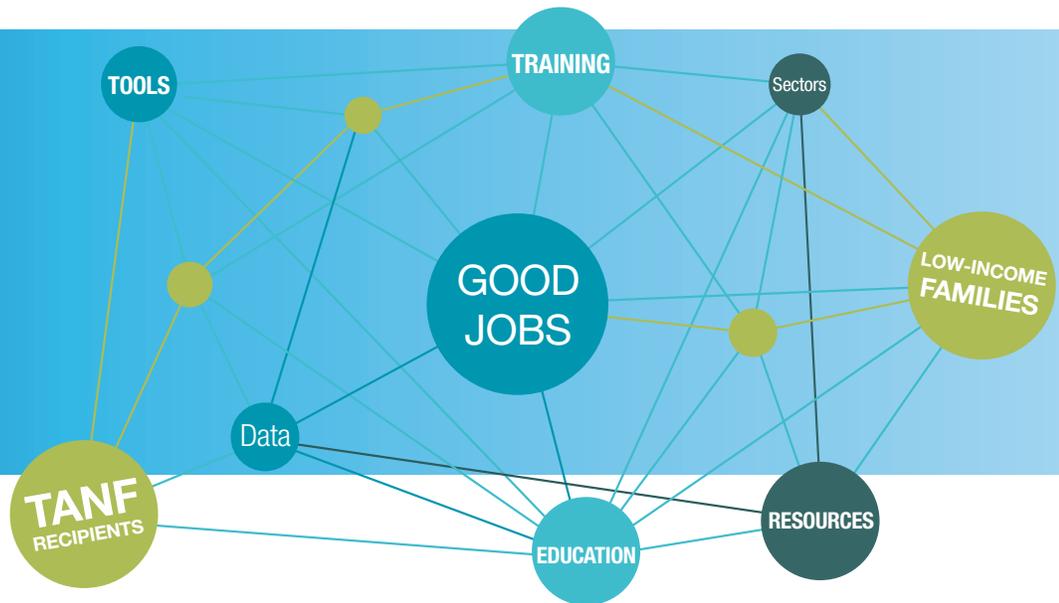


# Resources for Connecting TANF Recipients and Other Low-Income Families to Good Jobs

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## INTRODUCTION

To escape poverty, Temporary Assistance for Needy Families (TANF) recipients need good jobs that are growing, are in demand, and provide self-sufficient wages.<sup>1</sup> However, it is often a challenge to connect TANF recipients and other low-income families with these good jobs. Many good jobs require training, education, and credentials beyond the high school level, which most TANF recipients and similar low-income families lack. In addition, without the right tools and resources, it can be difficult to determine which jobs are growing, are in demand, and pay self-sufficient wages.

Fortunately, many resources are available, especially from the U.S. Department of Labor (DOL), to help programs and frontline staff. These resources can be used to locate good jobs in their geographic area, match clients' skills and interests to those good jobs, and identify additional education and training clients may require. However, agencies serving TANF recipients, administrators, and direct service staff may be unaware of these resources and how to use them, especially if they are not connected to workforce service providers. The passage of the Workforce Innovation and Opportunity Act (WIOA), which makes TANF a required partner for the workforce system, provides an opportunity to increase awareness of these resources and catalyze cross-agency collaboration in using these resources.

To help bridge this gap between TANF and the workforce system, Mathematica conducted a resource scan and identified, examined, and catalogued resources that state and local TANF agencies can use to help connect TANF recipients and other low-income families with good jobs. We gathered information from a broad range of resources, including research studies, technical assistance tools, client assessments, and data sets (see Appendix A for additional information on our methodology). The scan was not intended to be a comprehensive review, and the identified resources have not been evaluated for their usefulness or effectiveness.

This resource guide contains a summary overview and appendix tables. The overview highlights the key resources we identified, and the appendix tables catalogue them. This overview discusses the types of resources we identified and why TANF agencies should consider using them, the potential uses of the resource guide, and how various audiences, including TANF administrators and policymakers, direct service staff, and researchers, may benefit. The resources themselves are organized into four resource area appendices: (1) research studies, (2) technical assistance resources, (3) client assessments, and (4) data sets related to education and employment. The Office of Planning, Research and Evaluation (OPRE) within the Administration for Children and Families, U.S. Department of Health and Human Services, which funded this project, and Mathematica do not endorse any of the resources, but provide them as examples to be explored.

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<sup>1</sup> A self-sufficient wage—also referred to as “self-sufficiency wage,” “family-sustaining wage,” or “living wage”—is one that allows an individual or family to meet their basic needs without assistance from government programs or other income sources.

This summary overview serves as an introduction to the resource guide. It discusses the types of resources that TANF administrators and frontline staff can use to help connect TANF recipients and other low-income families with good jobs. It then describes how various audiences, including agencies with different levels of resource and staff capacity, can use the resource guide.

## **RESOURCES FOR CONNECTING TANF RECIPIENTS WITH GOOD JOBS**

We identified three types of resources that TANF administrators and frontline staff could use to help connect TANF recipients and other low-income families with good jobs: (1) career exploration and assessment tools to explore career opportunities that match clients' skills, abilities, and interests; (2) tools and information on career pathways and sector strategies to create new initiatives; and (3) information on the local economy and job market (labor market information [LMI]) to identify growing jobs with self-sufficient wages. Next, we define these three types of resources and explain why TANF agencies may want to consider using them.

### **Career exploration and assessment**

Career exploration and assessment tools are a resource available to frontline staff. Staff can use these tools to gather information on a person's interests and skills and apply that information to a job search plan tailored to that person. Career exploration tools can be used to learn about occupations and industries and the skills, abilities, and credentials required to enter them. In addition, they can help in locating training and education programs related to a person's career interests. Assessments measure a person's vocational skills and abilities, basic skills, work interests and values, and/or work readiness.

Together, these tools can help frontline staff improve the match between clients and available training and education programs. The use of career exploration and assessment tools is especially important in TANF programs. This is because education and training resources for TANF recipients are limited, and TANF rules restrict the amount of time spent on education and training activities that can count toward the work participation rate. Using these tools can help ensure limited funding resources are well invested. They can guide TANF recipients and other low-income workers toward training and education programs that align with job requirements, as well as their interests and abilities.

## HOW CAN THIS RESOURCE GUIDE HELP IF I AM EXPLORING CAREER OPTIONS WITH A TANF RECIPIENT?

- In the **Client Assessments** appendix, you can find assessment tools that can be used to determine a recipient's skills, abilities, and interests.
- In the **Technical Assistance Resources: Career Exploration** appendix, you can locate a career exploration tool to learn about the skills and training required for various careers. For example, one such tool is DOL's "My Next Move."
- To determine whether career opportunities in a given occupation are growing and pay self-sufficient wages, you can use a data set listed in the **Data Sets** appendix. You can also use "My Next Move," described in the **Technical Assistance Resources: Career Exploration** appendix, for this purpose.
- You can locate training programs in your community using tools like the "Local Training Finder" in the **Technical Assistance Resources: Career Exploration** appendix.

### Career pathways and sector strategies

A second type of resource administrators can consider using is tools and information on career pathways and sector strategies that can be used to create new initiatives. According to the Alliance for Quality Career Pathways, a career pathway is an approach that "connects progressive levels of education, training, support services, and credentials for specific occupations in a way that optimizes the progress and success of individuals with varying levels of abilities and needs."<sup>2</sup> A sector strategy is a workforce development approach that targets the needs of a specific industry sector and may involve the collaboration of education and training providers, businesses, community organizations, state agencies, and others.

Career pathways initiatives and sector strategies can help TANF recipients and other low-income families obtain good jobs and advance in careers in in-demand industries. These initiatives and strategies should be informed by LMI to ensure the targeted industries and occupations are growing and in demand, and also offer self-sufficient wages and advancement potential. Both approaches would require TANF agencies to collaborate with other organizations (for example, community colleges) and engage with local employers.

<sup>2</sup> Alliance for Quality Career Pathways. "Shared Vision, Strong Systems." Washington, DC: Center for Law and Social Policy, June 2014, p. 12.

## HOW CAN THIS RESOURCE GUIDE HELP ME CREATE A CAREER PATHWAYS INITIATIVE?

- In the **Research Studies** appendix, you can read about programs other states have implemented and example promising practices.
- To get started, you can use a “how-to” guide in the **Technical Assistance Resources: Career Pathways/Sector Strategies** appendix.
- The **Technical Assistance Resources: Career Pathways/Sector Strategies** appendix can point you to guides that discuss strategies for engaging employers.
- To learn from other practitioners and share ideas with them, you can find out how to join a community of practice, as listed in the **Technical Assistance Resources: Career Pathways/Sector Strategies** appendix.
- Using data listed in the **Data Sets** appendix, you can analyze the growing industries in your community and what training is required for occupations within those industries.
- Using the “Career Pathways Roadmap Web Tool,” listed in the **Technical Assistance Resources: Career Pathways/Sector Strategies** appendix, you can create a road-map for your initiative.

### Labor market information (LMI)

A third type of resource for administrators and staff is LMI that can be used to identify available good jobs in their geographic area. Traditional LMI is collected from employer surveys, interviews, and administrative records, whereas real-time LMI is obtained from web-based job banks, classified advertisements, and company websites. Traditional LMI provides information on the demand for jobs; the supply of skilled workers; characteristics of growing and declining occupations and industries, including wages and benefits; and training required and offered for new entrants and displaced workers. Real-time LMI provides the latest information on in-demand jobs and skills, job openings, and the supply of skilled workers.

LMI can help TANF administrators and frontline staff identify available jobs with growth potential and self-sufficient wages. As with career exploration and assessment tools, using LMI in TANF programs is especially important due to limits on training resources and the time spent on education and training activities that can count toward the work participation rate. Using LMI can help guide TANF recipients and other low-income families in pursuing training and education programs that will lead to in-demand jobs that are available in the community and offer self-sufficient wages.

## HOW CAN THIS RESOURCE GUIDE HELP ME USE LMI TO IMPROVE SERVICE DELIVERY FOR TANF CLIENTS?

- For an introduction to LMI and how you can use it, you can read *Unlocking the Treasure Chest of Labor Market Information* or *Using data to connect TANF clients to good jobs: An opportunity to foster WIOA partnerships*, listed in the **Technical Assistance Resources: Labor Market Information** appendix.
- To find a training on using LMI, you can look to the **Technical Assistance Resources: Labor Market Information** appendix, which will point you to trainings available from the *Labor Market Information Win-Win Network* and *Translating LMI into Service Delivery*, an e-learning series from DOL.
- To learn from other practitioners and share ideas with them, you can find out how to join a community of practice, as listed in the **Technical Assistance Resources: Labor Market Information** appendix.
- The **Data Sets** appendix can point you to a variety of LMI data for you to use, and help you understand which data best suits your needs.

## HOW TO USE THE RESOURCE GUIDE

This resource guide is a compilation of the career exploration and assessment, career pathways and sector strategies, and LMI resources we identified. We have organized these resources into four resource area appendices that we briefly describe below. Each includes a summary table, as well as a detailed description table with more information on each resource and where it can be found.

- **Research Studies (Appendix C)**. This appendix highlights 45 reports that can be used to learn about promising and evidence-based practices. The studies focus on such topics as career pathways initiatives, sector-based jobs, and adult basic education and skills. The types of analyses used in the studies include literature reviews, descriptive data analysis, implementation case studies, impact analysis, and practitioner guides.
- **Technical Assistance Resources (Appendix D)**. This appendix highlights 49 resources in LMI, career pathways/sector strategies, and career exploration. These resources can be used, for example, to train staff on how to use LMI, connect with other practitioners creating career pathways initiatives, or explore careers with low-income families. The types of resources include resource compilations, reports and briefs, “how-to” guides, promising practices, webinars and trainings, online career exploration and assessment tools, and practice communities.
- **Client Assessments (Appendix E)**. This appendix highlights 22 education, employment, and career assessment tools that administrators may want to consider using in their TANF

programs. The topics of the assessments include vocational skills and abilities, basic skills, work readiness, and work interests and values. The appendix tables also include information on the cost of the assessments and how they are administered.

- **Data Sets Related to Education and Employment (Appendix F).** This appendix highlights 25 data sets containing labor market and education information that TANF programs may wish to use to learn more about available job opportunities. For example, the LMI data sets include information on job openings, wages, high-growth jobs, and the education and training required for specific jobs. The education data sets include information on educational attainment, among other topics. The data sets are organized into three groups: (1) very user-friendly (those that are available using intuitive, well-designed “click-through” menus); (2) moderately user-friendly (those that are available in tables but can be difficult to interpret); and (3) data sets that require programming (those that offer the greatest flexibility in designing customized analysis but which require statistical software such as Stata, R, SAS or SPSS to be analyzed).

In the rest of this section, we discuss how these resources can be useful to a variety of audiences and in a variety of circumstances. We hope these examples will stimulate thinking as administrators and staff seek to develop programs and policies that help TANF recipients and other low-income families find good jobs. We also discuss the resource guide’s intended audiences and highlight how the resources may be used by agencies with different levels of resources and staff capacity.

#### WHAT PART OF THE RESOURCE GUIDE SHOULD I TURN TO FOR AN ANSWER TO MY QUESTION?

- Q. What are the high-growth jobs in my state?  
Look in the “**Data Sets**” appendix: use the *State and Local Employment Projections*.
- Q. What is the average wage for a given industry, such as leisure and hospitality, in my county?  
Look in the “**Data Sets**” appendix: use the *Quarterly Census of Employment and Wages* data set.
- Q. What training or education programs are available to clients in my community?  
Look in the “**Technical Assistance Resources: Career Exploration**” appendix: see the *Local Training Finder* or *College Navigator*.
- Q. What assessments are available to help my client figure out his or her career interests?  
Look in the “**Client Assessments**” appendix: use DOL’s *Interest Profiler* or one of the assessments for purchase.

**Q.** How do I begin to create a career pathways initiative with my community partners?

Look in the “**Technical Assistance Resources: Career Pathways**” appendix: see the *Career Pathways How-To Guide* or the *Career Pathways Toolkit: A Guide for System Development*.

**Q.** What example sector-based programs have been tried in other states that might work in mine?

Look in the “**Research Studies**” appendix: read “Tuning in to Local Labor Markets: Findings from the Sectoral Employment Impact Study” and “Meeting the Needs of Workers and Employers: Implementation of a Sector-Focused Career Advancement Model for Low-Skilled Adults.”

### Diverse audiences can benefit

We envision the resources in this guide being useful to four main audiences: (1) administrators and policymakers; (2) frontline staff; (3) TANF researchers (defined as applied and academic researchers); and (4) TANF partners, including community partners, other state agencies, community-based organizations, and community colleges. TANF recipients may also find useful several career exploration and assessment resources that can be self-administered. Table 1 highlights the types of resources likely to be relevant for each audience, and the text box illustrates how each audience might use the resources. Not all resources will be useful for all groups, but some will be useful for each group.

**Table 1: Resource guide audiences**

Title	Research Studies	Data Sets	Client Assessments	Technical Assistance Resources		
				LMI	Career Pathways/ Sector Strategies	Career Exploration
Administrators and policymakers	•	•	•	•	•	•
Frontline staff			•	•		•
TANF researchers	•	•			•	
TANF partners	•	•	•	•	•	•

## EXAMPLES OF HOW DIFFERENT AUDIENCES MIGHT USE THIS GUIDE

**Administrators and policymakers.** If you are a state administrator or policymaker, you can use this guide to help decide where to invest resources. It can help you identify assessments to buy and resources to use with your clients. With the proper analysis, the data sets in this guide can help you better understand which training programs to invest in, as well as what employers to target for work experience and subsidized job opportunities. For inspiration or troubleshooting tips, you can read reports on programs that have partnered with community colleges and other organizations to implement sector strategies and career pathways initiatives. The resources in this guide can point you to options for partnering with state workforce agencies to improve labor market outcomes for your clients, a new requirement under WIOA.

**Frontline staff.** If you are trying to improve your service delivery and help TANF recipients connect to jobs that match their interests and skills, look at the assessments and career exploration tools. You can use the assessments to help TANF recipients target their job search or training to their interests and abilities, and the career exploration tools can help you identify jobs that are in demand and pay self-sufficient wages.

**Researchers.** If you are a researcher, the reports listed here could provide a starting point for a literature review related to the connection between the labor market and TANF programs. The list of data sets may also help you identify the best data to apply to a research question. If you do evaluation research, the reports on career pathways could provide context and information for evaluating these programs and providing technical assistance.

**Partners.** If you are part of a community-based organization, state agency, community college, or another community partner concerned about the well-being of TANF recipients and other low-income families, you can find many helpful resources in this guide. These resources can help you better understand which training programs to invest in and find job opportunities for your clients. They can also help you learn more about career pathways and sector strategy initiatives that you may want to undertake in partnership with TANF agencies. This guide can also help you learn about resources available from DOL and workforce counterparts.

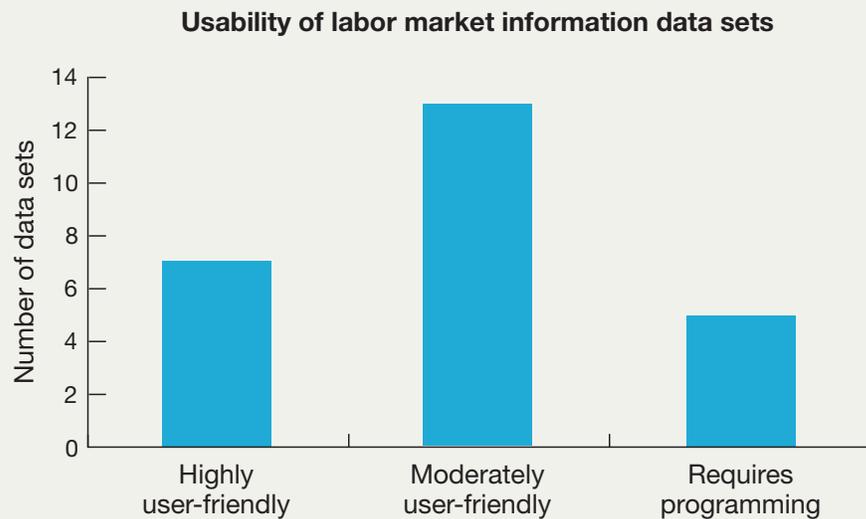
## Uses vary by agency capacity

Each administrator, policymaker, frontline staff member, researcher, and partner who uses the resources in this guide will have a different level of time, skill, and financial means with which to engage these resources. Below we offer suggestions on how agencies with differing levels of capacity can use the resources. We also encourage TANF agencies to expand their capacity by exploring partnerships with other agencies and community organizations that may offer relevant resources or expertise.

Next, we provide three examples of how agencies with different levels of capacity might use this guide. The examples cover three potential types of resources for connecting low-income families with good jobs (career exploration and assessment, career pathways, and LMI).

- **Assessments.** The guide lists assessment tools that can be used to determine a client's aptitudes, interests, and skills—crucial information for a TANF recipient's job search. Although most TANF agencies use assessment tools with recipients, administrators may not be aware of the range of tools available to them. Moreover, the guide lists several assessments that are free. Agencies with limited staff capacity could (1) use assessments that clients can self-administer, or (2) partner with a workforce center or local community college to administer a new or more complex assessment. Agencies with greater staff capacity could consider training their staff to use one of the more complex assessment tools. This guide can help state agencies identify new assessment tools that best suit their needs and those of their clients.
- **Career pathways reports.** Career pathways initiatives are promising but ambitious undertakings: they are resource intensive and involve buy-in from many partners. This guide directs interested parties to a variety of reports, many of which are case studies detailing the implementation and efficacy of career pathways programs in diverse settings. Here, too, agency capacity will affect how these resources are used. In agencies that have the interest and capacity to invest in a career pathways initiative, policymakers, staff, and administrators may want to carefully review the reports to learn best practices and common pitfalls of implementing career pathways initiatives. However, even agencies that lack the funding to launch and maintain a major career pathways initiative may be interested in career pathways. Administrators and policymakers at these agencies may want to read the executive summaries of some of the reports on career pathways to develop their knowledge of the field and share with colleagues at community colleges or local workforce partners who might lead a career pathways initiative.
- **LMI data.** This guide can assist administrators in locating data related to LMI—an important resource for helping clients train and search for jobs in areas where they are likely to find good employment. Each data source highlighted in this guide requires a different level of investment in terms of skills, cost, and time. Some of the data sources are complex and would require a trained statistician to analyze them, and others are accessible to laypeople. Most fall somewhere in between (Figure 2).

**Figure 1: Relative usability of LMI data sets**



In particular, TANF agencies that set out to use LMI data for the first time by relying on their own staff may wish to carefully consider the extent and complexity of their intended data analysis. For administrators who are willing and able to invest their own agencies' staff time, the guide suggests training and other support resources to help make the most of the available data (see, for example, the *Translating LMI into Service Delivery* resource and DOL's *Labor Market Information Win-Win Network*, both listed in the "Technical Assistance Resources: LMI" appendix. In addition, the companion brief, "Using data to connect TANF clients to good jobs: An opportunity to foster WIOA partnerships," offers more guidance on using LMI in the TANF context). Alternatively, TANF agencies could either use data that are accessible to staff with only limited training in data analysis, or work with their state LMI agencies to understand and use some of these complex data sources. The LMI Institute website includes contact information for each state's LMI agency (see the "Technical Assistance Resources: LMI" appendix).

Most of the data sources listed in this guide are free, although the real-time LMI data sources do require licenses. If TANF administrators or policymakers are interested in using real-time LMI data, they can check with other state agencies or organizations—such as LMI agencies or community colleges—that may already have licenses that TANF agencies could use.

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## **CONCLUSION**

There are many resources TANF agencies can consider using to help TANF recipients and other low-income families obtain skills, credentials, and good jobs that align with their interests. Focusing on post-high school skills and credentials and high-growth, in-demand jobs is necessary in today's economy. Most jobs that pay self-sufficient wages require more than a high school diploma, plus further training and education for advancement. In addition, the passage of WIOA allows TANF agencies to work more closely with their workforce counterparts. Strengthening relationships with state workforce agencies and engaging them in the use of these resources can be mutually beneficial and can help ensure existing resources are used efficiently in support of low-income families.

# **Appendix A:** **Methods**

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## METHODS

To identify, catalogue, and analyze existing information on high-growth, sector-based education and employment opportunities for TANF recipients and other low-income families, we held telephone discussions with subject matter experts and conducted a scan of existing research studies, technical assistance tools, assessments, and data sets.

### Informal discussions with subject matter experts

We conducted informal telephone discussions with subject matter experts to help us identify existing research, program resources, education and workforce data sets, and other relevant resources or tools to include in the resource scan. We identified an initial list of experts through recommendations from our project team and other Mathematica staff and expanded the list through recommendations offered during our calls. We held 13 discussions with individual experts in the following areas: federal programs and data (4), LMI (3), career pathways/sector strategies (4), and TANF/low-income families (2). Each discussion lasted about 30 minutes.

### Resource scan

We conducted a scan of existing resources in the following areas:

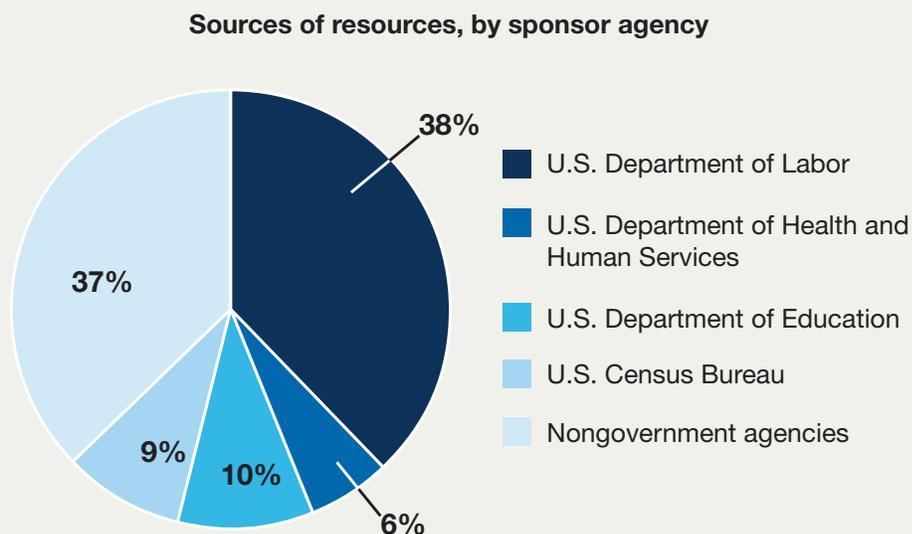
- **Research studies.** The research studies we identified come from targeted internet searches, bibliographies of major studies, resource lists from relevant organizations' websites, and recommendations from subject matter experts. In our search, we aimed to identify studies that included promising practices and evidence on what works in connecting TANF recipients and other low-income families with employment opportunities in high-growth sectors. All studies were cross-checked with the Employment Strategies for Low-Income Adults Evidence Review and we removed those that did not have strong evidence.
- **Technical assistance tools.** The technical assistance tools we identified come from a search of relevant government and nongovernmental organization websites, including education, labor, and TANF-related sites, and an internet search for practitioner-focused resources on LMI, career pathways, sector strategies, and career exploration. We also received recommendations on specific resources from subject matter experts. In our search, we aimed to identify relevant, practitioner-focused resources that are typically available online and might be useful to agencies serving TANF recipients and other low-income families.
- **Client assessments.** The client assessments we identified come from a general internet search and a review of the Departments of Labor and Education websites. We aimed to identify assessments that could be used to match clients with appropriate training and employment opportunities and that might be useful for linking clients to high-growth jobs.
- **Data sets related to education and employment.** The data sets we identified come primarily from recommendations from subject matter experts. We found additional data sets

through general internet searches, review of key government agency websites, internal experts, and press releases. Our search focused on data sets that provide detailed information on high-growth jobs in a state or local area, including occupational trends, entry-level employment opportunities, education and credentialing requirements, and applicant skills and experience requirements.

The resources we identified come from government (63 percent) and nongovernment (37 percent) sources. Of the government sources, most resources (59 percent) come from DOL (Figure 2).

Our resource scan has two limitations. First, it is not intended to be a comprehensive review, so other applicable resources that our audiences might find useful may have been omitted. Second, the identified resources have not been evaluated for their usefulness or effectiveness. OPRE and Mathematica do not endorse any of these resources but provide them as examples to be explored.

**Figure 2: Sources of resources reviewed for this guide**



## **Appendix B:** **Acronyms**

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**The following acronyms are used throughout this resource guide:**

ACF	Administration for Children and Families, U.S. Department of Health and Human Services
BLS	Bureau of Labor Statistics
ED	U.S. Department of Education
DOL	U.S. Department of Labor
ETA	Employment and Training Administration, U.S. Department of Labor
HHS	U.S. Department of Health and Human Services
LMI	labor market information
MSA	metropolitan statistical area
OFA	Office of Family Assistance, Administration for Children and Families, U.S. Department of Health and Human Services
O*NET	Occupational Information Network Database
OPRE	Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services
SNAP	Supplemental Nutrition Assistance Program
SOC	Standard Occupational Classification
TANF	Temporary Assistance for Needy Families
WIA	Workforce Investment Act
WIOA	Workforce Innovation and Opportunity Act

## **Appendix C:** **Research Studies**

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**Table C.1: Research Studies Summary**

Title	Topics						Type of Analysis				
	Career Pathways Initiatives	Sector-Based Jobs	Adult Basic Education/Skills	Postsecondary Education and Vocational Training	Employer-Focused Initiatives	Collaboration/Partnerships	Literature Review	Descriptive Data Analysis	Implementation/Program Case Studies	Impact Study	Practitioner Guide
1. A Cross-Case Analysis of Career Pathway Programs that Link Low-Skilled Adults to Family-Sustaining Wage Careers	•	•		•			•		•		
2. A Means to an End: Integration of Welfare and Workforce Development Systems						•			•		
3. Beyond Basic Skills: State Strategies to Connect Low-Skilled Students to an Employer-Valued Postsecondary Education			•	•					•		•
4. Beyond Graduation: Promoting Post-Program Engagement and Advancement	•	•		•		•			•		
5. Building Blocks for Building Skills: An Inventory of Adult Learning Models and Innovations	•	•	•	•		•			•		
6. Building Bridges in Wisconsin: Connecting Working Adults with College Credentials and Career Advancement	•		•	•					•		•
7. Building Skills and Promoting Job Advancement: The Promise of Employer-Focused Strategies	•	•		•	•				•		
8. Career and Technical Education: Five Ways That Pay Along the Way to B.A.				•	•			•			
9. Charting a Path: An Exploration of the Statewide Career Pathway Efforts in Arkansas, Kentucky, Oregon, Washington, and Wisconsin	•	•		•		•			•		
10. Competency-Based Degree Programs in the U.S.: Postsecondary Credentials for Measurable Student Learning and Performance				•					•		
11. Coordinating Employment Services Across the TANF and WIA Programs						•			•		
12. Courses to Employment: Partnering to Create Paths to Education and Careers	•	•		•		•		•	•		
13. Creating Postsecondary Pathways to Good Jobs for Young High School Dropouts: The Possibilities and Challenges			•	•		•			•		
14. Evaluation of the Early College High School Initiative: Select Topics on Implementation				•				•	•		
15. Expanding the CareerAdvance® Program in Tulsa, Oklahoma	•	•		•		•			•		
16. Facilitating Postsecondary Education and Training for TANF recipients		•		•			•				
17. Giving Credit Where Credit is Due: Creating a Competency-Based Qualifications Framework for Postsecondary Education and Training				•					•		•
18. Helping Adult Learners Navigate Community College and the Labor Market	•	•	•	•		•			•		
19. How I-BEST Works: Findings from a Field Study of Washington State's Integrated Basic Education and Skills Training Program	•	•	•	•					•		
20. How to Build Bridge Programs that Fit into a Career Pathway: A Step-by-Step Guide Based on the Carreras en Salud Program in Chicago	•	•	•	•					•		•
21. HPOG: Using Labor Market Information to Design Job-Driven Training Programs	•	•		•							•

Note: These studies are included as examples for possible use by state TANF administrators. Neither OPRE nor Mathematica endorses these studies.

**Table C.1: Research Studies Summary** *(continued)*

Title	Topics						Type of Analysis				
	Career Pathways Initiatives	Sector-Based Jobs	Adult Basic Education/Skills	Postsecondary Education and Vocational Training	Employer-Focused Initiatives	Collaboration/Partnerships	Literature Review	Descriptive Data Analysis	Implementation/Program Case Studies	Impact Study	Practitioner Guide
22. Integrating TANF and WIA Into a Single Workforce System: An Analysis of Legal Issues						•			•		
23. Learning Better Together: The Impact of Learning Communities on the Persistence of Low-Income Students				•					•		
24. Literature Review: Career Pathways Programs	•	•		•			•				
25. Meeting the Needs of Workers and Employers: Implementation of a Sector-Focused Career Advancement Model for Low-Skilled Adults		•	•						•		
26. Paths to Persistence: An Analysis of Research on Program Effectiveness at Community Colleges				•			•				
27. Ready to Work: Job-Driven Training and American Opportunity	•	•		•	•						•
28. Reinvesting in America's Youth: Lessons from the 2009 Recovery Act Summer Youth Employment Initiative					•	•		•	•		
29. Sectoral Workforce and Related Strategies: What we Know... and What We Need to Know (chapter 11 in Connecting People to Work: Workforce Intermediaries and Sector Strategies)	•	•		•			•				
30. Steady Work and Better Jobs: How to Help Low-Income Parents Sustain Employment and Advance in the Workforce			•	•	•						•
31. Strategies to Help Low-Wage Workers Advance: Implementation and Final Impacts of the Work Advancement and Support Center (WASC) Demonstration				•		•			•	•	
32. The Breaking Through Practice Guide: Tools for Helping Low Skilled Adults Earn Postsecondary Certificates and Degrees			•	•					•		•
33. The Career Pathways How-To Guide	•	•		•		•			•		•
34. The First Year of Accelerating Opportunity: Implementation Findings from the States and Colleges	•		•	•		•			•		
35. The Promise of Career Pathways Systems Change: What role should workforce investment systems play? What benefits will result?	•	•		•	•	•					•
36. Tuning in to Local Labor Markets: Findings from the Sectoral Employment Impact Study [Wisconsin Regional Training Partnership]		•			•					•	
37. Turning the Tide: Five Years of Achieving the Dream in Community Colleges				•				•	•		
38. Unlocking the Gate: What We Know About Improving Developmental Education			•				•				
39. Using TANF Funds to Support Subsidized Youth Employment: The 2010 Summer Youth Employment Initiative					•	•		•	•		
40. Washington State's Basic Food Employment & Training Program						•		•	•		
41. What Works In Job Training: A Synthesis of the Evidence	•		•	•			•				
42. Workforce Investment Act: Coordination of TANF Services Through OneStops Has Increased Despite Challenges						•			•		
43. Workforce Investment Act: Innovative Collaborations between Workforce Boards and Employers Helped Meet Local Needs					•	•			•		

**Table C.1: Research Studies Summary** *(continued)*

Title	Topics						Type of Analysis				
	Career Pathways Initiatives	Sector-Based Jobs	Adult Basic Education/Skills	Postsecondary Education and Vocational Training	Employer-Focused Initiatives	Collaboration/Partnerships	Literature Review	Descriptive Data Analysis	Implementation/Program Case Studies	Impact Study	Practitioner Guide
<b>44. Workforce Potential Project: Analysis of Area Labor Market and Provider Capacity</b>		●	●	●				●			
<b>45. Workforce System One-Stop Services for Public Assistance and Other Low-Income Populations: Lessons Learned in Selected States</b>						●			●		

Note: Reports are ordered alphabetically, not to reflect report quality or preference.

**Table C.2: Research Studies Detailed Description**

Title	Authors	Year Published	Summary	Potential Use	Website
<b>1. A Cross-Case Analysis of Career Pathway Programs that Link Low-Skilled Adults to Family-Sustaining Wage Careers</b>	Deborah Bragg, Christine Bremer, Marisa Castellano, Catherine Kirby, Ann Mavis, Donna Schaad, and Judith Sunderman; National Research Center for Career and Technical Education, University of Minnesota	2007	Using a literature review, telephone interviews with educational administrators (including state government staff), and site visits to three programs, this report provides a descriptive analysis of career pathways programs. This report highlights programs in Illinois, Washington, and Arkansas that illustrate commitment to enrolling and serving low-skilled adults. Many of the students were English-language learners, unemployed, or faced additional challenges. Programs used local partnerships and diverse strategies to retain students. The authors found these programs to be scalable and sustainable and called for further evaluation as programs evolved.	Pointing to successful practices, this report can support administrators/policymakers and program partners looking to create programs that help low-income and low-skilled adults access the labor market.	<a href="http://www.nrccte.org/resources/publications/cross-case-analysis-career-pathway-programs-link-low-skilled-adults-family">http://www.nrccte.org/resources/publications/cross-case-analysis-career-pathway-programs-link-low-skilled-adults-family</a>
<b>2. A Means to an End: Integration of Welfare and Workforce Development Systems</b>	Nisha Patel, Lisa Rangelhelli, and Mark Greenberg; Center for Law and Social Policy	2003	This Center for Law and Social Policy brief uses the experiences of four states—Florida, Ohio, Utah, and Wisconsin—that integrated their TANF/WIA services to provide pros and cons of TANF/WIA coordination and lessons learned. The brief describes benefits, including more flexible resources, decreasing the stigma associated with TANF receipt, and better linkages to employers. Highlighted disadvantages includes lack of support of individuals with multiple barriers and employers showing bias toward one-stop centers as welfare agencies.	Administrators and policymakers may find this issue brief useful in understanding the potential roadblocks and benefits to increased TANF/WIA collaboration and learning from other states' experiences.	<a href="http://www.clasp.org/resources-and-publications/files/0155.pdf">http://www.clasp.org/resources-and-publications/files/0155.pdf</a>
<b>3. Beyond Basic Skills: State Strategies to Connect Low-Skilled Students to an Employer-Valued Postsecondary Education</b>	Marcie Foster, Julie Strawn, and Amy Duke-Benfield; CLASP	2011	This report, focusing on the necessity of postsecondary education for those with low basic skills, describes promising strategies for improving basic skills delivery. The highlighted programs use contextualization to improve retention and success and provide more comprehensive student success services. The recommended states strategies include (1) creating bridge programs that integrate basic skills and/or English-language learning with higher-level content and technical skills, (2) dually enrolling students in basic and more advanced courses, and (3) providing personalized guidance with career and educational assessments.	This report will be useful for administrators/policymakers and program partners interested in state-level policy options and programs for improving basic skill services.	<a href="http://www.clasp.org/resources-and-publications/files/Beyond-Basic-Skills-March-2011.pdf">http://www.clasp.org/resources-and-publications/files/Beyond-Basic-Skills-March-2011.pdf</a>
<b>4. Beyond Graduation: Promoting Post-Program Engagement and Advancement</b>	Linda Dworak with Maureen Conway and Allison Gerber; The Aspen Institute	2009	This 2009 update report on the “Courses to Employment” demonstration describes six sector-based programs targeting low-income individuals. The report provides a rationale for establishing partnerships between community colleges and nonprofit organizations to facilitate longer-term engagement with low-income graduates. Best practices and challenges faced by the programs are discussed.	This report is useful for administrators/policymakers and program partners interested in strategies for engaging with and improving workforce outcomes for community college program participants.	<a href="http://dev.aspenwsi.org/wordpress/wp-content/uploads/09-008.pdf">http://dev.aspenwsi.org/wordpress/wp-content/uploads/09-008.pdf</a>
<b>5. Building Blocks for Building Skills: An Inventory of Adult Learning Models and Innovations</b>	Rebecca Klein-Collins; Council for Adult and Experiential Learning	2006	This report highlights key components and innovations of effective adult learning and training programs according to current research. The key components are broken into three steps of designing and developing a program in addition to strategic partnerships. The steps are (1) need-focused planning and analysis, (2) progress- and success-focused program design, and (3) adult-centered implementation. The report details programs that exemplify the best practices and innovations, many of which are healthcare-focused programs. The report concludes that sector-based and career pathways models are among the most applicable.	This report is useful to administrators/policymakers, program partners, and researchers interested in current research and best practices in designing and implementing adult learning and skill training programs.	<a href="http://www.cael.org/pdfs/buildingblocksfor-buildingskills">http://www.cael.org/pdfs/buildingblocksfor-buildingskills</a>
<b>6. Building Bridges in Wisconsin: Connecting Working Adults with College Credentials and Career Advancement</b>	Jessa Lewis Valentine and Adrienne Pagac; Center on Wisconsin Strategy	2010	This report from the Center on Wisconsin Strategy includes data and analysis of access to education and the workforce in Wisconsin. Focusing on initiatives taking place at technical and community colleges, it details efforts to engage low-income adults in training, postsecondary credentials, and family-sustaining careers. Early lessons from these programs include: there is a need for enriched collaboration among instructors across divisions, program staff turnover can disrupt progress, and there is value in measuring outcomes and not depending on standardized test scores to set program eligibility. The report also recommends increasing funding and access to adult education and training, in addition to further evaluation.	This report is useful for administrators/policymakers and program partners to identify successful practices.	<a href="http://www.cows.org/_data/documents/1117.pdf">http://www.cows.org/_data/documents/1117.pdf</a>

**Table C.2: Research Studies Detailed Description** *(continued)*

Title	Authors	Year Published	Summary	Potential Use	Website
<b>7. Building Skills and Promoting Job Advancement: The Promise of Employer-Focused Strategies</b>	Karin Martinson; Urban Institute	2007	This report by the Urban Institute provides an overview of employer-focused training as a method for improving labor market outcomes for low-skill individuals and details three employer-focused models that have shown promising results: incumbent worker training programs, sectoral training programs, and career ladder programs. The report provides examples of each type of program and identifies key issues in developing these programs, such as promoting collaboration, ensuring sustainability, and appropriately targeting low-income workers.	This report is useful for administrators/policymakers and program partners interested in employer-focused or sector-based workforce development programs.	<a href="http://www.urban.org/UploadedPDF/411535_building_skills.pdf">http://www.urban.org/UploadedPDF/411535_building_skills.pdf</a>
<b>8. Career and Technical Education: Five Ways That Pay Along the Way to B.A.</b>	Anthony P. Carnevale, Tamara Jayasundera, and Andrew R. Hanson; Georgetown Center on Education and the Workforce	2012	This report explores and identifies "middle jobs," which pay middle class-level wages and only require some postsecondary education but not a four-year degree. Authors describe five paths to these jobs: employer-based training, industry certifications, apprenticeships, postsecondary certificates, and associate's degrees. This report uses national data to analyze the population of workers with a high school education. The report also recommends that the federal government should provide financial support for career and technical education, in addition to creating a system to share academic records and employer wages.	This report identified growing middle jobs; administrators/policymakers can use this knowledge for programs supporting employment. This is also useful for program partners who want to create programs that help individuals access the skills necessary to gain employment in these positions.	<a href="https://georgetown.app.box.com/s/jd4r0n-wvjqt12g1olx8v">https://georgetown.app.box.com/s/jd4r0n-wvjqt12g1olx8v</a>
<b>9. Charting a Path: An Exploration of the Statewide Career Pathway Efforts in Arkansas, Kentucky, Oregon, Washington, and Wisconsin</b>	Rosanna Perry Stephens; Seattle Jobs Initiative	2009	The Seattle Jobs Initiative and the Working Poor Families Project studied career pathway initiatives in states that have achieved different levels of implementation: mature programs (Arkansas, Kentucky, and Oregon), an intermediate program (Washington), and an emergent program (Wisconsin). The research examines challenges faced by each state, as well as the implementation strategies each state developed. The report particularly focuses on the audience served by each program, the supports in place to drive enrollment and completion, and how to create momentum within a state to emulate pioneering colleges. The authors also provide program development recommendations, such as creating a communication strategy among all partners for effective communication, and policy recommendations, including exploring ways to direct federal funding to these career pathways.	With a focus on states, this report will be valuable to administrators/policymakers as they consider how to engage state policymakers. It can also be useful for researchers, as it provides information on high-growth sectors and their relevance to low-income or low-skills populations.	<a href="http://www.working-poorfamilies.org/pdfs/Career_Pathways_Report.pdf">http://www.working-poorfamilies.org/pdfs/Career_Pathways_Report.pdf</a>
<b>10. Competency-Based Degree Programs in the U.S.: Postsecondary Credentials for Measurable Student Learning and Performance</b>	Rebecca Klein-Collins; Council for Adult and Experiential Learning	2012	This report discusses the continuum of competency-based postsecondary education—from the most basic programs, in which institutions create defined learning goals for their curriculum, to more advanced programs that allow students to graduate by demonstrating particular competencies. Authors highlight exemplary program models and policy models that facilitate greater adoption of competency-based programs. The report also makes several recommendations, including developing reliable assessments of effectiveness and establishing processes for program students to pursue to other institutions and degrees.	This report can inform administrators/policymakers on successful competency-based educational programs when looking to partner with educational institutions.	<a href="http://www.cael.org/pdfs/2012_competency-basedprograms">http://www.cael.org/pdfs/2012_competency-basedprograms</a>
<b>11. Coordinating Employment Services Across the TANF and WIA Programs</b>	Gretchen G. Kirby, Julia Lyskawa, Michelle Derr, and Elizabeth Brown; Mathematica Policy Research for OPRE	2015	This study examines the extent of coordination between TANF and WIA programs in eight states and 11 localities across six program areas: (1) administration and management, (2) funding, (3) policies and procedures, (4) program missions and knowledge, (5) services for customers, and (6) accountability and performance management. Factors facilitating coordination, such as co-location, are examined, and best practices for future collaboration are recommended, including specific strategies for improving coordination across the six program areas. Major strategies for improving coordination include creating common administrative and management structures, using funds from both TANF and WIA to support common services, sharing data, and emphasizing common goals and services.	This study is useful for administrators/policymakers and program partners looking to understand the potential for coordinating with WIA services.	<a href="http://www.acf.hhs.gov/sites/default/files/opre/coordinating_employment_services_across_the_tanf_and_wia_programs.pdf">http://www.acf.hhs.gov/sites/default/files/opre/coordinating_employment_services_across_the_tanf_and_wia_programs.pdf</a>

**Table C.2: Research Studies Detailed Description** *(continued)*

Title	Authors	Year Published	Summary	Potential Use	Website
<b>12. Courses to Employment: Partnering to Create Paths to Education and Careers</b>	Maureen Conway, Amy Blair, and Matt Helmer; Aspen Institute & Workforce Strategies Initiative	2012	This report describes six partnerships between community colleges and nonprofits that were part of the Courses to Employment (C2E) demonstration. These partnerships sought to increase the success of low-income adults in postsecondary education and the workforce. Participant outcome data showed: high completion rates, that most participants obtained jobs after completion at higher wages than before the program, and that there is variation in earning gains across partnerships. The report concludes that C2E programs merit further research and support.	This report identifies successful practices by nonprofits and community colleges to increase employment for low-income adults. These practices can be used by administrators/policymakers, frontline staff, and program partners to create programs using the same framework and achieve similar outcomes. The methodology in studying these partnerships can help researchers study other programs and partnerships, as well.	<a href="http://www.aspenwsi.org/wordpress/wp-content/uploads/C2E.pdf">http://www.aspenwsi.org/wordpress/wp-content/uploads/C2E.pdf</a>
<b>13. Creating Postsecondary Pathways to Good Jobs for Young High School Dropouts: The Possibilities and Challenges</b>	Linda Harris and Evelyn Ganzglass; Center for American Progress	2008	This Center for American Progress report focuses on the employment struggles of recent high school dropouts and the challenges of connecting them to relevant postsecondary credentials. This report highlights programs for their innovative approaches to engaging young high school dropouts, including educational programs at high schools and community colleges and labor market-based programs, such as apprenticeship best practices. The report also provides recommendations for implementing a program that supports recent high school dropout youth's access to the labor market. These recommendations correspond to various stakeholders involved with the program's success. For example, program evaluators are recommended to measure labor market outcomes and education outcomes to estimate the program's impact.	This report will be helpful for administrators/policymakers looking to implement programs that support young high school dropouts' access to the labor market. Additionally, this report identifies various outcomes to measure when evaluating a program, which can advise researchers hoping to evaluate similar programs. Lastly, this report can help program partners wanting to use best practices to create and implement programs to support this population.	<a href="https://cdn.americanprogress.org/wp-content/uploads/issues/2008/10/pdf/postsecondary_pathways.pdf">https://cdn.americanprogress.org/wp-content/uploads/issues/2008/10/pdf/postsecondary_pathways.pdf</a>
<b>14. Evaluation of the Early College High School Initiative: Select Topics on Implementation</b>	Andrea Berger, Nancy Adelman, Susan Cole, Aimee Evan, Joel Knudson, Janet Lundeen, Stephanie Safran, Sarah Tettyfio, Laura Walton, Catherine Hall, Lauren Hersh, Kaeli Knowles Keating, Samantha Murray, Natalie Nielsen; American Institutes for Research	2007	This is one in a series of reports on the national evaluation of the Gates Foundation's Early College High School Initiative. The report provides a detailed account of the implementation of the initiative, which aims to provide students with the chance to earn college credits during high school in order to reduce the time necessary to complete a postsecondary degree. Few student outcomes are available, but early indicators of student attendance and performance on assessments are positive. The report uses qualitative data from interviews, focus groups, and classroom observations focusing on the design of the program with particular emphasis on intermediaries and local partnerships.	This report will be useful to researchers interested in the implementation of programs aimed at improving high school students' success in postsecondary education.	<a href="http://www.air.org/sites/default/files/downloads/report/ECHSI_Synth_Report_041607_Final_0.pdf">http://www.air.org/sites/default/files/downloads/report/ECHSI_Synth_Report_041607_Final_0.pdf</a>
<b>15. Expanding the CareerAdvance® Program in Tulsa, Oklahoma</b>	Robert Glover, Christopher King, and Tara Smith; Ray Marshall Center for the Study of Human Resources, University of Texas–Austin	2012	This study is part of a series of reports that describes the first two years of the CareerAdvance initiative in Tulsa, Oklahoma. The program targets parents of Early Head Start children and provides high-growth, sectoral-based career training in nursing and health information technology. The program includes eight key components, including career pathways, a sectoral focus, peer support, and financial incentives for participation and success. Authors detail expansion plans, implementation challenges, indicators of program success, and lessons learned from the first two years of the program. Although the program's impact is not evaluated, the authors point to high career training persistence rates, strong relationships with employers, high GED completion rates, and higher career coach efficiency as early indicators of program success.	This report can be useful for administrators/policymakers who are interested in working with pre-existing program partners to expand their programmatic focus in order to develop workforce development initiatives. Partners can use this for direction in creating their own programs.	<a href="http://captulsa.org/wp/wp-content/uploads/2012/12/RMC-FINAL-Implementation-Report-Year-1-03-19-12.pdf">http://captulsa.org/wp/wp-content/uploads/2012/12/RMC-FINAL-Implementation-Report-Year-1-03-19-12.pdf</a>

**Table C.2: Research Studies Detailed Description** *(continued)*

Title	Authors	Year Published	Summary	Potential Use	Website
<b>16. Facilitating Postsecondary Education and Training for TANF Recipients</b>	Gayle Hamilton and Susan Scrivener; Urban Institute	2012	This brief focuses on a review of literature describing programs that aim to increase program recipients' postsecondary educational attainment. It also identifies barriers facing program recipients in accessing postsecondary education, including integrating education with this population's parental responsibilities and work hours required to receive TANF benefits. Few programs intending to increase education and training enrollment for program recipients have been rigorously evaluated; programs focused on sector-based training and performance-based scholarships achieved limited success. Conclusions for policymakers include suggesting a focus on career pathways and sector-based models.	This report identifies programs targeting TANF recipients that can be helpful to administrators/policymakers looking to create similar programs, partners looking for best practices, and researchers evaluating similar programs.	<a href="http://www.acf.hhs.gov/programs/opre/resource/facilitating-postsecondary-education-and-training-for-tanf-recipients">http://www.acf.hhs.gov/programs/opre/resource/facilitating-postsecondary-education-and-training-for-tanf-recipients</a>
<b>17. Giving Credit Where Credit Is Due: Creating a Competency-Based Qualifications Framework for Postsecondary Education and Training</b>	Evelyn Ganzglass, Keith Bird, and Heath Prince; CLASP	2011	This report advocates for change in credentialing models by placing less value on time spent in classrooms (as in traditional credit-hour models) and focusing more on the credit-worthy occupational education and training that many adults participate in. The report also calls for common metrics and quality assurance to ensure that credentials received outside of a traditional educational context are valuable, and their value is clear to potential employers. Authors identify examples attempting to bridge the gap between nontraditional credentials and expected learning outcomes. They also recommend creating infrastructure for information-sharing on student outcomes and a framework to include occupational training in postsecondary education.	This report will be useful for administrators/policymakers interested in connecting occupational education with postsecondary education credentials. Because this report points to examples achieving this, the report would also be useful for program partners interested in creating similar programs.	<a href="http://www.clasp.org/resources-and-publications/files/Giving-Credit.pdf">http://www.clasp.org/resources-and-publications/files/Giving-Credit.pdf</a>
<b>18. Helping Adult Learners Navigate Community College and the Labor Market</b>	Matt Helmer; The Aspen Institute	2013	This research brief summarizes some of the findings from the Courses to Employment study. The study, which took place from 2008 to 2010, examined six programs throughout the country that help low-income workers find employment in high-growth sectors through educational and workforce partnerships. The Aspen Institute identified common problems that low-income workers face in the areas of entering community colleges, continuing the program, and then transitioning from the classroom into the workforce, as well as some of the solutions that the study participants used to overcome those challenges. Most of these solutions focused on increasing the support network available to continuing education students and improving the connection between the classroom and the workplace.	As the brief discusses, adults in continuing education programs face many obstacles to succeed and helping these adults can be a daunting task. This brief outlines the ways in which the challenges have been overcome. It will be very useful for administrators/policymakers and program partners who are interested in developing programs for continuing education learners.	<a href="http://www.aspenwsi.org/wordpress/wp-content/uploads/update_cte_march2013.pdf">http://www.aspenwsi.org/wordpress/wp-content/uploads/update_cte_march2013.pdf</a>
<b>19. How I-BEST Works: Findings from a Field Study of Washington State's Integrated Basic Education and Skills Training Program</b>	John Wachen, Davis Jenkins, and Michelle Van Noy; Community College Research Center	2010	This implementation study of the state of Washington's Integrated Basic Education and Skills Training (I-BEST) program was conducted by the Community College Research Center at 34 community colleges in 2009. The I-BEST program aims to increase the rate of entrance to and completion of postsecondary occupational education for adults with minimal education by integrating basic skills instruction with sectoral-based technical training. The program typically lasts one to three quarters, and program participants receive an I-BEST Certificate of Completion before pursuing a certificate in their chosen field. While the study found that the programs have a high success rate, the high cost of operating these programs was the reason most frequently cited by colleges that were not planning on offering new programs.	This study will be useful for administrators/policymakers interested in programs that help adult basic education students transition into career pathways programs. The brief includes a thorough description of the program itself, as well as lessons learned from the program that can be applied to new programs.	<a href="http://www.tc.columbia.edu/ncpr/conference/PDF/NCPR_Panel3_WachenJenkinsVanNoy.pdf">http://www.tc.columbia.edu/ncpr/conference/PDF/NCPR_Panel3_WachenJenkinsVanNoy.pdf</a>
<b>20. How to Build Bridge Programs that Fit into a Career Pathway: A Step-by-Step Guide Based on the Carreras en Salud Program in Chicago</b>	Ricardo A. Estrada and Tom DuBois; Instituto del Progreso Latino	2010	This report, produced by the Instituto del Progreso Latino, uses the Carreras en Salud program as a model for how to implement bridge programs between adult basic education and career pathways programs. The Carreras en Salud program is a bridge program targeting Latinos in Chicago lacking the necessary education to enter into a healthcare-based career pathways program. This manual lays out the steps for creating successful programs, including building strong program partnerships, designing a career pathway program, developing a curriculum, budgeting for the program, and managing the logistics of creating and monitoring the program.	This report is useful as a manual for stakeholders interested in creating bridge programs between education and workforce development programs. Each section of the manual focuses on a different component of program development and intertwines the Carreras en Salud program as a case study for how to implement that component.	<a href="http://www.idpl.org/images/publicationsPDFs/Instituto2010_HowToBuildBridgePrograms%20final.pdf">http://www.idpl.org/images/publicationsPDFs/Instituto2010_HowToBuildBridgePrograms%20final.pdf</a>

**Table C.2: Research Studies Detailed Description** *(continued)*

Title	Authors	Year Published	Summary	Potential Use	Website
<b>21. HPOG: Using Labor Market Information to Design Job-Driven Training Programs</b>	Administration for Children and Families	2015	This report, created for use by the Health Professions Opportunity Grants (HPOG) grantees, provides a step-by-step process for using traditional and real-time labor market information to determine high-growth, in-demand jobs and create training programs that match this need. The steps include: "(1) identify relevant employment trends, (2) identify real-time labor market trends, (3) understand wage variation, (4) measure local training capacity, (5) work with employers to verify demand, (6) use evidence to make program decisions, (7) measure results, and (8) make the process systematic." The report also provides ways to achieve each step, illustrated a hypothetical example.	This report could be used by administrators/policymakers who are interested in analyzing labor market information to determine high-growth jobs in their area.	<a href="http://www.acf.hhs.gov/programs/ofa/resource/using-labor-market-information">http://www.acf.hhs.gov/programs/ofa/resource/using-labor-market-information</a>
<b>22. Integrating TANF and WIA Into a Single Workforce System: An Analysis of Legal Issues</b>	Mark Greenberg, Emil Parker, and Abbey Frank; Center for Law and Social Policy	2004	This paper summarizes program goals and funding streams for both TANF and WIA. It then describes reasons for coordinating services across the two programs and lists legal barriers for this coordination in several domains including: client eligibility, type of services provided, income supports, performance measurement, reporting requirements, and program administration.	Administrators who are working to coordinate TANF/WIA services will find this paper to be useful as a roadmap for coordinating services within the bounds of existing law. Complex legal issues are presented in a straightforward and contextualized manner.	<a href="http://www.clasp.org/resources-and-publications/files/0171.pdf">http://www.clasp.org/resources-and-publications/files/0171.pdf</a>
<b>23. Learning Better Together: The Impact of Learning Communities on the Persistence of Low-Income Students</b>	Cathy McHugh Engstrom and Vincent Tinto; Syracuse University	2008	This study investigates the impact of the learning community model in improving academic outcomes for disadvantaged students across 13 community colleges. A learning community is a program in which students take all their classes with the same set of peers. Students who participated in learning communities were significantly more engaged than the comparison group and were more likely to continue attending the college the next year. Students reported feeling that the communities created encouraging, supportive, and safe environments for students to learn.	This study could be of interest to administrators/policymakers, program partners, or researchers interested in developing or studying learning communities or improving community college continuation rates for students enrolled in remedial skills courses.	<a href="https://www.sdbor.edu/services/studentaffairs/documents/LearningBetterTogether_Engstrom-Tinto-2008.pdf">https://www.sdbor.edu/services/studentaffairs/documents/LearningBetterTogether_Engstrom-Tinto-2008.pdf</a>
<b>24. Literature Review: Career Pathways Programs</b>	Alan Werner, Catherine Dun Rappaport, Jennifer Bagnell Stuart, and Jennifer Lewis; Abt Associates	2013	This literature review produced by Abt Associates examines some of the available studies on career pathways programs and highlights common themes across the programs. The literature review includes an overview of common program designs and results from outcome and impact studies conducted on career pathways programs. The literature suggests that programs have been implemented successfully and have achieved positive outcomes for low-income populations.	This study will be useful to researchers interested in literature on career pathways programs, as well as current findings on the outcomes of career pathways programs. They may be interested in the proposed designs for future outcomes studies.	<a href="http://www.acf.hhs.gov/sites/default/files/opre/cp_lit_review_final_62613_edits.pdf">http://www.acf.hhs.gov/sites/default/files/opre/cp_lit_review_final_62613_edits.pdf</a>
<b>25. Meeting the Needs of Workers and Employers: Implementation of a Sector-Focused Career Advancement Model for Low-Skilled Adults</b>	Betsy L. Tessler, Michael Bangser, Alexandra Pennington, Kelsey Schaberg, and Hannah Dalporto; MDRC	2014	This study presents early implementation findings from the evaluation of the WorkAdvance model, a sector-based training and employment program for low-income adults that includes career readiness services, as well as job retention and advancement services for up to two years. The evaluation is using a random assignment design. The model is being tested by four organizations (two in New York City, NY; one in Tulsa, OK; and one in Cleveland, OH). Key findings include the following: (1) the model is challenging to implement, (2) program screening conducted by employers based on their needs lead to low applicant eligibility, (3) soft skills training was as valuable to both employers and participants as occupational skills training, and (4) there have been high completion rates of the occupational skills training leading to industry-recognized credentials for most participants. A second report with more detailed information, including impacts, will be released in late 2015.	This study offers lessons learned from implementing a sector-based training and employment program, as well as an example model that could be used by administrators/policymakers interested in partnering with nonprofits and employers to create new sector-based training programs. It could also be of value to researchers interested in learning more about sector program models and developing research questions.	<a href="http://www.mdrc.org/publication/meeting-needs-workers-and-employers">http://www.mdrc.org/publication/meeting-needs-workers-and-employers</a>

**Table C.2: Research Studies Detailed Description** *(continued)*

Title	Authors	Year Published	Summary	Potential Use	Website
<b>26. Paths to Persistence: An Analysis of Research on Program Effectiveness at Community Colleges</b>	Thomas R. Bailey and Mariana Alfonso; Community College Research Center, Columbia University	2005	This literature review, produced by the Lumina Foundation for Education, reviews the current literature on community college interventions and common practices for improving academic outcomes. The foundation found that the only intervention to have strong evidence-based support is learning communities. They also found that there are many holes in the field of community college research in terms of available data and research methodology. The report concludes with six suggestions for improving research in the field of community colleges.	This study can be useful to researchers interested in developing their own studies on community college programs. It can help guide them to design their own research questions and avoid possible pitfalls in conducting their research.	<a href="http://www.luminafoundation.org/files/publications/PathstoPersistence.pdf">http://www.luminafoundation.org/files/publications/PathstoPersistence.pdf</a>
<b>27. Ready to Work: Job-Driven Training and American Opportunity</b>	The White House	2014	This presidential report gathers findings from a review of the state of occupational education in the United States. The report includes a series of recommendations including: collaborating with employers and other program partners, making better use of LMI, developing career pathways programs and other on-the-job training opportunities, and building additional forms of supports into training programs. The focus of the report is on new initiatives and funding opportunities targeted at increasing on-the-job training programs. The report calls for employing the long-term unemployed, increasing the skill level of workers to access middle-class job opportunities, and increasing access to high-demand job markets.	This report can be useful to administrators/policymakers interested in learning about new initiatives from the federal government and possible funding opportunities. Program partners interested in learning more about new efforts from the federal government to encourage collaboration between different state and federal agencies could also find it useful.	<a href="http://www.whitehouse.gov/sites/default/files/docs/skills_report.pdf">http://www.whitehouse.gov/sites/default/files/docs/skills_report.pdf</a>
<b>28. Reinvesting in America's Youth: Lessons from the 2009 Recovery Act Summer Youth Employment Initiative</b>	Jeanne Bellotti, Linda Rosenberg, Samina Sattar, Andrea Mraz Eposito, and Jessica Ziegler; Mathematica Policy Research	2010	This implementation study examines the 2009 Summer Youth Employment Initiative, funded by the American Recovery and Reinvestment Act of 2009. The initiative used federal funds to pay for summer work opportunities for youth with the objective of program completion and "work readiness." Twenty local workforce investment agents across the country were selected as evaluation sites. The report details program development and recruitment techniques, as well as youth experiences at different sites. The study also included information on implementation challenges and collection methods used by both the sites and evaluators. Mathematica found both the youth and employers reported overall positive experiences in the program and its impact on the youth involved and their local economies.	This study will be useful for administrators/policymakers and program partners who are interested in starting their own programs and would like some guidance on what types of challenges they might face, as well as how to handle a short timeframe for program implementation.	<a href="http://www.dol.gov/summerjobs/pdf/AmericasYouth.pdf">http://www.dol.gov/summerjobs/pdf/AmericasYouth.pdf</a>
<b>29. Sectoral Workforce and Related Strategies: What we Know... and What We Need to Know (chapter 11 in Connecting People to Work: Workforce Intermediaries and Sector Strategies)</b>	Christopher King; Ray Marshall Center for the Study of Human Resources, University of Texas–Austin	2014	This resource review examines findings from implementation and impact studies on workforce development topics, such as career pathways and sector-based initiatives. Summaries of the outcomes of completed studies, as well as initiatives that are underway, are described in detail. The author concludes that strong partnerships with training providers, focus on high-growth sectors, skill attainment, and support for skill attainment seem to be the keys to programmatic success. The author cautions that these findings cannot be confirmed due to the limited amount of research on the topic currently.	This chapter can be useful for administrators/policymakers needing quick access to data on the success of other programs, as well as for researchers interested in literature reviews on workforce development programs. Program partners looking for effective practices to incorporate into their own programs will also find this useful.	<a href="http://www.aspeninstitute.org/policy-work/economic-opportunities/connecting-people-work">http://www.aspeninstitute.org/policy-work/economic-opportunities/connecting-people-work</a>
<b>30. Steady Work and Better Jobs: How to Help Low-Income Parents Sustain Employment and Advance in the Workforce</b>	Julie Strawn and Karin Martinson; MDRC	2000	This how-to guide produced by MDRC reviews existing literature on workforce development programs and outlines suggested strategies in the areas of job advancement and supplementary assistance. The report is built around four themes: (1) placing welfare recipients into quality jobs, instead of focusing on placing them into a job, can minimize instability; (2) while more research is needed in the field of work supports, skill development programs, wage supports, and career counseling can help welfare-recipients maintain jobs; (3) TANF staff should work with employers to prepare welfare recipients for jobs available in the community; and (4) transportation and childcare challenges led to work instability, so support services might increase work stability. The researchers found that welfare recipients are more likely to have work instability with minimal wage increases and benefits. They concluded that focusing on helping recipients find a quality job, instead of just being placed in a job, can help them climb out of poverty.	This guide provides useful checklists for administrators/policymakers and program partners interested in creating programs to help program recipients gain meaningful employment.	<a href="http://www.mdrc.org/sites/default/files/full_514.pdf">http://www.mdrc.org/sites/default/files/full_514.pdf</a>

**Table C.2: Research Studies Detailed Description** *(continued)*

Title	Authors	Year Published	Summary	Potential Use	Website
<b>31. Strategies to Help Low-Wage Workers Advance: Implementation and Final Impacts of the Work Advancement and Support Center (WASC) Demonstration</b>	Cynthia Miller, Mark van Dok, Betsy L. Tessler, and Alexandra Pennington; MDRC	2012	This impact study examines the WASC demonstration, a two-year program conducted between 2005 and 2010. The two-part program combined welfare (such as SNAP) and workforce development systems into one building and one location. Three treatment sites from across the country were used in this randomized control trial. MDRC found affordable educational training programs increased participation rates and earnings by the end of the program.	This study will be useful for administrators/policymakers interested in working with program partners to collocate welfare and workforce development programs for low-income clients. The study demonstrates that there are some beneficial effects to collocated systems.	<a href="http://www.mdrc.org/publication/strategies-help-low-wage-workers-advance">http://www.mdrc.org/publication/strategies-help-low-wage-workers-advance</a>
<b>32. The Breaking Through Practice Guide: Tools for Helping Low-Skilled Adults Earn Postsecondary Certificates and Degrees</b>	Rebecca Arnold; Jobs for the Future	2010	The Breaking Through toolkit identifies strategies to ease the transition from remedial education to postsecondary technical education through contextualized learning in which technical education is worked into the basic skills curriculum. The toolkit details the process for developing a contextualized learning program and includes case studies and descriptions of four different strategies for incorporating contextualized learning: accelerated learning, comprehensive support services, labor market payoffs, and aligning programs for low-skilled adults. The report includes templates and other tools for use by program creators.	Administrators/policymakers and program partners will find this toolkit useful for conceptualizing and developing contextualized learning programs.	<a href="http://www.jff.org/sites/default/files/publications/materials/BT_toolkit_June7.pdf">http://www.jff.org/sites/default/files/publications/materials/BT_toolkit_June7.pdf</a>
<b>33. The Career Pathways How-To Guide</b>	Davis Jenkins and Christopher Spence; Workforce Strategy Center	2006	This guide from the Workforce Strategy Center expands on previous research profiling emerging career pathways programs. The report provides step-by-step directions for building regional career pathways partnerships, including examples for each phase of development. In addition, several states are profiled as examples of ways that state leaders and stakeholder agencies can support the cultivation of career pathway programs. The report also includes some lessons learned from the profiled programs: collaborating with partners from the outset of program conception; setting realistic expectations for participants; and focusing on changing the way agencies, partners, and participants interact.	This guide will be valuable to administrators/policymakers who need support from other state partners. Page 32, 33, and 41 of the guide also highlight the possibility of using federal TANF funds for pilot career pathways programming.	<a href="http://files.eric.ed.gov/fulltext/ED496995.pdf">http://files.eric.ed.gov/fulltext/ED496995.pdf</a>
<b>34. The First Year of Accelerating Opportunity: Implementation Findings from the States and Colleges</b>	Theresa Anderson, Lauren Eyster, Robert Lerman, Carol Clymer, Maureen Conway, and Marcela Montes; Urban Institute and Aspen Institute	2014	This Urban Institute/Aspen Institute report provides an initial evaluation of the Jobs for the Future's Accelerating Opportunity (AO) career pathways initiative, which was piloted in Illinois, Kansas, Kentucky, North Carolina, and Louisiana. AO focuses on the integration of career-related skills with basic education and English-language learning. Colleges found it difficult to align pathways with local labor market needs and student interests. Colleges also faced challenges in providing student supports and shifting perceptions around low-skill students. Some of these issues were addressed by partnering with local workforce agencies and community organizations, as well as focusing on increasing comfort with adult education among career and technical education staff.	The report provides a frank examination of challenges faced by colleges undertaking career pathways initiatives, which will provide researchers and leadership with valuable information regarding the potential difficulties in creating career education for low-skills adults.	<a href="http://www.jff.org/sites/default/files/publications/materials/413238-The-First-Year-of-Accelerating-Opportunity.pdf">http://www.jff.org/sites/default/files/publications/materials/413238-The-First-Year-of-Accelerating-Opportunity.pdf</a>
<b>35. The Promise of Career Pathways Systems Change: What role should workforce investment systems play? What benefits will result?</b>	Mary Gardner and Ray Uhalde; Jobs for the Future	2012	This report, produced by Jobs for the Future, provides guidance on the role of workforce development systems in implementing and developing career pathways programs. The toolkit outlines how workforce development agencies fit into the six key elements of developing and implementing career pathways systems. These six elements include building cross-agency partnerships and clarifying roles, identifying sectors or industries and engaging employers, designing education and training programs, identifying funding needs and sources, aligning policies and programs, and measuring system change and performance. The report details best practices and examples from the field.	This will be a useful resource for both administrators/policymakers and program partners interested in developing or improving career pathways programs.	<a href="http://www.jff.org/publications/promise-career-pathways-systems-change">http://www.jff.org/publications/promise-career-pathways-systems-change</a>

**Table C.2: Research Studies Detailed Description** *(continued)*

Title	Authors	Year Published	Summary	Potential Use	Website
<b>36. Tuning in to Local Labor Markets: Findings from the Sectoral Employment Impact Study [Wisconsin Regional Training Partnership]</b>	Sheila Maguire, Joshua Freely, Carol Clymer, Maureen Conway, and Deena Schwartz; Public/Private Ventures	2010	This impact study began in 2003 and evaluated the employment outcomes of low-income, disadvantaged workers and job seekers participating for two years in the Wisconsin Regional Training Partnership (WRTP), a sector-focused training program. The study used a random assignment experimental design. The study found that program participants experienced significant increases in long-term earnings and were significantly more likely to work in a higher wage job with benefits. There were no significant effects on their long-term employment outcomes. This study also evaluated Jewish Vocational Service-Boston and Per Scholas, but the Employment Strategies for Low-Income Adults Evidence Review only found WRTP to have strong evidence.	This study provides an example program and programmatic elements that could be used by administrators/policymakers who are interested in partnering with nonprofits and employers to create new sector-based training programs. It could also be used by researchers interested in evidenced-based sector programs and in developing research questions.	<a href="http://www.aspenwsi.org/wordpress/wp-content/uploads/TuningIntoLocalLaborMarkets.pdf">http://www.aspenwsi.org/wordpress/wp-content/uploads/TuningIntoLocalLaborMarkets.pdf</a>
<b>37. Turning the Tide: Five Years of Achieving the Dream in Community Colleges</b>	Elizabeth Zachry Rutshcow, Lashawn Richburg-Hayes, Thomas Brock, Genevieve Orr, Oscar Cerna, Dan Cullinan, Monica Reid Kerrigan, Davis Jenkins, Susan Gooden, Kasey Martin; MDRC	2011	This study, led by MDRC, examines the progress and results of the "Achieving the Dream: Community Colleges Count" initiative across 26 colleges from 2004 to 2009. The initiative was designed to help community colleges implement evidence-based practices by using student records and other data to examine student performance, identify barriers to success, and develop targeted interventions. The study found that universities increased their use of data following the demonstration, but that colleges faced challenges in scaling up reforms limiting the audience reached by the programs. Overall, few changes were found in student outcome trends across the colleges.	This study would be useful for program partners interested in analyzing data to inform program change and development.	<a href="http://www.mdrc.org/publication/turning-tide">http://www.mdrc.org/publication/turning-tide</a>
<b>38. Unlocking the Gate: What We Know About Improving Developmental Education</b>	Elizabeth Zachry Rutschow and Emily Schneider; MDRC	2011	This literature review, produced by MDRC, examines current research and practices in remedial education. In their review, MDRC found that programs that used an accelerated model, intertwined remedial education with technical education, or relied on an extra support system for students in remedial education were the most successful. MDRC also found that there was not too much quality evidence available on the ability of programs that targeted high school students as a way to improve academic outcomes.	This literature review can be helpful for researchers interested in the different research available on types of remedial education.	<a href="http://www.mdrc.org/sites/default/files/full_595.pdf">http://www.mdrc.org/sites/default/files/full_595.pdf</a>
<b>39. Using TANF Funds to Support Subsidized Youth Employment: The 2010 Summer Youth Employment Initiative</b>	Linda Rosenberg, Megan Hague Angus, Cassandra Pickens, and Michelle Derr; Mathematica Policy Research	2011	This implementation study, conducted by Mathematica, examines the use of TANF funding for the Summer Youth Employment Initiative in 2010. Funds were used to place youth into employment opportunities in their communities. The reliance on TANF funds required TANF agencies and local workforce development agencies to collaborate in the proposal process and occasionally during implementation and operation of the initiative. This study details some of the implementation and collaboration challenges and lessons. In this study, youth appreciated mentorship on soft skills (such as communicating with colleagues), in addition to task completion, and learned about the value of education in furthering their career.	This study will be useful for administrators/policymakers and program partners interested in developing youth-targeted employment programs, as well as those interested in collaboration. By detailing both the challenges and benefits associated with collaboration, stakeholders can learn how to avoid some of the pitfalls and take advantage of the benefits.	<a href="http://wdr.doleta.gov/research/FullText_Documents/ETAOP_2012_02.pdf">http://wdr.doleta.gov/research/FullText_Documents/ETAOP_2012_02.pdf</a>
<b>40. Washington State's Basic Food Employment &amp; Training (BFET) Program</b>	David Kaz and Rick Krauss; Seattle Jobs Initiative	2014	This report describes Washington's BFET program, a joint welfare-employment training program that combines SNAP and workforce development programs. The report details the program and includes some examples of lessons learned from implementing the program. Evaluators found that program participants were more likely to retain their jobs during the recent recession than those who did not participate in the program. Authors' recommendations include taking advantage of rarely used SNAP Employment and Training to support low-skilled SNAP recipients, starting with small pilot programs and building SNAP Employment and Training programs to complement workforce systems.	This study will be useful for administrators/policymakers and program partners interested in collaborating on workforce development and welfare-related programs.	<a href="http://www.seattlejobsinitiative.com/wp-content/uploads/SJI_BFET_June2014.pdf">http://www.seattlejobsinitiative.com/wp-content/uploads/SJI_BFET_June2014.pdf</a>

**Table C.2: Research Studies Detailed Description** (continued)

Title	Authors	Year Published	Summary	Potential Use	Website
<b>41. What Works In Job Training: A Synthesis of the Evidence</b>	U.S. Departments of Labor, Commerce, Education, and Health and Human Services	2014	This report provides a summary of the evidence on what job training programs, strategies, and supports work for adults and youth. Highlighted strategies include post-secondary education, work-based training, career education, and using labor market information. The report concludes with a discussion of the evidence gaps and recommendations for filling them.	This report could be used by administrators/policymakers to inform the adoption of evidence-based job training programs and strategies for adults and youth. It could also be used by researchers to inform future job training research studies.	<a href="http://www.dol.gov/asp/evaluation/jdt/jdt.pdf">http://www.dol.gov/asp/evaluation/jdt/jdt.pdf</a>
<b>42. Workforce Investment Act: Coordination of TANF Services Through OneStops Has Increased Despite Challenges</b>	U.S. Government Accountability Office	2002	This testimony before the Subcommittee on Employment, Safety, and Training, Committee on Health, Education, Labor, and Pensions to the U.S. Senate describes changes in TANF/WIA coordination immediately following WIA implementation, as well as summarizing the main challenges faced in coordinating TANF/WIA and listing successful approaches to coordination. Highlighted challenges include concerns about meeting WIA performance measures and limited training dollars. Highlighted success strategies include innovations in engaging employers and low-income job seekers and providing seamless services across TANF and WIA.	Administrators and policymakers may find these remarks useful to further understand and contextualize the history of TANF/WIA coordination and to learn of potential roadblocks and benefits to increased TANF/WIA collaboration.	<a href="http://www.gao.gov/new.items/d02739t.pdf">http://www.gao.gov/new.items/d02739t.pdf</a>
<b>43. Workforce Investment Act: Innovative Collaborations between Workforce Boards and Employers Helped Meet Local Needs</b>	U.S. Government Accountability Office	2012	This descriptive study conducted by the GAO considered 14 promising initiatives where local workforce boards have effectively engaged employers. The authors interviewed staff from the initiatives, as well as federal staff, and reviewed program materials. The study found six key elements that assisted with collaboration: "focusing on urgent needs, leadership, leveraging resources, employer-responsive services, minimizing administrative burden, and demonstrating results." It also identified challenges to collaborating that were specific to the constraints of the Workforce Investment Act, such as funding and performance measures.	Although focused on Local Workforce Investment Boards, this study could provide lessons learned to administrators/policymakers who are interested in increasing their engagement with employers.	<a href="http://www.gao.gov/assets/590/587809.pdf">http://www.gao.gov/assets/590/587809.pdf</a>
<b>44. Workforce Potential Project: Analysis of Area Labor Market and Provider Capacity</b>	Robert W. Glover, Dan O'Shea, Christopher T. King, Laura Stelling, and Richard Fonte; Ray Marshall Center for the Study of Human Resources, University of Texas–Austin	2012	This report identifies and examines high-demand, high-pay jobs and employment sectors in Austin, Texas. It reviews 17 occupations across four clusters and their alignment with various degrees, training options, and certifications. Basic skills are necessary prerequisites for the training needed to attain jobs that pay sustainable wage for a woman with two children.	This report will be useful for administrators/policymakers, program partners, and researchers interested in sector-focused employment options as it provides detailed information on high-demand, high-pay jobs available to individuals with less than a baccalaureate degree, as well as the conditions and training necessary to attain those jobs; this could serve as an example for research in other geographic areas.	<a href="http://repositories.lib.utexas.edu/bitstream/handle/2152/20236/The%20Workforce%20Potential%20Project%20Analysis%20of%20Labor%20Market%20and%20Capacity%20Analysis.pdf?sequence=3">http://repositories.lib.utexas.edu/bitstream/handle/2152/20236/The%20Workforce%20Potential%20Project%20Analysis%20of%20Labor%20Market%20and%20Capacity%20Analysis.pdf?sequence=3</a>
<b>45. Workforce System One-Stop Services for Public Assistance and Other Low-Income Populations: Lessons Learned in Selected States</b>	David J. Wright and Lisa M. Montiel; Rockefeller Institute of Government at SUNY Albany	2010	This study from the Rockefeller Institute studies six sites and their successful practices that have worked to help program recipients in WIA One-Stop Career Centers. The report includes lessons learned from the collaboration and its role in improving access to resources for program recipients. It also identifies challenges the programs faced in serving this population, like difficulty preparing low-skill TANF customers to access the job market given the program's experience with already skilled and previously employed clients. The report notes that successful practices include targeting high-growth sectors, allowing for highly flexible collaboration between centers and local agencies, and maintaining strong relationships with local organizations to support future projects.	This study can help administrators/policymakers and program partners interested in collaborating through workforce development centers. It outlines how to collaborate and the benefits experienced from collaboration.	<a href="http://www.rockinst.org/pdf/workforce_welfare_and_social_services/2010-04-DOL_Workforce_System.pdf">http://www.rockinst.org/pdf/workforce_welfare_and_social_services/2010-04-DOL_Workforce_System.pdf</a>

## **Appendix D:**

# **Technical Assistance Resources**

(Labor Market Information, Career Pathways/  
Sectors Strategies, and Career Exploration)

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**Table D.1a: Technical Assistance Resources Summary—Labor Market Information**

Title	Type of Resource								LMI Subtopics					Sponsoring Agency				
	Resource Compilation	Reports and Briefs	Toolkit/How-to Guide	Promising Practices/ State Examples	Webinar/Training	Online Career Exploration Tools and Assessments	Community of Practice/ Peer Support Network	Other <sup>a</sup>	Real-time LMI	Traditional LMI	State/Local LMI	National LMI	Career Pathways	Department of Labor	Department of Education	Department of Health and Human Services	Census Bureau	Other <sup>b</sup>
1. Catalogue of Workforce Information Sources	•			•				•	•	•	•		•					
2. Credentials That Work		•			•		•	•		•		•						•
3. Guide to State and Local Workforce Data	•							•	•	•			•					
4. Labor Market Information Win-Win Network	•	•	•	•	•			•	•	•	•		•					
5. LMI Institute Website		•			•		•	•	•									•
6. Skimming for Skills	•							•	•	•	•		•					
7. Tangled Up in Data? Putting Workforce Data in Employment and Education Programs					•			•	•	•	•		•					
8. Translating LMI into service delivery					•				•	•	•		•					
9. Unlocking the Treasure Chest of Labor Market Information	•	•	•	•				•	•	•	•							•
10. Using data to connect TANF clients to good jobs: An opportunity to foster WIOA partnerships			•	•				•	•	•	•					•		
11. Using Labor Market Information to Design Job-Driven Training Programs	•		•					•	•	•	•	•				•		

Note: Resources are ordered alphabetically, not to reflect resource quality or preference.

<sup>a</sup> “Other” includes technical assistance.

<sup>b</sup> “Other” includes organizations such as colleges/universities, as well as nonprofit and for-profit agencies.

**Table D.2a: Technical Assistance Resources Detailed Description—Labor Market Information**

Title	Summary	Website
<b>LABOR MARKET INFORMATION</b>		
<b>1. Catalogue of Workforce Information Sources (DOL)</b>	Compiled by DOL-ETA, this catalog discusses labor market and workforce information sources and their targeted users by government agency, web-based systems that deliver this information, and new tools that can be used to integrate and analyze it.	<a href="http://www.doleta.gov/programs/pdf/environmental-scan-report-final.pdf">http://www.doleta.gov/programs/pdf/environmental-scan-report-final.pdf</a>
<b>2. Credentials That Work</b>	Jobs for the Future’s Credentials That Work initiative provides community colleges access to real-time LMI and training and technical assistance to help use it. The website includes webinars and reports on using real-time LMI that are applicable to a wide audience.	<a href="http://www.jff.org/initiatives/credentials-work">http://www.jff.org/initiatives/credentials-work</a>
<b>3. Guide to State and Local Workforce Data (DOL)</b>	This DOL-ETA document compiles resources from a variety of state and local employment and economic datasets in nearly 20 different topic areas. It includes web addresses to more than 70 online resources, tools, and datasets on topics such as employment and compensation; job vacancies; benefits; and educational achievement, attainment, credentials, and skills.	<a href="https://www.workforce3one.org/view/2001213136995539545/info">https://www.workforce3one.org/view/2001213136995539545/info</a>
<b>4. Labor Market Information Win-Win Network (DOL)</b>	Created by DOL-ETA, this resource is a community of practice and peer support network focused on LMI. The website has links to many resources, including reports, blog posts, webinars, podcasts, and data guides. It includes a real-time LMI repository of background information, data sources, and studies using real-time LMI. A highlight is the “We’ve Got Your Number(s)—Key Workforce Trends” post, which includes links to tables and charts of national workforce trends data.	<a href="https://winwin.workforce3one.org/">https://winwin.workforce3one.org/</a>
<b>5. LMI Institute website</b>	The LMI Institute is a membership organization that supports the use of labor market information. The Institute offers trainings, annual conferences, and technical assistance. The website includes links to webinars and publications pertaining to LMI and information on datasets, including the spreadsheet “32 Education and Workforce Data Sources.” In addition, the website includes contact information for each state’s LMI agency.	<a href="http://www.lmiontheweb.org/">http://www.lmiontheweb.org/</a>  Data spreadsheet: <a href="http://www.lmiontheweb.org/About/LMISystem/Public_and_Private_Sources_of_Education_and_Workforce_Data.pdf">http://www.lmiontheweb.org/About/LMISystem/Public_and_Private_Sources_of_Education_and_Workforce_Data.pdf</a>
<b>6. Skimming for Skills (DOL)</b>	Created by the DOL-ETA, this guide provides information on data sources that can be used to identify skill shortages or mismatches. It includes links to available data sources, such as surveys, projections, job openings, and education and skills data.	<a href="https://winwin.workforce3one.org/view/2001322668182576469/info">https://winwin.workforce3one.org/view/2001322668182576469/info</a>
<b>7. Tangled Up in Data? Putting Workforce Data in Employment and Education Programs (DOL)</b>	This DOL-ETA webinar demonstrates how to use LMI to identify (1) high-growth, in-demand, good jobs; and (2) the education and training required for them. It includes information on available e-tools and specific information for rural areas and farmworkers.	<a href="https://winwin.workforce3one.org/view/Tangled_Up_in_Data__Putting_LMI_to_Work_in_Employment/info">https://winwin.workforce3one.org/view/Tangled_Up_in_Data__Putting_LMI_to_Work_in_Employment/info</a>
<b>8. Translating LMI into service delivery (DOL)</b>	This E-Learning series, created by DOL-ETA is geared to state workforce agencies to teach them about LMI and how they can use LMI in their daily service provision. Modules include “Introduction to the world of LMI,” “Utilizing LMI to Serve Job Seekers,” and “LMI for Assessing Skills.”	<a href="https://winwin.workforce3one.org/page/resources/1001111559308481596">https://winwin.workforce3one.org/page/resources/1001111559308481596</a>
<b>9. Unlocking the Treasure Chest of Labor Market Information</b>	Written by Aaron Fichtner, Ronnie Kauder, and Kathy Krepcio for the Heldrich Center for Workforce Development at Rutgers University, this research brief provides a framework for understanding labor market information and identifies available data sources. It discusses the different users of LMI and their needs and provides illustrative examples of how states could use LMI.	<a href="http://www.heldrich.rutgers.edu/products/unlocking-treasure-chest-labor-market-information-crucial-information-job-seekers-educators">http://www.heldrich.rutgers.edu/products/unlocking-treasure-chest-labor-market-information-crucial-information-job-seekers-educators</a>

**Table D.2a: Technical Assistance Resources Detailed Description—Labor Market Information** *(continued)*

Title	Summary	Website
<b>LABOR MARKET INFORMATION</b>		
<b>10. Using data to connect TANF clients to good jobs: An opportunity to foster WIOA partnerships (HHS)</b>	This OPRE-funded report serves as an introduction to using LMI for TANF practitioners. It provides basic information about LMI, identifies opportunities for TANF practitioners to use the information, and offers suggestions for collaborating with state departments of labor to do so.	<a href="https://www.acf.hhs.gov/programs/opre/resource/using-data-to-connect-tanf-clients-to-good-jobs-an-opportunity-to-foster-wioa-partnerships">https://www.acf.hhs.gov/programs/opre/resource/using-data-to-connect-tanf-clients-to-good-jobs-an-opportunity-to-foster-wioa-partnerships</a>
<b>11. Using Labor Market Information to Design Job-Driven Training Programs (HHS)</b>	This Health Profession Opportunity Grant (HPOG) toolkit provides a step-by-step approach for using LMI and other data to understand employer needs and create career pathways programs.	<a href="http://www.acf.hhs.gov/sites/default/files/ofa/using_labor_market_information_to_design_job_driven_training_programs.pdf">http://www.acf.hhs.gov/sites/default/files/ofa/using_labor_market_information_to_design_job_driven_training_programs.pdf</a>

**Table D.1b: Technical Assistance Resources Summary—Career Pathways/ Sector Strategies**

Title	Type of Resource							Career Pathways Subtopics					Sponsoring Agency					
	Resource Compilation	Reports and Briefs	Toolkit/How-to Guide	Promising Practices/ State Examples	Webinar/Training	Online Career Exploration Tools and Assessments	Community of Practice/ Peer Support Network	Career Pathways	Sector Strategies	Adult Basic Education	Cross-agency collaboration	Employer engagement	Funding	Department of Labor	Department of Education	Department of Health and Human Services	Census Bureau	Other <sup>a</sup>
1. Accelerating Opportunity Resource Library	●							●	●									●
2. Adult Career Pathways Training and Support Center	●				●			●	●					●				
3. Bridges to Careers for Low-Skilled Adults			●				●	●	●		●	●						●
4. Career Pathways—Approaches for the Delivery of Education, Training, Employment, and Human Services		●		●				●			●	●			●			
5. Career Pathways Catalog of Toolkits	●							●	●									●
6. Career Pathways Exchange							●	●										●
7. Career Pathways Group							●	●	●									●
8. Career Pathways How-To Guide			●	●				●	●	●	●	●						●
9. Career Pathways Initiative Community of Practice	●						●	●	●	●	●	●	●					
10. Career Pathways Roadmap Web Tool							●	●										
11. Career Pathways Toolkit: A Guide for System Development	●		●					●	●	●	●	●	●	●				
12. Competency Model Clearinghouse	●		●	●	●			●					●					
13. Connecting Education and Work	●			●				●										●
14. Corporation for a Skilled Workforce	●			●				●	●									●
15. Engaging Employers to Support Adult Career Pathways Programs			●	●				●			●			●				
16. Innovations in Welfare Policy: Building Successful Pathways				●			●	●	●									●
17. Job-driven training resources	●		●					●			●							●
18. National Network of Sector Partners	●			●	●		●		●			●						●
19. National Skills Coalition	●			●	●			●	●	●	●							●
20. Navigating TANF and WIA to Build Health Profession Career Pathways—A Guide for HPOG Programs			●	●				●	●	●		●						●
21. Sector Strategies: Start Planning Now				●					●				●					
22. State Sector Strategies: Regional Solutions to Worker and Employer Needs			●	●					●			●						●

**Table D.1b: Technical Assistance Resources Summary—Career Pathways/ Sector Strategies** (continued)

Title	Type of Resource						Career Pathways Subtopics						Sponsoring Agency					
	Resource Compilation	Reports and Briefs	Toolkit/How-to Guide	Promising Practices/ State Examples	Webinar/Training	Online Career Exploration Tools and Assessments	Community of Practice/ Peer Support Network	Career Pathways	Sector Strategies	Adult Basic Education	Cross-agency collaboration	Employer engagement	Funding	Department of Labor	Department of Education	Department of Health and Human Services	Census Bureau	Other <sup>a</sup>
<b>23. Tools for Building Employer-Educator Partnerships</b>	●			●			●				●			●				
<b>24. Workforce Strategies Initiative Research &amp; Resources</b>	●							●				●						●

Note: Resources are ordered alphabetically, not to reflect resource quality or preference.

<sup>a</sup> “Other” includes organizations such as colleges/universities, as well as nonprofit and for-profit agencies.

**Table D.2b: Technical Assistance Resources Detailed Description—Career Pathways/ Sector Strategies**

Title	Summary	Website
<b>CAREER PATHWAYS/SECTOR STRATEGIES</b>		
<b>1. Accelerating Opportunity Resource Library</b>	This Jobs for the Future resource library provides links to tools and resources for creating career pathways initiatives geared toward low-income adults. The resources are grouped into nine categories: communications, curriculum and instruction, data, finance, labor market engagement, model development, policy guidance and innovation, state vision, and support services.	<a href="http://www.acceleratingopportunity.org/virtualacademy/resources">http://www.acceleratingopportunity.org/virtualacademy/resources</a>
<b>2. Adult Career Pathways Training and Support Center (ED)</b>	No longer operational, this ED resource provided a community of practice for practitioners developing and implementing Adult Career Pathways systems. Resources are still available on the website, including online courses, a resource center, issue briefs, webcasts, and newsletters. The website provides a link to a current community of practice for Career Pathways.	<a href="http://lincs.ed.gov/programs/acp">http://lincs.ed.gov/programs/acp</a>
<b>3. Bridges to Careers for Low-Skilled Adults: A Program Development Guide</b>	This guide, produced by the nonprofit Women Employed, provides instructions for developing and implementing bridge training programs, which “prepare adults who lack adequate basic skills to enter and succeed in postsecondary education and training, leading to career-path employment.” The guide includes example curricula.	<a href="http://womenemployed.org/sites/default/files/resources/BridgeGuide.FullReport.2005.pdf">http://womenemployed.org/sites/default/files/resources/BridgeGuide.FullReport.2005.pdf</a>
<b>4. Career Pathways— Approaches for the Delivery of Education, Training, Employment, and Human Services: Summary of Responses to a Request for Information (ED)</b>	This ED-funded summary report provides examples of the key components of career pathways systems, facilitators and barriers to creating such systems, recommendations to government agencies for supporting career pathways development, and promising practices. The examples were provided by 141 respondents to a Request for Information issued by ED, HHS, and DOL in April 2014.	<a href="http://lincs.ed.gov/publications/pdf/CP_RFI.pdf">http://lincs.ed.gov/publications/pdf/CP_RFI.pdf</a>
<b>5. Career Pathways Catalog of Toolkits (ACF-OFA)</b>	This catalog, created by ACF-OFA, contains an online directory of toolkits for creating career pathways initiatives and communicating with the different sectors involved (for example, human services, workforce, and education). The catalog can be filtered by publisher, target population, intended audience, primary career pathway element addressed, and industry.	<a href="https://cptoolkitcatalog.peerta.acf.hhs.gov/">https://cptoolkitcatalog.peerta.acf.hhs.gov/</a>
<b>6. Career Pathways Exchange (ED)</b>	This ED-funded resource is an email-based information service that disseminates career pathways information, resources, and event announcements from government and private organizations. Subscribers can tailor the information they receive based on their area of interest, including identifying industry sectors, engaging employers, and designing education and training programs.	<a href="http://lincs.ed.gov/programs/movingpathways/career-pathways-exchange">http://lincs.ed.gov/programs/movingpathways/career-pathways-exchange</a>
<b>7. Career Pathways Group (ED)</b>	This ED-funded community of practice provides a venue for learning and sharing best practices and issues raised in implementing career pathways systems. Topics discussed include contextual instruction, work readiness, dual and concurrent enrollment, integrated education and training, program design, academic and career counseling, flexible wrap-around services, stackable industry-recognized credentials, assessment, and evaluation.	<a href="https://community.lincs.ed.gov/group/career-pathways">https://community.lincs.ed.gov/group/career-pathways</a>
<b>8. Career Pathways How-To Guide</b>	This Workforce Strategy Center guide provides a step-by-step process for creating a career pathways initiative, including a gap analysis, career pathways planning, implementation, and continuous improvement and expansion. It also discusses the roles state agencies and leadership can play in developing pathways systems and highlights best practices.	<a href="http://files.eric.ed.gov/fulltext/ED496995.pdf">http://files.eric.ed.gov/fulltext/ED496995.pdf</a>
<b>9. Career Pathways Initiative Community of Practice (DOL)</b>	This DOL-ETA community of practice provides practitioners with resources and a venue for sharing information and best practices with peers on developing and implementing career pathways systems. Available resources include information on promising strategies, trainings, toolkits, events, blog posts, and live chats.	<a href="https://learnwork.workforce3one.org/">https://learnwork.workforce3one.org/</a>

**Table D.2b: Technical Assistance Resources Detailed Description—Career Pathways/Sector Strategies** (continued)

Title	Summary	Website
<b>CAREER PATHWAYS/SECTOR STRATEGIES</b>		
<b>10. Career Pathways Roadmap Web Tool</b>	This web tool, created by the Oregon Career Pathways Initiative, provides visual career pathways road maps specific to Oregon’s labor market, including information on occupations, careers, education, and training. The roadmaps help users plan their educations and work experience in pursuit of careers, including courses, competencies, and credentials needed. The source code can be downloaded to develop a similar tool in other states.	<a href="http://oregon.ctepathways.org/">http://oregon.ctepathways.org/</a>
<b>11. Career Pathways Toolkit: A Guide for System Development (DOL)</b>	This DOL-funded toolkit provides a guide and framework for creating career pathways systems at the state, regional or local level. It includes tools and resources for planning and discusses promising practices.	<a href="https://www.workforce3one.org/view/2001523732879857569">https://www.workforce3one.org/view/2001523732879857569</a>
<b>12. Competency Model Clearinghouse (DOL)</b>	This clearinghouse, operated by DOL, provides industry competency models, tools, and resources to build custom competency models and career ladders and lattices. Resources include worksheets and tutorials to help develop models and ladders, and examples of their use.	<a href="http://www.careeronestop.org/CompetencyModel/">http://www.careeronestop.org/CompetencyModel/</a>
<b>13. Connecting Education and Work</b>	This Center for Law and Social Policy webpage lists promising state practices for creating career pathway initiatives. It provides links to reports and provides examples from states that have successfully enacted career pathways initiatives.	<a href="http://www.clasp.org/issues/postsecondary/pages/connecting-education-and-work">http://www.clasp.org/issues/postsecondary/pages/connecting-education-and-work</a>
<b>14. Corporation for a Skilled Workforce</b>	The Corporation for a Skilled Workforce is a nonprofit workforce development organization that works in part on sector strategies and career pathways. The website links to publications, projects, and relevant news about sector strategies and career pathways.	<a href="http://skilledwork.org/what-we-do/sector-strategies-career-pathways-integration/">http://skilledwork.org/what-we-do/sector-strategies-career-pathways-integration/</a>
<b>15. Engaging Employers to Support Adult Career Pathways Programs (ED)</b>	This ED-funded issue brief provides example approaches and promising practices for engaging and partnering with employers in support of career pathways programs.	<a href="http://lincs.ed.gov/publications/pdf/acp/Engaging_Employers_IssueBrief.pdf">http://lincs.ed.gov/publications/pdf/acp/Engaging_Employers_IssueBrief.pdf</a>
<b>16. Innovations in Welfare Policy: Building Successful Pathways: A Sector-Based, Career Advancement Model</b>	This white paper by the research and advocacy organization, Prosperity Agenda, provides a Career Advancement Model to be used with TANF recipients that includes the following components: (1) assessment, (2) basic education through sector-based strategies, (3) transitional jobs or internships linked to education and specific sectors, and (4) continuing support services.	Request a copy of the white paper from <a href="mailto:info@theprosperityagenda.org">info@theprosperityagenda.org</a> .
<b>17. Job-driven training resources (ACF-OFA)</b>	This Dear Colleague Letter, produced by ACF-OFA, encourages TANF programs to use a checklist—included with the letter—to make TANF employment and training programs more job-driven. The letter provides links to LMI datasets, strategies for engaging employers, and example programs.	<a href="http://www.acf.hhs.gov/sites/default/files/ofa/jdtdc_dear_colleague_letter_01_08_14_final.pdf">http://www.acf.hhs.gov/sites/default/files/ofa/jdtdc_dear_colleague_letter_01_08_14_final.pdf</a>
<b>18. National Network of Sector Partners</b>	The National Network of Sector Partners is a membership organization in support of sector initiatives and strategies. The website includes webinars, conference information, industry communities of practice, and publications on sector initiatives.	<a href="http://www.insightccd.org/our-areas-of-focus/workforce-development/national-network-of-sector-partners-nnsp/">http://www.insightccd.org/our-areas-of-focus/workforce-development/national-network-of-sector-partners-nnsp/</a>
<b>19. National Skills Coalition</b>	The National Skills Coalition is an advocacy organization focused on investing in American workers’ skills. The website includes webinars and publications on sector partnerships, career pathways, data and credentials, and job-driven investment.	<a href="http://www.nationalskillscoalition.org/">http://www.nationalskillscoalition.org/</a>
<b>20. Navigating TANF and WIA to Build Health Profession Career Pathways—A Guide for HPOG Programs (ACF)</b>	This Center for Law and Social Policy guide, funded by ACF, provides information about partner agency funding streams to help programs developing career pathways with cross-agency collaboration. The guide focuses on the provisions and accountability structures of TANF, WIA Title 1, and WIA Title II and provides examples of local coordination efforts.	<a href="http://www.acf.hhs.gov/node/16191">http://www.acf.hhs.gov/node/16191</a>

**Table D.2b: Technical Assistance Resources Detailed Description—Career Pathways/Sector Strategies** *(continued)*

Title	Summary	Website
<b>CAREER PATHWAYS/SECTOR STRATEGIES</b>		
<b>21. Sector Strategies: Start Planning Now (DOL-ETA)</b>	This DOL-ETA webinar discusses the steps to developing sector strategies, including the use of LMI, and provides an example from Kentucky.	<a href="https://www.workforce3one.org/view/5001428739480318011/info">https://www.workforce3one.org/view/5001428739480318011/info</a>
<b>22. State Sector Strategies: Regional Solutions to Worker and Employer Needs</b>	This National Governor’s Association issue brief defines sector initiatives and provides state examples. It also suggests steps states can take to implement their own sector initiatives.	<a href="http://www.nga.org/files/live/sites/NGA/files/pdf/06STATESECREG.PDF">http://www.nga.org/files/live/sites/NGA/files/pdf/06STATESECREG.PDF</a>
<b>23. Tools for Building Employer-Educator Partnerships (ED)</b>	This ED, Office of Career, Technical, and Adult Education website is designed to educate employers and educators about the merits of partnering. The website includes best practices and evidence-based tools and resources for developing career pathways.	<a href="http://lincs.ed.gov/employers/index.htm">http://lincs.ed.gov/employers/index.htm</a>
<b>24. Workforce Strategies Initiative Research &amp; Resources</b>	This Aspen Institute webpage provides information, reports, and webinars on sector initiatives organized by their approach, costs and funding, and industry targeted. It includes information specific to low-wage workers and community colleges.	<a href="http://www.aspenwsi.org/research-resources/">http://www.aspenwsi.org/research-resources/</a>

**Table D.1c: Technical Assistance Resources Summary—Career Exploration**

Title	Type of Resource						Career Exploration Subtopics					Sponsoring Agency				
	Resource Compilation	Reports and Briefs	Toolkit/How-to Guide	Promising Practices	Webinar/Training	Online Career Exploration Tools and Assessments	Curriculum	Career Assessment and Planning	Credentialing	Job Search/Job Readiness	Other Employment-Focused Resources	Department of Labor	Department of Education	Department of Health and Human Services	Census Bureau	Other <sup>a</sup>
1. Career Information Delivery System Links	●					●		●	●	●	●					
2. CareerOneStop	●	●	●	●	●	●		●	●	●	●					
3. Certification Finder						●		●			●					
4. College Navigator						●		●				●				●
5. Credential Resource Guide	●		●					●			●					
6. Empower your Future: Career Readiness Curriculum Guide							●	●	●	●						●
7. Local Training Finder						●		●	●	●	●					
8. My Next Move	●					●		●	●	●	●					
9. My Skills, My Future						●		●	●	●	●					
10. O*NET Online						●		●	●	●	●					
11. Occupational Outlook Handbook						●		●	●	●	●					
12. Occupational Profiles						●		●	●	●	●					
13. Virtual Career Network	●				●	●		●	●	●	●					
14. What's My Next Move			●					●	●	●	●					

Note: Resources are ordered alphabetically, not to reflect resource quality or preference.

<sup>a</sup>“Other” includes organizations such as colleges/universities, as well as nonprofit and for-profit agencies.

**Table D.2c: Technical Assistance Resources Detailed Description—Career Exploration**

Title	Summary	Website
<b>CAREER EXPLORATION</b>		
<b>1. Career Information Delivery System (CIDS) Links (DOL)</b>	This DOL-ETA website provides links to state CIDS, computerized programs that provide self-assessment, career exploration, and other occupational and educational information about career training opportunities.	<a href="http://www.careerinfonet.org/crl/library.aspx?LVL2=45&amp;LVL3=n&amp;LVL1=23&amp;CATID=400&amp;PostVal=3">http://www.careerinfonet.org/crl/library.aspx?LVL2=45&amp;LVL3=n&amp;LVL1=23&amp;CATID=400&amp;PostVal=3</a>
<b>2. CareerOneStop (DOL)</b>	This DOL-ETA website provides online tools to explore education, training, and careers, including assessment tools, guides, and occupational profiles.	<a href="http://www.careeronestop.org">http://www.careeronestop.org</a>
<b>3. Certification Finder (DOL)</b>	This DOL-ETA tool allows users to search for certifications by keyword, occupation, or industry. Certifications can be earned to demonstrate skills and abilities; these may be required for some occupations.	<a href="http://www.careeronestop.org/Education-Training/Find/certification-finder.aspx">http://www.careeronestop.org/Education-Training/Find/certification-finder.aspx</a>
<b>4. College Navigator (ED)</b>	This ED, National Center for Education Statistics tool provides information on more than 9,000 colleges, universities, and postsecondary vocational and technical schools in the United States. The database can be searched by location, type of institution, type of credentials awarded, and program of study.	<a href="http://nces.ed.gov/collegenavigator/">http://nces.ed.gov/collegenavigator/</a>
<b>5. Credential Resource Guide (DOL)</b>	This DOL-ETA guide provides information on credentials, including the different types of credentials, how to acquire them, and how they can be stacked in career pathways models.	<a href="http://wdr.doleta.gov/directives/attach/TEGL15-10a2.pdf">http://wdr.doleta.gov/directives/attach/TEGL15-10a2.pdf</a>
<b>6. Empower your Future: Career Readiness Curriculum Guide</b>	Created by the Commonwealth Corporation, a nonprofit, Empower your Future is a career readiness curriculum for youth, including units on self-assessment, career exploration, job readiness, job search, and life skills, such as coping, budgeting, and goal setting.	<a href="http://www.commcorp.org/resources/documents/Empower%20Your%20Future%20-%20Career%20Readiness%20Curriculum%20Guide%202010.pdf">http://www.commcorp.org/resources/documents/Empower%20Your%20Future%20-%20Career%20Readiness%20Curriculum%20Guide%202010.pdf</a>
<b>7. Local Training Finder (DOL)</b>	Created by DOL-ETA, this online tool can be used to identify education and training programs. It lists training programs available by state and is searchable by occupation, school, or program. Results can be filtered by program length.	<a href="http://www.careeronestop.org/toolkit/training/find-local-training.aspx">http://www.careeronestop.org/toolkit/training/find-local-training.aspx</a>
<b>8. My Next Move (DOL)</b>	This DOL-ETA tool is for learning about career options and high-growth jobs. It includes information on job tasks, skills, and salary for more than 900 careers. It is searchable by the amount of job preparation required and includes wage information for occupations that require varying amounts of training, education, and work experience. It also includes an online career interest assessment and links to relevant training programs. My Next Move is based on O*NET information.	<a href="http://www.mynextmove.org/">http://www.mynextmove.org/</a>
<b>9. My Skills, My Future (DOL)</b>	This DOL-ETA tool helps users identify occupations that require skills and knowledge similar to those required in their previous job(s). Users can gather information on current job openings, the type of work involved, and the education required for new occupations. The tool also helps users locate training programs and apply for jobs.	<a href="http://www.myskillsmyfuture.org/">http://www.myskillsmyfuture.org/</a>
<b>10. O*NET Online (DOL)</b>	Created by DOL-ETA, this occupational information tool includes descriptions of occupations; employment projections; current job openings; skills, abilities, and education required; and work activities.	<a href="http://www.onetonline.org/">http://www.onetonline.org/</a>
<b>11. Occupational Outlook Handbook (DOL)</b>	This DOL-BLS handbook provides information about hundreds of occupations, including the level of education, on-the-job training, and work experience required; the projected job openings; type of work activities; and pay.	<a href="http://www.bls.gov/ooh/">http://www.bls.gov/ooh/</a>
<b>12. Occupational Profiles (DOL)</b>	Created by the DOL-ETA, this search tool can be used to look up occupations by keyword and by state. It provides occupational descriptions and videos; state and national wages; state and national trends; knowledge, skills, and abilities required; tasks and activities; tools and technology; education and training; related occupational profiles; and web resources.	<a href="http://www.careerinfonet.org/Occupations/select_occupation.aspx?next=occ_rep&amp;level=&amp;optstatus=&amp;id=&amp;nodeid=2&amp;soccode=&amp;stfips=&amp;jobfam=&amp;menuMode=">http://www.careerinfonet.org/Occupations/select_occupation.aspx?next=occ_rep&amp;level=&amp;optstatus=&amp;id=&amp;nodeid=2&amp;soccode=&amp;stfips=&amp;jobfam=&amp;menuMode=</a>

**Table D.2c: Technical Assistance Resources Detailed Description—Career Exploration** *(continued)*

Title	Summary	Website
<b>CAREER EXPLORATION</b>		
<b>13. Virtual Career Network (VCN) (DOL)</b>	Sponsored by DOL-ETA, the VCN is a career exploration and training tool in the fields of healthcare, transit, and green jobs. VCN helps users (1) determine which career in these fields might be right for them by providing detailed occupation information, (2) gain the required training and skills by linking them to free online training courses and providing information on additional training and education programs, and (3) obtain a job by listing current job openings and providing job search tools.	<a href="https://www.vcn.org/index.php">https://www.vcn.org/index.php</a>
<b>14. What's My Next Move (DOL)</b>	Created by the DOL-ETA, this seven-step guide helps high school students manage their education and career path. The guide uses the DOL's online profiler to introduce students to occupations that match their interests. It also teaches students how to use the My Next Move and CareerOneStop websites.	<a href="http://www.careeronestop.org/whats-my-next-move.aspx/">http://www.careeronestop.org/whats-my-next-move.aspx/</a>

# **Appendix E:** **Client Assessments**

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**Table E.1: Client Assessments Summary Table**

Title	Primary Focus		Assessment Topics				How Administered			Sponsoring Agency			Cost
	Education	Employment and Careers	Vocational Skills/Abilities	Basic Skills	Work Readiness	Work Interests and Values	Online	Paper and Pencil	English and Spanish	Department of Labor	Department of Health and Human Services	Other <sup>a</sup>	
1. Ability Profiler	•	•	•	•				•		•			free
2. Accuplacer	•		•	•			•					•	varies
3. Advanced Math and Verbal Skills	•		•	•			•					•	varies
4. Assessing Barriers to Education	•			•				•				•	\$2.08/assessment
5. Barriers to Employment Success Inventory (BESI)		•			•		•	•				•	\$2.44/assessment
6. Basic Skills Test	•	•	•	•	•		•	•				•	varies
7. Campbell Interest and Skill Survey		•	•			•	•	•	•			•	\$73.35/kit
8. Career Ability Placement Survey (CAPS)		•	•	•			•	•	•			•	\$4.22/assessment
9. Career Assessment Inventory– Vocational Version		•				•	•	•	•			•	\$69.20/kit
10. Career Key	•	•				•	•					•	\$12.95/assessment
11. Career Liftoff Interest Inventory		•				•	•					•	\$19.95/assessment
12. Career Occupational Preference System Interest Inventory (COPS)	•	•				•	•	•	•			•	\$0.66/assessment
13. Comprehensive Adult Student Assessment Systems (CASAS)	•	•	•	•	•		•	•				•	\$2.75/assessment
14. General Assessment of Instructional Needs (GAIN)	•		•	•			•	•				•	varies
15. Interest Profiler		•				•	•	•		•			free
16. Online Work Readiness Assessment (OWRA)	•	•			•		•				•		free
17. Skills Profiler		•	•	•			•			•			free
18. SmarterMeasure	•		•				•					•	\$29.95
19. System of Integrated Guidance and Information	•		•			•	•					•	\$17.95 for 90 days
20. Tests of Adult Basic Education (TABE)	•			•			•	•				•	\$5.71/assessment
21. Work Importance Locator		•				•	•	•		•			free
22. WorkKeys		•		•	•		•	•				•	varies

Note: Assessments are ordered alphabetically, not to reflect assessment quality or preference.

<sup>a</sup>“Other” includes nonprofit and for-profit agencies and organizations.

Note: These assessments are included as examples for possible use by state TANF administrators. Neither OPRE nor Mathematica endorses these assessments.

**Table E.2: Client Assessments Detailed Descriptions**

<b>Title</b>	<b>Organization</b>	<b>Summary</b>	<b>Cost</b>	<b>Website</b>
<b>1. Ability Profiler</b>	DOL/O*NET	Measures nine abilities: verbal, arithmetic reasoning, computation, spatial, form perception, clerical perception, motor coordination, finger dexterity, and manual dexterity. Matches people with occupations aligned with their strengths and identifies areas that may require additional training or education. Administered by staff using a paper-and-pencil format and computerized scoring. Can be completed in approximately 60 minutes.	Available for download or can order paper copies/materials for a fee (\$3–\$50).	<a href="http://www.onetcenter.org/AP.html">http://www.onetcenter.org/AP.html</a>
<b>2. Accuplacer</b>	The College Board	Measures reading, writing, mathematics, and computer skills to determine ability level and remediation needs. Uses “computer-adaptive diagnostics” that adjust to the test taker’s ability level. Administered online. Reports are available instantly online after completion.	Call for pricing: 1-866-607-5223, or email: <a href="mailto:info@accuplacer.org">info@accuplacer.org</a> .	<a href="https://accuplacer.colleg-eboard.org/professionals">https://accuplacer.colleg-eboard.org/professionals</a>
<b>3. Advanced Math and Verbal Skills</b>	Wonderlic	Measures advanced language and math concepts including grammar, vocabulary, reading comprehension, expressions and equations, and statistics and probability to determine educational program placement and remediation needs. Results designate students as Below College-Ready, College-Ready, or Bachelor’s Degree-Equivalent. The assessment is based on O*NET and Common Core State Standards. Administered online. Can be completed in 60 minutes.	Pricing varies by type of test and quantity. Sales contact number: 1-877-605-9496.	<a href="http://www.wonderlic.com/wonderlic-education-solutions/admissions-and-placement/student-placement/advanced-math-and-verbal-skills-advanced-skills-test">http://www.wonderlic.com/wonderlic-education-solutions/admissions-and-placement/student-placement/advanced-math-and-verbal-skills-advanced-skills-test</a>
<b>4. Assessing Barriers to Education</b>	JIST Career Solutions	Helps identify barriers to postsecondary education (including emotional, situational, attitudinal, and material) and strategies for barrier removal. Also helps identify the best educational opportunities for individuals. The assessment is written at an 8th-grade level and can be completed in 20 minutes using paper and pencil. Assessments are self-scored and self-interpreted.	\$51.95 per 25 assessments. Free sample available.	<a href="http://jist.emcp.com/assessing-barriers-to-education.html">http://jist.emcp.com/assessing-barriers-to-education.html</a>
<b>5. Barriers to Employment Success Inventory (BESI)</b>	JIST Career Solutions	Helps identify barriers to job success. The assessment involves rating 50 statements in categories spanning from emotional wellbeing to career planning. The tool suggests barrier removal strategies and can aid in action planning. The assessment is written at a 7th-grade reading level and can be completed in 30 minutes using paper and pencil or online. Paper assessments are self-scored and self-interpreted. Online assessments are scored automatically.	\$60.95 per 25 paper assessments or online attempts. Free sample available.	<a href="http://jist.emcp.com/barriers-to-employment-success-inventory.html">http://jist.emcp.com/barriers-to-employment-success-inventory.html</a>
<b>6. Basic Skills Test</b>	Wonderlic	Measures 14 basic verbal and math skills required for employment (e.g. basic math computation; algebra and geometry; identify proper grammar). Can be used to assess job readiness and determine placement in educational programs. The assessment is aligned to O*NET competencies. Can be administered online or using paper and pencil. Can be completed in 40 minutes.	Pricing varies by type of test and quantity. Sales contact number: 1-877-605-9496	<a href="http://www.wonderlic.com/wonderlic-education-solutions/admissions-and-placement/student-placement/basic-math-and-verbal-skills-basic-skills-test">http://www.wonderlic.com/wonderlic-education-solutions/admissions-and-placement/student-placement/basic-math-and-verbal-skills-basic-skills-test</a>
<b>7. Campbell Interest and Skill Survey</b>	Pearson	Measures a person’s vocational interests, skills, and confidence in their abilities to perform tasks. It then matches them to careers requiring postsecondary education. Geared toward people who plan to attend or have already attended college. Can be completed in 25 minutes using paper and pencil, computer software, or online. Assessments can be self-scored online or with computer software, or can be mailed in and processed within 24 to 48 hours and mailed back. Also available in Spanish.	Starter kits are \$75.35. Reports and manuals range from \$10.70 to \$65.35, with some bulk discounts.	<a href="http://www.pearsonclinical.com/psychology/products/100000323/campbell-interest-and-skill-survey-ciss.html">http://www.pearsonclinical.com/psychology/products/100000323/campbell-interest-and-skill-survey-ciss.html</a>
<b>8. Career Ability Placement Survey (CAPS)</b>	EdiTS	Measures abilities along eight dimensions related to the requirements of occupations in 14 career clusters. Matches test takers with occupations that match their current abilities and that would require additional training. Administered online or via CD. Can be self-scored, scored immediately online, or mailed in for scoring and returned within 10 business days. Can be completed in 50 minutes. Also available in Spanish.	Self-scoring form: \$105.50 per 25; plus self-interpretation profile and guide, \$18 per 25.	<a href="http://www.edits.net/products/career-guidance/caps.html">http://www.edits.net/products/career-guidance/caps.html</a>

**Table E.2: Client Assessments Detailed Descriptions** (continued)

Title	Organization	Summary	Cost	Website
<b>9. Career Assessment Inventory–Vocational Version</b>	Pearson	Matches an individual's vocational interests to those of workers in 91 careers that require less than a four-year degree. Can be completed in 40 minutes using paper and pencil, computers, or online. Assessments can be self-scored online or with computer software or can be mailed in and processed within 24 to 48 hours and mailed back. Also available in Spanish.	Starter kits are \$69.20 (\$70.75 for mail-in scoring). Reports and manuals range from \$7.35 to \$42.05, with some bulk discounts.	<a href="http://www.pearson-clinical.com/psychology/products/100000425/career-assessment-inventory-the-vocational-version-cai.html">http://www.pearson-clinical.com/psychology/products/100000425/career-assessment-inventory-the-vocational-version-cai.html</a>
<b>10. Career Key</b>	CareerKey	Measures a person's interests in six occupational areas: realistic, investigative, artistic, social, enterprising, and conventional. Provides information on careers, occupations, and education programs related to those interests. The assessment includes information on 700 college majors and training programs and information from the Occupational Outlook Handbook. Can be completed online in 15 minutes. Includes related eBooks for purchase: <i>What Job is Best for Me?</i> and <i>Match Up! Your Personality to College Majors</i> .	Individual tests cost \$12.95; paired with eBooks for \$17.95 and \$22.95. Also offers a group discount.	<a href="http://www.careerkey.org/">http://www.careerkey.org/</a>
<b>11. Career Liftoff Interest Inventory</b>	Career Liftoff	Measures a person's career interests and matches them with occupations in six interest areas—realistic, investigative, artistic, social, enterprising, and conventional—as well as 30 career fields. Can be completed online in 30 minutes. Profile and reports are available immediately after completion.	\$19.95 per assessment.	<a href="http://www.careerliftoff.com/">http://www.careerliftoff.com/</a>
<b>12. Career Occupational Preference System Interest Inventory (COPS)</b>	EdiTS	Measures a person's interests and matches them with job activities in 14 career clusters. The clusters relate to high school and college curriculum and occupational information. Resulting reports focus on career exploration and include worksheets and recommendations for gaining experience. Can be completed in 25 minutes. Can be self-scored, scored immediately online, or mailed in for scoring and returned within 10 business days. Also available in Spanish.	Self-scoring booklets: \$66 per 100; self-interpretation profile and guides: \$62.25 per 100; comprehensive career guides: \$145 per 100.	<a href="http://www.edits.net/products/career-guidance/cops.html">http://www.edits.net/products/career-guidance/cops.html</a>
<b>13. Comprehensive Adult Student Assessment Systems (CASAS)</b>	CASAS	Measures basic skills through multiple assessments for adult basic education (reading and math), adult secondary education (reading, math, functional writing), English language learners (reading, listening), and workplace and pre-employment (reading, math, listening, functional writing, workforce skills certification system). Can be administered using paper and pencil, online, or via computer delivery. Individual assessments take about 30 minutes to complete.	Some available online at \$2.75 per assessment (quantity: 100–500). Paper assessments range from \$25 to \$80 per 25 assessments.	<a href="https://www.casas.org/product-overviews/order">https://www.casas.org/product-overviews/order</a>
<b>14. General Assessment of Instructional Needs (GAIN)</b>	Wonderlic	Measures basic skills, including numeracy and literacy, to aid in remediation. Includes pretest, progress test, and a post-test to measure progress. Suitable for both youth and adults. Available in paper and pencil or online. Reporting is available immediately if completed online and after a few minutes if template or “fax-back” scoring is used. Can be completed in 90 minutes. GAIN has been approved by DOL for WIA Youth Workforce programs, as well as by ED for use in Adult Basic Education programs funded by the Office of Career, Technical, and Adult Education.	Website provides contact information per state for purchasing.	<a href="http://everythingtogain.com/">http://everythingtogain.com/</a>
<b>15. Interest Profiler</b>	DOL/O*NET	Measures a person's interests in six occupational areas: realistic, investigative, artistic, social, enterprising, and conventional. Test takers can then learn about work activities and occupations related to their interests. Results can be linked to more than 800 occupations through O*NET Online. Can be completed in 30 minutes using paper and pencil, computerized, or web-based versions. Can be self-administered and self-interpreted.	Available as a free download or in paper for a fee (\$7.60–\$52).	<a href="http://www.onetcenter.org/IP.html">http://www.onetcenter.org/IP.html</a>

**Table E.2: Client Assessments Detailed Descriptions** (continued)

Title	Organization	Summary	Cost	Website
<b>16. Online Work Readiness Assessment (OWRA)</b>	Administration for Children and Families, Office of Family Assistance	Assesses a person's work readiness strengths and barriers through four modules. The Intake module is used to collect basic information about a person, including their education and employment background. The Assessment module uses the intake information to assess barriers and strengths in areas including housing, child care, mental health, and substance abuse. The Career Path Plan is used to create "individualized action plans" and recommend training, education, and employment options based on the person's goals and needs and the needs of the local workforce area. The Reporting module can be used to track participation. Administered online.	Free.	<a href="https://owra.icfi.com/owratanf/">https://owra.icfi.com/owratanf/</a>
<b>17. Skills Profiler</b>	DOL/CareerOneStop	Used to identify and match a person's skills to occupations. Results in an individualized "skills profile" that summarizes a person's skills and related work activities, offers a list of matched occupations and information about those occupations, and compares different occupations to one another. Takes 20 minutes to complete online. Skills profile is available immediately after completion.	Free online.	<a href="http://www.careerinfonet.org/skills">http://www.careerinfonet.org/skills</a>
<b>18. SmarterMeasure</b>	SmarterMeasure	Measures ability to succeed in an online or "technology rich" learning program through seven elements: individual attributes; life factors; learning styles; technical competency; technical knowledge; on-screen reading rate and recall; and typing speed and accuracy. Offers both a secondary school and higher education option. Includes individualized reports and recommendations for remediation. Administered online. Can be completed in 30 minutes.	\$29.95. Offers volume discounts.	<a href="http://www.smartermeasure.com/">http://www.smartermeasure.com/</a>
<b>19. System of Integrated Guidance and Information</b>	Valpar	Measures a person's motivations and matches their values, interests, personality, and skills to education programs and careers. Includes information and reports on available occupations and the required training. Self-administered online.	\$17.95 for a 90-day license. Pricing information for unlimited-use licenses available by calling: 1-800-633-3321.	<a href="http://www.sigi3.org/">http://www.sigi3.org/</a>
<b>20. Tests of Adult Basic Education (TABE)</b>	CTB/McGraw Hill	Measures skills and knowledge for adult basic education. TABE 9 &10 assesses reading, math, language, language mechanics, vocabulary, and spelling. TABE Advanced-Level Test assesses science, social studies, algebra/geometry, and writing. Includes a pre- and post-test to measure progress. Can be administered using paper and pencil, online, or via CD. Can be scored by hand, online, or through scanning. TABE 9 &10 can be completed in 3 hours and 30 minutes.	TABE 9 &10 test books are \$142.75 per 25. Answers sheets are \$50.75 per 25. TABE Advanced-Level Test books are \$67.30 or \$100.25 per 25.	<a href="http://www.ctb.com/ctb.com/control/productFamilyViewAction?productFamilyId=608&amp;p=products#">http://www.ctb.com/ctb.com/control/productFamilyViewAction?productFamilyId=608&amp;p=products#</a>
<b>21. Work Importance Locator</b>	DOL/O*NET	Measures a person's work values in six areas: achievement, independence, recognition, relationships, support, and working conditions. Based on these values, matches the person with occupations with similar characteristics. Can be self-administered and self-interpreted using a paper-and-pencil format or a computerized version called the Importance Profiler. Can be completed in 30 minutes.	Available for download or can order paper copies/materials for a fee (\$7.60–\$22).	<a href="http://www.onetcenter.org/WIL.html">http://www.onetcenter.org/WIL.html</a>  Work Importance Profiler: <a href="http://www.onetcenter.org/WIP.html">http://www.onetcenter.org/WIP.html</a>
<b>22. WorkKeys</b>	ACT	Measures work readiness through 12 foundational and soft skills assessments. The Applied Mathematics, Locating Information, and Reading for Information assessments form the foundation of ACT's National Career Readiness Certificate. Each of these three assessments can be completed in 55 minutes online or in 45 minutes using paper and pencil. Scores are available immediately if completed online.	Can be purchased individually or in bulk. Call: 1-800-967-5539.	<a href="http://www.act.org/products/workforce-act-workkeys/">http://www.act.org/products/workforce-act-workkeys/</a>

## **Appendix F:**

# **Data Sets Related to Education and Employment**

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**Table F.1: Data Sets Summary Table**

Title	Labor Market Information							Education Information		Geographic Detail		Sponsoring Agency			
	Job Openings	Wages	High Growth Jobs	Education/Training Required for Specific Jobs	Unemployment Rates	Occupation Indicators	Industry Indicators	Educational Attainment	Other Education Data	National	State/Local	Department of Labor	Department of Education	Census Bureau	For-profit Company
VERY USER-FRIENDLY DATA SETS: Data are available using intuitive, well-designed “click through” menus. Often includes easily-interpretable data visualization.															
1. American Fact Finder*		●				●	●	●		●	●			●	
2. CPS Table Creator*								●		●	●			●	
3. Help Wanted OnLine (HWOL)	●	●	●		●					●	●				●
4. Labor/Insight	●		●	●		●	●			●	●				●
5. Occupational Information Network (O*NET) Database	●	●	●	●		●	●			●	●	●			
6. Projections Central	●		●			●				●	●	●			
7. QWI Explorer*	●	●					●	●			●			●	
MODERATELY USER-FRIENDLY DATA SETS: Data are available in preconstructed tables or can be accessed using click-through menus to create tables. However, the tables can be difficult to interpret and may need to be manipulated in Excel.															
8. Business Employment Dynamics	●				●		●			●	●	●			
9. Current Employment Statistics (CES)		●					●			●		●			
10. Data Ferrett*		●			●	●	●	●		●	●			●	
11. Digest of Education Statistics								●	●	●	—		●		
12. Economic Modeling Specialists International (EMSI)	●	●	●	●	●	●	●		●	●	●				●
13. Ed Data Express								●		●	●		●		
14. Employment Projections (EP)	●	●	●	●		●	●			●		●			
15. Integrated Postsecondary Education Data System (IPEDS)									●	●	●		●		
16. Job Openings and Labor Turnover Survey (JOLTS)	●						●			●		●			
17. Local Area Unemployment Statistics (LAUS)					●						●	●			
18. Occupational Employment Statistics (OES)		●					●			●	●	●			
19. Quarterly Census of Employment and Wages (QCEW)		●					●			●	●	●			
20. State and Local Employment Projections	●		●			●					●	●			

Note: These data sets are included as examples for possible use by state TANF administrators. Neither OPRE nor Mathematica endorses these data sets.

**Table F.1: Data Sets Summary Table** (continued)

Title	Labor Market Information							Education Information		Geographic Detail		Sponsoring Agency			
	Job Openings	Wages	High Growth Jobs	Education/Training Required for Specific Jobs	Unemployment Rates	Occupation Indicators	Industry Indicators	Educational Attainment	Other Education Data	National	State/Local	Department of Labor	Department of Education	Census Bureau	For-profit Company
DATA SETS THAT REQUIRE PROGRAMMING: Data sets offer the greatest flexibility in designing your own analysis but require statistical software such as Stata, R, SAS or SPSS to be analyzed.															
21. American Community Survey (ACS)		●			●	●	●	●	●	●	●			●	
22. Business Dynamics Statistics (BDS)	●				●		—			●	●			●	
23. Current Population Survey (CPS)		●			●	●	●	●	●	●	●			●	
DATA SETS THAT REQUIRE PROGRAMMING: Data sets offer the greatest flexibility in designing your own analysis but require statistical software such as Stata, R, SAS or SPSS to be analyzed.															
24. Quarterly Workforce Indicators (QWI)		●					●			●	●			●	
25. Survey of Income and Program Participation (SIPP)		●			●	●	●	●	●	●	●			●	

Note: Data sets are ordered alphabetically, not to reflect data set quality or preference.

— Limited data available.

\*Tools that allow a user to analyze a variety of complex data sources in an intuitive way.

**Table F.2: Data Set Detailed Descriptions**

Title	Summary	Pros	Cons	Website
<p><b>VERY USER-FRIENDLY DATA SETS:</b> Data are available using intuitive, well-designed “click through” menus. Often includes easily-interpretable data visualization.</p>				
<p><b>1. American Fact Finder (Census Bureau)</b></p>	<p>This tool generates tables from a variety of Census data sets using simple click through menus. Data can be examined at a variety of geographic levels—from zip code to national.</p>	<ul style="list-style-type: none"> <li>• Tool is easy-to-use.</li> <li>• Provides access to a wide variety of data sources.</li> </ul>	<ul style="list-style-type: none"> <li>• Users have little control over the look and content of the tables that are generated.</li> </ul>	<p><a href="http://factfinder.census.gov/">http://factfinder.census.gov/</a></p>
<p><b>2. CPS Table Creator (Census Bureau)</b></p>	<p>This tool can be used to create tables using data from the Current Population Survey (CPS).</p>	<ul style="list-style-type: none"> <li>• Tool is easy-to-use.</li> <li>• User has several options for specifying the look of the table and the grouping of data.</li> </ul>	<ul style="list-style-type: none"> <li>• Only examines CPS data.</li> <li>• Provides access to a limited group of CPS variables.</li> </ul>	<p><a href="http://www.census.gov/cps/data/cpstablecreator.html">http://www.census.gov/cps/data/cpstablecreator.html</a></p>
<p><b>3. Help Wanted OnLine (HWOL)</b></p>	<p>HWOL is a real-time LMI database that pulls information on labor market supply and demand from 16,000 online job posting websites. Produces monthly press releases that highlight national, state, and the 52 largest MSAs’ labor market demand. Data for states and the 52 largest MSAs can be purchased from Haver Analytics.</p>	<ul style="list-style-type: none"> <li>• Provides real-time data compiled from online job postings that measure labor market demand.</li> <li>• Monthly press releases highlighting general state and MSA demand information are available on the website.</li> </ul>	<ul style="list-style-type: none"> <li>• Detailed state, MSA, and historical data must be purchased.</li> </ul>	<p><a href="https://www.conference-board.org/data/help-wantedonline.cfm">https://www.conference-board.org/data/help-wantedonline.cfm</a></p>
<p><b>4. Labor/Insight (Burning Glass Technologies)</b></p>	<p>Burning Glass’ Labor/Insight is a real-time LMI application that pulls information from online job listings to help users analyze supply and demand information for the labor market. The application includes reports on skills necessary for certain jobs, analyzes the most in demand jobs, and looks at information at the regional level. Local data are available at the county and area code level.</p>	<ul style="list-style-type: none"> <li>• Data can be linked to supply side information on available knowledge and skills gathered through scanning resumes available through other Burning Glass products or public job banks.</li> <li>• Users have access to raw job posting data.</li> </ul>	<ul style="list-style-type: none"> <li>• A license is required to access the data.</li> </ul>	<p><a href="http://www.burning-glass.com/products/laborinsight-market-analysis/">http://www.burning-glass.com/products/laborinsight-market-analysis/</a></p>
<p><b>5. Occupational Information Network (O*NET) Database (DOL)</b></p>	<p>O*NET is a resource containing occupational characteristics and requirements, such as knowledge, skills, abilities, detailed work activities and tasks, and preparation requirements for SOC-defined occupations</p>	<ul style="list-style-type: none"> <li>• Provides information about different occupations and the education, skills, and abilities required to perform the job. This tool would be most useful in conjunction with Bureau of Labor Statistics (BLS) resources that rely on SOC codes.</li> <li>• Users can sort occupations by “bright outlook,” an ETA defined measure that indicates that the occupation has been classified by O*NET as “new and emerging” or that BLS data on job growth and projected openings suggests that there are likely to be employment opportunities for the occupation in the near future.</li> <li>• Database includes a user-friendly search tool to match abilities, knowledge, and detailed work interests with careers.</li> </ul>	<ul style="list-style-type: none"> <li>• SOC codes might, in some cases, misrepresent educational requirements by combining too many positions within an occupation. The codes are based on the average level needed to perform the position and therefore do not apply to every position level (such as entry or senior).</li> </ul>	<p><a href="https://www.onetonline.org">https://www.onetonline.org</a></p>
<p><b>6. Projections Central (DOL)</b></p>	<p>Includes national- and state-level projections of the number of job openings by occupation and industry. The national projections are created by the BLS. The states prepare their own projections, using the BLS national projections as an input, and with funding from ETA.</p>	<ul style="list-style-type: none"> <li>• Data are intuitive to use and search. Search box and information are on the same page, allowing users to easily click through different categories or gather results that they are interested in.</li> <li>• Long-term projections are available at the state and national level and can be sorted by occupation.</li> </ul>	<ul style="list-style-type: none"> <li>• The projections are determined using mixed- methods that focus on long-term employment trends, not business cycle changes that may affect industries and hiring.</li> <li>• The projections do not account for technological or production changes that cannot be easily predicted.</li> </ul>	<p><a href="http://www.projectionscentral.com/Home/Index">http://www.projectionscentral.com/Home/Index</a></p>

**Table F.2: Data Set Detailed Descriptions** (continued)

Title	Summary	Pros	Cons	Website
<b>7. Quarterly Workforce Indicators (QWI) Explorer (Census Bureau)</b>	This tool allows for the analysis of QWI data (see number 24) in an intuitive and graphically appealing manner.	<ul style="list-style-type: none"> <li>Provides excellent data visualization.</li> <li>Relatively easy to learn to use.</li> </ul>	<ul style="list-style-type: none"> <li>The timing of data release varies by state. For example, Kansas and Louisiana data were available later than other states in 2015.</li> <li>Public use data from Massachusetts, Puerto Rico, and the U.S. Virgin Islands are not currently available.</li> </ul>	<a href="http://qwexplorer.ces.census.gov/">http://qwexplorer.ces.census.gov/</a>
<b>MODERATELY USER-FRIENDLY DATA SETS: Data are available in preconstructed tables or can be accessed using click-through menus to create tables. However, the tables can be difficult to interpret and may need to be manipulated in Excel.</b>				
<b>8. Business Employment Dynamics (DOL)</b>	The Business Employment Dynamics tool displays state-level information on employment levels and business survival, age, and size. The data are released on a quarterly basis.	<ul style="list-style-type: none"> <li>The user can look at gross job gains and losses, expansions and contractions, and openings and closings to get a picture of how certain industries are changing.</li> </ul>	<ul style="list-style-type: none"> <li>Data are released roughly seven months after the reference period.</li> <li>Unlike most BLS data sources that allow users to gather information from one internet page, the data must be acquired by clicking through multiple pages/screens.</li> <li>Data are available at the national and state level.</li> </ul>	<a href="http://www.bls.gov/bdm/">http://www.bls.gov/bdm/</a>
<b>9. Current Employment Statistics (CES) (DOL)</b>	CES are compiled from a survey of about 143,000 businesses and government agencies. The statistics include monthly data on earnings and wages, hours worked, and total number of people on a company's payroll.	<ul style="list-style-type: none"> <li>Data are released monthly.</li> <li>All data can be filtered to the metropolitan area and "super-sector." A super-sector is defined, for this dataset, as a group of related North American Industry Classification System sectors, such as "manufacturing," which incorporates three sectors, and "financial activities," which incorporates two.</li> </ul>	<ul style="list-style-type: none"> <li>Not all data can be filtered to the same level of detail. Most data can be filtered to the super-sector level, but only some data can be further filtered to the industry level. The earnings data in particular is constrained to the super-sector level.</li> <li>Seasonal adjustment unavailable for some data.</li> </ul>	<a href="http://www.bls.gov/ces/">http://www.bls.gov/ces/</a>
<b>10. Data Ferrett (Census Bureau)</b>	This tool allows users to generate tables from various data sources and at many geographic levels without using statistical software. Separate datasets can be combined and analyzed together. Tutorials for using the tool are available on the Data Ferrett website.	<ul style="list-style-type: none"> <li>Practitioners can analyze a wide variety of data sources without using statistical software.</li> <li>Users can design the tables that are generated.</li> </ul>	<ul style="list-style-type: none"> <li>The user must invest time to use and manage this tool effectively.</li> </ul>	<a href="http://dataferrett.census.gov/">http://dataferrett.census.gov/</a>
<b>11. Digest of Education Statistics (ED)</b>	The Digest of Education Statistics is a compilation of information from the National Center for Education Statistics and includes data from pre-k, elementary, secondary, and postsecondary educational institutions.	<ul style="list-style-type: none"> <li>Includes three tables dedicated to the number of certificates below the associate's degree level.</li> <li>Data can be broken down by gender, race/ethnicity, institution level, institution control (for example, non-profit or public), and the number of years required to complete the certificate.</li> <li>Includes six tables on associate's degrees.</li> <li>Also contains data at the national level on labor force participation, occupation, and earnings, sorted by degree attainment.</li> </ul>	<ul style="list-style-type: none"> <li>Data on certificates and associate's degrees are only available at the national level.</li> <li>Data are not linked to occupational or industry classification codes.</li> </ul>	<a href="http://nces.ed.gov/Programs/digest/">http://nces.ed.gov/Programs/digest/</a>
<b>12. Economic Modeling Specialists International (EMSI)</b>	EMSI is a service that collects LMI and job posting data from 90 sources and offers it to clients through a research and analysis tool. Data are updated quarterly and available down to the zip code level.	<ul style="list-style-type: none"> <li>Offers a combination of real-time and historic LMI.</li> <li>Real-time data allows analysis of jobs with the highest number of online postings by skills and certifications.</li> <li>Analysis tool allows for creating reports, tables, and maps.</li> <li>Data can be broken down to regional level.</li> <li>Gap analysis option for understanding employer needs in region.</li> </ul>	<ul style="list-style-type: none"> <li>A license is required to access the data.</li> </ul>	<a href="http://www.economicmodeling.com/">http://www.economicmodeling.com/</a>

**Table F.2: Data Set Detailed Descriptions** *(continued)*

Title	Summary	Pros	Cons	Website
<b>13. Ed Data Express (ED)</b>	Ed Data Express compiles state level data at the elementary and secondary school level, and includes student achievement and demographic data.	<ul style="list-style-type: none"> <li>Data are available on state level high school graduation rates and school performance metrics.</li> <li>Website offers multiple data tools for manipulating and reporting data by state.</li> </ul>	<ul style="list-style-type: none"> <li>Data are not available on postsecondary variables.</li> </ul>	<a href="http://eddata-express.ed.gov/index.cfm">http://eddata-express.ed.gov/index.cfm</a>
<b>14. Employment Projections (EP) (DOL)</b>	EP estimate the number of job openings at the occupation and industry levels for both short- and long-term planning purposes. Includes data on education level, expected job openings, and on-the-job training for each occupation.	<ul style="list-style-type: none"> <li>Information is available at the national level.</li> <li>Can sort data by education level.</li> <li>Includes jobs in demand and their related SOC codes.</li> <li>Provides information on the number of people expected to be employed in an occupation, the occupation's growth rate, and how much of the labor market demand is driven by new growth in jobs versus job replacement.</li> <li>The data can be useful for analyzing trends and magnitudes.</li> </ul>	<ul style="list-style-type: none"> <li>The projections are determined using mixed-methods that focus on long-term employment trends, not business cycle changes that may affect industries and hiring.</li> <li>The projections do not account for technological or production changes that cannot be easily predicted.</li> </ul>	<a href="http://www.bls.gov/emp/home.htm">http://www.bls.gov/emp/home.htm</a>
<b>15. Integrated Postsecondary Education Data System (IPEDS) (ED)</b>	IPEDS collects data from postsecondary institutions on a variety of topics, such as the type of degree awarded and enrollment information.	<ul style="list-style-type: none"> <li>Microdata can be downloaded from the website.</li> <li>Data are collected longitudinally.</li> <li>Data are available on the number and types of degrees and certificates awarded at the institutional level.</li> <li>Data can be analyzed at the level of individual institutions, regions, or states.</li> <li>Geographic variables are available at the state and zip code level, so that this data can be linked to other administrative data.</li> <li>Enrollment data can be grouped by race as well as by outcomes such as field of study, graduation, credentials earned and sector of employment.</li> </ul>	<ul style="list-style-type: none"> <li>Enrollment data only captures first-time enrollments during a 12-month period, which may miss students who take time off and reenroll at a later date.</li> <li>Data are not linked to occupational codes.</li> <li>Since the data unit is at the institutional level, characteristics at student level are limited to only those collected by IPEDS.</li> <li>Categories/classification of student characteristics may be different than those in other federal data (for example, race/ethnicity).</li> </ul>	<a href="https://nces.ed.gov/ipeds/">https://nces.ed.gov/ipeds/</a>
<b>16. Job Openings and Labor Turnover Survey (JOLTS) (DOL)</b>	JOLTS produces monthly estimates of rates and levels of job openings by high-level industry and region. JOLTS also collects data on job hires and separations.	<ul style="list-style-type: none"> <li>The data are published two months after collection, making this one of the most up-to-date data sources provided by the BLS.</li> <li>Includes information on job openings and number of hires by industry and type of separation (for example, quits, layoffs).</li> <li>Can be used as a check on localized data and hiring patterns.</li> <li>Single-screen data search option makes the data easy to access by a non-researcher audience. Graph option is helpful for viewing data trends.</li> </ul>	<ul style="list-style-type: none"> <li>Detailed information is only available at the national level.</li> </ul>	<a href="http://www.bls.gov/jlt/">http://www.bls.gov/jlt/</a>
<b>17. Local Area Unemployment Statistics (LAUS) (DOL)</b>	LAUS examines employment and unemployment rates at various geographic levels.	<ul style="list-style-type: none"> <li>Data can provide a picture of changing unemployment rates in state and local areas.</li> <li>Regional and state level data are available about 3-4 weeks after the reference month. Metropolitan level data are available 4-5 weeks after the reference month.</li> </ul>	<ul style="list-style-type: none"> <li>Data are aggregate and cannot be broken down to answer more specific questions.</li> </ul>	<a href="http://www.bls.gov/lau/">http://www.bls.gov/lau/</a>
<b>18. Occupational Employment Statistics (OES) (DOL)</b>	OES data are compiled from a survey of 1.2 million establishments. Data are collected over a three-year period: every six months a new group of 200,000 establishments are surveyed. Available statistics include data on the number of employed workers in various occupations and their wages, including both full-time and part-time workers in nonfarm industries.	<ul style="list-style-type: none"> <li>Data are available at the national, state, metropolitan, and nonmetropolitan area levels, and by industry or ownership.</li> <li>User-friendly chart tools for the data are available for practitioner use.</li> <li>The user-friendly map tool is visually helpful in comparing a state to the rest of the nation.</li> </ul>	<ul style="list-style-type: none"> <li>Data are collected every 6 months and released roughly 10 months after collection.</li> <li>Single screen data search not available.</li> </ul>	<a href="http://www.bls.gov/oes/">http://www.bls.gov/oes/</a>

**Table F.2: Data Set Detailed Descriptions** (continued)

Title	Summary	Pros	Cons	Website
<b>19. Quarterly Census of Employment and Wages (QCEW) (DOL)</b>	QCEW includes wage information by industry and can be sorted at the county level.	<ul style="list-style-type: none"> <li>• Users can access information at the county level.</li> <li>• Some data are available through the County Employment and Wages press release within 5.5 months after the reference quarter.</li> <li>• QCEW Data Viewer is easy to use.</li> </ul>	<ul style="list-style-type: none"> <li>• Data are available by industry but not occupation.</li> </ul>	<a href="http://www.bls.gov/cew/">http://www.bls.gov/cew/</a>
<b>20. State and Local Employment Projections (DOL)</b>	This resource produces state and local projections of base year employment, projected year employment, and the number of job openings during the period. Projections are calculated at the occupation and industry levels for long-term (10-year) and for some states short-term (2-year) planning purposes.	<ul style="list-style-type: none"> <li>• Website provides links to state and some local employment projections.</li> <li>• Projections are divided into short (2-year) and long term (10-year) projections and can be searched by occupation or industry.</li> <li>• Some states offer data at the metropolitan level as well as by occupation/industry level and long/short-term level.</li> </ul>	<ul style="list-style-type: none"> <li>• The projections are determined using mixed- methods that focus on long-term employment trends, not business cycle changes that may affect industries and hiring.</li> <li>• The projections do not account for technological or production changes that cannot be easily predicted.</li> </ul>	<a href="http://www.doleta.gov/business/projections/Inter-netLinks.cfm">http://www.doleta.gov/business/projections/Inter-netLinks.cfm</a>
<b>DATA SETS THAT REQUIRE PROGRAMMING: Data sets offer the greatest flexibility in designing your own analysis but require statistical software such as Stata, R, SAS or SPSS to be analyzed.</b>				
<b>21. American Community Survey (ACS) (Census Bureau)</b>	ACS is a yearly, longitudinal survey of a sample of the U.S. population. It produces one-year, three-year, and five-year estimates available at the national, regional, state, and local levels. The survey is broken up into four thematic areas: demographic, social, economic, and housing.	<ul style="list-style-type: none"> <li>• The American Fact Finder tool allows users to select data and tables that are most relevant to their needs.</li> <li>• Educational attainment tables are available that include age, poverty level, degree, and median earnings over the past 12 months, by education level.</li> <li>• Occupation tables are available that include median earnings, number of people employed, and class of worker (for example, self-employed, government employee, and so on).</li> </ul>	<ul style="list-style-type: none"> <li>• Data that will be useful for non-researchers require some additional manipulation of preexisting tables.</li> <li>• Survey data suffer from reporting errors.</li> </ul>	<a href="http://www.census.gov/acs/www/">http://www.census.gov/acs/www/</a>
<b>22. Business Dynamics Statistics (BDS) (Census Bureau)</b>	BDS are compiled from the Longitudinal Business Database and include data by firm and establishment characteristics. The data describe business dynamics, including the number of new and existing firms and establishments. The data also describe employment flows, including the number of jobs created or destroyed. Changes in employment levels are measured based on firm or establishment entry, expansion, contraction, or exit.	<ul style="list-style-type: none"> <li>• Database includes visualization tools with a guide on how to use them.</li> <li>• State and MSA data are available.</li> <li>• Data can be sorted by sector, measure, or state, either over time or at a specific point in time.</li> </ul>	<ul style="list-style-type: none"> <li>• Data are delayed by two years.</li> <li>• Data are available in the aggregate by establishment or firm characteristics (for example, age or average size), but not by individual establishment or firm.</li> </ul>	<a href="http://www.census.gov/ces/dataproducts/bds/">http://www.census.gov/ces/dataproducts/bds/</a>
<b>23. Current Population Survey (CPS) (Census Bureau)</b>	CPS is a monthly survey administered to a sample of 60,000 households with a focus on labor market-related statistics, such as education, employment and unemployment, and earnings. Data are available at the national and state levels and for the 12 largest metropolitan statistical areas. Monthly CPS supplements include questions on special topics, such as worker displacement and veterans' experiences.	<ul style="list-style-type: none"> <li>• CPS Table Creator allows users to manipulate the data.</li> <li>• Data are available on family income, work experience, and educational attainment.</li> <li>• Includes occupation and industry data.</li> <li>• Data are available roughly one month after collection.</li> <li>• Data are available at multiple geographic levels.</li> <li>• Sample rotates in and out of the survey in a way that enables year-over-year analyses for 50 percent of the sample.</li> <li>• The CPS will soon be adding questions on credentialing.</li> </ul>	<ul style="list-style-type: none"> <li>• Does not provide information about job openings or other employer-side variables.</li> <li>• Survey data suffer from reporting errors.</li> </ul>	<a href="http://www.census.gov/cps">http://www.census.gov/cps</a> <a href="http://www.bls.gov/cps">http://www.bls.gov/cps</a>

**Table F.2: Data Set Detailed Descriptions** *(continued)*

Title	Summary	Pros	Cons	Website
<b>24. Quarterly Workforce Indicators (QWI)</b> (Census Bureau)	QWI contains data on employment; hires/separations; job creation/destruction; and wages and starting wages by detailed industry, geography, and worker demographics. Jobs data are provided by state agencies and merged with Census data for demographic information on workers.	<ul style="list-style-type: none"> <li>• Data are available at the industry level and can be examined at the county and metro levels.</li> <li>• Data are available on demographic, education, and other characteristics of new hires.</li> <li>• QWI Explorer tool makes the data accessible to practitioners. Researchers have the option to download data files.</li> </ul>	<ul style="list-style-type: none"> <li>• The timing of data release varies by state. For example, Kansas and Louisiana data were available later than other states in 2015.</li> <li>• Public use data from Massachusetts, Puerto Rico, and the U.S. Virgin Islands are not currently available.</li> </ul>	<a href="http://lehd.ces.census.gov/data">http://lehd.ces.census.gov/data</a>
<b>25. Survey of Income and Program Participation (SIPP)</b> (Census Bureau)	SIPP is a longitudinal, household-based survey consisting of core and topical modules that differ in each wave. Monthly data are available. The core modules focus on the economic state of the country, while each wave collects different information.	<ul style="list-style-type: none"> <li>• Wave 1 of the 2008 panel includes employment history (Fall 2008).</li> <li>• Wave 2 of the 2008 panel includes education and training history (Spring 2008).</li> <li>• Wave 13 of the 2008 panel includes information on professional and educational certificates (Fall 2012).</li> </ul>	<ul style="list-style-type: none"> <li>• Data files are designed with researchers in mind, though there are some reports geared for practitioners.</li> <li>• The sample suffers from survey attrition.</li> <li>• Survey data suffer from reporting errors.</li> </ul>	<a href="http://www.census.gov/sipp/">http://www.census.gov/sipp/</a>

