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December 2013

WORKFORCE INVESTMENT ACT

Local Areas Face Challenges Helping Employers Fill Some Types of Skilled Jobs

GAO-14-19

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GAO Highlights

Highlights of GAO-14-19, a report to congressional committees

Why GAO Did This Study

The economy is recovering from the recession, but employers still have difficulty filling certain jobs. DOL's Workforce Investment Act (WIA) Adult and Dislocated Worker programs are designed in part to help employers find the skilled workers they need. The programs provide participants with services including job training, which must be for occupations that are in demand. However, questions have been raised about the extent to which these programs are positioned to help supply workers for jobs that employers have difficulty filling. The conference report accompanying the Consolidated Appropriations Act of 2012 mandated that GAO assess the Adult and Dislocated Worker programs. This report addresses (1) how local workforce areas have identified occupations that are in demand and how they have guided participants toward training for them; and (2) what challenges local workforce areas have faced in helping employers fill certain jobs. GAO conducted a web-based survey of a nationally representative sample of 200 local workforce investment boards (WIB), which oversee local workforce areas, and used the results to create estimates about the population of all WIBs nationwide. GAO also interviewed DOL officials and workforce organizations.

What GAO Recommends

GAO recommends that DOL collect and disseminate information on how local areas have used career pathways approaches to prepare workers for middle-skilled jobs that employers have difficulty filling. DOL agreed with our recommendation.

View GAO-14-19. To view the survey and detailed results, see GAO-14-20SP. For more information, contact Andrew Sherrill at (202) 512-7215 or sherrilla@gao.gov.

What GAO Found

Based on survey results for calendar year 2012, GAO estimates that most local areas used various sources of information to identify occupations that are in demand (i.e., available jobs and occupations that are projected to grow). Local areas found all of the sources of information they used to be at least moderately useful. To identify occupations that are in demand, GAO estimates that nearly 90 percent of local areas used state job banks and occupational projections, both of which are funded by the Department of Labor (DOL). All percentages presented on this highlights page are estimates from the survey and have a sampling error of no larger than plus or minus 7 percentage points. In addition, 93 percent of areas used at least one local initiative, such as a partnership with the local economic development agency, to identify such jobs. As compared to other sources, areas reported using local initiatives because they provided more detailed information and better reflected local employers' needs. To guide participants toward training, most local areas required them to complete certain activities, such as meeting with a case manager to discuss training options (80 percent) or completing a skills assessment (78 percent). Most local areas faced challenges in guiding participants toward training. Specifically, local areas faced challenges related to participants' lack of financial or work supports, such as child care or transportation (67 percent); participants' lack of the basic skills necessary even to participate in training (66 percent); difficulty finding training providers who could quickly adapt curricula to employers' changing needs (62 percent); and high training costs (54 percent). However, in 57 percent of local areas, these challenges did not affect their ability to guide participants toward training.

Local areas had difficulty helping employers fill certain jobs for a variety of reasons, including the low skills of some participants, according to GAO estimates. Eighty percent of local areas reported that employers had difficulty filling certain jobs, some of which can be considered "middle-skilled" jobs, such as welders and machinists, because they require more than a high-school diploma but less than a 4-year college degree. These local areas had difficulty supplying such workers because participants lacked relevant qualifications or the basic skills needed to participate in related training, among other reasons. To help participants improve their skills, DOL and other agencies have encouraged the use of career pathways approaches that combine job training with basic skills education and support services. According to these agencies, such approaches aim to enable participants to secure industry relevant certification and obtain employment within an occupational area and advance to higher levels of future education and employment in the area. However, little is known about the extent to which local areas are using career pathways approaches—or how they are using these approaches—specifically to prepare participants for middle-skilled jobs that employers have had difficulty filling. Without information on whether and how local areas are using these approaches to prepare participants for such jobs, DOL may not be well-positioned to help local areas use these approaches to better meet employers' needs.

Contents

Tables

Figures

Abbreviations

BLS	Bureau of Labor Statistics
CLASP	Center for Law and Social Policy
CPS	Current Population Survey
DMTF	Direct Match Title File
DOL	Department of Labor
Education	Department of Education
ETA	Employment and Training Administration
HHS	Department of Health and Human Services
OES	Occupational Employment Statistics
OVAE	Office of Vocational and Adult Education
RFI	Request for Information
SOC	Standard Occupational Classification
WIA	Workforce Investment Act
WIB	workforce investment board

U.S. GOVERNMENT ACCOUNTABILITY OFFICE
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December 2, 2013

The Honorable Tom Harkin
Chairman
The Honorable Jerry Moran
Ranking Member
Subcommittee on Labor, Health and
Human Services, Education, and Related Agencies
Committee on Appropriations
United States Senate

The Honorable Jack Kingston
Chairman
The Honorable Rosa DeLauro
Ranking Member
Subcommittee on Labor, Health and
Human Services, Education, and Related Agencies
Committee on Appropriations
House of Representatives

The economy is recovering from the recession, but employers are still having difficulty filling certain jobs. The Department of Labor's (DOL) Workforce Investment Act (WIA) Adult and Dislocated Worker programs are designed to help jobseekers find employment and to help employers find the skilled workers they need. In program year 2011, these programs provided job training to over 250,000 participants, or about 13 percent of all WIA participants, according to DOL's published data on participants who exited the programs.[1] WIA requires this training to be for occupations that are in demand, also known as demand occupations.[2] State and local

[1] According to DOL, approximately 2 million participants received employment services from the WIA Adult and Dislocated Worker programs and exited the programs between April 2011 and March 2012. Those who exited are a subset of all participants because some participants received services but did not yet exit the programs. These are the most recent published data available.

[2] For the purposes of this report, we are defining occupations that are in demand to include both currently available jobs and occupations that are projected to grow in the future. WIA does not provide a definition of occupations that are in demand. DOL officials told us that the agency interprets this term to mean both available jobs and occupations that are projected to grow, although officials said that the agency has not defined this term for states and local areas.

workforce investment boards (WIB) are responsible for administering WIA activities in approximately 600 local areas across the country.[3] To help local workforce areas identify demand occupations, DOL funds a variety of sources of labor market information that are provided by states. Local areas may also undertake additional initiatives to identify such jobs.

Previous research has shown that local workforce areas identify demand occupations and use that information to guide participants in the WIA Adult and Dislocated Worker programs toward training.[4] However, questions have been raised about the labor market information that informs these programs and the extent to which the programs are positioned to help supply workers for jobs that employers have had difficulty filling. The conference report accompanying the Consolidated Appropriations Act of 2012[5] mandated that GAO assess the Adult and Dislocated Worker programs. This report addresses (1) how local workforce areas have identified occupations that are in demand and how they have guided participants toward training for them; and (2) what challenges local workforce areas have faced in helping employers fill certain jobs.

To address both objectives, we reviewed relevant federal laws, regulations, and program guidance. We also conducted a web-based survey of a nationally representative sample of 200 WIBs, and used the results of the survey to create estimates about the population of all WIBs nationwide.[6] The survey asked questions about the following topics, in calendar year 2012: 1) which sources of labor market information local areas used to identify occupations that are in demand, and the sources they found most useful; 2) how they guided participants toward training,

[3] Most states have one state WIB that is responsible for overseeing multiple local WIBs. Some states have one statewide WIB and no local WIBs. For the purposes of this report, we use the term "local areas" to refer to the areas overseen by both local and statewide WIBs.

[4] See U.S. Department of Labor, Office of Inspector General—Office of Audit. *Additional Information Needed To Measure The Effectiveness And Return On Investment Of Training Services Funded Under The WIA Adult And Dislocated Worker Programs.* Washington, D.C.: Sept. 30, 2011.

[5] H. R. Rep. No. 112-331, at 1121 (2011) (Conf. Rep.).

[6] In designing the sample, we did not consider indicators of the size of the local areas overseen by WIBs, such as population or amount of WIA funding received, because such data were not readily available.

and the challenges they faced in doing so; and 3) whether employers in their areas have had difficulty filling certain jobs, and if so, the challenges they have faced in helping employers fill those jobs. We did not conduct a skills gap analysis because reliable data were not available.[7] This report does not contain all the results from the survey. The survey and a more complete tabulation of the results can be viewed at GAO-14-20SP. We also interviewed DOL officials as well as representatives from national workforce associations and organizations with expertise in workforce issues. See appendix I for more information on our scope and methodology.

We conducted this performance audit from July 2012 to December 2013 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

The WIA Adult and Dislocated Worker programs provide employment services to a wide range of participants. The Adult Program serves all individuals age 18 and older, and the Dislocated Worker Program serves individuals who have been or will be terminated or laid off from employment, among others.[8] The Adult Program prioritizes certain

[7] We considered conducting a skills gap analysis to assess whether there is a mismatch between employer needs and the skills of available workers. Officials from DOL's Bureau of Labor Statistics said that the following conditions would be associated with a skills gap in a particular occupation: 1) jobs remain unfilled for a longer-than-normal time period, 2) wages are increasing, and 3) unemployment is low. However, we decided not to conduct a skills gap analysis as part of this study primarily because reliable data on the conditions associated with a skills gap were not available at the local or state levels. For a detailed explanation of why we did not conduct a skills gap analysis, see appendix I.

[8] A dislocated worker is an individual who: 1) has been terminated or laid off, or has received a notice of termination or layoff from employment; 2) is eligible for or has exhausted unemployment insurance; 3) has demonstrated an appropriate attachment to the workforce, but is not eligible for unemployment insurance and is unlikely to return to a previous industry or occupation; 4) has been terminated or laid off or received notification of termination or layoff from employment as a result of a permanent closure or substantial layoff; 5) is employed at a facility where the employer has made the general announcement that the facility will close within 180 days; 6) was self-employed but is unemployed as a result of general economic conditions in the community or because of a natural disaster; or 7) is a displaced homemaker. See 29 U.S.C. § 2801(9).

services for recipients of public assistance and other low-income individuals when program funds are limited.[9] To allow individuals to participate, both programs offer supportive services such as transportation, childcare, housing, and needs-related payments under certain circumstances.[10] WIA requires that the Adult and Dislocated Worker programs and other federally funded employment and training programs provide services through one-stop centers—now called American Job Centers—so that jobseekers and employers can find assistance at a single location.[11]

DOL's Employment and Training Administration (ETA) administers the Adult and Dislocated Worker programs and oversees their implementation, which is carried out by states and localities. WIA requires that each state have one or more local workforce investment areas, each governed by a local workforce investment board (WIB).[12] WIBs' responsibilities include setting policy and overseeing service delivery for the local workforce area, coordinating workforce investment activities with economic development strategies, and developing relationships with employers.[13] Our previous work has identified innovative collaborations used by some WIBs to help employers meet their needs for workers with certain skills, among other needs.[14] WIBs also select the entities to operate American Job Centers and conduct oversight of the American Job Center network.[15]

[9] 29 U.S.C. § 2864(d)(4)(E).

[10] 29 U.S.C. §§ 2864(e)(2) and 2864(e)(3). Supportive services are defined at 29 U.S.C. § 2801(46).

[11] 29 U.S.C. § 2864(c). Training and Employment Guidance Letter No. 36-11, *Announcement of American Job Center Network* (Washington, D.C.: June 14, 2012) strongly encouraged states and local areas to refer to the one-stop system as the American Job Center network and to one-stop career centers as American Job Centers, in order to increase jobseeker and employer awareness of available workforce development resources.

[12] 29 U.S.C. §§ 2831 and 2832.

[13] 29 U.S.C. § 2832(d).

[14] See GAO, *Workforce Investment Act: Innovative Collaborations between Workforce Boards and Employers Helped Meet Local Needs.* GAO-12-97 (Washington, D.C.: Jan. 19, 2012).

[15] 29 U.S.C. § 2832(d).

The Adult and Dislocated Worker programs provide participants with a variety of employment services. The programs provide three levels of service: core, intensive, and training.

- **Core services** include basic services such as job searches and labor market information, and may be accessed with or without staff assistance.
- **Intensive services** include such activities as comprehensive assessment and case management, which require greater staff involvement. Intensive services are available to participants who are unable to obtain or retain employment after receiving at least one core service.
- **Training services** include such activities as occupational skills or on-the-job training. In order to be eligible for training services, participants must: 1) be unable to obtain or retain employment after receiving at least one intensive service; 2) be in need of training; and 3) have the skills and qualifications to successfully complete the training program, among other requirements.[16]

To determine whether participants need training and to assess their skills, WIBs may require them to complete certain activities. We previously found that most WIBs required participants to complete skills assessments or tests and gather information about the occupation for which they wanted training before entering a training program.[17] After participants are determined to be eligible for training, DOL requires that they select approved training providers in consultation with case managers, but participants ultimately choose the training programs in which they participate.[18] WIA requires that training be directly linked to demand occupations, which DOL interprets to include both currently

[16] Participants must also: 1) select a training program that is directly linked to employment opportunities in the local area or in another area to which the individual is willing to relocate, and 2) be unable to obtain grant assistance from other sources to pay training costs. 20 C.F.R. § 663.310.

[17] See GAO, *Workforce Investment Act: Substantial Funds Are Used for Training, but Little Is Known Nationally about Training Outcomes*. GAO-05-650 (Washington, D.C.: June 29, 2005).

[18] 20 C.F.R. § 663.440(c).

available jobs as well as occupations that are projected to grow in the future.[19]

In fiscal year 2013, the Adult and Dislocated Worker programs received a total of about $1.9 billion in appropriations, down from about $2.5 billion in fiscal year 2000 (a 24 percent reduction).[20] In order to receive their full funding allocations, states must meet agreed upon levels of performance. WIA requires performance measures that gauge program results for jobseekers in the areas of entered employment, employment retention, earnings, and credential attainment.[21] In addition, WIA requires measures of customer satisfaction for jobseekers and for employers.[22] States may request waivers to report performance measures known as common measures, which do not include credential attainment.[23] WIA requires states to negotiate performance levels with DOL and holds states accountable for achieving these levels by tying them to financial sanctions and incentive funding.[24]

Sources of Information for Identifying Demand Occupations

To help local areas identify demand occupations—including both available jobs and occupations that are projected to grow—DOL funds a variety of sources of labor market information that are provided by state labor market information offices and state workforce agencies (see table 1). Local areas may also use online job postings, which are funded by private companies and organizations, to identify demand occupations. In

[19] 29 U.S.C. § 2864(d)(4)(G)(iii).

[20] Fiscal year 2000 appropriations are presented in nominal dollars and are not adjusted for inflation.

[21] 29 U.S.C. § 2871(b)(2)(A).

[22] 29 U.S.C. § 2871(b)(2)(B).

[23] Common performance measures were developed under an Office of Management and Budget initiative, which sought to unify definitions for performance across programs with similar goals. As of May 2013, a total of 50 states and territories had waivers to use common performance measures for the Adult and Dislocated Worker programs.

[24] 29 U.S.C. § 2871(b)(3)(A) and (g); 20 U.S.C. § 9273. For all states—those with waivers and those without waivers— incentive or sanction determinations are based only on the following performance measures: entered employment, employment retention, and earnings. See Training and Employment Guidance Letter No. 9-07, *Revised Incentive and Sanction Policy for Workforce Investment Act Title IB Programs* (Washington, D.C.: Oct. 10, 2007).

addition, local areas may undertake other initiatives to identify demand occupations.

Table 1: Sources of Labor Market Information, by Provider and Primary Funding Source

Source of labor market information	Entity that provides information	Entity that primarily funds information
Sources for identifying available jobs		
State job banks	State workforce agencies	DOL (formula grants to states)[a]
Online job postings	Private companies and organizations	Private companies and organizations[b]
Job vacancy surveys	State labor market information offices	DOL (Workforce Information Grants to states)[c]
Sources for identifying occupations that are projected to grow		
Industry and occupational projections (including state, regional, and local projections)	State labor market information offices	DOL (Workforce Information Grants to states)
Customized reports and tools	State labor market information offices	DOL (Workforce Information Grants to states)
Other labor market data (e.g., information about unemployment, wages, salaries, and skill sets)	State labor market information offices	DOL[d]
Regional labor market economists/analysts	State labor market information offices[e]	DOL[e] (Workforce Information Grants to states)
O*NET[f]	The National Center for O*NET Development, operated by the North Carolina Department of Commerce (state workforce agency)	DOL
America's Career InfoNet (part of DOL's CareerOneStop website)[g]	Minnesota Department of Employment and Economic Development (state workforce agency)	DOL

Source: DOL.

[a] Funded primarily with Wagner-Peyser Act formula funds and, to a lesser extent, WIA formula funds.

[b] Some states use Wagner-Peyser Act funding to support their role in providing online job postings to participants.

[c] Some states use WIA formula funds and state funds to supplement Workforce Information Grants from DOL.

[d] The Bureau of Labor Statistics (BLS) funds national level data through Labor Market Information Cooperative Agreements, and ETA funds state and local data through Workforce Information Grants to states.

[e] Regional labor market analysts/economists are employed by state labor market information offices. DOL does not directly fund these positions, but states may use federal funding such as Workforce Information Grants, Wagner-Peyser Act funding, and WIA formula funds to support these personnel costs.

[f] O*NET provides a variety of occupational information, including occupational skill requirements.

[g] America's Career InfoNet provides labor market information by occupation and industry, links to state labor market information offices, and other career exploration tools.

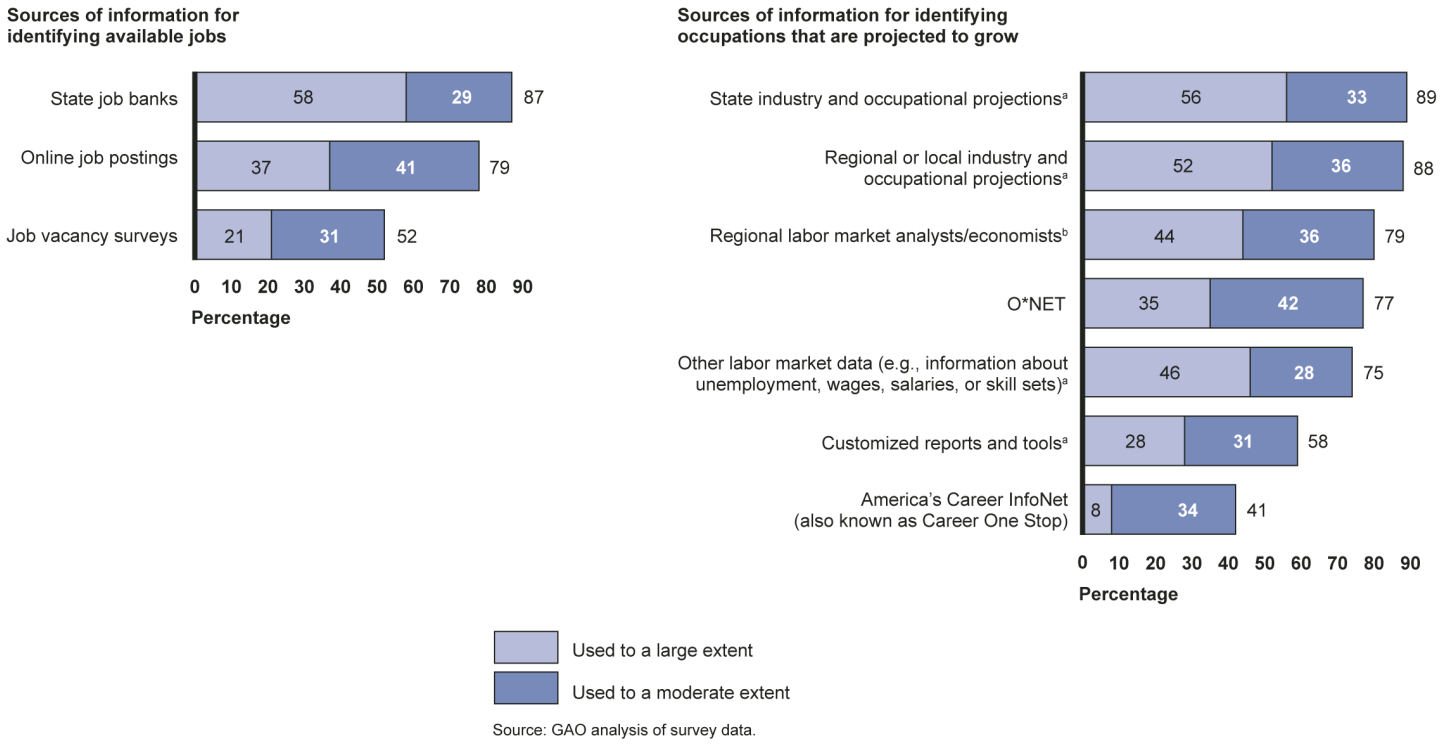
Local Areas Used Various Sources to Identify Demand Occupations and Required Participants to Complete Certain Activities before Entering Training

Most Local Areas Used a Variety of Sources to Identify Demand Occupations

We estimate that a majority of local areas used various sources of information to identify demand occupations (see fig. 1). All but one of these sources—online job postings, which are funded by private companies and organizations—are funded primarily by DOL and provided by state labor market information offices or state workforce agencies. The sources local areas used the most were state job banks and industry and occupational projections. Specifically, we estimate that nearly 90 percent of local areas used state job banks to identify available jobs, and nearly 90 percent of local areas used industry and occupational projections to identify occupations that are projected to grow.[25]

[25] See figure 1 for these estimates and confidence intervals. All percentage estimates from the survey have margins of error at the 95 percent confidence level, unless otherwise noted.

Figure 1: Sources of Information That Local Areas Used Most to Identify Demand Occupations in Calendar Year 2012



Source: GAO analysis of survey data.

Note: In some cases, the total is not the exact sum of the individual estimates due to rounding to the nearest whole percentage point. The estimates in the first bar graph (sources of information for identifying available jobs) have 95 percent confidence intervals of within plus or minus 7 percentage points. The estimates in the second bar graph (sources of information for identifying occupations that are projected to grow) have 95 percent confidence intervals of within plus or minus 8.5 percentage points. Additionally, all sources of information above are primarily funded by DOL, except for online job postings, which are funded by private companies and organizations.

[a]Areas obtained this information from the state labor market information office.

[b]These percentages reflect the 72 percent of local areas located in states that employed regional labor market analysts/economists; 28 percent of areas reported that their states did not employ such analysts/economists or did not know whether their states employed them.

Local areas found all of the sources of information they used to identify demand occupations at least moderately useful. Local areas found regional labor market analysts or economists the most useful of the sources for identifying occupations that are projected to grow, although they used them slightly less than industry and occupational projections, as shown in figure 1 above. However, 28 percent of local areas did not

have access to such analysts or economists because their states did not employ them or did not know whether their states employed them.[26]

In addition to using these sources of information, most of which are provided by state agencies, we estimate that 93 percent of all areas undertook at least one local initiative to identify demand occupations.[27] DOL encourages areas to use local initiatives to identify such occupations. Specifically, DOL has issued guidance encouraging local areas to use information from employers and economic development partnerships, among other sources, to identify available jobs and occupations that are projected to grow.[28] As compared to other sources of information, about 90 percent of areas used local initiatives for at least one of the following reasons:[29]

- They more accurately reflected the current and expected needs of local employers.
- They provided more detailed information.
- They provided more useful information.

Of those areas that used local initiatives, nearly all had a partnership with the local economic development agency (see fig. 2). For example, one local area used this partnership to learn about the hiring needs of employers that planned to locate in the area. Additionally, 90 percent of local areas used real-time labor market information to identify demand occupations.[30] A majority of these areas obtained such information from

[26] The confidence interval for the estimate of 28 percent is 22 to 34 percent. We estimate that 72 percent of local areas were located in states that employed regional labor market analysts or economists. The confidence interval for the estimate of 72 percent is 66 to 78 percent.

[27] The confidence interval for the estimate of 93 percent is 88 to 97 percent.

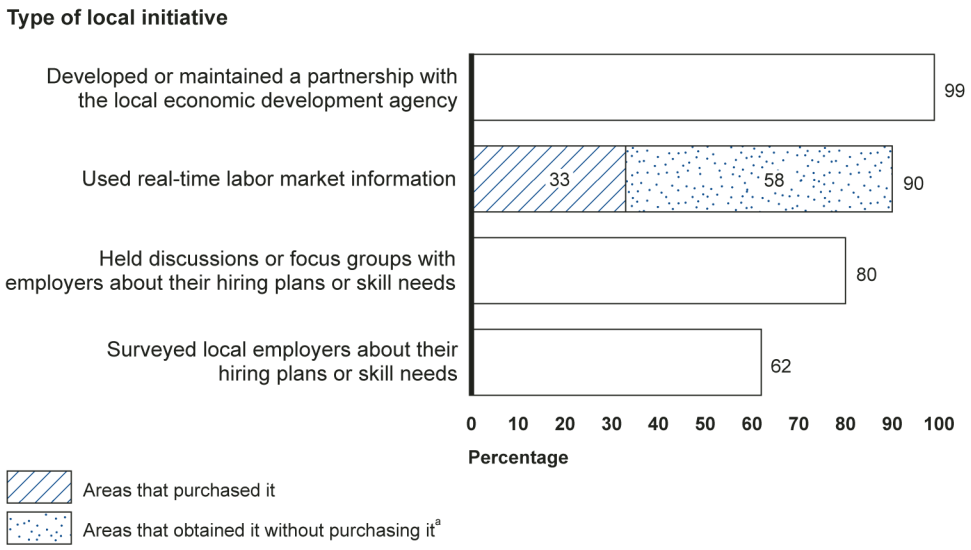
[28] Training and Employment Guidance Letter No. 33-11, *Annual Program Guidance for the Program Year 2012 Workforce Investment Act (WIA) Adult, Dislocated Worker, and Wagner-Peyser programs* (Washington, D.C.: June 8, 2012).

[29] We estimate that 90 percent of local areas used local initiatives to identify available jobs for at least one of these reasons. The confidence interval for the estimate of 90 percent is 83 to 94 percent. We estimate that 92 percent of local areas used local initiatives to identify occupations that are projected to grow for at least one of these reasons. The confidence interval for the estimate of 92 percent is 86 to 96 percent.

[30] Real-time labor market information aggregates and analyzes online job postings to provide “real-time” information about the hiring and skill needs of employers. The confidence interval for the estimate of 90 percent is 84 to 95 percent.

the state labor market information office, state workforce agency, or state or local economic development agency, while about one-third purchased it from private companies. Of the local initiatives, areas found discussions or focus groups with employers about their hiring plans or skill needs most useful for identifying demand occupations.

Figure 2: Of Those Areas That Used Local Initiatives to Identify Demand Occupations, Percentage That Used Each Initiative in Calendar Year 2012



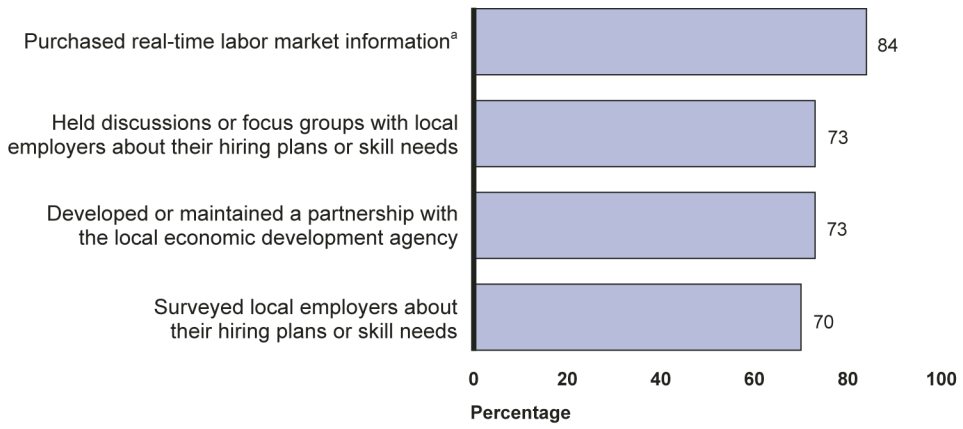
Source: GAO analysis of survey data.

Note: This figure provides estimates for a subset of local areas, specifically, those areas that used local initiatives to identify demand occupations (an estimated 93 percent of areas). For real-time labor market information, the total is not the exact sum of the individual estimates due to rounding to the nearest whole percentage point. The confidence interval for the estimate of 99 percent is 95 to 100 percent; for the estimate of 33 percent it is 26 to 39 percent; for the estimate of 58 percent it is 51 to 64 percent; for the estimate of 90 percent it is 84 to 95 percent; for the estimate of 80 percent it is 72 to 86 percent; and for the estimate of 62 percent it is 55 to 69 percent.

[a]These local areas obtained real-time labor market information from the state labor market information office, state workforce agency, or state or local economic development agency.

Most of the areas that undertook local initiatives used WIA funding to support them (see fig. 3). Some local areas also used other funding sources—such as the Employment Service (Wagner-Peyser) program, the state workforce agency, economic development agencies, and private funding—to support these initiatives.

Figure 3: Percentage of Areas That Used WIA Funding to Support Each Local Initiative in Calendar Year 2012



Source: GAO analysis of survey data.

Note: The confidence interval for the estimate of 84 percent is 70 to 93 percent; for the first estimate of 73 percent (discussions or focus groups) it is 64 to 81 percent; for the second estimate of 73 percent (partnership with the local economic development agency) it is 67 to 79 percent; and for the estimate of 70 percent it is 62 to 77 percent.

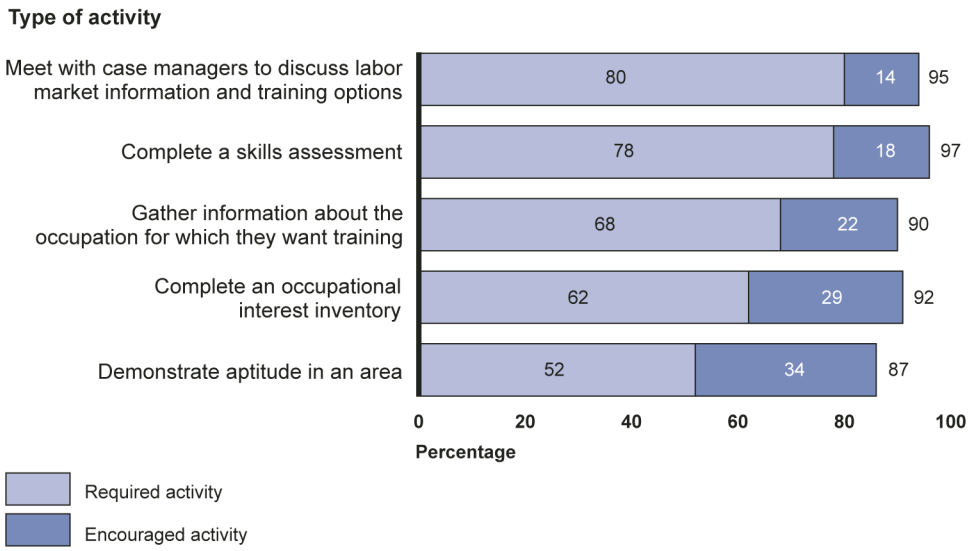
[a]As noted above, we estimate that 33 percent of local areas that used local initiatives purchased real-time labor market information.

Most Local Areas Required Participants to Complete Certain Activities Prior to Training

We estimate that, in 2012, a majority of local areas required participants to complete certain activities before entering a training program (see fig. 4).[31] For example, many local areas required participants to: 1) meet with case managers to discuss labor market information and training options; 2) complete a skills or interest assessment; or 3) obtain information about the occupation for which they wanted training. When local areas did not require participants to complete these activities, they typically encouraged participants to complete them.

[31] These results are similar to our findings in 2005 that most WIBs required participants to complete activities (such as taking skill assessments or tests and gathering information about the occupation for which they wanted training) to demonstrate their need for training. See GAO-05-650.

Figure 4: Activities That Local Areas Required or Encouraged Participants to Complete Before Entering Training in Calendar Year 2012



Source: GAO analysis of survey data.

Note: In some cases, the total is not the exact sum of the individual estimates due to rounding to the nearest whole percentage point. The confidence interval for the estimate of 80 percent is 73 to 86 percent; for the estimate of 14 percent it is 9 to 21 percent; for the estimate of 95 percent it is 89 to 98 percent; for the estimate of 78 percent it is 71 to 85 percent; for the estimate of 18 percent it is 12 to 26 percent; for the estimate of 97 percent it is 92 to 99 percent; for the estimate of 68 percent it is 62 to 74 percent; for the estimate of 22 percent it is 15 to 29 percent; for the estimate of 90 percent it is 84 to 94 percent; for the estimate of 62 percent it is 56 to 69 percent; for the estimate of 29 percent it is 23 to 35 percent; for the estimate of 92 percent it is 86 to 96 percent; for the estimate of 52 percent it is 46 to 59 percent; for the estimate of 34 percent it is 28 to 41 percent; and for the estimate of 87 percent it is 80 to 92 percent.

In half of local areas, employment prospects were greater outside the local area than inside the area.[32] When employment prospects were greater in neighboring areas, we estimate that 62 percent of local areas guided participants toward training for those jobs to a large or moderate extent.[33]

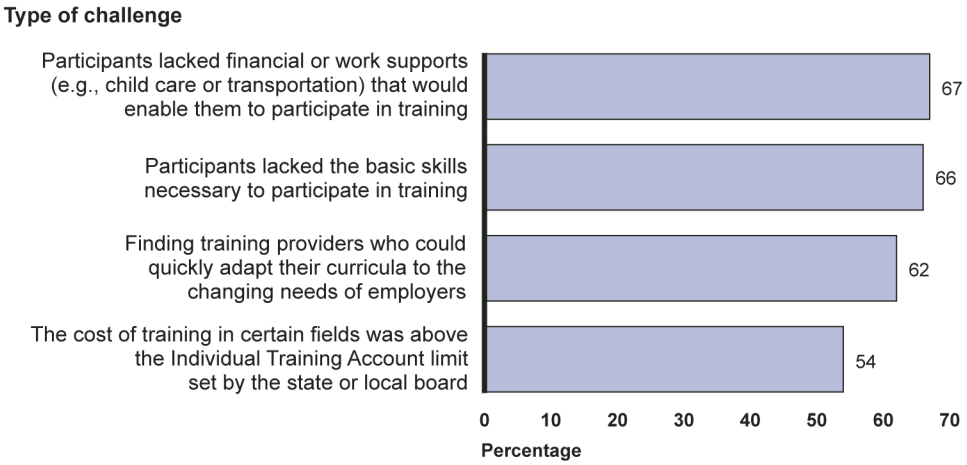
[32] In 79 percent of these areas, such employment prospects were located in neighboring areas. The confidence interval for the estimate of 50 percent is 44 to 57 percent; for the estimate of 79 percent it is 67 to 88 percent.

[33] The confidence interval for the estimate of 62 percent is 49 to 75 percent.

Most Local Areas Overcame Challenges in Guiding Participants Toward Training

Most local areas faced challenges in guiding participants toward training, but were still able to guide them toward training. We estimate that two-thirds of local areas faced major or moderate challenges related to (1) participants' lack of financial or work supports, such as child care or transportation, and (2) participants' lack of basic skills necessary to participate in training, such as reading and math skills (see fig. 5). In 57 percent of local areas, however, the challenges they experienced did not negatively affect their ability to guide participants toward training.[34] In the 38 percent of local areas where these challenges had a negative effect, more than half of areas guided fewer participants toward training, and one-third guided fewer participants toward their first choice of training.[35]

Figure 5: Major or Moderate Challenges Most Frequently Faced by Local Areas in Guiding Participants to Training in Calendar Year 2012



Source: GAO analysis of survey data.

Note: The confidence interval for the estimate of 67 percent is 61 to 73 percent; for the estimate of 66 percent it is 60 to 73 percent; for the estimate of 62 percent it is 56 to 68 percent; and for the estimate of 54 percent it is 47 to 60 percent. This survey question also included the following response categories: minor challenge, not a challenge, and no opinion/don't know.

[34] The confidence interval for the estimate of 57 percent is 50 to 63 percent.

[35] Specifically, we estimate that 56 percent of these areas guided fewer participants toward training and 33 percent of these areas guided fewer participants toward their first choice of training. The confidence interval for the estimate of 38 percent is 32 to 45 percent; for the estimate of 56 percent it is 45 to 67 percent; and for the estimate of 33 percent it is 21 to 47 percent.

Local Areas Had Difficulty Helping Employers Fill Certain Jobs for a Variety of Reasons, Including the Low Skills of Some Participants

Challenges in Helping Fill Jobs Included Participants' Lack of Qualifications and Basic Skills

Local areas cited a variety of reasons why they had difficulty helping employers fill certain jobs in 2012, including participants' lack of relevant qualifications and basic skills, according to GAO estimates. Eighty percent of local areas we surveyed said that employers had difficulty filling jobs in certain occupations.[36] Local areas most frequently cited the following jobs as those that employers had difficulty filling: welders, machinists, heath care occupations, computer occupations, and truck drivers (see app. II for a complete list of occupations identified by WIBs as those that employers had difficulty filling).[37] In almost all cases, the WIBs we surveyed also identified these as high growth occupations in their local areas. According to workforce experts, some of these jobs, such as welders and machinists, can be considered "middle-skilled" jobs because they require more than a high-school diploma but less than a 4-year college degree. Other jobs that require a 4-year degree or more—such as some registered nurses—are considered "high-skilled" jobs. Of the local areas that reported that employers had difficulty filling certain jobs and were able to identify these jobs, 81 percent indicated that employers used American Job Centers to try to fill these positions.[38] Among the most common reasons why these local areas had difficulty supplying such workers were participants' lack of relevant qualifications and lack of the basic skills needed to participate in training (see fig. 6). While DOL officials said that local areas should provide participants who

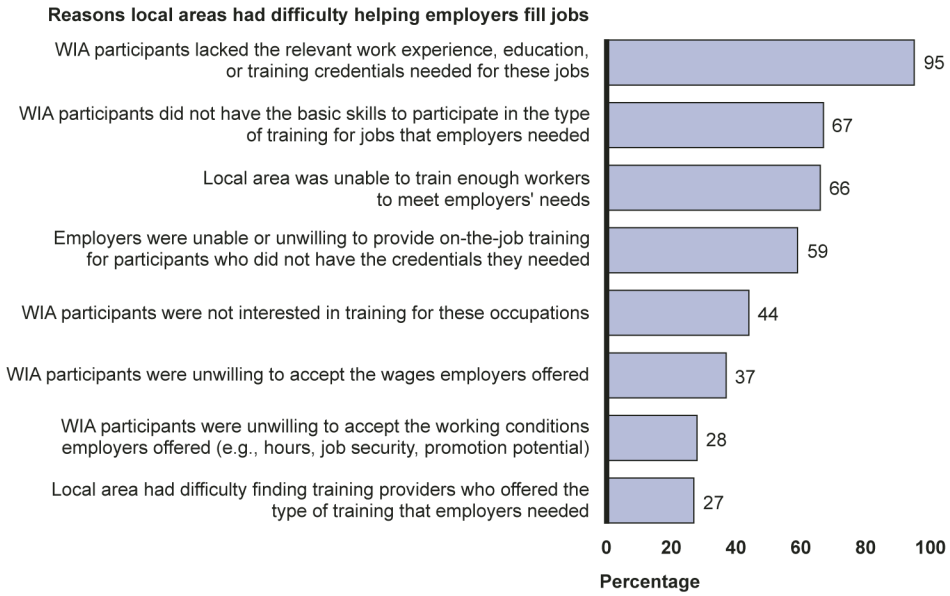
[36] The confidence interval for the estimate of 80 percent is 73 to 86 percent.

[37] Local areas reported the occupations that employers in their areas had difficulty filling. These hard-to-fill occupations are not generalizable to the national level.

[38] The confidence interval for the estimate of 81 percent is 72 to 87 percent.

lack skills and work supports with the services they need to enter training for middle-skilled jobs, they said it is not realistic to expect the Adult and Dislocated Worker programs to train low-skilled participants for high-skilled positions that require advanced degrees, due to the skill level and length of training required. However, DOL officials noted that these programs do serve some middle- and high-skilled participants who obtain employment after receiving only core services.

Figure 6: Reasons Why Local Areas Had Difficulty Helping Employers Fill Jobs in Calendar Year 2012



Source: GAO analysis of survey data.

Note: This figure provides estimates for a subset of local areas. Eighty percent of local areas we surveyed said that employers had difficulty filling jobs in certain occupations. Of the local areas that reported that employers had difficulty filling certain jobs and were able to identify these jobs, 81 percent indicated that employers used American Job Centers to try to fill these positions. For this subset of local areas, this figure provides estimates of the extent to which these reasons explained why local areas had difficulty helping employers fill jobs. The confidence interval for the estimate of 95 percent is 87 to 98 percent; for the estimate of 67 percent it is 59 to 75 percent; for the estimate of 66 percent it is 58 to 74 percent; for the estimate of 59 percent it is 50 to 67 percent; for the estimate of 44 percent it is 35 to 52 percent; for the estimate of 37 percent it is 29 to 45 percent; for the estimate of 28 percent it is 19 to 39 percent; and for the estimate of 27 percent it is 18 to 38 percent.

In addition, workforce experts cited decreased funding and the lack of a performance measure on skill improvement as additional challenges. WIA funding has decreased by 24 percent since 2000, and experts we interviewed told us that local areas face difficult tradeoffs in making decisions about spreading limited training funds over a broad population

of participants. Specifically, they said that because it takes more time and resources to prepare low-skilled participants to enter training, local areas must balance helping low-skilled workers improve their skills with serving as many individuals as possible. In addition, experts noted that WIA does not currently have a performance measure to track improvements in participants' basic skills.[39] Workforce experts we interviewed said that current measures reward states and local areas for placing participants into employment quickly and do not reward basic skills improvements or progress toward a degree or certificate. As a result of these challenges, experts said that local areas may not guide participants toward training programs for middle-skilled jobs, which tend to be longer and more expensive than other training programs and typically require a certain basic skill level. However, DOL officials disagreed that WIA performance measures encourage local areas to place participants into employment quickly. Also, DOL officials cited customer choice as a reason why some low-skilled participants do not receive training for middle-skilled jobs. Officials said that, when participants select training, they consider not only the guidance they receive from case managers but also their own interests and how long they can afford to be out of the workforce.[40]

Little is Known About the Use of Career Pathways to Prepare Workers for Certain Hard-to-Fill Jobs

To help participants in WIA and other programs improve their skills, gain employment, and progress in a career, DOL has coordinated with the Departments of Education (Education) and Health and Human Services (HHS) to fund and provide guidance for career pathways approaches, which link basic skills education, occupational training, and support services.[41] According to these agencies, these approaches aim to enable individuals to secure industry relevant certification and obtain employment

[39] Performance measures are being considered as part of WIA reauthorization proposals. Three of those proposals would add a performance measure on the basic skill gains of participants who are in an education or training program that leads to a credential or employment. See Supporting Knowledge and Investing in Lifelong Skills Act (SKILLS Act), H.R. 803, 113th Cong. (2013); Workforce Investment Act of 2013, H.R. 798, 113th Cong. (2013); and Workforce Investment Act of 2013, S. 1356, 113th Cong. (2013).

[40] DOL offers "learn and earn" strategies—such as on-the-job training and registered apprenticeships—that allow participants to earn money while they are receiving training.

[41] Specifically, DOL collaborates with Education's Office of Vocational and Adult Education (OVAE) and HHS's Administration for Children and Families. Also, Education's OVAE funds the Designing Instruction for Career Pathways Initiative, which assists state and local education providers in developing career pathways programs for adults by providing technical assistance, policy briefs, and research on program effectiveness.

within an occupational area and to advance to higher levels of future education and employment in that area. In 2010, DOL and Education launched the Career Pathways Initiative by providing 1-year grants to nine states and two tribal entities to develop these approaches. Based on the lessons learned from these grants, DOL has taken steps to help other states and local areas implement these approaches. Specifically, DOL has issued guidance on developing career pathways systems; provided technical assistance tools, such as webinars; shared promising practices; and maintained a Career Pathways Community of Practice website. In addition, DOL, Education, and HHS—as members of the Career Pathways Working Group—have collaborated on joint technical assistance efforts. For example, in 2012, DOL issued a joint letter with Education and HHS to encourage local areas' use of career pathways approaches to help prepare low-skilled participants for employment. The interagency working group plans to issue a national catalog of career pathways toolkits in the future. DOL has also funded grants that are not specifically targeted at career pathways approaches but can be used for this purpose. In 2012, DOL awarded 26 Workforce Innovation Fund grants to support innovative approaches for design and delivery of employment and training services; 17 of the 26 grantees are using these grants to develop career pathways approaches, according to DOL.[42]

DOL and workforce experts find career pathways approaches promising, and efforts are underway to gather more information about their implementation and effectiveness. According to DOL officials and experts we interviewed, career pathways approaches are a promising strategy that state and federal agencies should adopt to support lower-skilled individuals. Efforts are underway to collect information about how many states are using career pathways approaches. DOL conducted a preliminary review of the extent to which states are using these approaches, and found that all but seven states are participating in some type of career pathways initiative at either the state or local level. To supplement the information collected in this initial review, the Career Pathways Working Group plans to issue a national Request for Information (RFI) during program year 2013 to obtain more detailed feedback from states and local areas on career pathways successes and any obstacles to implementation. In addition, HHS has contracted with

[42] Other DOL grant programs also encourage career pathways strategies: Trade Adjustment Assistance and Community College Career Training Grants program and the H-1B Technical Skills Training Grant Program.

Abt Associates Inc. to conduct a 10-year evaluation of nine innovative career pathways programs across the country, known as the Innovative Strategies for Increasing Self-Sufficiency project. This evaluation will measure the effects of these programs on participants' employment, earnings, and other outcomes, and will also include a study of program implementation and operations as well as a cost-benefit analysis.[43]

However, little is known about the extent to which local areas are using career pathways approaches—or how they are using these approaches—specifically to prepare participants for middle-skilled jobs that employers have difficulty filling. According to the guidance issued by the Career Pathways Working Group, one essential component of career pathways approaches is a specific focus on local workforce needs, and DOL officials said that these approaches are one way to prepare participants for middle-skilled jobs that employers have difficulty filling. Nevertheless, DOL and other agencies do not plan to collect and disseminate information on whether and how local areas are using these approaches to prepare participants for such jobs as part of the RFI or the evaluation of career pathways programs. According to federal government internal control standards, agencies should have information on whether their programs are meeting their intended objectives.[44] Without information on whether and how local areas are using career pathways approaches to prepare participants for middle-skilled jobs that employers have difficulty filling, DOL may not be well-positioned to help local areas use these approaches to better meet employers' needs.

Conclusions

Employers' difficulty filling certain jobs could reasonably lead to questions about the labor market information that informs federal employment and training programs. The results from our survey, however, suggest that the WIA Adult and Dislocated Worker programs are using multiple sources of labor market information to guide participants toward training for both available jobs and occupations that are projected to grow. With regard to

[43] This study will use a random assignment research design to evaluate the career pathways programs. Participants will be assigned at random to one of two groups: the "treatment" group that will participate in the career pathways program and the "control" group that will not, although control group members may receive other services available in the community.

[44] GAO, *Internal Control Standards: Internal Control Management and Evaluation Tool,* GAO-01-1008G (Washington, D.C.: August 2001).

the extent to which these programs are positioned to help supply workers for hard-to-fill jobs, our work suggests that the programs have difficulty supplying workers for certain types of middle-skilled jobs due to the low skill level of some program participants, among other reasons. While it appears that these participants are receiving training, their lack of basic skills may be an obstacle to obtaining training that would prepare them for the middle-skilled jobs that employers are having difficulty filling. Further, both DOL and workforce experts emphasized that this problem exists in a larger context, and that helping participants improve their basic skills can involve a considerable investment of time and resources.

Given that a variety of factors affect whether skilled jobs are filled, it may not be realistic to expect the Adult and Dislocated Worker programs to fully meet all employers' needs, but these programs can play an important role. DOL has made efforts to help improve participants' skills through career pathways approaches and plans to gather more information about their implementation. Despite these efforts, our findings suggest that there are some local areas in which employers' needs for certain types of middle-skilled workers are not being met. Without additional information—beyond what it already plans to collect—on whether and how local areas are using career pathways approaches to prepare participants for the types of middle-skilled jobs that employers are having difficulty filling, DOL may not be well-positioned to help local areas use these approaches to better meet employers' needs.

Recommendation

To help local areas better meet employers' needs for skilled workers, we recommend that the Secretary of Labor:

- collect information on the use of career pathways approaches by local areas specifically to prepare workers for the types of middle-skilled jobs that employers have difficulty filling; and
- to the extent such approaches are being used, disseminate information about them, such as implementation challenges, strategies, and results.

Agency Comments and Our Evaluation

We provided a draft of this report and the e-supplement containing our detailed survey results to the Secretary of Labor for review and comment. DOL provided a written response (see app. III). DOL agreed with our recommendation and did not provide any comments on the e-supplement.

Specifically, DOL's response noted that the agency is committed to promoting effective labor market information resources and using career pathways approaches to prepare workers for career advancement and to help employers gain a skilled workforce. DOL agreed that there is value in learning more about how local areas are using career pathways approaches. To identify promising career pathways approaches used by local areas, DOL plans to (1) leverage existing investments in the Workforce Innovation Fund and other DOL initiatives; (2) continue to engage with federal and non-federal partners through the work of the interagency Career Pathways Working Group; and (3) widely disseminate information learned from studying these approaches through DOL's career pathways Community of Practice, other communication vehicles, and technical assistance activities, as appropriate.

We are sending copies of this report to the appropriate congressional committees and the Secretary of Labor. In addition, the report is available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-7215 or sherrilla@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix IV.

Andrew Sherrill
Director
Education, Workforce,
and Income Security Issues

Appendix I: Objectives, Scope, and Methodology

Our review focused on: 1) how local workforce areas have identified occupations that are in demand and how they have guided participants toward training for them; and 2) what challenges local workforce areas have faced in helping employers fill certain jobs.

To address both objectives, we reviewed relevant federal laws and regulations, as well as the Department of Labor's (DOL) guidance to states and local workforce areas. We also conducted a web-based survey of a nationally representative sample of 200 workforce investment boards (WIB) and interviewed nine WIBs that were not part of our survey sample (see WIB Survey and WIB Interviews below). In addition, we interviewed DOL officials as well as representatives from the National Association of Workforce Boards, the National Association of State Workforce Agencies, and the W.E. Upjohn Institute for Employment Research. To address the challenges local areas face in helping employers fill certain jobs, we also interviewed representatives from the National Skills Coalition and the Center for Law and Social Policy (CLASP). We did not conduct a skills gap analysis as part of this study primarily because reliable data on the conditions associated with a skills gap were not available at the local or state levels (see Skills Gap Analysis below).

WIB Survey

Design and Implementation

To address both objectives, we conducted a web-based survey of a nationally representative sample of 200 WIBs. The questionnaire included questions about which sources of labor market information local areas used to identify demand occupations, the sources they found most useful, how they guided participants toward training, and the challenges they faced in guiding participants toward training in calendar year 2012. In addition, we asked respondents whether employers in their areas have had difficulty filling certain jobs, and if so, the challenges they have experienced in helping employers fill those jobs.

We selected a stratified random probability sample from DOL's list of all 578 WIBs nationwide as of November 2012, which included both local

and statewide WIBs.[1] With this probability sample, each member of the study population had a nonzero probability of being included, and that probability could be computed for any member. We stratified the population into 10 groups based on U.S. Census Bureau regions to ensure geographic distribution.[2] Each sample element was subsequently weighted in the analysis to account statistically for all the members of the population, including those who were not selected. In designing the sample, we did not consider indicators of the size of the local areas overseen by WIBs, such as population or amount of WIA funding received because such data were not readily available. Our sample included 195 local WIBs and 5 statewide WIBs.

To minimize errors arising from differences in how questions might be interpreted and to reduce variability in responses that should be qualitatively the same, we conducted pretests with four local WIBs and one statewide WIB over the telephone. To ensure that we obtained a variety of perspectives on our survey, we selected WIBs with diversity on the following criteria: 1) Employment and Training Administration (ETA) region, 2) whether the WIB was located in an urban or rural area, and 3) state and local unemployment rate. Based on feedback from these pretests, we revised the questionnaire in order to improve the clarity of the questions. An independent survey specialist within GAO also reviewed a draft of the questionnaire prior to its administration. In addition, we asked knowledgeable DOL officials to comment on the questionnaire and incorporated their comments as appropriate.

After completing the pretests, we administered the survey. On March 7, 2013, we sent an e-mail announcement of the questionnaire to executive directors and other knowledgeable representatives of the WIBs in our sample, notifying them that our online questionnaire would be activated within a week. On March 13, 2013, we sent a second e-mail message to these WIB representatives in which we informed them that the

[1] DOL's list included WIBs in all 50 states, the District of Columbia, and the following U.S. territories: the Federal States of Micronesia, Guam, the Northern Mariana Islands, Puerto Rico, and the Virgin Islands. As previously noted, most states have one state WIB that is responsible for overseeing multiple local WIBs. Some states have one statewide WIB and no local WIBs.

[2] We stratified the population into the following 10 U.S. Census Bureau regions: New England, Middle Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, Pacific, and U.S. Territories.

questionnaire was available online and provided them with unique passwords and usernames. We also followed up by telephone and e-mail with these WIB representatives as needed to clarify their survey responses. We collected responses through April 15, 2013. We received completed questionnaires from 148 WIBs, for a 74 percent unweighted response rate.[3] Detailed survey results are available at: GAO-14-20SP.

Analysis of Responses and Data Quality

We used standard descriptive statistics to analyze responses to the questionnaire. All estimates based on the survey results are subject to sampling error. Because we followed a probability procedure based on random selections, our sample is only one of a large number of samples that we might have drawn. Since each sample could have provided different estimates, we express our confidence in the precision of our particular sample's results as a 95 percent confidence interval. This is the interval that would contain the actual population value for 95 percent of the samples we could have drawn. We used the results of the survey to create estimates about the population of all WIBs nationwide. All percentage estimates from the survey have their sampling margins of error calculated at the 95 percent level of confidence.

To minimize nonsampling errors, and to enhance data quality, we employed recognized survey design practices in the development of the questionnaire and in the collection, processing, and analysis of the survey data. For instance, as previously mentioned, we pretested the questionnaire with WIBs to minimize errors arising from differences in how questions might be interpreted and to reduce variability in responses that should be qualitatively the same. We further reviewed the survey to ensure the ordering of survey sections was appropriate and that the questions within each section were clearly stated and easy to comprehend. To reduce nonresponse, another source of nonsampling error, we followed up by telephone and e-mail with WIB representatives who had not responded to the survey to encourage them to complete it. In reviewing the survey data, we performed automated checks to identify inappropriate answers. We further reviewed the data for missing or ambiguous responses and followed up with WIB representatives when necessary to clarify their responses. On the basis of our application of

[3] The weighted response rate was 73.3 percent.

recognized survey design practices and follow-up procedures, we determined that the data were of sufficient quality for our purposes.

WIB Interviews

Concurrently with our survey, we interviewed nine WIBs that were not part of our survey sample to gather in-depth information about selected survey topics. To select WIBs for interviews, we selected five states with diversity regarding the following criteria: 1) state unemployment rate, 2) geography, and 3) whether DOL officials identified the state as having promising practices in using labor market information to guide participants toward training. In applying these criteria, we ensured that we selected one state with a statewide WIB (see table 2).

Table 2: States Selected for WIB Interviews

State	Statewide WIB	Unemployment rate in November 2012 (as compared to national average of 7.7 percent)	Geography (ETA region)	Identified by DOL as having promising practices
California	No	Above average	Region 6	Yes
Michigan	No	Above average	Region 5	No
New Jersey	No	Above average	Region 1	Yes
Virginia	No	Below average	Region 2	No
Wyoming	Yes	Below average	Region 4	No

Source: GAO analysis of information from ETA and data from DOL's Bureau of Labor Statistics.

We then randomly selected two WIBs in each of the four states with local WIBs (California, Michigan, New Jersey, and Virginia). In each of these states, we asked representatives of the state WIB to classify each local WIB in their state as either primarily urban or primarily rural.[4] We then randomly selected one primarily urban and one primarily rural WIB in each state to interview, excluding those that were part of our survey

[4] We defined "primarily urban" WIBs as those that have more urban than rural American Job Centers in their local areas, and "primarily rural" WIBs as those that have more rural than urban American Job Centers in their local areas.

sample.[5] We interviewed a total of eight local WIBs and one statewide WIB. Of the eight local WIBs, five were primarily urban and three were primarily rural.[6]

Skills Gap Analysis

We did not conduct a skills gap analysis as part of this study primarily because reliable data on the conditions associated with a skills gap were not available at the local or state levels. According to officials from DOL's Bureau of Labor Statistics (BLS), the following conditions would be associated with a skills gap in a particular occupation: 1) jobs remain unfilled for a longer-than-normal time period, 2) wages are increasing, and 3) unemployment is low. We explored the possibility of using existing datasets to identify occupations that have rising wages and low unemployment rates, and then asking the WIBs we surveyed whether employers in their local areas had difficulty filling these jobs. However, we concluded that reliable data on occupational unemployment rates are only available on the national level. Because national data may not reflect local labor market conditions, we did not incorporate such data into our survey. Instead, we asked the WIBs we surveyed to list occupations that employers in their area had difficulty filling and then coded their responses to Standard Occupational Classification (SOC) codes. For more information on the occupational coding, see appendix II.

Specifically, BLS' Occupational Employment Statistics (OES) program provides data on employment and wages by occupation, but officials told us that local-level OES data on occupational wage growth may not be reliable, and noted that data on occupational unemployment rates are not available at the local level.[7] In addition, we determined that state-level data on occupational unemployment rates are not sufficiently reliable for our purposes. Specifically, we were unable to use state-level data from the Current Population Survey (CPS) to identify occupations with lower

[5] For the urban WIB in Michigan, we randomly selected a WIB from the subgroup of urban WIBs that were part of the Workforce Intelligence Network, a consortium of community colleges, WIBs, and economic development partners that works with employers to identify and respond to their employment needs.

[6] New Jersey officials told us that all the WIBs in their state were primarily urban. As a result, we randomly selected two primarily urban WIBs to interview in this state.

[7] BLS officials noted that OES data are more reliable at the state or national level than at the local level.

than average unemployment rates because the standard error associated with these estimates was over 20 percent in states with small populations.[8] While data from online job openings—such as that published by The Conference Board—are used by some researchers to estimate state-level unemployment by broad occupational categories, these data are not available at the local level, and the reliability and validity of the data is not known.

We conducted this performance audit from July 2012 to December 2013 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

[8] The standard errors associated with regional estimates of unemployment rates by occupation from the CPS were also over 20 percent for some occupations.

Appendix II: Occupations That Employers Had Difficulty Filling in Calendar Year 2012

Our web-based survey of 200 workforce investment boards (WIB) included a question asking if employers in their local area had difficulty filling jobs in certain occupations in calendar year 2012 (see appendix I for more information on the survey's methodology). If WIBs answered yes, they were asked to list up to five occupations that employers had difficulty filling in open-ended boxes and also to indicate if the WIB considered each occupation to be high growth in its local area. A total of 110 WIBs listed one occupation that was difficult to fill, 95 WIBs listed 2 occupations, 70 WIBs listed 3 occupations, 47 WIBs listed 4 occupations, and 32 WIBs listed 5 occupations. We coded these open-ended responses to the 2010 Standard Occupational Classification (SOC) codes. The 2010 SOC system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data.[1]

In order to code the survey responses to the most appropriate SOC code, we searched the SOC titles or definitions or the related Direct Match Title File (DMTF)[2] on keywords or phrases provided in the open-ended survey responses. Survey responses were coded to the most detailed SOC code allowable based on the search results. In many cases, there was a one-to-one match at the detailed SOC level for many detailed occupations, including registered nurses, welders, and machinists. Survey responses that had a one-to-one match at a broad, minor group, or major group SOC level were coded at that higher level, including engineers and driver/sales workers and truck drivers.

Some survey responses resulted in multiple matches at the detailed SOC level. If all of the matches were among related occupations, the response was coded at the SOC level that incorporated all of the title matches. For example, a survey response of web designer and programmer matched to several detailed occupations that could be rolled up into the minor group of computer occupations.

[1] The SOC system contains 840 detailed occupations according to its website. Detailed occupations in the SOC that have similar job duties, and in some cases skills, education, and/or training, are grouped together to form 461 broad occupations, 97 minor groups, and 23 major groups. Information on the SOC can be found at www.bls.gov/soc.

[2] The DMTF lists associated job titles for detailed SOC occupations. Each of these titles is a direct match to a single SOC occupation. All workers with a job title listed in the DMTF are classified in only one detailed SOC occupation code.

Some survey responses matched to multiple detailed occupations that could not be rolled up to a higher SOC level. For example, a survey response of accounting matched to accountants and auditors which is a business and financial occupation, and also to bookkeeping, accounting, and auditing clerks which is an office and administrative support occupation. Responses were coded to more than one SOC code if May 2012 Occupational Employment Survey data indicated that workers were employed in all of the matched occupations in the metropolitan statistical area that contained the WIB. The most codes that were assigned to one survey response were two codes. Of the 354 survey responses that were coded, only 17 responses were assigned two SOC codes resulting in a total of 371 SOC codes assigned.

Survey respondents frequently cited manufacturing (15) or advanced manufacturing (14), which are considered industries,[3] not occupations, and matched to multiple SOC codes in different occupational groups. We created separate categories for these two responses in order to preserve the specificity of these responses given the relatively large number of survey responses where WIBs indicated these jobs were difficult to fill. Similarly, we created a separate code for the 20 responses that just stated health care without specifying an occupation, and also for the 7 responses that just stated nurse without specifying registered nurse or licensed practical nurse. Other survey responses that were vague or could not otherwise be matched to SOC occupations were coded as unknown.

A second analyst reviewed the SOC code matches and codes assigned by the first analyst to see if the assigned codes had face validity. In cases where there was disagreement or additional information was needed, the two analysts met to reconcile differences. A third analyst independently verified the counts of the codes listed in table 3 below. The number of coded occupations represents those most frequently cited by WIBs that responded to the survey question and cannot be generalized beyond that population.

[3] Manufacturing is classified as sectors 31-33 in the North American Industrial Classification System.

Table 3: Occupations Identified by Survey Respondents As Those That Employers Had Difficulty Filling in Calendar Year 2012, by Standard Occupational Classification Code

2010 Standard Occupational Classification (SOC) Code	SOC Title	Number of coded occupations that employers had difficulty filling	Number of coded occupations considered to be high growth
11-0000	**Management Occupations**	**2**	**0**
11-3031	Financial Managers	1	0
11-9151	Social and Community Service Managers	1	0
13-0000	**Business and Financial Operations Occupations**	**5**	**4**
13-1111	Management Analysts	1	1
13-1161	Market Research Analysts and Marketing Specialists	1	1
13-2011	Accountants and Auditors	3	2
15-0000	**Computer and Mathematical Occupations**	**40**	**37**
15-0000	Computer and Mathematical Occupations, unspecified[a]	1	1
15-1100	Computer Occupations, unspecified[b]	27	25
15-1121	Computer Systems Analysts	2	2
15-1130	Software Developers and Programmers, unspecified[a]	2	2
15-1131	Computer Programmers	5	4
15-1132	Software Developers, Applications	1	1
15-1151	Computer User Support Specialists	2	2
17-0000	**Architecture and Engineering Occupations**	**21**	**20**
17-0000	Architecture and Engineering Occupations, unspecified[c]	11	10
17-2000	Engineers, unspecified[a]	7	7
17-2112	Industrial Engineers	1	1
17-3021	Aerospace Engineering and Operations Technicians	2	2
19-0000	**Life, Physical, and Social Science Occupations**	**2**	**0**
19-1020	Biological Scientists, unspecified[a]	1	0
19-1031	Conservation Scientists	1	0
21-0000	**Community and Social Service Occupations**	**1**	**0**
21-1012	Educational, Guidance, School, and Vocational Counselors	1	0
25-0000	**Education, Training, and Library Occupations**	**2**	**1**
25-0000	Education, Training, and Library Occupations, unspecified[a]	1	1
25-2000	Preschool, Primary, Secondary, and Special Education School Teachers, unspecified[a]	1	0
27-0000	**Arts, Design, Entertainment, Sports, and Media Occupations**	**1**	**1**
27-1021	Commercial and Industrial Designers	1	1
29-0000	**Healthcare Practitioners and Technical Occupations**	**39**	**35**
29-0000	Healthcare Practitioners and Technical Occupations, unspecified[a]	1	1

2010 Standard Occupational Classification (SOC) Code	SOC Title	Number of coded occupations that employers had difficulty filling	Number of coded occupations considered to be high growth
29-1051	Pharmacists	3	2
29-1060	Physicians and Surgeons, unspecified[a]	2	1
29-1120	Therapists, unspecified	1	1
29-1122	Occupational Therapists	1	1
29-1126	Respiratory Therapists	2	1
29-1141	Registered Nurses	15	15
29-2011	Medical and Clinical Laboratory Technologists	1	1
29-2012	Medical and Clinical Laboratory Technicians	2	2
29-2034	Radiologic Technologists	1	1
29-2041	Emergency Medical Technicians and Paramedics	1	0
29-2052	Pharmacy Technicians	1	1
29-2061	Licensed Practical and Licensed Vocational Nurses	3	3
29-2071	Medical Records and Health Information Technicians	5	5
31-0000	**Healthcare Support Occupations**	**9**	**8**
31-1010	Nursing, Psychiatric, and Home Health Aides, unspecified[a]	2	2
31-1014	Nursing Assistants	4	3
31-2011	Occupational Therapy Assistants	1	1
31-2021	Physical Therapist Assistants	2	2
N/A	**Healthcare, unspecified[d]**	**20**	**20**
N/A	**Nurses, unspecified[d]**	**7**	**6**
35-0000	**Food Preparation and Serving-Related Occupations**	**3**	**1**
35-0000	Food Preparation and Serving-Related Occupations, unspecified[a]	3	1
37-0000	**Building and Grounds Cleaning and Maintenance**	**1**	**0**
37-2012	Maids and Housekeeping Cleaners	1	0
41-0000	**Sales and Related Occupations**	**6**	**5**
41-0000	Sales and Related Occupations, unspecified[a]	2	2
41-2000	Retail Sales Workers, unspecified[a]	2	2
41-2031	Retail Salespersons	1	0
41-3031	Securities, Commodities, and Financial Services Sales Agents	1	1
43-0000	**Office and Administrative Support Occupations**	**13**	**8**
43-0000	Office and Administrative Support Occupations, unspecified[a]	4	2
43-3031	Bookkeeping, Accounting, and Auditing Clerks	3	2
43-4051	Customer Service Representatives	4	2
43-5000	Material Recording, Scheduling, Dispatching, and Distributing Workers, unspecified[a]	1	1

2010 Standard Occupational Classification (SOC) Code	SOC Title	Number of coded occupations that employers had difficulty filling	Number of coded occupations considered to be high growth
43-6011	Executive Secretaries and Executive Administrative Assistants	1	1
47-0000	**Construction and Extraction Occupations**	**12**	**12**
47-0000	Construction and Extraction Occupations, unspecified[a]	4	4
47-2000	Construction Trades Workers, unspecified[a]	2	2
47-2111	Electricians	5	5
47-5071	Roustabouts, Oil and Gas	1	1
49-0000	**Installation, Maintenance, and Repair Occupations**	**23**	**22**
49-0000	Installation, Maintenance, and Repair Occupations, unspecified[a]	4	3
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	1	1
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	1	1
49-9040	Industrial Machinery Installation, Repair, and Maintenance Workers, unspecified[a]	15	15
49-9041	Industrial Machinery Mechanics	1	1
49-9071	Maintenance and Repair Workers, General	1	1
51-0000	**Production Occupations**	**98**	**92**
51-0000	Production Occupations, unspecified[a]	5	4
51-2000	Assemblers and Fabricators, unspecified[a]	1	1
51-2092	Team Assemblers	1	1
51-4000	Metal Workers and Plastic Workers, unspecified[a]	5	5
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	9	7
51-4012	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	5	5
51-4041	Machinists	34	33
51-4121	Welders, Cutters, Solderers, and Brazers	37	35
51-6031	Sewing Machine Operators	1	1
53-0000	**Transportation and Material Moving Occupations**	**23**	**23**
53-0000	Transportation and Material Moving Occupations, unspecified[a]	2	2
53-3030	Driver/Sales Workers and Truck Drivers, unspecified[a]	19	19
53-3032	Heavy and Tractor-Trailer Truck Drivers	1	1
53-7000	Material Moving Workers, unspecified[a]	1	1
N/A	**Manufacturing, unspecified[d]**	**15**	**15**
N/A	**Advanced manufacturing, unspecified[d]**	**14**	**13**
N/A	**Unknown[e]**	**14**	**13**
	Grand Total	**371**	**336**

Source: GAO analysis of survey data.

[a]SOC titles that are listed as unspecified indicate those survey responses that could only be coded at a broad, minor group, or major group level.

[b]Survey responses that stated information technology were coded as computer occupations.

[c]Of the 11 survey responses coded as architecture and engineering occupations, 10 responses specifically stated "engineering," which could include both engineers and engineering technicians. These responses were coded at the major group level that incorporated both engineers and engineering technicians.

[d]This is not a SOC title. However, we coded survey responses that specifically stated the title listed in the table because of the relatively large number of WIBs that provided that response.

[e]Survey responses that were vague or could not otherwise be matched to SOC occupations were coded as unknown.

Appendix III: Comments from the Department of Labor

U.S. Department of Labor

Assistant Secretary for
Employment and Training
Washington, D.C. 20210

NOV 01 2013

Mr. Andrew Sherrill
Director
Education, Workforce, and Income Security Issues
U.S. Government Accountability Office
441 G. Street, N.W.
Washington, D.C. 20548

Dear Mr. Sherrill:

On behalf of the U.S. Department of Labor (the Department), I want to thank you for the opportunity to review and comment on the Government Accountability Office's (GAO) draft report entitled: "*Workforce Investment Act: Local Areas Face Challenges Helping Employers Fill Some Types of Skilled Jobs*" (GAO-14-19).

The Department is pleased to see that nearly 90 percent of local areas are using our labor market information (LMI) tools and reported that they are helpful in guiding participants toward training and jobs that are projected to grow. As you mention in your report, while it may not be realistic to expect the Workforce Investment Act Adult and Dislocated Worker programs to fully meet all employers' needs, these programs do play an important role. Our Department, under the leadership of Secretary Perez, is committed to promoting effective LMI resources and the use of career pathways approaches to prepare workers successfully for career advancement and help employers gain a skilled workforce.

The GAO report included the following two-part recommendation:

> *To help local areas better meet employers' needs for skilled workers, GAO recommends that the Secretary of Labor:*
>
> - *Collect information on the use **of career pathways approaches** by local areas specifically to prepare workers for the types of middle-skilled jobs that employers have difficulty filling; and*
> - *To the extent such approaches are being used, **disseminate information** about them such as implementations, challenges and results.*

The Department agrees with GAO's recommendations and believes there is value in learning more about the use of career pathways approaches by local areas. Although the Department's primary statutory and grantor relationship is with state governments, we remain committed to identifying promising career pathways approaches within local areas. To do so, the Department will take the following steps:

- Leverage existing investments in initiatives, such as the Workforce Innovation Fund, Trade Adjustment Assistance Community College and Career Training, YouthBuild, and H-1B Technical Skills Training grants to learn more about promising, evidence-based career pathways approaches in local areas.

- Through the work of the interagency Career Pathways Working Group, which includes the Departments of Education and Health and Human Services, continue to engage with federal and non-federal partners to identify and learn about career pathways programs in local areas.

- Widely disseminate knowledge learned from studying career pathways approaches, such as implementation strategies, challenges, and results, to the broad public workforce system and interested stakeholders through our career pathways Community of Practice (https://learnwork.workforce3one.org/), other communication vehicles and technical assistance activities, as appropriate.

Again, thank you for the opportunity to review the draft report. Please feel free to contact me if you have any questions.

Sincerely,

Eric M. Seleznow
Acting Assistant Secretary

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

Andrew Sherrill, (202) 512-7215 or sherrilla@gao.gov

Staff Acknowledgments

In addition to the contact named above, Patrick DiBattista (Assistant Director), Caitlin Croake, Hedieh Fusfield, Linda Siegel, and Paul Wright made key contributions to this report. Also contributing to this report were Carl Barden, Jessica Botsford, Ted Burik, David Chrisinger, David Dornisch, Jill Lacey, Kathy Leslie, Mimi Nguyen, and Rhiannon Patterson.

Related GAO Products

Workforce Investment Act: DOL Should Do More to Improve the Quality of Participant Data. GAO-14-4. (Washington, D.C.: December 2013).

Workforce Investment Act: Innovative Collaborations between Workforce Boards and Employers Helped Meet Local Needs. GAO-12-97. (Washington, D.C.: January 19, 2012).

Workforce Investment Act: Employers Found One-Stop Centers Useful in Hiring Low-Skilled Workers; Performance Information Could Help Gauge Employer Involvement. GAO-07-167. (Washington, D.C.: December 22, 2006).

Workforce Investment Act: Substantial Funds Are Used for Training, but Little Is Known Nationally about Training Outcomes. GAO-05-650. (Washington, D.C.: June 29, 2005).

Labor Market Information: Trends and Issues in Funding of State Programs. GAO-03-336. (Washington, D.C.: December 20, 2002).