National Governors Association

NGA PAPER

Upskill/Backfill Strategies: Advancing Incumbent Workers and Opening Opportunities for Job Seekers

Executive Summary

Under the American Recovery and Reinvestment Act (Recovery Act) High Growth and Emerging Industry Sectors grant program from 2009 to 2013, the U.S. Department of Labor funded 152 grantees across the country to train unemployed and dislocated workers in emerging and growing sectors such as health care and "green jobs." Their experience offers insight into how training programs and employers partnered to advance incumbent workers and open entry-level positions for unemployed job seekers—an approach known as "upskill/backfill." This paper summarizes key lessons learned from that experience and documents benefits to job seekers, employers, and communities.

Job seekers benefited as the workforce training programs reduced costs and risks for companies that sought to increase the capacity or efficiency of their operations. In a survey of employers conducted by a group of Recovery Act grantees, 17 percent of respondents reported the addition of a total of 322 new jobs and 130 newly opened positions. Nearly 60 percent indicated the likelihood of future job openings for lower-skilled workers as a result of training existing workers.

Employers benefited from grant-funded training that reduced their costs by increasing worker productivity and reducing staff turnover. Nearly 60 percent of survey respondents reported increased profits. Small businesses were disproportionately likely to have been helped, as they reported 75 percent of newly opened positions.

Communities benefited from the preservation of good jobs and the increased income of newly trained workers. Respondents indicated that workforce programs helped to avert layoffs and to fill job openings with local workers.

Upskill/backfill workforce programs help labor markets function more smoothly by reducing the costs and risks to employers of hiring new workers. Those programs can be more helpful when demand for a company's products or services is growing. As in other workforce programs, the upskill/backfill strategy appears most effective when applied within a specific industry as part of a sector partnership approach where employers are partners, not just customers; the relationship with them is ongoing; and company-to-company connections and networking can take place.

Introduction

The Recovery Act grantees set out to train unemployed and dislocated workers for jobs that were expected to materialize in sectors with strong growth potential. In the context of the 2007-2009 recession, however, private businesses were confronted with falling sales and profits. As a result, many of those businesses reduced their production, laid off workers, and in some cases closed their doors. Out of necessity, grantees increasingly focused on helping employers adapt to economic conditions by retraining their current employees. As the economy recovered and demand increased for their products and services, those employers were better positioned to meet that demand with greater productivity and the capacity to expand into new markets. After establishing credibility through incumbent worker training, grantees were better positioned to meet employers' growing demand for job seekers.

Although these workforce programs did not directly create jobs, they played an important role in making labor markets function more smoothly and linking job seekers to employers—in a sense creating local jobs. In partnering with employers and establishing a reputation for operating effective training programs, the grantees helped employers reduce the costs and risks of hiring new employees by upskilling their incumbent workers. When entry-level positions opened up, grantees also saw an opportunity to meet job-placement targets by working with employers to backfill the vacated or new entry-level positions with unemployed job seekers. By hiring a new entry-level worker through a credible workforce program, rather than off the street, employers saw the potential to reduce hiring costs and risks. The community benefited from jobs remaining in the community and the income earned by the advancement of incumbent workers and the employment of formerly unemployed job seekers.

Background and Methodology

From 2010 to 2013, the National Governors Association (NGA) led a partnership with Corporation for a Skilled Workforce and Collaborative Economics, Inc. that provided technical assistance to the 152 Recovery Act grantees. To document lessons from grantees' experience with implementing an upskill/backfill approach, the technical assistance (TA) team convened a workgroup with eight grantees pursuing upskill/backfill strategies.[*] Grantees were selected to participate in the upskill/backfill workgroup based on the intent to provide training for incumbent workers in their original grant proposals, high numbers of incumbent workers trained under their grants, and an interest and ability to participate in the upskill/backfill workgroup. Grantee participants selected varied in the number of employer partners as well as the type and level of training they provided.

To inform that work, more than a dozen grantees (including but not limited to upskill/backfill workgroup members) conducted a survey of employer partners throughout March and April 2013. Focused on the employers' experience with upskill/backfill strategies, the survey explored employer perceptions of grantee contributions' effect on their ability to stay in business, expand services and markets, and keep workers on the job. A total of 278 companies participated in the survey, a response rate of about 51 percent.[**] Illustrated with examples and insights from the grantee workgroup, that survey forms the basis of the TA team's findings about grantees' experiences with upskill/backfill strategies.

Benefits for Job Seekers, Employers, and Communities

During the grant period, a variety of factors influenced grantees' ability to advance incumbent workers and open new positions to job seekers. For example, the recession likely decreased job placements early in the project, but later on the economic recovery likely increased job placements. Accordingly, the survey results cannot definitively attribute all outcomes to upskill/backfill training partnerships. Furthermore, the survey did not attempt to measure long-term employment impacts of the Recovery Act upskill/backfill partnerships. When coupled with grantee examples, however, the survey results suggest promising strategies for policymakers to consider. Such strategies can build strong partnerships between the workforce system and employers that are beneficial for job seekers, employers, and communities.

[*] Thank you to the members of an active workgroup of Recovery Act grantees who spent eight months conducting research and discussing promising approaches to upskill/backfill strategies. Members of the workgroup were: Theresa Rowland, Commonwealth Corporation, Massachusetts; Beth Meyer, Workforce Training and Education Coordinating Board, Washington State; Tom Morgan and Carol Craig, Colorado Department of Labor and Employment, Colorado; Sean Sypolt, Westmoreland-Fayette Private Industry Council, Pennsylvania; Jen Miles, Mohave-La Paz Workforce Investment Area, Arizona; Joan Dolan, Maine Department of Labor, Maine; Teresa Kittridge, Minnesota Renewable Energy Marketplace; Minnesota; and Mathew Shields, Workforce Development Agency, Michigan.

[**] A response rate could not be verified for all grantees participating in the survey; the 51 percent figure reflects the weighted average for the grantees with verified response rates, who accounted for 236 of the 278 responses received and whose experiences appear to be typical of the group, based on approximate response rates for other grantees.

Job seekers benefited when incumbent workers advanced to higher-skilled positions.

The Recovery Act grantees' experience indicates that when training is provided to existing workers, they acquire new skills to advance to higher-level jobs and new and existing positions in turn open up for job seekers. Illustrating the upskill part of the equation, 91 percent of survey respondents reported that trained employees applied new skills on the job, and 27 percent of respondents said that workers experienced immediate promotions as a result of the training.[1] To gauge the backfill part of the equation, the survey then asked employers if jobs were created or opened as a result of the training, and if so, how many; 17 percent of respondents reported the creation of a combined 322 new jobs and 130 newly open positions. Employers also were asked to indicate the likelihood that training existing workers would result in career advancement plus job openings for lower-skill positions in the future; 59 percent responded either "highly likely" or "somewhat likely," suggesting potential for future backfill and other benefits associated with grant activities.

For example, the **North Carolina** State Energy Sector Partnership partnered with two companies to upskill 40 general construction workers. All of them advanced to new positions, including building analysts, weatherization technicians, and installers. The companies credited the training with opening employment opportunities for an additional 40 job seekers, of which 18 new full-time positions had been filled at the time of the survey. In another example, the **Maine** Department of Labor partnered with Maine Medical Center to offer certified nursing assistant (CNA) training to housekeeping and food service staff. Seven individuals went through the training, all of whom advanced to either a CNA or technician position. The hospital in turn hired seven new workers to fill the vacated housekeeping and food service positions. The **Massachusetts** State Energy Sector Partnership focused on training current weatherization installers for advancement to crew supervisor positions. More supervisors meant weatherization companies could expand services by hiring additional employees to fill the now-open installer positions and form new crews.

Employers benefited from greater training capacity, increased profits, and enhanced partnerships.

According to the survey results, employer training program partnerships built the capacity of employers to upskill existing employees to keep up demand for their products or services or expand. Asked whether the ability to expand their business or simply to keep up with current demand better described their need to increase employee skills, 65 percent of respondents chose keeping up with demand and 35 percent reported entering new markets and expanding their business. Although employer motivations for upskilling varied, 80 percent of respondents said they would not have conducted training if the grantees hadn't provided it. Twenty-nine percent of respondents reported they had funds set aside to train their workers, but that the grantee partnerships enabled them to expand training plans.

Small employers in particular appeared to face barriers upskilling their employees and benefited from the grantee training assistance. Forty-eight percent of respondents indicated they were self-defined small businesses for whom grant assistance was an important incentive to provide adequate training. Moreover, companies with between two and 30 employees were disproportionately likely to report backfilling newly open positions: They made up 39 percent of the sample but accounted for 75 percent of newly opened positions. They also were 50 percent more likely than businesses with more than 30 employees to report

[1] Although 278 surveys were received back from employers, not all employers answered all questions; percentages presented throughout the paper are based on the number of employers who responded to the particular question.

expansion as their primary motivation for incumbent worker training. Although companies with more than 100 employees disproportionately accounted for new job openings (they made up only 31 percent of the sample but accounted for 53 percent of new jobs), job growth was concentrated among just a few respondents. Only 10 percent of large companies reported adding new jobs, compared with 30 percent of small to medium-sized employers.

Additionally, 59 percent of respondents reported that training partnerships resulted in measurable profits. Forty-two percent of respondents reported that training helped them reduce costs, citing specific ways such as increased overall productivity and reduced staff turnover. Thirty-four percent reported increased revenues, such as more opportunities to offer new products that would lead to new revenue streams (see Figure 1).

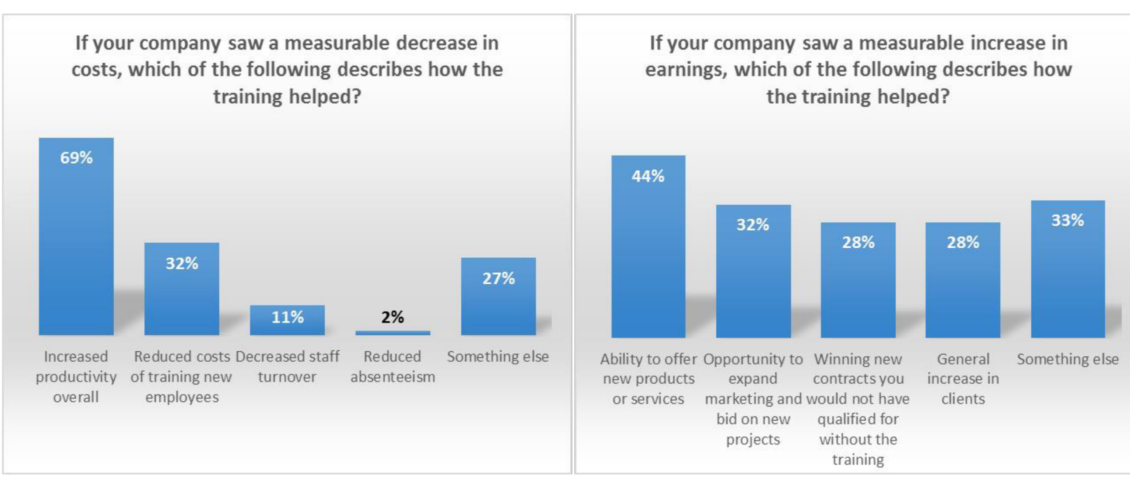
Based on grantee experiences documented through the workgroup, employers working with Recovery Act grantees also indicated that partnerships to upskill their employees led to more beneficial relationships with public training programs and other companies. For example, the **North Carolina** State Energy Sector Partnership provided training related to solar panel installation and spray foam certification to Blue Ridge Energy Works, a two-person insulation company, initially enabling the company to secure new contracts and ultimately to expand by hiring four installers. The partnership additionally connected the company to the Small Business and Technology Development Center, which helped Blue Ridge develop a business plan that included hiring up to 10 new employees in 2013.

As another example, the **Arizona** State Energy Sector Partnership used some of its grant funding to expand the scope of an existing apprenticeship program in Mohave County to include pre-apprentice screening and assessment. The Mohave/La PazWorkforce Investment Area began assessing and screening job seekers as potential apprentice candidates, regularly providing companies with a list of qualified candidates. In addition, funds were used to expand an apprenticeship training lab at local manufacturer Laron Inc. That way, other employer partners, including Cascades Tissue, Brackett Aero Filters, and I-Corp AZ, could collaboratively train machinist and millwright apprentices.

In the case of the Private Industry Council of Westmoreland/Fayette (PIC) in rural Pennsylvania, participating companies found that training partnerships helped them connect to other companies in their field, which allowed them to expand services to new customers, offer new types of services, and advance and hire workers. Although initially independent of an upskill/backfill strategy, those partnerships led the PIC to see benefits of an explicit strategy built on evolving needs.

One company, TriState Biofuels, first worked with the

Figure 1: Employer-Reported Benefit from Upskill/Backfill



PIC to strengthen its competitiveness by upskilling its workers with Occupational Safety and Health Administration training. Through the partnership, the company also made connections with the Marcellus Shale oil and gas drilling companies and, as a result, developed an entirely new product line of wood pellet absorbers for chemical waste at drill sites. To meet the new product demand, TriState needed 24 additional workers and returned to the PIC to train unemployed job seekers to fill the positions. Furthermore, upon hiring those workers, TriState again worked with the PIC to develop formal internal promotion criteria and a talent-management plan to meet the company's employment needs as it continued to expand. The experience motivated the PIC to design a new upskill/backfill strategy to engage employer partners similarly. The strategy includes:

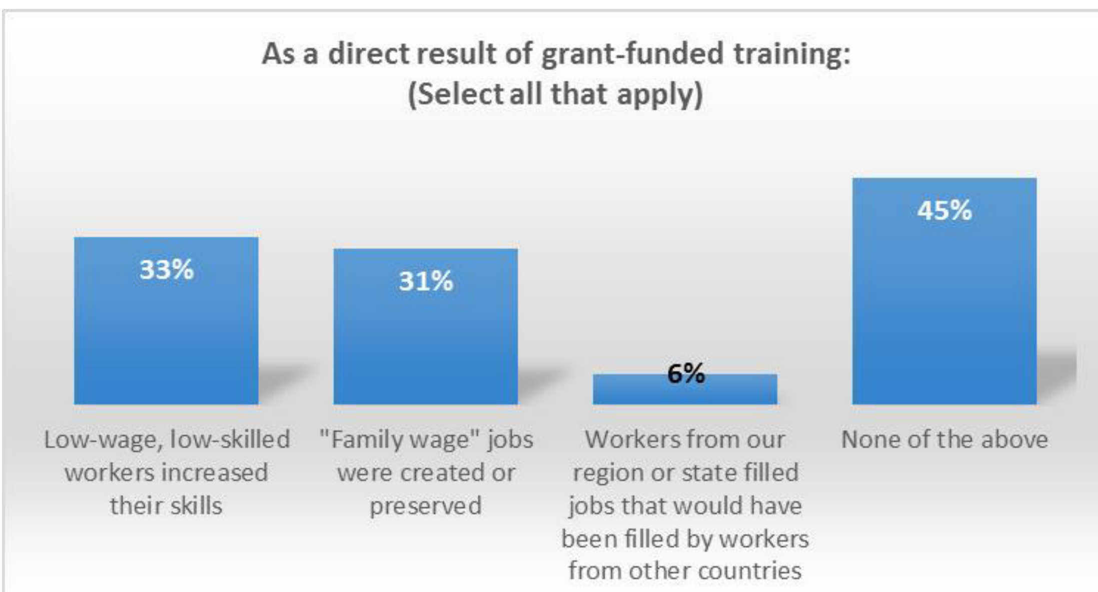
- Identifying and targeting employers with growth potential;
- Offering employers customized training for existing workers, with the agreement that the company will backfill open positions;
- Providing training to unemployed job seekers with the right pre-employment skills to meet employers' entry-level needs; and
- Partnering with companies to continue on-the-job training of new hires to ensure job retention and opportunities for advancement.

Communities benefited from both averted layoffs and the preservation or creation of jobs.

Respondents indicated that incumbent worker training through partnerships with grantees helped to avert layoffs and positioned them to add new jobs. More than 20 percent of employers who answered the survey indicated that as a result of training for their existing workers, they avoided either laying off workers or closing their business altogether. Additionally, when asked about various community benefits that resulted from training (see Figure 2), 31 percent reported that family-wage jobs were created or preserved.[4] Six percent reported that workers from their region or state filled jobs that otherwise would have been filled by workers from other countries.

The PIC provides an example of the benefits that communities can accrue as a result of upskill/backfill strategies. The PIC used Recovery Act funds to create

Figure 2: Community Benefit from Upskill/Backfill



[4] The term "family wage" was not defined in the survey and therefore open to interpretation by respondents; question wording is presented in Figure 2.

the Green Alliance Committee, a partnership between manufacturers of component parts for solar, wind, and geothermal heating, cooling, and electricity-generating systems and commercial and residential retrofitting companies. The committee began as a small advisory group of eight companies intending to guide the PIC on immediate training needs of renewable energy and energy-efficiency companies, but within 18 months it grew to include more than 40 members. Each member received a customized version of the PIC's comprehensive upskill/backfill strategy. Overall, the PIC invested $250,000 of funding (including Recovery Act grants, county general funds, Workforce Investment Act Title I funds, and Temporary Assistance to Needy Families funds) to upskill 220 workers who earned an average of $12.25 per hour. After training, their wages increased by $2.56 per hour (for a total of $14.81 per hour), representing a gross annual increase of nearly $1.2 million. That figure does not account for additional payroll gains through backfill that occurred as a result of advancing the upskilled workers.

The Westmoreland-Fayette community benefited economically because employers responded to increased demand from new and existing markets. The PIC facilitated that expansion by connecting employers through the upskill/backfill partnership, often making them aware of new market opportunities and improving their access to the talent needed to meet the new demand. Furthermore, the PIC helped ensure that the economic benefits stayed in the local community because it connected employers within a local supply chain and channeled wage gains and new jobs to local workers. Examples of business expansion and resulting community benefits facilitated by the PIC's training partnerships include:

- TriState Biofuels created a new product line and 24 jobs, also tripling supply purchases from local sawmills;
- J&J Mechanical, a small commercial HVAC company, quadrupled its employee base as a result of expanded connections to residential retrofitting needs, adding 20 jobs;
- Maccabee Industrial, a steel fabricator, added a product line to include windmill skeleton construction and created 10 jobs;
- Gerome Manufacturing, a steel fabricator, expanded windmill parts production, added a product line to produce brackets for constructing green buildings and created 18 jobs;
- Therm-O-Rock East, Inc., a manufacturer of vermiculite (a type of insulation) discovered it could be used to retrofit insulation, as well as an eco-friendly soilless medium, and created 20 jobs; and
- World Kitchen, formerly Corningware, now makes Pyrex glass for solar panels. It added an entirely new production line and 60 jobs.

Lessons Learned for Workforce Development Policy and Programs to Consider

Although the upskill/backfill strategies did not directly create jobs, they positioned employers to advance incumbent workers through training and add new jobs in response to changing demand, often providing new job opportunities for unemployed job seekers. Federal, state, and local policy and program leaders examining incumbent worker training as a potential element of workforce and economic development strategies can learn from the Recovery Act experience. In particular, that experience provides evidence that upskill/backfill strategies can be mutually beneficial for employers, job seekers, and the community.

Implementation

The Recovery Act grantees' experience provides some insight into how policymakers can implement upskill/backfill strategies most effectively. For example, upskill/backfill strategies thrive when applied within a specific industry as part of a sector partnership approach where employers are partners, not just customers; where the relationship with them is ongoing; and where company-to-company connections and networking can take place. Additionally, small and medium-sized companies poised for growth may face barriers to providing adequate training and are good targets for upskill/backfill strategies. Upskill/backfill strategies can also work more effectively when demand for a company's products or services is growing.

To ensure the benefits of upskill/backfill strategies are broadly shared, workforce entities can adopt an explicit protocol for forming upskill/backfill partnerships such as the one developed by the PIC and grantee workgroup. Specifically, that protocol includes clear expectations that training will lead to advancement for workers; a shared understanding that positions left open by workers advancing to new jobs will be filled by new, qualified job seekers; and a shared expectation that measures of the effect of the partnership will be tracked, including correlations to company growth, new jobs opened, jobs added, and worker advancement. Additional components of an upskill/backfill partnership protocol include a mutual understanding of the skills needed by entry-level workers; the expectation that the workforce entity will help find, screen, train, and place entry-level workers within the company; and an agreement to share the costs of training existing workers. The workforce entities also have the opportunity to connect employers to other potentially valuable programs and resources.

Funding

The Recovery Act experience contains important lessons for funding upskill/backfill strategies. Potential funding streams include grant funds; Workforce Investment Act funds; city, county, or state training funds; employer contributions; Temporary Assistance to Needy Families funds; economic development training funds; and other state funds such as unemployment insurance taxes that go toward training. In addition, workforce entities can encourage employer co-investment by making the business case that upskill/backfill partnerships can improve employers' profits through increased worker productivity, decreased turnover and recruiting costs, new revenue streams, and stronger ties to local economies.

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July 2014

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