



The Veterans Engaging in Transition Studies (VETS) Survey:
An Expansion of The Veterans Metrics Initiative (TVMI) Study



METHODOLOGY REPORT:
VETS SURVEY 2020/2021 (“Wave 7”)

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The **VET**eran **E**valuation and **R**esearch **A**pplications **N**etwork (VETERANNetwork) acts as an applied research and evaluation unit for philanthropies, foundations, and other veteran-serving non-profit organizations. It addresses questions and issues related to veterans' transitions to civilian lives using empirical data. Central projects under the network's purview included data analyses and dissemination of findings from The Veterans Metrics Initiative: Linking Program Components to Post-Military Well-Being Study (TVMI Study) and survey administration and analyses of the Veterans Engaging in Transition Studies (VETS) Survey.

Learn more about the VETERANNetwork online: <https://veteranetwork.psu.edu/>

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VETS Survey Introduction

The Pew Charitable Trusts (Pew) partnered with the Clearinghouse for Military Family Readiness at Pennsylvania State University (Clearinghouse) to conduct the Veterans Engaging in Transition Studies (VETS) Survey between November 14, 2020, and January 5, 2021. The VETS Survey was a nationally representative, online survey of 3,180 Post-9/11 U.S. military veterans. Approximately 60% of the questions in the VETS Survey were designed to address Pew's research questions, and the remaining 40% were devoted to the Clearinghouse's requirements.

The primary objective of Pew's portion of the VETS Survey was to answer at least three key questions about student veterans who are eligible for the Post-9/11 GI Bill:

1. What is the scope and scale of veterans' higher education debt?
2. Why do veterans borrow student loans despite having access to the Post-9/11 GI Bill?
3. What financial obligations lead to borrowing?

The Clearinghouse's portion of the survey continued the purposes of a six-wave, longitudinal study that preceded the VETS Survey called The Veterans Metrics Initiative (TVMI; see the next section for more details). The research aims included the following:

1. To examine the veterans' experiences as they transitioned from military to civilian life.
2. To explore common components across veteran transition programs that are linked to the following well-being domains: vocation, finances, mental and physical health, and social relationships.

Furthermore, the Clearinghouse added new lines of survey questions to assess the impact of the COVID-19 pandemic upon veterans.

Finally, it should be noted that the combination of TVMI and the VETS Survey data provides a uniquely robust longitudinal data resource concerning veterans in transition, as the two survey efforts amount to a total of seven data collection waves (six waves of TVMI plus one wave of the VETS Survey) from a representative cohort of Post-9/11 veterans who were surveyed from 2016 through 2020.

Background and TVMI Project Summary:

The Veterans Metrics Initiative: Linking Program Components to Post-Military Well-Being (TVMI) was the first longitudinal investigation of the military-to-civilian transition process that relied upon data collected from a national sample of Post-9/11 U.S. military veterans. The Clearinghouse fielded six waves of survey data collection as part of TVMI between the autumn of 2016 and spring 2019. The veterans in the TVMI sample were drawn from a complete census of 48,965 former Service members who had been discharged or deactivated from active-duty military service during the summer and early autumn of 2016. The Clearinghouse obtained the TVMI sample from an administrative database jointly managed by the Departments of Defense and Veterans Affairs, the VA-DOD Identity Repository (VADIR).

TVMI was coordinated by the Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. (HJF), a global nonprofit organization whose mission is to advance military medicine by supporting research partnerships within the military medical community. Additional details about TVMI are available at the following URL:

<https://www.hjf.org/tvmi-study-update>

The public use data set for TVMI is available from the Inter-university Consortium for Political and Social Research (ICPSR) at the following URL:

<https://www.icpsr.umich.edu/web/ICPSR/studies/38051/versions>

Preparation for Survey Administration

This report details the protocol during preparation of the VETS Survey (wave 7 of the TVMI sample). Data collection began in late Fall 2020 and was completed in winter 2021.

IRB Approval

All Pennsylvania State University (Penn State) human research is subject to Institutional Review Board (IRB) approval. The IRB provides written assurance to the Office of Human Research Protection (OHRP) of the Department of Health and Human Services (DHHS) that the Clearinghouse has complied with federal policy requirements prior to launching a research project. The Clearinghouse prepared two requests for IRB approval for the web-based data collection for this project; the applications were submitted to the Office for Research Protections at Penn State. One application was submitted for the student/alumni pilot, and this study was deemed exempt on September 11, 2020. Another application was submitted for the longitudinal survey, and this study was deemed exempt on September 8, 2020. While making the determination of IRB approval for the “Wave 7” VETS Survey, the Office for Research Protections reviewed the following items: a summary of the survey protocol, the grant proposal, the data collection instrument, the recruitment plan/materials, and a summary of team member qualifications.

Brand Identity

Development of the VETS Survey’s brand identity began when the Clearinghouse of Military Family Readiness at Penn State received approval for a Wave 7 survey from Pew researchers.



Rebranding was necessary to distinguish the new phase of the study from the former TVMI survey which was known by the veterans as the Transitioning Veterans Survey. The study team ultimately selected “Veterans Engaging in Transition Studies Survey” as the formal survey title and “VETS” as the acronym.

The study team determined this title was not yet claimed in the marketplace (i.e., not the name of company, product, or website as far as we are aware) nor used by any other military or veteran survey. The logo was designed internally by a staff graphic

designer, and it was used on all print materials (e.g., recruitment letters, paper surveys) and digital materials (e.g., web surveys, web portal, web pages).

Development of the Project Website

The Clearinghouse for Military Family Readiness at Penn State built a branded public project website (<https://veteranetwork.psu.edu/>) that was active in the winter of 2021. Members of the public and TVMI and VETS funders/stakeholders can access this site for information regarding the Veterans Evaluation and Research Applications Network or the VETERANetwork. In this way, the data findings can be communicated and become actionable for the betterment of veteran well-being.

Help Desk and Staff Training Protocols

The VETS Survey Help Desk is a mechanism for fielding respondent inquiries and addressing updates (vetspsu@psu.edu). Regardless of how well a survey is designed, participants have questions (e.g., they need help with clarification of a survey term or assistance understanding why a message reminder was emailed to them). Participants need to be able to contact survey support staff regarding technical and other issues, and timely, quality responses ensure participant satisfaction and continued commitment for future survey waves.

Throughout the entire “Wave 7” survey administration period, team members from the Penn State Survey Research Center (SRC) and Clearinghouse provided VETS Survey Help Desk support to participants by phone and email. To ensure the best service, the VETS Survey Help Desk was staffed by personnel who were trained in 1) survey research and web-based data collection, 2) the VETS Survey, or 3) the specific details of the survey process (i.e., incentive gift codes). During “Wave 7”, Penn State team members answered over 100 requests (i.e., survey navigation, gift code inquiries). In addition, an email was sent in February 2021 to thank participants for their survey completion.

Programming of the Survey for Web Administration

An initial draft of Pew’s suggested education questions were sent to Clearinghouse researchers on July 16, 2020. Iterative meetings were held to refine and reduce the number of questions to fit within a 20-minute portion of the survey. Once the full “Wave 7” longitudinal questionnaire (without the education section) was close to being finalized (July 22, 2020), the Clearinghouse and SRC study teams began programming the web administration instrument. The VETS education section was provided to SRC on August 14, 2020, so the team could finalize programming of the web survey. Web survey requests, such as an autofill of school names, were made by Pew and added to SRC’s programming tasks on August 21, 2020. Internal testing of the web survey began during the last week in August 2020. Clearinghouse researchers distributed test WebLoginIDs to the Pew team on September 25, 2020 and received iterative feedback beginning on September 29, 2020. A pilot test of the survey was run in October 2020 with recruited Penn State students/alumni who were veterans and Clearinghouse faculty. Between October 28, 2020 and November 2, 2020, Pew was sent a pilot survey report and given the opportunity to provide feedback on survey revisions. The web survey was revised and launched for live input by the longitudinal sample on November 14, 2020.

Web Survey Specifications

The web survey was developed according to the following specifications, which took into account visual heuristics and other factors.

Web Survey Specifications	
Characteristics of the Web survey	
WEB SURVEY APPEARANCE	
HHS Section 508 compliant guidelines (e.g., type font and size, spacing, colors)	
Full-color pages	
Study logo on login page (graphics are minimal in survey because of mobile optimization)	
Help Desk email address in footer of login page and on closing page	
Login pages contain project background and downloadable consent form	
Single punch questions have round bubbles and multiple response questions have square bubbles	
Redirect to incentive code form from the last page of the survey	
Final page has “thank you” script	
WEB SURVEY FUNCTIONALITY	
Survey accessible in multiple platforms (i.e., Windows, OS)	
Optimization for best viewing and ease of use on multiple devices (e.g., desktop, laptop, tablet, smartphone)	
Each page has option to back up to previous page, proceed to next page, or pause to continue later	
Skipped questions presented with a warning message that the question had been left blank	
Questions can be skipped. Respondent may proceed to the next question without answering	
Skip logic used to administer questions as intended based on demographics	
WEB SURVEY SECURITY	
Secure website specification (https://)	
Answers saved after each screen. If respondent stops or browser closes, the web survey picks up where respondent left off when they log in again using their unique WebLoginID	

Web Survey Optimized for Mobile Devices

Penn State’s Integrated Data Collection Platform automatically adapted the programmed survey for optimization on mobile devices. The study team’s testing process included taking the survey on various computers, tablets and smartphones to ensure it was user-friendly and to minimize respondent burden. The survey was formatted to maximize consistency in respondent comprehension and the universal presentation of the questionnaire across platforms. The survey also captured (1) the participants Internet browser (e.g., Explorer, Safari, Firefox), (2) whether the respondent completed the survey using a mobile device or computer, and (3) whether they used Windows, Mac, Linux, an Android device, or an iPhone/iPad.

Web survey quality assurance included automated skip check programing to check data against defined conditions specified in the Microsoft Word version of the questionnaire. Penn State study team members reviewed and tested the survey’s overall look and feel and its workflow (e.g., skip

logic) with multiple device types. TVS team members also tested the survey on various devices. Software updates were made to correct for inconsistent formatting on the newest devices (i.e., iPhone X). Penn State staff also tested the automatically generated test data from an auto-pilot program for 100% correct programming logic using SPSS. Corrections were sent to SRC survey programmers and rechecked to verify that all issues were completely addressed.

Pilot and Finalize Web Survey, Generate Pre-test Report

Penn State study team members pre-tested the web survey in early September 2020 with a convenience sample of eight participants (Clearinghouse employees and recently separated veterans). Pre-test participants were provided a URL and user WebLoginID to take the survey. After feedback to survey logic was corrected, a pilot study with 25 participants, who were Penn State student/alumni veterans, was initiated.

Feedback from the pilots was collected. The software also recorded survey length. The lead analyst summarized the aggregate results of the pre-test in a short report, focused primarily on survey length, which was provided to the VETS team on August 12, 2020. The team jointly determined on August 19, 2020 what further adjustments to make to the web survey.

Penn State researchers subsequently commenced finalization of the web survey. This included refinements to survey functionality such as ensuring ability to re-use the WebLoginID to return to the survey; adding the assigned WebLoginIDs to the server; inserting skip error warnings; and programming the automated email reminders and gift code incentives administration. The survey was fully set-up and ready to go live November 1, 2020.

Survey Administration

Survey IDs

Original survey IDs were generated by the original longitudinal survey. A temporary numeric ID was generated for this specific survey. IDs were encrypted during the deployment of the survey.

Incentives

Wave 7 incentives included a \$50 Amazon gift code sent via email or text message as requested by participants upon survey completion. The participant selected their preferred method of gift code delivery. The Amazon gift codes were purchased on a rolling basis based on survey completion rates, since gift codes could not be returned to Amazon by the study team.

After a survey completed a survey, they were directed to a separate system to complete a gift code request form. The form was not linked with any of their survey data. Once the gift code was assigned, a staff member from the Survey Research Center emailed or texted the incentive gift code to the participant within 1 week upon survey completion. Distribution of the gift codes was managed by the SRC.

Survey Recruitment

Description of the Pilot Recruitment

To recruit Penn State student/alumni participants for the pilot test, a marketing flier was created (see appendices). The flier was posted on Facebook and distributed via email to a variety of Clearinghouse connections and veteran serving organizations. The most successful recruitment responses came from distribution of the flier through the Penn State Office of Veterans Programs' list-serv. Potential participants emailed or phoned the VETERANetwork Research Program Manager, who vetted the potential participants according to the following eligibility requirements: Penn State student/alumni; a veteran; separation from any United States military branch since 2016; over the age of 18 years; a United States resident; and English-speaking. All 25 of the available slots were filled and a wait-list was created. The pilot survey was launched on October 12, 2020 through personalized email messages. The pilot survey system closed on October 18, 2020.

Description of the VETS Survey Launch

The longitudinal VETS Survey was launched to 3,516 previous TVMI participants whose contact information was received from ICF International, Inc. The "Wave 7" web survey was opened November 14, 2020 to 100 participants to ensure all functionality of the messaging system and survey was working. Then, the full survey launched to the remaining 3,416 participants on Sunday November 15, 2020. The survey remained open until January 5, 2021.

Recruitment Messaging

VETS Survey participants were actively recruited through email and text messages that were strategically staggered and crafted with language intended to appeal to veteran pride, to address the need for extra money for holiday spending, and to spark a sense of urgency in completion before the deadline. The first email invitation was sent on November 15, 2020 to 3,216 potential participants. Additional reminder emails were sent on November 22, 2020, December 6, 2020 and December 20, 2020. Reminder texts were sent on November 18th, 25th, 29th and December 13th and 23rd. Messaging was discontinued once a participant completed their assigned survey. The final text reminder notified participants who had not completed the survey that the survey deadline was extended to January 5, 2021. See the appendices for the recruitment email and text message language.

Recruitment Schedule

The table below outlines the dates for distribution of recruitment emails and texts for the VETS Survey initiative.

Type of Communication	Week of Implementation	Distribution Date
Email 1	Week 1	11/15/20
Text 1	Week 1.5	11/18/20
Email 2	Week 2	11/22/20
Text 2	Week 2.5	11/25/20 (Thanksgiving week)
Additional Text	Week 3	11/29/20
Email 3	Week 4	12/6/20
Text 3	Week 5	12/13/20 (informed of closing on 12/26/20)
Email 4	Week 6	12/20/20 (informed of closing on 12/26/20)
Text 4	Week 6.5	12/23/20 (extended closing to January 4, 2021)
Survey completion by each participant being recruited was tracked; reminder emails and text messages were discontinued once a participant submitted a complete survey. Recruitment efforts for the research initiative stopped when the survey closed.		

Post-Survey Participant Contact for Future Recruitment

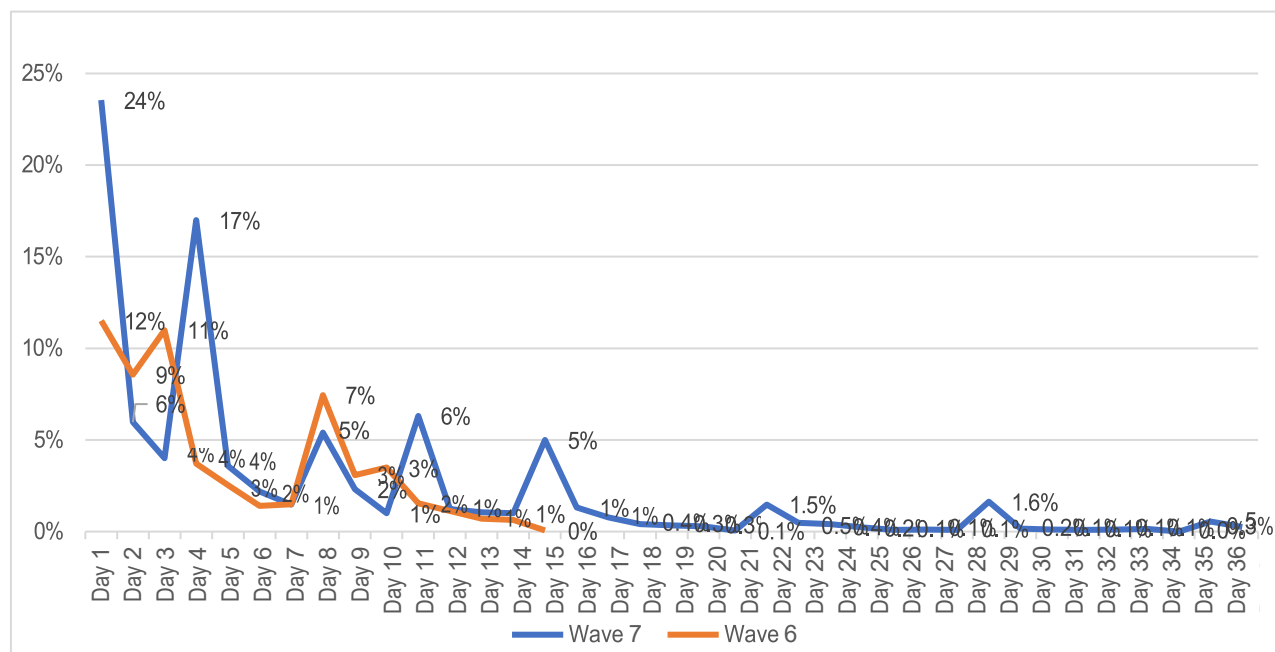
In February 2020, the Penn State lead analyst set-up a mail merge and emailed all the VETS Survey participants. The message was sent to thank participants for their survey completion and to peak interest in future waves by sharing some data points. In this message, participants were asked to keep the study team informed of contact information changes, and eight individuals responded with updates. See the appendices to view the email language.

Survey Progress Reports

During survey administration, VETS Survey briefs were prepared for Pew. A total of six briefs were submitted between November 20, 2020 and January 5, 2021. Each report highlighted the total number of surveys completed, the overall response rate, and the number of surveys in

progress. In addition, charts were included to visually demonstrate the response rate in comparison to earlier TVMI survey waves (See below for an example).

A total of 3,516 survey invitations were extended. At the conclusion of the survey process, 3,180 participants completed the survey, which reflected a 90.5% response rate. The high rate was attributed to active recruitment efforts, an incentive offered during the holidays, an established relationship with the sample, and the ease of the web-based survey process.



Note. The graph compares the VETS Survey response rate (blue line) to previous TVMI waves. Wave 7, Day 1 is November 16, 2020. Wave 5 launched on Monday, November 5, 2018. Wave 6 launched on Monday, May 6, 2019.

Wave 7 Weighting

A total of 9,566 Veterans responded to the baseline survey in the Fall of 2016. TVMI data collection continued every 6 months and concluded with Wave 6 in late Spring 2019. IFC International, Inc. contacted 7,404 TVMI participants for their permission to be contacted in future studies. A sample of 3,516 veterans voluntarily chose to participate in additional, independent survey efforts (“Wave 7”) by the Clearinghouse and were invited to participate in the wave 7 (W7) survey. A total of 3,205 veterans consented, and 3,180 completed the survey. To adjust for nonresponse at W7, we used a propensity score weight based on characteristics measured in wave 1 (W1). The propensity score weight adjusts the respondents to represent the nonrespondents for the weighting variables. The margin of error with design effect for the total respondents is plus or minus 1.9 percentage points at the 95% confidence level.

The propensity score model is based on a logistic model estimating the probability of a Veteran responding at W7 (1=response, 0= nonresponse) based on their W1 characteristics. The estimated logistic regression model parameters are presented in Table 4. The model uses the

W1 weights. We kept all weighting variables in the model even if not significant predictors. The reason for estimating the propensity scores using the full model is to have a consistent model to use over all waves of the research. Some of these variables may be significant in future waves.

The significant model effects ($p < 0.05$) were:

More likely to respond--

- Higher level of education (anything above high school) at wave 1
- Married- first and only marriage at wave 1 compared to single not married
- Had healthcare coverage at wave 1
- Gave a geocodable address at wave 1

Less likely to respond—

- Left active duty, currently NGR at wave 1
- Minority race/ethnicity (Black NH, Hispanic, Asian NH, and Other race NH) compared to White NH
- Older veterans (40 years old and older) compared to age 18 to 24 age group
- Warrant officers

A list of missing values for the wave 7 non-response weights are provided in Table 1. The W1 missing values were imputed using Proc MI (see Table 2). The nonresponse adjustment equals the inverse of the estimated probability from the logistic regression model. The W7 nonresponse weight is equal to the W1 weight multiplied by the W7 nonresponse adjustment.

The final W7 weight is calculated by ratio adjusting the W7 nonresponse weights to the original population of Veterans by branch, rank, gender.

Table 2 includes the W1 characteristics used in the modeling and the distributions for W7 respondents and nonrespondents. The distributions are weighted based on the W1 weight. The table also includes the overall weighted W1 distribution (respondents and non-respondents) and the propensity score weighted W7 respondents. Table 3 presents the unweighted frequency of respondents and nonrespondents as well as the weighted totals for Wave 1 and Wave 7.

Table 1. Missing values for Variables Used to Create the Wave 7 Non-response Weights

Variable	Missing
Age	318
Race/ Ethnicity	50
Marital status	5
Working Full-time	5
Branch	6
Rank	1
Military Occupation	9
Military Partner (veteran)	5
Discharge status	26
Deactivated NGR, currently Serving NGR	6
Left Active Duty, currently Serving NGR	7
Insurance	2
Applied for VA Benefits	2
Financial security	16
Physical health problems	1
Mental health problems	1
PTSD 3+ (possible)	6
Anxiety possible	4
Depression possible	52
Harm Self	56
Alcohol problem possible	5

Table 2. Weighted Percentages for Wave 7 Responders and Nonresponders

	Wave 7 Respond*	Wave 7 Non- respond*	Wave 1*	Wave 7**
Unweighted total	3180	6386	9566	3180
Weighted Total	16,217	32,748	48,965	48,965
Branch				
Army	31.0	32.6	32.1	32.1
Navy	19.4	18.5	18.8	18.8
Air Force	14.4	13.1	13.5	13.6
Marines	17.7	17.0	17.2	17.2
NG/Res	17.6	18.8	18.4	18.4
Paygrade				
E1-E4	42.8	40.7	41.4	41.4
E5-E6	29.4	29.6	29.5	29.6
E7-E9	12.0	14.1	13.4	13.4
W1-W5	0.8	1.2	1.1	0.9
O1-O3	7.2	6.0	6.4	6.6
O4-O7	7.8	8.3	8.1	8.1
Discharge status?				
Honorable	81.9	81.6	81.7	82.0
General honorable or not honorable	2.7	2.8	2.8	2.6
Other Discharge	0.9	1.0	1.0	0.9
Medical	6.2	6.1	6.2	6.3
I have never been discharged	8.2	8.5	8.4	8.2
Gender				
Male	83.3	84.5	84.1	84.1
Female	16.7	15.5	15.9	15.9
Age				
Mean	31.7	32.5	32.3	31.5
Std. Dev.	19.9	21.0	20.6	8.8
Min	18.8	18.0	18.0	18.8
Max	64.0	72.5	72.5	64.0
Age Group				
18-24	28.1	26.1	26.8	27.3
25-29	26.1	25.0	25.4	25.6
30-34	15.5	14.4	14.8	15.4
35-39	11.3	11.1	11.2	11.8
40-44	8.6	10.5	9.9	9.0
45-49	6.5	7.6	7.2	6.8
50+	4.0	5.2	4.8	4.2
Race group†				
NH white	68.1	60.6	63.1	70.0
NH black	8.2	11.8	10.6	7.2

	Wave 7 Respond*	Wave 7 Non- respond*	Wave 1*	Wave 7**
Unweighted total	3180	6386	9566	3180
Weighted Total	16,217	32,748	48,965	48,965
Hispanic	14.8	15.8	15.5	14.1
NH Asian/ HPI	3.0	6.0	5.0	2.5
NH Multi-race	5.3	4.2	4.6	5.6
NH Other	0.7	1.6	1.3	0.6
Highest Level of Education				
High school diploma GED	20.5	23.3	22.3	19.3
Some college credit, no degree. Post high school Voc Tech training	35.6	33.9	34.4	35.4
Associate's degree for example, AA, AS	13.5	12.4	12.8	14.0
Bachelor's degree for example, BA, BS	17.3	17.8	17.6	17.6
Master's degree for example, MA, MS, MEng, MEd, MSW, MBA	10.2	10.4	10.3	10.6
Doctoral or Professional degree	2.9	2.3	2.5	3.1
Marital Status				
Never married	24.6	27.3	26.4	22.9
Married - first and only marriage	52.1	47.3	48.9	53.8
Married - second or later marriage	13.5	14.2	14.0	13.8
Separated, Divorced, Widowed	9.9	11.2	10.8	9.4
Current work status?				
Working full-time (40+ hours)	45.5	44.8	45.1	46.3
Not working full-time	54.5	55.2	54.9	53.7
Unpaid work				
Full-time care of child/adult or homemaker	12.6	11.8	12.1	13.0
Full-time student †	25.4	22.7	23.6	25.8
Part-time student	7.0	5.9	6.3	7.5
Health				
Do you have an ongoing physical health condition, illness, or disability	53.0	52.4	52.6	54.1
Do you have an ongoing mental/emotional health condition, illness, or disability	31.6	32.8	32.4	31.2
T1 Meets criteria for probable depression based on sum score 3+	17.3	18.9	18.4	16.7
Thoughts of better off dead or hurting self†	8.2	8.7	8.6	8.1
T1 Meets criteria for anxiety based on sum score 3+	26.4	26.9	26.7	26.3
T1 Meets criteria for probable PTSD based on sum score 3+ revised if no trauma-0	25.2	26.1	25.8	25.3
T1 Meets criteria for alcohol misuse sum of 3+ women, 4+ men	36.5	34.3	35.0	37.1
Do you have healthcare coverage†	83.6	81.1	81.9	84.8
Have you ever applied for VA or DoD service connected disability status†	58.8	57.6	58.0	59.6
Traumatic Brain injury	20.6	21.5	21.2	21.1
Gave address at T1†				
Geocodable address	89.6	77.4	81.4	91.8
Not geocodable	10.4	22.6	18.6	8.2

	Wave 7 Respond*	Wave 7 Non- respond*	Wave 1*	Wave 7**
Unweighted total	3180	6386	9566	3180
Weighted Total	16,217	32,748	48,965	48,965
Financial Status†				
Secure financial status	37.2	35.2	35.9	38.1
Problematic financial status	24.3	26.0	25.4	23.8
At risk financial status	38.5	38.8	38.7	38.1
Current Military Status				
Left Active Duty, currently NGR	13.8	14.2	14.1	12.7
Deactivated NGR, currently NGR†	17.0	17.8	17.6	17.7
Partner not in military	83.9	85.1	84.7	84.0
Partner a Veteran	9.0	9.0	9.0	9.1
Partner currently serving	7.1	5.9	6.3	6.9
Military Occupation				
Service support	36.3	37.3	37.0	35.9
Combat arms	22.7	23.0	22.9	22.8
Combat support	40.9	39.7	40.1	41.3

*Weighted by Wave 1 weight.

**Weighted by Wave 7 weight.

Table 3. Unweighted Respondents and Nonrespondents and Weighted Wave 1 and Wave 7

	Wave 1 Unw Respond	Wave 7 Unw Respond	Wave 7 Unw Non- respond	Weighted Wave 1 48965	Weighted Wave 7 48965
Unweighted total	9566	3180	6386		
Branch					
Army	3153	1013	2140	15700	15714
Navy	1839	637	1202	9200	9217
Air Force	1820	631	1189	6631	6643
Marines	1520	513	1007	8422	8405
NG/Res	1234	386	848	9012	8987
Paygrade					
E1-E4	2705	933	1772	20288	20281
E5-E6	2871	952	1919	14461	14468
E7-E9	1708	510	1198	6570	6570
W1-W5	151	41	110	536	453
O1-O3	799	299	500	3130	3213
O4-O7	1332	445	887	3980	3980
Discharge status?					
Honorable	8132	2713	5419	39997	40141
General honorable or not honorable	207	69	138	1370	1259
Other Discharge	68	22	46	469	449
Medical	565	190	375	3012	3100
I have never been discharged	594	186	408	4117	4015
Gender					
Male	7823	2575	5248	41169	41169
Female	1743	605	1138	7796	7796
Age Group					
18-24	1871	655	1216	13109	13360
25-29	2134	742	1392	12416	12505
30-34	1423	494	929	7227	7550
35-39	1247	422	825	5471	5771
40-44	1281	378	903	4842	4399
45-49	964	304	660	3533	3312
50+	646	185	461	2367	2065
Race group					
NH white	6220	2226	3994	30895	34271
NH black	1032	263	769	5195	3536
Hispanic	1320	414	906	7570	6915

	Wave 1 Unw Respond	Wave 7 Unw Respond	Wave 7 Unw Non- respond	Weighted Wave 1 48965	Weighted Wave 7 48965
Unweighted total	9566	3180	6386		
NH Asian/HPI	449	90	359	2434	1200
NH Multi-race	423	164	259	2241	2762
NH Other	122	23	99	631	279
Highest level of education you have completed					
High school diploma GED	1654	497	1157	10936	9471
Some college credit, no degree, Post high school Voc Tech training	2883	979	1904	16859	17325
Associate's degree for example, AA, AS	1270	433	837	6264	6876
Bachelor's degree for example, BA, BS	1906	624	1282	8637	8619
Master's degree for example, MA, MS, MEng, MEd, MSW, MBA	1434	485	949	5053	5164
Doctoral or Professional degree	419	162	257	1215	1510
What is your current marital status					
Never married	2061	631	1430	12940	11232
Married - first and only marriage	4882	1717	3165	23927	26349
Married - second or later marriage	1557	511	1046	6829	6764
Separated, Divorced, Widowed	1066	321	745	5269	4620
Current work status?					
Working full-time (40+ hours)	4456	1496	2960	22066	22669
Not working full-time	5110	1684	3426	26899	26296
Unpaid work					
Full-time care of child/adult or homemaker	1218	430	788	5905	6361
Full-time student	2039	732	1307	11542	12607
Part-time student	596	220	376	3069	3679
Health					
Do you have an ongoing physical health condition, illness, or disability	5453	1825	3628	25753	26478
Do you have an ongoing mental/emotional health condition, illness, or disability	3215	1043	2172	15871	15296
T1 Meets criteria for probable depression based on sum score 3+	1727	540	1187	8996	8184
Thoughts of better off dead or hurting self	791	258	533	4198	3955
T1 Meets criteria for anxiety based on sum score 3+	2544	829	1715	13091	12852
T1 Meets criteria for probable PTSD based on sum score 3+ revised if no trauma-0	2546	821	1725	12617	12362
T1 Meets criteria for alcohol misuse sum of 3+ women, 4+ men	3352	1150	2202	17143	18166
Do you have healthcare coverage	8066	2730	5336	40111	41503
Have you ever applied for VA or DoD service connected disability status	6146	2069	4077	28410	29182
Traumatic Brain Injury	2102	680	1422	10380	10325
Gave address at T1					
Geocodable address	7807	2854	4953	39878	44936
Not geocodable	1759	326	1433	9087	4029

	Wave 1 Unw Respond	Wave 7 Unw Respond	Wave 7 Unw Non- respond	Weighted Wave 1 48965	Weighted Wave 7 48965
Unweighted total	9566	3180	6386		
Financial Status					
Secure financial status	3843	1320	2523	17579	18667
Problematic financial status	2210	690	1520	12455	11647
At risk financial status	3513	1170	2343	18931	18651
Current Military Status					
Left Active Duty, currently NGR	1419	457	962	6897	6239
Deactivated NGR, currently NGR	1179	372	807	8594	8680
Partner not in military	7858	2574	5284	41462	41119
Partner a Veteran	1066	361	705	4421	4466
Partner currently serving	642	245	397	3081	3380
Military Occupation					
Service support	3660	1204	2456	18105	17578
Combat arms	2167	714	1453	11214	11148
Combat support	3739	1262	2477	19645	20239

Table 4: Wave 1 Weighted Variables Used in Propensity Score W7 Attrition Weighting

	Odds Ratio [CI]	Design Effects
Intercept	0.34 [0.24, 0.49]***	1.13
Gender		
Female (reference group)		
Male	0.89 [0.77, 1.02]	1.06
Branch		
Army (reference group)		
Navy	1.04 [0.90, 1.20]	1.13
Air Force	1.08 [0.93, 1.24]	0.92
Marines	1.03 [0.88, 1.20]	1.17
NG/Res	0.77 [0.42, 1.40]	1.40
Paygrade		
E1-E4 (reference group)		
E5-E6	0.93 [0.80, 1.07]	1.19
E7-E9	0.83 [0.68, 1.03]	1.05
W1-W5	0.66 [0.43, 1.00]	0.80
O1-O3	0.94 [0.74, 1.18]	0.98
O4-O7	0.76 [0.58, 1.01]	0.98
Discharge status?		
Honorable (reference group)		
General honorable or not honorable	1.03 [0.75, 1.42]	1.35
Other Discharge	1.15 [0.66, 1.99]	1.40
Medical	0.93 [0.76, 1.14]	1.13
I have never been discharged	1.02 [0.81, 1.28]	1.40
Age		
Age (continuous)	0.98 [0.97, 0.99]***	1.07
Race group		
NH white (reference group)		
NH black	0.65 [0.55, 0.77]***	1.12
Hispanic	0.86 [0.75, 0.99]*	1.24
NH Asian/HPI	0.50 [0.38, 0.64]***	1.19
NH Multi-race	1.15 [0.92, 1.44]	1.17
NH Other	0.57 [0.35, 0.93]*	1.10
Highest level of education you have completed		
High school diploma GED (reference group)		
Some college credit, no degree or Voc and Tech training	1.19 [1.03, 1.38]*	1.31
Associate's degree for example, AA, AS	1.35 [1.11, 1.63]**	1.21
Bachelor's degree for example, BA, BS	1.29 [1.07, 1.56]**	1.17
Master's degree for example, MA, MS, MEng, MEd, MSW, MBA	1.45 [1.14, 1.85]**	1.06
Doctoral or Professional degree	1.85 [1.34, 2.57]***	0.82
What is your current marital status		

	Odds Ratio [CI]	Design Effects
Never married (reference group)		
Married - first and only marriage	1.23 [1.07, 1.41]**	1.28
Married - second or later marriage	1.16 [0.96, 1.40]	1.12
Separated, Divorced, Widowed	1.01 [0.84, 1.22]	1.18
Current work status?		
Working full-time (40+ hours)	1.01 [0.90, 1.13]	1.13
Unpaid work		
Full-time care of child/adult or homemaker	1.04 [0.90, 1.20]	1.10
Full-time student	1.08 [0.95, 1.22]	1.20
Part-time student	1.19 [0.98, 1.45]	1.15
Health		
Do you have an ongoing physical health condition, illness, or disability	1.03 [0.91, 1.17]	1.15
Do you have an ongoing mental/emotional health condition, illness, or disability	0.91 [0.79, 1.04]	1.14
T1 Meets criteria for probable depression based on sum score 3+	0.88 [0.75, 1.05]	1.15
Thoughts of better off dead or hurting self	1.06 [0.87, 1.28]	1.16
T1 Meets criteria for anxiety based on sum score 3+	1.04 [0.89, 1.21]	1.17
T1 Meets criteria for probable PTSD based on sum score 3+ revised if no trauma-0	1.01 [0.88, 1.16]	1.15
T1 Meets criteria for alcohol misuse sum of 3+ women, 4+ men	1.05 [0.95, 1.16]	1.15
Do you have healthcare coverage	1.18 [1.02, 1.35]*	1.24
Have you ever applied for VA or DoD service connected disability status	1.05 [0.92, 1.19]	1.20
Traumatic Brain Injury	1.00 [0.88, 1.14]	1.12
Gave address at T1		
Geocodable address	2.41 [2.10, 2.78]***	1.15
Financial Status		
Secure financial status		
Problematic financial status	0.94 [0.82, 1.08]	1.18
At risk financial status	0.91 [0.81, 1.02]	1.14
Current Military Status		
Left Active Duty, currently NGR	0.85 [0.74, 0.98]*	1.12
Deactivated NGR, currently NGR	1.18 [0.64, 2.17]	1.42
Partner a Veteran	0.94 [0.80, 1.10]	0.97
Partner currently serving	0.97 [0.79, 1.19]	1.09
Military Occupation		
Service support (reference group)		
Combat arms	0.96 [0.84, 1.10]	1.16
Combat support	1.02 [0.92, 1.14]	1.16

Weighted n=48,965

Appendix: Recruitment & Other Communications

Recruitment Email Messages

Below is the language for email messages distributed at staggered points in time while the VETS Survey was open. Email 3 was revised and re-programmed during survey administration.

Email 1

Subject Line: Continue Your Participation in Veteran Transition Studies! Your Opinions Matter!



Dear [veteran name],

Thank you for your military service and your previous participation in the Transitioning Veterans Survey (TVS). We now invite you to participate in an exciting expansion of this unique veteran study!

The Veterans Engaging in Transition Studies (VETS) team at the Pennsylvania State University is continuing to survey veterans about their experiences as they transition from military to civilian life. Your input is very important and will help inform future programs, services, and policies for Service members like you!

The new survey asks similar questions to the surveys you have already completed. The survey should take approximately 40 minutes to complete, and you will receive a **\$50 Amazon.com gift code** upon completion. The survey will ask about your recent experiences with work, education, health, personal relationships, finances, and programs or services you have used since May of 2019. New questions have been included to assess the impact of COVID-19 on reintegration and the impact of educational pursuits on employability and debt obligations.

Your decision to participate is **completely voluntary**, and your contact information and participation study code will be kept **completely confidential**. The VA will not know if you participate in the study and participation will not affect your benefits.

Act Now to Help Other Veterans! To learn more or participate, click the link below as soon as possible! The website you will be directed to contains additional information about the study and asks for your consent to complete the VETS Survey.

Alternatively, you can indicate that you are no longer interested in being contacted for future studies. Reply to this email or click on the link below. If you elect not to participate in this study, your contact information will be destroyed.

We greatly appreciate your military service and your consideration of this important effort to support veterans. We would be most grateful for your survey participation!

CLICK HERE ON YOUR UNIQUE SURVEY LINK

Sincerely,

Daniel F. Perkins, Ph.D.
VETS Principal Investigator
Principal Scientist and Founder, Clearinghouse for Military Family Readiness
Professor of Family and Youth Resiliency and Policy, Department of Agricultural Economics,
Sociology and Education
The Pennsylvania State University
Questions? Please contact the Help Desk at VETSpsu@psu.edu.

Email 2

Subject Line: Share Your Veteran Transition Experience and Earn \$50 for Holiday Shopping!



Dear [veteran name],

We hope you will participate in the Veterans Engaging in Transition Studies (VETS) Survey! This survey is an expansion of The Veterans Metrics Initiative (TVMI) and represents the seventh point of data collection. The VETS Survey is similar to the Transitioning Veterans Survey (TVS) you completed in the past. We are continuing to assess veterans' experiences as they transition from military to civilian life. Your survey participation, across multiple years, is helping us understand and identify ways to improve the transition experience and promote veteran well-being.

The **voluntary** survey takes 40 minutes to complete and you will receive a **\$50 Amazon.com gift code** upon completion. The survey will ask about your recent experiences with work, education, health, personal relationships, finances, and programs or services you have used

since May of 2019. New questions have been included to assess the impact of COVID-19 on reintegration and the impact of educational pursuits on employability and debt obligations.

This is not a VA study. Your contact information and participation study code will be kept **completely confidential**. The VA will not know if you participate in the study and participation will not affect your benefits.

Ready to participate and earn a gift code for holiday shopping? Click the link below as soon as possible! The website you will be directed to contains additional information about the study and asks for your consent to complete the survey.

If you do not wish to be contacted again for this or future studies, please reply to this email or click on the link below. If you elect not to participate in this study, your contact information will be destroyed.

We appreciate your consideration of this request and would be most grateful for your survey participation!

CLICK HERE ON YOUR UNIQUE SURVEY LINK

Sincerely,

Daniel F. Perkins, Ph.D.
VETS Principal Investigator
Principal Scientist and Founder, Clearinghouse for Military Family Readiness
Professor of Family and Youth Resiliency and Policy, Department of Agricultural Economics,
Sociology and Education
The Pennsylvania State University
Questions? Please contact the Help Desk at VETSpsu@psu.edu.

Email 3

Subject Line: Time is Running Out! Complete the VETS Survey and Earn \$50!



Dear [veteran name],

We recognize that the COVID-19 pandemic has altered life for many people. Help us understand how it has impacted your military to civilian transition. By completing the Veterans Engaging in Transition Studies (VETS) Survey, you will help raise awareness of the COVID-19 pandemic's impact on transitioning, as well as the many other facets at play during reintegration.

Time is running out, so please take this opportunity to share your experiences and provide valuable input! The **voluntary** survey takes 40 minutes to complete and you will receive a **\$50 Amazon.com gift code** upon completion as a token of appreciation. The survey will ask about your recent experiences with work, education, health, personal relationships, finances, and programs or services you have used since May of 2019. New questions have been included to assess the impact of COVID-19 on reintegration and the impact of educational pursuits on employability and debt obligations.

Your contact information and participation study code will be kept **completely confidential**. This is not a VA study. The VA will not know if you participate in the study and participation will not affect your benefits.

Want to Share Your Perspectives? Click the link below. The website you will be directed to contains additional information about the study and asks for your consent to complete the survey.

If you do not wish to be contacted again for this or future studies, please reply to this email or click on the link below. If you elect not to participate in additional studies, your contact information will be destroyed.

We thank you for your service to the country and for considering this opportunity to benefit future generations of Service members. On behalf of the VETS team, thank you in advance for your participation in the survey!

CLICK HERE ON YOUR UNIQUE SURVEY LINK

Sincerely,

Daniel F. Perkins, Ph.D.
VETS Principal Investigator
Principal Scientist and Founder, Clearinghouse for Military Family Readiness
Professor of Family and Youth Resiliency and Policy, Department of Agricultural Economics,
Sociology and Education
The Pennsylvania State University
Questions? Please contact the Help Desk at VETSpsu@psu.edu.

Email 4 – Survey End Date

(Note: Send on December 20, 2020.)

Subject Line: **Last Chance!** Veteran Survey Closes This Week. We Want To Hear From You!



Dear [veteran name],

Time is running out! The survey will close this week on **December 26, 2020**. Respond now to have your voice heard!

We thank you for participating in previous surveys and we invite you to complete the Veterans Engaging in Transition Studies (VETS) Survey! This **voluntary** survey is designed to help us understand and identify ways to improve the transition experience from military to civilian life for other veterans. Your opinions matter and can make a difference!

The survey takes 40 minutes to complete and you will receive a **\$50 Amazon.com gift code** upon completion. The survey will ask about your recent experiences with work, education, health, personal relationships, finances, and programs or services you have used since May of 2019. It also asks about the impact of COVID-19 on your reintegration and any educational pursuits and resulting debt obligations that have impacted your employability or well-being.

This is not a VA study. Your contact information and participation study code will be kept **completely confidential**. The VA will not know if you participate in the study and participation will not affect your benefits.

Last chance! Respond now! Click the link below. The website you will be directed to contains additional information about the study and asks for your consent to complete the survey.

If you do not wish to be contacted in the future for other studies, please reply to this email or click on the link below. If you elect not to participate in this study, your contact information will be destroyed.

We greatly appreciate your military service and value your input. Please do not delay, so your experiences can be counted and used to better supports for transitioning veterans! We would be most grateful for your survey participation!

CLICK HERE ON YOUR UNIQUE SURVEY LINK

Sincerely,

Daniel F. Perkins, Ph.D.
VETS Principal Investigator
Principal Scientist and Founder, Clearinghouse for Military Family Readiness
Professor of Family and Youth Resiliency and Policy, Department of Agricultural Economics,
Sociology and Education
The Pennsylvania State University
Questions? Please contact the Help Desk at VETSpsu@psu.edu.

Recruitment Text Messages

Below is the language for text messages sent at staggered points while the VETS Survey was open. Two of the messages (3 and 4) were revised during survey administration. The timing of distribution was also changed to 10 a.m. EST.

The survey vendor inserted the personalized survey links at the end of each message.

Text 1

Support other veterans! Complete the Veterans Engaging in Transition Studies Survey. It takes ~40 minutes. You will get a \$50 code for Amazon! (*link*)

Text 2

Happy Thanksgiving! We are grateful for your military service! Complete the VETS Survey. We will send you a \$50 Amazon code! (*link*)

Additional Text

(Added for distribution on 11.29.20)

Cyber Monday is tomorrow; earn **\$50 to shop** this holiday season! The VETS Survey is **closing soon**. If you started the survey, click the link to finish it today!

Text 3

It's not too late to finish the VETS Survey before it CLOSES on December 16, 2020! Earn a \$50 gift code from Amazon! (*link*)

Text 4

We value your input, so we are extending the VETS Survey until January 4, 2021. Please take time to complete it and help benefit future veterans! Earn a \$50 gift code from Amazon! (*link*)

Other Correspondence

Below are two additional emails sent following survey participation.

Payment Confirmation Email

Subject Line: VETS Gift Code Request Confirmation

Hello _____,

Thank you for completing the VETS Survey. Your time in providing survey responses is greatly appreciated.

Your gift code request is being processed. Please expect to receive an email/text message within 7 days. The message will include your Amazon gift code.

If you have questions, please email the VETS Help Desk at VETSpsu@psu.edu.

Thank you for your military service and for helping to inform future, effective programs and services for veterans.

Sincerely,

Daniel F. Perkins, Ph.D.

VETS Principal Investigator

Principal Scientist and Founder, Clearinghouse for Military Family Readiness

Professor of Family and Youth Resiliency and Policy, Department of Agricultural Economics, Sociology and Education

The Pennsylvania State University

Questions? Please contact the Help Desk at VETSpsu@psu.edu.

Note: The language below was used for any participant completing the survey after 4:00 p.m. on December 24, 2020.

Payment Confirmation Email for Holiday Survey Break Submissions

Subject Line: Confirmation of Survey Completion and Payment

Hello _____,

Thank you for completing the VETS Survey. Your time in providing survey responses is greatly appreciated.

Your gift code request is being processed. Due to the holiday break, please expect to receive your gift code by the week of January 4, 2021.

If you have questions, please email the VETS Help Desk at VETSpsu@psu.edu.

Thank you for your military service and for helping to inform future, effective programs and services for veterans.

Sincerely,

Daniel F. Perkins, Ph.D.

VETS Principal Investigator

Principal Scientist and Founder, Clearinghouse for Military Family Readiness

Professor of Family and Youth Resiliency and Policy, Department of Agricultural Economics, Sociology and Education

The Pennsylvania State University

Questions? Please contact the Help Desk at VETSpsu@psu.edu.

Incentive Email

Below is the language for the final message with the incentive details.

Subject Line: VETS Survey: Your Gift Code

Thank you for completing the Veterans Engaging in Transition Studies (VETS) Survey! Your time and effort is greatly appreciated!

Your \$50 Amazon.com® gift code is below.

Amazon.com® gift code:_____.

Your Amazon.com® code is unique. You may enter the code online when you are ready to make a purchase at www.amazon.com. There is no expiration date.

Thank you again for your military service and your participation in the survey.

Sincerely,

Daniel F. Perkins, Ph.D.

VETS Principal Investigator

Principal Scientist and Founder, Clearinghouse for Military Family Readiness

Professor of Family and Youth Resiliency and Policy, Department of Agricultural Economics,
Sociology and Education

The Pennsylvania State University

Questions? Please contact the Help Desk at VETSpsu@psu.edu.