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## Preface

This document reports the results of a study entitled "Employer Partnership Initiative Analysis of Alternatives." The purpose of this study was to examine opportunities for the U.S. Army Reserve and Army National Guard to strengthen their relationships with employers and citizen soldiers through the Employer Partnership Program.

In this document we describe the Army reserve components' experience with the program through September 2010 and recommend improvements, based on interviews with program stakeholders, analysis of data collected from the Employer Partnership Program's job search website, and case studies of job opportunities for soldiers in Army Reserve units located in four metropolitan areas across the United States. Since the Employer Partnership Program launched a new version of its job search website in November 2010, some of our analysis is no longer directly applicable to the program. However, these findings should be of interest to reserve component policymakers and staff concerned with recruiting, retention, and training of reserve component service members and with maintaining strong relationships with civilian employers and can help inform efforts in the Departments of Defense, Veterans Affairs, and Labor to assist veterans seeking civilian employment.

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## Contents

Preface ..... iii
Figures ..... vii
Tables ..... ix
Summary ..... xi
Acknowledgments ..... xvii
Acronyms ..... xix
CHAPTER ONE
Introduction ..... 1
The Employer Partnership Program ..... 2
Program History ..... 2
EPP Job Search Website ..... 5
Other Career and Employment Services for Soldiers ..... 5
Research Approach ..... 7
Organization of This Report ..... 8
CHAPTER TWO
Reducing Unemployment ..... 11
Unemployment in the Army Reserve Components ..... 11
Analysis of EPP Website Data ..... 13
Website Visits and Usage Relative to Reserve Unemployment ..... 14
Characteristics of Website Users ..... 17
Visits and Job Views per User ..... 19
Challenges to Increasing Website Usage ..... 21
Conclusions ..... 24
CHAPTER THREE
Improving Linkages Between Military and Civilian Occupations ..... 27
Case Studies of EPP Job Opportunities ..... 27
Website Usage in Case Study Units and States ..... 32
Possible Challenges to Improving Linkages Between Military and Civilian Occupations ..... 36
Translating Military to Civilian Skills ..... 36
Lack of Civilian Credentials ..... 38
Reducing Training Gaps ..... 39
Conclusions ..... 39
CHAPTER FOUR
Establishing Closer Working Relationships with Civilian Employers ..... 41
Challenges in Attracting and Maintaining Employer Partners ..... 41
Employers' Unmet Expectations ..... 41
Reaching Out to Potential Applicants. ..... 42
Use of Alternative Employment Websites ..... 43
Lack of Familiarity with the Military ..... 43
Product Support Managers Are Spread Thin ..... 43
PSMs Have Difficulty Gaining Access to Units ..... 44
Challenges Related to Program Design and Management ..... 44
Changes to the Program Cause Confusion and Concern ..... 44
Insufficient Coordination with Similar Programs ..... 45
Measuring Program Effectiveness. ..... 46
Occupations with Shortages or High Recruiting and Training Costs ..... 47
Conclusions ..... 48
CHAPTER FIVE
Recommendations ..... 51
Overall Recommendations ..... 51
Program Management ..... 52
Reducing Unemployment ..... 53
Improving Linkages Between RC and Civilian Jobs ..... 55
Establishing Closer Working Relationships with Employers ..... 57
APPENDIX
Additional Case Study Results ..... 59
Bibliography ..... 63

## Figures

1.1. EPP Program Timeline ..... 3
2.1. Unemployment Rates in the USAR and ARNG ..... 12
2.2. Army RC Unemployment Rates by Pay Grade Group ..... 13
2.3. Estimated USAR Unemployment and Website Usage ..... 15
2.4. USAR Website Users Relative to Estimated Number Unemployed ..... 16
2.5. Military Affiliation of Website Users ..... 17
2.6. Distribution of Website Users by Pay Grade ..... 18
2.7. Distance Between Website Users' Residence and Unit ..... 18
2.8. Number of Productive Visits per Website User ..... 19
2.9. Average Number of Jobs Viewed by Number of Visits ..... 20
2.10. Average Number of Jobs Viewed by CMF/Branch ..... 21
3.1. Website User Military Status in Case Study States ..... 35
3.2. Website User Location in Case Study States ..... 35
3.3. Relationship Between Military Occupation and Jobs Viewed for Website Users in Case Study States ..... 36

Tables
2.1. Percentage of Households with Internet Access, 2009 ..... 23
3.1. Case Study Locations and Units ..... 28
3.2. Case Study Results for 392nd Signal Battalion, Baltimore, MD ..... 29
3.3. Case Study Results for 399th Psychological Operations Company, Baton Rouge, LA ..... 30
3.4. Case Study Results for 4224th U.S. Army Hospital, Des Moines, IA ..... 31
3.5. Case Study Results for 355th Chemical Company, Las Vegas, NV ..... 32
3.6. Website Usage in Case Study Units ..... 33
3.7. Characteristics of Website Users in Case Study Units ..... 34
4.1. USAR CMFs with Personnel Shortages or High Recruiting or Training Costs ..... 48
4.2. ARNG CMFs with Personnel Shortages or High Recruiting or Training Costs ..... 49
4.3. Civilian Occupations with Largest Employment Growth, 2008-2018 ..... 50
A.1. Case Study Results for 203rd Transportation Detachment (Logistics Support Vessel), Baltimore, MD ..... 59
A.2. Case Study Results for 321st Sustainment Brigade, Baton Rouge, LA. ..... 60
A.3. Case Study Results for 448th Medical Logistics Detachment, Des Moines, IA ..... 60
A.4. Case Study Results for 257th Transportation Company, Las Vegas, NV. ..... 61
A.5. Case Study Results for 313th Military Police Detachment, Las Vegas, NV. ..... 61

## Summary

The Employer Partnership Program (EPP) was launched by the Chief of the Army Reserve in April 2008 to foster employer readiness for mobilization of their reserve and guard employees, to make hiring and retaining reservists attractive to civilian employers, and to identify opportunities to share the costs of training and employee benefits such as pensions and health care. In support of these long-term goals, efforts through September 2010 have focused primarily on reducing unemployment among reserve component (RC) service members, improving linkages between military and civilian skills and occupations, and establishing closer working relationships with employers. One of the primary features of the program is a job search website for RC service members, veterans, and family members that allows employer partners to recruit employees from this population. The website also lists jobs from state employment agencies and other sources, so it serves as a resource to help unemployed RC service members find jobs. Originally intended to serve Army Reserve soldiers, the program, including access to the website, was extended to the Army National Guard in 2009, and to the other services' reserve components in 2010.

The Army Reserve asked RAND Arroyo Center to examine experience with the Employer Partnership Program, identify candidate occupations and/or skill sets for partnerships, identify the costs and savings associated with employer partnerships, and make recommendations to expand and strengthen the program. ${ }^{1}$ To assess the program's progress in reducing unemployment among RC service members, improving linkages between military and civilian skills and occupations, and establishing closer working relationships with employers, the research team conducted three analytic tasks. First, we analyzed data collected from the EPP job search website on the total number of visitors and users over time, as well as more detailed data on the military status, pay grade, and military occupations of website users. Second, we conducted case studies of seven Army Reserve units located in four metropolitan areas across the United States to examine opportunities for RC service members to find civilian jobs related to their military skills. Third, we conducted interviews with 25 stakeholders, including current and former program staff, program support managers, and employer partners, regarding their experiences with the program and suggestions for improvement.

The program continued to evolve during our study, with turnover in program staff, expansion to other services' reserve components, and the launch of a new website in November 2010. We note these changes and adjust our analysis and recommendations as appropriate. Although some of our findings may no longer be directly applicable to the Employer Partnership Program, they can help inform other efforts to support RC service members and veterans leaving

[^0]active duty who are seeking civilian employment. For example, the Office of the Assistant Secretary of Defense for Reserve Affairs' Yellow Ribbon Reintegration Program launched the Heroes 2 Hired website (www.H2H.jobs) in 2011 for soldiers, veterans, and family members seeking private-sector employment opportunities.

## Reducing Unemployment

Unemployment rates in the Army reserve components have generally been close to the U.S. national average since 2003, but they began to rise above the national rate in 2009. Unemployment has been particularly high among junior enlisted personnel (E1-E4), rising to 25 percent in the U.S. Army Reserve (USAR) and 23 percent in the Army National Guard (ARNG) as of December 2009. By comparison, the national unemployment rate for the 18-to-24 age group was about 18 percent in December 2009. Given that the authorized Selected Reserve end strengths of the USAR and ARNG in FY10 were 206,000 and 359,000, respectively, there were substantial numbers of unemployed RC soldiers who could benefit from the EPP job search website, in addition to other potential users (employed RC soldiers looking for new jobs, veterans, family members, and survivors).

After the website was launched in October 2008, the number of monthly visitors averaged about 5,000 through November 2009, while the estimated number of unemployed USAR soldiers rose from 17,000 to 24,000 . The number of website visitors spiked following publicity events in January and April 2010 and plateaued at around 10,000 per month as of August 2010. The percentage of visitors who clicked on job listings and filled out a registration form remained steady, at about only one-third of website visitors. This pattern suggests that many website visitors did not find job listings that were suitable or sufficiently appealing to them. Although junior enlisted personnel were almost half of website users during a sevenweek period when more detailed website data were collected (May-June 2010), they were equivalent to only about 6.5 percent of the estimated number of unemployed, junior enlisted soldiers. Website usage was highest relative to the estimated number of unemployed junior officers (O1-O3) but was still quite low at about 19 percent. ${ }^{2}$

During the seven-week data-collection period, there were 3,350 unique website users who viewed a total of almost 31,000 job listings. Seventy percent of users only viewed job listings on one visit during the seven weeks, and 21 percent only viewed one job listing. Unless these users were able to find a job after only one visit, they may not have thought the site was worth a return visit, or may not have found any additional job listings that were appealing to them. Users who made multiple visits also downloaded many more job listings. These results suggest that there is room for improvement in outreach to RC service members and attracting return visits to the job search website.

The EPP launched an updated website with additional features in November 2010, but there may be some remaining challenges to increasing website usage. First, some unemployed RC service members may not be aware of the website. As the program is expanded to the Army National Guard and the other reserve components, the target population will increase and the 20 Program Support Managers (PSMs), who work to raise awareness of and participation in

[^1]the program among soldiers and their families and among employers, will be spread increasingly thin. Second, some unemployed RC service members may not have easy access to the Internet. As of 2009, about 70 percent of U.S. households had home Internet access, but there was considerable variation by race/ethnicity, education, and state. Internet access may be more problematic for junior enlisted personnel based on their likely educational attainment, particularly for African Americans and Hispanics. Third, the low percentage of website visitors who become registered users suggests that some visitors were not able to find job listings that were suitable or appealing to them. Improving search results, either by increasing the number of job listings or by modifying the website's search algorithms, could attract more visitors to become users and more users to return to the site for multiple visits.

## Improving Linkages Between Military and Civilian Occupations

The EPP program also seeks to enable soldiers to leverage the military training they receive into a job that recognizes and utilizes those skills. When there are close similarities between military and civilian occupations, the benefits of a closer skill match extend to the employer, who may avoid initial training costs and has ready access to a well-trained employee; to the soldier, who is able to take advantage of his or her military occupational training; and to the Army, which can be more confident that those occupational skills are kept current. To examine the effectiveness of the EPP website at identifying opportunities for RC service members to obtain civilian jobs related to their military occupations, we conducted case studies of seven USAR units located in four metropolitan areas: Baltimore, Maryland; Baton Rouge, Louisiana; Des Moines, Iowa; and Las Vegas, Nevada. For each unit, we identified the top five civilian equivalent occupations and searched for jobs in the metropolitan area on the EPP website using the Military Occupational Specialty (MOS) code for enlisted personnel or Area of Concentration (AOC) code for officers as a search term.

The case study results indicated that there were some problems with the crosswalk that was used by the EPP website to map from military to civilian occupations. MOSs with similar skills sometimes got very different search results from the website. Some MOSs had no civilian equivalent and so did not return any job listings, particularly in combat arms but also in other fields, such as Psychological Operations and Military Intelligence. Some civilian occupations considered equivalent to MOSs were declining or were no longer broadly used by civilian employers (e.g., Computer Operators), whereas others using similar skills had large numbers of job listings (e.g., Network and Computer Systems Administrators). Thus, there should be an initial revision of the crosswalk; then, the EPP website should update it annually to keep abreast of changes in MOSs and civilian occupation titles. In addition, since some employer partners are looking for generic military skills and training rather than specific MOS skills, it would be helpful for the EPP website to offer an occupation category for generic military skills and training both to employers and to RC job seekers.

Stakeholders we interviewed also suggested some additional challenges to improving linkages between similar reserve and civilian occupations. RC service members may lack civilian credentials for jobs they are capable of performing in fields such as medicine, trucking,
and vehicle repair. ${ }^{3}$ Although there are examples of some successes in incorporating civilian credentialing into military MOS training, some interviewees expressed frustration with a lack of progress in this area. In some cases, RC service members may not know or be able to communicate that they have the skills required for civilian jobs. They may need more hands-on assistance with career counseling or résumé building than PSMs were able to provide.

## Establishing Closer Working Relationships with Employers

Some employer partners that we interviewed had unmet expectations for the EPP. Some said they expected large numbers of job applicants, but they didn't know which job applicants came to them via the EPP website. Others said they would like to be able to reach out to potential applicants who are willing to identify themselves rather than waiting for RC service members to apply for jobs. Some of these issues will likely be resolved by the new EPP website, which will allow website users to create profiles and online résumés and employers to search through them.

PSMs are the primary means of outreach, both to RC service members and to employers, but there were only 20 spread out across the country. Given the size of their territories, they could not have a deep knowledge of local employer needs or make personal connections between RC service members looking for jobs and employers looking for applicants. Since turnover in these positions was relatively high, some employers expressed frustration at not knowing whom to contact when they wanted to communicate or raise a concern about the program.

Changes in the design and management of the EPP caused confusion and concern among former program staff, employer partners, and PSMs. These changes included an almost complete turnover in EPP central office staff in fall 2009, expansion to the ARNG and other reserve components, and a shift in priorities for PSMs from recruiting employer partners to increasing awareness and usage of the website by soldiers. Given the expansion to all reserve components, some wondered whether program management should move to the Assistant Secretary of Defense for Reserve Affairs or to another organization. Others wondered about the source of future funding. There was also a lack of coordination and considerable overlap with similar job search support services for RC service members, veterans, and family members provided by other military and government organizations, such as the Army Career and Alumni Program (ACAP) and the Partnership for Youth Success (PaYS). Better coordination and cooperation would leverage resources being spent by related programs to address common problems and would reduce confusion among RC service members and employers about the roles each program plays.

Finally, it was difficult to measure the overall effectiveness of the program in terms of the number of RC service members who found jobs through the EPP website. Due to the design of the website, users were transferred to the employer's website when they clicked on a job listing, so employers did not know if an applicant had come to them through the website and the EPP staff did not know how many job applications, interviews, or eventual hires of website users

[^2]were generated from the EPP website. EPP had to rely on PSMs who provide case management intervention or voluntary reports of this information by users.

## Recommendations

At the conclusion of our study in September 2010, we made several recommendations to the Army Reserve and EPP leadership. Some of our recommendations are specific to EPP, but others, such as website metrics, crosswalks from military to civilian occupations, and civilian credentialing, are applicable to other efforts to assist RC service members and veterans seeking civilian employment.

Low usage of the EPP job search website at the time of our study suggested that it may be necessary to invest additional resources in the program to increase outreach efforts and improve users' job search experience. As the program is expanded to other reserve components, additional staff and funding may be needed. The launch of the new website in November 2010 may increase user satisfaction and thus the number of return visits and job listings viewed. We recommend that EPP staff establish metrics for website usage, set goals to increase usage, and monitor progress against those goals. These metrics should include:

- Number of website visitors and users as a percentage of unemployed RC service members (or other measures of the number of potential users);
- Number of website users (who click on jobs and register to use the site) as a percentage of website visitors;
- Number of visits and jobs viewed per user; and
- Program costs per visitor, user, and RC service member hired through the website.

These metrics can serve as a guide to whether additional resources should be invested in the website or alternative approaches should be considered, such as an expanded network of PSMs to develop direct links between RC units and local employers.

In addition, EPP program staff should consider what EPP's unique role should be among other Army, Department of Defense, and government programs that provide employment services to RC service members, veterans, and family members, and explore opportunities to leverage and share resources with these programs.

As the EPP is expanded to other reserve components, the management structure and funding sources may need to be modified. Program management and responsibility for programming and budgeting could migrate to a defense-wide organization. If program management remains with the USAR, other reserve components should contribute to staffing and funding, since their members will also benefit from the program. Improved continuity of central office staff would also benefit the program, so that knowledge, experience, and personal contacts with employer partners are not lost. In addition, the number of PSMs should be increased to improve outreach to RC service members and employers. Their service territories could be based on a target population of RC service members per PSM.

Tracking website metrics is critical to meeting the EPP's objective to reduce unemployment among RC service members. If usage metrics do not improve after the launch of the new website, additional action may be needed to determine why unemployed RC service members are not using the website. Identifying whether the problem is a lack of awareness or Inter-
net access, user satisfaction with the website, or some combination of factors, is critical. One option would be to establish a feedback mechanism for website users, such as a pop-up window with a short survey or a sidebar encouraging comments and suggestions for improving the website. Another option would be to examine the best practices of other military and civilian job search organizations. In any case, it is important to ensure that users are satisfied with the website before launching extensive publicity campaigns, since bad experiences with the website could create unhappy visitors or users who are unlikely to return to the site or recommend it to others.

To increase synergies between reserve and civilian occupations, EPP staff should improve the website's mapping of military occupation codes to civilian occupation titles across all reserve components. Initial search results should include a broad range of relevant occupation titles that the user can narrow down if desired. Crosswalks developed by other military organizations, such as Army and Navy Credentialing Opportunities Online (COOL) and the Army Career and Alumni Program, could be used to aid this effort. EPP staff should also explore opportunities for RC service members to obtain civilian credentials related to their military occupations, either as part of their military training or by encouraging vendors to offer gap training, possibly coinciding with weekend drills or annual training periods.

There are several actions that EPP staff could take to establish closer relationships with employer partners. First, the benefits of the job search website should be made more transparent to employers, for example, by providing visibility of job applicants coming through the website and allowing employers to reach out to website users to directly market job opportunities. Second, EPP staff should develop a mapping of all RC units by location so that they can establish partnerships with local employers relevant to nearby unit types and provide information to employers about the size and type of RC units and the military occupations of RC service members near their location. ${ }^{4}$ Such a mapping could also be used as a basis to develop closer relationships between employer partners and local units to share information on training and deployment schedules, recognize reserve- and guard-friendly employers, and discuss concerns such as civilian credentialing. Third, EPP staff should explore strategic opportunities to benefit both the reserve components and employers by targeting occupations with high recruiting and/or training costs or with shortages of qualified personnel in both the military and civilian sectors.

[^3]
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## Acronyms

| ACAP | Army Career and Alumni Program |
| :--- | :--- |
| AMCOS | Army Military-Civilian Cost System |
| AOC | Area of Concentration |
| ARNG | Army National Guard |
| ATA | American Trucking Association |
| CBRN | Chemical, Biological, Radiological, and Nuclear |
| CMF | Career Management Field |
| COOL | Credentialing Opportunities Online |
| DEA | DirectEmployers Association |
| DMDC | Defense Manpower Data Center |
| DoD | Department of Defense |
| EOB | Employer Outreach and Benefits |
| EPP | Employer Partnership Program |
| FORMIS | Forces Readiness Manpower Information System |
| GOSC | General Officer Steering Committee |
| MOS | Military Occupational Specialty |
| MPSC | Manpower Personnel Services Corporation |
| MSA | Metropolitan Statistical Area |
| NLX | National Labor Exchange |
| OASD(RA) | Office of the Assistant Secretary of Defense for Reserve Affairs |
| OCAR | Office of the Deputy Chief of the Army Reserve |
| OJT | On-the-Job Training |
| OSD | Office of the Secretary of Defense |
| PSM | Program Support Manager |
| RC | Reserve Component |
| ROTC | Reserve Officers' Training Corps |
| USAR | U.S. Army Reserve |
| USERRA | Uniformed Services Employment and Reemployment Rights Act |

Members of the U.S. Army Reserve (USAR) and the Army National Guard (ARNG) balance two careers, and the bulk of their earnings come through civilian employment. However, the employment of reserve and guard members can present challenges to employers, particularly small employers, given the likelihood that employees will face at least one year-long mobilization during their Army careers. At the same time, there are also benefits associated with employing reserve and guard members. They include possible cost savings in screening candidates, as well as in training employees. In addition, a partnership with the Army Reserve or National Guard can help employers in identifying and recruiting qualified candidates.

Since September 11, 2001, activation and deployment of the Army reserve components, including the USAR and ARNG, have increased dramatically. Under the Army Force Generation model, reserve component (RC) units are expected to deploy every 5 to 6 years, and soldiers face additional pre-mobilization training requirements in the years leading up to a planned deployment. The Uniformed Services Employment and Reemployment Rights Act (USERRA) of 1994 requires employers to promptly reemploy RC service members returning from a deployment in the same or a similar position, and to provide the seniority, rights, benefits, and promotions they would have received if they had been continuously employed. However, in a June 2009 survey, 20 percent of ARNG soldiers and 27 percent of USAR soldiers reported that they had experienced at least one USERRA compliance problem. ${ }^{1}$ Thus, there have been concerns about the burdens of increased mobilizations and training on employers of RC service members, USERRA violations, and possible discrimination against RC service members by some employers. ${ }^{2}$

Within this context, the USAR has been exploring opportunities to collaborate with civilian employers and to make hiring and retaining reservists more attractive. The purpose of its Employer Partnership Program (EPP), which was extended to the ARNG in 2009, is to foster employer readiness for mobilization, to make hiring and retaining reservists attractive to civilian employers, and to identify opportunities to share costs with employers. The USAR asked RAND Arroyo Center to examine the experience with the Employer Partnership Program through September 2010, to identify areas for further collaboration with employer partners, and to identify statutory, regulatory, or policy barriers that may currently exist to these partnerships.

[^4]In this chapter we provide some background information about the Employer Partnership Program and other employment services for RC service members, veterans, and family members, and describe our research approach.

## The Employer Partnership Program

The Employer Partnership Program was created by the Chief of the Army Reserve, Lieutenant General Jack C. Stultz, and launched in April 2008. As of 2010, it was a joint venture between the USAR and the ARNG and was being extended to the other services' reserve components. According to the EPP website, "the Army National Guard and the Army Reserve share a vision of collaborative effort that will sustain a viable operational Reserve Component, capable of caring for Soldiers and their Families, and provide Employers with a no-cost link to highly skilled and talented Guard and Army Reserve soldiers."3

According to an official briefing, the EPP has four goals:

1. "Focus on skill sets in the Reserve Component and match them to the Civilian workforce in order to build Capacity \& Capability;
2. Transform the way Employers look at the Reserve Component-not as a liability but as a valued added source of talent;
3. Identify and capitalize on shared training and credentialing between the military and private sector; and
4. Continue collaboration with the private sector to identify and implement future workforce innovations."4

While these are the stated long-term goals of the program, as of 2010, efforts centered on three related but somewhat different objectives:

1. Reducing unemployment among RC service members,
2. Improving linkages between military and civilian skills and occupations, and
3. Establishing closer working relationships with employers. ${ }^{5}$

In support of these objectives, the EPP has undertaken a series of connected efforts, including entering into agreements with over 1,500 civilian employers, creating a job search website, hiring 21 Program Support Managers (PSMs) to connect with employers and support soldier job seekers, and exploring ways to share training costs and facilitate civilian credentialing of RC service members.

## Program History

The history of the EPP is summarized in Figure 1.1. In spring 2007, General Stultz created a number of General Officer Steering Committees (GOSCs) to discuss and strategize about the future of the USAR, including committees on Employer Outreach and Benefits (EOB),

[^5]Figure 1.1 EPP Program Timeline


RAND TR1005-1.1

Health Care, and Recruiting/Retention. ${ }^{6}$ The EPP, originally known as the Employer Partnership Initiative (EPI), was born out of the EOB GOSC discussions and General Stultz's vision of a closer partnership between the USAR and civilian employers, leading to a continuum of service for USAR members and informing employers about the unique mission of the Army Reserve and the value of its soldiers to their businesses.

In fall 2007, the Army Reserve began to meet with and elicit feedback from employers through the U.S. Chamber of Commerce. A team was assembled to create a business plan for a new program and present it to General Stultz and other high-level leadership. The Employer Partnership Initiative was subsequently launched in spring 2008.

On April 14, 2008, the USAR entered into its first partnership agreements with the American Trucking Association (ATA) and Inova Health Systems, a nonprofit health care provider in Northern Virginia. In July 2008, the program signed its first agreement with a law enforcement agency, the Washington, D.C. Metropolitan Police Department. As of April 2011, the EPP had entered into partnership agreements with over 1,500 employers, including major corporations, small businesses, and local government agencies. Agreements generally include a commitment by the USAR and the employer to "explore mutually beneficial initiatives that support the missions of both organizations" and "encourage Army Soldiers to pursue careers with employer partners." These agreements are not legally binding. ${ }^{7}$

The EPP expanded its services in the latter half of 2008, when it began a partnership with DirectEmployers Association, a nonprofit human resources consortium of large employers, which, with the National Association of State Workforce Agencies, runs the JobCentral National Labor Exchange (NLX). DirectEmployers was tasked with creating a job search website for the EPP. In October 2008, this website went live, using JobCentral NLX as its employ-

[^6]ment search engine. Over time this website expanded to include jobs from EPP's employer partners as well as postings from most state employment agencies and other sources. ${ }^{8}$

Also in the summer of 2008, the EPP contracted with the Manpower Personnel Services Corporation (MPSC) to hire a PSM Coordinator and 20 Program Support Managers spread across the country, each responsible for a geographic region. The PSMs, mostly retired members of the armed forces, are tasked with reaching out to employers in their regions, as well as supporting RC service members in their job searches. ${ }^{9}$

The EPP underwent further changes in 2009. In the summer of 2009, General Stultz invited the other services to participate in the program. The Acting Director of the Army National Guard took up this offer, and the ARNG is now partnering with the USAR on the initiative. With this new partnership came a new name for the program, the Armed Forces Employer Initiative, as well as changes in staffing at the Employer Partnership Office, which manages the program. ${ }^{10}$

During 2009, program staff continued to reach out to employers for ideas to improve the program. General Stultz hosted a CEO conference in May 2009, and the program established a Human Resources Working Group comprising employer representatives to examine civilian employment issues for reserve service members, with subgroups addressing career opportunities, skills translation, and career paths. Each subgroup developed a set of findings and recommendations for the program, which included a broader role for PSMs supporting soldiers looking for jobs and developing career paths, better mapping of military to civilian job skills classifications, and enhanced use of labor market data to inform decisionmaking (Armed Forces Employer Partnership, 2009). In addition, program staff conducted ongoing discussions and research into opportunities for the Army reserve components and employers to share training costs and for soldiers to obtain civilian credentials related to their military skills. However, few of these efforts have resulted in tangible programs or policy changes to date, likely due to program staff changes and expansion challenges.

The program continued to evolve in 2010. In October 2010, the Employer Program Office was established as a dedicated directorate within the Office of the Chief of the Army Reserve, and will begin to compete for resources within the planning, programming, and budgeting process in fiscal year 2014. It contracted with MRM Worldwide to develop an improved career portal with added functionality, allowing users to create profiles and online résumés, save the results of job searches, and track job applications. Employers are also able to create profiles, as well as manage job listings and search users' profiles and résumés. In addition, PSMs can access individualized dashboards that list their assigned customers, their customers' status, and metrics to assess program effectiveness. The improved website went live in November 2010.

At the time of our analysis, the website was the primary vehicle through which the Employer Partnership Program supported its mission. Soldiers and their family members were

[^7]encouraged to visit the website to learn about partners and jobs, employer partners to post their jobs on the website, and PSMs to recruit employer partners and make soldiers aware of the website and its benefits. As of April 2011, the program had over 1,500 employer partners, ranging from small, local employers to Fortune 500 companies in career fields such as health care, law enforcement and public safety, transportation and logistics, information technology, telecommunications, and human resources. ${ }^{11}$

## EPP Job Search Website

The EPP job search website is located at http://www.employerpartnership.org. It is linked to the Army Reserve's official homepage (http://www.usar.army.mil). It is also advertised on social networking sites such as Facebook, Twitter, LinkedIn, and http://myarmyreserve.blogspot. com. It is open to members of all reserve components, veterans, military retirees, dependents, and survivors. At the time of our analysis, users could search for jobs based on keyword, military occupation code, civilian occupation title, company name, location, and age of the job listing. When users clicked on a job listing, they were asked to fill out a registration form indicating their military affiliation, name, email address, and telephone number. Those currently serving in the reserve components were asked to provide their home address, unit name and address, pay grade, and military occupation. After completing the registration form, users were redirected to the employer's website, where they could access more information about the job and obtain an application through the employer's human resources department.

Because users left the EPP website when they clicked on a job listing, program staff did not have visibility of the number of job applications, interviews, or eventual hires that resulted from the website. Nor did employer partners have visibility of which applicants came to them via the EPP website, although RC service members may have indicated their military affiliation on their applications. However, the website asked users to report whether they had obtained a job through the site. Based on these voluntary reports, as of October 2010, the website had contributed to at least 3,570 hires since its inception.

As of April 2011, the new career portal allowed users to search for jobs based on keyword, civilian occupation title, company name, city, zip code, and age of the job listing. ${ }^{12}$ If users were not registered, they were prompted to do so as soon as they clicked on a job listing. The registration form requested their military affiliation, name, email address, telephone number, and other status and skill information. This information was used to autofill a basic résumé that can be modified by the user. When registered users clicked on a job listing, they continued to be redirected to the employer's website for additional information about the job, so program staff had limited visibility of interviews or eventual hires. However, there were additional feedback mechanisms to obtain this information if the PSM provided case management intervention or users returned to their profile and indicated in their job tracker that they had been hired. Planned website enhancements included an identifiable résumé tracking process.

## Other Career and Employment Services for Soldiers

The Army and Department of Defense (DoD) support the civilian careers of soldiers, veterans, and their families through a number of other programs and initiatives that provide transition

[^8]assistance for service members who are leaving active duty, help RC members find civilian employment, and recognize and support employers of reservists. We discuss these programs briefly to help the reader place the EPP in context.

Army Career and Alumni Program (ACAP). ACAP is a congressionally mandated, centrally funded and administered program that provides services for soldiers and civilian personnel who are separating from the Army, as well as their family members. These services include individual counseling and assistance, automated tools and personal assistance for preparing résumés and cover letters, and assistance in preparing for interviews. ACAP operates centers at major military installations, and provides remote support, to help soldiers, civilian personnel, and their families determine their career objectives and financial needs, identify job opportunities, develop résumés and other application materials, and prepare for job interviews. ACAP is mandatory for all soldiers who have served a minimum of 180 days of active duty at the time of their separation.

Partnership for Youth Success (PaYS). The PaYS program is a recruiting initiative developed by the Army that supports military recruits in finding a civilian job after completing their service. At the time of accession, the soldier's area of specialization is matched to a company in the private sector seeking qualified candidates. Upon separating from the military, the transitioning service member receives assistance in coordinating job applications, interviews, and site visits with that company. PaYS focuses on the period of time when a soldier is transitioning from active-duty service.

Army Credentialing Opportunities Online (COOL). Army COOL helps active and reserve component soldiers identify civilian certification and license requirements related to their military occupational specialties and locate education and training programs that can help them obtain civilian job credentials. It also provides information on civilian jobs that are related to military occupations or use similar skills, and resources that can be used to obtain training or to pay for licensing examinations, such as the Army Tuition Assistance Program, Army e-Learning, and the GI Bill.

Employer Support of the Guard and Reserve (ESGR). ESGR is a DoD agency that develops and promotes employer support for all branches of Guard and Reserve service by advocating relevant initiatives, recognizing outstanding support, increasing awareness of applicable laws, and resolving conflict between employers and service members through mediation. It has worked to educate Guard and Reserve service members and employers on the Uniformed Services Employment and Reemployment Rights Act of 1994, 38 U.S.C. 4301-4334 (USERRA), which establishes certain rights and benefits for service member employees and in the areas of employment, reemployment, and retention in employment, when employees serve or have served in the uniformed services. Unlike the EPP, ESGR focuses primarily on supporting continued civilian employment and not on helping soldiers and families identify new job opportunities.

Other military programs include the Warrior Gateway Program, Army Reserve Ambassadors, Army Spouse Employment Partnership, and Reserve Officers Training Corps.

Civilian employment of soldiers leaving active duty is also supported by other federal government resources.
U.S. Office of Personnel Management's Veterans Employment Website. Established as a result of Executive Order 13518, Employment of Veterans in the Federal Government, this website offers information about how to obtain jobs in the federal government to veterans, transitioning service members, and their families. It also provides information to federal
agencies about special hiring programs for veterans. Individuals searching for jobs are directed to USAJOBS.gov, the official jobsite for the U.S. federal government. In addition, the website provides links to job listings and employment resources at the Departments of Defense, Labor, Veterans Affairs, and Homeland Security.

Department of Labor's Veterans' Employment and Training Service (VETS). VETS is a small government agency within the Department of Labor that helps veterans prepare for, find, and keep good civilian jobs. VETS oversees the Transition Assistance Program (TAP), a 2.5day workshop designed to help veterans prepare for the civilian job search, and has developed the Veterans' Hiring Toolkit, which is part of the Department of Labor's "America's Heroes at Work" initiative designed to guide employers through the process for hiring veterans. VETS also awards grants for veterans' job training and employment and provides funding for Disabled Veterans' Outreach Program positions and Local Veterans' Employment Representatives to assist veterans at state employment offices.

DirectEmployers Association (DEA). DEA and the National Association of State Workforce Agencies (NASWA) formed an alliance in March 2007 to provide an employer-funded, jointly administered National Labor Exchange as a replacement for the discontinued America's Job Bank. DEA maintains a clearinghouse of jobs and is the only online cross-state labor exchange, distributing job listings to the state and local levels. When our analysis was conducted, DEA was the primary source of jobs listed on the EPP website.

Lastly, soldiers serving in the reserve components or separating from active duty may turn to civilian companies and organizations such as Monster.com to help them find civilian jobs. Job search engine websites post jobs from a range of industries and sectors (the U.S. Navy and Air Force also list extensively). Job searches can be conducted by keywords contained in job postings and/or by location, or users can browse jobs by location, job category, industry, posting date, career, education and experience level, and job type (such as full or part time, permanent or temporary). Military experience is not captured in the search unless it is identified as relevant in the job posting.

## Research Approach

The research team conducted three analytic tasks to examine the progress of the EPP in meeting three objectives ${ }^{13}$ :

- Reducing unemployment among RC service members,
- Improving linkages between military and civilian skills and occupations, and
- Establishing closer working relationships with employers.

First, we obtained and analyzed data on usage of the EPP job search website. These data include counts of website visitors and registered users from Google Analytics covering the period from October 2008 to August 2010, as well as more detailed information on all registered website users during a seven-week period in May-June 2010. The more detailed data

[^9]include information such as military status (USAR, ARNG, veteran, or spouse), the total number of job listings viewed, and the number of times the user returned to the website. For users serving in the reserve components, the data include pay grade, military occupation, and distance from residence to unit. We analyzed these data to provide a description of user characteristics, to compare website usage with the estimated number of unemployed USAR members, and to develop metrics that can help EPP staff evaluate the effectiveness of the website.

Second, we conducted case studies of seven USAR units located in four metropolitan statistical areas: Baltimore, Maryland; Baton Rouge, Louisiana; Des Moines, Iowa; and Las Vegas, Nevada. These locations were selected to cover a variety of unit types and U.S. geographical regions. We identified the pay grades and military occupational specialties (MOSs) or areas of concentration (AOCs) for all authorized positions in the units. We used these military occupation codes to search for jobs in the surrounding area on the EPP website to better understand soldiers' search experiences and to see whether civilian jobs related to their military occupations were available nearby. We also analyzed the detailed website data to identify soldiers in the case study units, metropolitan statistical areas, and surrounding states who used the website to examine whether they were looking for civilian jobs related to their military occupation and to place this search experience in the context of the labor force data gathered for the case studies.

Third, we conducted interviews with 26 stakeholders between May and June 2010, including current and former program staff (5), PSMs (5), employer partners across a range of industries and company sizes, including both private and public employers (10), and individuals from other employment assistance organizations (6). Most interviewees were asked to describe the benefits of the program to employers, soldiers, and the Army; the process of identifying and developing employers as partners; challenges with the program; and approaches to address those challenges. Interviewees from other employment assistance organizations were asked about the products and services offered by their organizations to identify lessons that could be applied to the EPP. Interviews were semi-structured and confidential. The interview results provided a variety of perspectives on the program and helped guide our recommendations for improvement.

We also used Army data to identify military occupations with shortages or high recruiting and training costs and Bureau of Labor Statistics data to identify growing occupations in the civilian sector. These occupations are potential targets for partnerships that would benefit both the Army RC soldiers and employers.

One significant challenge in conducting this analysis is that the EPP has evolved appreciably since its inception, including the program's goals, metrics, and organization. The program continued to evolve during the period of our study, and has been modified since. We have noted as best we can the changes that are relevant to our study. Although some of our findings may no longer be directly applicable to EPP, they can help inform other efforts to assist RC service members and veterans seeking civilian employment.

## Organization of This Report

Chapter Two discusses the objective of reducing unemployment among RC service members, focusing on our analysis of the EPP website data. Chapter Three examines efforts to improve linkages between civilian and military occupations, primarily through the results of our case
studies. Chapter Four explores opportunities to establish closer working relationships with employers, based on the results of our stakeholder interviews. Chapter Five presents our recommendations for strengthening the EPP.

## Reducing Unemployment

In this chapter we examine unemployment rates in the USAR and ARNG and compare them with national unemployment rates. Reducing unemployment among RC service members is a primary goal of the EPP, although the program and website also offer benefits to veterans, family members, and survivors who are unemployed, as well as those who are currently employed but looking for a better job or moving to a new location. We then discuss the potential contribution of the EPP website to reducing unemployment in the Army reserve components, based on Google Analytics data from October 2008 through August 2010 and more detailed website usage data from a seven-week period in May-June 2010. Finally, we discuss some challenges to increasing website usage among unemployed RC service members.

## Unemployment in the Army Reserve Components

From 2003 through 2009, the Defense Manpower Data Center (DMDC) conducted Status of Forces surveys of RC service members approximately every six months. Each iteration of the survey included a series of questions used to calculate unemployment rates that conform to Bureau of Labor Statistics standards using labor force items from the Current Population Survey. ${ }^{1}$ Figure 2.1 shows unemployment rates for all reserve components, the USAR, and the ARNG based on these surveys, in comparison with the national unemployment rate in the same months for all workers aged 16 and over. ${ }^{2}$ As the figure indicates, RC unemployment rates were close to the national rate in 2003 and 2004 but began to rise above the national rate in late 2005, particularly in the USAR and ARNG. ${ }^{3}$ As of December 2009, unemployment in the USAR and ARNG was four percentage points higher than the national rate. ${ }^{4}$

[^10]Figure 2.1
Unemployment Rates in the USAR and ARNG


RAND TR1005-2.1

Figure 2.2 shows a breakdown of USAR and ARNG unemployment rates for junior enlisted soldiers (pay grades E1-E4), senior enlisted (E5-E9), and officers. In addition to the national unemployment rate for all workers aged 16 and over, the figure shows the national unemployment rate for 18 - to 24 -year-olds, the group most comparable to junior enlisted soldiers. As the figure indicates, unemployment is highest among junior enlisted soldiers. ${ }^{5}$ Senior enlisted soldiers and officers typically have lower unemployment rates than the national average.

Given that the 2010 Selected Reserve end strengths of the USAR and ARNG were 206,000 and 359,000 , respectively, RC unemployment rates indicate that there were substantial numbers of unemployed RC service members who could benefit from the EPP. In the following section we discuss our analysis of EPP website data, including the number of website visitors and users relative to the estimated number of unemployed USAR soldiers, the characteristics of users, how often they visited the site, and the number of job listings they viewed. We also discuss website usage metrics that could be used by EPP staff to measure website effectiveness and the benefits of improvements to the EPP website. Since website users could include employed RC service members who were looking for new jobs, as well as veterans, family members, and survivors, our estimates of the number of unemployed USAR service members can be thought of as a lower bound on the potential number of website users.

[^11]Figure 2.2
Army RC Unemployment Rates by Pay Grade Group


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## Analysis of EPP Website Data

We obtained two types of data on usage of the EPP website. The first type consisted of weekly Google Analytics website visit data from October 2008 to August 2010, provided by the DirectEmployers Association. These data include the number of website visits and the number of visitors who clicked on job listings and filled in a registration form. A "visit" is defined as "[a] period of interaction between a visitor's browser and a particular website, ending when the browser is closed or shut down, or when the user has been inactive on that site for a specified period of time. . . Visits are the number of times your website has been viewed." ${ }^{6}$ The visit metric indicates the number of visitors who came to the website, but not whether those individuals used the website to obtain a job listing. In addition, we cannot be certain that all visitors are members of the USAR or other eligible groups (other RC service members, spouses, and veterans), since we have no additional information about them.

The "soldier visits" metric provides a count of website visitors who clicked on job listings and filled out a registration form. DirectEmployers defines a soldier visit as " $[\mathrm{t}]$ he number of online Referral Forms completed by soldiers, which is the number of times a soldier visits the website. . . When a job seeker does a search for jobs on the job search page of the USAR EPI website, a list of search results will appear. . . When the soldier/job seeker clicks on the job of interest, a Referral Form (input page) appears." For clarity, we define "soldier visits" as "users" to distinguish them from "visitors," who may or may not use the site to obtain job listings.

The second type of data was obtained during a seven-week period from May to June 2010, and consisted of information from the registration forms filled out by website users, including their military affiliation (USAR, ARNG, veteran, or family member), email address

[^12]and telephone number, and, for those serving in the reserve components, their home and unit addresses, pay grade, and military occupation. This information was linked with data on the number of times they used the website and the number and types of job listings they viewed. From these data, we identified 3,350 unique users over the seven-week period. ${ }^{7}$

We used the first database primarily to analyze website visits and usage relative to the estimated number of unemployed soldiers in the USAR. We used the second database to obtain a more detailed picture of the types of individuals who used the website and to determine whether there were any differences in website usage based on soldier characteristics, such as pay grade, military occupation, and the distance of their residence from their unit. We also developed a set of metrics based on the more detailed data that can be used to evaluate the effectiveness of the website as it evolves.

Throughout this analysis, we compare the number of website users to an estimated number of unemployed reservists as a measure of performance for the website. Because website users can include other RC service members, veterans, dependents, and survivors, both employed and unemployed, this is a very conservative estimate of the potential number of website users. As the reader will see, even based on this conservative estimate, website usage as a percentage of unemployed reservists was low during the data collection period.

## Website Visits and Usage Relative to Reserve Unemployment

We aggregated the weekly numbers of visitors and users from the Google Analytics data into monthly data so that we could compare them with the estimated number of unemployed USAR soldiers for each month between October 2008 and August 2010. As discussed in the first section of this chapter, we obtained USAR unemployment rates in the 14 months between May 2003 and December 2009 when Status of Forces Surveys of Reserve Component Members were conducted. To compare the number of website visitors and users with the number of unemployed USAR soldiers in each month when we have website usage data (October 2008 to August 2010), we must estimate the number of unemployed USAR soldiers based on the relationship between the national and USAR unemployment rates for the 14 months with survey data. As a baseline estimate, we used the average difference between the USAR and national average unemployment rates, as shown in Figure 2.1. We also estimated an upper bound based on the largest difference between the two rates, and a lower bound based on the smallest difference. Estimates based on the unemployment rates from the DMDC surveys are shown as single points on the chart. Note that the survey estimate was below the baseline estimate in November 2008, but at or near the upper bound in June and December 2009.

The differences between the national and USAR unemployment rates were small in most periods when survey data were available, but diverged in 2009. On average, the USAR unemployment rate was 2.0 percentage points higher than the national rate, the smallest difference was 0.4 percentage points, and the largest difference was 4.5 percentage points. To estimate the number of unemployed USAR soldiers in each month from October 2008 to August 2010, we adjusted the national unemployment rate for each month by the average, smallest, and largest differences and multiplied these rates by USAR annual end strength counts. These estimated unemployment counts are shown in Figure 2.3, along with the number of visitors and users.

[^13]As Figure 2.3 indicates, after the website's initial launch, the number of visitors remained around 5,000 per month through December 2009, and only about a third of visitors clicked on job listings and filled in a registration form. The launch of the website in October 2008 and other publicity events in January and April 2010 resulted in large spikes in visitors. In all but these three months, however, the number of visitors remained low relative to our estimated number of unemployed USAR soldiers, and the percentage of visitors who viewed job listings remained around a third. ${ }^{8}$ Across all months, the number of visitors was 36 percent and the number of users was 12 percent of the baseline estimate of unemployed reservists. When the three months with the highest numbers of visitors are removed from the average, visitors were approximately 25 percent and users were only 8 percent of the baseline estimate of the number of unemployed USAR soldiers. ${ }^{9}$

We used the more detailed website data to measure website usage by pay grade group, relative to the estimated number of unemployed reservists in each group. ${ }^{10}$ We estimated the

Figure 2.3
Estimated USAR Unemployment and Website Usage


RAND TR1005-2.3

[^14]unemployment rates in June 2010 for four pay grade groupings (E1-E4, E5-E9, O1-O3, and O4-O6) in a similar manner as described previously. We then compared the estimated number of unemployed soldiers in each group in June 2010 to the actual number of USAR website users. ${ }^{11}$ Figure 2.4 shows the results of these comparisons. Note again that since website users include both unemployed and employed reservists, these percentages likely overstate website usage rates among unemployed USAR soldiers. The junior enlisted (E1-E4) pay grade group has the largest number of unemployed soldiers, but their usage rate is the lowest (6.5 percent) as a percentage of those unemployed. Junior officers (O1-O3) had the highest website usage rate relative to the estimated number unemployed, nearly 19 percent. ${ }^{12}$ While it is difficult to know exactly why a smaller percentage of junior enlisted used the website, as discussed later in this chapter, one possible reason is that fewer members of this subpopulation had Internet access. Given that junior enlisted soldiers account for more than half $(15,226)$ of the estimated number of unemployed USAR soldiers $(24,625)$, future improvements to EPP outreach and support should be directed toward improving support for junior enlisted soldiers.

Next, we focus on the other characteristics of EPP website users that are measurable with the detailed website data.

Figure 2.4
USAR Website Users Relative to Estimated Number Unemployed


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[^15]
## Characteristics of Website Users

Figure 2.5 shows the distribution of website users in May-June 2010 by military affiliation. The majority of website users were USAR soldiers (59 percent), with a smaller fraction of ARNG soldiers ( 12 percent). It is not surprising that the majority of users were in the USAR, since the EPP had been marketed to them for the longest period of time. The remainder was veterans ( 22 percent) and family members ( 7 percent). It is interesting to note that these groups were also making use of the website, in addition to the target audience of currently serving RC service members.

Figure 2.6 shows the distribution of website users by pay grade for ARNG and USAR service members who used the EPP website in May-June 2010. The first group of bars shows the number of enlisted personnel who used the website by pay grade, the second group shows commissioned officers by pay grade, and the last bar shows the total number of warrant officers. The majority of RC service members using the website were enlisted personnel ( 83 percent). Almost half of all users ( 49 percent) were junior enlisted personnel. Junior enlisted personnel made up about 44 percent of the USAR and 50 percent of the ARNG as of the end of fiscal year 2009, but they had higher unemployment rates than other pay grade groups. Thus, as noted above, junior enlisted personnel may be underrepresented among website users.

We also analyzed the detailed website data to determine the distance between USAR and ARNG users' residence and unit. Figure 2.7 shows the distribution of this distance by percentile of RC users. For example, the first point in the lower left of the figure indicates that 10 percent of USAR and ARNG website users lived within 2 miles of their unit. Half of website users lived within 24 miles of their unit, and 70 percent lived within 53 miles. However, about 20 percent of users lived 100 miles or more from their unit. ${ }^{13}$ Web-based resources have a dis-

Figure 2.5
Military Affiliation of Website Users


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[^16]tinct advantage for soldiers who live far away from their unit, since they would have to travel long distances to obtain unit-based employment assistance. Moreover, information about job opportunities located near the unit would be less relevant for these soldiers, because they may not be willing to commute such long distances on a daily basis for their civilian job.

Figure 2.6
Distribution of Website Users by Pay Grade


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Figure 2.7
Distance Between Website Users' Residence and Unit


## Visits and Job Views per User

During the seven weeks when detailed website data were collected, there were 3,350 unique users and a total of 6,023 website visits during which at least one job listing was viewed. Thus, the average number of productive visits per user during the seven weeks was just under 1.8. ${ }^{14}$ Figure 2.8 shows the distribution of the number of productive visits per user. As the figure indicates, 70 percent of users $(2,341)$ only viewed job listings on one visit during the seven weeks. The remaining 30 percent visited and clicked on job listings on multiple occasions. It is possible that most users found employment as a result of their single visit. However, it seems more likely that these users either did not find the website very useful and never came back, or they returned to the website but found no additional job listings that were appealing to them. ${ }^{15}$ To test this possibility, we examined the relationship between the number of productive visits and the total number of job listings viewed by the user.

Over the seven-week period, the 3,350 unique website users viewed a total of 30,910 job listings, resulting in an average of 9.23 job listings per user. However, 718 users ( 21 percent) viewed only one job listing. Figure 2.9 shows the average number of job listings viewed based on the number of website visits. For example, users who viewed job listings on one occasion clicked on an average of 4.6 job listings; those who viewed jobs on two occasions clicked on an average of 11.3 job listings (combining the number of jobs viewed on both visits). The correla-

Figure 2.8
Number of Productive Visits per Website User


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[^17]Figure 2.9 Average Number of Jobs Viewed by Number of Visits


RAND TR1005-2.9
tion between the number of productive visits and the total number of listings viewed was positive and strong ( $\mathrm{r}=.76, \mathrm{p}<.001$ ). While we cannot assume causality based on this correlation, it does appear that users who made more visits also downloaded many more job listings. This result suggests that the number of productive visits per user and the number of job views per user could be used as metrics to evaluate the effectiveness of the EPP website.

Finally, we examined whether soldiers in some military career management fields (CMF) or branches ${ }^{16}$ were more likely to have multiple productive visits or to view more job listings. ${ }^{17}$ These types of correlations could occur for several reasons. For example, some CMFs or branches may have military skills that are closely related to civilian occupations, or that are adaptable across several types of civilian occupations. Conversely, the EPP website may have many more job listings in some civilian occupations than in others. Another possibility is that civilian unemployment is higher in some CMFs or branches than in others.

First, we examined the fraction of soldiers by CMF/branch that viewed job listings on more than one visit during the seven-week data-collection period. ${ }^{18}$ Across all CMFs/branches, approximately 30 percent of users made more than one productive visit during the seven weeks. We conducted statistical tests to determine whether any of the CMFs/branches with at least 30

[^18]unique website users ${ }^{19}$ had a significantly different percentage of multiple visits than the average across all MOSs. Although the percentage of users with multiple visits ranged from 23 to 40 percent across CMFs, we found no statistically significant differences from the average. It is possible that if our data covered a longer period of time, significant differences would be found. However, as noted above, it could be difficult to determine the reason for the differences.

We also examined the average number of job listings viewed by CMF/branch with at least 30 unique website users, as shown in Figure 2.10. We found three CMFs/branches that viewed significantly more job listings than the overall average of 9.23 jobs: field artillery, engineer, and intelligence. ${ }^{20}$ Without additional data, it is difficult to ascertain why these groups found more job listings. We examine the availability of job listings by military occupation for selected case study units and locations in the next chapter. However, monitoring CMF/branch website usage trends and could provide additional insight to EPP staff about the types of job listings that are needed or the types of employers to target for partnerships.

## Challenges to Increasing Website Usage

Google Analytics website data suggest that, through December 2009, website visitors represented only 15 to 25 percent at most of the estimated target population (unemployed USAR soldiers), since visitors can be employed and can include other RC service members, veterans,

Figure 2.10
Average Number of Jobs Viewed by CMF/Branch


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[^19]dependents, and survivors. Following publicity events in January and April 2010, this fraction had risen to about 40 percent in June-August 2010. However, the number of website visitors who clicked on job listings and registered as users remained at about a third. In this section we discuss some potential challenges to increasing EPP website visits and usage.

First, although the Google Analytics data suggest that publicity events can increase website traffic, there may be some RC service members who are not aware of the website. As the program is expanded and marketed to the ARNG and other reserve components, the target population will increase, and additional outreach will be needed to inform them about the EPP website. Some PSMs we interviewed reported difficulty getting access to units to brief them about the EPP, among the many competing demands for the unit's time. In addition, the 20 PSMs will be spread increasingly thin as the target population increases.

Second, some RC service members may not have easy access to the Internet. Table 2.1 shows the percentage of households with home Internet access or with at least one member who accesses the Internet from some location, for selected demographic groups, based on the 2009 Current Population Survey. ${ }^{21}$ For selected states, the table also shows the percentages of individuals with home Internet access or who access the Internet from any location. On average, almost 69 percent of U.S. households had home Internet access and nearly 77 percent had at least one member who accessed the Internet from some location, but there is considerable variation by age, race/ethnicity, and education. Internet access may be more difficult for junior enlisted personnel based on their likely educational attainment, particularly for African Americans and Hispanics. Table 2.1 lists the states with the highest and lowest Internet access rates, along with the four states selected for case studies. The percentage of individuals who access the Internet varied from a low of 55 percent in Mississippi to a high of about 75 percent in New Hampshire, with the lowest percentages largely in the southeastern United States. Among the four case study states, Louisiana and Iowa were below the national average for home Internet access, and Louisiana and Nevada were below average for Internet access from any location.

Third, the low percentage of website visitors who clicked on job listings and filled out the registration form suggests that some visitors were not able to find job listings that were appealing to them. Moreover, 70 percent of website users observed in the detailed data did not return within the seven-week data-collection period. Although it is possible that they found a job after their first search, it could mean that their first search was not very successful so they did not return, or they returned to the site but did not find any new job listings that appealed to them. Conversely, the correlation between the number of website visits and the number of job listings viewed suggests that if users are successful in finding job listings that interest them, they will return to the website and view additional jobs. These findings suggest that more successful search results, which could be achieved by increasing job listings or improving the website's search algorithms, could attract more visitors to become users and more users to return to the site for multiple visits.

The small number of return visits could also indicate that the website was not very userfriendly relative to other job search resources. For example, when we evaluated the EPP website, users had to re-enter their registration information if they left the site and returned on a later date, and there was no capability to save previous searches. The new website allows users to create accounts, post résumés, and save information from previous searches.
${ }^{21}$ We obtained these data from the U.S. Census Bureau website, http://www.census.gov/population/www/socdemo/ computer.html.

Table 2.1
Percentage of Households with Internet Access, 2009

| Characteristic | Household Has Home Internet Access | Someone in Household Accesses the Internet from Some Location |
| :---: | :---: | :---: |
| All householders | 68.7\% | 76.7\% |
| Age |  |  |
| Under 25 years | 67.0 | 82.9 |
| 25-34 years | 74.2 | 85.6 |
| 35-44 years | 77.8 | 87.0 |
| 45-54 years | 75.8 | 83.7 |
| 55 years and older | 58.2 | 63.0 |
| Race/ethnicity |  |  |
| White (non-Hispanic) | 73.3 | 79.9 |
| African American | 54.5 | 68.1 |
| Asian | 80.5 | 85.5 |
| Hispanic (any race) | 52.8 | 63.9 |
| Educational attainment |  |  |
| Less than high school graduate | 32.2 | 41.0 |
| High school graduate | 57.5 | 66.2 |
| Some college or associate's degree | 74.7 | 83.9 |
| Bachelor's degree or higher | 88.5 | 93.0 |
|  | Individual Lives in Household with Internet Access | Individual Accesses the Internet from Some Location |
| National average | 73.5\% | 68.4\% |
| Selected states |  |  |
| Mississippi | 56.6 | 55.0 |
| Louisiana | 65.8 | 60.5 |
| Iowa | 73.2 | 71.0 |
| Nevada | 76.0 | 67.8 |
| Maryland | 78.7 | 73.4 |
| New Hampshire | 84.7 | 75.5 |

SOURCE: U.S. Census Bureau, Current Population Survey, October 2009.

It is also possible that RC service members are reluctant to reveal their military status to potential employers. Some RC members may feel that civilian employers discriminate against people who serve in the reserve or guard. Data suggest that these fears may have some merit. According to one expert, there may be up to 8,000 alleged violations of the Uniformed Services Employment and Reemployment Rights Act (USERRA) reported, investigated, mediated, or fought in the courts each year (Jordan, 2010). At the time we evaluated the EPP website, the only way an employer could determine the applicant's military status was if the information was provided by the applicant. However, this information may not have been clear to the applicant and so fear of bias may have deterred usage of the website. Moreover, the new version of the website is expected to make it easier for the employer to identify the applicant as coming through the EPP website.

## Conclusions

Unemployment in the Army reserve components has generally been similar to the national unemployment rate since 2003, but rose more quickly than the national rate in 2009, particularly among junior enlisted personnel. Given 2010 end strengths of 206,000 for the USAR and 359,000 for the ARNG and an estimated unemployment rate of 11.5 percent, there are substantial numbers of unemployed RC service members who could benefit from civilian job search assistance, as well as those who are currently employed but looking for better jobs, and others who have access to the website, such as veterans, dependents, and survivors.

As of August 2010, the EPP website was just under two years old, and in this period there were approximately 64,000 unique users. During a seven-week period in May-June 2010, almost half of all RC users were junior enlisted personnel, but given their high unemployment rate, they may be underrepresented relative to other pay grade groups. Website usage by junior officers was the highest relative to the estimated number unemployed.

Our analyses indicate that only about a third of website visitors became users (i.e., click on a job listing and fill in a registration form), and only 30 percent of users returned to the website and viewed jobs on more than one occasion. These results suggest that there remained significant room for improvement as the EPP launched its new website and marketed its services more widely among all DoD reserve components.

We recommend that EPP staff continue to monitor several of the metrics we developed as part of this study to evaluate continued improvements in the website. These include:

- Number of website visitors as a percentage of the estimated number of unemployed RC service members,
- Number of website users as a percentage of the estimated number of unemployed RC service members,
- Number of website users as a percentage of the number of website visitors, and
- Number of productive visits and job listings viewed per user.

With more detailed data from website registration forms, these metrics can be broken down by pay grade groups, CMF/branch, and other user characteristics to determine whether some user types have lower utilization rates. We also recommend that EPP staff develop cost-effectiveness metrics such as program costs per website visitor and per website user.

If the website usage rate remains low relative to the estimated number of unemployed RC service members, particularly among junior enlisted personnel, additional efforts may be needed to understand why. Several factors could be considered or assessed, such as whether RC service members are aware of the EPP website, whether they have adequate Internet access, and the role of the EPP website in their job search process. For those who have used the website, additional factors could include ease of use, satisfaction with job search results, experience with obtaining job applications through the site, and whether the website helped them obtain a job.

For example, EPP staff could establish a system to identify and follow up with users who select few job listings or do not return to the website, based on information currently collected through the website registration form. Users could be selected for follow-up using cutoff values based on the number of visits or job listings viewed during a specified amount of time, such as
two to four weeks. These users could be contacted by email with a web-based survey link with questions such as:

- What type of job were you seeking?
- How did you search for a job?
- Did you search by MOS/AOC, keyword, occupation, and/or geographical location?
- What did your search yield?
- How many listings did your search yield?
- Were the results useful? If not, why not?
- Did the results include jobs for which you were qualified? If not, were you overqualified or underqualified?
- Have you found employment?
- Did the EPP website help you find a job?

Answers to these questions, combined with information from the user's registration form (e.g., location, pay grade, and MOS/AOC), could help inform efforts to improve the website. For example, the results may indicate that users are employing search terms that did not yield the types of job listings they were seeking, and changes could be made to the website's search engine. Alternatively, the results could indicate that many soldiers are looking for types of jobs that are underrepresented on the website, and EPP staff should target these types of employers to become partners.

## Improving Linkages Between Military and Civilian Occupations

Another objective of the EPP is to increase synergies between military and civilian jobs, so that the reserve components and civilian employers of RC service members can share the costs and benefits of occupational training. This effort is most likely to be valuable when there are close similarities between military and civilian occupations, in areas such as transportation, maintenance, medicine, and human resources. In other cases, civilian employers may be interested in more generic military training and leadership skills, security clearances, physical fitness, or personnel who have passed basic background checks.

To examine the effectiveness of the EPP website at identifying opportunities for RC service members to obtain civilian jobs related to their military occupations, we conducted case studies of four metropolitan areas located across the United States that host a variety of USAR unit types. ${ }^{1}$ We also analyzed website data for RC service members in the case study locations and the surrounding states. The purpose of the case studies was to determine the effectiveness of the EPP website in identifying relevant civilian occupations for the military occupations in the USAR units in each location and finding local job listings in these civilian occupations using the military occupation as a search term. We also examined the extent to which website users in each location clicked on job listings related to their military occupation.

In this chapter, we describe the results of these analyses, as well as some challenges that face RC soldiers who want to apply their military occupational training to civilian careers.

## Case Studies of EPP Job Opportunities

Table 3.1 provides some information about the four metropolitan areas we selected for case studies and the USAR units located in each. We obtained information about the 2009 labor force and unemployment rate in each area from the Bureau of Labor Statistics, ${ }^{2}$ and the number of positions by pay grade and MOS (for enlisted personnel and warrant officers) or AOC (for commissioned officers) from the USAR. For each unit, we identified the top five civilian equivalent occupations based on a crosswalk from military to civilian occupations obtained from

[^20]Table 3.1
Case Study Locations and Units

| Metropolitan <br> Statistical Area | 2009 <br> Labor <br> Force | 2009 <br> Unemployment <br> Rate | Unit | Number of <br> Positions |
| :--- | :---: | :---: | :--- | :---: |
| Baltimore, MD | $1,398,000$ | $7.4 \%$ | 392nd Signal Battalion <br> 203rd Transportation Detachment | 486 |
| Baton Rouge, LA | 377,000 | $6.4 \%$ | 321st Sustainment Brigade <br> 399th Psychological Operations Company | 3104 |
| Des Moines, IA | 316,000 | $5.6 \%$ | 4224th U.S. Army Hospital <br> 448th Medical Logistics Detachment | 326 |
| Las Vegas, NV | 982,000 | $12.0 \%$ | 257th Transportation Company <br>  |  |

O*NET Online. ${ }^{3}$ In some cases, more than one MOS or AOC mapped to the same civilian occupation, so the top five civilian occupations typically accounted for 70 to 100 percent of the positions in each unit. The exception was the 321st Sustainment Brigade in Baton Rouge, Louisiana, which included a wide variety of support occupations. In that case, the top five civilian occupations accounted for only 44 percent of the positions in the unit.

Tables 3.2 through 3.5 summarize the case study results for one unit in each of the case study locations. ${ }^{4}$ The first column of each table shows the top five equivalent civilian occupations for the MOSs and AOCs in the unit. The second column shows the MOS(s) or AOC(s) equivalent to these civilian occupations. The third column shows the authorized number of soldiers in each MOS or AOC. The fourth column shows the number of jobs in the civilian occupation as of May 2009 in the metropolitan area, for comparison with the number of USAR soldiers in related MOSs or AOCs. ${ }^{5}$ Finally, we searched for jobs on the EPP website within 25 miles of the metropolitan area using each of the individual MOSs and AOCs in the second column. The fifth column shows the number of job listings and the occupation titles obtained from the EPP website. ${ }^{6}$ As part of the case studies, we also recorded the occupation titles that matched to each MOS or AOC, the number of job listings in each occupation title, and examples of the job titles. These searches were conducted in June through September 2010.

[^21]Table 3.2 illustrates some of the strengths and weaknesses of the $\mathrm{O}^{*}$ NET crosswalk and the EPP website's matching of military occupations to civilian occupation titles. For example, based on the O*NET crosswalk, the first four MOSs in Table 3.2 all map to the same civilian occupation, Radio, Cellular, and Tower Equipment Installers and Repairers. However, as of May 2009, there were very few civilian jobs in the Baltimore metropolitan area in this occupation. When we searched the EPP website using each of these MOSs in June 2010, we obtained a somewhat different list of occupation titles for each MOS. MOS 25P, Microwave Systems Operator-Maintainer, mapped to four occupation titles: Radio Operators; Radio Mechanics; Communications Equipment Mechanics, Installers, and Repairers; and Station Installers and Repairers, Telephone; with a total of 24 job listings, all in the same occupation title (Communications Equipment Mechanics, Installers, and Repairers). MOS 25Q, Multichannel Transmission Systems Operator-Maintainer, mapped to three of these four occupation titles, but the omitted occupation title (Radio Operators) had no job listings, so the total number of job listings was the same as for MOS 25P. MOS 25S mapped to one additional occupation title (Electrical and Electronics Repairers, Commercial and Industrial Equipment) with one job listing, for a total of 25 . Finally, MOS 94E, Radio and Communications Security (COMSEC) Repairer, mapped to only one occupation title (Radio Mechanics) with no job listings. Thus, one of the four MOSs that maps to the same $\mathrm{O}^{*}$ NET civilian occupation would have gotten very different search results from the EPP website than the other three MOSs. However, MOS 25L, Cable Systems Installer-Maintainer, which maps to a different O*NET occupation, got nearly the same search results as MOSs 25P, 25Q, and 25S.

Two other issues were identified by this case study. First, MOS code 91B, which should be Wheeled Vehicle Mechanic, mapped to an outdated MOS (Emergency Medical Technicians and Paramedics) on the EPP website. To get the correct search results, the soldier would have

Table 3.2
Case Study Results for 392nd Signal Battalion, Baltimore, MD

| Top 5 Civilian <br> Equivalent Occupations | MOS/AOC | Number <br> of <br> Soldiers | Number of <br> Civilian Jobs <br> (May 2009) | Number of Jobs <br> on EPP Website <br> (June 2010) |
| :--- | :--- | :---: | :---: | :---: |
| Radio, Cellular \& Tower <br>  <br> Repairers | 25P Microwave Systems <br> Operator-Maintainer | 25Q Multichannel Transmission <br> Systems Operator-Maintainer | 147 |  |
|  | 25S Satellite Communication <br> Systems Operator-Maintainer | 34 (4 occ.) |  |  |

*Occupation titles searched by the EPP website did not include the O*NET civilian equivalent occupation.
needed to enter the former MOS, 63B. Second, MOS 25B, Information Technology Specialist, mapped to an outdated or declining civilian occupation (Computer Operators), based on the small number of job listings, whereas MOSs 250N (Network Management Technician, for warrant officers) and 25 N (Nodal Network Systems Operator-Maintainer) mapped to growing civilian occupations, based on the large numbers of job listings. Although the skills associated with these MOSs may differ somewhat, it is possible that soldiers in MOS 25B may be qualified for some of the jobs listed in the growing occupations.

Table 3.3 shows the case study results for the 399th Psychological Operations Company in Baton Rouge, Louisiana. This case study illustrates that some MOSs/AOCs map to generic military occupations that have no civilian equivalents. If they are used as search terms, the EPP website will not provide any job listings, although service members in these occupations may have skills that would be valuable to civilian employers. In addition, some employer partners that we interviewed said they were not looking for specific military occupational skills, but for more generic military training and leadership skills. It would benefit both service members and employer partners if these types of jobs came up for MOSs/AOCs with no other civilian equivalents, if not for all service members who search based on military occupations.

MOSs 92A (Automated Logistical Specialist) and 92Y (Unit Supply Specialist) illustrate another instance where MOSs that map to the same civilian occupation in the O*NET crosswalk result in very different search results on the EPP website. MOS 92A mapped to one additional occupation title (Laborers and Freight, Stock, and Material Movers, Hand) that had 47 job listings, whereas the other three occupation titles (Shipping, Receiving, and Traffic Clerks; Stock Clerks—Stockroom, Warehouse, or Storage Yard; and Order Fillers, Wholesale and Retail Sales) only had 6 job listings. It seems likely that MOS 92 Y would be equally well qualified for these jobs. In addition, MOS 25U (Signal Support Systems Specialist) mapped to outdated occupations both in $\mathrm{O}^{*}$ NET (Communications Equipment Operators, All Other) and on the EPP website (Radio Operators, Radio Mechanics, and Telecommunications Line

Table 3.3
Case Study Results for 399th Psychological Operations Company, Baton Rouge, LA

| Top 5 Civilian Equivalent Occupations | MOS/AOC | Number of Soldiers | Number of Civilian Jobs (May 2009) | Number of Jobs on EPP Website (June 2010) |
| :---: | :---: | :---: | :---: | :---: |
| Military Enlisted Tactical Operations \& Air/Weapons Specialists \& Crew Members | 35F Intelligence Analyst | 2 | Category not listed | $\begin{aligned} & \text { Outdated MOS 96B } \\ & 0(1 \text { occ.) } \end{aligned}$ |
|  | 37F Psychological Operations Specialist | 77 |  | 0 (1 occ.) |
| Military Officer Special \& Tactical Operations | 37A Psychological Operations (Officer) | 8 | Category not listed | 0 (1 occ.) |
| Automotive Service Technicians \& Mechanics | 91B Wheeled Vehicle Repairer | 6 | 1,930 | Outdated MOS 63B 5 (2 occ.) |
| Multimedia Artists \& Animators | 25M Multimedia Illustrator | 3 | 50 | 1 (4 occ.) |
| Stock Clerks \& Order Fillers | 92A Automated Logistical Specialist | 1 | 4,360 | 53 (4 occ.) |
|  | 92Y Unit Supply Specialist | 2 |  | 6 (3 occ.) |
| Communications Equipment Operators, All Other | 25U Signal Support Systems Specialist | 3 | Category not listed | 0 (3 occ.)* |

*Occupation titles searched by EPP website did not include the O*NET civilian equivalent occupation.

Installers and Repairers). There were no jobs in these occupations in the Bureau of Labor Statistics data for Baton Rouge and no job listings on the EPP website.

Table 3.4 shows the case study results for the 4224th U.S. Army Hospital in Des Moines, Iowa. There is a large number of soldiers in the most common MOS in this unit, 68 W (Health Care Specialist), relative to the number of existing jobs in the $\mathrm{O}^{*}$ NET civilian equivalent occupation in the Des Moines metropolitan area, and there was only one job listing in this occupation at the time the case study was conducted (September 2010). However, these soldiers may be eligible for other types of medical occupations, with some additional training or civilian credentials. ${ }^{7}$

Two of the MOSs in this unit, 68J (Medical Logistics Specialist) and 68G (Patient Administration Specialist), mapped to occupation titles associated with both the current MOS title and an outdated title (Aircraft Armament/Missile Systems Repairer and Aircraft Structural Repairer, respectively). AOC 66F, Nurse Anesthetist, mapped to the same occupation title as other types of registered nurses, but this should not be a problem, since nurse anesthetist job listings also appeared on the EPP website among other types of registered nurses.

Table 3.5 shows the results for the case study of the 355 th Chemical Company in Las Vegas, Nevada. This case study raises one additional issue not found in the other case studies. Although the primary MOS in this unit (74D, Chemical, Biological, Radiological and Nuclear Specialist) has an equivalent civilian occupation (Hazardous Materials Removal Workers) in the $\mathrm{O}^{*}$ NET crosswalk, it mapped to a generic military-specific occupation title on the EPP website, so there were no associated job listings. The similar officer AOC (74A, Chemical, Biological, Radiological and Nuclear) also mapped to a generic military-specific occupation on the EPP website.

Table 3.4
Case Study Results for 4224th U.S. Army Hospital, Des Moines, IA

| Top 5 Civilian Equivalent Occupations | MOS/AOC | Number of Soldiers | Number of Civilian Jobs (May 2009) | Number of Jobs on EPP Website (September 2010) |
| :---: | :---: | :---: | :---: | :---: |
| Emergency Medical Technicians \& Paramedics | 68W Health Care Specialist | 151 | 330 | 1 (1 occ.) |
| Registered Nurses | 66E Perioperative Nurse | 5 | 6,260 | 29 (1 occ.) |
|  | 66H Medical Surgical Nurse | 32 |  | 29 (1 occ.) |
|  | 66N Generalist Nurse | 1 |  | 29 (1 occ.) |
| Shipping, Receiving, \& Traffic Clerks | 68J Medical Logistics Specialist | 19 | 990 | 0 (1 occ.) <br> \& 1 (3 occ.) associated w/ outdated MOS |
| Medical Records \& Health Information Technicians | 68G Patient Administration Specialist | 15 | 570 | 3 (1 occ.) <br> \& 0 (4 occ.) associated w/ outdated MOS |
| Nurse Anesthetists | 66F Nurse Anesthetist | 11 | Category not listed | 29 (1 occ.)* |

*Also classified as registered nurses on EPP website.

[^22]Table 3.5
Case Study Results for 355th Chemical Company, Las Vegas, NV

| Top 5 Civilian Equivalent Occupations | MOS/AOC | Number of Soldiers | Number of Civilian Jobs (May 2009) | Number of Jobs on EPP Website (August 2010) |
| :---: | :---: | :---: | :---: | :---: |
| Hazardous Materials Removal Workers | 74D Chemical, Biological, Radiological \& Nuclear (CBRN) Specialist | 88 | 380 | 0 (1 occ.)* |
| Automotive Service Technicians \& Mechanics | 91B Wheeled Vehicle Repairer | 9 | 3,080 | Outdated MOS 63B 5 (2 occ.) |
| Emergency Management Directors | 74A Chemical, Biological, Radiological \& Nuclear (CBRN) (Officer) | 6 | Category not listed | 0 (1 occ.)* |
| Industrial Machinery Mechanics | 91J Quartermaster \& Chemical Equipment Repairer | 5 | 630 | Outdated MOS 63J 9 (1 occ.) |
| Stock Clerks \& Order Fillers | 92A Automated Logistical Specialist | 1 | 10,320 | 21 (4 occ.) |
|  | 92Y Unit Supply Specialist | 2 |  | 13 (3 occ.) |

* Occupation titles searched by EPP website did not include the O*NET civilian equivalent occupation. EPP classified as military-specific occupation.

We conducted some additional searches of the EPP website for jobs in Las Vegas in September 2010, using keywords from military-related job titles, such as "mechanic," "warehouse," "cook," and "food service," and compared them with the results from using the same search terms on Monster.com, a popular civilian job search website. In all cases, the EPP website listed at least as many jobs as Monster.com, and in some cases, many more. In addition, these search terms yielded more occupation titles and more job listings than searches using comparable MOSs, such as 92G (Food Service Specialist) and 92Y (Unit Supply Specialist). For example, the search term "cook" resulted in four different occupation titles for cooks and a total of 21 jobs, whereas a search for MOS 92G only resulted in one occupation title for cooks with no job listings. ${ }^{8}$ These examples suggest that a better mapping from MOSs to civilian occupation titles would yield significantly better search results on the EPP website.

## Website Usage in Case Study Units and States

We also examined website usage by members of the case study units during the seven-week period in May and June 2010 for which we have detailed website data. The number of website users, relative to the estimated number of unemployed RC service members, is shown in Table 3.6. We estimated the number of unemployed RC service members based on the 2009 unemployment rate for the metropolitan statistical area, assuming all the authorized positions in the unit were filled. Note that there seemed to be fewer website users in the two metropolitan statistical areas with higher local unemployment rates, Baltimore (7.4 percent) and Las Vegas (12.0 percent), either because fewer unemployed service members visited the website, or fewer who did visit found job listings they wanted to view.

[^23]Table 3.6
Website Usage in Case Study Units

| Metropolitan <br> Statistical Area | Unit | Number of <br> Positions | Estimated <br> Number <br> Unemployed | Number of <br> Website <br> Users |
| :--- | :--- | ---: | ---: | :---: |
| Baltimore, MD | 392nd Signal Battalion <br> 203rd Transportation Detachment | 486 | 36 | $3(8 \%)$ |
| Baton Rouge, LA | 321st Sustainment Brigade | 31 | 2 | 0 |
| 399th Psychological Operations Company | 104 | 20 | 7 | $3(15 \%)$ |
| Des Moines, IA | 4224th US Army Hospital | 326 | 37 | 19 |
|  | 448th Medical Logistics Detachment | 288 | 2 | $3(16 \%)$ |
| Las Vegas, NV | 257th Transportation Company | 116 | 45 | 14 |
| Total | 355th Chemical Company | 45 | 5 | $1(7 \%)$ |
|  | 313th Military Police Detachment | 1,739 | 140 | $11(8 \%)$ |

Table 3.7 provides some additional details on the characteristics of service members in case study units who used the EPP website in May-June 2010. Similar to the overall sample of website users, most website users in the case study units only viewed jobs on one occasion, and five of the eleven only viewed one job. The table also indicates the pay grade and MOS or AOC of the users, some examples of the job titles they viewed, and whether these jobs were clearly related to their MOS/AOC, used similar skills, or were not related to their MOS/AOC.

To examine more broadly whether recent website users viewed jobs related to their military occupation, we also analyzed the job search records of other website users who reported that their residence or unit was located, or who searched for jobs, in the four case study states. Figures 3.1 and 3.2 provide some background information about this subsample of website users. Figure 3.1 shows the military status of website users in the case study states. Overall, and in three of the four states, about 80 percent of website users were USAR service members. In Nevada, almost 90 percent were USAR service members. The remainder was ARNG service members, except in Iowa, where a small number of veterans, spouses, and retirees also viewed jobs.

For website users affiliated with the USAR or ARNG, Figure 3.2 provides information about the location of their residence or unit. Users in the case study units were typically a small fraction of total website users in these states. In Maryland and Nevada, the majority of website users reported that their residence or their unit was in the same metropolitan statistical area (MSA) as the case study unit. In Iowa and Louisiana, a substantial fraction of website users reported that their residence or their unit was located elsewhere in the state (but neither were in the case study MSA). Some website users whose residence and unit were both located outside the state viewed jobs located in Iowa. Most of these users appeared to be conducting nationwide job searches, but a few viewed jobs exclusively or primarily in Iowa.

Figure 3.3 shows the proportions of website users in the case study states who viewed jobs related to their military occupation, for those affiliated with the USAR or ARNG. Overall, 27 percent of these website users only viewed jobs that were clearly related to their military occupation; 28 percent viewed some jobs that were clearly related to their military occupation or used similar skills, and 45 percent only viewed jobs that did not seem to be related to their

Table 3.7
Characteristics of Website Users in Case Study Units

| Pay Grade | MOS/AOC | Number of Uses | Number of Jobs Viewed | Sample Job Titles | Related to MOS/AOC |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 392nd Signal Battalion, Baltimore, MD |  |  |  |  |  |
| E2 | 92Y Unit Supply Specialist | 1 | 5 | Office Administrator | Some |
|  |  |  |  | Receptionist |  |
|  |  |  |  | Management Analyst |  |
| E3 | 25Q Multichannel Transmission Systems Operator-Maintainer | 1 | 1 | Creative (Apple Store) | Some |
| E4 | 25U Signal Support Systems Specialist | 1 | 7 | Radio/Satellite Communications Field Engineer | Yes |
|  |  |  |  | Software Engineer |  |
|  |  |  |  | Field Technician |  |
| 321st Sustainment Brigade, Baton Rouge, LA |  |  |  |  |  |
| E4 | 68G Patient Administration Specialist | 1 | 2 | Human Resources/Recruitment Receptionist/ Administrative Assistant | Some |
| E5 | 71M Chaplain Assistant (outdated) | 1 | 1 | Business Development Manager | No |
| E8 | 92A Automated Logistical Specialist | 1 | 1 | Industrial Field Assistant | No |
| 399th Psychological Operations Company, Baton Rouge, LA |  |  |  |  |  |
| E2 | 37F Psychological Operations Specialist | 1 | 1 | Loader/Unloader | No |
| 4224th U.S. Army Hospital, Des Moines, IA |  |  |  |  |  |
| E5 | 68P Radiology Specialist | 1 | 1 | Radiologic Technician | Yes |
| O2 | 70H Health Services Plans, Operations, Intelligence, Security, \& Training | 5 | 26 | Intelligence Analyst | Some |
|  |  |  |  | Operations Research Analyst |  |
|  |  |  |  | Quality Control |  |
| 04 | 70B Health Services Administration | 1 | 4 | Industrial Engineer | No |
|  |  |  |  | Quality Engineer |  |
|  |  |  |  | Senior Process Engineer |  |
| 355th Chemical Co, Las Vegas, NV |  |  |  |  |  |
| E4 | 74D CBRN Specialist | 1 | 3 | Armored Car Driver | No |
|  |  |  |  | Display Stocker |  |
|  |  |  |  | Monitor Technician |  |

military occupation. However, these proportions varied somewhat from state to state. A larger proportion of website users in Iowa and Maryland only viewed jobs related to their military occupation, while none of the website users in Nevada viewed only jobs that were related to their military occupation. Sixty to seventy percent of website users in Louisiana and Nevada only viewed jobs that did not seem to be related to their military occupation. It is not clear whether these patterns occurred because website users were not interested in jobs related to

Figure 3.1
Website User Military Status in Case Study States


Louisiana


Nevada


Figure 3.2
Website User Location in Case Study States


RAND TR1005-3.2

Figure 3.3
Relationship Between Military Occupation and Jobs Viewed for Website Users in Case Study States

their military occupation, or because they were unable to find jobs on the website that were related to their military occupation.

The branches or career management fields in which website users were most likely only to view jobs clearly related to their military occupation were Adjutant General/Human Resources (7 website users), Medical, including nurses and health services ( 6 website users), Quartermaster ( 5 website users), and Military Intelligence ( 4 website users). ${ }^{9}$

## Possible Challenges to Improving Linkages Between Military and Civilian Occupations

Through our interviews with employer partners, PSMs, and current and former EPP staff, we also identified other possible challenges to improving linkages between RC and civilian jobs.

## Translating Military to Civilian Skills

Many interviewees expressed concern that soldiers have difficulty understanding how their military skills and training transfer to the civilian sector. RC service members who are new to the civilian job market, either those who have recently left the active component or new RC recruits who have completed their initial MOS training, may struggle to identify the jobs that make the best use of the skills they have developed in the Army and so end up in jobs for

[^24]which they are overqualified or that are not consistent with their Army MOS or AOC. As one employer noted:

Résumés of veterans who leave the military after 4 to 8 years are not as complete as a civilian résumé. They don't understand how to do a civilian résumé. In the Army Reserve, many are new recruits; they don't know how to apply for jobs either. Get 7 to 10 months of training, and report to their unit.

These interviewees believed that if RC service members could make better use of their military training, it might be considered more valuable both to them and to their civilian employers, and would also help them maintain the skills that are useful in their MOS or AOC. There are many tools in place to help RC service members identify the civilian jobs for which they are best prepared. For example, the O*NET crosswalk and Army Credentialing Opportunities Online (COOL) can help make these connections. However, a more robust system to help RC service members identify civilian opportunities would also be helpful. As one employer noted:

The other piece is educating the soldiers-often they get bad advice-"type your MOS in."
They aren't being taught how to translate their skills. How can I translate my experience into the civilian sector?

While some MOSs and AOCs have closely related civilian equivalents, the applicability of military-acquired skills is not obvious in other cases. A job description may call for previous experience in the industry, but employers may be open to considering relevant Army service as industry experience. One employer we interviewed, unable to find enough qualified biomedical equipment technicians, found that helicopter mechanics make very good MRI repair technicians; both helicopters and MRI machines require a strong understanding of electronics and, because the machines are expensive, someone who can fix them quickly. Another person we interviewed noted that submarine mechanics are often quite good at repairing equipment in a wood products mill. Another employer described his experience:

I am a perfect example. I was a tank leader on active duty. If you put those MOSs into MOS generators, you don't get much. My first job was at a paper manufacturing company. They had a lot of clunky machinery, [and the job was] similar to taking care of big clunky tanks. The reason I got that job was I had skills from the Army but that wouldn't come from the MOS translator.

In addition, the MOS or AOC captures only one dimension of a service member's skills, and may ignore other qualifications that are sought by civilian employers, such as foreign language abilities or security clearances. Security clearances can open up additional job opportunities and are valued by employers because of the lengthy clearance process. In addition, some employers we interviewed said they were looking for generic military skills or training, rather than for specific military occupational training. Others were looking for employees who had passed basic background checks.

## Lack of Civilian Credentials

Many interviewees noted that soldiers in some MOSs or AOCs have skills that would transfer well to civilian employment in a comparable field, but these soldiers often lack the specific credentials or licenses they need to take full advantage of the training they receive in the military. These gaps exist in a variety of specialties, including truck driving, many medical occupations, supply chain management, and vehicle repair that are relevant both to the Army and to civilian employers. One employer shared:

RNs in the military have command experience. They are more like patient care directors, not bedside nurses. But they tend to get offered positions as bedside nurses, which is below their training. The military RNs don't have the proper certifications, and so are underemployed in the civilian market.

Many interviewees thought that the Army could do more to provide or otherwise facilitate training for RC service members that is more consistent with civilian requirements. For example, according to one expert we interviewed, Army medics (MOS 68W) do not have sufficient training to qualify as civilian emergency medical technicians. ${ }^{10}$ Providing training that is more consistent with civilian requirements would encourage soldiers to pursue a civilian job that is related to their MOS or AOC. The additional training might also be directly useful to the Army; for example, the requirements for a commercial driver's license include additional training on safety. With skills that immediately translate to civilian qualifications, soldiers may be very competitive for civilian jobs. As one employer noted:

The Army is not paying any attention to what civilian competencies are needed, so the Army Reserve can't train them to get civilian jobs. They need to think differently about getting employees certified. It sets up people to fail. A lot of [reservists] don't even work in their medical specialty, so they don't keep up their training in their civilian job.

Others noted that some employers may be willing to lead efforts to streamline the transition from military to civilian employment. Lead companies in the most promising sectors could identify gaps in training and best practices in filling these gaps to improve linkages between RC and civilian jobs. One interviewer noted that he had worked with a major automobile manufacturer to develop gap training for Army mechanics working on large diesel engines so that they could become certified as master mechanics by that manufacturer. Most of this training could be done on-line in an RC service member's free time. As an employer noted:

If they come out of the military and they got certified [as a factory-certified technician], their pay would increase dramatically . . . We can help soldiers and employers by working together. Good employees are hard to find. Service members provide a lot of the things I'm looking for.

Another employer noted that gap training could be of value to the employer as well:
It would be difficult to line up Army training exactly with civilian requirements in some areas such as police. But we could help get the soldiers closer and cut down the employer's

[^25]training costs. An 80-90 percent match would be helpful to both the Army Reserve and employers.

One of the challenges in providing more standardized training, however, is that licenses and credentials may not be standardized across states. Commercial driver's licenses, for example, are not standardized, so additional effort would be required to develop training programs that are acceptable across the country.

## Reducing Training Gaps

Some interviewees described cases where the military services and employers have identified the gaps between military and civilian training and worked to close these gaps. Inova's Military to Medicine program has mapped the competencies of medical MOSs to those of civilian jobs and examined the gaps between them. It also offers training and education to fill those gaps, and has hired about 300 RC service members, veterans, and family members through the program. Military to Medicine also plans to publish this research to help soldiers and employers better match skills and requirements. In 2004, DoD partnered with the Federal Aviation Administration (FAA) to give enlisted mechanics in the military the same credentials as their civilian counterparts. The Navy and Marine Airframes and Powerplant Program was established at the Center for Naval Aviation Technical Training to ensure that all aviation technicians are able to obtain the FAA's Airframes and Power Plants license (Johnson, 2004).

However, interviewees also spoke of a number of failed attempts to increase the overlap between military and civilian training. For example, they described meetings between the American Trucking Association, the National Highway Traffic Safety Administration, and the Association of State Department of Motor Vehicles Administrators to talk through the challenges that RC service members face in getting civilian jobs as truck drivers. At that time, NHTSA was trying to write rules and guidelines for state licensing of commercial drivers. The USAR submitted comments into this process, but these challenges had not yet been resolved at the time of our interviews. We also heard of efforts to add some elements of civilian training to the standard military driving course using virtual reality trainers, but those efforts were not pursued at least in part due to staff turnover in the EPP central office. Another employer partner spoke of efforts to develop a pilot program for 10 RC mechanics to become certified by the manufacturer as diesel mechanics. As that employer explained:

They have to be certified to work on recalled equipment. This certification would help them get civilian jobs. Everyone liked this idea, but it seems like it hasn't gone anywhere. Getting through the bureaucracies at [the manufacturer] and the military has been frustrating. The ball is in the military's court. [The manufacturer] has asked if they could find 10 candidates to try it out.

## Conclusions

Based on our case studies, the O*NET one-to-one crosswalk from military to civilian occupations yields a relatively narrow set of job listings for each military occupation. Several military occupations may map to the same civilian occupation, and some military occupations have no civilian equivalent, particularly in combat arms, but also in other CMFs/branches, such as

Psychological Operations and Military Intelligence. This limitation may be more of a problem for the ARNG, which includes more combat arms personnel than the USAR.

Some $\mathrm{O}^{*}$ NET civilian occupation titles are declining or no longer broadly used by employers, such as Radio Operators, Radio Mechanics, and Computer Operators. However, other occupation titles using similar skills may have large numbers of job listings, such as Network and Computer Systems Administrators. In addition, reliance on a military-to-civilian crosswalk may be counterproductive in some circumstances. For example, police departments may be looking for generic military skills and training or individuals who have passed through background screening rather than soldiers trained as Military Police.

The EPP website typically searches a broader range of occupation titles than the O*NET crosswalk, but it may use outdated MOS codes or not include the $\mathrm{O}^{*} \mathrm{NET}$ occupation. In addition, some MOSs that were considered equivalent by O*NET got very different search results on the EPP website. These included some Signal and Quartermaster MOSs in the case study units. Narrow search results for some MOSs appeared to be more related to the military-to-civilian crosswalk than to a lack of job listings on the EPP website. We tested some common job titles such as "cook," "food service," and "mechanic" in Las Vegas, and found that the EPP website listed at least as many jobs as Monster.com.

These results suggest that it is important for the EPP to conduct an initial review of its crosswalk from military to civilian occupations to ensure that users get a broad listing of related civilian jobs, and then to update it annually to keep up with MOS changes as well as trends in employers' use of occupation titles. Other Army organizations, such as COOL and the ACAP, also maintain military-to-civilian crosswalks that could be adapted to the EPP program. ${ }^{11}$ Broader initial job search results would still allow website users to narrow down the results to a smaller list of occupations if desired, and could reduce potential frustration with searches that result in little or no job listings. It may also be helpful to allow employer partners to designate some jobs as needing generic military skills and training only, and offer this category as a search term for website users.

Based on our interviews, there are also additional steps the reserve components, EPP staff, and PSMs could take to help RC service members obtain the additional training and credentials they need to qualify for civilian jobs related to their military occupations. These steps include:

- Helping RC service members translate their military skills and training into terms understandable to civilian employers,
- Creating opportunities for RC service members to obtain civilian licenses and credentials, and
- Modifying military training or arranging for additional training to reduce gaps between military and civilian training in related occupations.

[^26]
## Establishing Closer Working Relationships with Civilian Employers

The third objective of the EPP is to establish closer working relationships with employers. The USAR considers the soldier a shared employee with the civilian employer, and one of the purposes of the program is to ensure that employers believe that hiring RC service members is a good return on investment. To better understand this relationship, RAND Arroyo Center interviewed current and former EPP staff, employers, and PSMs about their experience with the program and recommendations for improvement. In this chapter we describe the findings from these interviews and, in particular, the challenges the EPP faces in establishing closer working relationships with employers. We also present the results of an analysis to identify occupations with shortages or high recruiting and training costs in the ARNG, USAR, and civilian sector.

## Challenges in Attracting and Maintaining Employer Partners

Some of the challenges that were discussed during our interviews pertained to the relationship that employers have with the Army and their experience with the EPP to date.

## Employers' Unmet Expectations

Some employers we interviewed spoke of unmet expectations, of anticipating many successful applications from RC service members but hearing from or hiring fewer. This gap may be due to a combination of unrealistic expectations on the part of employers, overly optimistic signaling from their contacts in the Army Reserve or EPP staff, a lack of awareness about the EPP website or a lack of relevant skills among the soldiers in nearby units, or other factors. One employer spoke of challenges with the program:

We haven't had as much success with the program as we would like. The Army Reserve says they have a large pool of applicants, but we haven't hired as many as we expected. Military applicants can usually pass the agility test. In addition to drugs and alcohol, criminal history or financial problems can be an issue for military applicants.

Other employers attribute unmet expectations to an emphasis on growth in the program. As one employer stated:

A lot of effort has been made to solicit partners. Less effort has been made to ensure positive outcomes for employers and reservists. The next step is to make sure that positive outcomes occur.

Some attributed the low yield among employers to low motivation among some RC service members. As one PSM noted:

> The only feedback I get consistently from employers is that the younger soldiers aren't as responsive as they might wish. We ask employers to help, but soldiers may not apply, or if they identify some soldiers to work with, they don't send in the materials that employers ask for. It's mainly a maturity issue. They are just starting their working life.

## Reaching Out to Potential Applicants

Many employers, particularly those who expected more qualified applicants, would like to have a way to contact RC service members directly, or to otherwise solicit applications more aggressively. To those we interviewed, establishing this communication with potential RC applicants might take a variety of forms. It might involve allowing employers to search for candidates in the same way candidates search for jobs. This might be particularly appealing to employers who have a good understanding of what kind of service member would best fit the needs of the position they are seeking to fill. Alternatively, the Army might play a more active role in matching employer requirements and soldiers looking for employment. As one employer described:

One of the things that I remember when I left active duty is that headhunting firms knew all about me. My assumption is the Army tries to know where their people are moving. If they could create a talent database. The Army Reserve has to know that in August these are the people that are graduating truck driver school. These are people that are coming back to metro areas, let's make some matches. If I had a list, or report or database-proactively giving access to the talent pool-that would be helpful.

The USAR and ARNG might also encourage employer partners to share information about jobs with RC service members through other avenues. One person we interviewed spoke of attending a recruiting session for Reserve Officers' Training Corps (ROTC) candidates on a day when the cadets were discussing which branches that they might select in the Army. Availability of civilian job opportunities in related fields could encourage more ROTC cadets to choose to go into the reserve components, so the Army would not have to assign as many involuntarily.

At the very least, employers stated, they would like to be able to identify which applicants have a military background, because applicants do not always reveal their military status. The employer partners that are most committed to hiring those with military service would particularly like to be aware of any military experience so that they can give priority to those applications. Any efforts to more clearly identify the military status of the applicant would need to be sensitive, however, to an individual's preference not to be so identified. Some reservists may worry about discrimination from some employers, perhaps because of the potential that they could be deployed. ${ }^{1}$

[^27]
## Use of Alternative Employment Websites

Some people we interviewed thought that although the EPP website could be a valuable tool, it was not as effective as it might be due to low awareness among soldiers, employers, and employment support services, or because other options better met the needs of their industry. In some cases, employers work directly with local recruiters or recruit directly from RC units. One trucking company takes trucks to DoD facilities to conduct training and help individuals get licenses. Other partners have developed their own recruiting websites for service members and so are less attentive to their presence on the EPP website. Some Army employment services refer service members to more well-known job sites such as Monster.com or Jobspider and may or may not refer candidates to the EPP website. As one employer noted:
[Our company] is completing some military market research, so it has waited to do some work at the infrastructure level to get involved with the web side of the program. We are relaunching our military micro-site this summer and haven't really been involved with the [DirectEmployers Association] website.

## Lack of Familiarity with the Military

Some interviewees noted that many employers and human resource professionals are unfamiliar with military screening processes and training, and so are less equipped to understand the benefits of hiring RC service members and to evaluate their military experience. In the previous chapter we discussed the challenges that employers have in making connections between their job requirements and the military experience of a candidate. Additional information about the reserve components would also be helpful, including the educational, physical, and mental qualifications every service member must meet, the differences between military pay grades, generic and occupation-specific military training, and the frequency, timing, and duration of military training and deployment. As one employer indicated:

In the health care sector, providers are not connected to the military. They don't even know who their reserve employees are. There is a need to make the right connections within the company, to market the Services. Some employers may not even know what is available to them.

## Product Support Managers Are Spread Thin

PSMs are the primary means of outreach to both soldiers and employers, but as of September 2010, there were only 21 of them; for example, one PSM serves the states of Washington, Oregon, and Alaska. Given the size of their territories, PSMs cannot have a deep knowledge of local employer needs or a strong network of relationships with employers in all areas they cover. This undermines the effectiveness of the EPP by limiting awareness among employers and soldiers and by frustrating employers eager to build strong relationships with the Army but unable to connect with their liaison. As one employer stated:

A stronger network of PSMs is needed. I have reached out to the PSMs, but they don't always reach out to me, or to local hiring managers. The PSMs have huge areas to cover. It's challenging for them to have personal relationships.

Employers noted that although a web-based strategy is important, most hiring is done locally. Relationships between the EPP and hiring managers are important. In addition, when large companies join the program, relationships need to be built not only with senior management, but at the local level as well. As one employer stated:

PSMs sign people up and then they move on. They need to work with the employers more. Employers don't have any contact with the Army Reserve units.

PSMs, too, are frustrated at the size of the geographical regions they are expected to cover. According to those we interviewed, the original Army assessment called for more than 90 PSMs, but funding was obtained for only 20. As one PSM stated:

It's supposed to be an eight-hour-a-day job, but the workload is much greater. There are only 20 PSMs in the whole country.

## PSMs Have Difficulty Gaining Access to Units

Many of the PSMs we interviewed spoke of difficulties they faced in gaining access to units to provide information about the EPP and its website. Some units have responded slowly or not at all to PSM requests to brief soldiers about the program. Some PSMs thought that company commanders and unit administrators were not aware that the EPP is a priority program.

The program was introduced by General Stultz. He sent out an email, but a lot of people may have thought it was not a high priority. The message is not getting down to the lowest levels. There are five units in my reserve center but I have only talked to one, because the others haven't scheduled me to talk.

## Challenges Related to Program Design and Management

Other challenges undermine the strength of the program more generally and, therefore, indirectly impede the establishment of closer working relationships with employers.

## Changes to the Program Cause Confusion and Concern

As we discussed in the introductory chapter, there have been many changes to the program since its inception. While General Stultz remained an active proponent, most of the central office staff of the EPP changed in late 2009. Some employers and PSMs believed these changes were disruptive. For example, efforts begun by the original staff to make civilian and military training more consistent, to improve linkages between employers and soldiers, and to develop gap training programs were not pursued. Others spoke of challenges in building relationships anew. As one PSM stated:

There has been a lot of change in the staff at OCAR. I am not as familiar with them anymore. We need more stability at the higher level. There were a lot of people on temporary orders and they had to go. It helps if you know the person you are talking to.

The program has also expanded to include first the ARNG, and then all services' reserve components. This expansion in scope has introduced confusion among PSMs and employers. Some interviewees expressed concern that this expansion in scope has not yet resulted in an expansion of the PSM staff.

In addition, there have been more subtle shifts of emphasis in the strategic goals of the program, from outreach to employers and development of employer partners to outreach to soldiers. Many of the early partners, such as Inova Healthcare, Schneider Trucking, and Crowley Motors, have identified internal champions who have a clear understanding of RC service members' strengths and how their military experience aligns with the needs of the company. But there are now many hundreds of partners, some of whom are less familiar with the military. Because of the rapid expansion of the program, they also have more limited individual interactions with EPP staff and PSMs. Moreover, as of 2010, the program was placing less emphasis on signing up employer partners as a performance metric for program staff and PSMs, and was focusing on increasing awareness within the RC service member population.

At the time of our study, there were also unresolved questions about future program management. The EPP fell within the Office of the Deputy Chief of the Army Reserve (OCAR). Many of the individuals we interviewed, however, anticipated changes in program management to reflect the expansion to the other services. Some speculated that it would migrate to the Office of the Secretary of Defense (OSD) because it included all the services (specifically to the Office of the Assistant Secretary of Defense for Reserve Affairs), which they feared would dampen its entrepreneurial spirit and slow its development. Others thought the program could be transferred to Employer Support of the Guard and Reserve (ESGR). Where the program would reside, when this change would take place, and how smooth the transition would be were sources of concern for some interviewees.

These changes prevented the EPP from presenting to employers and soldiers a clear sense of priorities and goals, disrupted the development of closer partnerships with employers and placed on hold efforts that were being made to improve the program. As two employers noted:

A year ago we were working on [an effort to build stronger relationships with EPP and the Army Reserve]. But since then, they have gone into radio silence. I've heard they're retooling the program. Is it just reserve? Seems like we're taking a tactical pause.

I am not sure I am helping EPP as much as I could be. I don't know what problem they're trying to solve.

## Insufficient Coordination with Similar Programs

Some of the stakeholders we interviewed felt there was limited coordination with other employment support programs for service members and their families. As described in Chapter One, there are a number of related programs that provide transition assistance for service members leaving active duty, assist RC members looking for civilian employment, and support the employment of RC service members. While the EPP focuses primarily on assisting RC service members looking for civilian employment, many functions overlap with other, related programs and initiatives. For example, the Army Career and Alumni Program (ACAP) provides transition assistance to soldiers separating from the Army, some of whom will enter the reserve component. ACAP also provides services that the EPP currently offers or plans to introduce,
such as assistance in translating military skills to civilian employment, developing résumés, and preparing for interviews. The Veterans' Employment and Training Service (VETS) program within the Department of Labor offers workshops to help veterans prepare for a civilian job search and tools to support employers in hiring veterans.

Despite similar missions, there did not appear to be strong cooperation or coordination among the various programs and initiatives. Often these programs did not reference each other or provide links to one another on their websites. They did not appear to leverage each other's resources by sharing training materials, curricula, or identifying best practices. In addition, this lack of coordination sometimes caused confusion and frustration among those who were not familiar with the programs, both employers and service members alike. One PSM spoke of a failed effort to share information with other programs:

> EPP and ESGR are both DoD initiatives. The civilian Army also has an Army Spouse Employment Partnership program run by the Deputy ASA. My contact at West Point said that she didn't know EPP could be used by military spouses. So we all had a conference call that was supposed to be set up on May 13, but it never happened.

## Measuring Program Effectiveness

One of the EPP's primary goals is to help RC service members find jobs. Measuring the effectiveness of the program against this objective was very challenging. As the EPP website was structured, users were transferred to the employer's website as soon as they clicked on a job listing. While the DirectEmployers Association tracked information about the jobs selected by website users, it had no visibility of job applications submitted, interviews granted, or RC service members hired through the website. EPP staff relied on voluntary reports from website users about jobs obtained through the website. In addition, employers had no visibility of applicants referred by the EPP website. These difficulties in measuring the number of soldiers who found employment through the EPP website presented challenges for staff in justifying the program to the Army, DoD, and Congress, for supportive employers in convincing colleagues to support the program, and for the PSMs who were evaluated at least in part on this metric. As one staff member noted:

The program grew very fast. One of the weaknesses was the inability to capture data on how many people were hired through the program. We went to the DirectEmployers Association [to develop the website quickly] and they developed the website, but as a result, when soldiers click on a job, they go to the employer's website and the Army Reserve loses visibility. That wasn't a high priority at the time, but we knew the Pentagon would want to know how many people were getting jobs. We thought it was more important to help people get jobs than to wait for the Pentagon to develop the website.

Similarly, one PSM commented on the challenge of knowing when a soldier gets a job:
I have watched metrics go from A to $Z$. The first metric was enrollment of employer partners. Now, it is no longer a metric. It was relatively easy to measure and it was in the control of the PSMs. It was difficult to get an MOU signed at that time. Now, enrolling a partner is easier. We have over 1,000 partners enrolled and hundreds of thousands of jobs on the website. The new metric is identifying when soldiers get a job through the program. It's very
difficult for me to find that out. I can go to morning formation and let soldiers know about the program. I give them a handout showing them how to use the website. But it's difficult to know when they get a job.

## Occupations with Shortages or High Recruiting and Training Costs

One potential area for collaboration with employers is to identify military and civilian occupations with personnel shortages and/or high recruiting and training costs. To identify these types of occupations, we used DMDC's Forces Readiness Manpower Information System (FORMIS) to find CMFs with shortages of enlisted personnel in the ARNG and USAR; the Army Military-Civilian Cost System (AMCOS) to determine recruiting, initial entry training, and career training costs by CMF; and Bureau of Labor Statistics employment projections to identify the fastest-growing civilian occupations and their education and training requirements. ${ }^{2}$

Tables 4.1 and 4.2 report the results of this analysis for the USAR and ARNG, respectively. The second and third columns of the tables show which CMFs had shortages of assigned enlisted personnel relative to the number of authorized positions as of the end of fiscal year 2009. ${ }^{3}$ Dark gray shading indicates a numerical shortage of more than 500 personnel or a percentage shortage of more than 15 percent of authorized positions. Light gray shading indicates a shortage of $100-500$ personnel, or 5-15 percent of authorized positions. The fourth through sixth columns indicate CMFs with above-average fiscal year 2010 recruiting or training costs. Dark gray shading indicates that recruiting or training costs are more than 120 percent of average costs; light gray shading indicates that costs are 100-120 percent of the average.

In the USAR, there were few CMFs with both personnel shortages and high recruiting and training costs. Transportation (primarily truck drivers) had a high numerical shortage and high recruiting costs accompanied by moderately high training costs. Psychological Operations had moderately high personnel shortages and initial training costs and high recruiting costs. Other CMFs with personnel shortages included Engineer, Military Intelligence, Public Affairs, Recruiting, and Ammunition. CMFs with a pattern of high recruiting and training costs included Aviation (primarily helicopter maintenance), Signal, Chemical, and Mechanical Maintenance.

As of the end of fiscal year 2009, there were more ARNG CMFs with a combination of personnel shortages and high recruiting or training costs. These CMFs included Aviation, Chemical, Transportation, Mechanical Maintenance, and Electronic Maintenance. Other CMFs with personnel shortages included Engineer, Field Artillery, Special Forces, Signal, Military Police, Military Intelligence, Public Affairs, Recruiting, and Ammunition. The CMFs with a pattern of high recruiting and/or training costs also tended to have at least moderate personnel shortages.

Table 4.3 shows the 30 civilian occupations that are expected to have the largest employment growth from 2008 to 2018, along with the type of postsecondary education or training

[^28]Table 4.1
USAR CMFs with Personnel Shortages or High Recruiting or Training Costs

| CMF Number/Title | Shortage <br> (Number of <br> Authorized <br> Positions) | Shortage <br> (Percent of <br> Authorized <br> Positions) | Recruiting <br> Costs | Initial Entry <br> Training Costs | Career <br> Training Costs |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 12 Engineer |  |  |  |  |  |
| 15 Aviation |  |  |  |  |  |
| 25 Signal |  |  |  |  |  |
| 27 Paralegal |  |  |  |  |  |
| 31 Military Police |  |  |  |  |  |
| 35 Military Intelligence |  |  |  |  |  |
| 36 Financial Management |  |  |  |  |  |
| 37 Psychological Operations |  |  |  |  |  |
| 38 Civil Affairs |  |  |  |  |  |
| 42 Adjutant General |  |  |  |  |  |
| 46 Public Affairs |  |  |  |  |  |
| 56 Chaplain |  |  |  |  |  |
| 68 Medical |  |  |  |  |  |
| 74 Chemical |  |  |  |  |  |
| 79 Recruiting |  |  |  |  |  |
| 88 Transportation |  |  |  |  |  |
| 89 Ammunition |  |  |  |  |  |
| 91 Mechanical Maintenance |  |  |  |  |  |
| 92 Supply |  |  |  |  |  |
| 94 Electronic Maintenance |  |  |  |  |  |

SOURCE: Personnel shortages based on FORMIS; recruiting and training costs based on AMCOS.
needed by most workers to become fully qualified in that occupation, as defined by the Bureau of Labor Statistics. ${ }^{4}$ Based on these expected growth areas, the most likely areas for collaboration appear to be Medical, Transportation, Engineer (construction laborers and carpenters), Mechanical Maintenance, and Signal. For occupations requiring a bachelor's or higher degree, there may be potential synergies in recruiting and training of officers.

## Conclusions

Stakeholders that we interviewed mentioned a number of potential challenges to developing closer relationships with employer partners. Some employers may have had unrealistic expectations about the number of RC job applicants they would get through the program, but in any case, they did not have visibility of which applicants were coming to them through the EPP website. Some employers wanted to be able to reach out to potential RC applicants rather than waiting for them to apply for jobs. Others bypassed the EPP website, using their own recruiting websites or working directly with RC units. Some employer partners or their hiring man-

[^29]Table 4.2
ARNG CMFs with Personnel Shortages or High Recruiting or Training Costs

| CMF Number/Title | Shortage <br> (Number of <br> Authorized <br> Positions) | Shortage <br> (Percent of <br> Authorized <br> Positions) | Recruiting <br> Costs | Initial Entry <br> Training Costs | Career <br> Training Costs |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 11 Infantry |  |  |  |  |  |
| 12 Engineer |  |  |  |  |  |
| 13 Field Artillery |  |  |  |  |  |
| 14 Air Defense |  |  |  |  |  |
| 15 Aviation |  |  |  |  |  |
| 18 Special Forces |  |  |  |  |  |
| 19 Armor |  |  |  |  |  |
| 25 Signal |  |  |  |  |  |
| 27 Paralegal |  |  |  |  |  |
| 31 Military Police |  |  |  |  |  |
| 35 Military Intelligence |  |  |  |  |  |
| 36 Financial Management |  |  |  |  |  |
| 42 Adjutant General |  |  |  |  |  |
| 46 Public Affairs |  |  |  |  |  |
| 56 Chaplain |  |  |  |  |  |
| 68 Medical |  |  |  |  |  |
| 74 Chemical |  |  |  |  |  |
| 79 Recruiting |  |  |  |  |  |
| 88 Transportation |  |  |  |  |  |
| 89 Ammunition |  |  |  |  |  |
| 91 Mechanical Maintenance |  |  |  |  |  |
| 92 Supply |  |  |  |  |  |
| 94 Electronic Maintenance |  |  |  |  |  |

SOURCE: Personnel shortages based on FORMIS; recruiting and training costs based on AMCOS.
agers lacked familiarity with the military and so were uncertain about the potential benefits of hiring RC service members.

Program Support Managers provide outreach both to employer partners and RC service members. Some interviewees thought that PSMs should be more personally involved in making connections between RC service members and employers, but given that there were only 20 PSMs spread across the country, there were barely enough to perform their assigned functions. PSMs we interviewed also spoke of difficulty getting access to USAR and ARNG units to brief them about the EPP.

Interviewees also discussed some challenges related to program design and management. There was an almost complete turnover in the program's central office staff in fall 2009 and some initiatives were disrupted. Given the program's expansion to the ARNG and the other reserve components, questions arose about whether the program's management would migrate to OSD. Measuring the program's effectiveness was difficult, because EPP staff did not have visibility of the number of RC service members hired through the site.

Table 4.3
Civilian Occupations with Largest Employment Growth, 2008-2018

| Occupation | Change |  | Education or Training |
| :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Number } \\ & \text { (1000s) } \end{aligned}$ | Percent |  |
| Registered nurses | 582 | 22.2 | Associate degree |
| Home health aides | 461 | 50.0 | Short-term on-the-job training (OJT) |
| Customer service representatives | 400 | 17.7 | Moderate-term OJT |
| Food preparation/serving | 394 | 14.6 | Short-term OJT |
| Personal \& home care aides | 376 | 46.0 | Short-term OJT |
| Retail salespersons | 375 | 8.4 | Short-term OJT |
| Office clerks, general | 359 | 11.9 | Short-term OJT |
| Accountants \& auditors | 279 | 21.7 | Bachelor's degree |
| Nursing aides, orderlies, and attendants | 276 | 18.8 | Postsecondary vocational award |
| Postsecondary teachers | 257 | 15.1 | Doctoral degree |
| Construction laborers | 256 | 20.5 | Moderate-term OJT |
| Elementary teachers | 244 | 15.8 | Bachelor's degree |
| Truck drivers | 233 | 13.0 | Short-term OJT |
| Landscaping \& groundskeeping | 217 | 18.0 | Short-term OJT |
| Bookkeeping, accounting, \& auditing clerks | 212 | 10.3 | Moderate-term OJT |
| Executive secretaries \& administrative assts. | 204 | 12.8 | Work experience in a related occupation |
| Management analysts | 178 | 23.9 | Bachelor's or higher degree, plus work exp. |
| Computer software engineers | 175 | 34.0 | Bachelor's degree |
| Receptionists \& information clerks | 173 | 15.2 | Short-term OJT |
| Carpenters | 165 | 12.9 | Long-term OJT |
| Medical assistants | 164 | 33.9 | Moderate-term OJT |
| Supervisors/managers of office \& administrative support workers | 160 | 11.0 | Work experience in a related occupation |
| Network systems \& data comms analysts | 156 | 53.4 | Bachelor's degree |
| Licensed practical \& vocational nurses | 156 | 20.7 | Postsecondary vocational award |
| Security guards | 153 | 14.2 | Short-term OJT |
| Waiters \& waitresses | 152 | 6.4 | Short-term OJT |
| Maintenance \& repair workers | 148 | 10.9 | Moderate-term OJT |
| Physicians \& surgeons | 144 | 21.8 | Professional degree |
| Child care workers | 142 | 10.9 | Short-term OJT |
| Teacher assistants | 135 | 10.3 | Short-term OJT |

SOURCE: Bureau of Labor Statistics (2009).

We gathered information on military occupations with shortages in the ARNG and USAR, as well as their recruiting, initial entry training, and career training costs. We compared these with the fastest-growing civilian occupations to identify those where partnerships might be particularly valuable. Based on this analysis, the most promising areas for collaboration appear to be Medical, Transportation, Engineer, Mechanical Maintenance, and Signal.

## Recommendations

In the previous chapters we described the challenges that the EPP faced in fulfilling its objectives. In this chapter we discuss the recommendations we made to Army Reserve and EPP leadership at the conclusion of our study in September 2010 to address the challenges and barriers we identified. Some of our recommendations, such as program management and funding, are specific to EPP. Others are more broadly applicable to other programs directed at helping RC service members and veterans seeking civilian employment. These include website usage and satisfaction metrics, crosswalks from military to civilian occupations, and civilian credentials for military skills.

## Overall Recommendations

As we discussed in Chapter Two, usage of the EPP website was low relative to the estimated size of one targeted group of users, unemployed soldiers in the USAR. In addition, the EPP had been extended to the ARNG and the other reserve components. As a result, we saw a need to invest sufficient resources in the program to make it more effective in linking service members with jobs and to provide expanded outreach and support. Second, we recommended that program staff develop and monitor a set of metrics that reflect RC service members' utilization and satisfaction with the program's website, as a guide to whether additional resources should be invested in it or alternative approaches should be considered. Third, program staff should consider what EPP's unique role should be among the other employment services offered to RC service members, veterans, and family members, and whether there may be opportunities for resource sharing or other synergies with these programs and services.

Since the EPP was established, the program had struggled with staff changes, changes in priorities, limited resources, and questions about its role among the variety of employment support services offered by the Army, DoD , and the Department of Labor. The expansion of the program to other reserve components might bring additional staffing and resources that would benefit the program, but it might also place additional stresses on the program and the PSMs who conduct outreach and provide support to employers and RC service members. To understand whether the EPP could be positioned to help build stronger links between the reserve components and civilian employers, we thought it should be given the stability and resources needed to implement its strategy and to achieve its goals.

To determine whether resources are being used effectively, EPP and other job search websites for RC service members and veterans should have a set of metrics to monitor utilization of the website relative to its target population. While it may remain difficult to identify
the number of service members who get jobs through the EPP website, program staff can use metrics like those we developed in this report using data on total website visitors and users from Google Analytics, as well as more detailed data on individual users. We recommend that the program track the following types of metrics on a monthly basis:

- Website visitors as a percentage of the estimated number of unemployed RC service members (or other measures of the number of potential users);
- Website users (who view jobs) as a percentage of the estimated number of unemployed RC service members;
- Website users as a percentage of visitors;
- Number of visits (uses) and job views per user; and
- Program costs per visitor and user, and if feasible, per RC service member hired through the website.

As the program is expanded and marketed to other reserve components, the target population will increase and can be expected to fluctuate over time based on changes in U.S. economic conditions. Thus, goals for the program to increase visitors and users as a percentage of the estimated number of unemployed RC service members (or other measures of potential users) must be sensitive to likely changes in the target population.

If the new EPP website is successful in increasing utilization, as well as increasing the number of visits and jobs downloaded by each user, the Army and DoD can be more confident that resources invested in the program are generating returns. Metrics such as cost per visitor or per user can be used as a measure of return on investment in the program and compared with alternative uses of resources. If the EPP website is not able to meet goals for expanded utilization, despite an increase in resources, then alternative approaches may be needed. For example, it may be more cost effective for the EPP to expand its network of PSMs to develop direct links between units and local employers. Objective, consistent monitoring of the progress of the program using these metrics will help ensure that it receives sufficient support and resources, and that resourcing decisions are transparent and fair.

Third, EPP program staff should explore opportunities to leverage and share resources with other Army, DoD, and government programs that provide employment services to RC service members, veterans, and family members. Overlapping services include career counseling and assistance, automated tools to prepare résumés and cover letters, military-to-civilian occupation crosswalks, education and credentialing opportunities, and outreach to employers of RC service members.

In the sections below we turn to more detailed recommendations on program management and meeting program objectives to reduce unemployment among RC service members, improve linkages between military and civilian occupations, and develop closer relationships with employers.

## Program Management

As we discussed in Chapter Four, changes in program management and central office staff caused confusion and concern among former program staff, employer partners, and PSMs. Employers spoke of moving forward with their own efforts to recruit soldiers outside of the
program and were unclear about the development of the EPP website. While some interviewees spoke of their involvement with planning and support of the program in the past, they felt less engaged. PSMs also expressed some anxiety about the future of the program and their place in it. And to many, a significant and possibly very disruptive decision had yet to be made: where the program would ultimately be located.

Given the expansion of the EPP to all reserve components, the program should either be managed and resourced by the Office of the Assistant Secretary of Defense for Reserve Affairs (OASD(RA)), or if it remains in OCAR, the other reserve components should provide fair shares of staff and funding. Management of the program by $\operatorname{OASD}($ RA ) would reflect the DoD-wide expansion of the program and perhaps would improve participation and coordination among the services. It may also stabilize funding if ownership is at the level of DoD rather than the Army. However, relocating program management could result in another round of dislocation and staff changes, which could be challenging for the program. Some interviewees also worried that relocation of program management would add bureaucratic hurdles that could impede further development and innovation. While there are advantages and disadvantages to each approach, uncertainty about program ownership was perceived by many we interviewed as a source of anxiety.

A second issue was continuity of the central office staff. There was considerable turnover in fall 2009, just prior to the start of this study. The program office was able to maintain some continuity by hiring contractors who had been on staff, but most of the original staff members left the program. As a result, some of the program's initial efforts were not continued, and relationships had to be rebuilt with employers and PSMs. Many interviewees felt that staff turnover had been disruptive and were disheartened that initiatives they had supported had not been continued. Since this round of staffing changes, however, central office staff has stabilized. The program faces many challenges in achieving its goals amid expansion of its target population. Further, significant turnover could disrupt progress.

Finally, many interviewees felt that the PSMs were spread thin even before the program expanded to the other reserve components. Some also thought that PSMs needed to take a more personal role in advising RC service members on how to search for jobs and matching their skills with the needs of local employers. Ideally, PSMs would have a roster of service members who would like their help in looking for civilian employment and would be familiar with the local business environment and with local employers, so they could make connections between the two. Such efforts would be more labor intensive even without the expansion of the program, which expands the number of RC units that PSMs must contact for outreach. To maintain the same level of outreach to employers and RC units, the number of PSMs would need to increase as the number of RC units covered by the program increases. A more intensive role in advising unemployed RC service members and matching them with suitable local employers would require further expansion of the PSM workforce. If the number of PSMs is increased, their service territories should be adjusted so that each PSM is serving roughly the same population of RC service members.

## Reducing Unemployment

Tracking website visit and usage rates and patterns is critical to reducing unemployment among RC service members. If these metrics do not improve after the launch of the new website,
additional investigation will be needed to determine why RC service members are not using the website. As we discussed in Chapter Two, there are a number of possible reasons for low website usage. It may be that RC service members are unaware of the website. The PSMs we interviewed often struggled with gaining access to brief units on the program and website. In addition, because PSMs are responsible for a large geographic region, some units had not been approached by PSMs to be briefed.

RC service members who are aware of the website may have limited access to the Internet. Access varies across states and across demographic groups and is lower among minorities and those with lower educational attainment. If RC service members are using computers at a Reserve Center, they may find that firewalls on USAR websites can make it difficult to download job applications from certain employers. Finally, low usage of the website may be due to an unsatisfactory user experience. If RC service members come to the EPP website but find few attractive jobs, they may not view any job listings or return to the website. Moreover, they would be unlikely to recommend the site to friends or colleagues looking for jobs. As we discussed in Chapter Two, there was a direct relationship between the number of jobs a website user accessed and the number of return visits to the site. Those who accessed more jobs were more likely to return. Similarly, if RC service members are looking for career counseling, advice on interviewing, or other features that are not available on the website, they may choose to use other job search resources. RC service members may also choose to conduct their job search through civilian channels because they fear discrimination from employers who are concerned about potential deployments. ${ }^{1}$

To better understand how the EPP website fits into RC service members' job search experience, EPP staff might consider conducting focus groups and interviews to explore how RC service members search for jobs and the reasons they may not be using the EPP website. When EPP staff has learned more about the barriers to increased usage of the site, they can more effectively target its limited resources to overcoming those barriers. For example, if limited awareness of the EPP website is a problem, additional outreach efforts may be needed. Alternatively, if limited Internet access is a significant constraint, program staff might explore alternative ways to access the EPP website, such as via cell phone.

To improve the job search experience of EPP website users, the website should include mechanisms for users to provide feedback. Approaches could include a pop-up window with a short survey or a sidebar to encourage feedback on website navigation, job listings provided, and other suggestions for improvement. Responses should be compiled monthly, and promising suggestions or solutions should be incorporated into program improvement efforts.

Another approach to improving the program is to examine best practices of other organizations that provide employment services. Identifying best practices would offer insight into how to provide the best support to RC service members, as well as a better understanding of the various resources available to them. As noted above, there may be areas of overlap or potential collaboration among employment programs offered by the Army, DoD, and other government organizations to veterans and family members. Soldiers leaving the active component may face obstacles similar to RC service members, including difficulty understanding how best to translate their military skills into the civilian job market, communicating those skills

[^30]to potential employers, and obtaining civilian credentials and licenses. Understanding the best practices of other job search organizations can provide useful insight into improving the EPP and can also be useful in gauging what services are being provided by other organizations and identifying areas for cooperation.

To be most effective, this study should include a wide variety of military and civilian job search organizations such as those described in Chapter One. Army Career and Alumni Program, Army and Navy COOL, and other military programs provide services such as individual counseling and assistance, automated tools and personal assistance for preparing résumés and cover letters, education and training opportunities to obtain civilian credentials, and assistance in preparing for interviews. The Bureau of Labor Statistics' Occupational Outlook Handbook, O*NET Online, DirectEmployers Association, and other government resource websites would also provide useful information.

There is much to learn from the nonprofit and private sectors as well. Job seekers often turn to online job search sites such as Monster.com, CareerBuilder.com, Job.Fox and Indeed.com at the beginning of their job search. These websites allow users to search for jobs as well as post their résumés, create a personalized homepage, use career management tools, and join communities to seek advice and support. College guidance counselors provide individual support and suggestions for students seeking employment and manage libraries and online resources for students and alumni. Many community colleges also provide employment support.

Examination of a wide range of job search organizations would provide a better understanding of the best practices for supporting individuals embarking on, changing, or enhancing their careers. This research could also provide a better understanding of the various resources available to RC service members and identify areas of overlap and potential collaboration and perhaps opportunities to make more efficient use of DoD and other government resources.

Broad-based marketing of the EPP website to all reserve components should not be launched until EPP staff is confident that the website is providing a satisfying job search experience for users. Significant efforts to increase awareness of the website may be counterproductive if new visitors are not able to find attractive job listings or find the site difficult to navigate. These users are unlikely to return or to recommend the site to other service members. Metrics that capture user satisfaction should be watched closely for increases in return visits and the number of jobs accessed by each user.

## Improving Linkages Between RC and Civilian Jobs

There are a number of actions that EPP and similar programs could take to help RC service members find civilian jobs that make use of their military skills and training. First, as we discussed in Chapter Three, the EPP website's mapping of military to civilian occupations could be improved by using crosswalks developed by Army COOL, ACAP, and other related organizations. A mechanism to help RC service members identify civilian jobs related to their military occupation is a critical element of the website and perhaps its most distinguishing feature from traditional job search websites. However, there were flaws in the crosswalk that should be addressed. Army MOS codes have been changing frequently in recent years, and this information needs to be incorporated more effectively into the crosswalk. Commonly used civilian job and occupation titles also change over time, so the crosswalk should be updated annually to capture the full range of related jobs. Other organizations, such as Army and Navy COOL and

ACAP, are also developing and updating military-to-civilian crosswalks, and the EPP could leverage these efforts. The website could also provide an opportunity for RC service members to share their own suggestions for particular MOSs or AOCs in order to help make connections that are not as obvious. In addition, some employers are looking for more generic military skills and training, such as discipline, self-motivation, and leadership skills. A separate category for employers to list these jobs and RC service members to search for them would be helpful.

The EPP website could also provide supporting tools to translate military skills more effectively into civilian terms. This may include suggestions for language to include on résumés that is readily understandable to civilian employers. Army COOL also provides information and links to sites for training, certification, and licensing programs. Monster.com provides career maps that help users explore similar jobs, typical career paths, career benchmarking, and a tool to help users assess their strengths in a certain field relative to others. Similar tools (or indeed this tool) would be helpful to RC service members looking for jobs that make the best use of their skills.

Second, soldiers may have military training that is relevant and valuable to civilian employers, but lack civilian licenses or other credentials for jobs they are capable of performing, or require additional training to qualify for those credentials. While there have been some notable examples of success in helping soldiers identify and secure jobs that match their skill sets, other employers and EPP staff expressed frustration at unsuccessful efforts.

There are a number of approaches that might be taken to support RC soldiers and others leaving active duty who are seeking credentials in fields close to their MOS. Where military and civilian training are already consistent, the Army might coordinate training and licensing for soldiers. For fields where additional training would be required, the Army might identify the gaps and consider modifying military training to make it more consistent with civilian training, or provide civilian training and credentialing opportunities for service members. As with other forms of education benefits, this might require additional service obligations, but these obligations could be relatively short to reflect the short duration of civilian gap training. The Army might also work to accredit military schools and training to ensure that they are considered valid by civilian licensing and credentialing entities. In addition, the Army might allow and encourage private employers to provide civilian training at Reserve Centers in conjunction with unit training activities. For example, Schneider Trucking has taken trucks onto DoD sites and provided classroom training to help service members get commercial driver's licenses.

Because these efforts may require considerable time and thought to ensure a positive experience for the Army reserve components, the soldier, and the employer, EPP staff might propose pilot studies for specific MOSs. These pilot studies would help develop a methodology for identifying gaps in training, meeting multiple state standards, providing or supporting the provision of gap training, and addressing other program design questions. For example, the USAR could conduct a pilot study in a transportation unit to develop an integrated program of instruction for both Army and state commercial driver's license certification, ensuring that any gaps between military and civilian training were identified and filled. This pilot study would likely require the involvement of U.S. Army Training and Doctrine Command (TRADOC) to make sure that Army training requirements were met as well as the state Department of Motor Vehicles to identify civilian training requirements.

## Establishing Closer Working Relationships with Employers

In Chapter Five we discussed some approaches to help the EPP develop closer working relationships with employers. Several interviewees said that they did not have visibility of RC applicants coming to them through the EPP website. To build enthusiasm and support among employers for the program, it is important to provide a mechanism for employers to identify applicants who indicate that they would welcome this outreach. Some employers we interviewed also said they would like to have a way to reach out to potential applicants. Employers may be looking for specific characteristics such as security clearances, or specific skills such as foreign language proficiency or familiarity with diesel engines. Having the ability to search a database of RC service members who are willing to post their résumés would enable these employers to be more proactive. In addition, some employers expressed disappointment with the number of applicants they believed they had gotten through the program. Allowing employers to contact RC service members might also improve employer satisfaction. Some of these functions should be available when the new website is launched. For example, RC service members will be able to post résumés that can be searched by employer partners.

Alternatively, the EPP website could feature individual employers or jobs on its home page in an ad format, informing users about the jobs that are available from that employer and providing a quick link to those jobs. This would be particularly relevant to national employers such as Walmart. An additional source of information might be the reserve components themselves. If RC service members completing initial entry training agree to share information with employer partners about their skills, location, and how they can be contacted, this would enable employer partners to contact them directly.

Another resource that would be useful for the EPP and other job assistance programs targeting RC service members is a mapping of the location of all RC units across the country. This information could help support a variety of steps to establish closer partnerships with employers. First, it would help EPP staff target local employers relevant to nearby unit types. Employers whose needs most closely overlap with the military occupations in nearby units could be cultivated by EPP staff and PSMs, who could identify potential applicants and develop strategies to close any skills gaps that may exist. This process would not only benefit those RC service members and employers, but also help PSMs to develop best practices for matching RC service members with employers.

Second, providing information to employer partners about the size and type of RC units in their area would help set expectations about the number of potential RC job applicants who might approach them. Some employers we interviewed had unmet expectations about the number and type of applicants they would receive for a job posting. This may be due, in part, to unrealistic expectations among employers given the size and type of units nearby. Sharing information about the composition and size of RC units by location or MSA, along with general guidance about what fraction of RC service members are seeking employment at any given time, would help employers understand the potential benefits of the EPP.

Third, this information could help develop closer relationships between employer partners and local RC units. For example, a trucking company might want to visit a local transportation unit to discuss employment opportunities or to develop options for gap training to obtain commercial driver's licenses. Unit leadership could also share information with employers of RC service members about training schedules and expectations about future deployments. This option would help distinguish the EPP from other job search websites both to RC
service members and to employers. Local relationships could be developed between RC units, employers, and PSMs to serve more specific local needs. The EPP office should encourage the development of individual initiatives within broad parameters, and monitor these programs for modification or expansion to other locations.

Through our interviews, we also learned that some employers and human resource professionals lack familiarity with the military and may be interested in obtaining additional information about the military or observing unit training. For instance, human resource professionals may want to learn about the skills and training of relevant MOSs or AOCs, the leadership experience of RC service members, or the frequency, timing, and duration of training and possible deployments. More basic information about the military, such as differences among the services, components, ranks, and other aspects of military culture might also help improve communication between RC service members and the civilian recruiter.

Similar training has been developed for other purposes. According to one person we interviewed, when the Army of One campaign was launched, an "Army 101" session was created and "green" representatives helped educate the advertising agency developing the campaign. Participants were given a binder of information about the Army to help them understand it better and some of them observed basic training. This type of training program to increase cultural awareness is also common in other settings. For example, human resource professionals are routinely trained in aspects of racial/ethnic or other cultural competence.

Finally, as we discussed in Chapter Four, there are some occupations for which partnerships would be particularly useful to both the military and civilian employers. For occupations with shortages in both the reserve components and the civilian sector, or with high recruiting or training costs, partnerships could help attract recruits and share costs. By working together, the reserve components and civilian employers could present a package to potential applicants that would offer a path to free or low-cost training, steady employment, and the opportunity both to serve in the military and to work for a company that supports that service. By identifying occupations where recruiting and training costs are high, the EPP is likely to find eager partners who will work with the military to cultivate applicants and develop strategies to best support them.

## Additional Case Study Results

In this appendix we summarize the results of job searches using the MOSs and AOCs in the other USAR units located in the case study metropolitan areas.

Table A. 1
Case Study Results for 203rd Transportation Detachment
(Logistics Support Vessel), Baltimore, MD

| Top 5 Civilian Equivalent Occupations | MOS/AOC | Number of Soldiers | Number of Civilian Jobs (May 2009) | Number of Jobs on EPP Website (June 2010) |
| :---: | :---: | :---: | :---: | :---: |
| Captains, Mates \& Pilots of Water Vessels | 880A Marine Deck Officer (Warrant Officer) | 4 | 320 | 0 (1 occ.) |
|  | 88 K Watercraft Operator | 10 |  | 0 (2 occ.) |
| Ship Engineers | 881A Marine Engineering Officer (Warrant Officer) | 4 | 100 | 0 (1 occ.) |
|  | 88K Watercraft Engineer | 8 |  | 0 (1 occ.) |
| Cooks, Institution \& Cafeteria | 92G Food Service Specialist | 3 | 2,290 | 20 (2 occ.) |
| Radio Operators | 25C Radio Operator-Maintainer | 1 | Category not listed | 0 (1 occ.) |
| Emergency Medical Technicians \& Paramedics | 68W Health Care Specialist | 1 | 1,820 | 1 (1 occ.) |

Table A. 2
Case Study Results for 321st Sustainment Brigade, Baton Rouge, LA

| Top 5 Civilian Equivalent Occupations | MOS/AOC | Number of Soldiers | Number of Civilian Jobs (May 2009) | Number of Jobs on EPP Website (June 2010) |
| :---: | :---: | :---: | :---: | :---: |
| Stock Clerks \& Order Fillers | 92A Automated Logistical Specialist | 26 | 4,360 | 53 (4 occ.) |
|  | 92Y Unit Supply Specialist | 22 |  | 6 (3 occ.) |
| Logisticians | 70K Health Services Materiel (Officer) | 2 | 160 | 0 (1 occ.) |
|  | 90A Logistics (Officer) | 15 |  | 0 (1 occ.) |
|  | 91A Maintenance \& Munitions Materiel (Officer) | 4 |  | 0 (1 occ.) |
|  | $92 Z$ Senior Noncommissioned Logistician | 4 |  | 0 (1 occ.) |
| Human Resources Assistants, except Payroll \& Timekeeping | 42A Human Resources Specialist | 20 | 280 | 0 (2 occ.) |
|  | 42F Human Resources Information Systems Management Specialist | 3 |  | 0 (2 occ.) |
| Automotive Service Technicians \& Mechanics | 91B Wheeled Vehicle Repairer | 21 | 1,930 | Outdated MOS 63B 5 (2 occ.) |
| First-Line Supervisors of Mechanics, Installers, and Repairers | 915A Automotive Maintenance Warrant Officer | 1 | 1,730 | 18 (1 occ.) |
|  | 91X Maintenance Supervisor | 10 |  | Outdated MOS 63X 18 (1 occ.) |
|  | 948B Electronic Systems Maintenance Warrant Officer | 1 |  | 18 (1 occ.) |
|  | 948D Electronic Missile Sys Maintenance Warrant Officer | 1 |  | 18 (1 occ.) |
|  | 94W Electronic Maintenance Chief | 1 |  | 18 (1 occ.) |
|  | 912 Senior Maintenance Supervisor | 5 |  | $\begin{gathered} \text { Outdated MOS } 63 Z \\ 18 \text { (1 occ.) } \\ \hline \end{gathered}$ |

Table A. 3
Case Study Results for 448th Medical Logistics Detachment, Des Moines, IA

| Top 5 Civilian Equivalent Occupations | MOS/AOC | Number of Soldiers | Number of Civilian Jobs (May 2009) | Number of Jobs on EPP Website (September 2010) |
| :---: | :---: | :---: | :---: | :---: |
| Shipping, Receiving, \& Traffic Clerks | 68J Medical Logistics Specialist | 24 | 990 | $0 \text { (1 occ.) \& }$ <br> 1 (3 occ.) associated w/ outdated MOS |
| Stock Clerks \& Order Fillers | 92A Automated Logistical Specialist | 3 | 4,110 | 307* (4 occ.) |
|  | 92Y Unit Supply Specialist | 1 |  | 3 (3 occ.) |
| Ophthalmic Laboratory Technicians | 68H Optical Laboratory Specialist | 3 | 70 | 0 (1 occ.) |
| Automotive Service Technicians \& Mechanics | 91B Wheeled Vehicle Repairer | 2 | 1,330 | Outdated MOS 63B 6* (2 occ.) |
| Logisticians | 70K Health Services Materiel (Officer) | 1 | 120 | 0 (1 occ.) |
| Human Resources Assistants, except Payroll \& Timekeeping | 42A Human Resources Specialist | 1 | 790 | 2 (2 occ.) |
| Medical Equipment Repairers | 68A Biomedical Equipment Specialist | 1 | 100 | 1 (1 occ.)* |

*Some job titles seemed unrelated to occupation title.

Table A. 4
Case Study Results for 257th Transportation Company, Las Vegas, NV

| Top 5 Civilian <br> Equivalent <br> Occupations | MOS/AOC | Number <br> of <br> Soldiers | Number of <br> Civilian Jobs <br> (May 2009) | Number of Jobs <br> on EPP Website <br> (August 2010) |
| :--- | :--- | :---: | :---: | :---: |
| Heavy \& Tractor-Trailer <br> Truck Drivers | 88 M Motor Transport Operator | 219 | 4,410 | 14 (4 occ.) |
| Automotive Service <br> Technicians \& Mechanics | 91B Wheeled Vehicle Repairer | 38 | 3,080 | Outdated MOS <br> $63 B$ <br> $5(2 ~ o c c) ~$. |
| Transportation, Storage <br> \& Distribution Managers | 88D Motor/Rail Transportation <br> (Officer) | 7 | 440 | 5 (1 occ.) |
|  <br> Cafeteria | 92G Food Service Specialist | 6 | 780 | 5 (2 occ.) |
| Stock Clerks \& Order <br> Fillers | 92A Automated Logistical Specialist | 2 | 10,320 | 21 (4 occ.) |
|  | 92Y Unit Supply Specialist | 3 | 13 (3 occ.) |  |

Table A. 5
Case Study Results for 313th Military Police Detachment, Las Vegas, NV

| Top 5 Civilian Equivalent | MOS/AOC | Number <br> of <br> Occupations | Number of <br> Civilian Jobs <br> Soldiers | Number of Jobs <br> on EPP Website <br> (August 2010) |
| :--- | :--- | :---: | :---: | :---: |
| Police \& Sheriff's Patrol Officers | 31B Military Police | 40 | $2,950^{*}$ | 17 (2 occ.) |
| First-Line Supervisors of Police <br> \& Detectives | 31A Military Police (Officer) | 3 | $540^{*}$ | 0 (1 occ.) |
| Human Resources Assistants, <br> except Payroll \& Timekeeping <br> Stock Clerks \& Order Fillers | 42A Human Resources Specialist | 1 | 1,050 | 2 (2 occ.) |
|  | 92Y Unit Supply Specialist | 3 | 10,320 | 13 (3 occ.) |

*As of May 2008 (category not listed in May 2009).

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[^0]:    1 Unfortunately, existing data do not allow us to identify which RC service members were hired through the EPP or the employers who hired them. Therefore, we were unable to quantify the costs and benefits associated with the program.

[^1]:    2 Since unemployed USAR soldiers only represent one possible source of website users, these rates are based on conservative estimates of the population of potential users.

[^2]:    3 Occupations such as these may also require state licensure, which would be easier to obtain if the soldier had the relevant civilian credentials.

[^3]:    4 While some soldiers may travel considerable distances to drill, among website users, half lived within about 25 miles of their units.

[^4]:    1 See Defense Manpower Data Center (2010a), pp. 402-405. The most commonly reported problems were "loss of seniority, seniority-related pay, or seniority-related benefits" and "military service considered a break in employment for pension benefit purposes."

    2 See, for example, Congressional Budget Office (2005), U.S. Government Accountability Office (2007), and Doyle and Singer (2009).

[^5]:    3 See http://www.usar.army.mil/arweb/EPI/Pages/AboutUs.aspx.
    4 Employer Partnership Office, presentation.
    5 Interview with Employer Partnership Program Director and staff, January 19, 2010.

[^6]:    6 Employer Partnership Office (2009).
    7 Employer Partnership Office, presentation.

[^7]:    8 Listing jobs through the JobCentral NLX helps federal government contractors ensure that they are in compliance with regulations governing the processes they must use to hire, retain, and promote veterans under the Vietnam Era Veterans' Readjustment Assistance Act of 1974 (Webb, 2010).

    9 As of April 2011, there were 21 PSMs in the following states and territories: Arizona, California (2), Colorado, District of Columbia, Florida, Georgia, Illinois, Indiana, Louisiana, Maryland, Massachusetts, Minnesota, Missouri, New York, Pennsylvania, Tennessee, Texas, Utah, Washington, and Puerto Rico, as well as a National Manager.
    ${ }^{10}$ The program was initially staffed primarily by mobilized reservists, who reached the end of their mobilization in fall 2009.

[^8]:    ${ }^{11}$ http://employerpartnership.org/Resources/EmployerPartners provides a list of employer partners, with links to company profiles and jobs they are currently listing.
    12 As of April 2011, the website no longer offered the capability to search for jobs by military occupation code.

[^9]:    13 The USAR also asked RAND Arroyo Center to quantify the costs and benefits associated with the program. Unfortunately, this was not possible, since existing data did not allow us to identify which RC service members were hired through the EPP, or the employers who hired them.

[^10]:    1 These questions include whether RC service members were working in the last week, whether they were looking for work, and whether they could have started a job if offered one. If they were currently activated, these questions referred to the week prior to their most recent activation. See, for example, Defense Manpower Data Center (2010b), pp. 688-689.

    2 We obtained U.S. national unemployment data from http://www.bls.gov/data/\#unemployment.
    3 Savych, Klerman, and Loughran (2008) compared unemployment rates of veterans and nonveterans from 1994 to 2006. They found that the unemployment rate for all veterans was typically about one percentage point lower than the unemployment rate for all nonveterans during this period, based on the Current Population Survey. However, the unemployment rate for young veterans (age 20-24), was about 1.6 percentage points higher than for nonveterans in the same age group. This gap may reflect the later entry of young veterans into the civilian job market after completing military service.
    4 Note that since December 2007, USAR and ARNG unemployment rates reported by DMDC have been the same. We do not have access to the survey data to determine whether the reported figures could be incorrect, but the overall rates are plausible given the rates reported for the E1-E4, E5-E9, and officer subgroups and the USAR and ARNG end strengths in these subgroups.

[^11]:    5 These unemployment rates do not necessarily indicate that junior enlisted soldiers are more likely to become unemployed than other workers of a similar age, but that unemployed young people may be more likely to join the Army reserve components than those who have civilian jobs.

[^12]:    6 "Analytics Glossary of Terms" from DirectEmployers, provided by Jolene Jefferies in email communication 2010.

[^13]:    7 At the time this analysis was conducted, users were required to complete the registration form again if they revisited the site on a later date, so we used email addresses to identify unique users and link multiple visits within the data-collection period.

[^14]:    8 Although the ARNG joined the EPP in mid-2009, the program had not been widely marketed to these soldiers at the time our data were collected. During the period when more detailed data are available (May-June 2010), about 12 percent of users were affiliated with the ARNG. Since ARNG end strength is approximately 350,000 , adding the ARNG would greatly increase the estimated number of unemployed soldiers.

    9 To the extent that both visitors and users in the Google Analytics data include individuals who are not USAR members or are employed, these percentages likely overstate the fraction of unemployed USAR service members who visited and used the EPP website.
    ${ }^{10}$ This analysis excludes website users who are not in the USAR, but we cannot observe whether USAR users are employed or unemployed.

[^15]:    ${ }^{11}$ For display purposes, we only show the baseline estimates of the number of unemployed soldiers using the average difference between national and USAR unemployment rates.
    ${ }^{12}$ Pay grade information was only collected if a website visitor clicked on a job listing and completed a registration form, i.e., became a user. Consequently, we could not estimate the number of visitors by pay grade group. However, the correlation between the number of visitors and users since website inception is very high ( $\mathrm{r}=.99, \mathrm{p}<.001, \mathrm{n}=75$ ), so usage rates are probably a good proxy of visit rates by pay grade groups.

[^16]:    13 Junior enlisted website users lived closer to their unit on average than other pay grade groups, but this difference was not statistically significant.

[^17]:    ${ }^{14}$ Note that we only observe a visit in the detailed data if the website user clicks on at least one job listing and completes the registration form again. We do not observe additional visits by the same users if they do not click on any job listings or do not fill in the form.
    15 A-Team Solutions (2010) reports the results of a survey of EPP website users conducted from March to June 2010. Although the report does not provide exact percentages, it appears that less than 25 percent of respondents found the website useful in their job search. About 5 percent responded that the website helped them find employment; approximately 45 percent said they were still unemployed.

[^18]:    ${ }^{16}$ Career management fields are groups of related MOSs, such as Infantry, Military Intelligence, or Medical. Similarly, related AOCs are grouped into branches and functional areas.
    ${ }^{17}$ We also looked for differences in the number of visits or jobs viewed by pay grade groups. There were no statistically significant differences in the number of visits, but junior officers viewed marginally more job listings ( 13 on average) than junior enlisted personnel ( 9 on average; statistically significant at the .10 level).
    ${ }^{18}$ As noted above, we only observe a visit in the detailed website data if the user clicked on at least one job listing and completed a registration form.

[^19]:    19 Because we were concerned about how well the CMF subsamples would represent all soldiers in a CMF, we restricted our analyses to CMFs with at least 30 users.
    ${ }^{20}$ Statistical tests compared the average for each CMF/branch to the average for all USAR and ARNG website users. These three groups had a significantly higher average number of jobs viewed at $\mathrm{p}<.10$.

[^20]:    1 We selected these sites because they were spread geographically across the United States, were not located too close to other Metropolitan Statistical Areas that would have overlapping job markets, and had at least one USAR unit with similar civilian occupations, such as medical, transportation, logistics, and military police.

    2 These data can be found on the Bureau of Labor Statistics' Local Area Unemployment Statistics webpage, http://www.bls.gov/lau/.

[^21]:    3 For the most part, each Army military occupation code is mapped to one six-digit Standard Occupational Classification code. In a few cases (less than 1.5 percent), a second code is listed. O*NET Online is created for the U.S. Department of Labor, Employment and Training Administration, by the National Center for O*NET Development. See http://online. onetcenter.org.
    4 The remaining results are shown in the appendix.
    5 These data come from the Bureau of Labor Statistics' Occupational Employment Statistics, which can be found at http:// www.bls.gov/oes/.
    ${ }^{6}$ Although EPP and DEA personnel told us that the EPP website used the O*NET mapping of military to civilian occupation codes, in practice, searches of the EPP website using military occupation codes resulted in a list of occupation titles somewhat different from the titles associated with the 6 -digit Standard Occupational Classification codes in the O*NET crosswalk; in some cases, these occupation titles corresponded with more detailed, 8-digit Standard Occupational Classification codes.

[^22]:    7 The Army Credentialing Opportunities On-Line (COOL) website indicates that MOS 68W has skills relevant to medical assistants, medical laboratory assistants, licensed practical nurses, and licensed vocational nurses, but may require additional education, training, or experience to obtain a civilian credential. See https://www.cool.army.mil/enlisted/68W.htm (accessed September 17, 2010).

[^23]:    8 The five job listings for MOS 92G in Table A. 4 were all associated with another occupation title, Food Preparation Workers.

[^24]:    9 Although our case study results indicated that the EPP website did not return any job titles related to one of the military intelligence MOSs, these website users viewed intelligence- and security-related jobs with defense contractors and the FBI, for example.

[^25]:    ${ }^{10}$ Army medics obtain the National Registry of Emergency Medical Technicians' Basic certification, but may need an Intermediate or Paramedic certification to obtain a civilian job.

[^26]:    ${ }^{11}$ For example, the Army COOL website listed 12 civilian equivalent occupations for MOS 92A (Automated Logistical Specialist) and 13 occupations for MOS 91B (Wheeled Vehicle Mechanic), in comparison to 4 and 5 occupation titles, respectively, on the EPP website. See https://www.cool.army.mil/enlisted/92a.htm and https://www.cool.army.mil/ enlisted/91b.htm (accessed September 17, 2010).

[^27]:    1 USERRA does not require reserve service members to notify employers of their military status at the time of application or hiring. However, to be eligible for reemployment rights, they must provide their employers with verbal or written advance notice of military service, including both mobilizations and training. USERRA also prohibits employers from discriminating against past and present members of, and applicants to, the uniformed services. For additional information on USERRA, see http://www.dol.gov/vets/programs/userra/main.htm (accessed July 6, 2011).

[^28]:    2 See Bureau of Labor Statistics (2009).
    3 Note that the list of CMFs is somewhat different for the USAR and ARNG. The USAR consists primarily of combat support and combat service support CMFs.

[^29]:    4 In contrast, Gottschalk and Hansen (2003) argue that very few occupations actually "need" postsecondary education, since many occupations considered to be "college jobs" employ both college and non-college graduates.

[^30]:    1 Although such discrimination is prohibited by USERRA, service members may find it difficult to determine whether a lack of interest in their job application is related to their military service. (For additional information on USERRA, see footnote 1 on p .42 .)

