



**THE AMERICAN LEGION**  
*Veterans Strengthening America*

# The Future of Credentialing of Servicemembers and Veterans

Leveraging Partners, Policies and Resources



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# Contents

- Executive Summary** ..... 2
- Report Funding** ..... 4
- Report Preparation** ..... 4
- Introduction** ..... 5
  - Audience ..... 6
  - COVID 19 Implications ..... 7
  - Roundtable Workstreams ..... 8
- Chapter 1. Public-Private Partnerships** ..... 9
  - Key Findings ..... 9
  - Successful Public-Private Partnership Models ..... 11
- Chapter 2. Recognition of Learning and Stackable Credentials** ..... 15
  - Key Findings ..... 15
  - Successful Model Programs ..... 17
- Chapter 3. Tools and Resources** ..... 21
  - Key Findings ..... 21
  - Successful Tools and Resources ..... 23
- Chapter 4. Federal and State Legislation and Policy** ..... 27
  - Key Findings ..... 27
  - Key Legislative and Policy Actions to Facilitate Credentialing:  
2017 to Present ..... 27
- Chapter 5. Research on Emerging Issues** ..... 31
  - Key Findings ..... 31
  - Research Worth A Read ..... 31
  - Organizations to Keep an Eye On ..... 33
  - Research Questions Still Needed to be Addressed: ..... 34
- Conclusion and Opportunities for Action** ..... 37
- Appendices** ..... 41
  - Appendix A - Glossary of Terms ..... 42
  - Appendix B - Ambassador Bios ..... 44
  - Appendix C – Acknowledgements/Recognition ..... 49
  - Appendix D – Federal Legislation and Executive Orders  
Designed to Facilitate Credentialing ..... 50
  - Appendix E - References ..... 58



## Executive Summary

The Military Credentialing Advancement Initiative (MCAI) was established in August 2019, convening a small group of public and private-sector stakeholders across industry, education, labor and military. MCAI ambassadors were tasked with compiling recommendations to support the recognition of military-based learning toward high-quality credential pathways. Throughout 2020, the ambassadors met both in person and virtually to uncover models and principles that have been successfully executed across all credentialing stakeholder groups to create a report that would share a list of guidelines to support scale and had the potential to be replicated. For the purposes of the report, the term credential should be considered all-inclusive, to include certificates, certifications, licenses and apprenticeships, along with more traditional higher education degree programs. A more comprehensive list of referenced terms throughout the report can be found within Appendix A: Glossary of Terms.

Roundtable discussions centered on five workstreams, allowing ambassadors to leverage their individual expertise. Ambassadors also interviewed several experts familiar with the topics under discussion to gather additional data to inform their recommendations. Under the MCAI umbrella, a series of pilots was initiated that have begun testing several

recommendations included within the report, to build stackable credentialing programs that provide additional models for replication. To inform the field, a scaling guide is planned for release at the conclusion of the pilots in late 2021 or early 2022.

During the first roundtable, ambassadors identified topics relevant to the MCAI goals, organizing them into the five distinct workstreams. Those workstreams were translated into chapters within the body of the report. The first workstream focused on public-private partnerships, emphasizing those undertaken with the Department of Defense (DoD). MCAI ambassador findings centered on defining barriers, providing guidelines for development, as well as identification of key features and model programs. Navigating bureaucracy, undefined pathways, unclear points of contact, and a decentralized system among the services were noted as barriers faced by external stakeholders looking to partner with DoD. The recommendations were tailored to alleviate these issues, with seven key features of successful partnerships outlined: clearly identified catalyst(s) for creation, defined partner roles and responsibilities, identified leader(s), DoD involvement, defined workplans, clearly articulated goals and metrics, and confirmed sustainability. Including industry leaders and utilizing competency-



LEFT: U.S. Army Spc. Jekia L. Summerour secures a wheel on one of the unit's humvees at the Georgia Army National Guard Maneuver Area Training Equipment Site on Fort Stewart, Ga.

U.S. Army photo by Sgt. 1st Class Gary A. Witte

based pathways in high-demand career fields are also crucial for all model programs.

The second workstream addressed the stackability of credentials and recognition of military-based learning as key in facilitating credential attainment and career progression. Transparent pathways comprised of sequential coursework and buildable skills and credentials are most valuable and support lifelong learning and upward economic mobility. In creating programs following a stackable model, utilizing a common language, transparency of requirements, eliminating the need for duplicative training, a broad focus on competencies, and providing holistic support services are advised.

The third workstream emphasized the utilization of tools and resources to identify and fill gaps in military-based training and education. Common language and related data standards, frameworks and classification schemes, translation tools, and articulation portals were identified as the top resources for those seeking to advance credential attainment for servicemembers and veterans. Employing quality tools in the development of programs decreases time, cost and effort expended and improves equity, transparency, comparability and portability for credentialing.

The fourth workstream covered legislation and policy, and their role in facilitating credentialing. While legislation at the federal level has ensured equal access to resources and funding and established baseline criteria, the bulk of successful initiatives surrounding military-to-civilian employment have been at the state level. Legislation is most effective when it applies broadly across occupational areas, creates consistent frameworks and supports consistency in the application of legislative measures. Portability of licensure or certifications and the assessment of prior learning are key features currently, and where spousal legislation exists, minor modifications can expand the applicability to servicemembers.

The final workstream detailed how research on emerging issues can further promote credential attainment for servicemembers and veterans. A variety of research topics informed roundtable discussions; those found to have the most significant impact on advancing military credentialing initiatives were related to competency-based education, recognition

and validation of non-traditional learning, non-degree credential attainment, veteran employment and underemployment, and military-to-civilian transition support. Valuable research connects academia, employment, labor and industry partners in addressing issues that cut across all stakeholder groups and ultimately leads to identifying practical solutions. The report highlights research that allows the reader to dig deeper on topics of interest and shares several organizations spearheading new research initiatives relevant to military credentialing.

To reduce veteran unemployment and underemployment rates, ease the transition from the military to the civilian workforce, open additional credential pathways leading from high-quality military education and training, and foster a robust post-service career, clearly defined public-private partnerships, stackable programs, legislation and policy, and research are critical. Efforts begin with the recognition of military-based learning and creation of credential pathways (to include academic or non-academic credentials). They must include insight from cross-sector experts from industry, labor, academia and DoD for maximum impact. Where successful models exist, making adaptations and building outward is highly preferable to a ground-up approach.

As the employment landscape and economy will continue to shift in response to a global pandemic, the repercussions of which have not yet been fully realized, the replication of model programs and adoption of key components named in this report is more critical than ever. While the advancement of military credentialing may be complex and much work is yet to be done, the recommendations shared were designed to be universally applicable. Interested stakeholders may adapt and operationalize these guidelines to fit the unique characteristics and needs of their organizations. The conclusion offers tangible examples of opportunities for action relevant to each specific stakeholder group that can be taken in the short- and long-term to advance military credentialing for servicemembers and veterans. The hope of all those who have contributed to the MCAI report that you review what has been shared and use this information as a foundation upon which to improve current and future credentialing opportunities. Additional research and action are needed to adapt and offer continued credentialing support to servicemembers, veterans and their families, and we encourage you to spearhead such efforts.

## Report Funding



**The American Legion** is a nonpartisan, not-for-profit, highly respected veterans service organization (VSO) with nearly 2 million members. The American Legion has a strong commitment to the promotion of credentialing as a means to professionalize the military force and enhance civilian employment opportunities to aid in the transition from military service to the civilian workforce.



**Lumina Foundation** is an independent, private foundation in Indianapolis that is committed to making opportunities for learning beyond high school available to all. The foundation envisions a system that is easy to navigate, delivers fair results and meets the nation's need for talent through a broad range of credentials. Its goal is to prepare people for informed citizenship and for success in a global economy.

## Report Preparation



Solutions for Information Design, LLC (SOLID) provides policy research and analysis support to government and private-sector clients with an emphasis on the areas of education, training and employment of current and former military personnel. SOLID has specialized expertise in credentialing of servicemembers and veterans that dates to 1996 when staff members conducted the first formal research in this area, sponsored by The American Legion. Since then, SOLID has performed extensive additional research under the sponsorship of numerous public and private-sector organizations.



National Guard soldiers nail roof sheathing on a construction project at Camp Grayling Joint Maneuver Training Center in northern Michigan. Lt. Col. John Hall

## Introduction

In August 2019, the Military Credentialing Advancement Initiative (MCAI) was created as a way to strategically align a series of investments by Lumina Foundation focused on increasing credential attainment of military servicemembers and veterans. The goals of MCAI were comprehensive and multifaceted – **to compile recommendations for principles and guidelines that may be deployed by key stakeholder groups to successfully execute the recognition of military-based learning toward a high-quality credential pathway.** In disseminating this information and providing a model, the initiative aims to ensure that servicemembers' high-quality learning can receive full recognition, counted toward a credential and scaled at a national level. MCAI views military-based learning as validated learning from which new pathways should be built. **Validated learning** captures knowledge, skills and abilities gained outside formal higher education that have already been verified and validated (e.g., military occupational training). As such, it does not require the learner to be reassessed. It is based on the premise that the credential provider recognizes and values the learning that has already been validated by any other systems and applies that learning into an academic or non-academic credential pathway. This approach accelerates completion, saves money and creates greater equity in outcomes for the servicemember and veteran.

Under MCAI, experts were convened from across the military and civilian post-high-school learning

ecosystem to provide thorough leadership and guidance to those who can influence necessary infrastructure change and tackle issues with widespread relevance and impact within the military, industry and the education community. These experts served as roundtable ambassadors, using their experience with creating credentialing opportunities and programs for servicemembers and veterans that recognized military training and education toward a civilian credential pathway. **Selected from an expansive list of experts representing industry, academia, state and federal government agencies, and the military, their diverse perspectives allowed for a full-picture approach.** Ambassadors were charged with identifying various techniques deployed in recent years to overcome barriers to credentialing faced by those whose primary occupational training is gained through military service. Roundtable ambassadors captured these recommendations, which are outlined below, to provide strategic advice to industry leaders, institutions of higher learning and other credential providers, the Department of Education, Department of Labor, Department of Defense and other federal and state government agencies to support the execution of infrastructure change rooted in transparency, equity and quality assurance for credential completion.

There are two main deliverables of MCAI. The first is this report, which could be utilized as a toolkit by stakeholders looking to replicate the successful

credentialing partnerships currently in place throughout the country. The second is a series of pilot programs, currently underway, building stackable credentialing programs that apply competencies and credentials gained in military service toward continued education and employment for military servicemembers and veterans, eliminating the need for the repetition of training received during military experience. The pilot programs will be completed in 2021, and Lumina Foundation will issue a separate report on the results.

Lumina Foundation, as part of the “**Stronger Nation**” initiative, has set a goal that “by 2025, 60 percent of Americans hold a credential beyond high school – a quality credential that prepares people for informed citizenship and economic success” (Lumina, 2020). To produce the estimated 16.4 million additional credentials needed to meet that lofty goal, Lumina sought to align with a highly respected VSO to increase pathways for servicemembers and veterans to obtain credentials using skills gained during military service. As a longtime advocate for increased civilian credentialing opportunities for veterans and military servicemembers, The American Legion was a natural choice, and was selected as the VSO to convene the roundtables and lead the production of the report.

Over the past 25 years, The American Legion has been working to identify and reduce barriers associated with military credentialing for servicemembers and veterans. The American Legion conducted the first systematic study related to military credentialing in the mid-1990s and has since undertaken numerous initiatives to facilitate the credentialing of this population further. A highlight of these efforts is the National Credentialing Summits that were held in 2012 and 2015. Driven by outcomes from the summits, in 2017, The American Legion issued the **State of Credentialing of Service Members and Veterans report**. The report included a series of “Opportunities for Action,” which led to the most recent summit in Indianapolis in August 2019. It was from the findings within this report that the 2019 agenda was created. The event provided a forum for experts from the private and nonprofit sectors, and from military and federal agencies to share best practices for credentialing and enhancing civilian career prospects for veterans, servicemembers and military spouses. Based on robust conversations that occurred during the 2019 summit, combined with the findings from the State of Credentialing report, the foundation for MCAI was formed.

Lumina's investment focused on supporting additional capacity for The American Legion's credentialing advocacy programs to: **encourage greater stakeholder engagement to build the awareness, support, and implementation assistance needed to create a system where competencies and credentials gained in military service are acknowledged, valued by civilian postsecondary providers, and lead to stackable credentialing pathways.**

## Audience

Higher education, industry partners, legislators, government agencies and the military have been identified as primary audiences for whom the report contents are most directly applicable. The report has relevance to a broader audience, as well. This report is meant to be used as a toolkit by the stakeholders identified to support the development of credentialing programs to serve the military and veteran communities.

Higher education should utilize the report's recommendations to align programs with industry needs and create resilient programs and training for servicemembers and veterans. This should also include consortia dedicated to enhancing and facilitating education for veteran and military students for the most substantial impact.

Industry partners inclusive to sector-related experts, labor unions and employers will find this report useful when developing public-private partnership models. Trade and professional associations, especially those in the highest growing industries of manufacturing, health care, and information technology, should pay attention to the programs outlined that have had great success among veterans and military members, with an eye toward emulating best practices.

Legislators and government agencies are also able to facilitate the credentialing of servicemembers and veterans from several angles. Federal and state agencies that support education, training and employment programs can look at the model successful programs and resources described in this report to enhance their programs. Legislators can consider enacting legislation to provide greater recognition of equivalent military training and experience toward credential attainment and provide additional resources for programs supporting credentialing of servicemembers and veterans.

Finally, as a key player in providing high-quality training and experience to servicemembers and



ensuring their smooth transition to the civilian workforce, the military is also a primary audience for this report. Military leadership needs to understand how credentialing is perceived and accepted by the civilian sector to adapt their voluntary education and credentialing programs accordingly. Military leaders can also look to this report to identify opportunities to improve the transparency behind military training and experience so it can be considered for recognition toward credentialing requirements.

## COVID-19 Implications

In November 2019, ambassadors came together at The American Legion Washington, D.C., offices, for the first MCAI roundtable. During this meeting, they identified and outlined successful program elements that would serve as the way in which they would group the recommendations highlighted throughout this report.

During the third in-person roundtable convening in March 2020, the news of a worldwide pandemic was breaking. With the emergence of COVID-19, the work of the roundtable ambassadors shifted significantly. As the world changed rapidly, it became clear that employment would be a challenging aspect for all individuals, and the outcomes of this report would be more relevant than ever. While the important work of MCAI did not stop, meetings transitioned from in-person to virtual, and the examination of the findings of the report became increasingly relevant in a changing education and employment landscape. Across the world and here at home, unemployment rates skyrocketed to levels not seen since the Great Depression, with some employers shutting shops permanently. With the incredible impact on the U.S. economy and a significant shift in the available job market, it became clear that there would be a greater need for the retraining, reskilling and credentialing of Americans for in-demand and available careers.

Prior to COVID-19, though veteran unemployment was at an all-time low, veterans still made up a disproportionate percentage of the underemployed population. According to LinkedIn (2019) reporting, prior to the pandemic, “33% of veterans were underemployed, and veterans were 15.6% more likely to be underemployed than nonveterans.” The COVID-19 pandemic rapidly increased unemployment rates for veterans, accentuating the need for programs to employ veterans in high-demand careers. Many of the stakeholders for this report were impacted beyond measure as well. Higher education experienced

decreased enrollments and a shift to an all-online environment, grossly affecting how educational and administrative operations were conducted. Other training providers whose programs could not be readily adapted to an online environment had to shut down completely. Individuals seeking certification or licensure were precluded from doing so as most certification bodies had yet to transition to online testing. Employers were forced to lay off workers or scramble to find a trained workforce that could meet the sudden increased demand for industries like health care, manufacturing, food retail and e-commerce. Government agencies were tasked with providing aid to unemployed and impacted Americans, shifting focus away from everyday programs and support services needed by the majority of individuals across the country.

## Roundtable Workstreams

Under The American Legion's guidance, credentialing subject-matter experts were selected to meet in person and virtually to review model programs worthy of replication, offer recommendations for infrastructure change necessary to develop stackable credentialing programs with high-quality postsecondary providers and highlight principles and guidelines for how stakeholders can work together to advance military credentialing initiatives more broadly. Roundtable ambassadors facilitated workgroups on a series of topics relevant to expanding high-quality credentialing programs and pathways while ensuring military and veteran interests were represented. **The report focuses on sharing promising practices underlying the five areas below:**

1. Public-Private Partnerships
2. Recognition of Learning and Stackable Credentials
3. Tools and Resources
4. State and Federal Legislation and Policy
5. Research on Emerging Issues

The workstreams listed above were translated to appear as unique chapters within the body of the report. Each chapter focuses on outlining key findings uncovered by MCAI ambassadors, along with models or examples for each. In some instances, additional detail is shared within the chapter to ensure the reader walks away with an in-depth understanding of each workstream's most important aspects and is motivated to build upon the groundwork laid out within each.





# Chapter 1. Public-Private Partnerships

## Key Findings

**Public-private partnerships are a critical component to ensuring military servicemembers have access to programs designed to address existing skills gaps and connect them with new education and employment pathways to support their effective transition into the civilian community.** Numerous initiatives have been developed in recent years to offer servicemembers and veterans opportunities toward further education, credentialing and employment pathways – many of which are focused on helping servicemembers attain the credentials they will need to match their career goals when they leave military service. The ability to scale these initiatives and ensure sustainable development can be enhanced by relying on lessons learned and cataloging the features that make each successful.

While there are strong examples of institutional and industry partners that have credentialing relationships with the DoD and the military services, some have indicated that they find the process of creating these partnerships complex and unwieldy. Beyond that, the burden of creating a relationship with the DoD often lies on the external partner or credentialing entity, who struggle to navigate the bureaucracy and identify the appropriate contacts with whom to connect. Complicating this process one step further, each of the military services works independently with few centralized processes to create and administer credentialing partnerships and pathways with external entities toward credentials of value.

Though complex bureaucracy, unclear points of contact, and a lack of streamlining among services have complicated their creation, successful public-private partnerships do exist and succeed. Identifying the critical components of model systems, detailed below, can help credentialing entities establish these critical relationships and ensure full recognition of their goals.

In the context of credentialing, a variety of public-private partnership programs has been created with specific goals in mind: (1) evaluate the

servicemember's military training to identify any skills gaps that may exist in relation to earning a civilian recognized credential, (2) offer training and education opportunities to the servicemember to acquire those skills prior to separation to improve options for obtaining gainful employment, and (3) regardless of their specific military occupational training, connect servicemembers to new career opportunities in high-demand fields that lead to economic mobility for themselves and their families.

These partnerships' success can be attributed to the adoption of several key practices that prove to be critical in establishing a robust public-private partnership. These features include:

- **Identified Catalyst for Creating the Partnership.** We know that many organizations operate from a mindset of goodwill, especially those with an abundance of resources; however, that is not always enough and may not prove sustainable in the long run. A strong partnership is born out of the need to address an actual problem that currently exists within the military and civilian community and involves a variety of stakeholders.
- **Defined Partner Roles and Responsibilities.** Once the problem to be addressed has been clearly identified, it is important to consider who should have a seat at the table. To fully address the identified issues and goals of the partnership, relevant stakeholders must be selected, and the appropriate subject-matter experts within each group identified. A balanced representation of stakeholder groups, content experts and decision-makers is critical, as not every expert holds power to enact change. Roles and responsibilities of each partner should be clearly defined.
- **Identified Partnership Lead(s).** To facilitate effective communication and ensure deadlines and timelines are adhered to, having one or two individuals guiding the greater group has proven to be an asset. Sub-leads should be identified for discrete components of the partnership, especially if the group determines a subset of workgroups may be needed to address specific items related to overall partnership goals.
- **DoD Involvement.** The DoD must be included in the process and given a seat at the table to ensure its voices are leveraged, and deliverables are on par

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LEFT: Maj. Gen. Tom Miller uses a driving simulator at the 4th Logistics Readiness Squadron at Seymour Johnson Air Force Base, North Carolina. The simulator is used to prepare Airmen needing to obtain their commercial driver's licenses to complete mission requirements.

U.S. Air Force photo/Airman 1st Class David Lynn

with what is necessary for their success. Without the inclusion of the military and its perspective, any work done within the partnership may be in vain.

- **Specified Meeting Cadence and Defined Workplan.** Decisions should be made to determine how and when to convene experts to efficiently use everyone's time and not compete with their other priorities. Identifying goals and timelines of deliverables can help determine whether smaller working groups are needed or when meeting with the greater group is necessary and how often they need to meet to address the identified problem adequately.
- **Clearly Articulated Goals and Success Measures.** Define and formalize the primary goal, and clearly articulate what success looks like. Setting reasonable expectations, ensuring partner accountability, and maintaining transparency are key to successful working relationships and the overall achievement of the identified goal(s).
- **Confirmed Sustainability.** Determine in advance the sustainability of the partnership. Is this group brought together only to address a singular issue and then disperse, or is this a partnership that requires longevity tasked with future goals? Knowing the long-term outlook can help identify expectations, determine timelines, and confirm how best to utilize the skills and expertise of those involved.

These seven features of successful public-private partnerships can be used as a guide for those seeking to institute scalable and sustainable initiatives. In addition to these components, when addressing the issue of filling credential skills gaps as part of the partnership, a common theme begins to emerge that further informs new initiatives. **Across the successful model programs described below and where relevant, you will notice that each was developed with industry at the table and/or by utilizing competency-based pathways in high-demand career fields.** These are excellent examples of credentialing programs and/or training to placement partnership efforts aligned with industry and governing stakeholders to address gaps in military-based learning as translated to civilian credentials. However, not all pathways are created equally.

For a pathway to lead to a successful career, several elements have been shown to improve the success of participants. Programs that lead to a recognized, portable credential are more likely to result in sustained

meaningful employment. Additionally, the ability to assess a participant's prior knowledge and tailor a program to avoid duplication of training will promote accelerated pathways that lead to a better outcome. The assessment of existing knowledge and skills obtained during service and then directly training only to the gaps will get them into the workforce faster and at a lower cost for transitioning servicemembers and veterans. This point will be explored in much more depth within the next chapter.

MCAI ambassadors identified examples of public-private partnerships and the resulting programs discussed below illustrate one or more of the key components introduced above. While many of these programs were started at a time when the country was facing record-high veteran unemployment rates, they have withstood the test of the time because they adopted early what are now identified as fundamental tenets of successful public-private partnerships. As importantly, the initiatives have also proven to be adaptable. As the nation's economy has shifted, the military operations tempo has changed, and new crises have arisen, including the COVID-19 pandemic, the model programs discussed below have continuously assessed their approaches and adapted accordingly.

**Because the military is a microcosm of the civilian workforce, the skills and competencies gained through military training and experience have broad application across all industries.** Accordingly, public-private partnerships can be developed for a variety of career pathways to increase high-quality credential attainment for servicemembers and veterans. It is important to note the industries with the highest veteran hiring rates include manufacturing, defense and space, airlines and aviation, government administration, transportation, and logistics and supply chain (LinkedIn, 2019). Although this report is meant to encourage strong public-private partnerships across all industries, it is particularly important to encourage program development in industries such as these that lead to career growth and economic mobility for these populations. It is also important to consider current labor-market demand as events like the pandemic have uncovered additional career fields worthy of exploration. Health care, information and technology, and marketing, for example, are all expected to have a continued increase in job demand.

Between 2009 and 2014, veteran unemployment rates were at an all-time high across the country, due to the 2008 recession and an increase in the number of



servicemembers separating from active duty with a lack of access to quality employment opportunities. This prompted the development of numerous initiatives that led to successful public-private sector partnerships. Key among them was **Joining Forces**, which the Obama administration introduced and focused on employment, education and wellness of the military-connected community. Joining Forces brought together subject-matter experts and decision-makers from federal and state government agencies, industry, higher education and credentialing regulatory committees to create a groundbreaking dialogue among military and civilian sectors to streamline military training into civilian crosswalks. At the outset of the program, the Joining Forces team recognized the need to solicit written commitments from public and private partners to support its goals and encouraged partnerships within the private sector. Many of the programmatic partnerships highlighted below were a direct result of the conversations that began around the Joining Forces table.

## Successful Public-Private Partnership Models

MCAI ambassadors identified numerous model public-private partnerships. Those outlined below are included to represent some of the key types of successful partnerships and to highlight how different organizational entities can take the lead on forming sustainable relationships that result in significant opportunities for servicemembers to attain civilian credentials and sustainable employment.

### Industry-Led Partnership Model – Teamsters Military Assistance Program (TMAP)

In 2010, the International Brotherhood of Teamsters (IBT) identified a major challenge to maintaining the truck-driving workforce required to meet the nation’s significant demand for qualified commercial drivers. The industry was experiencing significant employment gaps due to an aging workforce and was facing considerable challenges to fulfilling workforce needs within the transportation industry. The IBT seized this as an opportunity to tap into the tremendous high-quality training and experience of transitioning servicemembers and veterans trained as military truck drivers. The Teamsters, in partnership with representatives of the Departments of Defense, Transportation and Labor, committed to finding viable licensing and employment pathways in the truck-driving industry that would allow separating

### Lessons in Partnership Adaptability from COVID Crisis

- Focus on actions to identify vulnerabilities.
- Ascertain of the scope of project impacts, monitor risks, adopt active risk management, and identify voluntary and mandatory safety measures that would be embraced and implemented immediately.
- Engagement with all stakeholders to optimize and chart successful remobilization plans and actions.
- Proactive strategic planning that engages all partners to establish short, medium, and long-term strategies that can be adapted to mitigate issues as they arise.

servicemembers and veterans an opportunity to translate skills and credentials gained as part of their military service to a job with a sustainable living wage, health-care benefits and other desirable benefits. This led to the creation of **IBT’s Teamsters Military Assistance Program** or TMAP.

TMAP afforded the military-connected community the opportunity to obtain the necessary training recognized by employers and state regulators, along with the required CDL license. With support from the Department of Transportation, the Army Career Skills Program and the DoD SkillBridge program, the Teamsters developed an industry-recognized training-to-placement program with their contracted employer, ABF Freight. The TMAP/ABF model gave momentum to thousands of America’s finest employers in the transportation industry to hire veterans into these in-demand jobs. This program has already been replicated within the transportation industry, leveraging collaborative partnerships with industry and related agency stakeholders to create singular pathways to obtaining the proper training and credentials recognized by all stakeholders.

TMAP’s continued success can be attributed to commitments each organization brings to the partnership. As evidenced during the pandemic, in a time of crisis, these commitments allow each partner to be responsive and efficient, leveraging resources and adapting the program model to avoid as much interruption to the servicemember as possible.

## **Industry-Led Partnership Model - Utility Workers Military Assistance Program (UMAP)**

In 2011, industries across the country were working tirelessly to address America's broken economy. Unions and industries were searching for resources to put veterans and returning servicemembers on pathways to gainful employment. In response, the **Utility Workers Military Assistance Program (UMAP)** was launched. A resolution signed by the general executive board allowed the leadership of the Utility Workers Union of America (UWUA) to encourage companies across the country to engage and hire veterans within their own communities. To set the example for the entire country, UWUA Local 18007 utilized an upcoming infrastructure project with Peoples Gas to develop a comprehensive long-term training-to-placement program specifically for veterans in the state of Illinois. UWUA and Peoples Gas partnered to develop a training plan to be responsive to workforce needs in conjunction with the desired project timeline. As a Chicago operating utility company, it was essential to align partners from the City of Chicago and the State of Illinois. Although it was a City of Chicago project, the Illinois Department of Veterans Affairs led the charge to put Illinois veterans back to work and offer WIOA funds to companies committed to hiring.

UWUA Local 18007 and Peoples Gas engaged in many planning meetings with the City of Chicago Veterans Affairs, Illinois Department of Veterans Affairs, City Colleges of Chicago, and Illinois Workforce Development Agency. While UWUA and Peoples Gas led the charge, support from the Illinois Governor and Chicago Mayor's office was vital in expeditiously moving things forward. City Colleges provided faculty for the training program, worked with UWUA and Peoples Gas on curriculum, and offered space to build an overall training workroom. To cover the cost of participating in this program, UWUA Training Trust took advantage of Illinois Department of Economic Security funding for workforce training programs and as a recipient of those funds, covered tuition costs for participating veterans.

As a result of this effective public-private partnership, in 2011, UWUA and Peoples Gas launched the Utility Workers Military Assistance Program (UMAP) in Chicago. UMAP provides six months of training as a gas utility worker. Successful graduates of the program are offered a full-time position with Peoples Gas. In addition, and one of the major successes of UMAP,

is that upon completion of the program, the veteran receives 52 college credits applicable toward an associate degree. This program had already been replicated in other states, and stakeholders from higher education, industry and state workforce agencies can also look to this model when building a similar program in their community.

## **Federal Agency-Led Partnership Model - DoD SkillBridge**

In 2012, Congress authorized a program that gave DoD the authority to allow eligible servicemembers within 180 days of separation to participate in job training and pre-apprenticeship programs with established pathways to civilian jobs. This led to the creation of the **DoD SkillBridge** program and the publication of the Department of Defense Instruction 1322.29, which provides guidance on the implementation of the program. This instruction applies to all service branches, but the Army stood out for early adoption with the creation and accelerated expansion of its Army Career Skills Program. The other services have since joined, and there are currently over 550 public and private organizations participating in the programs. Even with the onset of COVID-19 and the widespread employment challenges it brought, industry partners have remained engaged during the pandemic, and in some instances new potential partners have expressed interest in becoming a site so that they too can tap into these highly skilled individuals.

Traditionally, DoD-supported programs are focused on training and education with the goal of recruitment, professional development and retention. However, SkillBridge was a formal recognition that transition support was needed in advance of separation and was both an economic and human response to ensure separating servicemembers had a pathway for economic mobility for themselves and their families.

DoD and the military services engaged labor and industry partners to create formal training pathways (i.e., industry training, pre-apprenticeships and internships) that led to viable career pathways. The program provides servicemembers an opportunity to gain valuable on-the-job training and in many instances an industry-recognized credential in high-demand civilian careers prior to separation. DoD provides oversight and accountability for an industry-driven program and the industry partners must provide a reasonable expectation of employment upon completion of the program. This valuable experience will give

servicemembers additional leverage when entering the civilian workforce.

SkillBridge has not only provided a pathway for transitioning servicemembers into skilled apprenticeships and competitive careers with meaningful wages and affordable health care, employers who want to create a pipeline of veteran talent into their companies also see a high return on their investment. This results in mutually beneficial outcomes – transitioning servicemembers enhance their value propositions by coupling specific skills training with their existing military experience, while employers gain access to a talent pool with extensive leadership experience that is resilient, adaptable and team-oriented.

### **Higher Education and State-Led Partnership Models – Kansas Collaborative on Military Credit**

In 2015, the U.S. Army announced the establishment of Army University at Fort Leavenworth, Kan. The **Kansas Board of Regents (KBOR)**, interested in retaining more servicemembers in Kansas following separation, saw the value of partnering with Army University to develop stronger military crosswalks to degree pathways, improving the processes already being deployed by institutions within the state. Working directly with Army University, KBOR was able to bring together military experts and faculty in related specialties from colleges across the state to identify similar outcomes between military and college programs and determine how those outcomes could lead to college credit and, ultimately, credentials.

The partnership with Army University allowed KBOR to effectively crosswalk the military learning outcomes

with the institutional learning outcomes and develop a tool, the **Military Articulation Portal**, that could be used by all regents' institutions to provide information on transferability of military credits into college credits. This was not an easy task, as many of the institutions' existing policies were not considered military friendly and had to be rewritten to accommodate this new concept. The statewide PLA process provided transparent information to the learners, allowing them to select the institution and degree program that best fit their career goals.

This process also encouraged more institutions within the state to recognize military training and education for direct credit within the associated degree program. KBOR leadership's support and clearly articulating the concept into institutional goals made the idea of increased credit for military-based education and training a reality for servicemembers and veterans within the state.

By creating the partnership between Army University and KBOR leadership and faculty, KBOR was able to utilize previously misunderstood data to create a tool that allows better translation of military credit into college credit that can then be applied toward degree pathways more efficiently and effectively. This ensuing partnership between the Kansas Board of Regents and Army University has been key to the success of the military articulation initiative and will continue to contribute to its growth. KBOR continues to improve upon its model and is currently looking to scale to the other services to increase the number of articulations from military service to civilian credential in turn increasing educational pathways for servicemembers and veterans looking to remain in the state.







# Chapter 2. Recognition of Learning and Stackable Credentials

## Key Findings

Formal and informal learning acquired throughout the life of an individual has value and should count toward credentials, future education and employment. **In its simplest terms, recognition of learning means all learning should count toward the attainment of a credential.** The programs highlighted within the previous chapter provide an opportunity for servicemembers and veterans to increase credential attainment because the partners leading that work recognize, validate and value the training and education the military provides. They also support the development of new skills using industry-informed training in careers that provide opportunities for growth throughout an individual's employment lifecycle. To take it a step further, many of these programs offer stackable credential pathways. The definition of a stackable model is a bit different, depending on the context. Based on the Department of Labor's definition of a stackable credential, a stackable model is a sequence of credentials that can be accumulated over time to increase an individual's qualifications and to move them along a career pathway or up a career ladder. **Stackable credential models are often the result of a successfully executed public-private partnership.**

Attainment of a first credential is of utmost importance; however, the growing need to increase transparent pathways for learners that consist of a clear sequence of coursework and/or other credentials will assist with further skill attainment and an increase in employment opportunities over the learner's lifetime. While the main objective is obtaining that first in-demand, high-quality job, workers continuously have an eye on a better job and ultimately a career that supports lifelong learning and upward economic mobility.

While education and career advising remain key components in supporting credential completion, providing holistic support services that address the whole person cultivates an environment in which a

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LEFT: Private Kayle Witzman, an Army food service specialist, prepares hot rolls as part of her advanced individual training at Fort Lee, Va. Her MOS is part of a pilot program spearheaded by the Department of Defense as a way for soldiers to receive job credentialing and certification.

Photo by Chief Warrant Officer 4 Russell D. Campbell

A **stackable model** is a sequence of credentials that can be accumulated over time to build up an individual's qualifications to move along a career pathway or up a career ladder.

servicemember and veteran can excel and achieve their academic and career goals. Holistic thinking considers all aspects of life that contribute to the individual's total wellness, including the health of the body, mind and spirit. The transition from military to civilian life can be eased significantly by providing proper support services. These support services should focus not only on successful progression down an educational or career pathway but also on ensuring the servicemember and veteran are connected to institutional and community-based resources that address their personal needs.

When the MCAI ambassadors shared recognition of military-based learning and stackability as necessary aspects of increasing credential attainment for servicemembers and veterans, they identified nine key themes that cut across the programs they deemed worthy of replication.

### Key themes of Recognition of Learning and Stackability:

**Utilize a common language to describe the learning (skills or competencies) the learner has obtained.** The expression of military learning, in terms of competencies, promotes transparency behind military training, increasing access to credential pathways during service and after separation. The **Credential Transparency Description Language (CTDL)** is one example of a common language or vocabulary comprised of more easily understood terms, allowing for an increase in the usefulness of the information by a variety of credential providers and stakeholders. Presenting information in a universally recognized and accessible language facilitates the recognition of prior learning to open additional training opportunities and to articulate the skills needed for a specific job.

**Be transparent about the skills needed to obtain the credential.** While the civilian sector continues

to ask the military to provide transparent training level outcomes for military occupations, it is also necessary for education and industry partners to more clearly articulate the skills needed to excel in an academic and/or career pathway.

**Consider working with academia to offer credit for non-academic credentials, and work with industry to ensure the credential incorporates the skills necessary to excel in the position.** Identifying all the necessary credentials helps streamline the career pathway and facilitates credential attainment.

**Upskilling is one means of supporting transitioning servicemembers and veterans.**

Upskilling occurs when training builds upon obtained skills to advance an individual to the next career level, or along a career pathway, and is a critical component of the stackable model. When looking through the lens of transitioning servicemembers and veterans, upskilling is especially valuable. These individuals enter the civilian workforce with a wide range of technical and soft skills, making them ideal candidates for employment. This strong skill foundation allows the employer to tailor enhanced training opportunities that build upon skills gained during military service rather than wasting resources on more generic entry-level training.

**Crosswalk military occupational training and education to civilian credential pathways to eliminate the need for servicemembers and veterans to retrain, requalify or duplicate effort.**

When conducting a crosswalk, look at examples or models currently being utilized that map to civilian credentials in high-demand career fields and lead to economic mobility. Several successful model programs were identified as part of the MCAI efforts and are detailed throughout the report.

**When developing training programs, it is important to use a complete picture of knowledge, skills, abilities and competencies to establish a crosswalk for military members.** While some military occupations easily map to a civilian credential, many of the skills the servicemember gains during training can be more broadly applied across a variety of occupational areas. Avoid only mapping one to one and consider how skills gained during military service can align with other credentialing opportunities. The ability to identify skills and competencies and then match those skills to credentials will minimize training duplication and

shorten the timeline to employment. However, when matching skills and competencies to credentials, it is important to view them through a wide lens. Competencies can cut across career areas and degree programs, and caution should be used to avoid pigeon-holing a candidate into a singular pathway when the individual's skills may apply to other areas of interest as well. Think outside the box, and look at skills and competencies applicable to multiple career fields and credential pathways.

**Create hybrid or online training programs.**

While training programs have traditionally been in-person (i.e., synchronous learning), with the pandemic, it has become evident that there needs to be a shift in developing opportunities for remote training. There are numerous successful examples of programs that provide asynchronous opportunities for servicemembers and veterans to remotely attain quality training.

**Programs must incur minimal cost to servicemembers and veterans.** These individuals often do not have the funds to obtain training and credentials on their own. These costs must be offset and absorbed by the program owners to get a return on investment with a valued employee.

**Think beyond credential completion – where applicable, incorporate additional advising on how military service has prepared the individual for a variety of credential pathways.** If the individual has already obtained the credential, share how it might stack into another credential and connect to employment opportunities upon credential completion. The LinkedIn (2019) Veteran Opportunity Report stated that “55% of veterans say they want to pursue different careers than the ones they had in the military.” This demonstrates the need to look at competencies individually and see how they may apply to other career areas, rather than ONLY trying to fit the military occupation into a similarly situated civilian counterpart. However, it is important to note that servicemembers may not be aware of professional growth opportunities within the civilian sector related to their military occupational specialties. Sharing these opportunities with servicemembers might inspire them to remain in a career area where they have secured valuable training and experience.

## Successful Model Programs

The MCAI ambassadors identified the following programs as strong examples of stackable credentials along with implementing elements of recognition of prior learning to create positive outcomes for transitioning servicemembers and veterans. The components, goals and processes of these programs are highly replicable, and should be examined by entities wishing to create or modify similar programs.

**Davenport University** has taken an approach to creating pathways to credentials that maximize the number of credits awarded for military-based learning. To improve existing models, they began with evaluating military credit within the registrar's office rather than having each department make that determination. By keeping the evaluation centralized, they developed a universal process that was consistent and replicable across multiple disciplines. They were also able to review competencies in different contexts and think more freely in terms of applicability without focusing on one distinct degree pathway. Whenever the need arose for a subject-matter expert to help determine transferability, the registrar engaged the university's content expert to offer guidance and approval. Davenport University hired a military-connected expert to support the registrar's office with translating military education and experience and to drive efforts to obtain clarifying information from the proper military service when needed. It can be challenging to navigate the military bureaucracy, so an employee who fully understands the structure and chain of command can expedite the request process. Davenport University conducts a competency-based evaluation, utilizing military occupational skills data in their entirety to maximize the number of credits that can be awarded for military-based learning. This process builds upon the previous education and experience the student has obtained so the learner can continue on a desired credential pathway without duplicating effort on competencies already acquired.

The Heroes MAKE America program was developed by The Manufacturing Institute, the education and workforce partner of the National Association of Manufacturers. This program is a DoD SkillBridge program that operates within five states. Heroes MAKE America provides graduates with the skills necessary to obtain industry-recognized certifications, including the Manufacturing Standards Skill Council (MSSC) Certified Production Technician (CPT) and OSHA 10 and Forklift Operation training. Many graduates of

this program also earn credit hours that can be applied toward a college degree.

**Rockwell Automation's Academy for Advanced Manufacturing** is a joint effort with ManpowerGroup to upskill veterans interested in pursuing a manufacturing industry career. The manufacturing industry is rapidly growing, with an increase in available jobs and a substantial number of current employees set to retire within the next decade. This program aims to upskill 1,000 veterans each year so they can transition into manufacturing technician roles in areas such as instrumentation, automation and control. This 12-week intensive training program combines classroom and hands-on laboratory learning. The Academy for Advanced Manufacturing has been successful by leveraging individuals with adjacent skills, providing training to fill gaps, and placing 100% of graduates in advanced manufacturing roles.

Another program that focuses on the manufacturing industry is **Workshops for Warriors (WFW)**. This program resides within a state-licensed school and strives to train and educate interested veterans and separating servicemembers in accredited STEM programs. Participants earn third-party, nationally recognized credentials applicable to careers in advanced manufacturing. WFW offers programs in welding and machining and certifies to the nationally recognized standards of the American Welding Society, National Institute of Metalworking Skills (NIMS), Mastercam University, SolidWorks, Immerse2Learn, and the National Coalition of Certification Centers (NC3), which all reflect portable and stackable credentials.

**FastForward** is a state-run program in Virginia that offers training for industry credentials through the state community college system. Programs are specific to different state regions and are focused on the most in-demand jobs across the commonwealth. Participants complete a 6- to 12-week hands-on, expert-led training program that prepares them to sit for an industry-recognized credential exam. FastForward offers training in more than 40 in-demand careers, including logistics and transportation, welding and manufacturing, information technology and health care. Training programs are based on local employers' needs, and many programs have guaranteed interview agreements with local businesses. This program is an affordable option to obtain industry certifications and has a 90% completion rate. The cost of the program is offset by state funding, and veterans may qualify for additional grants and financial aid that may reduce

their out-of-pocket costs even further. Many of the credentials earned through FastForward are stackable, based on skills acquired and translate to credit toward an associate degree within the Virginia Community College System.

The **Microsoft Software and Systems Academy (MSSA)** is another example of a stackable model leading to college credits that can be applied toward a degree. MSSA is an 18-week training program that prepares transitioning servicemembers for high-demand careers in cloud development or cloud administration. Upon completion of the program, graduates are given the opportunity to interview for a full-time position at Microsoft or one of its hiring partners. Currently, MSSA has partnered with Embry-Riddle Aeronautical University (ERAU) and Saint Martin's University to offer these programs across the country.

The **National Restaurant Association Educational Foundation (NRAEF) Restaurants Recruit** program connects military members to restaurant and food-service companies looking to hire military members

and veterans. The NRAEF is a free program for servicemembers, military spouses, and veterans who wish to transition into civilian careers in the restaurant and food-service industry. NRAEF worked with industry members to create an industry-defined competency-based pathway with over 300 competencies defined. They then sat down with each military service branch and cross-walked the competencies achieved by the servicemembers at each level/paygrade. By completing this cross-walking that feeds directly into a career pathway, all learning and training are captured and fed directly into the civilian career pathway to fill gaps without redundancy. NRAEF shares these crosswalk matches with employers looking to fill positions so they can develop training programs to address identified skills gaps. While a position with an interested employer is not guaranteed, this program helps make connections between jobseekers and employers that might not have occurred elsewhere.

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RIGHT: U.S. Air Force Airman 1st Class David McCrary refills liquid oxygen canisters at Atlantic City Air National Guard Base, N.J. The canisters are primarily used as aviator breathing oxygen at high altitudes.

U.S. Air National Guard photo/Tech. Sgt. Matt Hecht









# Chapter 3. Tools and Resources

## Key Findings

Throughout this report, we have articulated the challenges civilian education and training providers experience when attempting to interpret the knowledge, skills and abilities obtained by a servicemember in a specific military occupation. The language used to describe a servicemember's knowledge and capabilities is foreign to most civilian industries and academic institutions. Because occupations are classified differently across the military services, translation of military training and experience can be difficult. Over the years, the DoD and civilian partners committed to successfully recognizing military-based learning within their sector have worked to create processes that better streamline the cross-walking of military occupational data to civilian pathways. During the MCAI roundtables, ambassadors identified tools and resources that could greatly assist with the advancement of credential attainment for servicemembers and veterans along with their abilities to obtain gainful civilian employment.

The remainder of this section describes key types of tools and resources and highlights specific examples identified by the MCAI ambassadors. While there are similarities in the tools and resources in terms of what each is intended to accomplish, the different types are loosely grouped into three categories:

1. Common Language and Related Data Standards
2. Frameworks and Classification Schemes
3. Translation Tools and Articulation Portals

### **Common Language and Related Data Standards Promote Consistent Use and Application of**

**Credential Terminology.** Articulating an individual's military-based learning using a common language recognized by credential providers allows for understanding and consistency when evaluating individual performance. As we continue to explore how the civilian job market values competencies and skills as the currency within the credentialing ecosystem, combined with accelerated technological advances, it is

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Gas Turbine Systems Technician 1st Class Alexandria Baez visits the Navy Credentialing Opportunities On-Line (COOL) website. COOL provides active duty and reserve sailors a way to map their Navy education, training, experience and competencies to civilian credentials and occupations.

U.S. Navy photo/Mass Communication Specialist 2nd Class Taylor L. Jackson

of growing importance to do so in a way that combines data from many diverse types of credentials, skills, and other components of high-quality education and career pathways expressed by academia and industry.

There have been numerous initiatives designed to ensure that consistent definitions and language are used across inter-related sectors, including credential providers, such as academia and certification and licensing organizations, as well as industry. The formation of working groups made up of representatives from a wide variety of stakeholder groups to agree on common definitions surrounding key related terms is essential. Once generally accepted definitions are agreed upon, the consistent use of the adopted language – mainly related to systems that describe credentials and jobs – can be facilitated by data standards.

Data standards are the rules by which data are described. They ensure that systems can readily share, exchange and understand data. For example, in the travel sector, numerous websites have been created to help people identify and book travel by collecting and presenting data on airline and flight information, hotel and other accommodations, and rental car availability. The ability of the creators of these sites (e.g., Expedia, Travelocity) to gather information from many disparate sources is made possible by the fact that the various source systems have used common standards to define their data elements and have embedded them in the source code for their systems. Similar standards exist for a multitude of purposes, including standards for describing terms related to post-secondary education, jobs, and, more recently, credentials. This makes it easier to connect digital ecosystems across sectors.

The use of common definitions and open data standards (or schema) is becoming widely accepted, including within the federal government and DoD. As related to the goal of increased transparency around credentials, the relatively recent development and adoption of common definitions of credential-related terms by key stakeholder groups and the **Credential Transparency Descriptor Language (CTDL)** – a schema that can be used to share information about credentials – will be instrumental in improving the ability to translate military training and experience, and the associated competencies, for applicability toward civilian credentials and jobs.

### **Classification Schemes and Competency-based Credential Frameworks Provide Common Reference**



**Points.** In addition to using a common language to describe credentials, using industry-accepted occupational classification schemes and competency frameworks will further make credentials translatable and transferrable among the military, industry and academia. The Department of Labor's **Occupational Information Network (O\*NET)** classification scheme is a key tool used by workforce development organizations, employers and others as a common language for describing civilian occupations. Tools that map military jobs to O\*NET can be invaluable in translating for civilian employers and credential providers how military training and experience might correspond to their jobs or credentials.

Competency frameworks take competencies (defined as observable and measurable attributes that demonstrate one's knowledge, skills and abilities regarding performance) and connect them in ways that create common reference points to simplify the comparison of credentials to one another. By looking at competencies within frameworks, it is possible to translate learning obtained from various sources (e.g., traditional education, on-the-job training, military education and training, etc.) and apply it toward another credential pathway.

Common language and competency frameworks are valuable tools that improve the existing criteria to define quality credentials, including indicators of equity, transparency, comparability and portability. Additionally, using these tools decreases the time, effort and cost needed to complete credentials, by accurately evaluating achieved competencies and applying them toward the desired credential.

**Translation Tools and Articulation Portals Promote Understanding of Equivalency and Gaps Between Military Training and Experience and Civilian Credentials.** Numerous tools have been developed to make the translation of military training and experience to civilian jobs and credentials possible. These tools and the corresponding online articulation portals are increasingly used by servicemembers, veterans, academic institutions, certification and licensing organizations, industry and labor when looking to understand how an individual's documented military training and experience might crosswalk to a position with a company or how an academic institution and other credentialing entities could award credit for, and assess, the equivalency of military-based learning.

**Translation tools** support industry and academia in understanding the skills a servicemember or veteran

has acquired during service by displaying the data in terminology more closely aligned with how civilian entities describe learning and outcomes associated with education and training. When hiring someone who is transitioning out of the military, employers should rely on these translation tools to determine how well a candidate would fit into a position and what unique experience they can provide, based on skills developed while in service. Tools that display how a military occupation translates to a civilian occupation are extremely valuable for employers in industries that desire candidates with specific backgrounds, such as health care or engineering. Sharing granular data (e.g., competencies, skills, etc.) within the tool provides access to credential details seen as more valuable to the user.

An **articulation portal** is a tool that a stakeholder can use to help explore how a specific military occupation might relate to a civilian job or credential or – ideally – how an individual servicemember's or veteran's own set of qualifications relate. Resources that provide information about military occupations and skills must have a few key elements to be successful.

These resources must be easy to find by the user, provide centralized data within the platform and contain consistent, descriptive language so that regardless of the pathway searched, the military-based learning obtained clearly articulates to a variety of opportunities.

In addition to providing the user with new information about an education or employment pathway of interest, the best translation and articulation tools also identify gaps. By displaying these gaps, both the candidate and the employer can focus on training and education still needed. Providing the training and education to fill the identified gaps is what the programs highlighted as successful public/private partnerships and stackable models serve to accomplish. Many programs looked at specific military occupations and determined what additional skills and competencies are needed to serve in a civilian occupation or to pursue a particular credential pathway. **Rather than having each stakeholder do this in a vacuum, centralized resources that are readily accessible, easy to use and available to all will be the best option to serve most individuals and provide consistent translation, resulting in the best outcomes.**



## Successful Tools and Resources

### Credential Engine Initiatives (Common Language and Related Data Standards)

**Credential Engine** is an organization that has provided a tremendous resource to the credential community and will help equalize assessment of competencies across sectors. Credential Engine is a non-profit organization that began in 2016 and was founded based upon the significant work of more than 275 leaders from business, higher education and credentialing communities that was undertaken as part of the Credential Transparency Initiative (CTI) established in 2013. Credential Engine's efforts to promote consistent use of credential-related terminology center around several key concepts. The most important of which was the development of a common vocabulary of more than 500 terms useful in making assertions about a credential and its relationships with other entities. A variety of cross-sector stakeholders provided significant input into the **Credential Transparency Description Language (CTDL)** development to ensure widespread support of this new set of terms.

CTDL is a schema available to anyone and reflects the federal government's 2013 Open Data Policy to provide data in an open and machine-readable format. When using CTDL, each element of data is assigned a noun (class) and a verb (property). This creates a dictionary that details the various elements of a credential using common terminology so that it can be used across numerous platforms and tools, supporting both interoperability and linked data outputs.

As credential providers begin to describe their credentials using common definitions and CTDL, the relevant information is displayed within **Credential Finder**, the national registry. Within the registry, credentials are linked to other parts of the credentialing ecosystem, such as assessments, learning opportunities and a myriad of conceptual frameworks, including competencies, job skills and formal classifications of occupations and instructional programs. It is important to note that while the registry provides a centralized resource to find detailed information about credentials, the schema that underlies CTDL will allow the open sharing and use of this type of common data. It also promotes further research and coordination of credentials across the ecosystem and the development of customized translation tools by relevant stakeholder groups, including those oriented to the translation of military training and experience.

### Connecting Credentials (Competency Framework)

One example of a competency framework that applies directly to credentialing is the **Connecting Credentials Framework**, created by the Corporation for a Skilled Workforce (CSW) and the Center for Law and Social Policy (CLASP). This framework provides a rubric where competencies are categorized into two domains, knowledge and skills which are then further broken into sub-domains: specialized skills, personal skills and social skills. Competencies are assessed within the rubric against eight levels related to the complexity, breadth, and/or depth of learning acquired. Once all competencies are evaluated, it is possible to compare the competencies achieved against required competencies within the desired credential to determine gaps and relevant pathways.

### Workforce Framework for Cybersecurity – National Initiative for Cybersecurity Education (NICE) Framework (Competency Framework)

The **Workforce Framework for Cybersecurity (NICE Framework)** provides organizations a method to describe work through tasks, knowledge and skills needed to perform cybersecurity work. The result is a common language that describes both the work and the workforce to match learners or employees to job positions appropriately. This framework is meant to provide building blocks for creating and describing common elements to align job positions and workers in an equitable manner. It has value for numerous stakeholders, including employers, education and training providers, and learners and forms the basis for the federal government and DoD's cybersecurity framework.

### O\*NET Program (Occupational Classification Scheme and Associated Data and Tool)

The O\*NET program is the nation's primary source of occupational information developed by the Department of Labor and implemented by the National Center for O\*NET Development. As described in **O\*NET Online**, central to the project is the O\*NET database, containing information on hundreds of standardized and occupation-specific descriptors. The database is continually updated by surveying a broad range of workers from each occupation. Information from this freely available database forms the heart of O\*NET Online, the interactive application for exploring and searching occupations. The database also provides

the basis for DOL's Career Exploration Tools, a set of valuable assessment instruments for workers and students looking to find or change careers.

### **Career OneStop (Competency Framework Resource and Development Tool)**

The **CareerOneStop** competency model clearinghouse provides an excellent blueprint for using the O\*NET database to develop a competency model. Additionally, there are many existing industry competency frameworks made available by the Employment and Training Administration (ETA) and industry partners to use as examples of well-designed programs. These examples span many industries and give a wide variety of models to display different types of competencies and credentials.

### **American Council on Education (ACE) Military Guide (Credit Articulation Tool)**

The American Council on Education's (ACE) Guide to the Evaluation of Educational Experiences in the Armed Services (also known as the **ACE Military Guide**) is the validated source for academic credit recommendations for both courses and occupations that appear on a Joint Services Transcript (JST). The 2020 modernization efforts of the ACE Military Guide provide a more interactive and interoperable experience for academic institutions assessing the learning outcomes with expanded evaluative information and criteria. Though its military evaluations date back to 1954, the evaluations cycle is continuous and The ACE Military Guide is updated daily. ACE has developed its industry-standard process to evaluate learning for college credit equivalency by pairing a structured framework to review the content, scope, rigor, breadth and depth of non-institutional learning, leveraging the expertise of disciplinary college faculty. These recommendations are conducted at the request of the military services, and the results appear on a servicemember's Joint Service Transcript or JST.

### **Lockheed Martin Skills Translator (Translation Tool)**

The **Lockheed Martin Military Skills Translator** is a tool developed to assist military members and veterans finding employment at Lockheed Martin. The tool allows an individual to enter a military occupation code or title to view applicable jobs. Users can also filter the results by geographic area to narrow down the results. This tool can be useful to jobseekers. Rather than providing the user with hypothetical career pathways,

vacant positions within the company are displayed and can be applied for in real-time.

### **My Next Move (Articulation Portal)**

**My Next Move** is an application that uses the O\*NET data to help jobseekers explore career options. This application is interactive and presents data using a common language to describe workers' skills and attributes. These tools are available to the public at no cost to the user. **My Next Move for Veterans** takes things a step further and allows the user to search for careers that are most similar to the jobs they have held in the military. Users can view tasks, skills, salary information, job listings and other relevant details for more than 900 careers.

### **Credentialing Opportunities On-Line (COOL) (Articulation Tool)**

**COOL** is a centralized resource supported by five military services: Air Force, Army, Coast Guard, Marine Corps, and Navy, and a centralized portal for access and cross-service analysis has been developed by DoD. Each service has a public website that contains information to crosswalk military occupations, training and experience to relevant civilian credentials and private and federal civilian occupations. In addition to this information, the COOL websites provide gap analyses to display where military members may need additional training or experience to achieve a passing rate on a credential exam. The sites also provide extensive exam and eligibility preparation resources. Disseminating this type of information on civilian credentialing opportunities that are aligned to military occupations was legislatively required by the NDAA FY 14 (P.L. 113-66), Section 542, which explicitly recognized the COOL program.

### **MilGears Platform (Articulation Tool)**

**MilGears** is powered by the extensive, detailed data contained in Credentialing Opportunities On-Line (COOL) on military occupations, civilian occupations, federal occupations and civilian credentials. Like COOL, it is an articulation tool, but rather than focusing only on mapping a broad military occupation to civilian jobs and credentials, it considers all of the individual servicemember's or veteran's unique qualifications. Many other existing articulation tools are focused exclusively on qualifications derived from serving in a particular military occupation, and they ignore other acquired learning – be it through military or non-military education, training and experience.

The U.S. Navy initially developed the MilGears application, and DoD has recently taken steps to scale the tool for all services. It provides servicemembers and veterans the ability to upload formal documentation, capture military training and experience, and add additional obtained qualifications. Once complete, they can view customized and available career and educational pathways they can pursue while in service or afterward.

MilGears provides an “Engage My Career” tool to analyze an individual’s military training and duties and any civilian education and other credentials they have attained (certifications, licenses, apprenticeships). The user then receives a customized output related to relevant civilian occupations, credentials, and resources that can be accessed to fill training gaps and support achievement of career goals. This tool is unique because it considers formal and informal learning, and supplies the servicemember with a customized report based on a distinct mix of qualifications. In turn, the individual is now a well-informed consumer of the future, to make sound decisions about the next steps in a career or education pathway. This process also provides enhanced capability of assessing competencies and skills toward multiple career opportunities rather than focusing strictly on those related to a specific military

occupation. The tool is actively being enhanced to make it easier for external stakeholders, like employers, higher education and other credentialing organizations, to interact with the tool and conduct their own analyses of military training and experience.

### **Kansas Military Articulation Portal (Articulation Portal)**

The Kansas Board of Regents has developed the **Military Articulation Portal** in conjunction with the Kansas Credit for Prior Learning Task Force and the Kansas Collaborative on Military Credit. This free, interactive search tool allows the user to review available credit for prior military-based learning offered by Kansas public postsecondary institutions. Individuals can search by military occupation or military course to determine how many credit hours they can be awarded toward a degree. While this tool provides information primarily from an education focus, it can help employers see what types of course topics are included in military training and education and how those might fit into specific jobs or careers. The Kansas Board of Regents worked directly with the services to obtain current and accurate military occupations and training information.







# Chapter 4. Federal and State Legislation and Policy

## Key Findings

Legislative, directive, regulatory and policy actions at the federal and state levels have been instrumental in facilitating servicemembers' and veterans' credentialing. While numerous formal pieces of legislation have been enacted to promote certification, license, apprenticeship and degree attainment, executive orders, regulatory changes and the creation of formal policies and programs are also proven mechanisms to effect change. At the federal level, legislation and policy that have been particularly effective have been targeted toward the Departments of Defense, Labor, Education and Veterans Affairs and its affiliates (i.e., State Approving Agencies). At the state level, entities charged with carrying out new requirements include higher education governing and coordinating boards, and state licensing boards.

**The American Legion's State of Credentialing of Service Members and Veterans report, published in 2017, provides an overview of the various legislation passed since FY 2013 to facilitate credentialing.**

Since then, there have been additional actions designed to empower servicemembers and veterans to pursue training opportunities and attain credentials that will help them succeed in military and civilian careers alike. These initiatives have grown considerably since 2017.

In reviewing the key legislative, regulatory and policy actions that have been undertaken since 2017, MCAI Ambassadors identified three key focus areas:

- Establishing Credentialing Programs and Policies
- Assessment of Training and Experience and Prior Learning Toward Credential Requirements
- Ensuring the Quality of Credentials

The intended target audiences of the various actions identified can vary and may include:

- Servicemembers
- Veterans
- Spouses
- Workforce as a whole – civilian and non-civilian
- Combination of above

The remainder of this section summarizes some of the crucial actions that have been undertaken in each of the three key areas noted above. More detailed information on federal and state initiatives can be found in Appendix D, which includes a summary of federal legislative and policy actions to facilitate credentialing of servicemembers and veterans, and provides links to information on key state actions in this area.

## Key Legislative and Policy Actions to Facilitate Credentialing: 2017 to Present

### Establishing Credentialing Programs and Policies

The key actions taken to establish credential programs and policies since 2017 have been undertaken at the federal level primarily through legislation and executive order. Most of these initiatives focused on establishing or enhancing systemic programs that facilitate credentialing in general, with several focusing specifically on servicemembers and/or veterans. In some cases, this entails an emphasis on specific types of credentials, while others are oriented toward facilitating a variety of credential types. Similarly, the actions may support credentialing across industries or target specific, high-growth occupational areas.

While specific legislation and executive orders are detailed in Appendix D, some particularly notable actions include:

- **FY 17 NDAA (P.L. 114-328), Section 724** - Allows the Uniformed Services University of Health Science (USUHS) to award academic credit and offer undergraduate degrees to servicemembers in allied health-related occupational areas, thus enhancing their abilities to attain civilian certifications and licenses and to receive academic credit from USUHS that can be accepted by other colleges and universities.
- **Executive Order 13801 of June 15, 2017** - Allows DOL to propose regulations to promote Industry Recognized Apprenticeship Programs (IRAPs); funds promotion of apprenticeships; expands access to apprenticeships; promotes apprenticeship programs at colleges and universities; established Task Force on Apprenticeship Expansion. This

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LEFT: American Legion National Commander Bill Oxford testifies on Capitol Hill on March 11, 2020.

Photo by Jeric Wilhelmsen

provides new credentialing opportunities for transitioning servicemembers and veterans and provides an opportunity to directly incorporate military training and experience in IRAP eligibility requirements and/or as a means of demonstrating advanced standing.

- **Harry W. Colmery Veterans Educational Assistance Act of 2017 (P.L. 115-48), Section 116** – Establishes the VA’s “Vet TEC,” a five-year pilot program in 2018 to enroll veterans in high-technology programs of education sought by employers in relevant fields or industries.
- **NDAA FY18 (P.L. 115-91), Section 546** - Expands United Services Military Apprenticeship Program beyond the Navy and Coast Guard to all services providing opportunities for servicemembers to attain nationally recognized credentials while in service.
- **NDAA FY 20 (P.L. 116-92), Section 562** - Authorizes federal government participation in the SkillBridge Program, providing opportunities for transitioning servicemembers to participate in federal agency-sponsored pre-apprenticeship, internship and training programs that lead to civil service employment.

### **Enabling Better Recognition of Training and Experience Through Assessment of Equivalency of Military Training and Experience**

The ability of credentialing bodies to recognize the equivalency of military training and experience toward credential requirements is essential to ensure servicemembers and veterans are not required to repeat what can be costly and time-consuming education and training for which they can already demonstrate competency or skills attainment. Numerous actions have been taken at both the federal and state level to facilitate assessment of equivalency. Broadly, they can be categorized into:

- Formal Prior Learning Assessment (PLA) for licensing, certification, and awarding of college credit.
- DoD provision of non-classified training materials to credential providers/others for review and evaluation.
- Accreditation of DoD training programs to show they are on par with civilian programs and meet national standards.

- Formal recognition, in law or regulation, of equivalent military training and experience.

**Prior Learning Assessment.** Legislation at the federal level that seeks to provide additional opportunities for prior learning assessment of military-trained applicants, include the Harry W. Colmery Veterans Educational Assistance Act of 2017 (P.L. 115-48), Section 108, which expands GI Bill reimbursement for certifications and licenses to include national tests that evaluate prior learning and knowledge. (Colmery is a past national commander of The American Legion who is credited with drafting the original GI Bill that Congress passed in 1944.)

The Department of Education has also undergone a review of its prior learning assessment rules and regulations. In 2018, it began a negotiated rulemaking process that proposed regulations to require institutions to publish Prior Learning Assessment policy with, “Written criteria used to evaluate and award credit for prior learning experience including, but not limited to, service in the armed forces, paid or unpaid employment, or other demonstrated competency or learning.” After an extended public comment period, these regulations went into effect on July 1, 2020.

In addition to the federal legislation, state legislation that promotes improvement in the way prior military-based learning is assessed for academic credit is another successful area. Since 2016, at least 31 states have passed legislation related to awarding credit for prior learning. The most successful legislation supporting this issue focuses on creating consistent frameworks and requirements for performing the assessment. Michigan, Texas, Louisiana and Washington have passed legislation that directs institutions to develop academic credit policies for prior military-based learning. These policies help military members and veterans avoid duplication of learning they have already completed and will allow them to focus their education on the areas that are new and more challenging.

**DoD Provision of Non-classified Training Materials.** The FY 18 NDAA (P.S. 115-91), Section 542, enables the DoD to establish a database to record all training performed by members of the Army, Navy, Air Force and Marine Corps that may have application to employment in the civilian sector for use by states and other entities to satisfy licensing or certification requirements. Services have taken different approaches to satisfy this requirement. The

Army has been actively working to provide online access to unclassified training materials. On the other hand, other services have relied on the Freedom of Information Act (FOIA) request process.

### **Formal Recognition in Law or Regulation of Equivalent Military Training and Experience.**

Perhaps the most far-reaching example of recognition of equivalent military training and experience is the effort undertaken by the Department of Transportation's **Federal Motor Carriers Safety Association (FMCSA)** to attain recognition by state licensing entities of military truck driver training and experience. These efforts included the adoption by all states of the skills-test waiver between 2011 and 2014, which precludes servicemembers who meet individual eligibility requirements from having to take the skills test for purposes of attaining a commercial driver's license (CDL). Documentation shows that as of February 2019, more than 40,000 military-trained applicants had taken advantage of the waiver.

More recently, FMCSA developed implementation procedures to State Driver's Licensing Agencies (SDLAs) on the FMCSA's decision to grant a limited exemption to the Missouri Department of Revenue (DOR), Driver's License Bureau, and, at its discretion, all other SDLAs, from the CDL regulations that require a driver to pass knowledge and skills tests. The exemption allows for an even exchange of specific military driver licensing specialties for a CDL. In effect, this process allows for the waiver of the skills test (Skills Test Waiver) and the knowledge test. As of December 2020, 13 states had implemented even exchange, with another eight pending (see the current map <https://www.fmcsa.dot.gov/registration/commercial-drivers-license/even-exchange-program-state-implementation-status>).

The success of the CDL skills-test waiver and the even exchange program was based on multiple stakeholders' concerted efforts and entailed overcoming regulatory and legal challenges at both the federal and state level, procedural issues within the military and obtaining insurance company buy-in. The systematic identification of the barriers that needed to be overcome, the stakeholders who would need to be involved, and clear articulation of the ultimate goals of getting recognition of military training and experience were instrumental to this initiative's success.

## **Ensuring the Quality of Credentials**

With the proliferation of post-secondary credentials in recent years, ensuring their quality is a topic receiving increasing attention within the credentialing ecosystem. This is particularly true as government agencies, including the Departments of Defense and Veterans Affairs, invest in programs to pay for these credentials. There is no single generally accepted definition of what constitutes the quality of a credential and "quality" is often used interchangeably with "value." Two key federal legislative initiatives that were undertaken since 2017 were designed to specify selection factors for ensuring the quality and industry recognition of credentials paid for by DoD and VA.

- **NDA FY 17 (P.L. 114-328), Section 561 - Modification of Program to Assist Members of the Armed Forces in Obtaining Professional Credentials** – allows DoD to consider factors other than personnel certification accreditation in approving certifications that can be paid for, for servicemembers. This includes consideration of whether the credential is highly valued in industry and/or approved through another federal government program.
- **Johnny Isakson and David P. Roe, M.D. Veterans Health Care and Benefits Improvement Act of 2020, Section 1013 – Oversight of Educational Institutions with Approved Programs – Risk-Based Surveys** – provides greater authority to State Approving Agencies, which approve education and training programs for the GI Bill, to conduct risk-based surveys at institutions and training providers under investigation for misconduct. By implementing a new risk-based review system built on public data, state agencies will for the first time target their reviews to the riskiest schools most likely to leave veterans worse off, help students finish their studies if their schools may be at risk of closure, and push schools to improve or risk losing GI Bill dollars if they continually fail to offer veterans meaningful paths to economic advancement.







# Chapter 5. Research on Emerging Issues

## Key Findings

In recent years, the post-high-school credential ecosystem has put more focus on exploring how to increase credential attainment effectively and efficiently for underrepresented student populations on campus. Part of this focus includes re-engaging adult learners interested in pursuing the next credential on their pathways, or in some instances, even completing the first credentials they may have started years prior. As the pedagogical shift moves from traditional higher education and the resulting degree serving as the so-called “golden ticket” for gainful employment and continued economic mobility, industry and employers have signaled a greater interest in understanding how to evaluate, recognize and validate non-traditional training and education (I.e., outside of higher education) to meet their hiring needs.

One population that continues to gain much interest and support regarding how its formal and informal on-the-job training and education prepares it for career success are servicemembers and veterans. Credential stakeholders have widely shared their desire to increase credential attainment for servicemembers and veterans without requiring them to start over. These stakeholders continue to seek out evidence-based guidelines and processes that others within the credentialing ecosystem have successfully deployed to connect these individuals more efficiently to a pathway that adequately recognizes their technical skillsets. At a minimum, academia and industry are aware that the soft skills acquired are vast and well-developed and are exploring ways to place value on those skills (i.e., leadership, management) to put the individual on a path toward continued academic and career success.

While MCAI ambassadors were not tasked with conducting an extensive literature review for this project, the research summarized below and the organizations we recommend you keep an eye out for future research connected to this topic did inform

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LEFT: Chris Naughten, 423rd Civil Engineer Squadron firefighter, administers resuscitation breaths on a simulated patient during an Emergency Medical Technician basic certification at RAF Alconbury, England. This new certification will allow firefighters, across the 501st Combat Support Wing installations, the ability to assess and provide basic medical care for common conditions.

U.S. Air Force photo/Master Sgt. Brian Kimball

each roundtable conversation. In response, MCAI ambassadors believed a section on research was necessary to include within the report.

A variety of research topics are worthy of discussion; however, a few rose to the top, related to advancing military credentialing initiatives and will be highlighted below.

1. Competency-Based Education
2. Recognition and Validation of Non-Traditional Learning
3. Non-Academic Credential Attainment
4. Veteran Employment and Underemployment
5. Military-to-Civilian Transition Support

A theme that cuts across each research topic is broadening our understanding of how servicemembers and veterans of color are impacted by programs and initiatives focused on increasing credential attainment. In the absence of disaggregated data by race and ethnicity, we have an incomplete representation of the experiences and opportunities available. Therefore, future research must continue to disaggregate data by race and ethnicity, so credentialing stakeholders appropriately address gaps that may exist with current policies and practices.

## Research Worth A Read

The research conducted and the reports published below continue to shed light on several issues to inform military-to-civilian credentialing opportunities and employment programs. These reports serve to connect academia, labor, employment, industry and government partners to find solutions to the challenges that exist with increasing credential attainment for servicemembers and veterans and uncover bright spots that require immediate attention.

The U.S. Advanced Distributed Learning (ADL) Initiative released the [Competency-Based Learning Report](#) in 2018 that examines methods of assessing learning and skills obtained by servicemembers, as well as the existing separation between the education and training communities across the services. The report examines the technical aspects and complexities necessary to begin the migration of DoD toward a competency-based education system. Though its specific focus lies in preparing servicemembers for warfare or military action, it can be viewed through the

broader lens of the growing recognition of competencies as the currency within the post-high-school learning ecosystem. That DoD is looking to competencies as a means of restructuring internal training highlights the value of this approach for the greater population, as well as the potential impact for future transitioning servicemembers.

The **Military Transcript and Experience Review: A 13-state scan of policies** released by the National Center for Higher Education Management Systems (NCHEMS) and the Midwestern Higher Education Compact, outlines research on the development and passage of state legislation and policy related to the review of military transcripts and experience for postsecondary education. Thirteen states were studied, reviewing the policies currently in place for the recognition and validation of military-based learning and experience, as well as how state agencies interpret these policies. The findings outlined formal legislation and statutes' success in awarding meaningful college credit to servicemembers and veterans for their military training and experience.

**Veterans Without Degrees: The Benefits and Opportunities of Certificates and Certifications** is a report issued by Strada Education Network in affiliation with Gallup and Lumina Foundation to conduct a monumental survey of 340,000 U.S. adults ages 18-65 on their educational experiences and attitudes. This report specifically looked at non-academic credentials through the lens of the veteran population. Of all adults without degrees, veterans were more likely to have certificates or certifications, and having these non-academic credentials made them more likely to be employed (and at a higher income level) than those without any credentials (Clayton & Torpey-Saboe, 2019). The issue of translating military training and education into civilian terms is uniquely highlighted within this document. Strada-Gallup recommends that policymakers, veterans organizations, educational institutions, and employers focus on connecting veterans to portable and stackable credentials to allow for career mobility and lower rates of underemployment.

**Understanding Certifications** was authored by the Corporation for a Skilled Workforce (CSW), George Washington Institute of Public Policy (GWIPP), and WorkCred following a two-year study of industry and occupational certifications. The purpose of this report was to “make it easier to differentiate among the diversity of certifications in the marketplace, understand what constitutes a quality certification, and show how

certifications can be used in building pathways to good jobs and further postsecondary learning.” (Good et al., 2020). The report explains in detail what a quality certification is and the purpose that certification serves for different populations as well as the stackability of credentials and the practice of embedding certifications into other educational programs of study. Lastly, the report identifies many questions about the future of certifications in the changing environment and how various stakeholders can play a role in improving certifications for the workforce.

**Veteran Opportunity Report: Understanding an untapped talent pool** was produced by LinkedIn and highlighted some key findings related to veteran employment within the civilian workforce. The topic and impact of underemployment is a common discussion point within the veteran community and is often misunderstood by civilian employers. Underemployment means that the individual is employed, but the job does not fully utilize skills and abilities and could negatively impact economic mobility. LinkedIn (2019) reports that 33% of veterans are underemployed and are more than 15% more likely to be underemployed than nonveterans. These overly high rates of veteran underemployment can be attributed in part to the civilian-military divide. This term describes the lack of understanding and knowledge about how military experience applies to a civilian career.

The “**civilian-military divide**” refers to the lack of understanding and knowledge about how military experience applies to a civilian environment, and is one of the greatest culprits for veteran underemployment.

Veterans are an underrepresented population within the workforce and hiring veterans can increase a company’s diversity by bringing unique skillsets and experiences to the team. This should be considered when looking to improve the diversity of the workforce as the veteran population is highly diverse in terms of age, race, gender and sexual orientation.

**Military-to-Civilian Readiness: The Past, Present, and Future of the Transition** written by MITRE Corporation in 2020, examines the transition process for servicemembers, utilizing previous studies, interviews, focus groups and observations from experts. It details the critical role support services play in easing the transition process. Shifts in identity,

relocation and pursuing education or a return to the civilian workforce can significantly add to the stress of transition. Impacts of legislation, such as the Veterans Opportunity to Work (VOW) to Hire Heroes Act or the Fiscal Year 2019 National Defense Authorization Act are highlighted as significant in offering resources and simplifying the separation process a servicemember experiences. Existing gaps, like the disjointed nature of veteran programs, complicated transition into the education system, and applicability of support services were named, and the report makes recommendations to positively impact the transition process as well as areas for future research.

### **Organizations to Keep an Eye On**

The organizations listed below are regularly engaged in research, study, or reporting on the topics above, and work with the military and veteran community and VSOs (veteran service organizations) to inform their work. To stay informed of current and emerging research efforts, consider joining their mailing lists or email listserv and regularly engaging with their content in other forums.

#### **American Association of Collegiate Registrars and Admissions Officers (AACRAO)**

**AACRAO** is a non-profit, voluntary, professional association of more than 11,000 higher education professionals representing approximately 2,600 institutions in more than 40 countries. Its mission is to provide professional development, guidelines and voluntary standards to be used by higher education officials regarding the best practices in records management, admissions, enrollment management, administrative information technology and student services.

#### **Advanced Distributed Learning (ADL)**

The **ADL Initiative** is a DoD program that conducts research on distributed learning and coordinates efforts across the public and private sector and serves the entire federal government. ADL is a global partnership network that encourages collaboration, facilitates interoperability, and promotes best practices for using distributed learning to provide the highest-quality education, training, informal learning, and support “tailored to individual needs and delivered cost-effectively, anytime and anywhere, to increase readiness, save resources, and facilitate interorganizational collaboration.”

#### **American Institutes for Research (AIR)**

**AIR** is a non-profit behavioral and social science research and evaluation organization. Its primary goal is to use the best available science and evidence to bring the most effective ideas and approaches to enhancing everyday life. They collaborate with other organizations, policymakers and communities, and inform and integrate changes or improvements to many areas, including education, health and workforce development. AIR’s veteran-focused research centers around finding solutions for issues faced by servicemembers after separation and collaborating with VSOs to increase capacity for support-service offerings.

#### **Competency-Based Education Network (C-BEN)**

**C-BEN** is a member-driven community of professionals dedicated to building and promoting competency-based education as an effective, efficient, affordable and sustainable pathway to high-quality postsecondary degrees and credentials. To ensure its impact on the future of learning and student success, C-BEN is committed to spreading its knowledge and expertise through programming and support services that can help others move through the learning curve competently – accelerating development, adoption and continued innovation. C-BEN’s efforts focus on three main priorities: growing demand, building capacity and removing barriers.

#### **Center for Regional Economic Competitiveness (CREC)**

**CREC** is an independent nonprofit organization founded to provide policymakers around the world with the information and technical aid they need to create innovative, regional and job-creating economic strategies. Their network of partnerships emphasizes the importance of data and evidence-based policy and decision-making and they conduct research, provide technical assistance and provide training and leadership to practitioners and policymakers in the economic development, workforce development and higher education sectors.

#### **National Institute for Learning Outcomes Assessment (NILOA)**

**NILOA** is a research and resource-development organization dedicated to documenting, advocating and facilitating the systematic use of learning outcomes assessment to improve student learning. Its work supports institutions in the design of learning environments and approaches to assessment that strengthen the experience of a diverse field of learners within a variety of institutional contexts. NILOA

partners with a broad spectrum of organizations and provides technical assistance and research support to projects both within the United States and internationally.

### **Society for Human Resource Management (SHRM)**

**SHRM** is a professional association that promotes the role of the human resources profession in creating better workplaces. They provide education, certification, and networking to members, and lobby on issues pertaining to labor management. SHRM is the “foremost expert, convener and thought leader on issues impacting today’s evolving workplaces. With 300,000-plus HR and business executive members in 165 countries, SHRM impacts the lives of more than 115 million workers and families globally.”

### **Strada Education Network**

The **Strada Network** is a nonprofit corporation which assists students with post-secondary education by providing financial support and other assistance. Its mission is to improve lives by forging clearer and more purposeful pathways between education and employment, and promotes learning opportunities that help better prepare individuals for jobs. The network works with educators to help align curriculum with career pathways and aids employers in recruiting and training talent. It has contributed to research and reports with specific veteran focus.

### **Non-Degree Credential Research Network (NCRN)**

Researchers at the George Washington Institute of Public Policy, funded through a grant from Lumina Foundation, established the **Non-Degree Credential Research Network (NCRN)** in 2019. NCRN brings together leading researchers and a cross-sector group of stakeholders representing employers, policymakers and providers of employment, training and certification. The goals of the project are to clarify what is currently known about credentials, such as certificates, certifications, apprenticeships, licenses and micro-credentials, and their place in the broader credentialing ecosystem; determine what new research is needed; identify lessons learned in the course of the project and their implications for policy and practice; and share the project’s findings with practitioners, policymakers and other stakeholders.

### **Research Questions Still Needed to be Addressed:**

MCAI ambassadors curated the list of questions below with the goal of encouraging cross-sector partners to

come together and conduct research to further inform new and promising principles and guidelines that will continue to facilitate increased credential attainment of servicemembers and veterans.

### **Competency-Based Education**

- Do servicemembers and veterans entering competency-based education and training programs see a higher rate of return for their military-based educations and training?

Can competency-based assessments serve as a means to validate learning for non-academic credentials

### **Recognition and Validation of Non-Traditional Learning**

- What questions do faculty continue to struggle with answering, related to translating military education and experience to degree pathways? What additional tools and resources can be provided to assist in this effort?
- How does, or how can, past non-credit-bearing education and training experiences translate to credit-bearing degree pathways?
- Do state prior learning assessment (PLA) laws result in the desired outcomes? Are these laws working to improve credit received? How much credit is typically awarded? Is it streamlining the pathways? Does this lead to gainful employment?
- How does PLA currently affect servicemember and veteran time to degree and how can PLA policy be reformed to improve recognition of credit and eventual learning and employment outcomes?
- Have state initiatives to recognize military training and experience for state licensure resulted in desired outcomes? What barriers exist to assessing the equivalency of military training and experience?

### **Non-Academic Credential Attainment**

- How are servicemembers and/or veterans choosing credentials and career pathways? How are their military experiences being used to help them achieve non-academic credentials and career goals?

### **Veteran Employment and Underemployment**

- Has COVID-19 had an impact on credential pathways selected by transitioning servicemembers and veterans? Are credential pathways impacted by the changes seen in employment as a result of COVID-19?



- How does the attainment of credentials and certifications, both in-service and after service, affect long-term employment and education outcomes for servicemembers and veterans?

#### **Military to Civilian Transition Support**

- How does the national shift to online learning affect servicemember and veteran education experiences? Is there a need for additional resources and

guidance to better use education and employment benefits based on this shift?

- How can the DoD better support servicemember transition into civilian employment? At what point within the military lifecycle should DoD help servicemembers engage in civilian career pathways without negatively impacting retention?
- Outside of DoD, what can other federal agencies do to better support servicemember transition?



U.S. Army photo by Spc. Chenee' Brooks

## Conclusion and Opportunities for Action

This report outlines five key areas that MCAI ambassadors deemed worthy of exploration throughout the 2019 and 2020 American Legion MCAI Roundtables. Public-private partnerships, recognition of learning and stackability of credentials, tools and resources, legislation and policy, and research on emerging issues were selected and initiated a variety of robust conversations among a diverse group of stakeholders. These individuals were all too familiar with the challenges in advancing military credentialing opportunities for servicemembers and veterans that currently exist. This report displays their commitment to providing others with relevant information to address and be responsive to those challenges within their respective sectors.

As the employment landscape and economy will continue to shift in response to a global pandemic, the repercussions of which have not yet been fully realized, the replication of model programs and adoption of key components named in this report is more critical than ever. This report was meant to provide a list of promising practices, guidelines and processes that cut across the broad military credentialing ecosystem, and it is unique in that the recommendations shared were designed to be universally applicable. Interested stakeholders may adapt and operationalize these guidelines to fit the unique characteristics and needs of their organizations.

The American Legion and Lumina Foundation Military Credentialing Advancement Initiative kick-started a conversation about advancing military credentialing for servicemembers and veterans with representation of relevant stakeholders around the table. This conversation was meant to ignite a spark to encourage others in the post-high-school learning ecosystem to pick up where we have left off. As such, The American Legion will use the findings of this report to map future credentialing roundtable events, and we encourage interested readers to attend virtually if they are able.

While a never-ending list of opportunities for action could be generated from the findings shared within this report, included below is a chart that provides the reader with a short list of key opportunities for action their respective stakeholder groups can take to initiate change in the near and long term. This list is not meant to be exhaustive; instead, it is meant to provide feasible next steps that allow the reader to answer the question, “So, now what?” In considering these opportunities, readers are encouraged to look back at the specific best practices and approaches detailed in the report.



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**Stakeholder****Federal and State Government Agencies**

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**Immediate Opportunity for Action**

We applaud the reconvening of the Joining Forces initiative so it can continue and expand its landmark work championing the reduction and elimination of licensing and credentialing barriers for servicemembers and military spouses. A task force focused on recognition of military-based learning in support of incremental and stackable credentials should be of the highest priority.

Legislation and policy designed to achieve better recognition of military training and experience can mandate or recommend usage of existing tools to ensure consistent application and credit of equivalent training and experience.

Federal and state policymakers should engage more subject-matter expertise from the field when developing legislation and policy, along with ensuring appropriate decision-makers are also involved.

As states continue to support legislation to expand PLA to recognizing military-based learning for academic credit, it must be done so using resources that already exist and leveraging partners from other states that have successfully deployed similar policies.

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**Future Opportunity for Action**

Convene a White House Forum on Military Credentialing and Licensing to recognize military public-private partnerships, academic recognition of military learning, translation tools, state policy and emerging research trends.

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**Stakeholder****Academia**

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**Immediate Opportunity for Action**

Higher education should holistically review military-based education, training and experience and determine how that can be implemented into core degree requirements.

In order to ensure consistency within the state when attempting to gather military-based training, education and experience data — and in order to avoid the appearance that any one institution is receiving an advantage — state systems of higher education, rather than individual institutions, are encouraged to establish open and continuous dialogue with appropriate DoD officials.

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**Future Opportunity for Action**

As technology continues to advance (i.e., artificial intelligence, machine-learning, etc.) current tools and resources to streamline military credentialing will be updated and new tools created. Using these tools, academia should consider annualized reassessment of military training to help maximum time to complete degree.

Maintain a repository of previously awarded credit for military-based learning to ensure consistency in future credit review.

Maintain open and continuous dialogue with appropriate DoD officials.

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**Stakeholder****Industry**

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**Immediate Opportunity for Action**

Research SkillBridge and other state and federal programs to support increased employability of veterans within respective industries.

As DoD continues to expand training and employment programs for separating servicemembers, employers should consider becoming SkillBridge industry partners.

SkillBridge providers and employers should provide transparency to servicemembers about pay scales and benefits received upon employment.

Employers and Industry stakeholders must provide job seekers clearer signals within job posting to the competencies or skills required for the job, rather than focusing on highest level of education attained. In addition, it's encouraged that more emphasis be placed on required qualifications rather than "preferred" and that those qualification are articulated using common and recognizable language.

National union Leadership and employer partners should develop "college resolutions" that capture short and/or long term commitments to career pathways based on workforce projections and within the means of existing contract negotiations and hiring protocol.

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**Future Opportunity for Action**

Work with credential providers to better signal the demand for specific skills and competencies for your industry's workforce.

Ongoing collaborative discussions with DoD and industry partners regarding matching industry competencies earned in the military to civilian regulatory recognition defined by industry institutions and state and federal governing regulatory bodies.

Industry partners and employers should continue to expand their recognition of all forms of military-based training, experience and non-traditional learning to streamline and expedite servicemember career and education pathways and reduce burden to administrators and governing agencies.

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**Stakeholder****DoD and Individual Service Branches**

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**Immediate Opportunity for Action**

Research SkillBridge and other state and federal programs to support increased employability of veterans within respective industries.

As DoD continues to expand training and employment programs for separating servicemembers, employers should consider becoming SkillBridge industry partners.

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Employers and Industry stakeholders must provide job seekers clearer signals within job posting to the competencies or skills required for the job, rather than focusing on highest level of education attained. In addition, it's encouraged that more emphasis be placed on required qualifications rather than "preferred" and that those qualification are articulated using common and recognizable language.

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Industry partners and employers should continue to expand their recognition of all forms of military-based training, experience and non-traditional learning to streamline and expedite servicemember career and education pathways and reduce burden to administrators and governing agencies.



# Appendices

**Appendix A** - Glossary of Terms

**Appendix B** - Ambassador Bios

**Appendix C** - Acknowledgments/Recognition

**Appendix D** - Federal Legislation and Executive Orders Designed  
to Facilitate Credentialing

**Appendix E** - References

# Appendix A - Glossary of Terms

## Apprenticeship

Apprenticeship programs are designed to prepare individuals for specific jobs through both on-the-job training and job-related instruction, related to national skills standards. Apprenticeships are employer-driven and can be time-based or competency-based.

## Civilian-Military Divide

The “civilian-military divide” refers to the lack of understanding and knowledge about how military experience applies to a civilian environment and is one of the greatest culprits for veteran underemployment.

## Competencies

Competencies are observable and measurable attributes that demonstrate one’s knowledge, skills, and abilities in regard to performance.

## Credential

A credential is any academic and/or non-academic postsecondary verified and validated learning opportunity. Non-degree credentials include certifications and licenses. Degree credentials are typically academic degrees and certificates.

## Crosswalk

A crosswalk is a tool that helps to equate competencies from training or experience to a credential or a different job or career than was previously held.

## Data standards

Data standards are documented agreements on representation, format, definition, structuring, tagging, transmission, manipulation, use and management of data.

## Direct Credit

For the purposes of this report, “direct” credit refers to academic credit that applies directly to a degree program’s core curriculum. The opposite of direct credit is “elective” credit.

## Military Occupational Skills Data

For the purpose of this report, military occupational skills data refers to the knowledge, skills, abilities and proficiencies described within a specific military occupation (i.e., Military Occupational Specialty (MOS), Air Force Specialty Code (AFSC), Naval Enlisted Classification (NEC) and Ratings).

## Pathway

A pathway is any structured learning opportunity that develops a person’s core academic, technical and employability skills and results in gaining a high-quality credential.

## Quality

Our definition of a quality credential is one that provides individuals with the means to equitably achieve their informed employment and education goals. There must be valid, reliable and transparent evidence that the credential satisfies the criteria that constitute quality.

## Skills Gap

A skills gap refers to the difference between the skills an individual possesses and the skills required to perform in a job.

## Stackability/Stackable Credential

Stackability refers to a sequence of credentials that can be accumulated over time to build up an individual's qualifications to move along a career pathway or up a career ladder.

## Underemployment

Underemployment does not always just mean not having a job but can also mean having a job that does not pay a living wage or that does not fully use one's skills and abilities.

## Upskilling

Upskilling occurs when training builds upon obtained skills to advance an individual to the next level in a career or along a career pathway and is a critical part of the stackable model.



## Appendix B – MCAI Ambassador & Program Support Bios

### Keith Boring

Keith Boring reported to Center for Information Warfare Training (CIWT) Pensacola Florida in January 2005, while still on active duty (Master Chief). Upon transfer to the Fleet Reserve in 2006, he continued his work at the Naval Education and Training Command (NETC) as a Navy Civil Service civilian. He currently serves as the Director for the Navy's Credentialing Programs - Navy Credentialing Opportunities On-Line (COOL) and United Services Military Apprenticeship Program (USMAP).

Boring is a native of Clinton, Tenn. He enlisted in the Navy as a Cryptologic Technician in 1985 and was advanced to the rank of Master Chief Petty Officer in 2003. He has a degree in Industrial Business Management, is a Microsoft Certified Professional, CompTIA Certified A+, Network+ and Security+ Technician and is a Certified Project Coordinator. He is also credentialed by the Department of Labor, under the United Services Military Apprenticeship Program (USMAP), as an Information Systems Operator and Radio Station Operator.

Boring's role as Director for the Navy's Credentialing Programs includes daily operation of the Navy COOL and USMAP programs, participation in White House and DoD credentialing task forces, DoD CIO and DoN CIO Cybersecurity workgroups, facilitating Navy Job Duty Task Analysis (JDTA), represent the DoD within various credentialing agency advisory boards, as well as other tasks associated with Navy and civilian credentialing.

### Babs Chase

Babs Chase is the Vice President of Military and Veterans Programs at The Manufacturing Institute, the workforce and education partner of the National Association of Manufacturers. In her role, Chase leads Heroes MAKE America, the institute's initiative to build connections between the military community and the manufacturing industry. She has expertise leading outreach efforts in myriad industries including politics, economic development, public diplomacy, corporate America and government.

From 2011 to 2017, Chase orchestrated executive outreach on behalf of the U.S. Army Senior Leadership advising them on impactful opportunities for the Army and maintaining a network of hundreds of external influencers. She received the Department of the Army Superior Civilian Service Award and Meritorious Civilian Service Award in recognition for her contributions. In 2018, Chase launched Chase Magnolia Partners, a consulting firm focused on building partnerships to support clients striving to make an impactful difference in the veterans community.

Chase served almost all eight years in the administration of President George W. Bush. She worked at the Department of Labor in Intergovernmental Affairs and Public Liaison, the Office of the Secretary of Defense in public affairs and at the Department of State Foreign Press Center. Originally from Memphis, she now lives in Alexandria, Va., with her husband, Andrew Mickley, U.S. Navy retired, and their dog, Elvis.

### Deidra L. Jackson

Deidra Jackson is the managing partner of Opus Strategies. Launching in 2013, the firm has grown significantly by developing and leading the implementation of strategy, relationship development, public policy engagement and overall business advancement initiatives with key federal, state and local policy makers.

Her experience includes more than 20 years in the area of public relations, internal and external communications, advocacy, corporate philanthropy, and crisis management.

This includes providing consulting services to various clients in federal and state government agencies and nonprofit, petrochemical and technology industries with such companies as BASF, Huntsman, PriceWaterhouseCoopers, Shell Oil, ExxonMobil, ICF Consulting, ACE Scholarships, Companion Animal Alliance, Louisiana Department of Education, Baltimore City Public Schools, Louisiana Workforce Commission and the Department of Justice.

## Andrew Morton

Andrew Morton provides strategic leadership for SHRM's inclusion initiatives to include veteran, military-family and disability hiring, retention and engagement programs. He works with stakeholders across the military-service organizations to develop pathways for active-duty, veteran and military-family members to achieve relevant workforce credentials including SHRM's Certification. Morton works with SHRM's membership to deliver resources that empower HR professionals, people managers and business leaders in their inclusion-hiring and retention efforts, including SHRM's Getting Talent Back to Work initiative. He's an award-winning speaker, delivering workshops and keynote sessions on these inclusion-hiring initiatives. In 2018, he served as the contributing author to fellow veteran Justin Constantine's SHRM-published book "From We Will to At Will – A Handbook for Veteran Hiring, Transitioning and Thriving in Today's Workplace."

Before joining SHRM in 2014, Morton worked with a leading PR firm, managing several Fortune 500 brand and advocacy campaigns. He is a retired Army infantry officer who served in multiple leadership and command positions, as well as overseas and combat tours including deployments to Iraq, Bosnia, Macedonia and Egypt. During his 21-year Army career Morton also served in multiple senior public affairs positions, including Chief of Media Outreach for Multi-National Force-Iraq, Chief of Marketing and Advertising for the Army Reserve and the Director of Digital and Social Media for the Army Reserve.

Morton is passionate about efforts to foster awareness and resources in support of mental health and the workplace – across all employees. Most importantly, he serves as the working dad to his three wonderfully exhaustive kids and two huskies at their home headquarters in Alexandria, Va.

## Elizabeth Murray-Belcaster

Elizabeth Murray-Belcaster is CEO of EMB Consultants, Inc. She has been leading initiatives for veterans and military families over a decade. Belcaster is an expert in strategic development training to placement efforts across the country and an adviser for leadership and coalition building. She is responsible for networking with labor unions, employers, military partners, and legislators as well as building independent partnerships with labor affiliates and with veterans service organizations across the country. She served as Task Force Committee member and lead panelist for the American Legion National Licensing and Credentialing Summits and continues to drive industry stakeholders, governing agencies, labor unions and military affiliations into collective spaces to further advance programming and policy for servicemembers across the globe.

Belcaster specializes in development of military training to placement efforts with military leadership, industry, labor, academia and regulatory agencies and stakeholders across the country.

She also has experience directing political campaign initiatives for the offices of governor, state and national Congress, Senate, aldermanic, and regional judicial campaigns.

In 2015, Belcaster presented at the Clinton Global Initiative and serves as a board member on the Women For Wounded Warriors Foundation since 2016.

On Jan. 28, 2017, Belcaster received the Order of Saint Barbara award from the United States Field Artillery Associations.

## Terrell Odom, ED.D., MBA, MPA, VSO

Dr. Terrell Odom, a U.S. Navy veteran, serves as Director, Office for Military Affiliated Communities, University of Chicago. He is responsible for developing and coordinating efforts and specialized programs for the university's military-affiliated communities. He works closely with campus partners on applicable university policies and procedures, throughout all divisions at the University of Chicago.

Odom received his bachelor of science from DeVry University, an MBA from American Military University, an MPA from the Keller Graduate School of Management, a masters of Online Teaching and Certification for Online Learning Administration from the University of Illinois at Springfield and a doctorate in Educational Leadership and Administration from Chicago State University.

Odom has worked in higher education for over 13 years as an administrator, student services professional and faculty member at trade and technical schools, and well as two- and four-year universities at public and private institutions. During his career, Odom has constructed policies that incorporate military experience into institutional credit and stackable credentials. He created college-level courses specific to transitioning servicemembers, fostered environments that were engaging and conducive for student veterans, and published research awareness supporting military-affiliated students.

## **Richard Passarelli**

Rick Passarelli enlisted in the U.S. Navy in 1982, where he was deployed for two tours of active duty, and two years of active reserve duty. During his deployments, he received the Humanitarian Service Medal, Navy Battle “E” Ribbon, Navy Sea Service Deployment Ribbon with silver star 2nd award.

After his enlistment and honorable discharge, Passarelli started his career with Peoples Gas where he recently retired with 32 years of service as business manager and UWUA National Executive Board member and National Veterans Chair. During his tenure at Peoples Gas and the UWUA, Passarelli founded the UMAP program in 2011, in partnership with Peoples Gas Executive Team, recognizing the need for putting veterans to work with skilled careers during the highest veteran unemployment rate in American history.

Passarelli is now the UWUA national director of veterans affairs, organizing under National President James Slevin for the UWUA. Passarelli is a committee member for Veterans in Energy Washington D.C. and sits on the committee for veterans in work force innovation and is chair of the subcommittee for the AFL-CIO workforce development, Washington, D.C.

He has been involved in licensing and credentialing nationwide on committees involving work with the Departments of Defense, Education and Interior. The work with federal agencies has yielded new developments in matching veterans skill sets with stackable credentials. Recently a skill bridge memorandum of understanding was signed with the UWUA to allow skill bridge UWUA programs to be recognized. He has been married to Lynn Passarelli for 38 years and is the father of two sons and has five grandchildren.

## **Esmeralda Silva, MBA**

Esmeralda Silva’s career has been comprised of roles revolving around building strong relationships. Over the past 20 years, she has held leadership roles within student affairs, academic affairs, administrative services, military outreach and partnerships, military and veteran relations, compliance and regulatory affairs, allowing her to create and implement integrated strategies as well as collaborate with cross-departmental leaders to ensure a universitywide focus on student success.

Silva is actively involved in advocating for improved support and services for military members, veterans and their families. She currently serves on the board of directors for the Council of College and Military Educators as the vice president-elect and oversees public affairs. CCME is an active proponent for the professional development of those serving in the military education community by providing a forum for the exchange of information on educational programs, strategies and innovation among its members and associated partners.

She also served as the president of the California Advisory Council on Military Education from 2015-2018, California Advisory Council on Military Education, she is a member of Los Angeles Veteran Collaboration – Higher Education Working Group, she is also a member of the Orange County Veteran and Military Family Collaborative and actively participates in national education consortiums. Currently, she serves as the vice president of Strategic Initiatives & Government Relations/Compliance at Trident University and oversees all military MOUs, military articulation agreement as well as POI reviews for military assessments. She also collaborates and supports academic leadership and the registrar on military articulation processes and assisting on training for military credit assessment.



## **Brien Walton, ED.D., J.D., LL.M.**

Dr. Brien Walton is the Director of the Center for Family Business at Husson University and CEO of Acadia Capital Management LLC, a U.S. Treasury-certified business development firm that advises federal agencies on ways to attract investment capital and facilitate workforce development in economically distressed communities.

Since 2010, Dr. Walton has also advised the American Council on Education on competency-based learning and served as a national coordinator, leading faculty teams conducting reviews of military programs at facilities throughout the United States. He is a strategic adviser to Apple's National Education Development team and a noted authority in leadership development training for non-traditional learners.

Dr. Walton completed his doctorate of education in organizational learning leadership at the University of Pennsylvania; a juris doctorate in law at the University of D.C., a master of education in workforce development at the University of Pennsylvania; a master of arts in educational technologies at Harvard University; a master of laws in taxation at Georgetown University; a bachelor of arts in psychology at the University of D.C.; and a graduate certificate in leadership development at the Wharton School of Business.

## **Col. (Ret.) Sam Whitehurst**

Retired U.S. Army Col. Sam Whitehurst served over 29 years in multiple command and staff positions. His Army career spanned from the Pacific to the Middle East and Southwest Asia to include deployments to Iraq and Afghanistan. Highlights of his career included commanding a brigade combat team in Afghanistan and serving as the chief of staff for the 18th Airborne Corps in Iraq. His last assignment in the Army was as director of the Soldier for Life program.

He now serves as vice president for the Dixon Center for Military and Veterans Services, a non-profit that supports and serves military members, veterans and their families.

## **Jennifer Worth**

Jen Worth is senior vice president, workforce and economic development, for the American Association of Community Colleges. Worth oversees projects that partner community colleges with workforce boards, economic development entities, labor market intermediaries and other community organizations to drive workforce and economic opportunity. She interfaces with federal agencies and fosters relationships with foundations and industry partners to align talent pipelines from colleges.

Worth also directs the annual Workforce Development Institute an annual event for workforce development professionals at community colleges. Worth has held positions at the National Center on Education and the Economy, the Academy for Educational Development, the Center for Post-Compulsory Education and Lifelong Learning and the National Association of Workforce Boards. She serves on the board of SkillsUSA and the National Association for Community College Entrepreneurship. She holds a Master of Public Policy and Management degree from the University of Melbourne in Australia.

## **John Kamin**

John Kamin is an education and credentialing policy associate for The American Legion's Veterans Employment & Education Division. He is a U.S. Army Reservist who deployed into combat twice to Iraq, in 2007 and 2010. He used both the Montgomery GI Bill and the Post-9/11 GI Bill in pursuit of a cross-disciplinary bachelor's degree in communications, law, economics and government from American University's School of Public Affairs.

In his role at The American Legion National Headquarters in Washington, D.C., he works daily in support of veterans education benefits and organizes roundtable discussions, workshops and other events to improve awareness and build expert understanding of the GI Bill. He prepares and delivers testimony before Congress and works with the Department of Veterans Affairs to improve transition benefits. He also provides GI Bill guidance for The American Legion's more than 3,000 service officers nationwide.

## Lisa Lutz

Lisa Lutz is president and CEO of SOLID, LLC. She has more than 20 years of experience in policy research and analysis and program evaluation, specializing in issues related to education, training, workforce development, and employment of military servicemembers and veterans. Her work has concentrated on the use of occupational credentialing to promote the professional development of servicemembers and ensure their smooth transition from the military to the civilian workforce. She has performed research, provided policy guidance and supported program development in this area for numerous federal government clients, including the Departments of Defense, Labor, Army, Navy, Air Force, Energy, Homeland Security and Transportation. She has also worked closely with a variety of private-sector companies and non-profit organizations.

Lutz's expertise has led to appointments to advisory committees by four secretaries of Veterans Affairs to provide them with subject-matter expertise on the implementation of education and credentialing benefits for servicemembers and veterans. She also serves as vice chair for the American National Standards Institute's Personnel Certification Accreditation Committee (PCAC). She holds a bachelor of science degree in political science and psychology and a master's degree in public administration.

## Lauren Runco

Lauren Runco is director of strategy for Solutions for Information Design (SOLID), LLC. She began her role with SOLID in November 2020 and joins the organization from Lumina Foundation where she served as strategy officer for military-based learning. While at Lumina, Runco conceptualized and led a new body of work focused on increased recognition of military-based learning toward expanded credentialing opportunities for servicemembers and veterans.

Runco spent the last 11 years working on issues related to the nation's military and veteran workforce and their transitions to civilian education and employment, by working with state and federal agencies, veteran service organizations, employers, community-based organizations and higher education institutions. Of note is her attention in these spaces to focus on women and people of color, making her a sought-after voice in higher education and the workforce.

From 2015-2018, Runco served as the director of education and employment for the Military Family Research Institute at Purdue University. She began her professional career serving the military-connected community in 2012 as the founding director of the Office of Military and Veteran Services at Marywood University, where she also served as the veterans affairs certifying official, led the national Veteran Knowledge Community for NASPA, and received the Army Commander's Award for Public Service. Runco earned her master's degree in higher education administration from Marywood University and her bachelor's in international studies from the University of Scranton.

## Appendix C – Acknowledgements/Recognition

MCAI ambassadors invited the following individuals to provide insight on their extensive subject-matter expertise on issues related to credentialing of servicemembers. Their contributions to informing the findings outlined in this report are very appreciated.

**Christopher Marx**, Registrar/Director of Transfer Articulation, Davenport University

**Dr. Karen Daley**, Dean of the College of Health Professions, Davenport University

**Sue Crystal-Mansour**, Ph.D., Vice President, Program Impact, National Restaurant Association Educational Foundation (NRAEF)

**Jonathan Harmon**, Executive Director, UWUA Power For America Trust

**Kevin Duesterhaus**, Manager of Driver Analysis, Illinois Secretary of State (CDL Even Exchange)

**Dan Griesse**, Director of Human Resources, ABF Freight System, Inc.

**Selden Fritschner**, Senior Policy Director for CDL Policy, FMCSA

**Connie Beene**, Senior Director, Adult & Career Technical Education, Kansas State Board of Regents

**Karla Wiscombe**, Director, Academic Affairs, Kansas State Board of Regents

**Erin Wolfram**



## Appendix D – Federal Legislation and Executive Orders Designed to Facilitate Credentialing

<b>Relevant Legislation</b>	NDAF FY 17 (P.L. 114-328)
<b>Section Title/Summary</b>	Sec. 561. Modification of Program to Assist Members of the Armed Forces in Obtaining Professional Credentials
<b>Key Agencies Responsible</b>	Department of Defense
<b>Focus Area</b>	Ensuring Quality of Credentials
<b>Status/Significance</b>	Allows services to pay for credentials that have not been accredited, but are highly valued by industry and/or approved through another government program. Also, allows for payment of credentials not related to an individual's military occupation as long as they are related to a military occupation.
<b>Relevant Legislation</b>	NDAF FY 17 (P.L. 114-328)
<b>Section Title/Summary</b>	Section 724. Modification of authority of Uniformed Services University of the Health Sciences to include undergraduate and other medical education and training programs
<b>Key Agencies Responsible</b>	Department of Defense
<b>Focus Area</b>	Establishing Credentialing Programs and Policies
<b>Status/Significance</b>	Allows USUHS to award academic credit and offer undergraduate degrees to servicemembers in allied health-related occupational areas, enhancing their ability to attain civilian certifications and licenses and to receive academic credit from USUHS that can be accepted by other colleges and universities.
<b>Relevant Legislation</b>	Executive Order 13801 of June 15, 2017
<b>Section Title/Summary</b>	Expanding Apprenticeships in America
<b>Key Agencies Responsible</b>	Department of Defense, Department of Labor, Department of Education, Federal Government
<b>Focus Area</b>	Establishing Credentialing Programs and Policies
<b>Status/Significance</b>	Allows DOL to propose regulations to promote Industry Recognized Apprenticeship Programs (IRAPs). Funds promotion of apprenticeships. Expands access to apprenticeships. Promotes apprenticeship programs at colleges and universities. Established Task Force on Apprenticeship Expansion.

<b>Relevant Legislation</b>	Harry W. Colmery Veterans Educational Assistance Act of 2017 (P.L. 115-48)
<b>Section Title/Summary</b>	Section 108. Charge to Entitlement for Certain Licensure and Certification Tests and National Tests Under Department of Veterans Affairs Post-9/11 Educational Assistance Program
<b>Key Agencies Responsible</b>	Department of Veterans Affairs
<b>Focus Area</b>	Assessment of Training and Experience and Prior Learning Towards Credential Requirements
<b>Status/Significance</b>	Permits GI Bill reimbursement for national tests that evaluate prior learning and knowledge.

<b>Relevant Legislation</b>	Harry W. Colmery Veterans Educational Assistance Act of 2017 (P.L. 115-48)
<b>Section Title/Summary</b>	Sec. 116. Department of Veterans Affairs High Technology Program
<b>Key Agencies Responsible</b>	Department of Veterans Affairs
<b>Focus Area</b>	Establishing Credentialing Programs and Policies
<b>Status/Significance</b>	Establishes a VA "Vet TEC" five-year pilot program in 2018 to enroll veterans in high-technology programs of education sought by employers in a relevant field or industry.

<b>Relevant Legislation</b>	NDAA FY18 (P.L. 115-91)
<b>Section Title/Summary</b>	Sec. 542 – Improved Employment Assistance for Members of the Army, Navy Air Force, and Marine Corps and Veterans
<b>Key Agencies Responsible</b>	Department of Defense
<b>Focus Area</b>	Assessment of Training and Experience and Prior Learning Towards Credential Requirements
<b>Status/Significance</b>	Requires DoD to establish a database to record all unclassified training performed by members of the Army, Navy, Air Force and Marine Corps that may have application to employment in the civilian sector for use by states and other entities to satisfy licensing or certification requirements.

<b>Relevant Legislation</b>	NDAF FY18 (P.L. 115-91)
<b>Section Title/Summary</b>	Sec. 546 - Authority to expand eligibility for the United States Military Apprenticeship Program
<b>Key Agencies Responsible</b>	Department of Defense
<b>Focus Area</b>	Establishing Credentialing Programs and Policies
<b>Status/Significance</b>	Expands United Services Military Apprenticeship Program beyond the Navy and Coast Guard, to all services.

<b>Relevant Legislation</b>	NDAF FY18 (P.L. 115-91)
<b>Section Title/Summary</b>	Sec. 556 – Reimbursement for State Licensure and Certification Costs of a Spouse of a Member of the Armed Forces Arising from Relocation to Another State
<b>Key Agencies Responsible</b>	Department of Defense
<b>Focus Area</b>	Establishing Credentialing Programs and Policies
<b>Status/Significance</b>	Allows each service branch to reimburse spouses up to \$1,000 for re-licensure and certification costs resulting from relocations or PCS moves that cross U.S. state lines – to include OCONUS to stateside moves.

<b>Relevant Legislation</b>	Executive Order 13845 of July 19, 2018
<b>Section Title/Summary</b>	Establishing the President's National Council for the American Worker
<b>Key Agencies Responsible</b>	Department of Commerce, Department of Labor, Executive Office of the President, Other Departments specified as co-chairs
<b>Focus Area</b>	Establishing Credentialing Programs and Policies
<b>Status/Significance</b>	Establishes executive branch policy to work with private employers, educational institutions, labor unions, other non-profit organizations, and state, territorial, tribal and local governments to update and reshape our education and job training landscape so that it better meets the needs of American students, workers and businesses. Creates President's National Council for the American Worker.

<b>Relevant Legislation</b>	VALOR ACT (P.L. 115-89)
<b>Section Title/Summary</b>	Designation of State Approving Agencies for Multi-State Apprenticeship Programs
<b>Key Agencies Responsible</b>	State Approving Agencies
<b>Focus Area</b>	Establishing Credentialing Programs and Policies
<b>Status/Significance</b>	Empowers employers to create GI Bill apprenticeship programs in multiple states, providing more on-the-job training opportunities for veterans.
<b>Relevant Legislation</b>	NDAF FY19 (P.L. 115-232)
<b>Section Title/Summary</b>	Sec. 556 - expand opportunities for servicemembers to gain professional credentials
<b>Key Agencies Responsible</b>	Department of Defense
<b>Focus Area</b>	Establishing Credentialing Programs and Policies
<b>Status/Significance</b>	Amends DoD credentialing program by striking "related to military training..." and inserting "that translate into civilian occupations."
<b>Relevant Legislation</b>	Support for Veterans in Effective Apprenticeships Act of 2019 (P.L. 116-134)
<b>Section Title/Summary</b>	Improved Apprenticeship Program Coordination Between the Department of Labor and the Department of Veterans Affairs
<b>Key Agencies Responsible</b>	Department of Labor, Department of Veterans Affairs
<b>Focus Area</b>	Establishing Credentialing Programs and Policies
<b>Status/Significance</b>	Requires written assurance from registered apprenticeship program sponsors of veterans education assistance opportunities



<b>Relevant Legislation</b>	NDAF FY 20 (P.L. 116-92)
<b>Section Title/Summary</b>	Sec. 562 - Participation of Other Federal Agencies in the Skillbridge Apprenticeship and Internship Program for Members of the Armed Forces
<b>Key Agencies Responsible</b>	Department of Defense
<b>Focus Area</b>	Establishing Credentialing Programs and Policies
<b>Status/Significance</b>	Authorizes federal government participation in the SkillBridge Program, providing opportunities for transitioning servicemembers to participate in federal agency sponsored pre-apprenticeship and training programs and potential civil service employment.

<b>Relevant Legislation</b>	NDAF FY 20 (P.L. 116-92)
<b>Section Title/Summary</b>	Sec 3511.Military to Mariner.
<b>Key Agencies Responsible</b>	Department of Defense, Department of Homeland Security, with respect to the Coast Guard when it is not operating as a service in the Navy, Department of Commerce, Department of Health and Human Services
<b>Focus Area</b>	Assessment of Training and Experience and Prior Learning Towards Credential Requirements AND Establishing Credentialing Programs and Policies
<b>Status/Significance</b>	Codifies Executive Order 13860 into law. Ensures military training and experience are considered for mariner credentialing. Requires services to operate Credentialing Opportunities On-Line (COOL). Provides selected federal agencies with direct hiring authority to employ separating servicemembers with relevant mariner credentials or sea service.

<b>Relevant Legislation</b>	Executive Order 13931 of June 6, 2020
<b>Section Title/Summary</b>	Continuing the President's National Council for the American Worker and the American Workforce Policy Advisory Board
<b>Key Agencies Responsible</b>	Department of Commerce, Department of Labor, Executive Office of the President, Other Departments specified as co-chairs
<b>Focus Area</b>	Establishing Credentialing Programs and Policies
<b>Status/Significance</b>	Continuation/extension of Executive 13845 (noted above).

<b>Relevant Legislation</b>	Johnny Isakson and David P. Roe, M.D. Veterans Health Care and Benefits Improvement Act of 2020*
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<b>Section Title/Summary</b>	Sec. 1013 - Oversight of Educational Institutions with Approved Programs: Risk-Based Surveys
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<b>Key Agencies Responsible</b>	Department of Veterans Affairs
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<b>Focus Area</b>	Ensuring the Quality of Credentials
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<b>Status/Significance</b>	Provides greater authority to State Approving Agencies to conduct risk-based surveys at institutions and training providers under investigation for misconduct
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<b>Relevant Legislation</b>	Johnny Isakson and David P. Roe, M.D. Veterans Health Care and Benefits Improvement Act of 2020*
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<b>Section Title/Summary</b>	Sec. 4302 – Expansion of Eligible Class of Providers of High Technology Programs of Education for Veterans
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<b>Key Agencies Responsible</b>	Department of Veterans Affairs
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<b>Focus Area</b>	Establishing Credentialing Programs and Policies
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<b>Status/Significance</b>	Lowers barriers for training providers to participate in the Vet TEC program.
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<b>Relevant Legislation</b>	Johnny Isakson and David P. Roe, M.D. Veterans Health Care and Benefits Improvement Act of 2020*
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<b>Section Title/Summary</b>	Sec. 4303 - Pilot Program for Off-Base Transition Training for Veterans and Spouses
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<b>Key Agencies Responsible</b>	Department of Veterans Affairs
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<b>Focus Area</b>	Establishing Credentialing Programs and Policies
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<b>Status/Significance</b>	
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<b>Relevant Legislation</b>	Johnny Isakson and David P. Roe, M.D. Veterans Health Care and Benefits Improvement Act of 2020*
<b>Section Title/Summary</b>	Sec. 1106 – Apprenticeship or On-Job Training Requirements
<b>Key Agencies Responsible</b>	State Approving Agencies
<b>Focus Area</b>	Establishing Credentialing Programs and Policies
<b>Status/Significance</b>	Allows GI Bill apprenticeship students to roll prior monthly hours into 120-hour requirement for GI Bill benefits.
<b>Relevant Legislation</b>	Executive Order 13966 of December 14, 2020
<b>Section Title/Summary</b>	Increasing Economic and Geographic Mobility
<b>Key Agencies Responsible</b>	Department of Commerce, Department of Labor, Office of Management and Budget
<b>Focus Area</b>	Establishing Credentialing Programs and Policies
<b>Status/Significance</b>	This order expands the Feb. 24, 2017, EO 13777 to alleviate regulatory burdens on occupational licensing, specifically by building on occupational licensing reforms enacted recently in Arizona, Florida, Iowa, Missouri and South Dakota.
<b>Relevant Legislation</b>	NDAAs FY 2021
<b>Section Title/Summary</b>	Sec. 572 - Expansion of SkillBridge Program to include the Coast Guard
<b>Key Agencies Responsible</b>	Department of Homeland Security
<b>Focus Area</b>	Establishing Credentialing Programs and Policies
<b>Status/Significance</b>	Allows for the U.S. Coast Guard to participate in the SkillBridge program.

<b>Relevant Legislation</b>	NDAAs FY 2021
<b>Section Title/Summary</b>	Sec. 578 – Improvements to the Credentialing Opportunities On-Line Programs of the Armed Forces
<b>Key Agencies Responsible</b>	Department of Defense
<b>Focus Area</b>	Establishing Credentialing Programs and Policies
<b>Status/Significance</b>	Requires a report to study additional performance measures for the COOL programs.

<b>Relevant Legislation</b>	NDAAs FY 2021
<b>Section Title/Summary</b>	Sec. 579 – GAO Study Regarding Transferability of Military Certifications to Civilian Occupational Licenses and Certifications.
<b>Key Agencies Responsible</b>	Government Accountability Office
<b>Focus Area</b>	Establishing Credentialing Programs and Policies
<b>Status/Significance</b>	Requires GAO to conduct a study on the transferability of military certifications to civilian occupational certifications and licenses.

\*As of 1/5/2021 – this legislation has passed the Senate, but was not yet signed by the president.



## Appendix E - References

The following references provide additional information on the topics covered in this report.

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