

Improving Employment Prospects for Soldiers Leaving the Regular Army

Some soldiers struggle to find employment after they leave the Regular Army, and many claim unemployment compensation. Among young soldiers, unemployment has historically been at or above that of a comparable civilian group. This suggests that, while youth unemployment is a problem, young veterans often have additional difficulties in the civilian job market. Furthermore, since 2012, the Army has been reducing its active component end strength; this has increased the number of soldiers leaving the Regular Army each year, exacerbating challenges for soldiers entering the civilian workplace.

This brief highlights the results of a study to improve the transition process for enlisted soldiers leaving the Regular Army. We assessed the knowledge, skills, and abilities (KSAs) and other job characteristics of soldiers in ten of the most populous Army military occupational specialties (MOSs) to develop improved crosswalks between military and civilian occupations and to help soldiers describe their work experience to potential civilian employers.

What Approach Did We Use?

We administered civilian occupation surveys developed by the U.S. Department of Labor (DoL) to soldiers at four Army installations. This enabled us to directly compare the importance and level of KSAs and job characteristics of military and civilian occupations based on the responses to each survey question by soldiers and civilians. Survey domains are shown in Table 1.

Using the data generated by these surveys, we created a distance metric to identify the closest matching civilian

Key findings:

- Many Army occupations do not have civilian counterparts. This poses employment issues for soldiers entering the civilian workplace, but matching soldiers' training and skills to civilian jobs can help.
- Our analytical approach improves on existing job recommendations by generating higher-quality military occupational specialty (MOS) matches with civilian occupations, by providing a broader range of matches from which to choose, and by providing "filtered" recommendations within the broad range of matches.
- The Army should make findings on the ten analyzed MOSs available now, develop a communications plan for employers in these occupations, and expand the use of occupational surveys to develop crosswalks for additional MOSs.

occupations for each of the ten MOSs. The distance metric compared the average response to each survey question for soldiers in each MOS with the average response of civilian workers in all 761 U.S. standard civilian occupations DoL surveyed. We rescaled the distance metric so that the best match across all MOSs and civilian occupations had a score of 100 and the worst match had a score of zero. For presentation clarity, we defined matches that score 80 or higher as high-quality matches.

Table 1. Survey Domains and Focus

Domains (Number of Questions)	Domain Focus
Knowledge (33)	Sets of facts and principles needed to address problems and issues that are part of a job
Skills (35)	Abilities to perform a task well, usually developed over time through training or experience
Abilities (52)	Enduring talents that can help a person do a job
Work Activities (42)	Set of similar actions performed together in many different jobs
Work Context (57)	Work setting and its possible hazards, pace of work, and dealings with other people
Work Styles (16)	Personal characteristics that can affect how well someone does a job

To help soldiers translate their KSAs for civilian employers, we highlighted survey questions associated with soft skills—such as leadership, teamwork, persistence, and attention to detail—allowing transitioning soldiers to cite them when communicating with potential employers.

What Did We Find Applying Our Approach?

The ten MOSs we examined included the five combat arms and five noncombat arms ones shown in Table 2. These ten MOSs currently constitute 40 percent of enlisted personnel.

The report on which this brief is based provides results for all ten MOSs; here, we use the example of MOS 11B (Infantryman) to illustrate the results of applying our approach. This MOS is the largest in the Army and does not have a clear civilian counterpart.

Based on the distance metric, we identified both a broader range of civilian occupation matches and higher-quality matches for each MOS than other military-civilian crosswalks. For example, Table 3 compares the top civilian occupation matches generated by the survey data for MOS 11B (Infantryman) with those recommended by the website My Next Move for Veterans—a commonly used military-civilian occupation crosswalk designed for U.S. veterans looking for jobs. My Next Move allows soldiers to search for careers based on keywords, by browsing industries that employ different types of workers, or by entering their military occupation code. My Next Move is based on an analysis of military and civilian occupational data

(e.g., comparisons of job duties or tasks) and supplemented with expert opinion.

On the left of the table, the survey matches from our approach are listed in descending order by the quality of the match (with a cutoff at 80); on the right, matches generated by My Next Move are ordered by the pay grade of the transitioning soldier and shown by the quality of that match according to our distance metric. As shown by the shaded cells, only one occupation—police and sheriff’s patrol officers—is on both lists. Some occupations recommended by My Next Move—such as construction laborers, delivery service drivers, and security guards—scored very low on our distance metric, which means they do not leverage infantrymen’s KSAs. This occurs partly because soft skills identified in our approach—such as leadership, teamwork, and training, coaching, and mentoring others—are less important to the My Next Move occupations.

More generally, we found that some civilian occupations match well with multiple MOSs we analyzed, because they use KSAs common to all soldiers. However, most MOSs, especially noncombat arms MOSs, also have civilian occupation matches that use MOS-specific KSAs.

What Do We Recommend?

The Army should use these data and analysis in several ways. First, it should provide information on the best civilian job matches to transitioning soldiers in the ten MOSs analyzed: types of employers that transitioning soldiers should target,

Table 2. Ten MOSs Examined

Combat Arms MOSs		
11B	Infantryman	Supervise, lead, or serve as a member of an infantry activity that uses individual small arms weapons or heavy anti-armor crew-served weapons in support of offensive and defensive combat operations
12B	Combat Engineer	Supervise or serve as a member of an Army organization engaged in providing mobility, counter-mobility, and survivability support to combat forces
13B	Cannon Crewmember	Supervise or serve as a member of a field artillery cannon or ammunition section in support of long-range target engagement by indirect fire
19D	Cavalry Scout	Assess terrain conditions, understand the geography, and report enemy position, strength, and armaments to the commander during battle
19K	M1 Armor Crewman	Operate armored equipment, such as the M1A2 Abrams tank, to destroy enemy positions
Noncombat MOSs		
31B	Military Police	Protect lives and property on Army installations by enforcing military laws and regulations and control traffic, prevent crime, and respond to all emergencies
35F	Intelligence Analyst	Receive and process information from multiple intelligence sources, conduct analysis, and produce and disseminate intelligence to support military decisionmaking and other Army processes
68W	Health Care Specialists	Provide emergency medical treatment, limited primary care, and health protection and evacuation from a point of injury or illness
91B	Wheeled Vehicle Repairers	Supervise and perform maintenance and recovery operations on wheeled vehicles and associated items, such as heavy wheeled vehicles and select armored vehicles
92Y	Unit Supply Specialist	Supervise or perform duties involving request, receipt, storage, issue, accountability, and preservation of individual, organizational, installation, and expendable supplies and equipment

Table 3. Comparison of Recommended Civilian Occupations for MOS 11B (Infantryman)

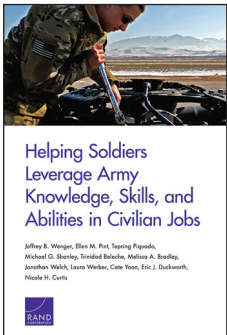
Survey Matches from RAND Approach	Distance Metric	Matches from My Next Move for Veterans	Distance Metric
Firefighters	93	Construction Laborers (E1)	64
Captains, Mates and Pilots of Water Vessels	88	Correctional Officers and Jailers (E4)	76
Supervisors of Fire Fighting and Prevention Workers	86	Light Truck or Delivery Service Drivers (E4)	49
Supervisors of Mechanics, Installers, and Repairers	84	Maintenance Workers, Machinery (E4)	64
Septic Tank Servicers and Sewer Pipe Cleaners	83	Police and Sheriff's Patrol Officers (E4)	80
Millwrights	82	Probation Officers and Correctional Treatment Specialists (E4)	55
Fire Inspectors and Investigators	82	Security Guards (E4)	42
Aircraft Cargo Handling Supervisors	81	Supervisors of Correctional Officers (E5)	71
Ship Engineers	81	Supervisors of Transportation Machine and Vehicle Operators (E5)	79
Manufactured Building and Mobile Home Installers	80	Training and Development Specialists (E6)	53
Structural Iron and Steel Workers	80	Training and Development Managers (E7)	56
Police and Sheriff's Patrol Officers	80	Emergency Management Directors (E7)	73

NOTE: Distance metric is normalized to a scale of 0 to 100, with 100 indicating the best match.

KSAs they should emphasize in their discussions with employers, and potential skill gaps they may need to overcome or credentials they may need to acquire. Our approach generates a broader range of civilian occupations than existing crosswalks and may help transitioning soldiers identify other options that leverage the KSAs developed while serving in the Army.

Second, the Army should develop a communications plan for employers in these occupations, identifying which MOSs are good matches for employers and the KSAs that are developed in these MOSs. Also, the Army should provide information to employers about the number of soldiers in these MOSs leaving the Regular Army each year and their planned geographic locations.

Finally, the Army should expand the use of the occupation surveys to develop crosswalks for additional MOSs. DoL has already implemented online versions of the surveys to collect data on civilian occupations. Making the surveys available to soldiers online and integrating them into the Transition Assistance Program is one option for expanding their use that would greatly increase the amount of data available to analyze the best civilian occupation matches by MOS and pay grade. An online format could even help generate job recommendations for individual soldiers based on their own survey responses and would allow them to identify their own KSA gaps for specific careers they would like to pursue.



This brief describes work done in the RAND Arroyo Center documented in *Helping Soldiers Leverage Army Knowledge, Skills, and Abilities in Civilian Jobs*, by Jeffrey B. Wenger, Ellen M. Pint, Tepring Piquado, Michael G. Shanley, Trinidad Beleche, Melissa A. Bradley, Jonathan Welch, Laura Werber, Cate Yoon, Eric J. Duckworth, and Nicole H. Curtis, RR-1719-A, 2016 (available at www.rand.org/t/RR1719). To view this brief online, visit www.rand.org/t/RB9936. The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is nonprofit, nonpartisan, and committed to the public interest. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark. © RAND 2017

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