

# Voice of the Veteran Line of Business Tracking Study Vocational Rehabilitation and Employment Non-Participant

Fiscal Year 2015 Non-Response Bias Analysis



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# Executive Summary

The Voice of the Veteran (VOV) Line of Business Tracking Satisfaction Research Study was developed to establish continuous satisfaction measurement and incorporate direct Veteran feedback in the decision making process in order to improve the level of service to Servicemembers, Veterans, and their beneficiaries.

As part of this study, a survey was fielded in Fiscal Year 2015 (FY15) for the Department of Veterans Affairs (VA), Veterans' Benefits Administration (VBA) Vocational Rehabilitation and Employment Service program (VR&E) Non-Participant. This survey is fielded annually on behalf of the VR&E Service Program. The survey yielded a response rate of 5.60% (decrease of 0.16% from FY14), which was lower than the estimated response rate submitted with the information collection request (ICR) as well as lower than the Office of Management and Budget's standard of 80% (at the overall unit response rate).

OMB's *"Standards and Guidelines for Statistical Surveys,"* Section 3.2, Guideline 3.2.9, notes that a non-response analysis should be conducted for surveys with an overall unit response rate of less than 80%. Therefore, J.D. Power (JDP) conducted the necessary statistical tests in accordance with OMB's guidelines in order to verify the validity of VR&E's survey results for FY15.

The initial 2015 analyses for these reports were done in consultation with Dr. Don Dillman, a professor at Washington State University. Dr. Dillman is regarded as a key survey method expert on non-response bias research and the report conforms to sound statistical research practices in accordance with OMB standards. The analysis performed also includes an iterative survey raking procedure to derive sample weightings based on a simultaneous balancing analysis of the demographic differences.

The statistical tests performed on the survey illustrate that no differences were found in the Overall Satisfaction Index Score and Advocacy ratings (likelihood to reapply for the program) for VR&E in FY15 after adjusting for non-response bias in age, gender, race, military branch, days of service, war participation, and case status.

The VR&E survey is fielded to Veterans who dropped out of the program prior to completing a rehabilitation plan. These individuals include applicants who never attended the initial meeting with a counselor; applicants who were entitled to the program but did not pursue; and applicants who started, but did not complete rehabilitation (i.e., negative closures).

The Overall Satisfaction Index score (582) and advocacy ratings likelihood to reapply for program (2.63, rating 1-4) are not impacted in any meaningful way by non-response bias. This analysis confirms that the data collected during Fiscal Year 2015 is valid for use by VBA.

# Introduction

In an effort to achieve top level customer service, VBA partnered with J.D. Power to conduct Veteran satisfaction research on its behalf. VBA's Voice of the Veteran (VOV) Satisfaction Initiative was established to continuously measure and improve the level of service to Service members, Veterans, and their beneficiaries.

The intent of this initiative is to:

- Reinststate VBA's customer satisfaction research program in order to incorporate Veteran feedback into the decision-making process,
- Identify the critical factors to Veterans' satisfaction with benefits and services provided by VBA,
- Provide continuous feedback to validate effectiveness of new initiatives and process changes,
- Provide decision-makers and stakeholders with timely and actionable feedback on a continuous basis, and;
- Identify and document best practices, and act as a vehicle to celebrate successful interactions and experiences.

VBA's VOV Line of Business Tracking Satisfaction Research Study was developed to continuously field customer satisfaction survey instruments to provide Veteran and beneficiary feedback on the following VBA lines of business and benefit programs: Compensation, Pension, Education, Vocational Rehabilitation and Employment, and Loan Guaranty (including Specially Adapted Housing). In support of this effort, in FY15, JDP fielded a survey instrument regarding the Non-Participant process on behalf of VR&E. The purpose of the VR&E Non-Participant study is to identify factors that may have led Veterans to discontinue the vocational rehabilitation program and to determine ways to improve the level of services provided.

The survey instrument for the VR&E Non-Participant study was developed in collaboration with VR&E and in accordance with OMB's guidelines concerning statistical collection procedures and methods. After the initial survey instrument was designed, cognitive labs using the "think aloud" method were conducted to evaluate user experience when filling out the survey. Prior to the FY15 fielding of the VRE Non-Participant survey, a Benchmark (pilot) study was conducted from October 2012 through January 2013 to further assess the effectiveness of the methodology and conformance to OMB's standards. This was also fielded in 2014 and the 2015 fielding will be the third iteration of the survey fielding.

# Methodology

## 2.1 J.D. Power Index Model

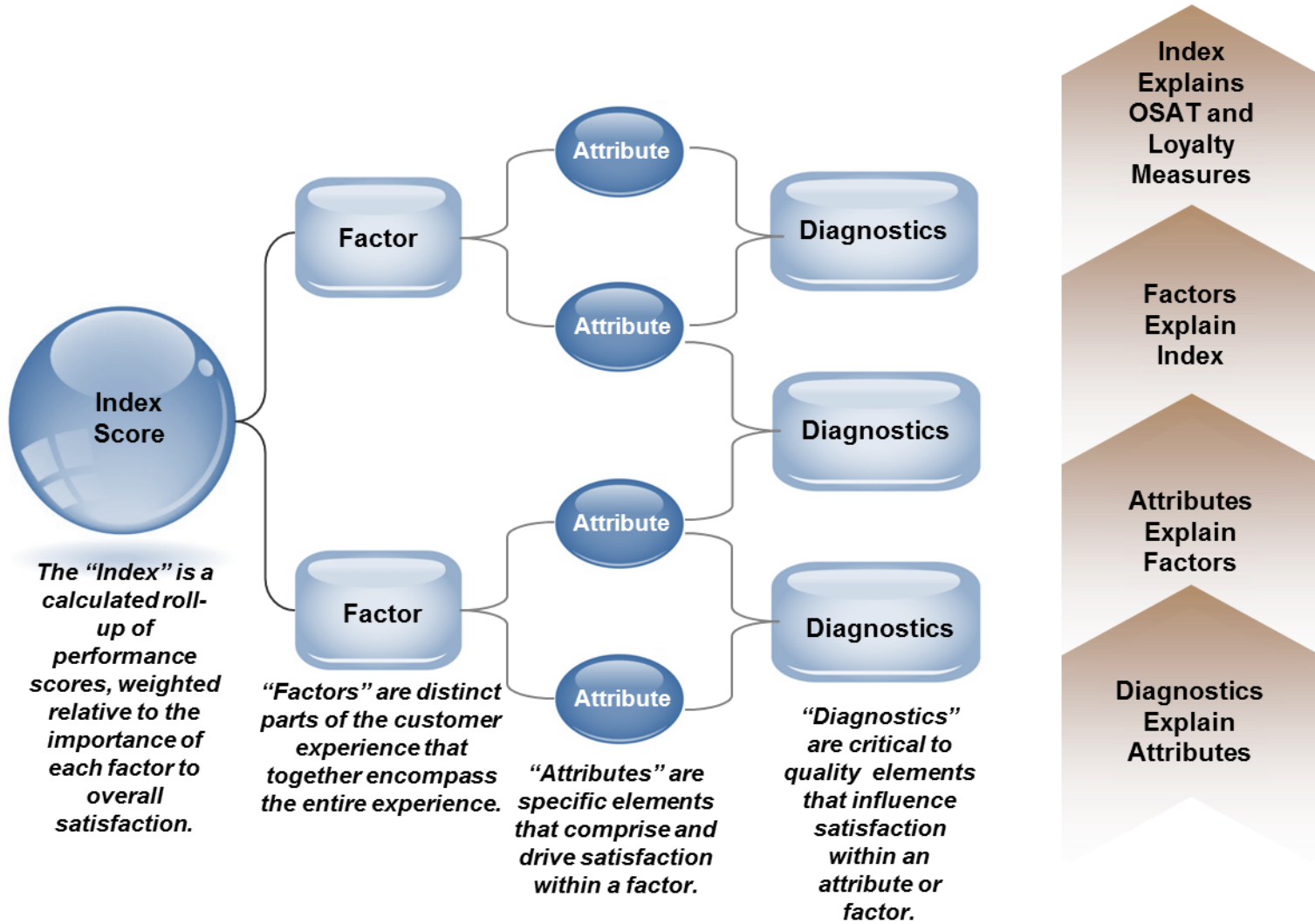
J.D. Power defines customer satisfaction as a measure of how well product or service experiences fit the expectations of customers. All JDP index models assume a two-tiered regression model involving factors and attributes. Each customer experience is influenced by several factors (i.e. first tier), which in turn, are influenced by several attributes or drivers (i.e. second tier). A diagram of the index model follows on the subsequent page.

In order to begin the index model calculation, each set of attributes within a factor are used to predict the Overall Satisfaction rating (sub-OSAT) for that factor. An importance weight is assigned to each attribute, where the weight of “importance” of each attribute is defined as the ability of that attribute to predict Overall Satisfaction. A multiple regression model is used to estimate the attribute weights. This model produces the “bottom” level weights and is computed for each factor separately. The bottom level weights are rescaled so that they add up to one within each subcategory. As a result, the percentage of total explained variation in the sub-OSAT that is due to a particular attribute constitutes that attribute’s importance weight within its respective factor.

Following the calculation of attribute (i.e. bottom level) weights, the factor (i.e. top-level) weights are calculated. Factor scores are calculated by taking the sum of the product of the attribute rating scores and the attribute importance weights. This model produces the “top” level weights and these weights are rescaled so that they add up to one. Thus, the percentage of the total explained variation in the Overall Satisfaction rating that is due to a particular sub-OSAT constitutes that factor’s importance weight.

After all factor scores are computed, they are weighted so that some contribute more to Overall Satisfaction than others, based on the index importance weights. The index score is subsequently calculated by taking the sum of the product of all of the factor scores and the factor importance weights. Finally, both the index and factor scores are multiplied by 100 so that the range of each is 100 (if all attributes were rated 1) to 1,000 (if all attributes were rated 10).

By applying the importance weights derived from the two-tiered modeling approach, JDP creates a weighted index score that ranges from a low of 100 to a high of 1,000. This index approach has the benefit of being highly reliable and valid and provides increased ability to discriminate the performance levels of companies.



### VR&E Non-Participant Process Index Weights

In working with VR&E's subject matter experts and leadership, the design of its survey encompasses the factors and attributes as outlined in the tables on the next page. The factors (Benefit Information, Contact with VA, Benefit Application, and Benefit Entitlement) and attributes (Ease of Accessing Information, Availability of Information, etc.) represent VR&E's Non-Participant Index Model in FY15. The corresponding weights for each factor and attribute are the weights based on the above index model calculation. The weights are derived from the relative importance of each factor or attribute to the respondents.

Table 2.0 Index Model Weights

VR&E Index Model Weights	
	Effective Weight
Benefit Information	29.78%
Intake Counselor	52.94%
Service Counselor	3.32%
Benefit Entitlement	13.96%

Table 2.1 Weights by Attribute

VR&E Weights by Attribute	
	Effective Weight
<b>VR&amp;E Benefit Application Process</b>	
Ease of completing the application	7.76%
Timeliness of eligibility notification	9.19%
Flexibility of application methods	12.83%
<b>VR&amp;E Intake Counselor</b>	
Promptness of scheduling	7.13%
Courtesy of the app. counselor	9.12%
Knowledge of the app. counselor	9.11%
Counselor's concern for your needs	18.11%
Timeliness of completing your initial	9.48%
<b>VRE Service Counsellors</b>	
Promptness of scheduling	0.46%
Courtesy of the counselor	0.74%
Knowledge of the counselor	0.53%
Counselor's concern for your needs	1.12%
Timeliness of completing your initial	0.47%
<b>VRE Benefit Entitlement</b>	
Effectiveness of benefit/service	5.08%
Timeliness of receiving	8.88%



## 2.2 Sampling

The VR&E survey was fielded to Veterans who dropped out of the program prior to completing a rehabilitation plan. These individuals include applicants who never attended the initial meeting with a counselor; applicants who were entitled to the program but did not pursue; and applicants who started, but did not complete rehabilitation (i.e., negative closures).

J.D. Power mailed approximately 5,000 surveys to Veterans across the nation in FY15. The targets number of completed surveys was 1,500. The actual number of completed surveys received was 354. The sample used in this study was provided by VR&E and was a random sample from the available Veterans provided by VR&E.

Survey Instrument	Methodology	Fielding Frequency	Total Mailouts in FY15
VRE Non-Participant	Mail Only	Annually	5,000

## 2.3 Data Collection

During the survey fielding period, self-administered paper surveys were collected. While verbatim responses are recorded by a live survey processor, responses from paper surveys are scanned through automated imaging software. Survey returns undergo quality assurance to validate the accuracy of responses captured.

Respondents from each study completed the survey on paper and received two separate mailings:

- 1<sup>st</sup> Mailing: Survey Package, which included a cover letter introducing the study to the respondent, a paper survey, and a business reply envelope.
- 2<sup>nd</sup> Mailing: Survey Package, which included a cover letter, a paper survey, and a business reply envelope.

Each time the surveys were deployed, the postcards and survey packages were subject to a proof approval process that utilized three levels of approvals by J.D. Power, Benefits Assistance Service (BAS), and VA Publications Services Division (VAPSD). After the print vendor mailed the survey packages, mail receipts were sent to VBA.

During the survey fielding period, JDP provided a toll-free survey hotline and dedicated e-mail address to answer survey-related inquiries and to provide assistance to respondents for completing the surveys.

The telephone and e-mail helpdesk was staffed by three JDP employees who answered inquiries during regular business hours (8:00am-5:00pm PST, Monday thru Friday). A voice message system was available to receive phone messages so after-hours calls could be responded to the following business day. An automatically generated e-mail response was sent to all e-mail inquiries informing respondents that their e-mail was received and they would receive a response within 24 hours. JDP helpdesk representatives logged each survey-related inquiry in a password protected spreadsheet documenting the reason for the inquiry, the resolution provided, and the contact information of each caller. At the end of each month, a log containing all inquiries was provided to the Contracting Officer Representative (COR) for review. If non-survey related high-severity benefit inquiries were received, J.D. Power contacted the COR immediately with the respondent's contact information.

Throughout the course of the program, weekly status meetings were held between JDP and BAS to discuss survey administration. Biweekly status meetings were held between the Government Printing Office print vendor, JDP, BAS and VAPSD to discuss the printing and mailing of the survey materials.

## Non-Response Bias Analysis

The purpose of the non-response bias analysis is to ascertain the possible causes of variance in response rates among different respondent demographics and/or determine if any bias has been introduced with a low response rate. Given that the Voice of the Veteran VR&E Non-Participant study had an overall unit response rate of 5.60% in Fiscal Year 2015, the following section examines whether a low response rate or other factors may have caused respondent bias to occur.

The Office of Management and Budget's Questions and Answers, "When Designing Surveys for Information Collections" dated January 2006, and "Standards and Guidelines for Statistical Surveys" dated September 2006 (see References) provide guidelines on acceptable survey design and response rates. OMB guidelines recommend a non-response bias evaluation for surveys with an overall unit response rate of less than 80%.

In addition to the above referenced documents prepared by OMB, J.D. Power assessed other source documents that were written and published by the Federal Committee on Statistical Methodology, "Statistical Policy Working Paper 17, Survey Coverage" (1990) and "Statistical Policy Working Paper 31, Measuring and Reporting Sources of Error in Surveys" (2001).

While high response rates are always desirable in surveys, JDP finds an 80% response rate is not achievable for most voluntary, satisfaction-based, survey research studies (Malhotra & Birks, 2007). In particular, survey research studies that do not provide an incentive are subject to not achieving an 80% response rate. To better illustrate this point, the Dillman Method for survey fielding was discussed in Dillman, D. A. (2014, pp. 22), detailing the efforts to attain an 80% response rate.

A survey instrument was fielded to 600 students at the University of Washington, the same University that sponsored the study. After 5 attempts to solicit a response in a closed university setting, as well as offering a monetary incentive to complete the study, they failed to achieve an 80% response rate garnering only a 77% response rate. The JDP team met with the VA Contracting Officer Representative to discuss current trends and realistic response rates. As noted JDP does not believe that an 80% response rate is achievable and this concern was shared with the Benefits Assistance Service team.

JDP conducted the following non-response bias analysis to determine if the respondents (i.e. those who completed the survey) were different in a meaningful way from the non-respondents (i.e. those who were sent a survey, but did not complete it). Chi-squared analyses consist of comparisons between respondents and non-respondents on available demographic variables such as gender, age, race, geographical region, war participation (service era), and military service branch. The U.S. states were converted to standard USA census regions (Midwest, Northeast, South, and West) in order to aggregate the data and enhance regional comparisons.

Throughout this report, we are conducting statistical analyses to compare survey respondents and non-respondents. Frequently used statistical tests can include the T-Test, Chi-Square, or Analyses of Variance (ANOVA). These tests generate relevant t-statistics, Chi-Squares, or F statistics that are reported. The magnitude of the statistic's value (either positive or negative) measures the size of the difference relative to the variation in the data. If the statistic is not large enough to generate a probability (p-value) less than .05, then it falls below the accepted standard probability cut-off level that indicates whether a statistical difference is significant. If a difference is not significant, statisticians regard these results as part of the normal sample variation that occurs within the same population. Throughout this report, the probability p-value standard of "must be less than .05 to be significant" is used for all statistics reported.

Significant differences were found between the survey respondent and non-respondent samples on gender (Table 3b) such that there were more female than male respondents:

*Table 3b. Comparing Gender for Respondents and Non-Respondents*

Gender by Respondent Type (%)				Statistic	DF	Value	Prob
	Survey Respondents	Non-Respondents	Total	Chi-Square	1	4.5	.03
Female	20	15	16				
Male	80	85	84				

Significant differences were found with the population based on age generation as shown in Table 3c, such that a larger number of older Veterans and a fewer number of generation X and YZ Veterans completed the survey:

*Table 3c. Comparing Age Generation for Respondents and Non-Respondents*

Age Generation by Respondent Type (%)				Statistic	DF	Value	Prob
	Survey Respondents	Non-Respondents	Total	Chi-Square	2	93	< .0001
Baby & Pre-Boomer (ages 50-68)	59	32	33				
Generation X (ages 37-49)	23	27	27				
Generation YZ (ages 24-36)	18	41	40				

Significant differences were found between the survey respondent and non-respondent samples on race (Table 3d), such that there were fewer white and more black and other that responded to the survey:

*Table 3d. Comparing Race for Respondents and Non-Respondents*

Race by Respondent Type (%)				Statistic	DF	Value	Prob
	Survey Respondents	Non-Respondents	Total	Chi-Square	3	17	.0007
White	45	55	55				
Asian	6	6	6				
Black	23	22	22				
Other	26	17	18				

No significant differences were found between the survey respondent and non-respondent samples on census region (Table 3e).

*Table 3e. Comparing Census Region for Respondents and Non-Respondents*

U.S. Census Region by Respondent Type (%)				Statistic	DF	Value	Prob
	Survey Respondents	Non-Respondents	Total	Chi-Square	3	2.09	.55
Midwest	21	20	20				
Northeast	18	20	20				
South	35	35	35				
West	27	24	24				

Significant differences were found with the population based on Military Service Branch as shown in Table 3f, such that smaller proportion of Army and Marine veterans responded to the survey compared to the population:

*Table 3f. Comparing Military Service Branch for Respondents and Non-Respondents*

Military Service Branch by Respondent Type (%)			
	Survey Respondents	Non-Respondents	Total
Air Force	16	11	12
Army	47	53	52
Marines	7	12	12
Navy	14	14	14
Other	16	10	10

Statistic	DF	Value	Prob
Chi-Square	4	23	.0002

Significant differences were found with the population based on War Service as shown in Table 3g, such that a larger number of Veterans from wars before OEF/OIF completed the survey compared to non-respondents:

*Table 3g. Comparing War Participation in OIF and OEF for Respondents and Non-Respondents*

War Service by Respondent Type (%)			
	Survey Respondents	Non-Respondents	Total
All other wars	75	61	62
OEF/OIF	25	39	38

Statistic	DF	Value	Prob
Chi-Square	1	24	< .0001

*Note: OIF is Operation Iraqi Freedom and OEF is Operation Enduring Freedom.*

Significant differences were found with the population based on days of active service as shown in Table 3h, such that survey respondents were more likely to have served “1,000 days or less” or “4,001 or more” days and less likely to have served 1,001 to 4,000 days compared to the population:

Table 3h. Comparing Days of Active Service for Respondents and Non-Respondents

Days of Active Service by Respondent Type (%)				Statistic			
	Survey Respondents	Non-Respondents	Total	Statistic	DF	Value	Prob
1,000 days or less	37	30	31	Chi-Square	3	24	<.0001
1,001-2,000 days	24	31	31				
2,001-4,000 days	14	22	21				
4,001 days or more	25	17	18				

Significant differences were found with the population based on Case Status. Fewer surveys were completed by Discontinued Veterans and more by Other Veterans:

Table 3i.e. Access: Comparing Case Status for Respondents and Non-Respondents

Case Status by Respondent Type (%)				Statistic			
	Survey Respondents	Non-Respondents	Total	Statistic	DF	Value	Prob
Discontinued	52	64	63	Chi-Square	2	30	<.0001
Employ Rehab	21	21	21				
Other	27	15	15				

### 3.1 Survey Yield

In accordance with OMB “Standards and Guidelines for Statistical Surveys,” an agency must appropriately measure, adjust for, report, and analyze unit and item non-response, when the intended response for a targeted population is not met.<sup>1</sup> In assessing the survey data in accordance with Section 3.2, and Guidelines 3.2.1-3.2.3, the unweighted unit response rate was calculated as the ratio of the number of completed cases to the number of in-scope sample cases (Ellis, 2000; AAPOR, 2000).

Table 3.1a below shows the sample distribution and response rate for VR&E Non-Participant target population:

<sup>1</sup>As defined by OMB and FCSM, unit non-response occurs when a respondent fails to respond to all required response items (i.e., fails to fill out or return a data collection instrument); item non-response occurs when a respondent fails to respond to one or more relevant item(s) on a survey.

Table 3.1a. Sample Distribution and Response Rates for VR&E Non-Participant population

<b>VR&amp;E Non-Participant Population FY2015</b>	
<b>Total records received</b>	<b>33,666</b>
Duplicate records in sample file	9,546
Duplicate record history	950
Invalid Address	1,457
Invalid Values	70
Blanks	0
Do Not Contact	293
<b>Total records available after cleaning<sup>2</sup></b>	<b>21,350</b>
<b>Total records selected</b>	<b>5,000</b>
Undeliverable addresses	833
<b>Total mailed (excludes undeliverable)</b>	<b>4,167</b>
<b>Total completed surveys</b>	<b>354</b>
<b>Total completed surveys with Overall Index Score<sup>3</sup></b>	<b>280</b>
<b>Total Sample Response Rate<sup>4</sup></b>	<b>5.60%</b>
<b>Eligible Sample Response Rate<sup>5</sup></b>	<b>8.50%</b>

Of the 33,666 total records received from VR&E, 12,316 records were purged from the sample due to cleaning rules such as duplicate records, invalid addresses and values, blanks, and do not contact opt outs. From the 12,316 records purged, 950 records were cleaned out due to duplicate records across VBA's other business line surveys (i.e., duplicate record history). The purpose of these cleaning rules is to prevent respondents from being re-contacted if they were previously selected to participate in any of VBA's business line surveys in the past 12 months. The cleaning rules are a JDP and survey research best practice and is intended to promote proper conduct in market research. About 37% of the total records provided by VR&E were removed from the sample due to this cleaning rule. A high number of records were removed because they were duplicates in the sample file provided by VR&E. It is unlikely the cleaning rule impacted the unit non-response since we were able to secure the target number of records (5,000) for the survey.

<sup>2</sup> Glossary of sample cleaning rules included in Appendix E.

<sup>3</sup> Findings in the report are based on the "Total completed surveys with Overall Index Score" (N=280).

<sup>4</sup> Response rate calculation per OMB Standards and Guidelines for Statistical Surveys, section 3.2, guideline 3.2.9 (includes undeliverables as number of non-contacted sample units known to be eligible).

<sup>5</sup> Response rate calculation per Council of American Survey Research Organizations (CASRO) (includes number of completed interviews with reporting units/number of eligible reporting units in sample). The American Association for Public Opinion Research (AAPOR) also uses this method for calculation and cites CASRO (AAPOR Standard Definitions, 2008, pp. 34)

*Table 3.1b. Weight/Person for Completed Surveys per Population*

Completed Surveys	2015 Population	Weight/Person
354	33,666	95

In the Table 3.1b the 95 in the Weight/Person column means that every survey completed and returned represents the views of 95 Veterans using VR&E benefits. This was calculated by dividing the number of completed surveys into the population number.

To confirm the sample’s representativeness, a comparison was conducted among the total records provided (33,666) and the records available after cleaning (21,350). The intent of this analysis was to determine whether the cleaning rules caused the remaining sample to vary in a meaningful way from the original sampling frame.

Table 3.1c indicates characteristics such as gender, age, and geographical region are similar among the total records provided and the records available after cleaning. Regional USA State comparisons yield differences that are less than 2% point. These comparisons suggest the cleaning rules did not alter the proportion of respondent characteristics provided in the original sampling frame.

*Table 3.1c. Comparing Gender, Generation, and U.S. States to Total Population*

	Total Population (%)	Records Available (%)	% Point Difference
<b>Gender</b>			
Female	16.97	17.01	0.04
Male	83.03	82.99	-0.04
<b>Generation</b>			
Baby & Pre-Boomer	31.38	32.61	1.22
Generation X	27.54	28.01	0.47
Generation YZ	41.08	39.38	-1.69
<b>U.S. State</b>			
AK	0.49	0.48	-0.02
AL	2.55	2.34	-0.21
AR	1.12	1.07	-0.05
AZ	2.49	2.57	0.08
CA	9.23	9.18	-0.05
CO	2.4	2.26	-0.14
CT	0.76	0.73	-0.03
DC	0.16	0.17	0.02
DE	0.19	0.21	0.02



Table 3.1c. Comparing Gender, Generation, and U.S. States to Total Population (Continued)

	<b>Total Population (%)</b>	<b>Records Available (%)</b>	<b>% Point Difference</b>
FL	6.68	6.69	0.01
GA	4.78	4.33	-0.45
HI	0.79	0.77	-0.02
IA	0.83	0.9	0.06
ID	0.37	0.4	0.03
IL	2.03	2	-0.02
IN	1.81	1.89	0.07
KS	0.61	0.56	-0.05
KY	1.39	1.36	-0.02
LA	1.28	1.26	-0.02
MA	1.14	1.18	0.04
MD	1.84	1.84	0
ME	0.44	0.49	0.06
MI	2.13	2.28	0.15
MN	1.21	1.27	0.07
MO	1.6	1.56	-0.04
MS	0.86	0.74	-0.12
MT	0.5	0.52	0.01
NC	3.62	3.39	-0.24
ND	0.18	0.18	0.01
NE	0.72	0.68	-0.04
NH	0.61	0.69	0.08
NJ	1.05	1.04	-0.01
NM	0.76	0.78	0.02
NV	1.2	1.19	-0.01
NY	2.92	2.99	0.07
OH	2.83	2.86	0.03
OK	2.59	2.7	0.12
OR	1.89	1.92	0.03
PA	2.14	2.12	-0.03
RI	0.24	0.25	0.01
SC	2.8	2.58	-0.22
SD	0.27	0.36	0.08
TN	2.26	2.19	-0.08
TX	14.25	15.17	0.92
UT	0.56	0.59	0.02
VA	3.74	3.45	-0.29
VT	0.34	0.45	0.11
WA	2.62	2.85	0.23
WI	0.98	1.03	0.05
WV	0.53	0.51	-0.03

Table 3.1c. Comparing Gender, Generation, and U.S. States to Total Population (Continued)

	Total Population (%)	Records Available (%)	% Point Difference
WY	0.18	0.2	0.02

## 3.2 Missing Data Patterns and Mechanisms

In accordance with the OMB “Standards and Guidelines for Statistical Surveys” Guidelines 3.2.9 and 3.2.11, an investigation of missing data patterns was performed on the 354 total surveys received. In order to assess the distribution of missing data, a procedure was performed to process missing values involving iterative multiple imputation chains using expectation–maximization (MCMC) algorithms and divide these into distribution interval groupings, Pierchala, Carl E. (2001). This was done on the key measures of the overall satisfaction index (see Appendix A for calculation) and advocacy ratings related to Veterans’ likelihood to recommend VA benefits.

As shown in Table 3.2, there were no indications of unusual patterns for missing data. For more discussion of missing data mechanisms (MCAR, MAR, and MNAR), please see Appendix A.

Table 3.2. Missing Data Patterns in Satisfaction and Advocacy Ratings (0 = missing, 1 = data)

Group	Overall Satisfaction	Likelihood to re-apply to program	Freq	Percent	Group Means		
					OSAT Index	Age	% Male
1	0	0	13	5%	640	51	92%
2	0	1	2	1%	828	44	100%
3	1	0	32	11%	573	49	91%
4	1	1	233	83%	578	52	78%

## 3.3 Margin of Error

The margin of error expresses the maximum expected difference between the true population parameter and a sample estimate of that parameter. It is often used to indicate the accuracy of survey results. The larger the margin of error around an estimated value, the less accurate the estimated value will be. Larger samples are more likely to yield results close to the true population quantity and thus have smaller margins of error than smaller samples.

Based on a sample of 354 Veterans, the FY15 Overall Satisfaction Index for the VR&E Non-Participant study is 582 and has a margin of error of 27 index points, on a 1,000 point scale, at the 95% confidence level. This indicates that if the survey were repeated many times with different samples, the true mean Overall Satisfaction Index would fall within 27 index points 95% of the time.

Table 3.3 below demonstrates relative decreases in margin of error as the study sample size increases. A 20% response rate (833 completes) would be associated with a margin of error of 17 index points, similar to the margin of error for a 30% response rate (1,250 completes). Results from this analysis indicate the Overall Satisfaction Index (OSAT) calculated from the VR&E Non-Participant study is an accurate measurement of the true population mean, which is reported on a 1,000 point scale.

*Table 3.3. Margin of Error for Larger Sample Sizes*

Sample	Response Rate	Completes (N)	OSAT (mean)	Standard Deviation	Standard Error	Margin of error (95% confidence interval)
<b>4,167</b>	<b>8.50%</b>	<b>354</b>	<b>582</b>	<b>257</b>	<b>13.7</b>	<b>27</b>
4,167	20%	833	582	257	8.9	17
4,167	30%	1,250	582	257	7.3	14
4,167	40%	1,667	582	257	6.3	12
4,167	50%	2,084	582	257	5.6	11
4,167	60%	2,500	582	257	5.1	10
4,167	80%	3,334	582	257	4.5	9

In the margin of error analysis noted on the previous page and in subsequent analyses included in this report, the Overall Satisfaction Index Score is the main dependent variable and is the basis for the analysis. The Overall Satisfaction Index score is the survey metric that VBA utilizes to measure customer satisfaction and benchmark performance against other industries. It is the primary measurement in all reports. The Overall Satisfaction Index encompasses all aspects of the customer experience<sup>6</sup>, and can therefore be used as a reliable indicator for the presence or absence of respondent bias in the survey results as a whole. For these reasons, the Overall Satisfaction Index score is used as the main dependent variable in the margin of error analysis and subsequent t-test analyses included in this report.

### 3.3.1 Sampling Distribution

Respondent characteristics such as gender and age were compared to that of the total sample to determine whether respondents and non-responders differed on key variables of interest.

<sup>6</sup> Explanation of J.D. Power Index Model Calculation included in Methodology.

Compared to the population of all eligible respondents (40,000), the survey respondents demonstrate the same gender characteristics. Table 3.1.1 below illustrates 20% of survey respondents were female and 80% were male, mirroring close to the total sample population. The distribution of age shows that survey respondents tend to be older. *Table 3.1.1. Comparing Gender and Age of Survey Respondents to the Total Sample*

	<b>Respondents (%)</b>	<b>Sample Size (N)</b>	<b>Total Sample (%)</b>	<b>Sample Size (N)</b>	<b>% Point Difference</b>
<b>Gender</b>					
Female	20	70	16	779	-4
Male	80	284	84	4,221	4
<b>Age Generation</b>					
Baby & Pre-Boomer	56	199	34	1,677	-23
Generation X	25	88	27	1,349	2
Generation YZ	19	67	39	1,974	21

### 3.3.2 Distribution of Overall Satisfaction Index Scores

Following the comparison of sampling distributions, a comparison of Overall Satisfaction scores was conducted to determine whether differences in age and gender among respondents correlate with differences in Overall Satisfaction.

Table 3.3.2 below indicates differences in Overall Satisfaction scores are the most notable between gender groups. On average, females tend to rate their experience lower than males (527 vs. 596). Comparing age groups reveals that Baby & Pre-Boomers had the highest overall satisfaction with Generation YZ much lower.

*Table 3.3.2. Overall Satisfaction Scores for Gender and Age Groups*

<b>Gender and Age</b>	<b>OSAT (mean)</b>	<b>Standard Deviation</b>	<b>Sample Size (N)</b>
<b>Gender</b>			
Female	527	250	56
Male	596	257	224
<b>Age Generation</b>			
Baby & Pre-Boomer	609	255	164
Generation X	547	257	65
Generation YZ	539	255	51

### 3.3.3 Analysis for Demographic Differences

T-test analyses were conducted to determine whether differences in demographic groups produced statistical differences in Overall Satisfaction scores. T-tests are typically used to determine whether or not the difference between two groups' averages most likely reflect a meaningful difference in the population from which the groups were sampled.

Both gender and war participation demonstrated no differences in Overall Satisfaction scores as shown in Table 3.3.3a:

*Table 3.3.3a. T-Test Analysis for Gender and War Service in Veterans' Overall Satisfaction*

<b>Gender and War Service</b>	<b>T-Test Statistic</b>	<b>p-value</b>	<b>Statistical Difference (95% confidence level)</b>
<b>Gender</b>			
Female vs. Male	-1.83	.07	No
<b>War Participation</b>			
OEF/OIF vs. All other wars	1.07	.69	No

Analyses of Variance (ANOVA) were conducted to determine whether differences in demographic groups produced statistical differences in overall satisfaction scores. ANOVAs are typically used to determine whether or not the difference between three or more groups' averages most likely reflect a meaningful difference in the population from which the groups were sampled.

Differences in overall satisfaction by generation were *not* significant ( $F = 2.24$ ,  $p\text{-value} = .11$ ):

*Table 3.3.3b. Overall Satisfaction for Generation*

<b>Generation</b>	<b>OSAT (mean)</b>	<b>Sample Size (N)</b>
Baby & Pre-Boomer	609	164
Gen-X	547	65
Gen-YZ	539	51

Differences in overall satisfaction by region were *not* significant ( $F = 1.81$ ,  $p\text{-value} = .14$ ):

*Table 3.3.3c. Overall Satisfaction for Regions*

<b>Regions</b>	<b>OSAT (mean)</b>	<b>Sample Size (N)</b>
Midwest	637	58
Northeast	610	49
South	565	97
West	544	76

Differences in overall satisfaction by race were *not* significant ( $F = 0.23$ ,  $p\text{-value} = .88$ ):

*Table 3.3.3d. Overall Satisfaction for Race*

Race	OSAT (mean)	Sample Size (N)
Asian	561	16
Black	588	63
Other	600	74
White	572	127

Differences in overall satisfaction by Branch of Service were *not* significant ( $F = 1.85$ ,  $p\text{-value} = .12$ ):

*Table 3.3.3e. Overall Satisfaction for Military Service Branches*

Military Service	OSAT (mean)	Sample Size (N)
Air Force	570	44
Army	549	131
Marines	671	20
Navy	589	39
Other	643	46

Differences in overall satisfaction by days of active service were *not* significant ( $F = 1.61$ ,  $p\text{-value} = .19$ ):

*Table 3.3.3f. Overall Satisfaction for Days of Active Service*

Days of Active Service	OSAT (mean)	Sample Size (N)
1000 days or less	592	104
1001-2000 days	569	67
2001-4000 days	512	40
4001 days or more	620	69

There were *no* significant differences in Overall Satisfaction by Case Status ( $F = 1.74$ ,  $p\text{-value} = .18$ ):

*Table 3.3.3g.e. Access: Overall Satisfaction for Case Status*

Case Status	OSAT (mean)	Sample Size (N)
Discontinued	562	145
Employ Rehab	635	60
Other	578	75

### 3.3.4 Data Imputation Analysis for Demographic Differences

A pairwise comparison T-Test analysis was done to evaluate whether data imputation for missing values across age, race, region (and other significant demographics) for the final cleaned sample size of 280 and the 354 total survey respondents generated any changes in the overall satisfaction index score. This analysis also included survey raking across demographic differences as one level of comparison.

The results below show that there were no significant differences between the non-imputed mean and the imputed mean of the satisfaction index across demographics, sample sizes, nor survey raked values. We want to highlight that after statistical adjustment for the differences found between respondents and non-respondents reported earlier, there were no differences in overall satisfaction levels. These results support the conclusion that the survey's findings for Veterans' overall satisfaction ratings are accurate.

*Table 3.3.4a. T-Tests of Imputed vs. Non-Imputed on Veterans' Overall Satisfaction Scores*

T-Test Analysis on Imputed vs. Non-Imputed for Age, Race, and Region				
Overall Satisfaction Index (100 - 1000 range)	mean (imputed)	mean (non- imputed)	t-statistic	p-value
Imputed demographics (280 final sample size)	583.93	582.03	-0.09	0.93
Imputed survey-raked demographics (280 final sample size)	562.00	560.47	-0.07	0.95
Imputed survey-raked demographics (354 total respondents)	560.98	562.32	0.07	0.95

*Note:* Non-imputed is based on the 280 final cleaned sample size used in this report.

#### Survey Raking for Sample Weights to Adjust for Differences and Compare Overall Satisfaction and Advocacy Ratings

The procedure known as “raking” adjusts a set of data so that its marginal totals match specified control totals on a specified set of variables. The term suggests an analogy with the process of smoothing the soil in a garden plot by alternately working it back and forth with a rake in two perpendicular directions, Izrael and Battaglia (2004).

Survey raking is an iterative sample-balancing algorithm-based technique that provides sample weighting convergence across multiple variables and multiple categories; see Battaglia, Izrael, Hoaglin, and Frankel (2009).

In keeping with OMB “Standards and Guidelines for Statistical Surveys” guidelines 3.2.12 and 3.2.13, JDP selected the best statistical method to simultaneously adjust for multiple differences between groups by applying a survey raking procedure, see Anderson, L., and R.D. Fricker, Jr. (2015).

The JDP raking procedure is a proprietary improved version based on the excellent methods initially developed by Izrael and Battaglia (2000, 2004) and Battaglia, Izrael, Hoaglin, and Frankel (2004). JDP raking improvements are primarily related to better handling of low cell values during iterative convergence processing. For this analysis, 50 iterations were set (although less were needed) to converge on the best sample weights (.2 estimation margin) to simultaneously adjust for non-response bias in age, race, region, and war (service era) demographic categories. For additional background about survey raking methodologies, see Wallace and Rust (1996).

The estimated population distributions are used as convergence targets. In this case, the dataset of all eligible respondents (5,000) was used as the estimated population to derive sample weightings for the 354 survey respondents.

In accordance with OMB “Standards and Guidelines for Statistical Surveys” Guideline 3.2.13, a series of t-tests were conducted to determine whether non-response bias in demographic areas produced statistical differences in overall satisfaction scores and advocacy ratings. Typically, t-tests are used to determine whether differences between two groups’ averages and variances reflect a meaningful difference in the population. The sample weightings derived from the survey raking procedure were included in the t-tests to equalize the survey respondent differences with non-respondents.

There were no significant differences in Overall Satisfaction or advocacy levels when the data was adjusted for demographic differences between survey respondents and non-respondents. The results below support the conclusion that the survey’s findings for Veterans’ overall satisfaction ratings are accurate.

Table 3.3.4b. Overall Satisfaction and Advocacy for Respondents Unweighted and Weighted

Analysis of Survey Respondent Scores with Weighted Adjustment for Non-Response Bias						
Rating Measure	Mean (Unweighted)	Mean (Weighted)	Standard Deviation (Unweighted)	Standard Deviation (Weighted)	t-statistic	p-value
Overall Satisfaction Index (100 - 1000 range)	582	560	257	262	0.98	0.33
Likelihood to reapply for program (rating 1 - 4)	2.63	2.68	0.97	0.94	-0.59	0.55



# Findings

Results from the non-response bias analysis indicate that the Overall Customer Satisfaction Index Score and the Advocacy ratings from the VR&E Non-Participant study reflects the experience of all Veterans who dropped out of the program prior to completing a rehabilitation plan.

**Sample Cleaning:** Initial comparisons on age, gender, and geographical characteristics between the total records provided and the records available after cleaning, suggests the sample utilized in the study exhibits similar characteristics as the total sample provided by VR&E. The tests (see Margin of Error and Sampling Distribution, Section 3.3,) suggest the sample cleaning rules did not impact the sample's representativeness and the results are conclusive.

**Non-Response Bias Analysis:** Results from the non-response bias analysis did show group differences for age, gender, race, military branch, days of service, war participation, and case status between survey respondents and non-respondents. After correcting for these differences using a recommended sample-balancing survey raking method to derive sample weights (see Margin of Error, Section 3.3.4 Data Imputation Analysis for Demographic Variables), there were no differences found in Veterans' overall satisfaction and advocacy (likelihood inform others about VA benefits) between weighted and unweighted survey respondents.

**Item Response Rate Calculations:** Results from the survey item response rate calculations reveal high item response rates, with none falling below 70% (see Appendix B for Item Response Rates). According to OMB Guideline 3.2.10, given this high item response rate, a non-response bias analysis was not necessary at the item level.

The research and approach taken by JDP are in accordance with sound market research and current best practices from the American Association for Public Opinion Research (AAPOR) regarding response rate recommendations: "Results that show the least bias have turned out, in some cases, to come from surveys with less than optimal response rates. Experimental comparisons have also revealed few significant differences between estimates from surveys with low response rates and short field periods and surveys with high response rates and long field periods." See AAPOR "Response Rates – An Overview" (2015) and Special Issue of Public Opinion Quarterly "Nonresponse Bias in Household Surveys" (Singer, 2006).

## Conclusion

The Overall Satisfaction Index score and advocacy ratings (likelihood to inform others about VA benefits) are not impacted in any meaningful way by non-response bias. This analysis confirms that the data collected during Fiscal Year 2015 is valid.

The FY15 Voice of the Veteran Line of Business Tracking Satisfaction Study data for the VR&E Non-Participant survey can be used to infer reliable overall customer satisfaction scores and advocacy ratings. The overall customer satisfaction index score reflects the experience of all Veterans who dropped out of the program prior to completing a rehabilitation plan.

The sample utilized in the study exhibits similar characteristics for age, gender, and geography as the total sample provided by VR&E Non-Participant. This indicates the sample cleaning rules did not impact the sample's representativeness.

While the results from the non-response bias analysis did show group differences on demographic characteristics between survey respondents and non-respondents, there were no differences found in Veterans' overall satisfaction and advocacy ratings between weighted and unweighted survey respondents. This was evaluated after correcting for these differences using a recommended sample-balancing survey raking method to derive sample weights. JDP conducted all necessary statistical tests in accordance with OMB standards.

J.D. Power certifies the results contained within this report.

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# Appendix A

## Missing Data Patterns and Mechanisms

An excellent discussion of missing data patterns, mechanisms, and research analysis methods is provided in Vogt, W. Paul, Vogt, Elaine R., Gardner, Dianne C., and Haeffele, Lynne M. (2014). An overview of the missing data types and issues is described below:

Understanding the reasons why data is missing can help with analyzing the remaining data. If values are missing at random, the data sample may still be representative of the population. But if the values are missing systematically, analysis may be harder.

- **Missing completely at random.** Values in a data set are missing completely at random (MCAR) if the events that lead to any particular data-item being missing are independent both of observable variables and of unobservable parameters of interest, and occur entirely at random. When data are MCAR, the analyses performed on the data are unbiased; however, data are rarely MCAR.
- **Missing at random.** Missing at random (MAR) is an alternative, and occurs when the missing value is related to a particular variable, but it is not related to the value of the variable that has missing data. An example of this is accidentally omitting an answer on a questionnaire.
- **Missing not at random.** Missing not at random (MNAR) is data that is missing for a specific reason (i.e. the value of the variable that's missing is related to the reason it's missing). An example of this is if a certain question on a questionnaire tends to be skipped deliberately by participants with certain characteristics. Graphical models can be used to describe the missing data mechanism in detail.

While it is clear that MNAR can introduce statistical bias, there is no definitive test, see Vogt et al. (2014). It is also clear that MCAR is rarely evident in research data and most tests of it will fail. However, MAR is fully acceptable for valid statistical analyses (Vogt et. al, 2014). MAR is essentially “missing partially at random” whereby the intra-group missing value remains random despite some differences between group tendencies. Graphical data representations are the typical tool used in assessment as described above and in Pierchala, Carl E. (2001).

See Section 3.2 Missing Data Patterns and Mechanisms for findings specific to VR&E’s data.

# Appendix B

## Item Response Rates

In accordance with OMB “Standards and Guidelines for Statistical Surveys,” Section 3.2, guidelines 3.2.6-3.2.7, the item response rate was calculated as the ratio of the number of respondents for whom an in-scope response was obtained to the number of respondent who were asked to answer that item. The number asked to answer an item is the number of unit-level respondents minus the number of respondents with a valid skip pattern. In addition to item response rate, total item response rate was calculated as the product of the overall unit response rate and the item response rate for each item. The purpose of these calculations is to assess the item non-response, which occurs when one or more survey items are left blank in an otherwise completed questionnaire. Table B1 displays the item and total item response rates for this survey.

The OMB “Standards and Guidelines for Statistical Surveys” (Guideline 3.2.10) states an item non-response analysis should be conducted for items with an item response rate of less than 70%. Since none of the survey item response rates fall below 70%, an item-level analysis of non-response bias was not necessary. Results from the item response rate calculation suggest the item response rate for the VRE Non-Participant study is strong, ranging from 71% to 100%, with a 90% average. In the item response rate calculation below, JDP considered blanks as non-response for mail returns.

Table B1. Comparing Survey Item Response Rates<sup>7</sup>

Question Number	Item Response Rate	Unit Response Rate
1	93%	5%
2	99%	6%
3	97%	5%
4	97%	5%
5	99%	6%
6	99%	6%
7	99%	6%
8	91%	5%
9	80%	4%
10	94%	5%
11	91%	5%

<sup>7</sup> E-mail opt in and additional comments about your experience (open capture) questions display “N/A” and were not included in item and total item response rate calculations

*Table B1. Comparing Survey Item Response Rates (Continued)*

12	100%	6%
13	90%	5%
14	96%	5%
15a	96%	5%
15b	96%	5%
15c	92%	5%
15d	98%	5%
16a	98%	6%
16b	99%	6%
16c	98%	5%
16d	99%	6%
16e	96%	5%
16f	99%	6%
17	99%	6%
18	99%	6%
19	96%	5%
20	75%	4%
21	80%	4%
22	78%	4%
23	78%	4%
24	92%	5%
25	77%	4%
26	93%	5%
27	87%	5%
28	90%	5%
29	84%	5%
30	88%	5%
31a	86%	5%
31b	87%	5%
31c	88%	5%
31d	88%	5%
31e	86%	5%
31f	87%	5%
32	89%	5%
33	87%	5%
34	85%	5%
35a	83%	5%
35b	74%	4%
35c	75%	4%
35d	83%	5%
36	71%	4%
37	79%	4%
38	94%	5%

*Table B1. Comparing Survey Item Response Rates (Continued)*

39	95%	5%
40	84%	5%
41	93%	5%
42	N/A	N/A
43	N/A	N/A
44	N/A	N/A



# Appendix C

## Study Overview

### 1.1 Study Background

The Voice of the Veteran Satisfaction Initiative tracks Veteran satisfaction with the benefits and services received from VBA. The VOV Tracking Satisfaction Research Study is ongoing survey research tracking Veteran satisfaction with VBA's lines of business: Compensation, Pension, Education, Vocational Rehabilitation & Employment (VR&E), and Loan Guaranty (LGY).

As part of Executive Order 13571 Streamlining Service Delivery and Improving Customer Service, agencies that provide significant services directly to the public to identify and survey customers, establish service standards and track performance against those standards, and benchmark customer service against those best practices. This program enables VBA to understand what is important to Veterans relative to benefits received and services provided. This program provides timely and actionable Veteran feedback on how well VBA is providing services. Insights from this program identify opportunities for improvement and measure the impact of improvement initiatives, as well as continuously measure performance outcomes. VR&E's Non-Participant survey instrument was regarding what led Veterans to discontinue their vocational rehabilitation program.

Survey	Methodology	Fielding Frequency	Total Mailouts Per Year	Target Number of Completes
VRE Non-Participant	Mail Only	Annually	5,000	1,500

### 1.2 Methodology

The respondents only had the option of completing a paper survey. Respondents were first mailed a Survey Package which included a cover letter introducing the study to the respondent, a paper survey, and a business reply envelope. The second mailing included a cover letter, a paper survey, and a business reply envelope. The sample for mailings of the survey packet was cleaned to exclude anyone who completed the survey at least one week prior to the cleaning.

#### Sample Population Definition

The targeted population was identified by VRE and is defined as Veterans who dropped out of the program prior to completing a rehabilitation plan. These individuals include applicants who never attended the initial meeting with a counselor; applicants who were entitled to the program but did not pursue; and applicants who started, but did not complete rehabilitation (i.e., negative closures).

## Sample File Generation

- VRE generates the sample files based upon the sampling definition and submits sample files directly to BAS.
- BAS receives the sample files and sends to VADIR for processing.
- VADIR processes sample files (to remove SSN and append demographics/EDIPI) and returns to BAS.
- BAS transfers sample files (via EDX platform) to JDP and notifies JDP via email that sample files are ready for deployment.
- JDP cleans the sample file and selects the sample.
- Sample is transferred to Government Printing Office (GPO) print vendor (via EDX platform) for printing and mailing of the postcards and survey packages.



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- Sample is transferred in accordance with the following schedule:

### 1.3 Data Cleaning

JDP processed the sample according to the following cleaning rules:

1. De-duplicate records within each business line and across surveys based on the unique identifier (EDI\_PI or VA\_ID) for each record. *Note: EDIPI is Electronic Data Interchange Personal Identifier.*
  - a) *Exception:* For Pension Access (v1) and Pension Servicing (v8), de-duplicate records based on EDI\_PI *and* Claim Number.
  - b) When each new sample file is received, JDP cleans it against all sample selected from every sample batch that has been delivered 12 months prior to ensure a respondent does not receive a VA line of business survey more than once in a 12 month-period. In the case of duplicates occurring within the same sample month, priority is assigned to business lines with the lowest number of sample records.
2. Clean out records present on the JDP Do Not Contact list and clean against the National Change of Address (NCOA) list.
3. Clean out any respondents who do not have any EDI\_PI or VA\_ID included in their sample record.
  - a) *Exception:* For Pension Access (v1) and Pension Servicing (v8), clean out records with blank EDI\_PI *and* Claim Number.
4. Clean out any respondents not specified as a dependent/spouse who have a date of death (DOD) in their sample record.
5. Clean out any respondents who do not have any address included in their sample record.
6. Assign and maintain unique sampling identifiers to each sample record in order to track history of sampling. Exclude records that have been sampled in the past 12 months to ensure no respondent is mailed surveys more than once in a 12-month timeframe. This rule may not apply to those who completed a survey.

## 1.4 Order generation and fulfillment process

Federal Acquisition Regulations (FAR 8.8) mandate government agencies solicit all printing requirements through the Government Printing Office. GPO utilizes print vendors to fulfill orders. A Data Transfer Agreement (DTA) must be in place with print vendor and contractor before BAS can obligate funds or transfer sample files to the print vendor and contractor.

Prior to mailing the postcards and mail surveys, print orders must be generated for each survey. The entire process may take up to 2-4 weeks from inception of the print order to the mailing of the survey package or postcard. Below are the steps involved in order generation and order fulfillment.

### Order generation

- After sample is received by JDP, the sample files are cleaned and selected. Then Letter Work Orders (LWOs) are created to provide the print vendor with the necessary information to match the sample files to the correct survey instrument. (1 day)
- JDP creates the print order and sends over to BAS Contractor Officer's Representative (COR). (Same day as above step)
- The COR then reviews, authorizes, and submits the print order. (1 day)
- The BAS Publication Officer and/or COR submits the orders to the VA Publications Services Division (VAPSD). (Same day as above step)
- The order is issued a control number by a VBA Management Analyst, Publications. (Variable timing)
- Once the control number is assigned, the order goes to VA Publication Services Division liaison to forward to GPO Contracting Officer. (Variable timing) *Note: the amount of time an order is with VAPSD varies greatly, it could be from 3 days up to 20 days.*
- The GPO Contracting Officer sends the printing and mailing order to the print vendor.

### Order fulfillment

- Once the order is placed, the GPO print vendor is allotted 9 business days to fulfill the order (2 days to generate proofs, 2 days for proof review, corrections, and 5 days to print and mail).
- Upon receipt of the proofs from print vendor, JDP reviews and approves; then BAS reviews and approves; then VAPSD reviews and approves.
- After the orders have been mailed, the print vendor provides the mail receipts to contractor, BAS and VAPSD.
- Upon order completion, VAPSD provides actual costs to BAS.

## 1.5 Reporting

Reporting occurs once per year for the VR&E Non-Participant survey.

On a yearly basis, the following deliverables are provided:

- Scorecard
- Data Matrices
- Data is loaded to the VOV reporting site
- Open ended comments (verbatim)
- Data and Analysis Presentation

# Sample Plan Overview

## 2.1 Sample Criteria

VBA was responsible for providing sample to JDP that meets the following sampling criteria:

Sample Population	Inclusion Criteria	Frequency of Data Request
VRE Non - Participant	The targeted population includes Veterans who dropped out of the program prior to completing a rehabilitation plan. These individuals include applicants who never attended the initial meeting with a counselor; applicants who were entitled to the program but did not pursue; and applicants who started, but did not complete rehabilitation (i.e., negative closures).	Annually

## 2.2 Fielding/Sampling Frequency

Survey Instrument	Methodology	Total Survey Instruments	Targeted Number of Completes	Number of Postcards (eSurvey)	Number of Mail Packages	Fielding Frequency
VRE Non - Participant	Mail Only	5,000	1,500	N/A	5,000	Annually

## 2.3 Data Transfer

The sample was posted by BAS once a month within the sampling folder on the VOV EDX site. Sample should be provided in a file layout consistent with the file layout provided for the study as outlined below.

VR&E File Layout
ADDRESS_1
ADDRESS_2
ADDRESS_LINE_1
ADDRESS_LINE_2
AGE
BAH Rate
BRANCH_1
BRANCH2
BRANCH3
CASE_STATUS_CODE

*VR&E File Layout (Continued)*

CITY
Claim_Number
Date_of_Birth
DIAG_CODE
ELGBTY_TRMNTN_DT
Email_Address
EOD_1
EOD_2
EOD_3
First_Name
FIRST_NOTICE_OF_DEATH
GENDER
Last_Name
MILITARY_RANK
PHONE_NUMBER
PHONE_NUMBER_2
POSTAL_CODE
PRCNT_NBR
RAD_1
RAD_2
RAD_3
SEH_STATUS
SERVICE_ERA_1
SERVICE_ERA_2
SERVICE_ERA_3
SERVICE_PERIOD_MONTH
SSN_NBR
STATE
STN_NBR
VETERAN_DOB
Zip
Zip_Code

## 2.4 Sample Cleaning Rules Glossary

*Duplicate records in sample file* – the record is cleaned out if there is more than one record within the same sample file for the same respondent

*Duplicate record history* – the record is cleaned out if the record has been selected within the past 12 months for any of VBA’s business line surveys (i.e. Compensation, Pension, Education, Home Loan Guaranty, and Vocational Rehabilitation) regardless of whether the respondent completed the survey

*Invalid address* – the record is cleaned out if JDP’s address verification software indicates an invalid address code

*Invalid values* – the record is cleaned out if the “VA\_ID” field is blank

*Blanks* – the record is cleaned out if the “Name” field corresponding to the record is blank

*Do not contact* – the record is cleaned out if the individual is listed on JDP’s Do Not Contact List

## 2.5 Sample Selection

JDP selected sample records following the completion of the sample cleaning process. The following guidelines are referenced when selecting sample:

1. Total Sampling Targets: The table below summarizes the total sampling target per an RO per a fielding period. The “Sampling Target per RO” column indicates the minimum number of sample records that should be selected per an RO for each survey. If this minimum target number cannot be reached for a particular RO, sample from a different RO will be selected to make up the difference.

<b>Survey</b>	<b>Frequency</b>	<b>Total Sampling Target</b>	<b>Sampling Target Per Time Period</b>	<b>Sampling Target Per RO</b>	<b>Number of ROs</b>
VRE Non-Participant	Annually	5,000	5,000	86	58

2. The same record cannot be selected for multiple surveys during the same wave. Respondents who have completed a survey within the past 12 months cannot be selected. Survey priority is based on the number of records in each sample file. The survey with the smallest number of records is given first priority.
3. Following sample selection, the JDP project teams receives an automated report confirming the number of records selected for each survey version. The JDP project team verifies that the sample selection quantities reflect the sample targets and approves the sample file for fielding.

## 2.6 Data Collection

During the survey fielding period, both online survey returns and paper surveys are collected as they are received and posted on a secure EDX site. Responses from paper surveys are scanned through automated imaging software while verbatim responses are recorded by a live survey processor. Survey returns must have all pages intact in order to be processed and counted as a return. Surveys with missing pages are counted as unusable. Returns are also considered unusable, if there is an indication that the individual completing the survey is not the individual selected from the sample file (i.e. the respondent name and/or address on the survey is replaced with a different name and/or address). During each day of fielding, a subset of survey returns undergo quality assurance to validate the accuracy of responses captured. If duplicate surveys are returned (as identified by the unique sampling identifier assigned to each sample record), the original survey return is processed while the duplicate survey is removed. In the case of duplicate survey returns from mixed methodology surveys, the date the survey was received is used to identify the original return while the subsequent return is removed post-fielding.



## Appendix D

# Approaches to Mitigating the Effect of Non-Response Bias and Strategies to Improve the Response Rate

The following section outlines two approaches used in FY 2015 to mitigate the potential of non-response bias. As mentioned earlier in the report, J.D. Power affirms that while high response rates are always desirable in surveys, an 80% response rate is typically not achievable for a voluntary, customer-satisfaction survey instrument (Malhotra & Birks, 2007), particularly those that do not provide an incentive (not recommended for this program). To illustrate this point, the Dillman Method for survey fielding was discussed in Dillman, D. A. (2014) – a survey instrument was fielded to 600 students at the University of Washington. After 5 attempts to solicit a response, as well as offering a monetary incentive to complete the study, a 77% response rate was reported.

The first approach to minimize non-response occurs *before and during* data collection and involves introducing measures to maximize survey response rates. The second approach is to make statistical adjustments *after* the data is collected.

### 1.1 Approach 1: Strategies to Maximize Response Rates

Prior to, and during, fielding the VR&E survey, JDP implemented the following measures to reduce the chances of non-response:

- Respondents were provided with the promise of confidentiality on the survey cover letter and postcard, and assured that their survey responses would not impact their current or future eligibility for benefits.
- Following the first mailing, non-respondents were sent an additional survey mailing.
- Respondents were provided with a toll-free telephone number and dedicated e-mail address to contact JDP about survey-related inquiries (e.g., how to interpret questions and response items, the purpose of the survey, how to get another copy of the survey if their copy has been lost/damaged, etc.). Telephone calls and e-mails are responded to within 24 hours and answered during regular business hours (8:00-5:00pm PT).
- JDP ensured the web-based surveys were accessible to people with disabilities by maintaining 508 compliant standards. These standards include:
  - Keyboard navigation rather than mouse or other pointing devices
  - Customization options for color, size, and style of text displayed
  - Compatibility with screen-readers to translate items displayed on the survey in audible output and/or Braille displays
  - Customer support and technical support through JDP Help Desk toll-free phone number and email address

- Exclusion of non-text elements, image maps, animation, flashing or blinking text.
- The survey fielding period was extended to offer opportunities to respond for subgroups having a propensity to respond late (e.g., males, young, full-time employed).
- The survey was developed and reviewed in order to enhance respondent understanding of the survey materials and to improve the relevancy of the data collected:
  - Prior to fielding the Benchmark study, a series of cognitive labs was conducted with test users to ensure the survey questions were easily understood and correctly interpreted. Revisions were made to the survey based on test user feedback. (As per OMB Guideline 1.4.1)
  - After the Benchmark study and prior to fielding the first year of the Tracking study, VR&E Service and JDP conducted a review of the survey instrument and modified the survey to improve the relevancy of data collected. (As per OMB Guideline 1.4.2)

## 1.2 Approach 2: Correcting Unit Non-response Bias with Sample Weighting and Survey Raking

As stated above, the two approaches to tackling non-response bias include implementing measures to maximize response rates during the fielding period and making post hoc statistical adjustments to the survey results afterwards. The following section discusses the statistical adjustments approach, which include weighting the data or imputing scores to correct the amount of non-response bias. An example of this approach would be the survey raking procedure described earlier in this paper. See the associated references in the “Survey Raking Procedure for Sample Weightings” section for more information.

The procedure known as “raking” adjusts a set of data so that its marginal totals match specified control totals on a specified set of variables. The term “raking” suggests an analogy with the process of smoothing the soil in a garden plot by alternately working it back and forth with a rake in two perpendicular directions, Izrael and Battaglia (2004).

If non-response bias was identified in the survey data, the non-response bias could be corrected mathematically with a post-stratification survey weight. JDP would weigh the survey data based on certain demographics (such as age, gender, region, etc.) of the total sample so that the weighted survey data would conform more to the demographics of the total sample. The implicit assumption in this approach is the distributions of characteristics of the non-respondents within an adjustment class (such as an age group) are the same, on average, as those of the respondents within the same adjustment class.

See Appendix B for the item response rate for each question in the survey. If the item response rate was not lower than 70%, as per OMB standards, the imputation of data is not necessary.

In the case that a particular item-level response was less than 70%, JDP would recommend conducting additional analysis to determine the potential for other factors (i.e. missing or skip patterns in the survey instrument) to be the cause of non-response.

## Strategies to Improve Response Rate

In addition to the strategies listed above, JDP recommends considering the following strategies to improve response rates going forward:

- Issue ongoing public communications (e.g. press releases, post information on the VA website) to spread awareness and confirm the legitimacy of the VA VR&E Study.
- Educate VA employees and VSOs about the survey to encourage participation. Provide a list of frequently asked questions and answers to VSOs and VA employees to equip them with answering Veterans' questions regarding the survey.
- Send e-mail invitations to Veterans rather than mailing postcards to make it easier for Veterans to complete the survey online.
- Reduce the length of the survey to improve respondents' willingness to respond
  - Reduce overall number of questions and number of response options for each question.
- Increase the number of contacts to respondents with additional reminders about the survey to encourage participation
  - Provide respondents with an additional paper survey questionnaire.
- Reduce the frequency of mailings to reduce the opportunities for delays and errors in the GPO Print process.
- Revise the cover letter and postcard to express the importance of participation in the survey.
- Provide sample from the 30 day period immediately prior to the mailing rather than sample from 90 days prior to improve the recency of their experience with the VR&E benefit (which improves both participation and recollection).
- Change location of sequence number to directly follow survey link on postcard and cover letter.
- Alter formatting on postcard and cover letter to include color print to make materials more readable to increase participation.
- Alter the responsibility of sample file generation from VR&E to PA&I. A data pull by PA&I will increase consistency.

# Appendix E

## Impact of FAR 8.8

Federal Acquisition Regulation (FAR) 8.8 requires that printing must be conducted through the Government Printing Office (GPO). The following section outlines limiting factors of the VOV Line of Business Tracking Satisfaction Research Study that occurred as a result of the FAR requirement.

Through the utilization of the GPO Print Vendor, the following occurred in FY15:

- Quality issues included:
  - Survey instruments were printed and mailed:
    - Utilizing the sample population from one survey, but receiving a different survey (e.g., potential respondents from the pool of one business line received the survey for a different business line)
    - Using a version of the instrument that was outdated; this version did not contain the current questions or responses that were being fielded
    - Mixing content between survey versions
    - Using shells from one survey printed with a different survey
- Ongoing timeliness delays occurred with each set of orders placed, as the order fulfillment process took a minimum of 2-4 weeks

### 1.1 Impact

The project experienced ongoing delays in the printing and mailing of its postcards and survey packets for VBA's lines of business. The delays affected the critical processes required to execute the VOV Program to its fullest potential.

A multitude of quality issues were experienced throughout FY15 that negatively impacted the VOV Program response rates. The issues that occurred impacted: access to the online survey; readability of mail materials; level of effort required by respondents to take the survey; relevancy of survey; and the diminishment of brands (VA/JDP) associated with poor quality materials.

# Appendix F

NOTE: Questionnaire is not shown in the formatted version that respondents used to fill out survey.

## Survey Questionnaire

[DO NOT DISPLAY/IDENTIFY SECTION HEADERS. DISPLAY SINGLE QUESTION PER PAGE.]

[RESPONSE CODES APPEAR IN BRACKETS AT THE END OF EACH RESPONSE FOR SINGLE RESPONSES AND IN THE PROGRAMMING INSTRUCTIONS FOR MULTIPLE RESPONSES.]

### Pre-Application Process

1. How did you FIRST learn about the Vocational Rehabilitation and Employment (VR&E) benefit program? *(Mark only one) If you are unsure, please indicate the first way you remember learning about the VR&E program.* [RADIO BUTTONS. SINGLE RESPONSE.]
  - a. VA website [1]
  - b. eBenefits.va.gov [2]
  - c. Veterans Employment center in eBenefits [3]
  - d. Social media websites (e.g., Facebook, Twitter, etc.) [11]
  - e. Internet (excluding VA and social media sites) [14]
  - f. Mail (from VA) [4]
  - g. VA phone number (800-827-1000) [5]
  - h. VA medical center [8]
  - i. VA Vet Center [9]
  - j. In person at a Regional Office [10]
  - k. Visit from a VA employee [12]
  - l. Transition Assistance Program/Disabled Transition Assistance Program briefings [6]
  - m. Veterans Service Organizations (e.g., Amer. Legion, DAV, VFW, PVA, MOPH, etc.) (Specify) \_\_\_\_\_ [TEXT BOX, FORCE TEXT IF RESPONSE IS SELECTED, 50 CHARACTER MAX.]
  - n. Other Veterans/Servicemembers [13]
  - o. Friends or family [15]
  - p. Information came with notification/ratings letter [16]
  - q. Other publications (e.g., Army Times, local newspaper, etc.) [17]
  - r. Other (Specify) \_\_\_\_\_ [TEXT BOX. FORCE TEXT IF RESPONSE IS SELECTED. 50 CHARACTER MAX.] [97]
  - s. Don't know or not sure [99]
  
2. Thinking about the factors you considered when deciding to apply for benefits, which of the following describes your reason(s) for applying to the VR&E program? *(Mark all that apply)* [CHECK BOXES, MULTIPLE RESPONSE. CODE EACH RESPONSE AS 0 IF UNCHECKED OR 1 IF CHECKED]

- a. I had a good experience with the VR&E program in the past
- b. A family member or friend recommended the VR&E program
- c. Another Veteran recommended the VR&E program
- d. VA recommended the VR&E program
- e. The program is recommended by an independent source (e.g., Veterans Service Organizations (e.g., Amer. Legion, DAV, VFW, PVA, MOPH, etc.))
- f. It is easy to find information about the VR&E program
- g. VR&E will assist me in finding and obtaining suitable employment
- h. The VR&E program has a good reputation
- i. The VR&E program offers services I need
- j. VA makes it easy to apply for the VR&E program
- k. Don't know or not sure **[MUTUALLY EXCLUSIVE RESPONSE]**

**Reasons for Applying for VR&E Services**

3. Which of the following statements BEST describes your plans at the beginning of the application process? **(Mark only one) [RADIO BUTTONS, SINGLE RESPONSE]**
- a. I was not planning on participating in the rehabilitation process, but wanted to find out about the rehabilitation services/process and which services I qualified for **[1]**
  - b. I was considering participating in the rehabilitation process if I liked the services that I qualified for **[3]**
  - c. I was considering participating in the rehabilitation process if the process was not too time-consuming or complicated **[4]**
  - d. I definitely planned to participate in the rehabilitation process **[5]**
  - e. Other (Specify) \_\_\_\_\_ **[TEXT BOX, FORCE TEXT IF RESPONSE IS SELECTED, 50 CHARACTER MAX.] [97]**
  - f. Don't know or not sure **[99]**
4. Were you prompted to apply to the VR&E program for any of the following reasons? **(Mark only one per row) [GRID WITH YES/NO IN COLUMNS AND ATTRIBUTES IN ROWS. RADIO BUTTONS, SINGLE RESPONSE PER ROW. IF TEXT ENTERED IN "SPECIFY" BOX, AUTOPUNCH "YES" RESPONSE.] [CODE RESPONSE AS 0 IF NO IS SELECTED AND 1 IF YES IS SELECTED]**

	Yes	No
Information you received during a Transition Assistance Program/Disabled Transition Assistance Program briefing		
Information you received in a letter from a VA Regional Office telling you what information you needed to provide and what VA would do		
Change in your life circumstances (e.g., marriage, divorce,		

loss of job, severity of disability, etc.)		
Current employment did not meet your expectations		
Recommendation or referral		
Other reasons (Specify)		

(Ask Q5 if yes to “Change in life circumstances” in Q4, otherwise go to Q6)

5. Which of the following describes the change in your life circumstances? (Mark all that apply) **[CHECK BOXES, MULTIPLE RESPONSE. CODE EACH RESPONSE AS 0 IF UNCHECKED OR 1 IF CHECKED]**

- a. Marriage
- b. Divorce
- c. Death in the family
- d. Had children
- e. New job
- f. Lost job
- g. Moved
- h. Declared bankruptcy
- i. Retirement
- j. Severity of disability
- k. None of the above **[MUTUALLY EXCLUSIVE RESPONSE]**

(Ask Q6 if yes to “Current job did not meet expectations in Q4, otherwise go to Q7)

6. In what areas did your current employment not meet your expectations? (Mark all that apply) **[CHECK BOXES, MULTIPLE RESPONSE. CODE EACH RESPONSE AS 0 IF UNCHECKED OR 1 IF CHECKED]**

- a. Experienced problems with supervisors
- b. Did not utilize my skills/abilities
- c. Level of pay
- d. Level of responsibility
- e. Too many work hours
- f. Too few work hours
- g. Poor reliability of pay checks
- h. Lack of benefits
- i. Flexibility of work schedule
- j. Job security
- k. Other (Specify) \_\_\_\_\_ **[TEXT BOX, FORCE TEXT IF RESPONSE IS SELECTED, 50 CHARACTER MAX.]**

**Entitlement Evaluation**

7. How soon after you were contacted did you meet with a VR&E representative from VA in person for your initial evaluation appointment? (Mark only one) **[RADIO BUTTONS. SINGLE RESPONSE]**

- a. Less than 30 days [1]
- b. 31-60 days [2]
- c. More than 60 days [3]
- d. Don't know or not sure [99]
- e. Did not meet with a VR&E representative [96]

(Ask Q8-Q9 if did not meet with representative in Q7, otherwise go to Q10)

8. Why did you decide not to attend your initial evaluation appointment with VR&E? (Mark all that apply) [CHECK BOXES. MULTIPLE RESPONSE. CODE EACH RESPONSE AS 0 IF UNCHECKED OR 1 IF CHECKED]

- a. I had a poor experience scheduling the initial appointment
- b. I had a poor experience with the VR&E representative
- c. The VR&E program does not offer the services I need
- d. A family member or friend recommended against the VR&E program
- e. Another Veteran recommended against the VR&E program
- f. Issues related to the application process (too time consuming/complicated)
- g. It is difficult to find information about the VR&E program
- h. Concerns about my eligibility for the VR&E program
- i. Other (Specify) \_\_\_\_\_ [TEXT BOX, FORCE TEXT IF RESPONSE IS SELECTED, 50 CHARACTER MAX.]
- j. Don't know or not sure [MUTUALLY EXCLUSIVE RESPONSE]

9. Did your decision not to attend your initial evaluation appointment involve a change in any of the following life circumstances occurring after you submitted your application? (Mark all that apply) [CHECK BOXES. MULTIPLE RESPONSE. CODE EACH RESPONSE AS 0 IF UNCHECKED OR 1 IF CHECKED]

- a. Marriage
- b. Divorce
- c. Death in the family
- d. Had children
- e. New job
- f. Lost job
- g. Moved
- h. Declared bankruptcy
- i. Retirement
- j. Severity of disability
- k. None of the above [MUTUALLY EXCLUSIVE RESPONSE]

10. Which of the following statements is the most important to you in your decision to attend the initial evaluation appointment? (Mark only one) [RADIO BUTTONS. SINGLE RESPONSE]

- a. Receiving a call from a VA Representative to schedule your appointment [1]
- b. Change in life circumstances (e.g., marriage, divorce, loss of job, severity of disability, etc.) [2]
- c. Current employment did not meet your expectations [3]



- d. Recommendation or referral [4]
- e. Other (Specify) \_\_\_\_\_ [TEXT BOX, FORCE TEXT IF RESPONSE IS SELECTED, 50 CHARACTER MAX.] [97]

### Entitlement Evaluation Process

(Ask Q11-Q14 if met with a representative in Q7, otherwise go to Q15)

11. During your initial evaluation appointment, did the counselor have you participate in any testing? (Mark only one) [RADIO BUTTONS. SINGLE RESPONSE]
- a. Yes [1]
  - b. No [0]
  - c. Don't know or not sure [99]

(Ask Q12 if Q11 is Yes, otherwise go to Q13)

12. Did the counselor explain the following...? (Mark all that apply) [CHECK BOXES. MULTIPLE RESPONSE. CODE EACH RESPONSE AS 0 IF UNCHECKED OR 1 IF CHECKED]
- a. Purpose of the test
  - b. Results of the test
  - c. Next steps in the process
  - d. None of the above [MUTUALLY EXCLUSIVE RESPONSE]
  - e. Don't know or not sure [MUTUALLY EXCLUSIVE RESPONSE]
13. How many appointments did you have with a counselor before an entitlement decision was made? (Open Capture)
- a. Number of appointments (0-99) \_\_\_\_\_ [NUMERIC TEXT BOX; ACCEPT (0-99)]
  - b. Don't know or not sure [MUTUALLY EXCLUSIVE RESPONSE] [CODE AS 0 IF UNCHECKED OR 1 IF CHECKED]

(Ask Q14 if Q13 is 2 or more, otherwise go to Q15)

14. Why was it necessary for you to have more than one appointment? (Mark all that apply) [CHECK BOXES. MULTIPLE RESPONSE. CODE EACH RESPONSE AS 0 IF UNCHECKED OR 1 IF CHECKED]
- a. To provide additional paperwork/documentation (e.g., medical documents)
  - b. Additional tests
  - c. To follow-up with questions/concerns
  - d. Initial appointment took too long
  - e. Other (Specify) \_\_\_\_\_ [TEXT BOX, FORCE TEXT IF RESPONSE IS SELECTED, 50 CHARACTER MAX.]
  - f. Don't know or not sure [MUTUALLY EXCLUSIVE RESPONSE]

### Application and Evaluation Experience

The following questions ask you to rate various aspects of your experience with Vocational Rehabilitation and Employment using a scale of 1 to 10 where 1 is Unacceptable, 10 is Outstanding, and 5 is Average. **[SHOW ON SAME PAGE AS THE QUESTION THAT FOLLOWS]**

15. Please rate your experience with the VR&E benefit application process on the following items: **[SHOW RESPONSES IN GRID WITH 10-POINT SCALE IN COLUMNS AND ATTRIBUTES/RESPONSES IN ROWS (SEE JDPA CONVENTIONS DOCUMENT PG. 1 FOR SPECIFIC DETAILS OF LAYOUT). EVENLY SPACED RADIO BUTTONS/COLUMNS, ALTERNATE SHADES IN ROWS. SINGLE RESPONSE PER ROW. RANDOMIZE ALL ATTRIBUTES EXCEPT THE LAST ONE.]**

- a. Ease of completing the application **[ALLOW N/A RESPONSE] [1-10, N/A=99]**
- b. Timeliness of eligibility notification **[ALLOW N/A RESPONSE] [1-10, N/A=99]**
- c. Flexibility of application methods **[ALLOW N/A RESPONSE] [1-10, N/A=99]**
- d. **Overall rating of application process**

16. Using the same 1 to 10 scale where 1 is Unacceptable, 10 is Outstanding, and 5 is Average, please rate your experience with Vocational Rehabilitation and Employment counselors during the initial evaluation of your benefit application on the following items: **[SHOW RESPONSES IN GRID WITH 10-POINT SCALE IN COLUMNS AND ATTRIBUTES/RESPONSES IN ROWS (SEE JDPA CONVENTIONS DOCUMENT PG. 1 FOR SPECIFIC DETAILS OF LAYOUT). EVENLY SPACED RADIO BUTTONS/COLUMNS, ALTERNATE SHADES IN ROWS. SINGLE RESPONSE PER ROW. RANDOMIZE ALL ATTRIBUTES EXCEPT THE LAST ONE.]**

- a. Promptness of scheduling appointments or returning calls **[ALLOW N/A RESPONSE] [1-10, N/A=99]**
- b. Courtesy of the counselor **[ALLOW N/A RESPONSE] [1-10, N/A=99]**
- c. Knowledge of the counselor **[ALLOW N/A RESPONSE] [1-10, N/A=99]**
- d. Counselor's concern for your needs **[ALLOW N/A RESPONSE] [1-10, N/A=99]**
- e. Timeliness of completing your initial evaluation **[ALLOW N/A RESPONSE] [1-10, N/A=99]**
- f. **Overall counselor experience**

### Rehabilitation Program/Plan Selection

17. Did you sign a rehabilitation plan with your counselor? **[RADIO BUTTONS. SINGLE RESPONSE.]**

- a. Yes **[1]**
- b. No **[0]**
- c. Don't know or not sure **[99]** (Skip to Q38)

(Ask Q18-Q19 if did not complete a rehabilitation plan in Q17, otherwise go to Q20)

18. Why did you decide not to complete a rehabilitation plan with VR&E? (Mark all that apply) **[CHECK BOXES. MULTIPLE RESPONSE. CODE EACH RESPONSE AS 0 IF UNCHECKED OR 1 IF CHECKED]**

- a. I had a poor experience with the VR&E representative
- b. The VR&E program does not offer the services I need
- c. I chose to enroll in the GI Bill Program
- d. A family member or friend recommended against the VR&E program
- e. Another Veteran advised against or recommended that I not use the VR&E program
- f. Issues related to the planning process (too time consuming/complicated)
- g. Issues related to transportation
- h. Issues related to a medical condition
- i. It is difficult to obtain information about the VR&E program
- j. Life circumstances
- k. Other (Specify) \_\_\_\_\_ **[TEXT BOX, FORCE TEXT IF RESPONSE IS SELECTED, 50 CHARACTER MAX.]**
- l. Don't know or not sure **[MUTUALLY EXCLUSIVE RESPONSE]**

19. Did your decision not to complete a rehabilitation plan involve a change in any of the following life circumstances occurring after you received your entitlement decision? (Mark all that apply) **[CHECK BOXES. MULTIPLE RESPONSE. CODE EACH RESPONSE AS 0 IF UNCHECKED OR 1 IF CHECKED]**

- a. Marriage
- b. Divorce
- c. Death in the family
- d. Had children
- e. New job
- f. Lost job
- g. Moved
- h. Declared bankruptcy
- i. Retirement
- j. Severity of disability
- k. None of the above **[MUTUALLY EXCLUSIVE RESPONSE]**

(Ask Q20-37 if completed a rehabilitation plan in Q17, otherwise go to Q38)

20. Which of the following statements would you say was the most important to you in your decision to complete the rehabilitation plan process? (Mark only one) **[RADIO BUTTONS. SINGLE RESPONSE.]**

- a. Access to an assigned VR&E counselor **[1]**
- b. Receiving continuous contact from the same VR&E counselor **[2]**
- c. Change in life circumstances (e.g., marriage, divorce, loss of job, severity of disability, etc.) **[3]**
- d. Current employment did not meet your expectations **[4]**

- e. Recommendation or referral [5]
- f. Other (Specify) \_\_\_\_\_ [TEXT BOX, FORCE TEXT IF RESPONSE IS SELECTED, 50 CHARACTER MAX.] [97]

21. Was the counselor during the planning phase of your program the same counselor who conducted your initial evaluation? (Mark only one) [RADIO BUTTONS. SINGLE RESPONSE.]

- a. Yes [1]
- b. No [0]
- c. Don't know or not sure [99]

22. Did your counselor provide you with information about the Veterans Employment Center in eBenefits? (Mark only one) [RADIO BUTTONS. SINGLE RESPONSE.]

- a. Yes [1]
- b. No [0]
- c. Don't know or not sure [99]

23. Did you register for the Veterans Employment Center in eBenefits? (Mark only one) [RADIO BUTTONS. SINGLE RESPONSE.]

- a. Yes [1]
- b. No [0]
- c. Don't know or not sure [99]

(Ask Q24 if Q23 is No, otherwise go to Q25)

24. Why didn't you register for the Veterans Employment Center in eBenefits? (Mark all that apply) [CHECK BOXES. MULTIPLE RESPONSE. CODE EACH RESPONSE AS 0 IF UNCHECKED OR 1 IF CHECKED]

- a. Not aware of the Veterans Employment Center
- b. Opted not to use the Veterans Employment Center
- c. Other (Specify: ) \_\_\_\_\_ [TEXT BOX, FORCE TEXT IF RESPONSE IS SELECTED, 50 CHARACTER MAX.]
- d. Don't know or not sure [MUTUALLY EXCLUSIVE RESPONSE]

25. Did your final rehabilitation plan include your original vocational training choice? (Mark only one) [RADIO BUTTONS. SINGLE RESPONSE.]

- a. Yes [1]
- b. No [0]
- c. Don't know or not sure [99]

(Ask Q26 if Q25 is No or Don't know, otherwise go to Q27)

26. Why didn't your final rehabilitation plan include your original vocational training option? (Mark all that apply) [CHECK BOXES. MULTIPLE RESPONSE. CODE EACH RESPONSE AS 0 IF UNCHECKED OR 1 IF CHECKED]

- a. Poor labor market
- b. Medical reasons
- c. Another vocational option suited my needs better

- d. Other (Specify: ) \_\_\_\_\_ [TEXT BOX, FORCE TEXT IF RESPONSE IS SELECTED, 50 CHARACTER MAX.]
- e. Don't know or not sure [MUTUALLY EXCLUSIVE RESPONSE]

### Rehabilitation Experience

27. From the time you signed your rehabilitation plan, how long did it take before services were initiated for your plan? (Open Capture) Please respond using any or all of the following categories

(Web only: IF 0 IS SELECTED FOR DAYS, WEEKS, AND MONTHS, SHOW: Please select "don't know or not sure" or "did not begin one of the five rehabilitation tracks")

- a. Days (0-99 days) \_\_\_\_\_ [NUMERIC TEXT BOX; ACCEPT (0-99)]
- b. Weeks (0-99 weeks) \_\_\_\_\_ [NUMERIC TEXT BOX; ACCEPT (0-99)]
- c. Months (0-99 months) \_\_\_\_\_ [NUMERIC TEXT BOX; ACCEPT (0-99)]
- d. Don't know or not sure [MUTUALLY EXCLUSIVE RESPONSE] [CODE AS 0 IF UNCHECKED AND 1 IF CHECKED]
- e. Did not begin one of the five rehabilitation tracks [MUTUALLY EXCLUSIVE RESPONSE] [CODE AS 0 IF UNCHECKED AND 1 IF CHECKED]

28. Did the same counselor who developed your rehabilitation plan also provide case management sessions during the education and training phase? (Mark only one) [RADIO BUTTONS. SINGLE RESPONSE.]

- a. Yes [1]
- b. No [0]
- c. Don't know or not sure [99]
- d. Not applicable [96]

29. Were you given a time frame from VA for completing the education/training phase of your rehabilitation plan? (Mark only one) [RADIO BUTTONS. SINGLE RESPONSE.]

- a. Yes [1]
- b. No [0]
- c. Don't know or not sure [99]

30. Which of the following types of counseling or referrals has your counselor provided? (Mark all that apply) [CHECK BOXES. MULTIPLE RESPONSE. CODE EACH RESPONSE AS 0 IF UNCHECKED OR 1 IF CHECKED]

- a. Education/training enrollment assistance
- b. Career counseling
- c. Personal counseling

- d. Financial counseling
- e. Problem-solving techniques
- f. Referrals to potential employers (e.g., government, private, etc.)
- g. Referrals to employment agencies or job banks
- h. Referrals to health providers (e.g., medical, dental, optical)
- i. Referrals to other counseling programs
- j. Referrals to Veterans Service Organizations (e.g., American Legion)
- k. None of the above **[MUTUALLY EXCLUSIVE RESPONSE]**

The following question asks you to rate various aspects of your experience with Vocational Rehabilitation and Employment (VR&E) using a scale of 1 to 10 where 1 is Unacceptable, 10 is Outstanding, and 5 is Average. **[SHOW ON THE SAME PAGE AS THE QUESTION THAT FOLLOWS]**

*Please answer the following question based on your best ability to recall your experience with your VR&E counselor(s).* **[SHOW ON THE SAME PAGE AS THE QUESTION THAT FOLLOWS]**

31. Please rate your experience with VR&E counselors on the following items: **[SHOW RESPONSES IN GRID WITH 10-POINT SCALE IN COLUMNS AND ATTRIBUTES/RESPONSES IN ROWS (SEE JDPA CONVENTIONS DOCUMENT PG. 1 FOR SPECIFIC DETAILS OF LAYOUT). EVENLY SPACED RADIO BUTTONS/COLUMNS, ALTERNATE SHADES IN ROWS. SINGLE RESPONSE PER ROW. RANDOMIZE ALL ATTRIBUTES EXCEPT THE LAST ONE.]**

- a. Promptness of scheduling appointments or returning calls **[ALLOW N/A RESPONSE] [1-10, N/A=99]**
- b. Courtesy of the counselor **[ALLOW N/A RESPONSE] [1-10, N/A=99]**
- c. Knowledge of the counselor **[ALLOW N/A RESPONSE] [1-10, N/A=99]**
- d. Counselor's concern for your needs **[ALLOW N/A RESPONSE] [1-10, N/A=99]**
- e. Timeliness of completing your initial evaluation **[ALLOW N/A RESPONSE] [1-10, N/A=99]**
- f. **Overall counselor experience**

32. Which of the following benefits did you receive as part of your rehabilitation plan? **(Mark all that apply) [CHECK BOXES. MULTIPLE RESPONSE. CODE EACH RESPONSE AS 0 IF UNCHECKED OR 1 IF CHECKED]**

- a. Tuition
- b. Subsistence allowance
- c. Books/supplies
- d. Computer equipment/software
- e. Health services (e.g., medical, dental, optical)
- f. Tutoring
- g. Independent living services

- h. Employment services (e.g., resumepreparation, interview skills, obtaining licenses/certifications, etc.)
- i. None of the above **[MUTUALLY EXCLUSIVE RESPONSE]**

33. Which of the following types of employment services did you receive as part of your rehabilitation plan? (Mark all that apply) **[CHECK BOXES. MULTIPLE RESPONSE. CODE EACH RESPONSE AS 0 IF UNCHECKED OR 1 IF CHECKED]**

- a. Resume preparation
- b. Interview skills
- c. Obtaining licenses/certifications
- d. Job hunting strategies
- e. Information interview with potential employers
- f. Job placement assistance
- g. None of the above **[MUTUALLY EXCLUSIVE RESPONSE]**

34. Were the amount of services you received as part of your VR&E program less than, more than, or what you expected? (Mark only one) **[RADIO BUTTONS. SINGLE RESPONSE.]**

- a. Less than **[1]**
- b. What I expected **[2]**
- c. More than **[3]**

The following question asks you to rate various aspects of your experience with Vocational Rehabilitation and Employment using a scale of 1 to 10 where 1 is Unacceptable, 10 is Outstanding, and 5 is Average. **[SHOW ON THE SAME PAGE AS THE QUESTION THAT FOLLOWS]**

35. Please rate your VR&E benefit entitlement (e.g., training and counseling) on the following items: **[SHOW RESPONSES IN GRID WITH 10-POINT SCALE IN COLUMNS AND SINGLE ROW (SEE JDPA CONVENTIONS DOCUMENT PG. 1 FOR SPECIFIC DETAILS OF LAYOUT). EVENLY SPACED RADIO BUTTONS/COLUMNS, SINGLE RESPONSE PER ROW.]**

- a. Amount of benefits or services **[ALLOW N/A RESPONSE] [1-10, N/A=99]**
- b. Effectiveness of benefit/service in preparing and obtaining suitable employment **[ALLOW N/A RESPONSE] [1-10, N/A=99]**
- c. Timeliness of receiving benefit payment **[ALLOW N/A RESPONSE] [1-10, N/A=99]**
- d. **Overall rating of benefit payment/entitlement**

36. While we understand there may be many reasons for not completing the plan, what was the primary reason you did not complete your rehabilitation through the VR&E program? (Mark only one) **[RADIO BUTTONS. SINGLE RESPONSE.]**

- a. I had a poor experience developing my rehabilitation plan **[1]**
- b. I had a poor experience with the VR&E representative **[2]**
- c. The VR&E program does not offer the services I need **[3]**

- d. Issues related to the program requirements (too time consuming/complicated) [6]
- e. Issues related to transportation [7]
- f. Issues related to a medical condition [8]
- g. It is difficult to obtain information about the VR&E program [9]
- h. Concerns about my eligibility for a specific track within the VR&E program [10]
- i. Other (Specify) \_\_\_\_\_ [TEXT BOX, FORCE TEXT IF RESPONSE IS SELECTED, 50 CHARACTER MAX.] [97]
- j. Don't know or not sure [MUTUALLY EXCLUSIVE RESPONSE] [99]

37. Did your decision not to complete your rehabilitation through the VR&E program involve a change in any of the following life circumstances? (Mark all that apply) [CHECK BOXES. MULTIPLE RESPONSE. CODE EACH RESPONSE AS 0 IF UNCHECKED OR 1 IF CHECKED]

- a. Marriage
- b. Divorce
- c. Death in the family
- d. Had children
- e. New job
- f. Lost job
- g. Moved
- h. Declared bankruptcy
- i. Retirement
- j. Severity of disability
- k. None of the above [MUTUALLY EXCLUSIVE RESPONSE]

### Overall Experience with Benefit Program

38. Thinking about ALL aspects of your experience with Vocational Rehabilitation and Employment benefits, please rate VA overall, using a scale of 1 to 10 where 1 is Unacceptable, 10 is Outstanding, and 5 is Average. (Mark only one) [SHOW RESPONSES IN GRID WITH 10-POINT SCALE IN COLUMNS AND SINGLE ROW (SEE JDPA CONVENTIONS DOCUMENT PG. 1 FOR SPECIFIC DETAILS OF LAYOUT). EVENLY SPACED RADIO BUTTONS/COLUMNS, SINGLE RESPONSE PER ROW.] [1-10]

### Overall Experience with VA

39. Taking into consideration all of the non-medical benefits (e.g., education, compensation, pension, home loan guaranty, vocational rehabilitation and employment, insurance, etc.) you have applied for or currently receive, please rate your experience with VA overall, using a scale of 1 to 10 where 1 is Unacceptable, 10 is Outstanding, and 5 is Average. (Mark only one) [SHOW RESPONSES IN GRID WITH 10-POINT SCALE IN COLUMNS AND SINGLE ROW (SEE JDPA CONVENTIONS DOCUMENT



**PG. 1 FOR SPECIFIC DETAILS OF LAYOUT). EVENLY SPACED RADIO BUTTONS/COLUMNS, SINGLE RESPONSE PER ROW.] [1-10]**

40. How likely are you to reapply for the VR&E program in the future? **(Mark only one)** **[RADIO BUTTONS. SINGLE RESPONSE.]**

- a. Definitely will not **[1]**
- b. Probably will not **[2]**
- c. Probably will **[3]**
- d. Definitely will **[4]**

### About You

41. Are you currently employed? **(Mark only one)** **[RADIO BUTTONS. SINGLE RESPONSE.]**

- a. Yes **[1]**
- b. No **[0]**
- c. Prefer not to answer **[98]**

42. Do you have any other comments or concerns about your experience? **(Open Capture)** **[OPEN-END. TEXT BOX. 1000 CHARACTER MAX. ALLOW NO COMMENT, MUTUALLY EXCLUSIVE CHECK BOX. CODE NO COMMENT AS 0 IF UNCHECKED AND 1 IF CHECKED]**

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As a reminder, your responses will be kept completely confidential and your email address will not be sent to VA with any responses on this survey. **[SHOW ON THE SAME PAGE AS THE QUESTION THAT FOLLOWS]**

43. Would you like to provide an e-mail address so VA can contact you with general information about VA benefits and services? **(Mark only one)** **[RADIO BUTTONS. SINGLE RESPONSE.]**

- e. Yes **[1]**
- f. No **[0]**
- g. I do not have an e-mail address **[96]**
- h. Prefer not to answer **[99]**

**(Ask Q44 if Yes in Q43)**

44. Please enter your preferred e-mail address where you would like to be contacted: **(Open Capture)**

a. E-mail: **[OPEN CAPTURE. 100 CHARACTER MAX.]**

# Appendix G

## List of Acronyms

AAPOR	American Association for Public Opinion Research
ANOVA	Analysis of Variance
BAS	Benefits Assistance Service
BPA	Blanket Purchase Agreement
BRE	Business Reply Envelope
CAPS	Centralized Account Processing System
COR	Contracting Officer's Representative
DTA	Data Transfer Agreement
EDIPI	Electronic Data Interchange Personal Identifier
EDX	Enterprise Data Exchange
FAR	Federal Acquisition Regulations
FY	Fiscal Year
GPO	Government Printing Office
ICR	Information Collection Request
JDP	J.D. Power
LGY	Loan Guaranty Service
LWO	Letter Work Order
MAR	Missing At Random
MCAR	Missing Completely At Random
MCMC	Markov chain Monte Carlo algorithm
MNAR	Missing Not At Random
NPC	NPC, Inc. Integrated Print and Digital Solutions
OIF	Operation Iraqi Freedom
OEF	Operation Enduring Freedom
OMB	Office of Management and Budget
OSAT	Overall Satisfaction Index
RO	Regional Office
SSN	Social Security Number
US	United States
USA	United States of America
VA	Department of Veterans Affairs
VADIR	VA DoD Identity Repository
VAPSD	VA Publications Services Division
VBA	Veterans Benefits Administration
VOV	Voice of the Veteran
VR&E	Vocational Rehabilitation and Employment Service
VSO	Veterans Service Organizations