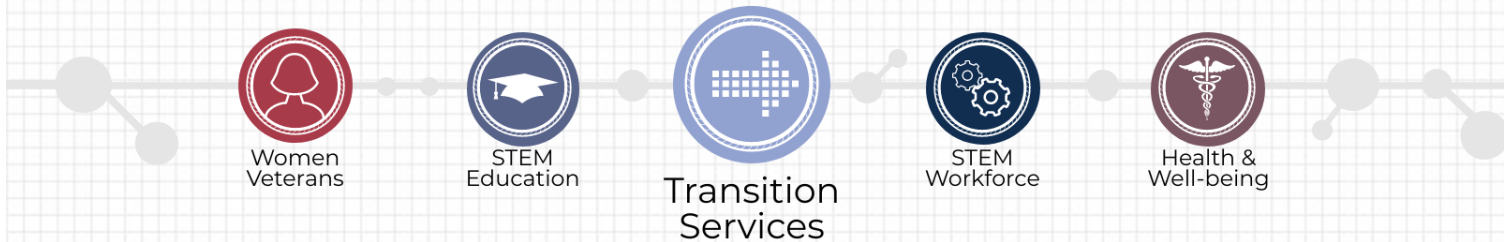


## Strengthening the Pipeline from Service to STEM

A series focusing on the future of Women Veterans in STEM




### ARTICLE 2 of 5

This paper was developed as part of a National Science Foundation-funded project seeking to improve participation by women veterans in the STEM workforce. It is the first of five papers aimed at providing a snapshot of what is currently known about women veterans' participation in the STEM workforce, factors that affect their participation, and promising practices to increase participation and success in these fields. A convening in early 2021 will bring together key stakeholders to discuss the implications of these findings and how to best strengthen and scale the impact of existing initiatives to support women veterans' success.

# Women Veterans Transitioning to the STEM Workforce

## What services are currently available to help women veterans successfully transition to jobs in STEM fields?

**There are currently no widespread transition services that cater exclusively to STEM fields.**



Each year, approximately 200,000 women and men service members participate in the Transition Assistance Program (TAP), which is an important part of their transition. Their participation is required under the Veterans Opportunity to Work and Hire Heroes Act of 2011 (VOW Act).<sup>1,2</sup> TAP has undergone significant expansion and improvement in recent years, and is provided to all transitioning service members through an interagency partnership among the Department of Defense (DoD), Department of Labor (DOL), Department of Education (ED), Department of Veterans Affairs (VA), and Department of

Homeland Security (DHS), in conjunction with the Small Business Administration (SBA) and the Office of Personnel Management (OPM).<sup>2</sup>

TAP begins with individualized initial counseling and pre-separation counseling, both of which must be completed no later than 365 days prior to separation or retirement. During the individualized initial counseling, a TAP counselor works with the transitioning service member to help them begin the transition process, complete their personal self-assessment and individual transition plan, and discuss their individual post-transition

goals.<sup>2</sup> The benefits, entitlements, and resources for which transitioning service members are eligible are covered during their pre-separation counseling.<sup>2</sup>

Transitioning service members then attend a week of training, which includes DoD Transition Day, one day of VA Benefits and Services, and one day of DOL's Employment Fundamentals of Career Transition for all attendees.<sup>2,3,4</sup> DoD Transition Day includes training in Managing Your Transition, the Military Occupational Code (MOC) Crosswalk, and Financial Planning for Transition.<sup>2,4</sup> TAP participants then choose one of the following two-day tracks.<sup>2,4</sup>

- DoD Education Track—Assists transitioning service members in identifying the higher education requirements that support their personal career goals.<sup>3</sup>
- DOL Employment Track—Covers emerging best practices in career employment, including in-depth training on interview skills, effective resumes, and the use of emerging technology to network and search for employment.<sup>3</sup>
- DOL Vocational Track—Offers a unique opportunity to complete an industry-standard personalized assessment, receive a variety of tailored job recommendations, and learn a variety of career considerations, including labor market projections and education, apprenticeship, certification, and licensure requirements.<sup>3</sup>
- SBA Entrepreneurship Track—Educates service members pursuing self-employment in the private or non-profit sectors.<sup>3</sup>

Transitioning service members should pursue these tracks soon after beginning the transition process to allow for ample planning time. Counseling related to education options should occur as early as possible to allow enlisted women to take courses that help them achieve their goals. If this is happening shortly before discharge, it is too late to pursue the necessary education options.

Capstone is the final piece of TAP for all participants, and must occur no later than 90 days before separation. Capstone is a culminating event in which military commanders must verify that the transitioning service member has met all career readiness standards and has a viable individual transition plan, OR they must refer the transition-

ing service member to the appropriate agency for further assistance.<sup>4</sup>

The VA has [programs and services](#) available for women veterans, such as the [Center for Women Veterans](#), the [VA Health Care for Women Veterans](#), and [Women Veterans Healthcare](#). The VA has expanded the Center to better serve women by placing Women Veteran Coordinator (WVCs) in the VA's regional offices and has created the Women Veterans Call Center (1-855-VA-WOMEN). Unfortunately, many of these programs and resources evolved from existing services for male veterans, and are therefore fractured and isolated.

The VA's Center for Women Veterans offers exit seminars for women, but their focus is to make women veterans aware of health care resources. Some experts say that women veterans also need training on social and psychological skills in order to cope with their transitions. "It took the Army 17 years to get me to the rank of major, so there is no program that is going to be three-to-six months that is going to prepare me for civilian life," said Jas Boothe, who founded Final Salute Inc., an organization to provide women veterans with safe and suitable housing. "America needs to carry the torch, and go beyond the handshake and a thank you for your service. We need a boot camp that is longer and effective."



# What are the work and non-work considerations and barriers to advancement for women veterans' STEM careers?

**Knowledge and skills are sometimes not enough to launch a STEM career for women veterans.**

Enlisted women must consciously accumulate STEM skills while in the military if they want to pursue STEM fields after they transition out of the military. They need to intentionally take courses and training that is relevant to STEM jobs. Even after women have accumulated the appropriate knowledge and skills, there are three additional work/non-work considerations that affect women veterans' advancement in STEM:

## Unequal Family Obligations

- Pregnancy is incompatible with many military jobs and tasks, leading many women to separate from the military earlier than they may have originally planned.
- Women veterans are faced with increased social/societal expectations for women to perform family and home tasks. "Even though they vary by personality, interviews provide ample evidence that army mothers, when faced with work–family conflict, almost always choose to limit or stop working."<sup>5</sup>

## Lack of Role Models in Leadership Positions

- In both military and non-military contexts, there are few women in leadership positions to model pathways and strategies for balancing work and family.
- Likewise, women veterans have few advocates or sponsors at higher organizational levels to serve as resources.

## Lack of Instrumental and Interpersonal Resources

**Instrumental:** Fewer resources exist to support the needs of working women in higher ranks of STEM positions (e.g., access to childcare, flexible schedules, etc.)

- Because fewer women progress in STEM careers, there is less perceived need for these types of resources, based on the demographics of leadership/advanced careers in STEM.
- Women veterans may be located in areas far from family or other support for childcare demands.

**Interpersonal:** Less support for women from their family members and colleagues

- Dual-career families may prioritize the partner's career over the woman veteran's career
- Many women veterans have partners in the military, and both partners face challenges of military lifestyle/expectations.
- An existing network of support may have been lost at the time of separation from the military.



## How do women veterans learn about available STEM careers for which they may be qualified or could become qualified?

Women veterans require assistance with searching for various types of jobs, including STEM positions.

The keys to success in identifying civilian STEM jobs for women veterans are:

- Organizing a comprehensive and targeted job search, based on job function, desired industry, and location;
- Identifying their translatable/transferable knowledge and skills;
- Learning the language and terminology used in civilian STEM careers; and
- Networking with other women (veteran and non-veteran) who are in civilian STEM careers.

Some organizations and foundations provide assistance with career search/alignment of skills developed in the military to those required for civilian careers. The [Civilian-to-Military Occupation Translator](#) from CareerOneStop provides valuable information and resources to assist with the translation of military to civilian skills by mapping military occupations to civilian job openings. Employers, like [Lockheed Martin](#) and [Boeing](#), have built military skills translators into their organization's job pages.

## What are the elements of an effective transition program for women veterans who could enter STEM careers?

An effective transition program would offer wrap-around support.

This would include resources to allow veterans more time to invest in transition services, more exposure to STEM career options, and increased social capital through connections with other women in STEM careers.

### Resources

- Technology (e.g., computer)
- Childcare
- Transportation

### Career Exploration/Coaching

- Include opportunities for women veterans to discover, explore, and articulate their career interests, values, preferences, and so on.
- Coach women veterans on how to translate their previous experiences, knowledge, and skills to potential careers in the STEM workforce.
- Coach women veterans on how to leverage professional online networking sites (e.g., LinkedIn).

### Professional Mentoring

- Each woman veteran should be supported during the transition process by a designated role model/buddy/mentor.
- Transition program experience should help women veterans reframe how they see their professional selves and what their professional options are for the future.
- Women veterans should be introduced to the language used in STEM fields.



## In Summary

These findings will provoke national dialogue on the importance of policies and programs to support women veterans in seeking greater economic opportunities through STEM work. We can leverage the unique expertise of these individuals only by providing the additional support they need to be able to successfully join the STEM workforce. While such support exists in isolated pockets and instances, it is critical that our nation create opportunities for all female veterans. We seek to bring key stakeholders together for this timely and critical discussion, and invite those who are interested to join us.



For more information about the project, check out our website [womenvetsstem.edc.org](https://womenvetsstem.edc.org)

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