concentration of more mature industries including shipbuilding, and an older textile industry is in serious decline. Virginia has more venture capital investment and in 1999 saw a greater amount of venture capital financing going to firms than in any other Southern state.

While the whole state has historically had a low unemployment rate, throughout the state unemployment rates vary widely by locality, with some counties and cities experiencing double-digit unemployment and some areas reporting shortages of certain types of labor. The highest unemployment rates occur in southern Virginia, where textile, apparel and furniture plants have

closed. Many localities in southwest Virginia also suffer from unemployment rates chronically well above the statewide average.

Virginia is ranked 29th in the nation on educational attainment of the high school degrees. Equally as important is the great disparity that persists between counties and cities in different regions of the state, with the rate of high school completion dropping to below 60% for several cities and counties and reaching rates above 90% in several others.

In the private sector, there is great concern about the skills gap that exists between those skills required on the job and those exhibited by potential and incumbent workers. Employers experience great difficulty in hiring people who have basic employability skills and who are therefore trainable for specific jobs. There also is dissatisfaction with the employability skills of students who graduate from high school and college. Academic competencies are often not backed up by employability skills.

Regarding state leadership and direction, the past eighteen years have witnessed a myriad of executive and legislative branch workforce studies in Virginia, but there have been no major policy realignments or restructuring initiatives during this time period. There are twenty-two state administered workforce training programs (totaling \$255.8 million) spread among ten agencies and three secretariats with no formal method of coordination. Additionally, very little opportunity is afforded key high-level state officials to gain practical insight across the broad range of economic, workforce, and education policy issues.

The passage of the Workforce Investment Act (WIA) in 1998 ushered in major workforce changes in some states. However, in Virginia the changes consisted of moving the state administrative function from the Health & Human Resources to the Commerce and Trade Secretariat/function and expanding the duties of an existing State Workforce Training Council to accommodate the duties of the WIA State Board. Consequently, at the dawn of the 21st Century, Virginia had no systematic, integrated policy or service strategies for meeting the workforce and career development needs of employers or job seekers.

Goals to Address Key Challenges

- Develop and implement a market-driven workforce system that provides a single point of entry to a range of employment and training services, and is customer friendly to both employers and job seekers.
- Provide skilled workers to meet current and projected business and industry needs in the Commonwealth of Virginia.
- Employ and retain workers from at-risk populations in the primary labor market.