Veteran Workforce Development: How Veterans can make a Positive Impact on Workforce Development in the Construction Industry

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Abstract

Many different sources have reported on the looming shortage of labor for the construction industry. Simultaneously, veterans who are returning from deployments and transferring into a civilian career are facing significantly higher unemployment rates than the general population. This paper proposes that these issues can be partially solved by forming a working relationship between the two populations. To find relevant information and opinions on this topic, interviews were conducted with three different groups. These three groups were contractors, veterans who are currently working in construction, and groups or organizations who are working to promote the partnership of the construction industry and the veteran population. Since the data gathered was mostly opinions and experiences, qualitative data analysis techniques were used to find trends in the data. Comparing and contrasting these different groups gave an informative insight to the issue. This paper concludes that while there are many challenges to overcome, the veteran population is a sustainable source for future employees for the construction industry, which can, in part, help to lessen the forecasted shortages for both skilled labor and construction professionals. However, there are multiple steps that need to be taken before veterans will have the opportunity to easily transfer their skills into the construction workforce. Some of these are cultivating lasting relationships between contractors and local military bases, provide opportunities for veterans to learn about and connect with contractors, and offer targeted veteran training programs that allow veterans to gain trade specific skills before they leave the military.

Keywords: veterans, workforce development, construction industry, United States,

1. Introduction

In 2011, in the United States, it was estimated that there will be approximately 300,000 veterans exiting the military in the next year, and this number will continue to grow in the years to come (VetPop 2011). These men and woman who have served the country are returning home to another battle, the adjustment to civilian life. Veterans who have fought in post September 11, 2001 wars (known as Gulf War II – era veterans) face an unemployment rate that is roughly three percentage points higher than the average (Army Times 2013).

The construction industry in the United States, on a whole, is experiencing a shortage of labor (AGC, 2013). This shortage applies to both construction professionals and trade workers. As the US economy is recovering from the downturn that began in 2007, construction projects are once again in high demand. Almost three quarters (74%) of construction companies report having trouble hiring qualified workers to meet the demand for their increasing work (AGC, 2013). This is an issue that is not just a current one, but one that will persist long into the future if new avenues of finding laborers and employees are not established and continually sustained.

This paper proposes that these two issues can be solved simultaneously. Veterans need sustainable careers and construction firms need trainable, responsible workers. Yet, there still seems to be a disconnection between the companies and these potential employees. This study investigated if and why veterans were a good fit to work in construction and what is currently being done to pair these two populations together and what can be done in the future to increase awareness on both sides of the issue. This research aimed to explore the opportunities in, benefits of, and barriers to construction as a civilian career for recent veterans and to investigate how this population could help to solve workforce issues in the construction industry. The objectives of the research were to (1) assess the need for renewed and continual workforce development in the construction industry, (2) discover what skills, experiences, and training veterans of the U.S. Military have that have been and would be applicable in the construction industry and (3) to discover what efforts are currently being made to pair contractors with veterans and to suggest future actions to this end.

The study used qualitative research methods and techniques. Interviews were selected as the main method of data collection because of the personal nature of the issue at hand. The collected data was analyzed by summarizing, coding, narrative and comparative analysis methods.

2. Literature Review

2.1. Construction Workforce Issues

In 2013, the Associated General Contractors of America (AGC) released the results of a nationwide survey that revealed issues companies were having with finding suitable workers. Over eighty percent of the firms surveyed answered that they had expanded their professional or craft workforce in the past year and that they had trouble or are still having trouble filling those

positions (AGC, 2013). This survey determined that 65% of the firms considered the quality of the available construction crafts workers was below average or poor whereas 77% of the firms considered the quality of general construction professionals as either average or less. Contractors are pushing more for higher productivity rates from their craft workers. This higher demand for quality and productivity is being opposed by the lack of proper training pipelines for future construction workers (Pace, 2003).

According to a leading management consulting and investment banking company for the engineering and construction industry (FMI), in a detailed 2010 report on construction trade demand, the estimated number of jobs that needed to be added by 2014 to fulfil the estimated amount of work was 1.5 million. Another source, the Construction Labor Research Council (CLRC) predicted that a minimum of 185,000 new construction jobs will have to be added annually in the next decade to keep pace with the demand for construction services. It was also predicted in 2010 that by 2014 almost twenty percent of the current construction workforce would retire or be on the verge of retiring. All of this comes at a time when the market for construction is finally climbing out of a six year recession (NCCER, 2013).

All of these facts point to, what is commonly referred to as, the "skills gap." This skills gap highlights the growing break between the construction workforce and the skills and training that are needed for one to join the workforce and the general population. High school aged kids and other young people are not receiving or are not interested in receiving the proper training to enter a construction trade as a career. Over fifty percent of high school graduates are now attending college. Very few are attending trade schools. This shift in the US culture is leading to less funding for the secondary career and technical schools, which in turn leads to fewer workers and less ways for a hopeful employee to receive proper training (AGC, 2014).

The AGC released a workforce development plan in 2014 which outlines a number of ideas on how to combat the aforementioned problems about labor shortages and a lack of proper training programs (AGC, 2014). One section of this plan discusses how giving training opportunities to veterans can be a great source of future workers. There are already many programs in place that could help veterans gain the needed skills to enter the construction workforce, if they receive more funding and are grown into a national effort. The AGC also mentions that extending the Work Opportunity Tax Credit, which helps cover certain costs of hiring veterans for companies, would encourage more companies to actively seek out the veteran population as a potential market for future employees.

2.2. Veteran Unemployment Status

Bureau of Labor Statistics publishes the data for unemployment rates for veterans. The statistics for the unemployment rate for vets by period of service show that while many periods have lower rates than nonveterans, the Gulf War era II, which is defined as veterans who have served post 9/11/2001, is the youngest generation of vets and has the highest unemployment rate. The Gulf War era II generation is also comprised of a much larger population of women than previous veteran generations.

2.3. Veterans in Construction

The idea of pairing veterans with construction companies is not new, but it is one that still has plenty of potential to help both sides. There are multiple organizations and programs that have this goal in mind: V2C, Helmets to Hardhats, VIP, Veterans Build America, and V.I.C.E. or Veterans in Construction Electrical are just a few such programs (Jones, 2013). However the effectiveness of many of these programs is hard to quantify. If they truly are making a difference in the labor force as a whole has yet to be determined.

"Helmets to Hardhats" has been helping veterans find jobs in the construction industry since 2003 but recently lost its funding from the federal government thus greatly impacting its effectiveness (Cronin, 2013). V2C is a much smaller and much newer program. It has been developed and run thus far with no funding. The founding members of the program have essentially volunteered their extra time to run V2C, but they feel that to begin making a larger impact, funding must be procured soon (Jones, 2013).

VIP is the most different program from the previously mentioned ones. This is because VIP does not simply try to pair veterans with jobs, it actually provides the necessary training to become an apprentice in the plumbing and pipefitting industry for free. This program is twenty weeks long and guarantees job placement upon completion of the program. The program includes eighteen weeks of intensive training that takes place while the veteran is still stationed on base and then two weeks of transition assistance to assure the veteran a smooth shift back to a civilian life and career. All of these services are provided free to the veterans and paid for by the local UA (United Association of Plumbers, Pipe Fitters, Welders and HVACR Technicians). This program started on Joint Base Lewis-McChord in Lacey, WA and has spread to multiple other bases including Camp Pendleton, California and Camp Douglas in Wisconson (Terven, 2011).

The percentage of veterans working in construction is significantly less than other industries such as: automotive/mechanic, aviation, government, health-related services, security, and transportation (Abt, 2008). There is limited data on the make-up of the construction labor force and what percentage of workers and professionals are veterans.

A survey by the *Military Times* entitled "Best for Vets 2013: Employers" ranked the top 53 employers for veterans. Of the 53 companies listed none were from the construction industry. There are two contractors listed on the 2014 list of "Best for Vets: Employers." The decision was based on data such as percentage of employees who were veterans, percentage of veteran executives, and percentage of recruiting budgets dedicated to veterans. This survey suggests that the construction industry as a whole could improve its outreach towards veteran.

3. Research Methodology

The study was conducted using qualitative research methods and techniques. Interviews were administered to collect the data from three different groups consisting of twelve people in total.

The collected data was analyzed using qualitative methods such as summarizing, coding, narrative and comparative analysis. The answers from each group were examined individually, as a group, and comparatively across all groups.

Group One- General and Specialty Contractors. This group consisted of a representative or group of representatives from selected construction firms in the Southeast of the United States. These firms and individuals were chosen using convenience sampling methods.

Group Two- Veterans. This group was comprised of people who were currently working for a company that was involved in the construction industry and also had previously served in any of the branches of the United States military. This group was selected using both convenience and snowball sampling methods.

Group Three- Programs that are currently working to pair the veteran population with the construction industry. This group contained people in leadership positions in a group or organization whose goal is to pair the veteran population with the construction industry through a variety of different methods. These organizations and individuals were chosen using convenience sampling methods.

3.1. Interview questions

Group One was asked eight questions, Group Two were asked ten questions and the third group responded to six questions in total. Following questions were asked in the interview:

- a) Interview Questions for Group One (Construction Company representative)
 - 1. Does your company have or participated in any special hiring/training program for veterans? If so, please explain. If not, would you consider creating and or joining one?
 - 2. Does your company actively participate in any kind of workforce development program? If so, please explain.
 - 3. What are some positions that veterans currently hold or have historically held in your company?
 - 4. In your experience, have veterans had more, less, or a comparable amount of applicable training than non-veterans who you have hired for similar positions?
 - 5. Has your company experienced any difficulties in finding and or hiring veterans onto your workforce? If you have, please explain.
 - 6. Has your company experienced any direct or indirect benefits of hiring veterans i.e. government relocation assistance or other paid expenses? If so, please explain.

- 7. Is there any specific factor that is keeping your company from actively recruiting and hiring veterans?
- 8. For your company, what would make the process of recruiting and hiring veterans a simpler and more regular occurrence?
- b) Interview Questions for Group Two (Industry Veterans)
 - 1. Were you involved in construction in any way during your time in the military?
 - 2. Did you receive any construction related training while in the military?
 - 3. Why did you get into construction?
 - 4. Did you have any connections in the industry? If not how did you get in touch with construction companies?
 - 5. Did you participate in any program or organization that helped veterans find jobs in construction or other fields?
 - 6. Do you believe that the training you received from the military prepared you for a civilian career after you had finished your service?
 - 7. Do you know of anyone that you served with who is now working in the construction industry?
 - 8. What was your knowledge of and perception about construction before you started to work in the industry?
 - 9. Did you consider any other careers outside of the construction industry?
 - 10. Would you recommend a career in construction to a fellow recent veteran?
- c) Interview Questions for Group Three (Veteran Program Representatives)
 - 1) How/why did your program get started?
 - a) Why do you think vets and construction are a good match?
 - 2) What is the goal/mission of your program?
 - a) Has it evolved at all?
 - b) If so. Why?

- 3) What kind of progress has your program made and how has it changed?
- 4) What has been the biggest impediment to the mission of your program?
- 5) What is the biggest factor(s) that will help promote the partnership between vets and construction?
- 6) Where will your program go from here?

4. Results and Analysis

4.1. Data Trends

In this section of data analysis, the collected interviews were transcribed into written form. The interview transcripts were then comprehensively read multiple times. Trends in answers to the questions were identified and recorded as codes. The tables are reported below from each group with the codes as found in the text. This paper defines a trend as a topic that was mentioned by two or more (40%) of the interviewees in a certain group. The interviewees wording did not have to exactly match another's to be considered a code or trend, rather it was the topic of idea spoken which determined the trend. There are three fields in each of the tables below:

- Description—a brief description of the idea or topic that was repeated by multiple interviewees
- Mentions—This is the number of times the identified topic or idea was mentioned by the interviewees, this includes multiple mentions by a single interviewee, but at least two separate interviewees had to mention the idea before it was considered a trend
- Marker—this is the highlighted color of the trend (Table ,1 2, and 3)

Marker Respondents Mentions Description 5 17 Veterans are hard to contact as a group Veterans have the type of work ethic or attidue we are looking 4 10 for in an employee 5 8 We would like to hire more veterans 3 5 Veterans have the leadership skills we need in our workforce 2 3 Veterans thrive in teamwork enviornments

Table 1: Contractors' responses

As demonstrated in Tables 1, 2, and 3, there were many trends found throughout the collected data. One of major takeaways from this form of analysis is that one of the main hindrances in advancing the relationship between the construction industry and the veteran population is the difficulty in finding, or lack thereof, established lines of communication between these two

groups. A separate trend discovered in all three groups was that of how military training prepares veterans for their civilian careers. While most interviewees agree that the trade specific training is absent, the soft skills that military service men and women develop such as, work ethic, attitude, trainability, leadership, and teamwork combine to make veterans a great candidate for any job in construction.

Table 2: Veterans' responses

Marker	Respondents	Mentions	Description
	5	14	I gained skills in the military which helped me later when I got a civillian job
	4	13	I had a Family or Friend Connection in the Construction industry
	3	11	Construction is hard work
	4	8	I did not particpate in construction while in the military
	5	6	Construction is a hard field to get into if you do not have any connections with a company

Table 3: Responses from veteran construction programs

Marker	Respondents	Mentions	Description
	2	6	Online job sites are not the answer, there needs to be a more tangible solution
	2	6	The Military and Government are hard to work with
	2	5	These types of programs are good for the veteran community
	2	5	Veterans are hard to contact as a group
	2	3	Construction is a fragmented industry
	2	2	Veterans have the type of work ethic, attidue, and leadership skills we need in our workforce
	2	2	Veterans are trainable

4.2. Comparative Analysis

The diagram below (Figure 1) illustrates how the data trends from all three groups align with each other. This diagram shows that there were many interrelated issues mentioned by two or even all three groups. By representing the data in this way it is easy to spot the main issues and ideas for the entire collection of interviewees.

As illustrated above, one trend that stood out from all interview groups was the topic of communication. This theme was brought up by the interviewee in almost every interview. Every time communication was mentioned the tone was negative. The difficulties of trying to reach out from one population to the other or the lack of communication between populations were pointed out as the biggest obstacles in the way of the goal. All contractors had experienced

indirect benefits of hiring veterans through their attitudes about work, and their abilities to thrive in team oriented environments. This idea was to back up all of the veterans' belief that the leadership and teamwork skills they developed during their time in the military were the cornerstone to their successful careers in the construction industry. The notion of veterans having the skills needed to be successful in the construction business was further reinforced by the fact that all three programs in this study were started by veterans who believed the same thing so strongly that they decided to do something about it, in a big way.

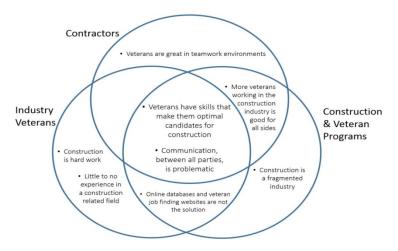


Figure 1: Conceptual alignment of data trends

The most prevalent difference between the group of contractors interviewed and the group of veterans interviewed was their outlook on veteran employability in the construction industry. Although all parties agreed that there are many similar skills needed and many parallels in the lines of work, the veterans were split evenly between recommending a career in construction to a fellow veteran, while contractors were unanimous in their desire to employ more veterans. While this result cannot be extrapolated to the populations as a whole, it certainly points out a gap that must be filled if the construction industry truly wants to recruit more veterans in the future.

5. Conclusions and Recommendations

There is no doubt that workforce development in the construction industry is a topic that needs to be addressed. Amid forecasts of labor shortages and the public's rapidly deteriorating attitudes about working in the construction trades, no contractor is denying this need. However, what the strategy will be to truly develop the workforce remains largely to be determined. Several different national contractors and industry groups have proposed plans of how to accomplish this task. As revealed through the interviews performed for this study, this issue cannot be solved with a singular solution or by a one contractor. Conversely, it must be handled through multiple avenues of attack and via an industry wide effort. The conclusions and recommendations of this paper alone are not enough to solve the construction labor shortage, nor are they intended to do so. To be successful, the following tactics must be accompanied with a heightened sense of awareness from all contractors and industry participants and a

comprehensive, realistic plan of action from collaborative industry groups, unions, construction nonprofit groups, and individual contractors.

Ultimately, hiring a veteran is a business decision and as with any business decision, it is about return on investment. Veterans have been proven to have the intangibles needed to succeed in the construction industry in positions from trade apprentices all the way to senior management and owners. With the addition of increased awareness of the construction fields, opportunities to make personal connections with contractors, and readily available training programs, the veteran population could prove to be a renewable source of future employees for the construction industry for years to come. More importantly, these training programs and other opportunities will provide reliable avenues for service men and women to develop the skills and connections needed to smoothly transfer from active duty service into a prosperous civilian career. As a result of the research in this paper, the authors make following recommendations for the construction industry:

1) Begin the process of building a relationship with the veterans before they become veterans.

The construction industry is a fragmented industry with thousands of individual contractors spread across the country. Very few of the contractors have the time and or resources to individually establish a working relationship with the military. Likewise the veteran population, once separated from the military, is disjointed and near impossible to reach as a whole. Because of the conditions of these two populations it is important for a significant number of contractors, acting through local industry groups, such as the state chapters of the Associated Builders and Contractors, begin the process of building a relationship with the veterans before they are discharged from their final military stationing.

2) Recruit people with connections on both sides to become a liaison

This can be done firstly by recruiting someone with a strong network of connections in the military bases in the local community to be a part of this initiative. These connections are critical because, similar to construction, knowing who to talk to is half of the battle.

3) Establish a presence on local military bases

With the aforementioned connections in place it will be easier to establish a presence on the base. The idea is to get veterans to begin thinking of construction as a viable career. The most obvious groups of veterans to begin this campaign towards are those with construction related experience from the military i.e. the Navy Construction Battalion, or the Army Corps of Engineers. This group may prove to provide the best immediate return on investment, however, as revealed through this study veterans who were not assigned to these units can and will still make great employees for any contractor.

4) Offer construction specific career fairs and information sessions

To begin reaching out to these groups and establishing a credibility with the base command, groups should begin with relatively low cost, high yield strategies such as construction specific career expos. V2C has already begun this process and hopefully the rewards to all parties will be evident. Once these types of events have been successful it will become easier for individual contractors to reach out to these bases when they want to recruit more veterans. This strategy will diminish the largest complaint of both the contractors and veterans interviewed, which is the high level of difficulty experienced in trying to reach out and make personal contact with the other population.

5) Start a military specific training program

VIP has established a very effective training program specifically for veterans to gain the skills necessary to enter the welding and pipefitting trade. They have set up these programs to be run on base for active military personnel who are about to be finished with their military service. This is the optimal time to train the service men and women because of multiple reasons. Firstly, these men and women are highly trainable at this stage in their military careers and can absorb the trade knowledge and gain the necessary skills efficiently. This allows for training programs to be condensed, saving everyone involved time and money. Secondly, as they are still employed by the federal government, their living expenses and housing arrangements are fully taken care of by the military. This means that the veterans do not have to try and support their families by working a night job or by taking unemployment benefits form the government. This gives the veteran the ability to fully concentrate on the training program, which again saves everyone involved time and money.

The program that VIP has created is an accelerated eighteen week training regimen that is completely free to the veteran. The UA pays for the training which amounts to \$15,000 per person. At the end of the program every veteran is guaranteed a job in the industry and also must join the UA. That amount of money may seem daunting at first, but not when one considers the thousands of dollars in union dues the graduates will pay back to the UA and the tens and possibly hundreds of thousands of dollars of work the graduates will produce in quality craftsmanship over the lifetime of their careers. It is important that the framework for this strategy continue to be developed and expanded into as many construction trades as possible. As of now, the UA is the only group with such a training program and the program is only available on a limited number of USMC bases. Unions and other trade groups, as well as general construction industry groups must find ways to finance, implement, and expand these types of training programs.

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