



BOOTS to BUSINESS

from the U.S. Small Business Administration

White Paper: Operation Boots to Business Veteran Entrepreneurship Assessment

Written by the Institute for Veterans and Military Families at Syracuse University
in cooperation with the U.S. Small Business Administration

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EXECUTIVE SUMMARY

Small businesses are vital contributors to the U.S. economy, and veteran-owned small businesses are a historically important, and presently growing, segment of U.S. small businesses. There are currently 2.5 million veteran-owned businesses in America representing 9.1 percent of all U.S. businesses that combined generate about \$1 trillion in receipts and employ nearly 6 million Americans. These numbers have risen over recent years despite a decline in the overall number of veterans in the population.

Many veterans have both the skills and the motivation to continue serving their country by building a business and creating jobs for themselves, their neighbors, and other veterans. What they need to succeed is the knowledge and awareness of the tools and services available to support their business ownership pursuits. America has both an unquestioned responsibility and a compelling incentive to empower veteran entrepreneurship by providing the needed knowledge and support at the most critical time - before and during their transition from active duty. This is done today through the Entrepreneurship Track of the Department of Defense's Transition Assistance Program (TAP) - known as Boots to Business (B2B).

B2B is administered by the U.S. Small Business Administration (SBA) in collaboration with other U.S. government agencies and through a network of non-profit partners that provide instruction and business expertise and technical assistance to program participants. Since its inception in 1953, the SBA has served to aid, counsel, assist, and promote the interests of small businesses. While SBA is best known for its financial support of small businesses through its many lending programs, the Agency also plays a critical role in providing funding to organizations that deliver technical assistance to small business concerns and nascent entrepreneurs to promote growth, expansion, innovations, increased productivity, and management improvements. SBA's Office of Veterans Business Development (OVBD) exists specifically to empower veteran entrepreneurship by formulating, executing and promoting policies and programs to assist veteran small business ownership through education, access to capital, and access to federal contracting and other market opportunities, as well as administering the Veteran Business Outreach Center Program (VBOC).

Since its inception in January 2013, B2B has been a two-step entrepreneurial education and training program for service members and their dependents that includes a two-day introductory course and a follow-on eight-week foundational course. Eligibility for the program expanded in 2015 to veterans of all eras via Boots to Business: Reboot and to active duty service members and their dependents prior to their transition as part of the DoD's military life cycle model. The program not only prepares service members for post-service career success as business owners - a vocation that harnesses many of their skills and traits acquired through military service - but also represents a compelling post-service benefit that will contribute to attracting America's finest to serve in the first place.

In an effort to continuously evolve and improve by understanding and meeting the needs of active and transitioning service members, their dependents, and veterans interested in business ownership, SBA in cooperation with its B2B program partner - The Institute for Veterans and Military Families (IVMF) at Syracuse University - engaged in research on today's veteran entrepreneurship environment and collected and analyzed the outcomes of Boots to Business to date on the business ownership initiatives of its participants. This white paper examines the current state of training available to the veteran population and discusses the results of a recent outcomes assessment survey of B2B program participants that begin to show the impact of the program on veteran business ownership initiatives.

Literature discussing and data on veteran entrepreneurship is limited. Only recently has there been an interest in veterans' post-service experiences as business owners. The majority of scholarly research on veteran entrepreneurial activity uses analysis of U.S. Census Bureau and Small Business Administration data which can illustrate the end results with some accuracy but misses describing the journey from concept to successful business ownership. In recent years, there has been an influx of veteran entrepreneurial training programs to meet the needs of a growing veteran population entering the civilian workforce; however, there are few studies on the impact of these education programs on satisfying the entrepreneurial initiative demonstrated by many of the active duty, transitioning, and veteran population - particularly after the veteran has launched his or her start-up. There is great opportunity and potential for examination of the topic - especially concerning the internal and external factors that push veterans to launch new business ventures and, ultimately become successful entrepreneurs.

To examine the segment of the emerging veteran population represented in the B2B program, an assessment and evaluation was developed to capture entrepreneurial intentions, motivations of the participants, and efficacy of the training. By design, this evaluation goes further to explore factors that contribute to or discourage an entrepreneurial motivation. The Outcomes Assessment Survey was developed to ensure the B2B program remains focused on the needs of the service member and to capture short and long-term metrics that link entrepreneurial behaviors and strategies trained in the B2B program, to knowledge-based and economic outcomes reflected in the post-training actions of program participants.

Results from the initial survey suggest service members, both young and old, are interested in business ownership. Many are beginning the path towards business ownership while still in service and using entrepreneurial support services to adjust their path as resources are learned. The B2B program appears useful in helping inform and support business ownership initiatives, and success rates are encouraging. Current insights are limited to about a three-year timeframe, but as the B2B program continues to communicate with and examine the transitioning service member population and other segments of the veteran business ownership population, a more detailed understanding of the programs impact and the opportunities, challenges, and resource needs for aspiring veteran entrepreneurs will become evident.

1. VETERAN ENTREPRENEURSHIP: STATE OF KNOWLEDGE AND PROGRAMMING

1.1 Literature on Veteran Entrepreneurship

The current literature of veteran entrepreneurship is limited. The proliferation of interest in veterans' post-service experiences as business owners is a recent development. Policy-oriented scholarship is almost exclusively found in legal journals, with primary focus on contracting and fraud issues around service-disabled veteran-owned small businesses. The current limited academic literature on veteran entrepreneurship is primarily descriptive or bivariate analysis of U.S. Census Bureau and Bureau of Labor Statistics (BLS) data. Almost all of the current research on veteran entrepreneurship has been sponsored by the U.S. Small Business Administration (SBA).

As mentioned above, the majority of scholarly research on veteran entrepreneurial activity has used analysis of Census Bureau and SBA data. Lichtenstein¹, Sobota, and Lichtenstein² have been academic leaders in analyzing SBA data; their articles have been important contributions to the literature because they use the most up-to-date information and data on veteran-owned businesses. For example, both articles have been instrumental in identifying demographic characteristics of veteran entrepreneurs (i.e., increasing business ownership among female and Hispanic veterans since 2008). Haynes' contributions to the literature details the net worth and income of veteran households, primarily those who own businesses.³ Finally, Fairlie uses data extracts from every month of Current Population Survey (CPS) data from 1996 to 2011 to estimate entrepreneurship rates among veterans.⁴ Fairlie found that, over the last sixteen years, veteran entrepreneurship rates have generally been higher than non-veteran entrepreneurship rates.

Within the veteran entrepreneurship literature there is a major gap in analyzing the factors that affect entrepreneurship among veterans. Hope, Oh, and Mackin analyze some general trends, including the general inverse relationship between length of service and likelihood of self-employment post-transition.⁵ The authors also argue that individual characteristics (as opposed to military training) may be the leading driver for younger veterans. Avrahami and Lerner analyzed a sample of service members in the Israeli military and found that combat service and risk-taking propensity were the main variables distinguishing entrepreneurs from non-entrepreneurs in the regression of the sample.⁶ While these two articles focused on individual factors that shape entrepreneurial ventures, a SBA paper suggested that there are outside factors that play a role in veteran entrepreneurship, particularly the ability to obtain financing and the availability of public or private sector small business programs.⁷ Unfortunately, the section of the literature related to factors affecting entrepreneurship is essentially limited to these three articles. We would encourage academics and researchers to investigate these factors in greater depth and breadth in future research on veteran entrepreneurship.

Given the recent inception of veteran-oriented entrepreneurial training programs, there have been very few studies on the impact of education programs on veterans' entrepreneurial initiatives. While some studies⁸ in the entrepreneurship literature have cited positive correlations between entrepreneurial education, firm growth, and venture expansion, the impact of entrepreneurial education on veterans and the successes of their business ventures are not as clear or as extensively studied. However, in the only academic study on veteran-oriented entrepreneurial training programs, Kerrick, Cumberland, Church-Nally, and Kemelgor note that entrepreneurial initiatives and networking activities, in the civilian sector, can be influenced by a structured training program involving classwork and ongoing mentorship and engagement.⁹

While mainstream entrepreneurship literature is committed to exploring characteristics of entrepreneurs and how those characteristics influence their business successes, there has been limited academic research conducted on an important entrepreneur sub-group: veterans. However, the SBA has been highly active in collecting and publishing data on veteran-owned businesses.¹⁰ The SBA's reports exhibit clear strengths, but some gaps remain in understanding veteran entrepreneurship. Note that a frequent problem for researchers is that veteran-owned businesses do not consistently identify their status as veteran-owned; thus, this prevents researchers and academics from studying and analyzing the veteran-owned business market. Accordingly, researchers and policymakers should take efforts to improve the data quality on identified veteran-owned businesses, and to capture true veteran-owned businesses that are not yet identified in any source (which is a problem since most veteran-owned businesses are so small that they do not appear in listings or directories). Additionally, government and private sector business surveys should include identifiers for veteran status and service-disabled veteran status.

In all, the literature on veteran entrepreneurship today is nascent, but there is great promise and potential for growth in the field, especially concerning the internal and external factors that push veterans to launch new business ventures and, ultimately, become successful entrepreneurs. It is vital that further research be pursued to collect data and analyze veterans' business experiences, particularly related to motivating factors and business success and failure. We appreciate the current proliferation of academic research on federal veteran-oriented programs, and we hope that these studies of federal program effectiveness will continue in the future.

1.2 Existing Policy and Programs

Since the mid-2000s, there has been a proliferation of public and privately sponsored programs promoting veteran entrepreneurship—including the SBA's B2B program. In addition to the SBA, a few organizations have joined the effort to inform and support veteran business ownership initiatives. The Entrepreneurship Boot Camp for Veterans with Disabilities (EBV) and Veteran Entrepreneurship Program (VEP) are examples of programs offered throughout the year in multiple locations through several consortia of American universities. EBV provides veterans experiential training in entrepreneurship and small business management. The Veteran Women Igniting the Spirit of Entrepreneurship (V-WISE) program educates and trains women veterans and female military spouses or partners seeking out entrepreneurship as a potential career path. The Bunker and Patriot Boot Camps are two more examples of non-academic veteran entrepreneurship programs that focus on attracting capital, investors, and alternative investment opportunities for veteran-owned startups. Finally, the Coalition for Veteran-Owned Businesses (CVOB) is a growing effort to bring together civilian industry leaders who are committed to providing innovative solutions and thought leadership to grow and support veteran-owned businesses by connecting veteran businesses with market opportunities to augment their growth.

Despite the scant and largely descriptive academic work on veteran entrepreneurs, the SBA and Government Accountability Office (GAO) have focused some attention on federal programs and policies supporting veteran entrepreneurship. Dilger and Lowry from the Congressional Research Service (CRS) published a report on SBA's programs, particularly related to the employment assistance programs offered by different federal agencies to assist veterans in their transition from the military to the civilian labor force.¹¹ The GAO, Best, and Sherman also conducted separate analyses of the Department of Veterans Affairs' Service-disabled Veteran-Owned Small Business (SDVOSB) program.¹² The GAO found potential vulnerabilities to abuse and fraud within the program, while Best and Sherman observed challenges and obstacles to meeting federal contracting goals for SDVOSBs. Sherman particularly notes what revisions, if any, might be necessary to make the Veterans Benefit Act of 2003 a success, and whether the Act is the best vehicle for providing assistance to the service-disabled veteran community. Finally, Korsak discusses the current relationship between SDVOSBs and the federal government in regards to federal contracts.¹³

Beyond the aforementioned, little has been published to date on the short- and long-term outcomes of these policies and programs. Part of this stems from constraints to data collection and long-term tracking of participants. A clear need exists for increased data collection and data sharing to support performance based analysis of existing programs and policy development. The effort captured in this white paper is a positive step to address this need.

1.3 Future Research and Data Needs

Analysis of federal data (i.e. CPS, SBO, and DMDC) continually shows that military service has a strong association with veteran entrepreneurship. Veterans are at least 45 percent more likely than those with no active-duty military experience to be self-employed.¹⁴ However, research has also found a negative association between time in service and entrepreneurship, except among veterans with twenty or more years of service (career veterans).¹⁵ Research is needed to further examine what factors contribute to the positive association between entrepreneurship and longer careers in the military. Given the start-up costs of starting a business, research is needed on whether longer military service better positions veterans financially for their own business.¹⁶

Service-disabled veterans are self-employed at a rate significantly lower than the veteran population as a whole. 2007 data shows that only 8.3 percent of veteran businesses are started by a veteran with a service-connected disability. Given the opportunities that entrepreneurship can allot an individual, it would be beneficial to investigate what attracts or deters veterans with a service-connected disability to entrepreneurship. This investigation should also examine what, if any, additional resources veterans with a service-connected disability need to start a business. Veterans who have a service-connected disability may find self-employment a more attractive option than traditional employment because of the flexibility and accommodating work environment but currently there is not research to support such speculation.

Research suggests that recent acts and amendments to assist SDVOSB firms to gain contracts have fallen short.¹⁷ Research is needed on how information about the services SDVOSB firms offer can be better conveyed so SDVOSB firms are better able to attract contracts.¹⁸ Additionally, researchers assert that the entrepreneurial programs currently available to veterans with a service-related disability are often unknown to veterans.¹⁹

The studies cited in the previous section highlight that there is a gap in veteran entrepreneurship research that investigates whether the available services, programs, and trainings are adequately serving veterans most in financial need, particularly after the veteran has officially launched his/her start-up. Additionally, the methodology of the SBO suggests that there is potential for research to be conducted on failed veteran-owned businesses, particularly the ones with few employees and small earnings. Though studies on racial and gender minorities are increasing, there is still an apparent gap in veteran entrepreneurship research and minority groups.²⁰

What additional data sets are needed?

There are many large nationally representative datasets based on household surveys, but these datasets include only limited information on the owner's business. Household surveys typically include only the owner's income from the business and the industry of the business. Data on entrepreneurship, self-employment, and small business is limited. A major challenge for researchers is finding data that includes detailed information on both the characteristics of the owner and the characteristics of the firm while being representative.²¹ Information and characteristics of the business owner such as gender, age, veteran status, and education are all important to understand the relationship between business ownership and the business performance outcomes. Few datasets contain large enough samples of underrepresented groups such as gender and veteran status along with businesses characteristics and outcomes.²² Much of the data that is available is cross-sectional data. Although much can be learned from these datasets more longitudinal data is needed to understand success and longevity of businesses. Some researchers have indicated that longitudinal data can be created by linking CPS files over time, which allows for the examination of business creation.²³

What research approaches are possible and practical?

Though a majority of the data available for analysis is quantitative, the gaps in the literature highlight the need for qualitative data that explores the nuance of veteran entrepreneurship, particularly for disadvantaged veterans in addition to more quantitative studies that show trends in the veteran population.

There are mixed-method studies on veteran entrepreneurship that focus on overall trends and individual experiences.²⁴ CPS and SBO are examples of research approaches that attempt to gather data from the population. However, due to sampling and response biases, some veteran business owners might be excluded from the studies.

Despite the gaps in veteran entrepreneurship research, the current literature illuminates specific issues that need to be addressed, such as providing adequate support to veterans with a service-connected disability who are business owners. In such cases, predictive research that examines associations and tests current programs might be quicker and more effective in highlighting specific changes that can be made. Analytical/exploratory studies might be beneficial in learning more about the specific needs of understudied veteran groups, including veterans with less financial resources. Analytical/exploratory studies, though often quantitative, would present information on particular issues groups are facing in becoming a veteran entrepreneur and begin to describe potential reasons for setbacks or struggles.

How must government statistical agencies and private sector share data to support addressing research questions?

Sharing data is becoming increasingly important. Studies have found that making data available to the public and agencies increases the value of the data.²⁵ Increased availability of data allows for better access to the right data, which can lead to continued rigorous studies and knowledge. Furthermore, often necessary studies or policy decisions are not conducted because of data not being available or easily locatable.²⁶ Recently, there have been many efforts to encourage data sharing amongst governmental agencies. In 2010 a memorandum was sent from Jeffery D. Zients, Deputy Director for Management in the Executive Office of the President, Office of Management and Budget encouraging departmental agencies to share data and reminding them of the benefits of sharing data when done in compliance with privacy laws.²⁷ This memorandum serves as a re-enforcement that making data available to other agencies, and the public, can greatly assist research efforts and policies.²⁸

Efforts to increase availability of data to the public and across departments are becoming more widespread. Several federal agencies have enhanced the sharing of data across federal agencies. For example, the Department of Education, Department of Labor, and the Department of Health and Human Services share longitudinal data.²⁹ Retrieval of data related to veteran entrepreneurship stresses the benefits of departments sharing data, and perhaps the conducting of projects. However, currently, access to data is separate, with each departmental agency having its own data. Though barriers exist, such as privacy issues, sharing of data between federal agencies and with the public can reduce costs, improve services, and allow for more accurate assessments.³⁰

Several organizations in the private sector are collecting data on topics related to veterans, such as veteran entrepreneurship. Like many governmental agencies, sharing of data between other private sector organizations, governmental agencies, and the public can at times be sparse. However, initiatives are in place to increase knowledge between the public, the government, and private organizations. For example, to assist veterans ascertain a job or become an entrepreneur; the U.S. Chamber of Commerce Foundation Hiring Our Heroes initiative conducts the Service Member Transition Summits.³¹ Though the Summits are not a data-sharing initiative, they are an example of how partnering together benefits veterans and the U.S. economy.

Recognizing the importance and crucial need for governments and the private sector to share data, the United Nations created Global Pulse, an initiative focused on sharing data. The United Nations Global Pulse and the Data and Society Research Institute hold forums on data sharing: Responsible Data Forums on Private Sector Data Sharing.³² Though there are

ethical and privacy issues that should be addressed before data is shared, it is apparent that data sharing with the public, other organizations, and the government is necessary to produce meaningful outcomes.

President Obama's Administration committed to increasing access to data, by launching the open data Website, <http://data.gov>, in 2009.³³ This resulted in an influx of valuable data being available to the public and the private sector, with cities such as Chicago and San Francisco following suit. While this commitment and increase in open data has certainly improved access to data, the White House might continue exploring ways to safely share data with the public, private sector, and governmental agencies and introduce policies when necessary to ensure data sharing.

1.4 Veteran-owned Business – A Pillar of American Economic and Community Leadership

Small Business Impacts

In 2013, according to U.S. Census Bureau data, there were 5.75 million employer firms in the U.S. Firms with fewer than 500 workers accounted for 99.7 percent of those businesses, and businesses with less than 20 workers made up 89.5 percent.³⁴ Needless to say, small businesses significantly contribute to the U.S. economy. As a result, economic growth and stability is dependent upon the success of small businesses. Small businesses have a more direct effect on job creation and revenue than large businesses.³⁵ Review of studies spanning the 1980's and 1990's show that small businesses continually generate at least 80 percent of new net jobs.³⁶ The contribution of small businesses is evident when examining how small businesses were essential in reducing the negative economic impact of Hurricane Katrina in 2005. Small businesses helped in the rebuilding of disaster ridden communities and the distribution of supplies. As a result, in 2006, Congress mandated the utilization of local small businesses in federal contracts.³⁷ Thus, it can be argued that small businesses are central to the economy, especially in regards to job creation and production.³⁸ However, in recent years, there has been a downward trend in new small businesses.³⁹ Additionally, the creation of policies and the enforcement of policies that would benefit small businesses are often lacking.⁴⁰

Veteran Population

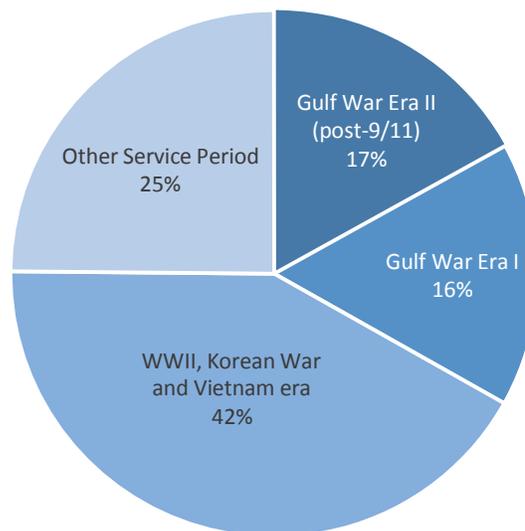
To understand the context of veteran entrepreneurship it is important to know the population and employment situation of veterans. The U.S. Department of Veterans Affairs (VA) estimates the contemporary, total veteran population at about 22.3 million. A slightly lower number is reported from annual averages in the most recent Current Population Survey (2015) at the U.S. Department of Labor's Bureau of Labor Statistics: 21.2 million living, U.S. military veterans, about 9 percent of the total U.S. population.⁴¹ Based on the same report, most recent U.S. Census data available, Gulf War era II (Post-9/11) veterans comprise a cohort of about 3.5 million individuals — 17 percent of all U.S. military veterans but only 1.5 percent of the U.S. population. Gulf War I veterans (those serving between August 1990-August 2001) represent a cohort of about 3.4 million individuals—or 16 percent of all veterans. Combined, both Gulf War era veterans represent 2.9 percent of the U.S. population. Those among the World War II, Korean War, and Vietnam veteran populations (combined) represent the largest and oldest veteran cohort of 8.9 million individuals or about 42 percent of all U.S. military veterans (representing 3.7 percent of the U.S. population). Veterans that are classified in "Other Service Period"—those with service during peacetime periods—represent a cohort of about 5.2 million individuals—or 25 percent of all U.S. military veterans.

Table 1. Veteran Population by Period of Service, CPS 2015

<i>Total Population</i>	<i>Estimated Number</i>	<i>Percent</i>
All Americans (18 and over)	241,949,000	
Non-veterans	220,740,000	91%
All veterans	21,209,000	9%
<i>Period of Service</i>		
<i>Period of Service</i>	<i>Estimated Number</i>	<i>Percent</i>
Total Veteran Population	21,209,000	
Gulf War Era II (post-9/11)	3,594,000	17%
Gulf War Era I	3,440,000	16%
WWII, Korean War and Vietnam era	8,901,000	42%
Other Service Period	5,273,000	25%

NOTE: Bureau of Labor Statistics, Current Population Survey, 2015 annual averages, population 18 and over, not seasonally adjusted. For this data, veterans who served in more than one wartime period are classified by the most recent wartime period of service only.⁴²

Figure 1. Period of Service, CPS 2015



NOTE: Bureau of Labor Statistics, Current Population Survey, 2015 annual averages, population 18 and over, not seasonally adjusted.

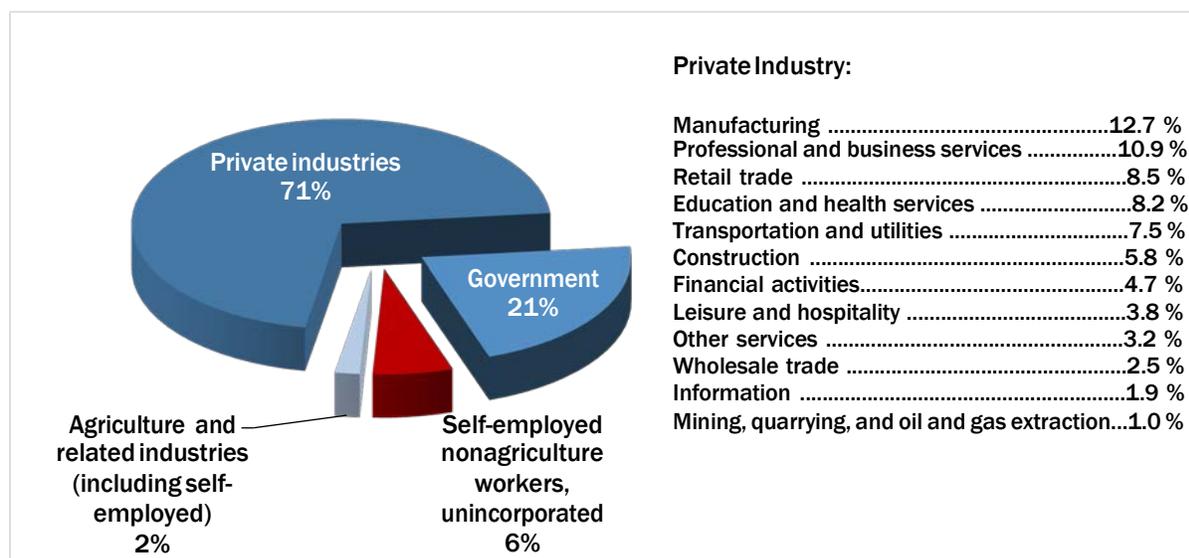
For Active Duty personnel, the most recent U.S. Department of Defense (DoD) Defense Manpower Data Center (DMDC) data indicates a population of about 1.4 million service members⁴³ and about 824,757 service members⁴⁴ in the Selected Reserves. Veterans, thus, represent about 9 percent of the total U.S. population, while active duty/activated selective reserves represent about one percent of the total population. This number—one percent—is what commentators reference when noting the small size of the U.S. armed forces. It is estimated that more than 200,000 service members are transitioning from the military each year and projected that more than 1 million will transition over the next five years.⁴⁵

Veteran Employment

Veteran Employment within Industry and Labor Market Categories

Figure 2 presents the distribution of veterans in the labor market by industry sector. Approximately 71 percent of all employed veterans work in private (nonagricultural that includes wages and salary) industries; manufacturing (12.7 percent), professional and business services (10.9 percent), retail trades (8.5 percent), and education and health service (8.2 percent). Public sector employment remains an important channel through which veterans engage the labor market (21 percent), as does self-employment, unincorporated, as a post-service vocation (6 percent).⁴⁶

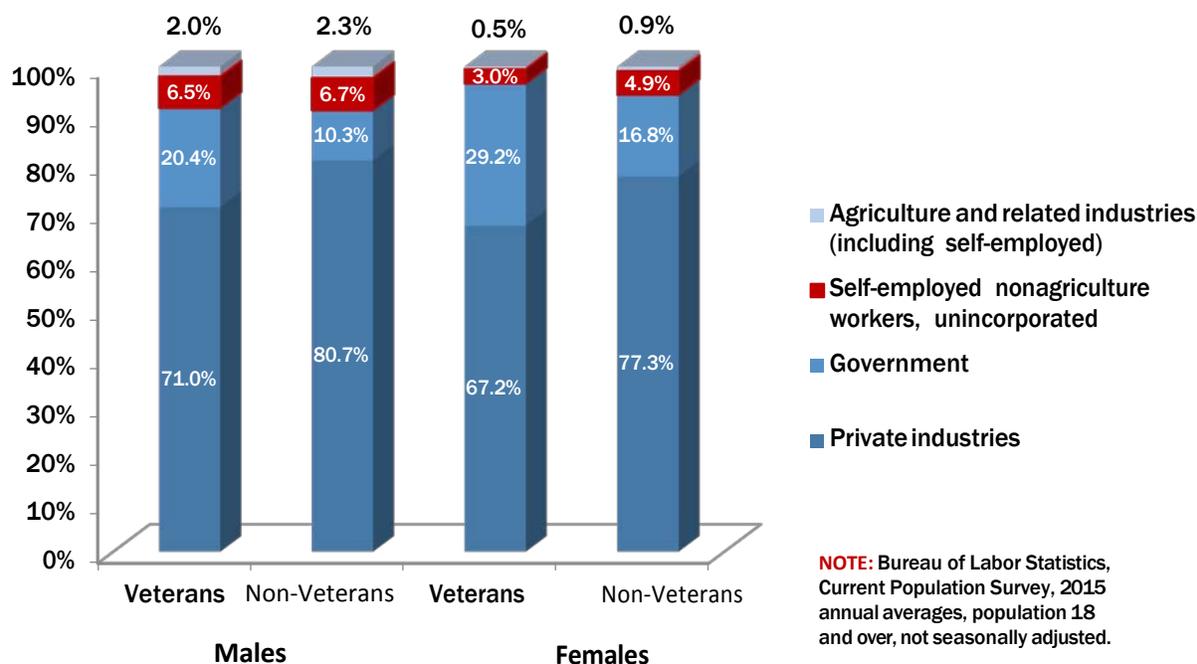
Figure 2. Distribution of Employed Veterans by Industry, 2015



NOTE: Bureau of Labor Statistics, Current Population Survey, 2015 annual averages, population 18 and over, not seasonally adjusted.

Figure 3 presents an overview of the nation's employment composition by labor market category, as a function of veteran status and gender. Summary data suggests that veterans are more likely to be employed by government, as compared to non-veterans. However, the overwhelming majority of veterans and non-veterans continue to be employed in private-sector (nonagricultural that includes wages and salary) industries. Self-employed workers whose businesses are incorporated are counted as wage and salary workers because technically they are employees of their business. As for self-employed workers, unincorporated, slightly more male non-veterans are self-employed (6.7 percent) as compared to male veterans (6.5 percent), while the self-employment rate for female veterans (3.0 percent) is smaller than female non-veterans (4.9 percent).

Figure 3. Distribution of Employed Veterans and Non-Veterans by Gender and Labor Market, 2015



Rates of Self-Employment by Veteran Status and Period of Service

Figures 4, 5, and 6 present the self-employment rate for veterans by year, as a function of veteran status. When combining the incorporated and unincorporated self-employment rates data shows that veterans are more likely to be self-employed, as compared to non-veterans. However, since 2012, the percentage of self-employment has dropped slightly compared to pre-2012 levels (see Figure 4). As you can see in Figure 5, the overwhelming majority of veterans that are self-employed as from the World War II, Korean War, and Vietnam era (24 percent in 2015) followed by those in the Other category (peacetime periods; 13 percent in 2015), then by Gulf War I veterans (8 percent in 2015), and last by post-9/11 veterans (4 percent in 2015). The majority of veteran self-employed are unincorporated as compared to incorporated and are slightly de-

Who Is a Self-Employed Worker?

“Self-employed people work for profit or fees in their own business. They could be sole proprietors of their business or own it in partnership with others. Also, the businesses run by self-employed workers may assume any of several legal forms, including incorporation. A business that is incorporated—a corporation—is an independent legal entity owned by shareholders. The corporation itself is liable for the actions of the business, not the shareholders.

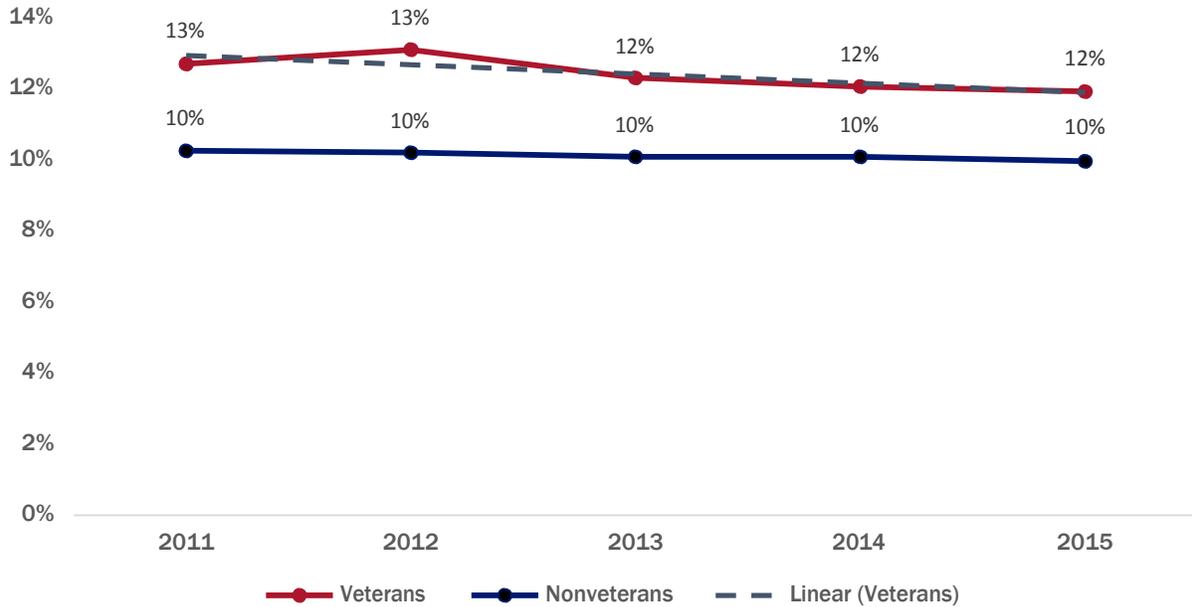
Self-employed workers whose businesses are incorporated are sometimes counted as wage and salary workers because technically they are employees of their business.

In the Current Population Survey (CPS), workers identify themselves as self-employed in response to a question on whether they were employed by a private company, a nonprofit organization, or the government, or if they were self-employed. The final count of self-employed workers in the CPS reflects some fine tuning, such as the exclusion of people working without pay in a family business or farm.”

SOURCE: <http://www.pewsocialtrends.org/2015/10/22/three-in-ten-u-s-jobs-are-held-by-the-self-employed-and-the-workers-they-hire/>

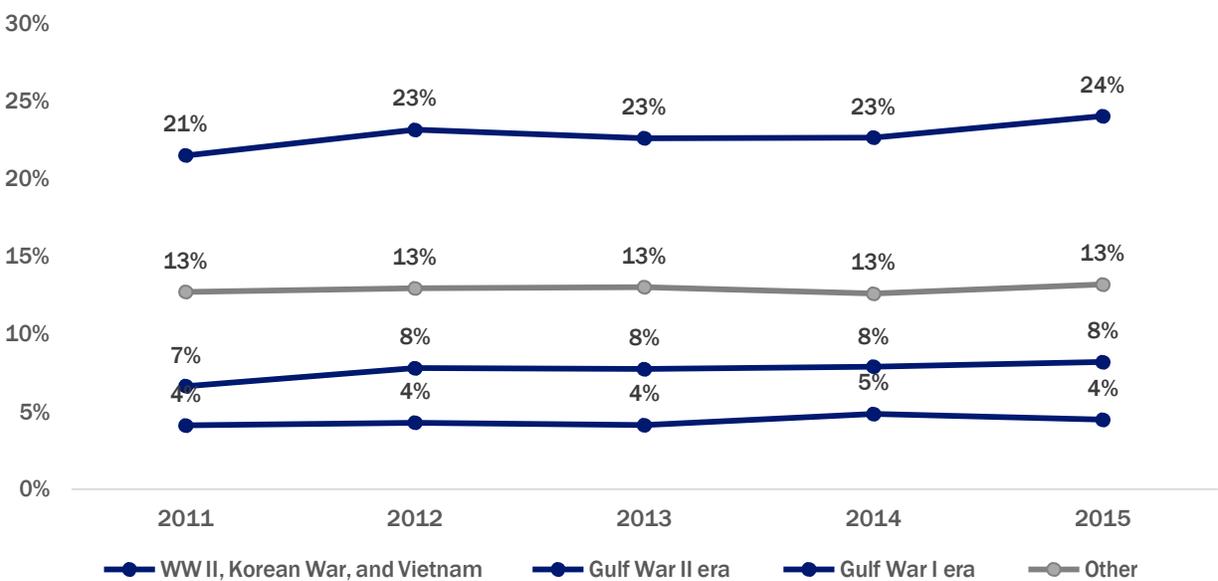
creasing compared to pre-2012 levels (see Figure 6).

Figure 4. Self-Employment Rates for Veterans and Non-Veterans (Incorporated & Unincorporated), 2011-2015



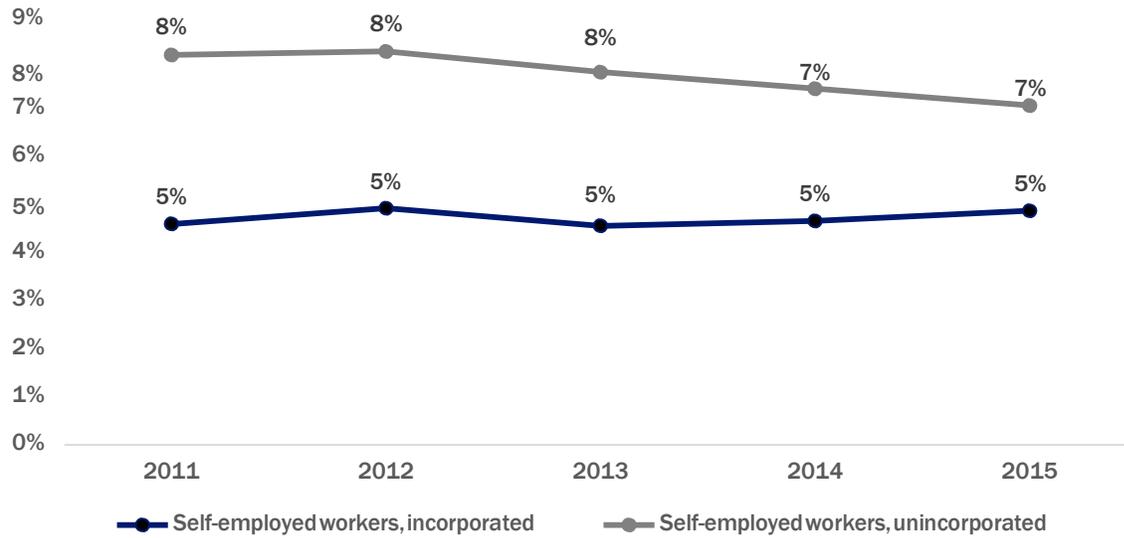
NOTE: Bureau of Labor Statistics, Current Population Survey, 2015 annual averages, population 18 and over, not seasonally adjusted.

Figure 5. Self-Employment Rates by Period of Service (Incorporated & Unincorporated), 2011-2015



NOTE: Bureau of Labor Statistics, Current Population Survey, 2011-2015 annual averages, population 18 and over, not seasonally adjusted.

Figure 6. Self-Employment Incorporated & Unincorporated Rates for Veterans, 2011-2015



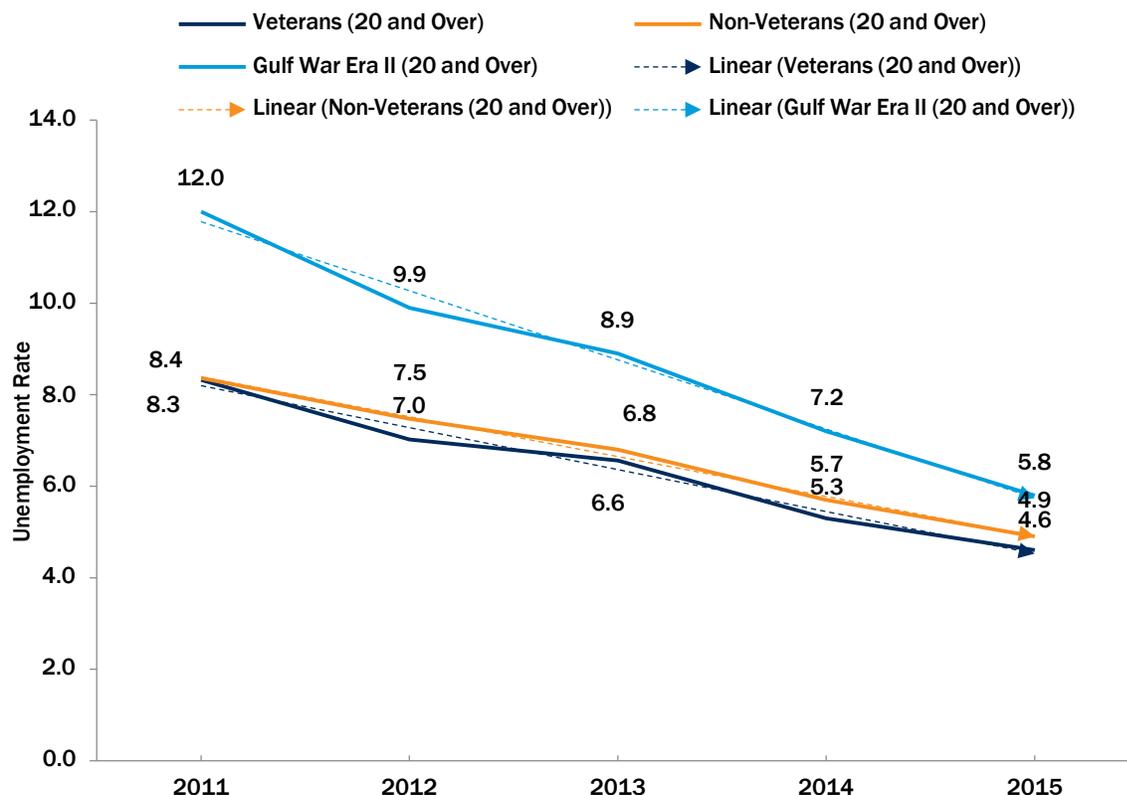
NOTE: Bureau of Labor Statistics, Current Population Survey, 2011-2015 annual averages, population 18 and over, not seasonally adjusted.

Unemployment

Overall, the unemployment rate for veterans in 2015 was 4.6 percent, which is down from 5.3 percent in 2014. The Gulf War era II (post-9/11) veterans have the highest unemployment rate which was at 5.8 percent in 2015, down from 7.2 percent in 2014. While the post-9/11 veterans have decreased in their unemployment rates those ages 18-24 still maintain the highest rate of unemployment at 13 percent.

When looking at the most recent group of veterans the unemployment rate of female post-9/11 veterans has decreased from 8.5 percent in 2014 to 6.4 percent in 2015. For comparison, female non-veterans were unemployed at a rate of 5 percent in 2015. The unemployment rate of male post-9/11 veterans has also decreased from 6.9 percent in 2014 to 5.7 percent in 2015. For comparison, male non-veterans were unemployed at a rate of 5.3 percent in 2015. The 9.3 percent unemployment rate experienced by African-American post-9/11 veterans is slightly lower to their non-veteran counterparts, at 9.4 percent. Hispanic post-9/11 veterans have an unemployment rate of 6.5 percent, slightly higher than that of their non-veteran counterparts at 6.4 percent.

Figure 7. Unemployment Rate for Veterans and Non-Veterans, 2011-2015



NOTE: Bureau of Labor Statistics, Current Population Survey, 2011-2015 annual averages, population 18 and over, not seasonally adjusted.

Veteran Entrepreneurship

Veteran entrepreneurship has been increasing. In 2007, veterans comprised 8.9 percent of all U.S. businesses. In 2012, the percentage increased to 9.1 percent or from 2.4 million to 2.5 million veteran-owned businesses. When including those veterans that are half-owners the number increases to 3.1 million, representing 11.3 percent of all businesses nationwide. Several states were found to have a high number of veteran-owned businesses: California (252,377) and Texas (213,590) had the highest number of veteran-owned businesses, with Los Angeles County having the highest number of veteran-owned businesses by county. Of the 50 most populous cities in 2012, Virginia Beach had the highest proportion of veteran-owned businesses with 15.2 percent.⁴⁷

In 2007, 8.3 percent of veteran business owners have a service-connected disability and that most veteran-owned businesses were in scientific, professional, and technical services, or construction. Veteran-owned businesses were typically owned by males. Non-Hispanics and whites comprised a higher percentage of the veteran owners. Veteran-owned businesses included home-based, family-based, and franchise. Most veterans gained capital to start up the business from personal funds or family, with loans being the second source of funding. Veterans who owned businesses varied in highest level of education attained; a majority of the veteran business owners were age 55 or older.

Similar to 2007, in 2012 most veteran-owned businesses were located in California, Texas, New York, or Georgia. Military veterans owned 2.4 million businesses in 2007, which accounted for 9 percent of all businesses nationwide. In 2012, the number of veterans owned businesses increased to 2.5 million (a 3 percent increase from 2007; 9 percent of all businesses nationwide in 2012).

Veteran Entrepreneurship Contribution to the Economy

In 2012, the 2.5 million veteran-owned businesses generated \$1.1 trillion in receipts or about 3.4 percent of all business receipts in 2012, and employed over 5 million people. Business in which veterans were majority or half-owners numbered 3.1 million, representing 11.3 percent of all businesses nationwide and accounting for more than \$1.4 trillion in receipts in 2012. These 3.1 million businesses employed 6.7 million people.⁴⁸

Veteran questions were revised and expanded in the 2012 SBO survey, when the full data is available further demographic analysis can include:

- service-disabled veterans
- those that served on active duty or as a reservist during the survey year
- those that served on active duty at any time
- those that served active duty after September 11, 2001.

2. BOOTS TO BUSINESS PROGRAM BACKGROUND

2.1 The Need in Context

Since September 2001 and the conception of the B2B program, more than 2.5 million service men and women have transitioned from military to civilian life, many after having served multiple tours of duty. Providing services to assist the transition back to civilian life for this demographic was, and remains, imperative to this growing veteran population. Services and assistance including counseling on how to start and grow a small business – is not only a moral responsibility to our service members but a strategy that will assist in continuing to grow the U.S. economy. As the U.S. economy continues to strengthen in the wake of a major recession, the Federal Government’s efforts to help small businesses – responsible for 2/3 of new jobs created each year – must remain strong. When veterans turn toward entrepreneurship and are provided the necessary training, they have the tools needed to create their own job. Many veterans have both the skills and the motivation to continue serving their country by building a business and creating jobs for themselves, their neighbors, and other veterans. What they lack is the knowledge and awareness of the tools and services available to support their entrepreneurial vision.

America has both an unquestioned responsibility and a compelling incentive to empower veterans through entrepreneurship, enabling them to become successful small business owners. In the report to the President, the Interagency Task Force On Veteran Small Business Development stated it “strongly believes that serving veterans who are – or who want to become – small business owners is crucial to America’s overall job creation, economic growth, and competitiveness in the world economy.” Veterans are 45 percent more likely to be self-employed than non-veterans.⁴⁹ Already, veterans own about 2.5 million businesses or 9.1 percent of all of America’s businesses. These businesses generate about \$1 trillion in receipts and employ nearly 6 million Americans. Notably, 500,000 of these businesses have paid employees, including 7,500 which employ more than 100 people. When including businesses in which veterans are at least half-owners, these numbers rise to 3.7 million businesses (13.5 percent of U.S. businesses), \$1.6 trillion in receipts, and 8.2 million employees.⁵⁰

2.2 Background and Partner Organizations

Each day service members make the transition from the military to civilian life. Successful transition is an important and collaborative effort. To aid in that transition, and at the direction of the President of the United States, DoD, VA, DOL, DHS, ED, OPM and SBA revised and enhanced the Transition Assistance Program (TAP) to make service members more post-service career ready and to establish Career Readiness Standards (CRS). The TAP is an overarching program that provides transition assistance, information, training, and services to eligible transitioning service members and their spouses so they are career ready when they separate, retire, or are released from active duty back to civilian life. The TAP consists of multiple elements, including the Transition GPS (Goals, Plans, Success) curriculum, which provides skills, education and training, and benefits information to enable service members to meet CRSs. There are three tracks provided within the Transition GPS – Accessing Higher Education (administered by DoD), Career Technical Training (administered by VA), and Entrepreneurship – known as Boots to Business (administered by SBA). DoD, VA, DOL, DHS, ED, OPM and SBA continuously improve and govern the program via interagency steering groups of senior leaders who receive input and report outcomes to OMB, Congress and other stakeholders.

To implement the TAP Entrepreneurship Track, the SBA developed and designed the B2B program through a partnership with the IVMF at Syracuse University (SU). The curriculum provides valuable assistance to transitioning service members exploring business ownership or other self-employment opportunities by leading them through the key steps for evaluating business concepts and providing the foundational knowledge required to develop a business plan. In addition, participants are introduced to SBA resources available to help access start-up capital and additional technical assistance. SBA reports

progress and performance of the B2B program to TAP's interagency governance committees and via its internal Agency management processes. The program is delivered on 213 military installations worldwide through SBA's network of district offices and its resource partner network including Veterans Business Outreach Centers (VBOC), America's Small Business Development Centers (SBDC), SCORE chapters, and the Association of Women's Business Centers (WBC).

The U.S. Small Business Administration (SBA)

The SBA was created in 1953 as an independent agency of the federal government to aid, counsel, assist, and protect the interests of small business concerns, to preserve free competitive enterprise and to maintain and strengthen the overall economy of our nation. The U.S. Government recognizes that small business is critical to national economic recovery and strength, to building America's future, and to helping the United States compete in today's global marketplace. Although SBA has grown and evolved in the years, the bottom line mission remains the same. The SBA helps Americans start, build and grow businesses. Through an extensive network of field offices and partnerships with public and private organizations, SBA delivers its services to people throughout the United States, Puerto Rico, the U. S. Virgin Islands, and Guam.

The Office of Veterans Business Development (OVBD)

The OVBD's mission is to empower veteran entrepreneurship by formulating, implementing, administering, and promoting policies and programs to equip veteran, service member (active duty, National Guard, Reserve), and military spouse owned small businesses with counseling, training and education, access to capital, and contracting opportunities. OVBD is SBA's liaison with the veteran business community; provides policy analysis and reporting; and serves as an Ombudsman for veteran entrepreneurs.

The Institute for Veterans and Military Families (IVMF)

The IVMF is the first interdisciplinary national institute in higher education focused on the social, economic, education and policy issues impacting veterans and their families post-service. Through IVMF's focus on veteran-facing programming, research and policy, employment and employer support, and community engagement, the institute provides in-depth analysis of the challenges facing the veteran community, captures best practices and serves as a forum to facilitate new partnerships and strong relationships between the individuals and organizations committed to making a difference for veterans and military families.

Veterans Business Outreach Centers (VBOC)

The VBOC program is designed to provide entrepreneurial development services such as business training, counseling and mentoring, and referrals for eligible veterans owning or considering starting a small business. The SBA has 19 organizations participating in this cooperative agreement and serving as VBOCs.

Small Business Development Centers (SBDC)

SBDCs provide assistance to small businesses and aspiring entrepreneurs throughout the United States and its territories. SBDCs help entrepreneurs realize the dream of business ownership and help existing businesses remain competitive in a complex, ever-changing global marketplace. SBDCs are hosted by leading universities and state economic development agencies, and funded in part through a partnership with SBA.

SCORE Chapters (SCORE)

By providing mentorship and sharing ethically sound business practices, SCORE's nationwide initiatives help entrepreneurs and small business owners at various stages in their professional lives.

Women's Business Centers (WBC)

WBCs represent a national network of educational centers throughout the United States and its territories, which are designed to assist women in starting and growing small businesses. WBCs seek to "level the playing field" for women entrepreneurs, who still face unique obstacles in the business world.

2.3 Program Design and Delivery

The B2B program is designed to leverage the expertise of the partnering organizations to train, teach, and inspire in an effort to put service members and their dependents on a path toward venture creation and business ownership as they exit the service and enter their post-service life. To maximize the effectiveness of the program, a pedagogical approach and learning objectives were jointly created between the IVMF and OVBD. Program learning objectives are as follows:

1. Understanding the opportunities and challenges associated with pursuing business ownership as a vocation.
2. Identify the process(es) and elements required to pursuit business ownership.
3. Evaluate the feasibility of a business concept using the New Venture Feasibility Analysis Tool.

Identify the resources, services, and access points available to support the formation of business ownership, including services provided by the SBA and resource partners.

Upon the determination of the B2B course learning objectives, a two-step training program was developed to introduce and train transitioning service members in business ownership. B2B helps to ensure that every transitioning service member and their dependents have access to the world-class standardized entrepreneurship training track offered through the DoD TAP Program. Upon completion of the program, participants are positioned with the tools and knowledge needed to identify a business opportunity, draft a business plan, connect with community-based small business resources, and launch their small business.

The two-step training program includes:

Introduction to Entrepreneurship Two-Day Course

A two-day classroom course is offered for those interested in learning more about the opportunities and challenges of business ownership. Subject matter experts and practitioners from SBA and its network of partners teach the course at over 213 military installations worldwide. Participants learn business fundamentals and techniques for evaluating the feasibility of their business concepts.

The Introduction to Entrepreneurship course is currently offered at 182 U.S. military bases across the continental United States (CONUS) and has served 31 installations outside of the continental United States (OCONUS). CONUS courses are instructed by a SBA Representative/SBA Resource Partner (SBDC, SCORE, VBOC, WBC, etc.) in conjunction with the DoD Transition Assistance Program. OCONUS courses are taught by instructors from IVMF, Syracuse University, the Young Presidents Organization (Y.P.O.), the Entrepreneurship Bootcamp for Veterans with Disabilities (EBV) Consortium, and additional instructors whom are recruited and trained by program key personnel.

Additionally, the Introduction to Entrepreneurship course is offered through the U.S. Department of Defense's (DoD) Joint Knowledge Online (JKO) which is the enterprise portal system providing convenient access to online joint training and information resources. JKO integrates with other DoD systems and uses the latest advanced distributed learning technologies to provide training courses and resources that better prepare warfighters for joint exercises and operations.⁵¹

Foundations of Entrepreneurship Eight-Week Online Course

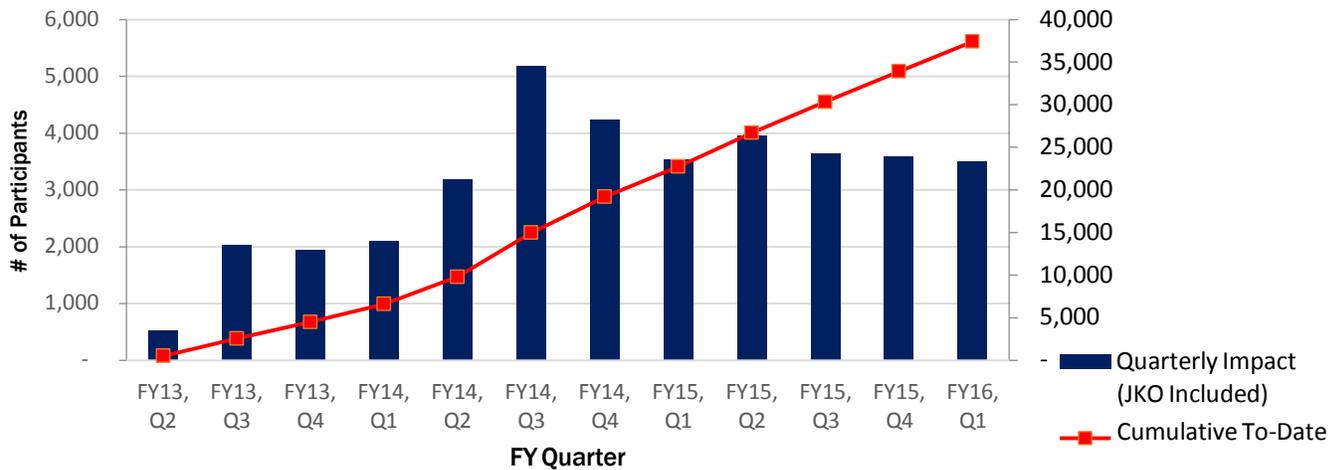
After completing the Introduction to Entrepreneurship Two-Day course, transitioning service members and their dependents can elect to further their study through an instructor guided eight-week online course that offers in-depth instruction on the elements of a business plan, evaluating venture ideas, identifying components of business venture strategies and interrelationships of marketing, accounting/finance, operations/production, and human resources. By dedicating a minimum of 10 hours per week to connected and independent study, participants work through the fundamentals of developing an actionable business plan.

The Foundations of Entrepreneurship Eight-Week Online course utilizes Moodle Learning Management System (LMS) which includes access to the online learning system to view assignments, course discussion forums and general information. The course is an instructor-led, eight-week online course offered by the IVMF. Courses are taught by instructors from IVMF, Syracuse University, the Young Presidents Organization (Y.P.O.), the Entrepreneurship Bootcamp for Veterans with Disabilities (EBV) Consortium and additional instructors whom are recruited and trained by program key personnel.

2.4 Delivery Model and Program Throughput

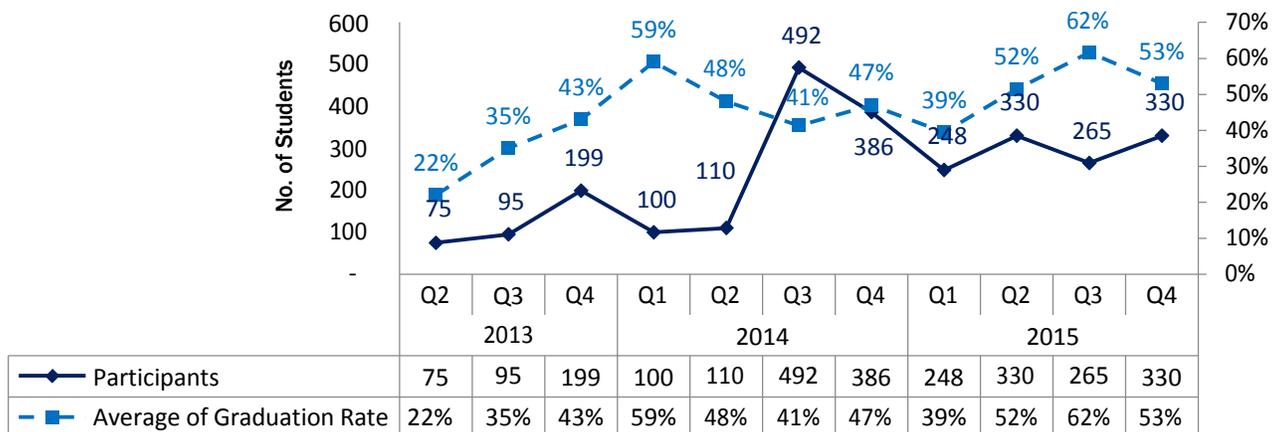
Provided below are graphical representations of the B2B program. Figure 8 depicts the cumulative impact for the Introduction to Entrepreneurship Two-Day course quarterly run rate including cumulative total line for the period of January 1, 2013 – March 31, 2016 (including JKO course participation). Figure 9 depicts the enrollment and graduation rate for the Foundations of Entrepreneurship Eight-Week Online Course provided on a quarterly basis for the period of January 1, 2013 – December 31, 2015 (Quarter 2, Fiscal Year 2016 enrollment rate represented is as of March 7, 2016).

Figure 8. B2B 2 Day Participation Cumulative Impact Through FY16, Q1 (JKO Included)



SOURCE: OVBD

Figure 9. Foundations of Entrepreneurship – 8 Week Enrollment and Graduation Rate



SOURCE: IVMF

3. BOOTS TO BUSINESS PROGRAM ASSESSMENT

Over the past 20 years, the scale and scope of training and educational programs positioned to support expanded opportunity for the pursuit of business ownership among Americans has increased exponentially. It follows that the rapid growth of training and educational programs focused on entrepreneurship has also seeded a robust area of academic research related to the means and mechanisms appropriate to best assess and evaluate the efficacy of such programs. In other words, there has been a robust and ongoing debate in academic literature related to answering the question, what does 'good look like,' with regard to programs designed to increase the opportunity for the pursuit of business ownership among program participants.⁵²

Still, today there are many different approaches currently being espoused and applied related to assessing and evaluating the efficacy of business ownership training programs. Taking a holistic review of the academic literature does suggest several important considerations related to how assessment and evaluation of the B2B program should proceed.

First, in the context of assessment and evaluation, the state of research and practice relating to contemporary business ownership education and training programs illustrates how and why it's critical to differentiate between program types in the context of assessment.⁵³ That is, meaningful assessment and evaluation programs are constructed in a way that acknowledges the differences between the objective outcomes appropriate to:

1. Programs that are purposefully and solely designed to introduce or 'orient' individuals to the vocation of business ownership, versus
2. Programs that assume both a prior business ownership orientation and an existing intention to act on business ownership aspirations, and are thus designed as skills-training initiative to prepare individual to successfully act on their intent to launch and grow a venture

Importantly, B2B was purposefully and appropriately designed as a hybrid-type program, relative to the typology above. At the time B2B was designed it was (and remains today) an appropriate assumption that transitioning service members on average have had little to no formal exposure to the vocation of business ownership at the time of transition.

It was based on this assumption that step one of the B2B program (on-base, 2-day Introduction to Entrepreneurship workshop) was designed NOT as a robust business ownership skills-training program that assumed entrepreneurial intent among all participants, but instead as a means to introduce and orient participants to the vocation of business ownership. In other words, step one of the B2B program was designed to assist transitioning service members and dependents answer the question: "*Is business ownership the right pathway for me – and/or for my family?*"

Accordingly, research suggests that the most appropriate approach to evaluating the efficacy of step one of the B2B program – in the context of the objective of introducing and orienting participants to the opportunities and challenges associated with the vocation of business ownership – is to capture the impact of the program related to the following change (Δ) metrics:

1. Δ in Entrepreneurial Intention (increased likelihood of starting a venture)
2. Δ in Entrepreneurial Motivation (increased motivation related to starting a venture)
3. Δ in Entrepreneurial Efficacy (increased confidence related to starting a venture)

This Outcomes Assessment Survey was used to assess the impact of the training intervention related to these three dimensions.

As stated previously, business ownership training programs that assume both a prior business ownership orientation and also an existing intention to act on business ownership aspirations, are typically designed around a curriculum grounded in applied skills-training and focused toward preparing individuals to successfully act on their intent to launch and grow a venture. For programs of this type, research suggests that the most appropriate means to frame assessment and evaluation should be focused on the impact that the program has on regulating entrepreneurial action among program participants; that is, the efficacy of the program is best captured by short- and long-term metrics that link entrepreneurial behaviors and actions to knowledge-based and economic outcomes.

Generally, assessment and evaluation of this type is centered on the following metrics:

1. Technical Skills Transfer (change in applied knowledge relevant to entrepreneurial behaviors)
2. Venture Creation (rate of business start-up among participants)
3. Venture Sustainability & Growth (business survival/over time change in economic performance)

Step two of the B2B program (Foundations of Entrepreneurship) is best described as one that aligns with an applied skills training model, designed to prepare individuals (with an existing entrepreneurial intention) to successfully act on that intention and launch/grow a business venture. Importantly, step two of the program assumes that enrolled participants enter with an entrepreneurial intention because of their successful completion of step one, and because step two of B2B demands a significant and voluntary time commitment (8-weeks).

In addition to the objectives in step one, the Outcomes Assessment Survey was developed to capture short-term and long-term metrics that link entrepreneurial behaviors and strategies trained in step two to knowledge-based and economic outcomes reflected in the post-training actions of program participants.

Finally, the Outcomes Assessment Survey and evaluation was retrospective, in that it collected self-reported descriptive data on the participant population, their impression of the effectiveness of the B2B program, their business creation intentions and outcomes, and their use of SBA resources. In addition to the survey disseminated to all past B2B participants (which contained both outcome and course performance questions) a singular outcome survey was created to capture all future B2B participant and business outcomes. As part of the comprehensive evaluation strategy, a second survey was designed to assess course quality.

3.1 Methodology

The survey asks participants twenty questions, for example, if they have launched or continued to grow an existing business, if the business is still in operation, the type of business, the number of employees, financing, use of SBA resources, and additional education or training since course completion. Demographic questions include course location, service, age, gender, race/ethnicity, and service member connectedness (i.e. dependent spouse, service member). The questions include a mix of single and multiple answer multiple choice questions, text entry, and matrix tables.

B2B participants were sent the survey if they took the Introduction to Entrepreneurship two-day course in the U.S. or at an overseas installation, the Foundations of Entrepreneurship Course (eight-week Course), or the more recently launched B2B Reboot Course.

The IVMF distributed the survey on January 11th, 2016 to a total of 10,623 B2B participants via email who most recently completed a B2B course prior to December 24, 2015 (save those in JKO, mentioned above). The survey was fielded via IVMF's customer relationship management system utilizing an online survey software tool. Subsequent reminders were sent at one- and two-week intervals to participants who had not started or finished the survey. Results were compiled from responses received from 1/11/2016 through 2/15/2016.

Boots to Business Course	Date of Initial Course Offering	Total Course Participants as of December 24th, 2015*
CONUS Two-Day	January 1, 2013	8,165
OCONUS Two-Day	June 23, 2014	2,337
Eight-Week Online	January 1, 2013	2,829
Reboot	November 2, 2015**	195

*More than one course could be taken by a participant; Two-Day Course completion is a requirement for Eight-Week enrollment

**Pilot ran from June - October 2015, soft launch occurred in November 2015.

3.2 Limitations

The survey holds several limitations. First, with a response rate of less than 10 percent, the bias inherent in those that choose or did not choose to take the survey can only be speculated. Thus, there is a high likelihood of non-response bias, especially for those participants with no or limited internet access, or email filters that eliminate unsolicited messages. For response rates. There was a higher response rate among participants in the eight week Foundations course due to their choosing (self-selection) of additional training. In addition, participants who provided “.mil” email addresses instead of civilian email addresses may not have received the survey due to their email being deactivated or less frequent account use after separation. It is likely that respondents that had positive experiences with the program or who created businesses as a result of the program would be more likely to respond as well. To that end, an initial Outcomes Assessment Survey was developed to capture (ex-post) perceived pre- and post-training levels of entrepreneurial intention, motivation, and efficacy among participants in the B2B program. This initial outcomes survey was administered once, post-training, which also presents a limitation due to possible response bias.

Second, sampling reliability poses a concern. During the course sign-in process many service members do not provide their personal post-service email addresses and are unreachable. This is being addressed through TAP interagency management, and other initiatives are underway to promote more seamless data sharing and more reliable registration processes.

Ideally, business outcomes of participants would be independently verified by external national datasets. However, should any national datasets be made available, the current survey and collection process does not collect social security numbers or any other unique identifier required to adequately match datasets. Entrepreneurship and business creation is a process that takes substantial time. Therefore, a lag in time for outcomes related to business creation should be expected. While business creation is a valued outcome of the B2B courses, another positive outcome of equal importance is enabling participants that would have naively started a business, but when educated about the process make a more informed decision about starting a business.

3.3 Findings

The objectives for those participating in the Two-Day and Eight-Week online courses are different. The questions and outcomes pertaining to entrepreneurial intention, motivation, and efficacy are highlighted under Step One: Introduction to Entrepreneurship. The survey questions and outcomes that pertain most directly to technical skills transfer, venture creation, and venture sustainability and growth are discussed in Step Two: Foundations of Entrepreneurship. We also provide a summary table of how participants responded to the questions at both stages, those who either selected the Two-Day or Eight-Week Online course as their most recent B2B course.

Findings – Step One: Introduction to Entrepreneurship

Data collection from B2B Two-Day participants indicate the following outcomes, with regard to pre- and post-training levels of entrepreneurial intention, entrepreneurial motivation, and entrepreneurial efficacy.

1. 79% of survey respondents indicated that they are MORE (34%) or SIGNIFICANTLY MORE (45%) interested in starting a business after completing B2B, as compared to their interest in starting a business prior to participating in the B2B program (*entrepreneurial intention*)
2. 84% of survey respondents indicated that participating in the B2B program INCREASED their level of confidence associated with acting on the steps and stages associated with starting a business, as compared to their level of confidence associated with business ownership prior to participating in the B2B program (*entrepreneurial efficacy*)
3. 89% of survey respondents indicated that they are SOMEWHAT (29%) or VERY (60%) motivated to start a business after completing B2B, as compared to 77% that were SOMEWHAT (43%) or VERY (34%) motivated prior to participating in the B2B program (*entrepreneurial motivation; intention*)
4. 95% of survey respondents indicated that they are SOMEWHAT (46%) or VERY (49%) informed about the vocation of business ownership after completing B2B, as compared to 48% that were SOMEWHAT (39%) or VERY (9%) informed about the vocation of business ownership prior to participating in the B2B program (*entrepreneurial motivation; intention*)
5. 85% of survey respondents indicated that they are SOMEWHAT (32%) or VERY (53%) likely to start a business after completing B2B, as compared to 67% that were SOMEWHAT (33%) or VERY (34%) likely to start a business prior to participating in the B2B program (*entrepreneurial motivation; intention*)
6. 59% of survey respondents indicated that they are SOMEWHAT (26%) or VERY (33%) likely to start a business within one year (12-months) of completing B2B, as compared to 42% that were SOMEWHAT (19%) or VERY (24%) likely to start a business within one year (12-months) prior to participating in the B2B program (*entrepreneurial motivation; intention*)

Findings – Step Two: Foundations of Entrepreneurship

Data collection from B2B participants who completed the Eight-Week Online course indicate the following outcomes, as reflected by the post-training actions of program participants.

1. 44% of survey respondents who completed Step 2 of the B2B program indicated that they have launched a new venture - or have leveraged the B2B training to grow an existing business – after completing the B2B training (*venture creation*).
2. 91% of those participants who created a new venture after completing Step 2 of the B2B training – or who leveraged the B2B training to grow an existing business – indicate that their business remains in operation today (*venture sustainability*).
3. 53% of those participants who created a new venture after completing the B2B training, did so within one year (12 months) of program completion (*venture creation*).
4. 95% of survey respondents indicated that they are SOMEWHAT (40%) or VERY (55%) likely to have the skillset required to start a business after completing B2B, as compared to 56% that indicated they were SOMEWHAT (41%) or VERY (15%) likely to have the skillset required to start a business prior to participating in the B2B program (*technical skills transfer*).
5. 71% of survey respondents indicated that they are SOMEWHAT (27%) or VERY (43%) likely to pursue additional technical assistance (related to business ownership) after completing B2B, as compared to 56% that indicated they were SOMEWHAT (36%) or VERY (19%) likely to pursue additional technical assistance (related to business ownership) prior to participating in the B2B program (*technical skills transfer*).

The assessment metrics cited above, as realized by the B2B program to date, are consistent with or exceed the performance levels of similar (business ownership) introduction and orientation programs offered to other student cohorts (non-military students) by higher-education or private sector programs.

The following table is a summary of findings across all course participant types

Survey Question	B2B Course*	Before			After		
		% Some-what**	% Very	% Total	% Some what	% Very	% Total
Step One: Introduction to Entrepreneurship							
Which of the following best described your interest in starting or owning a business after you completed Boots to Business? (<i>entrepreneurial intention</i>)* **	2 day	-	-	-	34	45	79
	8 week	-	-	-	22	62	83
	All	-	-	-	28	52	81
Did the B2B program increase your confidence in starting or owning a business? (% Yes) (<i>entrepreneurial efficacy</i>)	2 day	-	-	-	-	-	84
	8 week	-	-	-	-	-	89
	All	-	-	-	-	-	86
How motivated were you to start a business? (<i>entrepreneurial motivation; intention</i>)	2 day	43	34	77	29	60	89
	8 week	41	46	87	20	74	94
	All	42	39	81	25	66	91
How informed did you feel about starting a business and entrepreneurship in general? (<i>entrepreneurial motivation; intention</i>)	2 day	39	9	48	46	49	95
	8 week	46	9	55	30	67	97
	All	42	9	51	39	57	96
How likely were you to start a business? (<i>entrepreneurial motivation; intention</i>)	2 day	33	34	67	32	53	85
	8 week	40	36	76	28	68	96
	All	36	35	71	30	60	90

Survey Question	B2B Course*	Before			After		
		% Somewhat**	% Very	% Total	% Somewhat	% Very	% Total
How likely were you to start a business soon (within one year)? (<i>entrepreneurial motivation; intention</i>)	2 day	19	24	42	26	33	59
	8 week	27	32	59	30	52	82
	All	22	27	49	27	41	69
Step Two: Foundations of Entrepreneurship							
In the time since you completed the B2B program, have you launched a new venture/business or continued to grow an existing business? (% Yes) (<i>venture creation</i>)	2 day	-	-	-	-	-	35
	8 week	-	-	-	-	-	44
	All	-	-	-	-	-	39
Of those who answered Yes to the above question, indicate that their business remains in operation today. (<i>venture sustainability</i>)	2 day	-	-	-	-	-	97
	8 week	-	-	-	-	-	91
	All	-	-	-	-	-	94
How soon after completing Boots to Business did you start this business? (% within 1 year)	2 day	-	-	-	-	-	52
	8 week	-	-	-	-	-	53
	All	-	-	-	-	-	52
How confident were you about having the skillsets required to start a business? (<i>technical skills transfer</i>)	2 day	39	15	54	47	43	91
	8 week	41	15	56	40	55	95
	All	40	15	55	44	49	93
How likely were you to pursue additional technical assistance first? (<i>technical skills transfer</i>)	2 day	30	26	56	30	40	69
	8 week	36	19	56	27	43	71
	All	33	23	56	29	41	70

-N/A

*'2 day' is in reference to the Two-Day B2B course and the '8 week' references the Eight-Week Online course. All includes both B2B course offerings.

** The Before/After questions are on a five-point scale with the following options: Not at all, Not very, Neither, Somewhat, Very

*** This question is on a five-point scale with the following options: ...significantly more interested, ...more interested, ...neither, ...less interested, ...significantly less. The first two options are listed under their corresponding Somewhat and Very columns.

Additional Assessment and Evaluation Considerations

The following, additional considerations are critically important to appropriately interpret and ascribe meaning to assessment and evaluation of the B2B program:

1. Unlike traditional employment (you are employed, or are not employed), starting a business is a process that happens over time. For example, once an individual makes the purposefully decision to pursue new venture creation, research suggests that the business planning lifecycle (time between decision to pursue business ownership, to legal creation of a business entity) typically ranges between 8 – 24 months. This fact has two important implications for performing and interpreting B2B assessment data:
 - a. It's critical to collect data on B2B program participants over time (longitudinal assessment), to most appropriately capture the impact of the B2B program on new venture creation.
 - b. Given the above, it's worth noting that the current B2B venture creation rate (39 percent) is actually higher than one would objectively expect, given that 60 percent of survey respondents completed the B2B program within 12-months of completing the survey instrument.
2. One outcome often generated by exposure to business ownership training (broadly) relates to the realization among some participants that they would benefit from additional education and/or additional experience prior to starting a new business. Given the potential risks (financial) associated with the pursuit of business ownership – particularly in the face of inadequate education and/or relevant work experience, it should be viewed positively when an individual delays venture creation in favor of additional education and/or relevant work experience. Accordingly, the B2B assessment survey included questions related to the extent that exposure to the B2B training increased the likelihood that the individual would a) pursue traditional employment prior to venture creation, and b) pursue higher-education prior to venture creation. Accordingly, the data revealed that exposure to the B2B program both increased the likelihood that participants would pursue traditional employment and/or higher-education prior to venture creation.
3. Related to the above, it is also important to acknowledge that no discrete training program – however comprehensive and robust – is adequate to support an individual throughout the lifecycle (over time) of venture creation and growth. Accordingly, one important outcome characteristic of a strong and well-constructed training program relates to the extent to which the training intervention increase the individual's propensity to actively seek additional resources and assistance throughout the venture creation lifecycle. Survey data revealed that exposure to the B2B program notably increased the likelihood that participants would seek additional resources and assistance in concert with their business ownership pursuits.

4. RECOMMENDATIONS FOR SUSTAINING BOOTS TO BUSINESS

Given the programmatic assessment and landscape analysis detailed above, the following recommendations are positioned to sustain and enhance the B2B:

1. Consistency in program delivery (across providers/across program sites) is critical to both ensuring a quality learning experience for participants, and also for supporting rigorous assessment and evaluation. To that end, opportunities for additional training and support to providers – focused on consistent and high-quality instruction – will serve to support continuous improvement and sustainability of the program.
2. Ongoing assessment and evaluation – specifically a cohort-based model allowing for longitudinal data collection – would serve to inform and advance opportunities to introduce new content and pedagogy positioned to address barriers to venture creation realized by program participants. Ultimately, economic outcomes will serve as a focal point for external perceptions related to the efficacy of the B2B program, thus any effort focused on sustaining external support for the program must prioritize venture creation and growth-related outcomes (as related to content and pedagogy refinements).
3. Consider the means and mechanisms appropriate to incorporate additional post-training supportive services and resources into the program experience. The extent to which such support and resources are available to the participant - throughout the lifecycle (over time) of venture creation and growth – will correlate directly with enhanced venture creation and growth-related outcomes.
4. Explore, validate, and incorporate assessment metrics beyond venture creation, as appropriate, to fully evaluate the broad range of possible positive outcomes associated with the B2B experience (advanced education, relevant work experience, etc.).
5. Investigate the most appropriate means to provide specific and purposeful training to transition counselors and other in-service influencers' positioned to support enhanced understanding of business ownership as a post-service pathway. The intent of such training is to better position field personnel, particularly those that interface with transitioning service members, to:
 - a. Effectively communicate to transitioning service members about the 'vocation' of business ownership, and
 - b. Effectively blunt the myths and stereotypes often associated with the 'vocation' of business ownership.
6. Investigate what attracts or deters veterans with a service-connected disability to entrepreneurship. This investigation should also examine what, if any, additional resources veterans with a service-connected disability need to start a business.
7. Investigate whether the available services, programs, and trainings are adequately serving veterans most in financial need, particularly after the veteran has officially launched his/her start-up.

APPENDIX A. KEY DATA SOURCES

There are several primary federal datasets available that have been used in veteran research. Some include entrepreneurship, employment, and self-employment while others are limited. The list below is not all inclusive but represent some of the major data sources publically available and used by researchers that are focused on veteran's issues.

U.S Census Bureau

Survey of Business Owners (SBO) is conducted by Census and provides the only comprehensive, regularly collected source of information on select economic & demographic characteristics for businesses and business owners by gender, ethnicity, race, and veteran status. Considered one of the key sources for of veterans' business data. Data are collected every 5 years since 1972; the program began as a special project for minority-owned businesses in 1969 and was incorporated into economic census in 1972 with Survey of Women-Owned Businesses.⁵⁴

American Community Survey (ACS) is an ongoing statistical survey by Census begun in 2000, which samples small percentage of U.S. population annually by age, sex, race, family, income & benefits, health insurance, education, veteran status, disabilities, employment & housing, and class of worker (i.e., self-employed, wage/salary, federal employee). The ACS is one of the largest survey efforts, along with decennial census, that Census administers. The latest ACS data (2014), includes over 3 million records. ACS is useful in analyses of income and employment in STEM fields for military, veteran, and civilian service members and spouses. We have estimated in a multivariate regression model of age earnings (total personal income was used for earnings of the spouse, male and female) over the work life of the sample veteran population.⁵⁵

Survey of Income and Program Participation (SIPP) The SIPP is a national survey of approximately 45,000 households (covering almost 93,000 individuals) conducted by the U.S. Census Bureau. SIPP is a longitudinal survey where each sampled household is re-interviewed at four month intervals over a period of roughly four years.

U.S. Department of Labor

Current Population Survey (CPS), jointly sponsored by Census and the U.S. Bureau of Labor Statistics (BLS), is the primary source of labor force statistics.⁵⁶ Dating back to 1962, CPS is the source of numerous high-profile economic statistics, i.e., national unemployment rate, and provides data on a range of issues relating to employment & earnings. CPS collects extensive demographic data to complement view of labor market conditions among many population groups in state and sub-state areas. Data is collected monthly on labor force and demographics, and collects extensive demographic data, including on veterans, so it complements our understanding of labor market conditions nationally and for different populations in states and sub-state areas. The CPS includes various supplements such as Annual Social and Economic Supplement and the veteran Supplement. These supplements provide detailed information on veterans, computer/ Internet use at home and at work, adult education, health care, and pension coverage.

U.S. Department of Veterans Affairs (VA)

National Survey of Veterans (NSV) is a nationwide survey to help the VA plan for veterans' services: data includes all U.S. service members, veterans, demobilized National Guard & Reserves, families and surviving spouses (i.e. 10,972 surveys were completed for 2010 NSV). Data is used for veteran population trends; comparing VA benefits & services users. VA role in benefits delivery; demographics, VA policies.⁵⁷

Veteran Population Projection Model 2014 (VetPop2014): Actuarial projection model developed by Office of the Actuary (OACT) with projections to 2043; provides latest official veteran population projection by VA, including living counts by key demographic characteristics such as age, gender, period of service, and race/ethnicity at various geographic levels.⁵⁸

U.S. Department of Defense (DoD)

Defense Manpower Data Center (DMDC) provides current monthly and yearly totals of DoD personnel from 1954-present; we use this data to determine previous, current & future force populations (by branch and rank), including service members likely to pursue education and careers in STEM.⁵⁹

U.S. Department of Treasury

The *Survey of Consumer Finances (SCF)* is normally a triennial cross-sectional survey of U.S. families. The survey data include information on families' balance sheets, pensions, income, and demographic characteristics including veteran status. Information is also included from related surveys of pension providers and the earlier such surveys conducted by the Federal Reserve Board. Data from the SCF are widely used, from analysis at the Federal Reserve and other branches of government to

scholarly work at the major economic research centers.⁶⁰

National Science Foundation

NSF National Survey of College Graduates, Recent College Graduates, Survey of Doctorate Recipients, Graduate Students and Post doctorates in Science and Engineering: although these surveys do not directly assess service member and veteran issues, they will allow the proposed research to develop general trends in engineering and STEM education that can be used for comparison to our service member target population.⁶¹

ENDNOTES

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- ¹ Lichtenstein, J. (2013). Profile of Veteran Business Owners: More Young Veterans Appear to Be Starting Businesses *Small Business Association Issue Briefs*: U.S. Small Business Administration, Office of Advocacy.
- ² Sobota, J., & Lichtenstein, J. (2012). Veteran-Owned Businesses and Their Owners—Data from the Census Bureau's Survey of Business Owners. Washington, D.C.: U.S. Small Business Administration, Office of Advocacy.
- ³ Haynes, G. W. (2014). Income and Net Worth of Veteran Business Owners over the Business Cycle, 1989–2010. Washington, D.C.: U.S. Small Business Administration, Office of Advocacy; and Haynes, G. W. (2015). Income and Net Worth of Veteran Business Owners over the Business Cycle, 2007-2013. Washington, D.C.: U.S. Small Business Administration, Office of Advocacy.
- ⁴ Fairlie, R. W. (2012). Kauffman Index of Entrepreneurial Activity by Veteran Status 1996-2011 Kansas City, Mo: Ewing Marion Kauffman Foundation.
- ⁵ Hope, J. B., Oh, B., & Mackin, P. C. (2011). Factors Affecting Entrepreneurship among Veterans *Small Business Research Summary*. Washington, D.C.: U.S. Small Business Administration, Office of Advocacy.
- ⁶ Avrahami, Y., & Lerner, M. (2003). The Effect of Combat Service and Military Rank on Entrepreneurial Careers: The Case of Israeli MBA Graduates. *Journal of Political and Military Sociology*, 31(1), 97-118.
- ⁷ U.S. Small Business Administration, Jack Faucett Associates, Eagle Eye Publishers, Waldman Associates, & REDA International. (2004). Evaluating Veteran Business Owner Data *Small Research Business Summaries*. Washington, D.C.: Office of Advocacy.
- ⁸ Dickson, P. H., Solomon, G. T., & Weaver, K. M. (2008). Entrepreneurial Selection and Success: Does Education Matter? *Journal of Small Business and Enterprise Development*, 15(2), 239-258. doi: doi:10.1108/14626000810871655; Gorman, G., Hanlon, D., & King, W. (1997). Some Research Perspectives on Entrepreneurship Education, Enterprise Education and Education for Small Business Management: A Ten-Year Literature Review. *International Small Business Journal*, 15(3), 56-77. doi: 10.1177/0266242697153004; Henry, C., Hill, F., & Leitch, C. (2005). Entrepreneurship Education and Training: Can Entrepreneurship Be Taught? Part I. *Education + Training*, 47(2), 98-111. doi: doi:10.1108/00400910510586524; and Peterman, N. E., & Kennedy, J. (2003). Enterprise Education: Influencing Students' Perceptions of Entrepreneurship. *Entrepreneurship Theory and Practice*, 28(2), 129-144. doi: 10.1046/j.1540-6520.2003.00035.x
- ⁹ Kerrick, S. A., Cumberland, D., Church-Nally, M., & Kemelgor, B. (2014). Military Veterans Marching Towards Entrepreneurship: An Exploratory Mixed Methods Study. *The International Journal of Management Education*, 12(3), 469-478. doi: <http://dx.doi.org/10.1016/j.ijme.2014.05.006>
- ¹⁰ U.S. Small Business Administration, Jack Faucett Associates, Eagle Eye Publishers, Waldman Associates, & REDA International. (2004). Evaluating Veteran Business Owner Data *Small Research Business Summaries*. Washington, D.C.: Office of Advocacy.
- ¹¹ Dilger, R. J., & Lowry, S. (2014). SBA Veterans Assistance Programs: An Analysis of Contemporary Issues. Washington, D.C.: Congressional Research Service.
- ¹² Best, N. A. (2013). Safeguarding Opportunities for America's Wounded Warriors: A Proposed Solution to Subcontracting Abuse in the Service-disabled Veteran-Owned Small Business Program and the Veterans First Contracting Program. *Public Contract Law Journal*, 42(2), 347-368; Sherman, P. (2006). Paved with Good Intentions: Obstacles to Meeting Federal Contracting Goals for Service-Disabled Veteran-Owned Small Businesses. *Public Contract Law Journal*, 36(1), 125-138; and U.S. Government Accountability Office. (2012). Service-disabled Veteran-Owned Small Business Program: Vulnerability to Fraud and Abuse Remains. Washington, D.C.: GAO.
- ¹³ Korsak, T. R. (2008). The Service-disabled Veteran-Owned Small Businesses in the Federal Marketplace. *Army Law*(7), 45-58.
- ¹⁴ Hope, J. B., Oh, B., and Mackin, P. C. [SAG Corporation]. (2011). "Factors affecting entrepreneurship among Veterans." Washington, DC: U.S. Small Business Administration, Office of Advocacy. Available at <http://semperfileader.com/SBASTudyVeteranEntrepreneurs.pdf>
- ¹⁵ Ibid.
- ¹⁶ Ibid.
- ¹⁷ Sherman, P. (2006). Paved with Good Intentions: Obstacles to Meeting Federal Contracting Goals for Service-Disabled Veteran-Owned Small Businesses. *Public Contract Law Journal*, 36(1), 125-138.
- ¹⁸ Ibid.

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- ¹⁹ Frochen, S. (2015). *War Veterans and Civilian Reentry: Combatting Unemployment with Entrepreneurship*. Bowling Green, Ohio: Ohio Association of Gerontology and Education Conference, Bowling Green State University.
- ²⁰ Puryear, A. N., Rogoff, E. G., Lee, M. S., Heck, R. K., Grossman, E. B., Haynes, G. W., & Onochie, J. (2008). Sampling Minority Business Owners and Their Families: The Understudied Entrepreneurial Experience*. *Journal of Small Business Management*, 46(3), 422-455.
- ²¹ Fairlie, R. W. and Robb A. (2009). *Entrepreneurship, Self-Employment and Business Data: An Introduction to Several Large, Nationally-Representative Datasets*. IZA DP No. 4052.
- ²² Ibid.
- ²³ Fairlie, R. W. (2013). Minority and immigrant entrepreneurs: Access to financial capital. In A. F. Constant & K. F. Zimmermann (Eds.), *International Handbook on the Economics of Migration* (pp. 153-175). Cheltenham, United Kingdom: Edward Elgar Publishing Limited.
- ²⁴ One example of Veteran entrepreneurship program can be found at Kerrick, S. A., Cumberland, D., Church-Nally, M., & Kemelgor, B. (2014). Military Veterans marching towards entrepreneurship: An exploratory mixed methods study. *The International Journal of Management and Budget*, 12(3), 469-478.
- ²⁵ Borgman, C. L. (2015). *Big data, little data, no data: Scholarship in the networked world*. Cambridge, MA: MIT Press.
- ²⁶ Ibid.
- ²⁷ Zients, J. D. (2010). *Sharing data while protecting privacy* [Memorandum]. Washington, D.C.: Executive Office of the President, Office of Management and Budget.
- ²⁸ Ibid.
- ²⁹ Carson, R., Laird, E., Gaines, E., & Ferber, T. (2010, March). *Linking Data across Agencies: States That Are Making It Work* (Issue brief). Retrieved <http://forumfyi.org/files/States.That.Are.Making.It.Work.pdf>
- ³⁰ Zients, J. D. (2010). *Sharing data while protecting privacy* [Memorandum]. Washington, D.C.: Executive Office of the President, Office of Management and Budget; Borgman, C. L. (2015). *Big data, little data, no data: Scholarship in the networked world*. Cambridge, MA: MIT Press.
- ³¹ Service Member Transition Summits. (2016). Retrieved from <https://www.uschamberfoundation.org/hiring-our-heroes/service-member-transition-summits>
- ³² Responsible Data Forum on Private Sector Data Sharing - Event Summary. (2014, August 24). Retrieved from <http://www.unglobalpulse.org/RDF-private-sector-data-summary>
- ³³ <https://www.data.gov/in-the-news>
- ³⁴ Small Business Facts & Data <http://sbecouncil.org/about-us/facts-and-data/>. Data retrieved from U.S. Census, Statistics of U.S. Businesses (SUSB) 2013 at <http://www.census.gov/econ/susb/>
- ³⁵ Edmiston, Kelly D., The Role of Small and Large Businesses in Economic Development (June 2007). Available at SSRN: <http://ssrn.com/abstract=993821> or <http://dx.doi.org/10.2139/ssrn.993821>
- ³⁶ Gebremariam, G. H., Gebremedhin, T. G., and Jackson, R. W. (2004). The role of small business in economic growth and poverty alleviation in West Virginia: An empirical analysis (Research Paper). Denver, Colorado: American Agricultural Economics Association Annual Meeting. Retrieved from <http://rri.wvu.edu/wp-content/uploads/2012/11/gebremedhinwp2004-10.pdf>
- ³⁷ Clark, L. and Saade, R. N. (2010). The role of small business in economic development of the United States: From the end of the Korean War (1953) to the present (Working Paper). Retrieved from the Office of Advocacy U.S. Small Business Administration Website: <https://www.sba.gov/advocacy/role-small-business-economic-development-united-states-end-korean-war-1953-present>
- ³⁸ Ibid.
- ³⁹ Decker, Ryan, John Haltiwanger, Ron Jarmin, and Javier Miranda. 2014. "The Role of Entrepreneurship in US Job Creation and Economic Dynamism." *Journal of Economic Perspectives*, 28(3): 3-24.
- ⁴⁰ Clark, L. and Saade, R. N. (2010). The role of small business in economic development of the United States: From the end of the Korean War (1953) to the present (Working Paper). Retrieved from the Office of Advocacy U.S. Small Business Administration Website: <https://www.sba.gov/advocacy/role-small-business-economic-development-united-states-end-korean-war-1953-present>; Sherman, P. (2006). Paved with Good Intentions: Obstacles to Meeting Federal Contracting Goals for Service-disabled Veteran-Owned Small Businesses. *Public Contract Law Journal*, 36(1), 125-138.
- ⁴¹ U.S Department of Labor, Bureau of Statistics Current Population Survey, Annual Average 2015.

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- ⁴² Veterans who served in more than one wartime period are classified only in the most recent one in CPS. Veterans who served during one of the selected wartime periods and another peacetime period are classified only in the wartime period.
- ⁴³ U.S. Department of Defense, *Active Duty Military Personnel by Rank/Grade and Service July 31, 2014*, Defense Manpower Data Center, Data Source: Active Duty Master Personnel File, Military Academies, available at: <https://www.dmdc.osd.mil/appj/dwp/rest/download?fileName=rg1407.pdf&groupName=milRankGrade>; U.S. Department of Defense, *Unique SSAN Activations as July 1, 2014*, Defense Manpower Data Center, Data Source: Contingency Tracking System (CTS) Daily Processing Files, available at: <http://www.defense.gov/documents/Mobilization-Weekly-Report-140701.pptx>
- ⁴⁴ U.S. Department of Defense, *Active Duty Military Personnel by Rank/Grade and Service July 31, 2014*, Defense Manpower Data Center, Data Source: Active Duty Master Personnel File, Military Academies, available at: <https://www.dmdc.osd.mil/appj/dwp/rest/download?fileName=rg1407.pdf&groupName=milRankGrade>; U.S. Department of Defense, *Unique SSAN Activations as July 1, 2014*, Defense Manpower Data Center, Data Source: Contingency Tracking System (CTS) Daily Processing Files, available at: <http://www.defense.gov/documents/Mobilization-Weekly-Report-140701.pptx>
- ⁴⁵ U.S. Department of Veterans Affairs. (2007) Veteran Population Projections Model (VetPop 2007), Table 2S. Office of the Actuary, Over the next 5 years, over 1 million vets will transition.
- ⁴⁶ U. S. Department of Labor, Bureau of Labor Statistics (2015), Current Population Survey, Annual Averages 2015.
- ⁴⁷ U.S. Census Bureau, Survey of Business Owners <https://www.census.gov/econ/sbo/about.html>. Data available at <http://www.census.gov/econ/sbo/pums.html>
- ⁴⁸ Ibid
- ⁴⁹ Hope, J. B., Oh, B., and Mackin, P. C. [SAG Corporation]. (2011). "Factors affecting entrepreneurship among Veterans." Washington, DC: U.S. Small Business Administration, Office of Advocacy. Available at <http://semperfileader.com/SBASStudyVeteranEntrepreneurs.pdf>
- ⁵⁰ Report to the President, Empowering Veteran Through Entrepreneurship, Interagency Task Force On Veteran Small Business Development, November 2011, pg. 1-2
- ⁵¹ Joint Knowledge Online, <http://jko.jten.mil/>
- ⁵² Gielnik, M. M., Spitzmuller, M., Schmitt, A., Klemann, D. K., & Frese, M. (2015). "I Put in Effort, Therefore I Am Passionate": Investigating the Path from Effort to Passion in Entrepreneurship. *Academy of Management Journal*, 58(4), 1012-1031; Brown, T & Hanlon, D. (2016). Behavioral Criteria for Grounding Entrepreneurship Education and Training Programs: A Validation Study. *Journal of Small Business Management*, 54 (2), 399-419; Lyons, R., Lynn, T., & Mac and Bhaird, C. (2015). Individual Level Assessment in Entrepreneurship Education: An investigation of Theories and Techniques. *Journal of Entrepreneurship Education*, 18 (1), 136.
- ⁵³ Neck, H & Greene, P. (2011). Entrepreneurship Education: Known Worlds and New Frontiers. *Journal of Small Business Management*, 49 (1), 55-70.
- ⁵⁴ U.S. Census Bureau, Survey of Business Owners <https://www.census.gov/econ/sbo/about.html>. Data available at <http://www.census.gov/econ/sbo/pums.html>
- ⁵⁵ U.S. Census Bureau/American FactFinder, "Veterans," 200X – 20XX, American Community Survey. U.S. Census Bureau's American Community Survey Office, 20XX. Accessed: date, <http://factfinder2.census.gov>
- ⁵⁶ U.S. Census Bureau, Current Population Survey <http://www.census.gov/cps/>. Data retrieved from http://thedataweb.rm.census.gov/ftp/cps_ftp.html#cpsbasic
- ⁵⁷ U.S. Department of Veterans Affairs (2010), National Survey of Veterans, <http://www.va.gov/vetdata/>; Westat (2010), National Survey of Veterans, Active Duty Service Members, Demobilized National Guard and Reserve Members, Family Members, and Surviving Spouses (Prepared for the VA Contract GS-23F-8144H), <<http://www.va.gov/vetdata/docs/SurveysAndStudies/NVSSurveyFinalWeightedReport.pdf>>. In NSV2010 findings, 41 percent of Veterans indicated their military experience applied to their most recent civilian job, and they were "Very well" or "Well" prepared to enter the civilian job market after separating from the military.
- ⁵⁸ U.S. Department of Veterans Affairs, National Center for Veterans Analysis and Statistics, The Veteran Population Projection Model 2014 (VetPop2014), available at: http://www.va.gov/vetdata/Veteran_Population.asp.
- ⁵⁹ U.S. Department of Defense, Defense Manpower Data Center, Data Source: Active Duty Master Personnel File, Data available at https://www.dmdc.osd.mil/appj/dwp/dwp_reports.jsp
- ⁶⁰ Federal Reserve Board, Survey of Consumer Finances (SCF), Retrieved from <http://www.federalreserve.gov/econresdata/scf/scfindex.htm>
- ⁶¹ National Science Foundation, Survey include Survey of College Graduates, Recent College Graduates, Survey of Doctorate Recipients, Graduate Students and Postdoctorates in Science and Engineering, available at: <http://www.nsf.gov/statistics/surveys.cfm>