A Governor's Guide to Creating a 21st-Century Workforce

Since their initial meeting in 1908 to discuss interstate water problems, the governors have worked through the National Governors Association to deal collectively with issues of public policy and governance. The association's ongoing mission is to support the work of the governors by providing a bipartisan forum to help shape and implement national policy and to solve state problems.

The members of the National Governors Association (NGA) are the governors of the fifty states, the territories of American Samoa, Guam, and the Virgin Islands, and the commonwealths of the Northern Mariana Islands and Puerto Rico. The association has a nine-member executive committee and three standing committees—on Economic Development and Commerce, Human Resources, and Natural Resources. Through NGA's committees, governors examine and develop policy and address key state and national issues. Special task forces often are created to focus gubernatorial attention on federal legislation or on state-level issues.

The association works closely with the Administration and Congress on state-federal policy issues through its offices in the Hall of the States in Washington, D.C. The association serves as a vehicle for sharing knowledge of innovative programs among the states and provides technical assistance and consultant services to governors on a wide range of management and policy issues.

The Center for Best Practices shares knowledge about innovative state activities, explores the impact of federal initiatives on state government, and provides technical assistance to states. The center works in a number of policy fields, including agriculture and rural development, economic development, education, energy and environment, health, social services, technology, trade, transportation, and workforce development.

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As it did 100 years ago, America enters a new century marked by an economic environment of free trade, international competition, and global business relationships. In such an environment, U.S. economic strength depends on the ability of each state to "compete" successfully in the world marketplace. Each state must exploit the unique advantages it has relative to other states and build on the strengths found in its local "clusters of innovation"—distinct groups of competing and cooperating companies, suppliers, service providers, and research institutions.

To help their clusters of innovation thrive and compete worldwide, governors will need to work with their educational institutions and the private sector to build a skilled labor force that is second to none. State governments will need to leverage public research dollars and coordinate efforts with industry to build the science and technology infrastructure that brings new ideas to the marketplace and new technologies to traditional industries. Finally, states will need to eliminate barriers to business innovation, workforce training, and international trade.

In partnership with the Council on Competitiveness, the National Governors Association (NGA) has conducted a yearlong effort helping governors develop economic strategies for a global marketplace. These strategies are designed to provide lifelong learning and training for employers and employees, strengthen science and technology capacity, develop international markets, and bring prosperity to disadvantaged communities. This new approach to economic development is a major shift from the traditional approach—which chiefly relied on location-based tax incentives to attract large manufacturing entities—and represents a more effective strategy for competing in the global economy.

To implement this effort, which began in July 2001, the NGA and Council formed a Task Force on State Leadership in the Global Economy. Under the task force, the NGA and Council sponsored regional workshops for state policy teams from around the nation to teach and discuss the approaches for cluster-based economic development. The NGA and Council also published four reports providing tools and recommendations for governors on the following topics:

- how to build a cluster-based economic development strategy,
- programs and policies for building a 21st-century workforce,
- maximizing public leadership in promoting international trade, and
- the role of science and technology in fostering an economy based on innovation.

State economies are the economic engine of America. To achieve their potential—both in terms of technology and human capital—governors must have access to the most sophisticated tools available for helping workers and industry stay competitive. The tools provided to states under this initiative should help foster a new understanding of economic development and ready states for the 21st century.

Acknowledgements

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Executive Summary

America's economic future depends on the strengths of our workforce. Our businesses need skilled workers to continue producing goods and services marked by innovation, knowledge, and quality—characteristics that give U.S. firms a competitive edge in the global marketplace. If we are to sustain this advantage, we must build a workforce enterprise that:

- improves the productivity and competitiveness of all workers and employers;
- builds the skills needed for quality jobs;
- provides lifelong learning opportunities;
- supports workers in managing their careers; and
- is supported by public and private investment.

State governors have an immense stake—along with business and labor—in building the best workforce training and education system in the world. Public elementary and secondary schools are the primary educators of America's labor force. Public postsecondary institutions—colleges, community colleges, and universities—play key roles in teaching skills to new workers and working adults. Finally, state government—in partnership with the private sector—is the largest provider of lifelong training and support services for new and incumbent workers, displaced workers, and low-income individuals leaving the welfare system.

However, in creating successful workforce policies and programs that meet 21st-century demands, states face several challenges.

- **Many state workforce systems do not reflect market needs**. Many state workforce bureaucracies are not connected to the economic needs of businesses and workers. A key problem is that 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 needs 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 that 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 turnover in business and jobs) in the economy and a substantial growth in the number of jobs created by small firms, which are less likely to offer training. Workers also are much more mobile in this churning environment. The end result is that responsibility for career advancement is shifting from companies to individuals, but postsecondary 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 supports—child care, health care coverage, transportation assistance, etc.—to help them move up the job skills and wage ladder. For many of these 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 systemwide 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.

Recommendations for Governors

Governors can implement six policy changes to overcome these barriers to building a skilled workforce and achieve a more effective workforce development enterprise. They can:

- connect workforce development to economic needs through education;
- build a stronger education pipeline to produce trainable graduates who have strong foundational skills;
- expand/create incentives for continuous learning;
- enhance workers' ability to manage their careers;
- strengthen work supports (including education and training) to promote employment retention and career advancement; and
- strengthen governance and accountability in the workforce system.

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. In addition, states should take these actions.

- **Organize workforce development around industry clusters**. States can use their workforce and education dollars more effectively if they target the strategic clusters in their region. (Clusters are networks of competing and cooperating firms, suppliers, service providers, and institutions in a state and regional economy.)
- **Work with networks of firms to promote cooperation and leverage private-sector investment**. Training dollars can be maximized by spreading training costs over multiple employers and serving a larger pool of workers. Multi-employer strategies in industries with high concentrations of low-wage workers can improve wages, working conditions, and advancement opportunities for workers.

Build a Stronger Education Pipeline to Produce Trainable Graduates

States should harmonize career 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. States should take actions such as the following.

- **Ensure the prekindergarten, elementary, secondary, and postsecondary education systems are connected and build students' skills**. One approach is to use "P–16" councils to help connect all levels of education.
- **Strengthen math and science programs at the middle, secondary, and postsecondary school levels**. Schools must teach more rigorous math and science skills to all workers, and public policies should encourage more students to pursue math, science, and engineering degrees.
- **Reform schools to improve student achievement**. Our 100-year-old elementary and secondary education structure is designed to serve a different era, struggling to respond to changing social and economic conditions, and isolated from other parts of the educational system. We need an education system in which all third graders read at or above grade level; all students take algebra by the end of eighth grade; high school exams test students at the 12th-grade level and are aligned with college admission requirements; all young people graduate from high school prepared for college or work; and every student who enters college is able to finish.
- **Fund postsecondary education institutions based on demonstrated performance**. Governors can use state financing mechanisms to encourage postsecondary education institutions to be more responsive to regional economic needs and to demonstrate higher performance.
- **Work with the higher education system to contain costs**. The increasing costs of postsecondary education must be contained if the system is going to accommodate the 12 mil-

lion more people with some postsecondary education needed in the workforce by 2020.

- **Promote greater participation and choice by modifying financial aid policies**. States should take steps to remove the barriers to financial aid for nondegree and part-time study.
- **Encourage greater use of federal and state tax incentives**. Internal Revenue Service data indicate that only a fraction of eligible students and families are claiming federal HOPE and Lifetime Learning tax credits, which pay for tuition and fee expenses. State tax credits should also be promoted.

Expand Incentives for Continuous Learning

Governors should create incentives for education and training that build skills throughout an individual's lifetime. States can create such an environment by taking several actions.

- **Increase the use of community colleges for workforce training**. Governors can enhance the role of community colleges as training providers to employers and as a bridge to higher-wage jobs for learners. The nation's 1,132 community colleges serve 10.4 million students each year, and no other system matches community colleges' scope and scale in education and training. For economically and educationally disadvantaged individuals in particular, community colleges are a gateway to continuing and higher education, job training, literacy instruction, and adult education.
- **Link adults with low skills and language problems to continuous learning**. Governors can promote agreements between public and private colleges and the agency responsible for adult basic education in their state to ensure noncollege adult programs are successfully preparing students to meet the challenge of college, advanced vocational, and career classes.
- **Direct welfare- and workforce-funded programs to allow greater participation in education and training activities**. States should increase skills training for welfare recipients, low-wage adults, and dislocated workers to prepare them for higher-wage jobs.
- **Support e-learning and other innovative delivery systems**. For example, under the Advanced Distributive Learning Initiative, the U.S. Department of Defense, other government agencies, more than 1,600 colleges and universities, and 150 corporations are collaborating to develop an open architecture for online learning.
- **Promote workplace learning opportunities**. States should support, through matching funds, programs that train workers in job settings. These programs increase firm productivity and support worker advancement.

Enhance Workers' Ability to Manage Their Careers

In this 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. State policy actions include the following.

- **Promote the use of skill-based assessment and credentials**. For example, states can support the pilot testing of skill-based credentialing systems by employers and training providers.
- **Increase customer choice and strengthen consumer information systems**. For example, states can support Web-based portals that offer information on the performance of workforce training providers and customers' satisfaction with those providers.
- **Work with state and federal agencies, businesses, and organized labor to improve government's role in helping people transition between jobs**. Reducing the amount of time workers are unemployed—or are involuntarily employed less than full time—can significantly increase the earnings of low-wage workers.

Strengthen Work Supports to Promote Employment Retention and Career Advancement

States' experiences under welfare reform highlight how important work supports are in helping families successfully move from dependency to economic self-sufficiency. States can help strengthen support systems in several ways.

- **Work with the private sector to develop flexible work rules and benefits policies**. For example, the Working Today Portable Benefits Network in New York City enables independent workers to pay less for health insurance than what they would pay on their own and to maintain coverage as they move from assignment to assignment or job to job.
- **Simplify access to work supports**. States can take advantage of options under federal law to simplify application, verification, recertification, and presumptive eligibility procedures for noncash benefits, such as food stamps, medical benefits, child care, and transportation subsidies.
- **Promote the use of earned income tax credits and develop other policies to make work pay**. States that are not already doing so can aggressively market the availability of the federal earned income tax credit among low-income working families and consider implementing a similar state tax credit.
- **Expand strategies to encourage asset-building and investments in training, such as individual development accounts (IDAs) and individual training accounts (ITAs)**. Both accounts enable low-income families to invest in postsecondary education and training. IDAs also enable families to invest in business capitalization and home ownership.

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. To achieve these improvements, states should take these steps.

- **Focus state workforce programs on meaningful outcomes**. Instead of individual program "bean counting," states should measure overall improvement in labor force outcomes—including income, skill levels, and job advancement—to determine whether taxpayers, employees, and employers are getting their money's worth from public workforce systems.
- **Promote continuous quality improvement in state workforce development programs**. States can require their workforce programs to implement continuous improvement systems based on leading private-sector practices.
- **Streamline the governance of public workforce programs**. Governors can form cross-agency cabinet councils to harmonize and combine the resources of education, workforce, welfare, human services, and other departments. Governors can also consolidate state agencies to bring related programs under unified leadership and direct them toward a common purpose.
- **Seek flexibility in federal programs**. The federal government should work with states to experiment with the consolidation of federal funding streams to aid workforce development. Consolidating funding from disparate programs would allow states to develop strategies that target unique economic problems and take advantage of local private resources and capabilities.

Conclusion

Together, the above state policy actions should strengthen the entire workforce development enterprise and improve the opportunities available for all American workers to continually enhance their skills. It is imperative that we meet these goals to sustain U.S. firms' competitive edge in the global marketplace and ensure our nation's continued prosperity.

I The Need for New Workforce Policy

Our nation must compete and win on the basis of high-value products rich in knowledge and innovation. This requires a workforce that is adaptive, skilled, and educated. Only with such a workforce can American industry produce the goods—pharmaceuticals, technology, computer software, business services, etc.—that will continue to be highly valued and create an economy that raises the prosperity of everyone—individuals, families, businesses, and communities.

Unfortunately, the future of our labor force and competitive position is uncertain. In many industries, we face shortages of skilled labor and challenges in developing the skills of an increasingly diverse workforce. Rapid job turnover is making it difficult for workers to receive the workplace training they need to enhance their skills. To address these challenges, we must redefine our workforce policies by forging partnerships with the private sector and with educators.

> "Despite the slowing economy, 80 percent of manufacturers continue to experience moderate to serious shortages of qualified job candidates."
>
> *(National Association of Manufacturers, Center for Workforce Success, The Skills Gap 2001 (Washington, D.C., National Association of Manufacturers, 2001)*

The Changing Workforce

The major challenge to the U.S. economy in the 21st century is the **shortage of skilled workers**. This shortage constrains the productive capacity of key industries and jeopardizes the quality of services in others. The Bureau of Labor Statistics projects that by 2020, there will be a 22-percent increase in the number of jobs requiring some postsecondary education. Yet, during the next 20 years, we will lose 46 million skilled workers as baby boomers retire.[1]

By 2020 we will have achieved a net gain of 3 million people with postsecondary education entering the workforce. However, this increase will not offset the 15-million new jobs that will require some postsecondary education. This means that potentially 12 million skilled jobs will go unfilled.[2] Specific industries that are critical to our economic growth, including education, health care, and information technology, will continue to suffer disproportionately large shortages of skilled workers, with unfilled job openings numbering in the hundreds of thousands.

States and communities face further challenges from an **increasingly diverse workforce**. Many baby-boom generation workers will retire during the next 20 years, and fewer new workers will enter the labor market. Labor force growth will come from labor market entry by new immigrants and from greater labor market participation by women, ethnic and cultural minorities, and individuals with disabilities.

> Despite the current short-term weakening of the economy, the U.S. will experience a very serious shortage of workers and skills; if current trends continue, the nation will experience a shortage of over 35 million workers by 2030, which will jeopardize economic growth and American prosperity.
>
> *(Branka Minic,* Staffing Firms and the Changing Labor Market *(Washington, D.C.: Manpower Inc., November 2001)*

The increased diversity of our workforce poses new challenges for the systems that educate and train workers. These systems must accommodate ethnic and cultural differences, provide for the needs of working families and individuals with disabilities, and address gaps in literacy and job skills among some immigrant populations. This will require increased investments in adult literacy and English-as-a-Second-Language programs, more opportunities for continuous learning to stay competitive, and expanded access to work supports to sustain labor force participation.

Employers also face new issues arising from the diverse workforce. They must offer more flexible work schedules to accommodate training, education, and family care needs. Their workplaces must include accommodations to enable individuals with disabilities to work and be fully productive. Employers must also provide greater opportunities for

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"The impending retirement of millions of baby boomers will leave a smaller and relatively less educated and experienced workforce. The ability to maximize the productive potential of every American of working age, through investment in education and training, will be essential to sustain future growth."

(Michael E. Porter, Debra van Opstal, U.S. Competitiveness 2001: Strengths, Vulnerabilities and Long-Term Priorities *(Washington, D.C.: The Council on Competitiveness, January 2001)*

work-based learning to prepare future workers and to continually upgrade the skills of current workers.

Exacerbating these challenges is the **churning economy** that is constantly creating and eliminating jobs. Every year, up to a third of all jobs are either additions to or are soon to be eliminated from the economy.[3] This churning has contributed to the demise of the social contract between employees and employers and has reduced the incentives for employers to invest in their workers. For many workers, the traditional concepts of job security, career ladders, and job progression are things of the past.[4] This has reduced employee loyalty to employers and given rise to new work relationships and a growing contingent workforce. Within this ever-changing environment, states and communities must help skilled workers achieve and sustain higher levels of productivity, innovation, and agility to ensure our nation's competitiveness.

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 in elementary and secondary school and continuing through college and working life. In this vision, workforce policies no longer address the "second chance" system as they have in the past, but they are customized to the needs of individuals and employers and are linked closely to the economic priorities of states and communities. Ultimately, the success of workforce policy and programs must be measured by their contribution to the economy.

The Massachusetts Institute for a New Commonwealth found that one in three Massachusetts workers lack skills for jobs in the new economy. Twenty-five percent have no education credentials, 17 percent have language problems, and 58 percent have literacy deficiencies.

(John Comings, Andrew Sum, Johan Uvin, "New Skills for a New Economy: Adult Education's Key Role in Sustaining Growth and Expanding Opportunity", (Boston, Ma: Massachusetts Institute for a New Commonwealth, December 2000)

The new workforce development policies must therefore:

- improve the productivity and competitiveness of all workers and employers;
- build the skills needed for jobs that lead to a high quality of life;
- provide lifelong learning opportunities;
- support workers in managing their careers; and
- be supported by public and private investment.

This report examines the challenges in designing a new, responsive workforce system and. recommends actions to meet those challenges. The new vision for workforce development incorporates a fundamental rethinking of how workers are educated, trained, and equipped with the knowledge and skills necessary to compete throughout their working lives.

The report is written primarily for governors. Governors are in the best position to redefine workforce policy and to mobilize government programs—workforce; child care; health care; human services; adult education; and elementary, secondary, and postsecondary education—to forge a more effective workforce enterprise that can maintain our nation's economic competitiveness.

1 Anthony P. Carnevale and Richard Fry, "The Economic and Demographic Roots of Education and Training" (Washington, D.C., National Association of Manufacturers, November 19, 2001).

2 Anthony P. Carnevale, "The Economic and Demographic Roots of Education Reform," *National School Board Journal* (Alexandria, Va.: National School Boards Association, 2002).

3 The United States Census Bureau, U.S. Business Statistics, *Births and Deaths, Expansions and Contractions,* (http//www.census.gov/pub/epcd/ssel_tabs/view/tab9_99.htm).

4 Robert Sheets, *Meeting the Challenges of Global Competitiveness: The Need for Next Generation Policy* (Naperville, Ill.: Northern Illinois University, Unpublished draft 2002).

II Challenges in Building a Skilled Workforce

States and communities face major challenges in preparing U.S. workers for high-skill, high-wage employment. In many instances, the publicly funded workforce system does not adequately reflect market demand for skilled workers, and the public education system fails to prepare students for the working world. Also for many low-skilled, low-wage workers, career advancement opportunities are insufficient, so working families often struggle to advance and many depend on support systems to move into higher-level employment. Finally, effective governance and accountability structures are usually inadequate to build integrated workforce and education systems. Consequently, individuals are forced to navigate a myriad of programs that are often unrelated or even irrelevant to their needs.

While some states and communities are succeeding in overcoming these barriers to building a skilled workforce, the rapid pace of economic change demands an accelerated and more far-reaching response.

> "While more people are working, the percentage of nonelderly adults and children who live in low-income families also is growing . . . To help working poor individuals out of dead-end jobs and into work that pays well and allow for advancement, it is more important than ever to provide and promote skill-building opportunities."
>
> *Aspen Institute Report,* Measure for Measure: *September 2001*

Many State Workforce Systems Do Not Reflect Market Needs

Workforce policies in many states lack a connection to the economic needs of workers and employers. State workforce programs are mostly tied to federal programs that are targeted to welfare recipients, the economically disadvantaged, and the unemployed. Because these programs are insufficiently linked to market needs, they leave the needs of workers and employers unmet.

Although some states have made progress in moving to more comprehensive approaches, in general, workforce programs and services remain separate in agencies that do not share even a common vision.

Publicly funded programs focused on entry-level jobs for low-skill workers, not on high-demand occupations that add to the innovative capacity of employers. Moreover, these programs offer employers minimal assistance in dealing with serious skill shortages and high turnover costs. Consequently, employers rarely view publicly funded programs as meeting their immediate or long-term needs for qualified workers and thus do not value the public investment or use the systems supported by this investment.

Government approaches to informing consumers about workforce services have not kept pace with the rapidly expanding private market in education, training, and labor exchange services. As a result, students and workers have trouble making informed choices in managing their careers. Employers also are frustrated in their search for assistance in finding and training workers.

Public Education Is Falling Short in Preparing Individuals for the New Economy

The annual budget of our nation's elementary and secondary school (K–12) system is $372 billion, and the higher education annual budget is $247 billion.[1] Despite these expenditures, almost one in four youth suffer from low literacy rates. U.S. employers spend $62 billion each year on basic skills training for their employees[2] and repeatedly say their workers are unprepared for available jobs that increasingly require higher levels of competence. Among skills often cited as lacking in today's workforce are the abilities to read and write at basic to moderately complex levels, compute, solve problems, and work in teams.

As the economy's skill requirements have risen and expanded, the performance of many public education entities—from preschools to postsecondary institutions—has been mixed. Too often, students are promoted to the next grade without mastering the content needed for advancement, and achievement gaps are widespread throughout the education pipeline. For example, in eighth grade, only one of every four students demonstrates proficiency in mathematics. In twelfth grade, the reading skills of African American students are approximately equal to the reading skills of white eighth-graders. Moreover, between 11 percent and 16 percent of high school students never complete high school. In addition, most employers and college professors judge the academic and employability skills of high school graduates as fair or poor.[3]

Postsecondary education achievement is also poor. Nearly a fourth of all four-year college freshmen fail to return for their sophomore year, and half of all community college students fail to complete a second year.[4] Educational attainment varies significantly by race and ethnicity. Hispanic adults—the largest growing segment of the U.S. population—obtain a bachelor's degree at a rate half that of white adults.

Beyond failing to produce graduates with strong basic skills, state education systems face another challenge—ensuring enough graduates with degrees in mathematics, science, and engineering to meet a growing demand. During the next 10 years, employment in science and engineering-related occupations will increase at almost four times the rate for all other occupations. Meanwhile, U.S. colleges are underproducing graduates in these disciplines. During the last 10 years, colleges have awarded 37 percent fewer degrees in computer science, 24 percent fewer in mathematics, 16 percent fewer in engineering, and 2 percent fewer in physical sciences.[5] Graduate enrollments in science are up only because so many foreign students study in the United States; significantly, foreign-born students earn nearly half of the doctorates awarded in science and engineering.

Finally, access to postsecondary education is becoming a problem. During the next 20 years, the workforce will need an additional 12 million people with some postsecondary education, but all who are eligible may not be able to attend.[6] College participation rates already vary significantly by race, income, and ethnicity, and cost is an increasing barrier to participation. Tuition rates at most private and public institutions are growing faster than inflation rates each year. Ultimately, we risk shortchanging our economy because a large number of workers cannot afford to attend college.

Workers Must Navigate a More Uncertain Career Path

Workers can no longer rely on their employer for long-term career growth or training. According to statistics from the 1990s, small firms with 500 or fewer employees account for about 75 percent of the employment growth and 90 percent of the new business location growth in the United States.[7] Although these fast-growing firms are the impetus for the new jobs, small firms often lack the resources, incentives, and capabilities to invest in worker training and education. As a result, incumbent training is declining.

Firms with fewer than 50 employees employ more than 94 percent of U.S. workers, but these firms provide limited training opportunities.[8] (In contrast, 84 percent of firms with 50 or more employees provide some kind of formal training.[9]) As a share of gross domestic product, business investment in training fell 18 percent between 1988 and 1999.[10]

In addition, jobs are less secure and employment relationships more tenuous because of technology advances, global competition, and the rapid pace of business start-ups and closures. For example, between just 1998 and 1999, 6.4 million new jobs were created from new business start-ups while 5.7 million jobs were lost from business closures.[11] Over a longer period—between 1983 and 2000—the proportion of workers that had been with their employers 10 or more years fell in every age group and the median years of job tenure among men age 55 to 64 dropped by about a third.[12] Moreover, businesses are establishing flatter organizational structures, which weaken internal career ladders and provide fewer opportunities for advancement. Increased job instability and fewer advancement opportunities mean workers need new strategies to help them retain employment, become reemployed if they lose a job, and advance economically.

The end result is that responsibility for career advancement is shifting from companies to workers. Decreasing job security and changing employer-employee relationships require workers to become "career entrepreneurs" and to take responsibility for managing their own careers. To meet this new challenge, education and training providers and funding mechanisms must be more flexible in helping individuals acquire the knowledge and skills necessary for employment and career transitions. Yet our education and workforce systems have few alternate paths to career advancement and are static in terms of instruction, credentialing, and financing.

Many Low-Wage Workers Need Work Supports to Advance

The strong economy of the 1990s and new public welfare and workforce policies moved large numbers of welfare recipients and low-income individuals into the workforce. However, many secured low-wage jobs that do not pay enough to enable families to escape poverty. These low-wage workers need further training and education and support systems, such as child care, health-care coverage, and transportation assistance, to help them move up the job skills and wage ladder. For many of these families, work support services are crucial to their self-sufficiency and advancement.

Work supports, including job training, increase family income and produce other positive outcomes for children and families.[13] Without effective support systems, many individuals and families fail to progress economically and remain vulnerable to economic downturns, as was seen in 2001, when welfare caseloads rose for the first time in several years.[14]

Unfortunately, many support systems for low-income workers are struggling to deliver needed services. A large part of the problem is the system, which makes it difficult to connect individuals and families to the services for which they are eligible. For example, take-up rates for work support programs such as food stamps, Medicaid, the State Children's Health Insurance Program, and earnings supplements are relatively low because of confusing eligibility criteria, complex application processes, and the stigma associated with receiving these supports.[15]

The lack of health care coverage—public or private—also impedes career advancement. Despite state and federal efforts to expand access to health insurance, the number of uninsured adults continues to rise. Part-time workers, temporary workers, and workers employed by new, small, or service-oriented firms often cannot afford health insurance because their employers provide little or no subsidy to help cover expensive premiums. Moreover, those employed by small or service-oriented firms often have trouble obtaining child care.

Continuing education and job training also remain elusive for many workers. A recent study in California found that only 23 percent of those eligible for work supports take advantage of education and training services after job placement because of cost and access barriers and their struggle to balance work and family responsibilities.[16]

Effective Governance and Accountability Structures Are Missing

Multiple agencies, administrative fragmentation, and a lack of system-wide accountability conspire to reduce the effectiveness of state and local public workforce systems. Workforce development, welfare-to-work, and education policies are often treated as separate policy domains with few administrative structures linking them. Programs that should be closely connected are spread among multiple agencies that often have competing priorities. Consequently, individuals cannot take advantage of linked education and training services that provide alternative pathways to success. In addition, employers do not receive the services they need and are disenchanted by the arcane and complex administrative requirements of different public programs.

Many federally funded programs exacerbate the governance problem. The federal funding streams often impose different eligibility criteria and unique administrative requirements, and the administering federal agencies often convey conflicting policy and coordination priorities. These inconsistencies make it difficult to combine programs and simplify access to services for individuals and employers. They also make it difficult to create holistic approaches to meeting customers' workforce needs.

Separate state and local management information systems, driven largely by federal reporting requirements, do not support effective case management practices or cross-agency planning and oversight at the state and local levels. Federal reporting requirements for specific programs also hamper program accountability. Today's performance management systems focus on narrow program measures rather than system-wide results and continuous improvement. Consequently, individual programs seem to perform well while the entire public-private workforce enterprise falls short; neither employer productivity nor individual and family well-being is improved. Although public workforce programs generally meet the goals they have set for themselves, they often do not succeed in addressing skill shortages or reducing poverty.

Finally, misaligned governance areas complicate planning and oversight of related programs. For example, the Workforce Investment Act delegates substantial decisionmaking authority to local workforce investment areas that do not align geographically with areas covered by school districts, community college planning districts, county-based welfare programs, or economic development regions.

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III Next Steps Toward a Stronger Workforce Development Enterprise

Building a stronger workforce will require smarter investments—public and private—in innovative solutions to keep pace with continuous change. Governors will need to become catalysts and brokers for public and private actions that improve the performance of the entire workforce development enterprise.

As part of this initiative, governors can implement six policy changes:

- connect workforce development to economic needs through education;
- build a stronger education pipeline to produce trainable graduates with strong foundational skills;
- expand/create incentives for continuous learning;
- enhance workers' ability to manage their careers;
- strengthen work supports (including education and training) to promote employment retention and career advancement; and
- strengthen governance and accountability in the workforce system.

Connect Workforce Development to Economic Needs

Governors should encourage the participation of employees in dialogue with students, educators, workers, and workforce officials to help them better understand the demands of the global knowledge-based New Economy. They should help to emphasize that it is in an individual's best interests to build his/her knowledge during a lifetime of education and work.

Workforce programs should forge stronger connections to the business community to identify the skills needed to power the regional economy. States should design training and education programs to meet skill demands and connect the resources of various programs to provide lifelong training and education. Workforce programs should also support industry sector- and cluster-based strategies and work with networks of firms to train the workforce cost effectively.

States should organize workforce development programs around industry clusters. Numerous academic and business scholars, including Michael Porter, Kenichi Ohmai, and Paul Krugman, believe innovation occurs through networks of competing and cooperating firms, suppliers, service providers, and institutions in a state and regional economy. As a global economy becomes more interconnected, interactions among economic actors at the local level become central to the ability to compete at the global level. By participating in these networks of interdependent institutions, firms gain resources and flexibility that enable them to respond better to rapidly changing global market forces.

States should invest in workforce capacity to improve these clusters' innovative capacity and the quality of the goods and services they produce. For example, newly emerging clusters, such as biotechnology are likely to need highly trained engineers and scientists to drive innovation, while mature and restructuring clusters might need help in upgrading the skills of their workers to help them transition to new product lines.

Governors should organize local workforce delivery structures, including one-stop systems, around the needs of key industry clusters. Services should be tailored to meet the needs of those industries and their employees. For example, the workforce investment board in Houston, **Texas**, is establishing an employer services division to meet the needs of 10 key industries that pay good wages and have significant labor shortages.[1] Governors should also consider integrating the delivery of workforce training, technology extension, and business services to holistically address the interrelated needs of companies in a specific industry.

Governors should promote interagency planning and improved communication between the public and private sectors by promoting regional planning and program oversight. To do this, they can reduce inconsistencies in programs' planning and administrative regions and provide flexible resources to public-private partnerships, such as business-led workforce investment boards, to address regional economic needs. For example, **Pennsylvania** will require local workforce investment boards to submit annual regional plans based on the state's 10 economic development regions.

Governors and state officials should work with networks of firms to promote cooperation and leverage private-sector investment. This should facilitate making the design and delivery of services more effective and efficient. Multi-employer strategies can spread training costs among employers and build a richer pool of talent by training more workers. Such strategies also aggregate employer demand for education and training, enabling providers to deliver services more cost effectively.

Governors should help broker relationships between employers and education and training providers to develop qualified workers and link them to jobs. This could include working with employer associations, unions, and community-based organizations to help their members recruit and train qualified workers and improve career advancement opportunities. Assistance to small and medium-size businesses is particularly important because they often lack the comprehensive human resources departments that larger companies have to address recruitment, training, and advancement issues. Multi-employer strategies, such as **Indiana**'s Regional Skill Alliance, in regions with identified common training needs, have been particularly effective in improving wages, productivity, and advancement opportunities for workers.[2] (see "Indiana's Regional Skill Alliance").

Indiana's Regional Skill Alliance

Indiana has developed the Regional Skill Alliance grant program for training incumbent workers using WIA discretionary resources. The state is working with employers, the Community College of Indiana, and each WIB to help small and medium-sized businesses that face difficulties in organizing training programs for their own employees. In each community the WIB's Incumbent Worker Council convenes firms experiencing skill shortages to identify the specific skill sets they require. A regional development specialist then prepares a grant application, which packages training and support services needed by individuals to meet employer specifications. Grants are approved by an internal review committee and are awarded on a competitive basis.

Build a Stronger Education Pipeline to Produce Trainable Graduates

To build a labor force with robust, foundational skills, governors need to harmonize early childhood education, K–12 education, postsecondary education, and workforce development with statewide goals for economic competitiveness. Each segment of the education pipeline should build student skills so they can advance to the next level. High school graduates should leave school with strong skills, including a solid math and science background. They should be prepared to enter college or the workforce ready to learn and upgrade their abilities throughout their career.

Postsecondary education, a primary source of highly skilled entrants to the workforce, should be a major focus of efforts to strengthen the education pipeline. State investments in community colleges, colleges, and universities dwarf state investments in workforce training programs. States spend more than $40 billion on postsecondary institutions[3], compared with approximately $589 million on workforce programs, such as employment services, unemployment insurance, and job training programs.[4] For this reason, governors need to ask how the state's significant investments in postsecondary education support state workforce and economic goals.

Governors should strive to improve access to postsecondary education and the performance of postsecondary education institutions. An unprecedented number of students will be eligible for postsecondary education in the next 10 years. States must ensure these students are better prepared academically and financially to attend the school of their choice.

Governors should begin by aligning different levels of education to better address the skill needs of the economy. For example, they could start by ensuring prekindergarten (pre-K), K–12, and postsecondary education systems are connected and build students' skills. In 25 states, governors draw on "P–16" councils to address this challenge. These councils work to align curricula, standards, assessments, professional certification requirements, accountability systems, and financial incentives at key transition points.

Governors can also ensure that expectations for high school and postsecondary graduates reflect the economy's skill needs. For example, in 1998 **Florida**'s voters approved a statewide referendum to establish a seamless academic education system that fosters an integrated continuum from kindergarten through graduate school education. In 2001 the legislature and governor established a K–20 "super board" to promote enhanced academic success and funding efficiency by centralizing the governance of education delivery systems and aligning responsibility with accountability.

Governors must strengthen math and science programs at the middle, secondary, and postsecondary school levels. They can use their bully pulpit to encourage the education system to teach more rigorous math and science skills to all students and to encourage more students to obtain math and science degrees. The United States does not produce enough graduates in these subject areas to meet specialized workforce demands, nor does it produce enough students with even basic quantitative and scientific knowledge. Consequently, many high school and college graduates enter the workforce unprepared to master concepts of modest complexity or to use the technology available to them in the workplace.

Starting in elementary school, students need rigorous basic preparation and they need to be made aware of the wide array of career choices, particularly those requiring math and science skills. At the middle and secondary

Kentucky's Strategic Investment and Incentive Trust Funds

Kentucky's Strategic Investment and Incentive Trust Funds are the financial cornerstone of the state's postsecondary reform agenda. Appropriations to these trust funds are made directly to the Council on Postsecondary Education, which establishes performance criteria for the distribution of funds to the institutions. The funds reflect state priorities.

- The *Postsecondary Workforce Development Trust Fund* furthers cooperative efforts among the community colleges and technical institutions to acquire equipment and technology necessary to provide quality education programs.
- The *Research Challenge Trust Fund* encourages universities to raise private funds to promote research excellence at the state's two major research universities. Funds are made on a matching basis for endowed chairs and professorships, graduate assistantships, research startup costs, and other related expenditures.
- The *Student Financial Aid and Advancement Trust Fund* increases student access to postsecondary education, including technical institutions, community colleges, state-supported universities, and accredited private colleges and universities.
- The *Adult and Literacy Education Trust Fund* is used to develop a long-term strategy for adult education and literacy. The strategy includes a statewide network linking all regional and county providers.
- The *Science and Technology Trust Fund* supports advanced scientific research at all universities, technology transfer to the marketplace, and regional postsecondary-based corporations to help rural industries access new markets and identify high-technology strengths.

school levels, governors can develop internationally benchmarked standards aligned to curriculum, assessments, and teacher professional development. Fourteen governors currently work on these issues as members of Achieve's Mathematics Achievement Partnership.[5]

At both the secondary and postsecondary school levels, governors can provide incentives to recruit and retain students in math, science, and engineering. For example, institutions could compete for grants based on their success in increasing the share of students who receive undergraduate education in science and engineering. Performance along this dimension is easy to measure, and it can be linked to a clearly stated state policy goal.

Governors must reform high schools to improve student achievement. Building on their success in reforming elementary education, governors can provide leadership to reform high schools and improve student achievement. Despite increased expectations for all students to graduate prepared for the more skilled workforce and some postsecondary education, U.S. high schools are still structured as they have been for much of the last century. Little has changed over the last few decades in terms of meeting the needs of the New Economy.

As a starting point, governors can call for a statewide commission to engage school and college leaders, teachers, and members of business and industry in high school reform efforts. This commission, such as the one in **Rhode Island**, can identify strategies to strengthen high school accountability systems and restructure high schools to create multiple pathways to and through the second year of college.

States should fund institutions based on demonstrated performance. Governors should incrementally shift a share of fiscal support for postsecondary institutions away from a funding formula based on the number of students (an input-based finance mechanism) to a system based on performance (an outcome-based system). For example, institutions can be rewarded for developing education and training programs that support regional industry clusters, such as in **Georgia**. In **Colorado** public postsecondary institutions receive incentive funds for better-than-predicted performance on 10 indicators, including enrollment and graduation rates of low-income students and achievement scores on professional, graduate school admissions, and other exams taken by baccalaureate graduates.

To the extent states retain the per-student funding formula, governors should seek greater equity in the formula between noncredit career and technical classes and more traditional academic degree programs. This would provide a stable source of revenues to support lifelong learning. States such as **California**, **North Carolina**, and **Texas** provide per-pupil funding for noncredit career and technical classes, while **Oregon** provides the same level of funding for professional and technical education programs as for academic degree programs. State funding sends a clear signal to community colleges that career training and workforce development are important.

States should encourage higher education to contain costs to meet growing student demand. Governors can promote and reward institutions that increase their productivity. Costs must be contained if access is going to expand to accommodate the 12 million more people with some postsecondary education needed in the workforce by 2020. Budgetary limits preclude states from exponentially increasing institutional support at the current rate. Governors can call attention to unwarranted program duplication among institutions so they can support efforts to become more mission-driven.[6]

States must promote greater participation and choice by modifying financial aid policies. Low-income and adult students' access to postsecondary education is limited by an underinvestment in financial aid and barriers to eligibility. Increases in college costs and stagnating incomes result in an unmet financial need of between \$3,200 and \$6,200; consequently, low-income students' participation in college significantly lags that of other students.[7] Governors should consider increasing state support for need-based student assistance and aggressively market state and federal financial aid programs, including income support and work-study resources available through Temporary Assistance for Needy Families (TANF) and the Workforce Investment Act (WIA).

Barriers to financial aid for nondegree or part-time study should be removed. Governors can promote the broadening of eligibility for federal and state grants and loans to include students who attend school less than half time, are in nondegree programs, or who are seeking a certificate. States can also provide tuition waivers and supplements for low-income students to make up for gaps in Pell funding, because these gaps particularly affect part-time students and those in non-credit programs. **California**, **Illinois**, **Massachusetts**, **Pennsylvania**, **Washington**, and **Wyoming** have begun to offer this kind of financial support.

Governors should encourage greater use of federal and state tax incentives supporting postsecondary education and training. Internal Revenue Service data indicate that only a fraction of eligible students and families are claiming federal HOPE and Lifetime Learning tax credits, which pay for tuition and fee expenses. Governors can promote greater use of these tax credits. In **Massachusetts**, for example, the federal tax credits are widely publicized to help make community college tuition effectively free for families earning less than $80,000 per year.

Governors also can promote greater use of college savings programs. Although most states have college savings programs that enjoy federal tax advantages, most parents use these programs to support the college educations of their dependent children. Such programs can be extended to adults to help them pursue lifelong learning. **Oregon** allows individual development accounts to be rolled over into their state-sponsored college savings program to promote adult postsecondary education participation. All states can more directly market their college savings programs to adult learners.

Expand Opportunities for Continuous Learning

Governors should seek to create an education and training environment that builds skills throughout an individual's career. By combining the activities and resources of various systems, programs, and institutions, states can create an effective system of lifelong learning.

States should increase the use of community colleges for workforce training. Governors can enhance the role of community colleges as training providers for employers and as a bridge to higher-wage jobs for learners. Community colleges are core public institutions offering unrestricted access to education and skill training. The nation's 1,132 community colleges serve 10.4 million students each year.[8] No other system matches community colleges' scope and scale in education and training. For economically and educationally disadvantaged individuals in particular, community colleges are a gateway to continuing and higher education, job training, literacy instruction, and adult education (see "North Carolina's Community College System").

North Carolina's Community College System

North Carolina's community college system uses a comprehensive approach to workforce training to address key sectors of the state's economy. State legislation identifies the community college system "as the primary lead agency for delivering job training, literacy, and adult education programs in the state." The system seeks to link adult education, human resource development, and job-readiness training to more advanced skills training. The state's Pathways Program offers training in four sectors: manufacturing, biotech-pharmaceuticals, boat building, and industrial maintenance. Each program combines basic skills remediation with job-readiness and occupational skills training. This short-term, fully integrated approach is supported with resources that include state funds on a per-student basis for adult literacy, human resource development, and noncredit career or occupational training.

States should link adults with low skills and language barriers to continuous learning. Workforce development focused on continuous learning must link students at all skill levels to better education and employment opportunities. Currently, however, policies and programs for students in adult education and English-as-a-Second-Language (ESL) programs pose significant barriers to achieving this goal. In most states, low-skilled adults and English-language learners are served outside the college system in school districts and adult education programs. These programs, though perhaps effective, are not designed to prepare students for college-level work and rarely enable transition to entry-level programs at college campuses. Consequently, adult literacy students face an abrupt end to their learning unless they are able to overcome these barriers.[9]

Governors can promote agreements between public and private colleges and the state agency responsible for Adult Basic Education (ABE) and ESL. These feeder agreements can ensure that noncollege adult programs are successfully preparing students to meet the challenge of college, advanced technical, and career classes.

States can also reorganize their ABE and ESL programs to provide students with a stronger orientation to college and careers. One promising approach is to create "bridge" programming models that integrate skills remediation into entry-level career programs. Bridge programs teach basic skills, work readiness, and workforce skills in an integrated fashion, making basic skill classes more relevant to the job market.[10]

Welfare- and workforce-funded programs should be changed to allow for greater participation in education and training activities. "Work-first" policies, which emphasize that individuals obtain employment as quickly as possible before they receive intensive services, are a major element of federal welfare-to-work and workforce programs. These policies have been successful in moving many people into the labor market.[11] However, the next challenge for states will be to help individuals advance up the career ladder and increase their earnings.

Governors can help solve this problem by increasing skills training for welfare recipients, low-wage adults, and dislocated workers to prepare them for higher-wage jobs. Such training should encompass both preemployment job-readiness occupational training for the unemployed and advanced career training for those already working. These efforts should be linked to other policies that encourage businesses to invest in upgrading the skills of their current workers, particularly those in entry-level positions. For example, states can offer free supervisory training for employers who hire welfare recipients to encourage firms to hire these workers. Governors can also require private training programs subsidized with government funds to measure whether workers obtain jobs with incomes and benefits that lead to economic self-sufficiency.

Governors should support e-learning and other innovative delivery systems. Web-based distance learning technologies—e-learning—can be a valuable complement to more traditional forms of instruction. Technology-based learning can take place anytime, anywhere. E-learning content also is more easily tailored to individual learners and can provide better opportunities for students who learn in different ways. **New Jersey** is pilot testing the use of distance learning to enhance working single mothers' opportunities for occupational skill development and career advancement to high-wage/high-skill jobs. In **Michigan**, to close the skills gap in the incumbent workforce, online instruction has been made available free of charge for a period of three years to employers with 25 or fewer employees.

Governors can work with industry to adopt common technical standards for e-learning that enable content to be shared. They can also offer incentives to providers to develop modular and accelerated curricula and to award competency-based credentials through strategic partnerships with employers. For example, under the Advanced Distributive Learning Initiative, the U.S. Department of Defense, other government agencies, more than 1,600 colleges and universities, and 150 corporations are collaborating to develop an open architecture for online learning.[12]

Governors should promote workplace learning opportunities. Supporting workplace learning can be an important strategy for worker advancement while also increasing productivity. Companies typically collaborate with community colleges to develop a curriculum tied to business needs. Governors can provide financial incentives to leverage private investment in worker training that result in transferable skills and increased productivity and competitiveness for workers and companies. Experience with customized training programs shows that investing in courses offered through employers or employer organizations, rather than through external providers, raises employer investment in training. At least 47 states have customized training funds that can link small and medium-size employers with education and training providers.[13]

For example, Mission College in Santa Clara, **California**, offers full degree programs at work sites through courses customized to meet the needs of the client company and its employees. The college developed associate degree programs for employees at Intel, Cisco Systems, and National Semiconductor in response to the companies' interest in improving the basic literacy and technical skills of their employees. To develop these programs, Mission profiled the skill requirements of jobs at the client firms and assessed employees to identify gaps between skills required on the job and employees' skills. The college also used this information to help develop customized education plans for participating employees. Companies have responded to this investment by paying for their employees to attend the training.

Enhance Workers' Ability to Manage Their Careers

Governors can use their bully pulpit to persuade individuals to assume greater responsibility for keeping their knowledge and skills current. They can also encourage the public and private sectors to develop easier ways for people to gain necessary certifications and to navigate the increasingly complex and confusing learning marketplace.

States should promote the use of skill-based assessment and credentials. Governors can provide incentives to encourage employers and educators to create new ways of validating what people know and are able to do regardless of how, where, or when they accumulated this knowledge. For example, they can support the pilot testing of skill-based credentials by employers and training providers participating in workforce development systems. The Career Transcript System, developed by Johns Hopkins University, documents the career and learning experiences of students and workers and their mastery of work-related skills. Records are maintained in a secure Internet-based environment.

Skill-based certification systems are increasingly used in the information technology industry and have dramatically changed how people qualify themselves for employment in this field and how schools prepare their students.[14] According to a recent study, the demand for nondegreed career certifications is exploding in response to the growth in credentialing programs run by businesses and trade associations. The number of organizations that offer certifications based on standardized tests increased from 120 in 1965 to 1,600 in 1996.[15] Several states require students in their career programs to apply for industry-sponsored, skill-based credentials, such as the Standard Automotive Service Excellence certificate and the National Institute of Metalworking certificate.[16]

Working adults, who must balance work and family responsibilities, are likely to increase their skills incrementally over time by participating in formal and informal learning experiences. Credentials recognizing learning gains that are not tied to specific course completion or degree attainment can motivate adults to seek other forms of training and career advancement. If the certifications are benchmarked to employer requirements and industry standards, they can serve as a gateway to career advancement and wage increases. For example, several states are using ACT Inc.'s WorkKeys system to validate work-related skills for hiring, to qualify workers for advanced training programs, and to expand access to more formal education opportunities (see "Michigan's Career Guidance System").

In addition, skill-based credentials can create learning pathways to higher education by paving the way for education providers to award students credits or advanced placement in degree programs. Not requiring adult learners to take courses for which they can demonstrate mastery can also result in cost savings to the individual and the system. For example, **Virginia** accepts about 80 different skill-based certificates for credit toward secondary and postsecondary degree programs.[17]

For skill-based credentials to gain currency among employers and educators, states will have to work with businesses and the education and training communities to develop valid assessments. This may entail resources at the development stage, but these costs can be recouped through testing fees. States or accreditation institutions might also need to establish guidelines to ensure the integrity, fairness, and privacy of the assessments and certifications. Such standards could build on ones already being developed for e-learning.

Michigan's Career Guidance System

Michigan's Career Guidance System provides a portal to the state's career development system through which students and workers have access to information and tools for their educational and career futures. To inform consumer choice, the state provides a consumer-oriented, searchable, Web-based post-high school education and training information system. The site provides access to e-learning links, online scholarships, and career advice.

Governors should increase customer choice and strengthen consumer information systems. Governors should promote competition among education and workforce service providers, provide more flexibility in structuring services at the local level, and strengthen the role of the customer so that services become more responsive to their preferences and needs. Job seekers, students, workers, and employers—the customers of the workforce development system—need more information on the value and performance of training providers. States can support improved consumer information to help consumers benefit from expanded choice and determine quality in the marketplace.

For example, states can support Web-based portals that provide information on the performance of workforce training providers and customers' satisfaction with those providers. Such rating systems might be similar to those developed by Amazon.com for books and music or by Zagat.com for restaurants. States can also provide information on industry and occupational certification systems that are available to students, job seekers, and employers. The proliferation of online and other certification systems makes it difficult to know the meaning, reliability, and market value of different certifications.

In addition, state workforce and education systems can provide more accurate, timely, and locally relevant information on labor market conditions and trends. Available data are not packaged well for strategic planning, policy oversight, or career planning purposes. Furthermore, current approaches seldom incorporate information on local employer hiring practices, school enrollments and completions, and other variables that can reveal labor supply and demand trends in local areas. A partnership between the Census Bureau and nine states is addressing this problem by combining state administrative and Census data to produce quarterly information on 27 indicators of labor market dynamics at the county and major industry levels.[18]

Governors should expand access to career management information and resource materials that illustrate the strong link between skills and upward mobility. One of the greatest challenges in building a skilled workforce is motivating low-skilled workers to engage in continuous learning. Pointing out the connections among increased skills, career advancement, and financial rewards can help.

Campus-based student services programs have been instrumental in helping working students persist and succeed in school. Governors can ask their postsecondary education system to examine the potential for making these programs available to working adults.

Workforce systems should do a better job of helping workers manage transitions between jobs. In this highly dynamic economy, workers are likely to change jobs more frequently because of a job loss or a desire to advance. Reducing the amount of time low-wage workers are unemployed—or are involuntarily employed less than full time—can significantly increase their earnings. It can also address labor shortages that impede employers' ability to expand.

Governors can work with state and federal agencies, businesses, and organized labor to improve government's role in helping people find the best job and helping employers find the most qualified workers. In addition to publicly provided labor exchange services, there is now a vibrant industry of Internet-based placement firms. States can broaden customer access to information and services by forming partnerships between public- and private-sector providers of labor exchange services. For example, last year the U.S. Department of Labor formed a partnership with Monster.Com to exchange job listings and create a richer source of information for employers and job seekers.[19]

New York's Transitional Opportunities Program

New York's Transitional Opportunities Program (TOP) is a specialized service delivery system created to ensure certain low-income wage earners receive all of the ongoing assistance and services they need to remain in the workforce and improve their financial well-being. Supports include case management services to promote job retention and career advancement; and access to transitional benefits, such as the earned income tax credit, food stamps, medical assistance, and child care subsidies. Participation is limited to family assistance cases with earnings. For up to 24 months, TOP will also serve families that no longer receive cash assistance because of excess earnings.

States also can provide incentives and supports for rapid reemployment through the unemployment insurance program. For example, they can use claimant profiling techniques developed in New Jersey to target reemployment services and supports to those at risk of experiencing long-term unemployment and exhausting their unemployment insurance (UI) eligibility. **New Jersey** is piloting a new series of reemployment workshops called Career Beacon to support rapid reemployment. Profiling also achieves cost savings because it directs job search services to displaced workers who are more likely to benefit from those services. [20]

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. Work supports are essential components of welfare-to-work strategies, and they should be viewed as essential components of career-advancement strategies for low-wage workers. Governors can strengthen support systems by partnering with the private sector to set flexible work rules and benefits policies, simplifying access to supports, subsidizing work that builds skills, and helping individuals and employers invest in training.

States can work with the private sector to develop flexible work rules and benefits policies. Governors can convene unions, industry associations, and community groups and encourage them to implement flexible human resources policies that promote skill building and employee retention and advancement. These could include portable benefit arrangements to ease transitions between jobs for workers and employers. For example, the Working Today Portable Benefits Network in New York City, **New York**, enables independent workers to pay less for health insurance than what they would pay on their own and to maintain coverage as they move from assignment to assignment or job to job. The network operates in partnership with the HIP Health Plan of New York and Guardian Life Insurance Company of America.

States can use tax incentives to encourage employers to provide onsite training and child care. For example, Kansas' High Performance Incentive Program offers companies a tax credit for making cash investments for employee training. **Connecticut** and **Georgia** offer employers tax incentives for constructing onsite child care centers and providing child care subsidies for their employees.[21] States can also fund pilot projects to demonstrate that family-friendly workplace policies, such as flexible scheduling to enable parents to participate in their children's school activities, improve worker morale and reduce turnover.

Governors should simplify access to work supports. They can take advantage of options under federal law to simplify application, verification, recertification, and presumptive eligibility procedures for noncash benefits, such as food stamps, medical benefits, child care, and transportation subsidies. For example, governors can opt for a three-month transitional food stamp benefit for families leaving welfare for work or freeze food stamp benefits for a working family for six months. States can also remove the stigma associated with the receipt of these benefits by processing applications using the Internet or mail, or by making the benefits available through employers or other community institutions not associated with the welfare system.

At a minimum, states can strengthen their outreach activities and work with employers—especially businesses that employ a large number of low-wage workers—to make people aware of the benefits for which they are eligible. For example, **Idaho** works with employers of immigrant farm labor to encourage them to educate their employees about available benefits. Another approach is to broaden the mission of "one-stops" to provide customers with easy access to eligible work supports.

States should implement policies to make work pay. Governors that are not already doing so can aggressively market the availability of the federal earned income tax credit (EITC) among low-income working families and consider implementing a similar state tax credit. Such policies have proven effective in raising family income and bringing needed resources to low-income communities. For example, in 1999 **Washington** brought $451 million into the state economy and increased the income of nearly 304,500 low- and moderate-income working families by initiating an aggressive public information campaign on EITC.[22] Fifteen states and the District of Columbia currently have some form of an earned income tax credit (see "State Earned Income Tax Programs").[23]

State Earned Income Tax Programs

Colorado, the District of Columbia, Kansas, Maryland, Massachusetts, Minnesota, New Jersey, New York, Oklahoma, Wisconsin, and Vermont have refundable state EITCs. Illinois, Iowa, Maine, Oregon, and Rhode Island have nonrefundable state credits. Montgomery County, Maryland; and Denver, Colorado, also have programs.

Governors can also consider providing earnings supplements in addition to income disregards under TANF. Although income supplementation strategies will increase the cost of welfare-to-work programs, they increase employment, earnings, and family income. They also have other positive effects on families and children when they are combined with other strategies to support work. These positive effects, especially for young children, are significantly larger than those of any other welfare-to-work strategy tested to date.[24]

Governors should expand strategies to encourage asset building and investments in training. They can encourage individuals and families to build assets by implementing and promoting individual development accounts (IDAs) and individual training accounts (ITAs). These accounts are similar to individual retirement accounts to which workers contribute earned income and to which the public and private sectors may contribute matching funds. Both IDAs and ITAs enable low-income families to accumulate assets that can be invested in postsecondary education and training. IDAs also enable families to invest in business capitalization and home ownership.

Governors can also provide tax incentives to encourage employers, foundations, and religious organizations to contribute to IDAs or matched savings accounts and can use TANF, Community Development Block Grant (CDBG), or other program funds for the public contribution. Even if no public funds are contributed, states can decide not to count any savings in determining eligibility for TANF and other income-tested programs. States can also expand the use of ITAs, authorized under WIA, to include investments from various sources.

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. These goals can be achieved through improved governance and accountability.

Governors should work with political leaders at all levels to overcome fragmentation in state workforce systems' accountability and governance structures. Most federal and state governance and accountability systems are lodged in separate funding and institutional silos. This arrangement hinders the use of cross-cutting interagency approaches to designing or delivering workforce services. Many accountability systems are still focused on inputs and compliance with rules rather than outcomes. Outcome standards, where they do exist, measure only the performance of discrete programs and fail to capture the overall picture. Even though individual programs may perform well according to these measures, important economic and social goals are not being achieved.

Governors can start building a stronger workforce development enterprise by focusing state workforce programs on meaningful outcomes. Governors can demand an accounting of how cumulative public and private investments in workforce development contribute to economic prosperity for all at the state and local levels (see "Washington's Performance Management for Continuous Improvement Framework"). This accounting will require the development of indicators of economic well-being that make sense to the public and that can be used to monitor the results of workforce policies to ensure no individual or community is left behind.

Governors should consider taking advantage of provisions under WIA to develop measures of the effectiveness and efficiency of the public-private workforce development enterprise in achieving the state's workforce goals. Such indicators could measure increases in the productivity, earnings, and skill levels of workers as well as the increases in the capacity of employers and industries to recruit, hire, retain, and improve the skills of their workers. **Maryland** calculates the public investment in workforce development related to the number of participants served and is exploring the use of this measure as the basis for measuring the return on this investment in terms of earnings gained and the reduction in public assistance. **Michigan** has recently developed two systemwide indices—one for customer satisfaction (four measures); and one for system effectiveness (seven measures)—to measure progress toward excellence. States can request waivers or support for limited pilots that would allow them to demonstrate workforce system performance using these measures rather than the ones required under WIA and other federal programs.

By funding postsecondary education institutions based on performance, governors can also provide financial incentives to promote a focus on outcomes in quality assurance processes. Institutional quality should be measured by how well they achieve their mission and help meet the skill needs of employers in their communities. The measures could include an increase in access to higher education, the persistence and success of nontraditional students, and student performance in the labor market. Such measures are more relevant to investor and customer interests than traditional

Washington's Performance Management for Continuous Improvement Framework

Washington has identified seven desired outcomes for its workforce development system. The system includes the employment service; vocational training at community and technical colleges and high schools; private career schools; adult basic education and literacy; programs for disadvantaged youth and adults; apprenticeship; retraining for dislocated workers; and vocational rehabilitation training for disabled adults. The outcomes are:

- *Competencies:* Washington's workforce possesses the skills and abilities required in the workplace.
- *Employment:* Washington's workforce finds employment opportunities.
- *Earnings:* Washington's workforce achieves a family-wage standard of living from earned income.
- *Productivity:* Washington's workforce is productive.
- *Reduced Poverty:* Washington's workforce lives above poverty.
- *Customer Satisfaction:* Workforce development participants and their employers are satisfied with workforce development services and results.
- *Return on Investment:* Workforce development programs provide returns that exceed program costs.

accountability measures such as degree acquisition, grades, and graduation rates because they enable state policymakers, employers, students, and their families to determine whether they are getting their money's worth as costs continue to escalate.

Governors should promote continuous quality improvement in state workforce development programs. Governors can require their workforce programs to implement continuous improvement systems based on leading private-sector practices. Unlike most federal and state performance management systems, private-sector approaches, such as the Malcolm Baldrige Award criteria and Kaplan and Norton's balanced scorecard, measure progress in key results areas that are benchmarked to best practices in the industry.[25] These approaches emphasize continuous improvement in bottom-line results while promoting innovation and system agility.

The state's Workforce Training and Education Coordinating Board use multiple measures to track the state's progress in achieving these outcomes for the state's whole workforce, and for program participants. In addition, it uses a Balanced Scorecard framework to promote continuous improvement at all levels within the system.

In many states, governors can build on the work of quality councils established to recognize and promote improvements in business, government, and education. These councils use Baldrige-based award processes to recognize organizations that improve performance by adopting continuous improvement practices. Moreover, state and local workforce investment boards, with private-sector leadership, are well positioned to be leaders in promoting the integration of continuous improvement practices into performance management systems.

Governors can streamline the governance of public workforce programs. Governors can bring workforce and education programs under a common policy framework that complements the economic and social development goals of the state and region. Several governors have formed cross-agency cabinet councils to harmonize and combine the resources of education, workforce, welfare, human services, and other departments. These councils also oversee program implementation by line agencies and "enforce" collaboration among line managers.

Governors also have consolidated state agencies to bring related programs under unified leadership and direct them toward a common purpose. The new agencies integrate workforce-related programs previously spread among various agencies (see "State Consolidation of Workforce Programs).[26] Consolidation often requires legislative action and gubernatorial involvement to overcome bureaucratic impediments and turf wars. For example, in **Michigan**, education and workforce agencies were combined into a single department by executive order.

By streamlining state governance structures, governors can create a more flexible and responsive workforce system. Education resources can be combined with other training and support systems to provide comprehensive services to the labor force.

Finally, governors should seek flexibility in federal programs as the next step in streamlining. To facilitate the development of a workforce development system, the federal government should work with states to experiment with the consolidation of federal funding streams from disperate programs. This would enable states to develop strategies that target unique economic problems and to take advantage of local private resources and capabilities. It would also facilitate more seamless service delivery and make it easier for employers, students, and workers to navigate the workforce system.

Governors should urge the federal government to partner with states in expanding the use of waivers of federal laws and regulations. Waivers could be used to develop innovative service models and to promote more flexible cost allocation rules and administrative requirements, harmonized reporting requirements, aligned planning cycles, and streamlined and mission-relevant performance management systems.

Together these recommendations provide a cross-cutting action agenda for governors to increase the agility and productivity of America's workforce. They define a vibrant role for states in strengthening public-private partnerships and retooling our education, workforce, economic development, and human services systems to better address the needs of workers and employers in the dynamic competitive global economy. Governors must lead in a transformation of our attitudes, policies and practices to ensure America's continued prosperity and create a 21st-century workforce.

State Consolidation of Workforce Programs

- About 33 states have combined most U.S. Department of Labor (DOL)-funded employment and training programs (employment service [ES], unemployment insurance [UI], veterans, WIA, and trade act). For example, in a 1996 consolidation, **Iowa** combined ES, UI, labor market information (LMI), trade act, Job Training Partnership Act (JTPA), and other state training programs into a new agency, Iowa Workforce Development.
- About 10 states have combined most DOL-funded employment and training programs with vocational rehabilitation (VR) programs. For example, acting on the recommendations of a citizens committee, in 1993 **Nevada** combined ES, UI, trade act, LMI, JTPA, and VR into the Nevada Department of Employment, Training and Rehabilitation.
- Seven states have combined most DOL-funded employment and training programs with public assistance programs (TANF and Food Stamps Employment and Training). A few of these states have fully combined programs. For example, in 1996 Utah combined ES, UI, LMI, veterans, and JTPA with TANF, the Food Stamp program, and child care programs. In other states, such as **Connecticut, Florida, Michigan,** and **Texas,** administrative responsibility for TANF is shared by several agencies. Wyoming is moving toward combining employment and training programs and selected public assistance programs.
- Three states have combined DOL-funded employment and training programs with education programs. **Alaska** has combined adult education with major employment and training programs. **Indiana** houses vocational education, school-to-work, and workforce literacy programs in the same agency as employment and training programs. **Michigan** has combined career technical education, adult education, and career preparation (including community colleges, proprietary schools and activities funded under state-provided career preparation funds) with vocational rehabilitation and employment and training programs.
- Only one state has combined most employment and training programs with economic development programs. **Missouri** houses these programs in its department of economic development. **Minnesota** is moving toward merging employment and training programs with economic development programs.

III

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