The Bridge to a New Economy:
Worker Training Fills the Gap

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“Now is the time to put a new foundation for growth in place—to rebuild our economy, to retrain our workforce, and re-equip the American people. And now is the time to change unemployment from a period of “wait and see” to a chance for our workers to train and seek the next opportunity—so when that new and better day does come around, our people, our industry, and our entire country are ready to make the most of it.”

—President Obama, May 8, 2009

Experiencing the worst economic crisis since the Great Depression, and with the national unemployment rate at its highest level in more than a generation, federal policymakers are increasingly looking at policies and strategies to stimulate job growth and put America back to work. The American Recovery and Reinvestment Act, or “stimulus,” has saved or created over 1 million jobs, and Congress is working to pass a “jobs bill” designed to build on this extraordinary investment.

As the economy recovers and begins generating jobs again, it is vital that workers have the skills they need to maximize opportunities. Many newly created jobs will be “middle skill” jobs such as nurses, welders, and database managers. These occupations require significant education and training beyond the high school level but not a four-year degree. Educating people to plug the gap and fill these middle-skill jobs is critical, especially for low-skill workers to take advantage of emerging job opportunities, and for businesses to grow with the skilled workforce they need.

To turn today’s crisis into tomorrow’s opportunity, we must then make sufficient investments in a national skills strategy that brings the federal workforce development system to scale and ensures that all workers have access to the education and training they need to prosper. For too long, federal investments in workforce development have been in decline, placing a significant financial burden on employers and leaving behind those individuals who could benefit the most from skills training.
Meeting the Skill Needs of Tomorrow’s Jobs

In recent years, federal higher education policy has focused on increasing the number of individuals with four-year college degrees and beyond. While critical, it is not the only investment necessary to ensure that our workforce has the skills businesses need to succeed. As a nation, we have significantly underinvested in programs offered through community colleges, local workforce investment systems, community and faith-based organizations, and labor-management partnerships that help workers prepare for middle-skill jobs. Today, middle-skill jobs make up nearly half of the national labor market and are expected to experience considerable growth in the years ahead.

A Middle-Skill Gap in the United States

Prior to the recession, the United States was experiencing a shortage of middle-skill workers, but a surplus of low-skill workers. Approximately 52% percent of all jobs in the state were middle-skill jobs, yet only 42% percent of workers had the education and training necessary to fill those positions. While demand may have lessened over the last two years, there is still a persistent skills gap with employers struggling to find qualified employees and a large pool of low-skill workers in search of too few jobs.

Source: Analysis of data from the US Department of Labor and the US Bureau of the Census by The National Skills Coalition for the Skills2Compete campaign.

Middle-skill jobs are well represented in many of the high-growth industries that will benefit from the Recovery Act and other federal investments. For example, in the health
care sector it is anticipated that more than 1 million openings for registered nurses will be created between 2008 and 2018, while there will be nearly 1 million openings for nursing, psychiatric, and home health aides.¹ Skilled trade occupations requiring post-secondary certification should also see significant increases, with the construction sector and the installation, maintenance, and repair sector expected to see nearly 1.8 million and 1.6 million openings respectively between 2008 and 2018.² Policies supporting clean energy and energy efficiency will yield further job growth: according to one estimate, by 2030 more than 175,000 jobs in manufacturing, construction, and maintenance will be created in the wind-energy industry alone.³

The increasing sophistication of the workplace has led to increased skill demands across virtually all sectors of the economy. More than 40 percent of manufacturing jobs in the year 2012 will require at least some college or other post-secondary training, a far cry from the situation in 1973, when less than half of the manufacturing workforce had even a high school diploma.⁴ Today, manufacturing has become more about cutting-edge technologies too. For example, advanced manufacturing such as nanotechnology machinery is estimated to grow 30 percent per year over the next decade,⁵ while the service-robotics market is expected to jump to $52 billion by 2025, up from just $600 million back in 2002.⁶

Importantly, skill shortages are not waiting for tomorrow—they are happening now. Even in the midst of the recession, employers across a range of industries are having difficulty finding qualified applicants. According to a December 2009 report by Business Roundtable, more than 60 percent of employers report that candidates lack the skills to fill available positions.⁷ More specifically, the employment research group Manpower Inc. found that the top 10 occupations with the greatest skill shortages for 2009 include middle-skill occupations such as nursing, skilled trades (for example, electricians and welders), and machinists.⁸

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<th>Top 10 Greatest Skill Shortages in 2009</th>
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<td>1. Engineers</td>
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<td>2. Nurses</td>
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<td>3. Skilled Trades</td>
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<td>4. Teachers</td>
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<td>5. Sales Representatives</td>
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<td>6. Technicians</td>
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<td>7. Drivers</td>
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<td>8. IT Staff</td>
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<td>9. Laborers</td>
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**A New National Skills Strategy**

U.S. businesses need access to training programs that can quickly and effectively respond to changes in economic conditions and technology, while allowing them to focus on their core businesses. This requires a national skills strategy that focuses on developing effective partnerships between employers and other stakeholders to identify industry skills needed, upgrade the skills of their current workforce, and develop pipelines of skilled workers to meet future demands.
Our nation’s workforce development strategy needs to consider the changing circumstances of working adults as well. More than ever before, workers seek education and training at different stages of their lives and careers. As many as 73 percent of all undergraduate students have been described as “nontraditional” in some way. These workers are often balancing work and family commitments with their studies, so they need flexibility to pursue education and training at the time, place, and pace that best meets their needs.

It is also important to recognize that merely expanding access to post-secondary education and training will be of little value for individuals who lack the basic skills to succeed in such programs. According to one recent report, nearly 90 million Americans lack the basic education skills to participate in the post-secondary education and training needed for the middle-skill jobs of tomorrow. To ensure that all workers, regardless of their current skill level, can take advantage of emerging job opportunities, we must couple access to post-secondary education and training with access to remedial, English language, and adult basic education and other supportive services, establishing a path for workers to both enter and succeed in the workplace.

Over the past decade, two collaborative strategies have emerged at the state and local level that can help community colleges, local workforce investment boards, and other entities better respond to the realities of today’s labor market and today’s workers: sector partnerships and career pathways.

**Sector partnerships** bring together multiple stakeholders connected to a single industry—businesses, unions, community colleges, community-based organizations, and the public workforce system—to develop short- and long-term skills training that will grow or sustain that industry. Active in nearly 40 states, sector partnerships allow employers across an industry, particularly small and medium-size businesses with limited in-house training capacity, to aggregate skill requirements and training investments to ensure the availability of qualified workers within a region. Sector partnerships also benefit individual workers by providing them with skills development and by connecting training to good jobs. Recent research shows that low-income participants in well-implemented sector programs earn nearly 20 percent higher wages over a two-year period than comparable individuals, worked more hours and were more likely to find jobs with benefits.

**Macomb Community College** in the Detroit suburb of Warren, Michigan, has long provided education and training for the region’s automotive workforce. But, as jobs in this industry have dried up, Macomb has partnered with the Society of Piping Engineers & Designers (SPED) and several local employers to offer a six-week course that prepares displaced automotive designers and engineers for careers in process plant layout and pipe design. Students all have a minimum of 10 years of experience in the automotive industry, but relatively few (about 10 percent) have a bachelor’s degree or higher.

**Career pathways** have emerged as another key strategy for addressing the education and skill needs of a broad range of workers and businesses. This model aligns basic education, occupational training, and higher education in a way that promotes smooth transitions across programs and institutions, and permits people to continue to work and
support their families while gaining education. Where most effective, career pathways can transform institutions and organizations involved in education, employment, and supportive services by encouraging collaboration as a response to the needs of both workers and employers.

### Washington State’s I-Best (Integrated Basic Education Skills Training) Program offers a pioneering approach to preparing lower-skilled workers for careers in a range of careers in manufacturing, health care, and other growth sectors: courses that are team-taught by occupational instructors and teachers of Adult Basic Education (ABE) or English as a Second Language (ESL). This model allows workers to get the skills they need to enter the workforce more quickly than the traditional approach, which requires ABE instruction to be completed by the worker prior to enrollment in occupational training courses.

### A Legacy of Underinvestment

Unfortunately, America has not made the public investments necessary to ensure that our current education and workforce development systems can meet growing demand for services from business and workers alike. As illustrated in the chart below, federal funding for key education and training programs under the U.S. Department of Labor declined by over a quarter in inflation-adjusted terms between 2001 and 2009. At the same time, U.S. employers have shouldered the burden with greater investments in skills training, but this comes at a heavy cost, to the tune of $134 billion in 2008 alone. Importantly, this places American companies at a distinct disadvantage when their foreign competitors enjoy access to strong, public-supported job-training programs. In fact, the U.S. ranks 22nd among OECD countries in public investments for job-training programs.

Employer-funded training is critical to our nation’s economic growth and prosperity, but we cannot expect to remain competitive through these investments alone. Many small and medium-size employers lack the ability to develop and provide training, which ultimately limits their innovation and success. With finite resources, private-sector investments are often directed primarily at developing the skills of current employees,
meaning that unemployed and underemployed workers are at risk of falling further behind. In addition, publicly funded education and training programs often are not effectively connected to employer training initiatives, making it difficult for workers to align the credentials needed to personally advance.

The Recovery Act included sorely needed resources for education and training, including nearly $4 billion for job training under the Department of Labor. To maintain and build upon this down payment, annual public investments require billions more. This level of commitment will help bring workforce development funding in line with historic norms, while also addressing the circumstances of today.

Sustained federal support for workforce training is particularly critical now, as states struggle to close massive budget gaps resulting from the current economic crisis. Between 1980 and 2000, the number of states contributing 60 percent or more of the revenues of their community college system dropped from 18 to zero, and the past decade has seen even greater pressures on state budgets.15

Despite reduced resources though, some states have utilized what is left of available state and federal dollars to make new broad-based investments in workforce training, so that every resident can be part of their state’s economic recovery. For example, in 2007, Michigan Governor Jennifer Granholm launched the No Worker Left Behind (NWLB) Initiative, which provides up to $10,000 over two years for any unemployed or underemployed worker seeking education or training that leads to a high-growth job in the state. In its first eighteen months of the program more than 60,000 workers entered some form of skills training, and 72 percent of those completing training have been able to obtain or retain employment, despite the fact that, as of September 2009, there were ten unemployed individuals for every job opening in the state.

Additionally, more than 1,000 firms across the state—primarily in the manufacturing and health care sectors—were able to avert layoffs and revitalize their businesses through job retention training, which helped nearly 17,000 workers get the skills they needed to keep their jobs with these firms. Perhaps most importantly, 77 percent of participants still in training were in long-term training programs (more than one year), meaning that they have the time to develop skills and earn industry-recognized credentials that can lead to good family-supporting jobs, rather than settling for the first low-wage job opportunity that comes along.

Based on these promising outcomes, Governor Granholm recently announced that NWLB will continue as Michigan’s permanent workforce development policy. Given the current financial pressures on the states, federal policy can best support innovative training and education strategies like NWLB by ensuring that adequate resources are available to meet the growing demand for services, and by encouraging states to focus on training opportunities that meet the long-term skill needs of workers and businesses.
The Student Aid and Fiscal Responsibility Act—A Critical First Step

President Obama has signaled clearly the importance of post-secondary education and training in growing and maintaining the skills of the U.S. workforce. In July 2009, the President proposed his “American Graduation Initiative,” calling for billions of dollars to support innovative community college programs and partnerships that will enable an additional 5 million Americans to earn degrees and certificates over the next 10 years. Congress is currently considering legislation—the Student Aid and Fiscal Responsibility Act (SAFRA)—that would make the President’s vision a reality.

“...I ask every American to commit to at least one year or more of higher education or career training. This can be community college or a four-year school; vocational training or an apprenticeship. But whatever the training may be, every American will need to get more than a high school diploma.”

—President Obama, Address to Joint Session of Congress, February 24, 2009

It is little wonder that community colleges, along with institutions such as apprenticeships and community-based job-training programs, have been identified as an integral part in developing the workforce of tomorrow. In addition to preparing millions of students for transfer to four-year institutions, community colleges have proven exceptionally responsive to the needs of working adults. In fact, nearly 60 percent of the total community college population attends part-time, with half of all part-time students fully employed. Approximately 5 million students—more than 40 percent of the overall community college population in 2007—were enrolled in non-credit courses, gaining valuable work skills to enhance their career prospects.

Community colleges are a major source of training for middle-skill jobs, too. Close to 80 percent of firefighters, law enforcement officers and EMTs are credentialed at community colleges, with over 45,000 safety certificates awarded in 2007. Nearly 60 percent of nurses are trained at community colleges. And between 1987 and 2007, the percentage of Americans granted associate’s degrees at community colleges more than doubled.
Community colleges, working in partnership with businesses, local workforce investment boards, community-based organizations, and other entities, will play an integral role in implementing our national skills strategy. And while Congress takes up the passage of SAFRA, they should also consider provisions that will:

- Give priority for federal funding to programs that offer strategies to serve “non-traditional” students, recognizing the changing educational and training requirements of working adults;
- Ensure that efforts to increase attainment of associate’s degrees do not come at the expense of increased attainment of occupational certificates and other industry-recognized credentials. These shorter-term programs are critical to meeting worker and industry demands, yet they are often not recognized or rewarded in performance outcomes or funding formulas.
- Ease transitions between different course work and institutions. While many workers begin their post-secondary careers seeking only short-term training, easing transitions between non-credit and for-credit programs would allow more workers to pursue higher-level educational and career advancement opportunities. For students—particularly working students—standardized and transferable credentialing can ensure that credits earned in one school or program will apply to those earned elsewhere, facilitating and encouraging the pursuit of degree programs.
- Support the role of community-based organizations and other stakeholders that work in partnership with community colleges to develop career ladder and bridge programs, and other remediation and support services. Community colleges do offer developmental courses, but many workers are reluctant to burn up their educational-assistance benefits without earning credit toward a credential.
- Target investments toward community colleges that work with industries to help ensure that employers have access to the skilled workforce they need to compete both today and in the future.

Other steps the Administration and Congress can take as they craft the budget for FY 2011 and beyond:

- Strengthening and reauthorizing the federal Workforce Investment Act—which funds the nation’s workforce development system—providing increased access to training for all workers and ensuring that the law supports investments in sector partnerships to help grow or sustain local and regional industries;
- Supporting the development of career pathways through the alignment of adult education, higher education, and job training systems—at all levels of government—by removing administrative barriers to cooperation between programs on the local level, and requiring that all federal agencies engage in cross-agency planning and collaborative administration of job training and related programs under their jurisdiction.
- Rebuilding our workforce infrastructure by extending Recovery Act funding increases for job training programs through at least FY 2014 while increasing support for adult basic education programs to ensure workers at all skill levels can benefit from postsecondary training and education.
- Developing a longer term human capital investment plan that ties federal training expenditures across all agencies to national targets for the number of individuals attaining industry-recognized, middle-skill credentials leading to well-paying jobs and careers.
Conclusion

To put Americans back to work, we must ensure that workers and employers are able to access and acquire the skills necessary to retool a new 21st century economy and compete in the global marketplace. Investments in health care, clean energy, transportation, and other high-growth and emerging industries will create or save millions of jobs, but these investments in our national infrastructure must be coupled with investments in America’s workforce.

Through a greater expansion of federal funding in the coming budget and legislation such as the Student Aid and Fiscal Responsibility Act, we can begin to build a foundation for strong skills training that encourages industry and public partnerships and the development of career pathways for all workers. By doing so, Congress and the Administration will ensure that U.S. workers and businesses have the skills they need to begin rebuilding our economy and moving toward a new era of shared opportunity and prosperity.
ENDNOTES


8 Note: skilled trades refer to a broad range of job titles that require workers to possess specialized skills, traditionally learned over a period of time as an apprentice. Examples of skilled trades jobs are: electricians, bricklayers, carpenters, cabinetmakers, macons, plumbers, welders, etc. Manpower, “2009 Talent Shortage Survey Results,” 2009. http://files.shareholder.com/downloads/MAN/748182293x0x297372/dab9f206-75f44-00b-88fb3-ca81333140f/09TalentShortage_Results_USLetter_FINAL_FINAL.pdf


