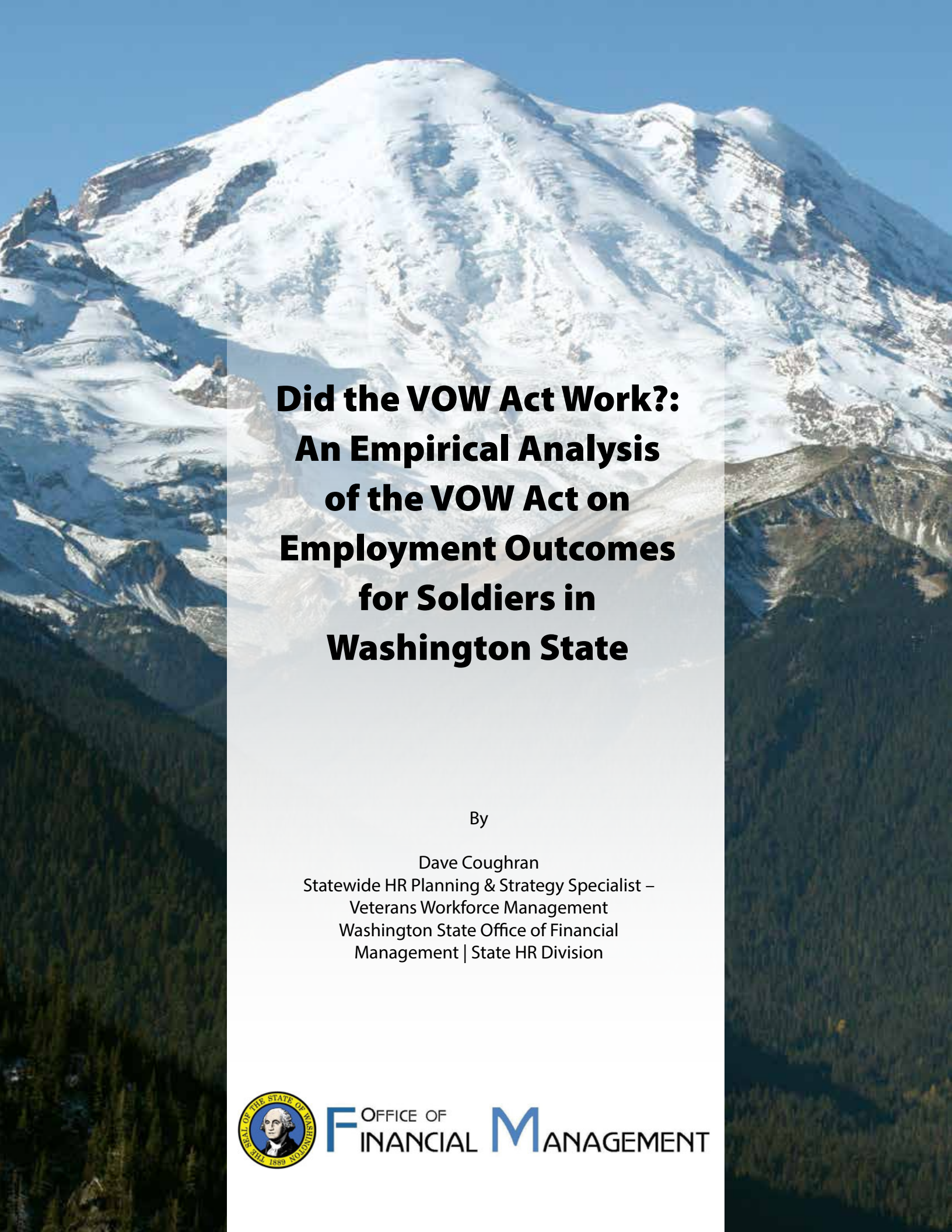

Did the VOW Act Work?: An Empirical Analysis of the VOW Act on Employment Outcomes for Soldiers in Washington State

By

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Executive Summary

At the request of the Joint Base Lewis McChord Transition Services Manager, the Washington State Office of Financial Management (OFM) conducted an empirical analysis to determine the impact of the Veterans Opportunity to Work (VOW) Act on employment outcomes for Army soldiers transitioning into Washington State's workforce. OFM accomplished this by making a comparison of two cohorts. First, OFM compiled data on soldiers who separated the military between January of 2011 and March of 2012. This cohort is our control because these soldiers transitioned before the VOW Act took effect. The second cohort consists of those who transitioned between January of 2013 and March of 2014. These soldiers received transition services under the new rules specified by the VOW Act. Additionally, OFM reduced bias in its results by addressing/controlling for numerous demographic variables such as age, ethnicity, education, disability status, external economic conditions, et al.

The results demonstrate that the new transition services ushered in by the VOW act are not associated with any discernible impact in Washington State on (1) the length of time a veteran spends in the job search after separating from the Army (2) the initial salary a veteran earns upon joining the workforce (3) the average salary a veteran earns upon joining the workforce (4) the length of time it takes a veteran to achieve his or her highest salary levels in the civilian workforce and (5) the highest salary a veterans earns after leaving the military.

This report offers three recommendations. First, the Defense Department must allow other military installations to pursue data share agreements with state agencies (like OFM) to repeat this analysis in other parts of the country. Second, the military should allow transition managers to focus transition services on those in greatest need of the intervention rather than providing all services to everyone. Finally, as policy, the Defense Department should allow transition managers to interact more closely with state, private, public, and educational institutions to better synchronize efforts.

Introduction & Background

In September 2015, the Washington State Office of Financial Management (OFM) Workforce Planning and Strategy Section began the Veterans Service Data Evaluation Project. This undertaking was a collaborative effort between OFM, the Washington State Governor's Office, the Joint Base Lewis McChord (JBLM) Soldier-For-Life Transition Assistance Program (SFL-TAP), the Employment Security Division, the OFM Forecasting Department, and the Washington State Department of Veteran's Affairs (WA DVA). The goal of the project was to aid policymakers by performing cost-benefit analysis on the many programs servicing veteran transition into the state workforce. These programs receive funding from federal, state, and private sources. Additionally, virtually all of these programs involve some level of investment or advocacy from the Washington State government. The Veterans Service Data Evaluation Project was to design both a framework and a centralized database so that OFM could differentiate between high-performing programs and those that have little impact on outcomes (finding a job, salary, salary increases over time, etc.). However, it soon became clear that this project also had the capability to evaluate wider policy initiatives such as the VOW Act. Therefore, it is helpful to describe the methodology of the Data Evaluation Project to better understand the results that OFM presents in this paper.

The Data Evaluation Project was novel in its ability to successfully integrate a series of state, federal, and military databases so that OFM could measure the employment outcomes of transitioning veterans in Washington State. OFM began with a database managed by WA DVA that stores separation information from a veteran's DD-214.[1] In total, these records contain personally identifiable information (PII) of approximately 13,000 service members who transitioned from the military between 2013 and 2015 and elected to have their DD-214 archived at WA DVA. OFM took this data and then merged it with the Army Career Assistance Program XXI database (ACAP XXI database). ACAP XXI is a web-based data-entry tool used by career counselors at Army installations to track separating service members as they attend various classes and receive transition services. At JBLM, it contains PII and limited demographic data for approximately 34,000 service members who left active military duty from January 2011 to present.

The next step was to append this merged database with more detailed demographic data on the veterans. This is necessary so that OFM's research could control for potential bias in its estimates. For example, if a treatment group has a disproportionately larger percentage of minority veterans, this could lead to an understatement of the treatment's effect because minorities typically earn less than non-minorities. OFM identified that, at a minimum, we would need to determine age, rank, ethnicity, education, marital status, gender, character of service, separation date, years of service, job position, and disability status on all of its veterans to ensure precision in the analysis. The JBLM Transition Manager acted as the sponsoring agency so that OFM could obtain all of this demographic data from the Defense Manpower Data Center in Monterey, California.

OFM's next step was to use the PII in these records to match a veteran with his or her earning reports in the Employment Security Division's Workforce Unemployment Insurance (UCX) Database. The UCX database captures quarterly earnings statements for workers whose employees participate in the state's unemployment insurance program. The database does not capture all earners in Washington State. For example, Washington does not require small businesses to participate and the database does not capture federal wages. However, it is an effective tool that records workers' (1) quarterly wages earned before taxes (2) quarterly hours worked (3) industry or business sector where wages were earned and (4) the employing company or agency.

OFM is now able to impute a variety of statistical outcomes from this data. First, by examining when a veteran exited active duty and counting the number of quarters that elapse before he or she populates the UCX database, OFM can approximate how long that service member had to look to find his or her first job. Furthermore, OFM can estimate the approximate annual salary from this first position, observe how/if the veteran's wages rose over time, and how many quarters elapsed before the veteran found a job that paid his or her highest recorded salary.

[1] The DD-214 is a US Department of Defense Form that summarizes a veteran's service record at his time of discharge. It contains personally identifiable information, such as the veteran's name and social security number, as well as some baseline demographic data on that individual. Veterans choose which state, if any, will maintain a copy of their DD-214.

With all of this information now in tow, OFM is able to successfully perform cost-benefit analysis. When the governor's policy office or WA DVA identifies a program to be evaluated, the program manager simply provides a list of its participants. This list can come either from interfacing with another database (such as the Services Knowledge & Information Exchange System aka SKIES) or providing OFM with a list of names for those who received treatment.[2] OFM can employ means testing, regression analysis, nonparametric matching, and other econometric techniques to determine the overall program effectiveness. In addition to benefit for the individual veteran (such as higher earnings), OFM can also determine benefit to the state and federal government. For example, if a program successfully brings a service member into the workforce sooner after transition, this veteran is generating taxable income to the state. Additionally, it may decrease the veteran's propensity to draw unemployment insurance or other costly social services (food stamps, housing assistance, etc.). These are all tangible savings to Washington State and the US government.

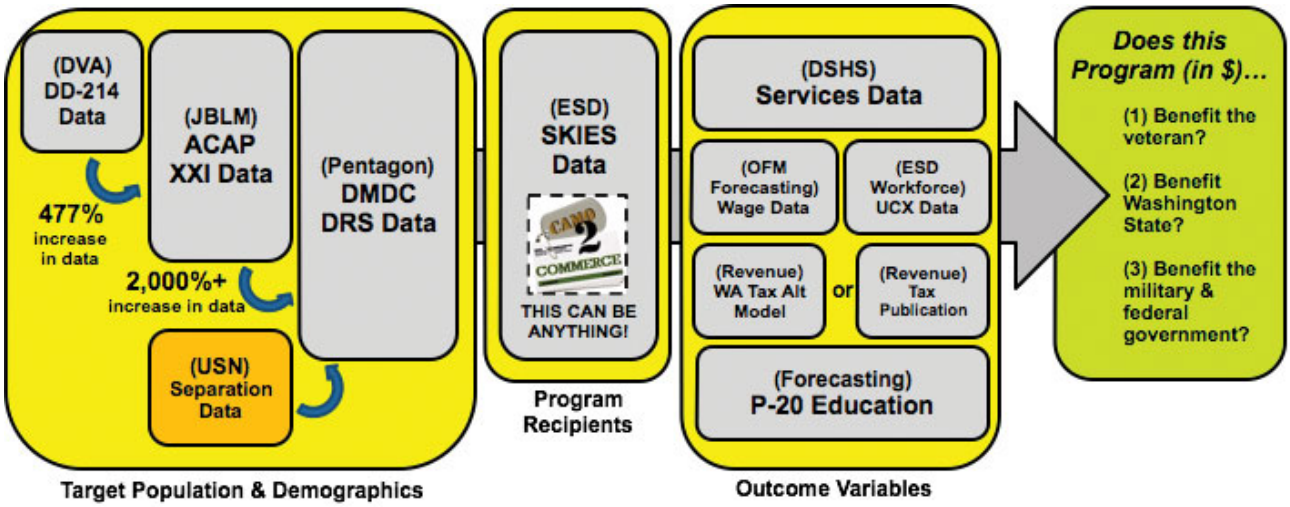
The following chart is graphical depiction of how OFM links databases to identify population of interest, treatment, and outcome variables. In the provided example, Camo2Commerce is the treatment program under evaluation. The acronyms in parentheses represent the agency that owns that particular database. In some cases, the agency provides a model (such as the Department of Revenue Tax Alternative Model), that allows OFM to impute statistical values based on information in other databases. For more information on the technical aspects of this research, please see Annex A. ***Figure 1: Program Evaluation Framework***

The VOW ACT

The Veterans Opportunity to Work Act (H.R. 2433) is a bill that the President signed into law in November of 2011. The goal of the law is to improve employment outcomes for veterans, who at the time had an alarmingly high unemployment rate at 12.1%.[4] Officially, the law put into effect the following policies[5]:

- Participation in the Transition Assistance Program (TAP) is now mandatory to all separating service members. The TAP program varies from service to service (the Army's program is called Soldier-for-Life TAP, the Navy's program is run by Fleet & Family Services), but each mandates a battery of classes and training programs to help veterans become aware of their benefits and gain skills that will assist them in the job market. A veteran is said to have met Career Readiness Standards (CRS) when he or she completes all of the requirements in Department of Defense Form 2958 and DD2648 (DD 2958). (See Annex C).
- The VOW Act enabled 100,000 veterans of past eras access to Montgomery GI Bill Benefits.

Figure 1: Program Evaluation Framework[3]



[2] With all of this data, inevitably there are questions regarding access to these personnel records. OFM is fully compliant with the Privacy Act of 1974. Under the relevant provision, we are compiling this data solely as "statistical research" and all records will be "transferred in a form that is not individually identifiable." (5 USC §552a(b) Disclosure and Matching Provisions). The PII is used simply to match records, and then the department deletes information that could tie a data back to an individual person.

[3] Navy Region Northwest and the US Navy (USN) are currently examining a legal framework to share data in the same fashion as JBLM.

[4] Bureau of Labor Statistics.

[5] "The Veterans Opportunity to Work Act (The VOW Act)," House Committee on Veterans' Affairs, http://veterans.house.gov/jobs, (November 1 2012).

- Governors now have greater flexibility in the funds they receive to support veteran service programs. The VOW Act provided states with up to 25% funding for direct training services for veterans.
- The VOW Act strengthened the provisions in the Uniformed Services Employment and Reemployment Rights Act (USERRA).
- Finally, the VOW Act worked to help civilian accreditation and licensing of many transferable military skills such as combat medics, technicians, mechanics, and truck drivers.

Of note, OFM believes that one aspect of the VOW act that remains underemphasized was its intent to raise the level of awareness for the challenges veterans face in the workforce. This law brought public attention to the issue, and thereby focused policy makers' attention on it. The VOW act therefore also raised the level of discourse and empowered organizations to frame their ideas around a central goal. Experiment Design

In November of 2015, the Joint Base Lewis McChord (JBLM) Transition Manager approached OFM with a research question. Because OFM has a database with wage and demographic information on transitioning veterans, it is now possible to conduct analysis of macro-level policy in addition to cost-benefit analysis of veteran service programs.

Specifically, the JBLM Transition Manager sought to determine the impact of the Veterans Opportunity to Work Act (VOW Act) on the following outcome variables:

Length of Time in Job Search- the length of time (in quarters) it takes a veteran to find a job after transition from active duty.

First Salary- the first salary a veteran earns following transition. OFM calculates this as an annual salary.

Average Salary- the average salary a veteran has earned following transition. Again, OFM calculates this as annual salary.

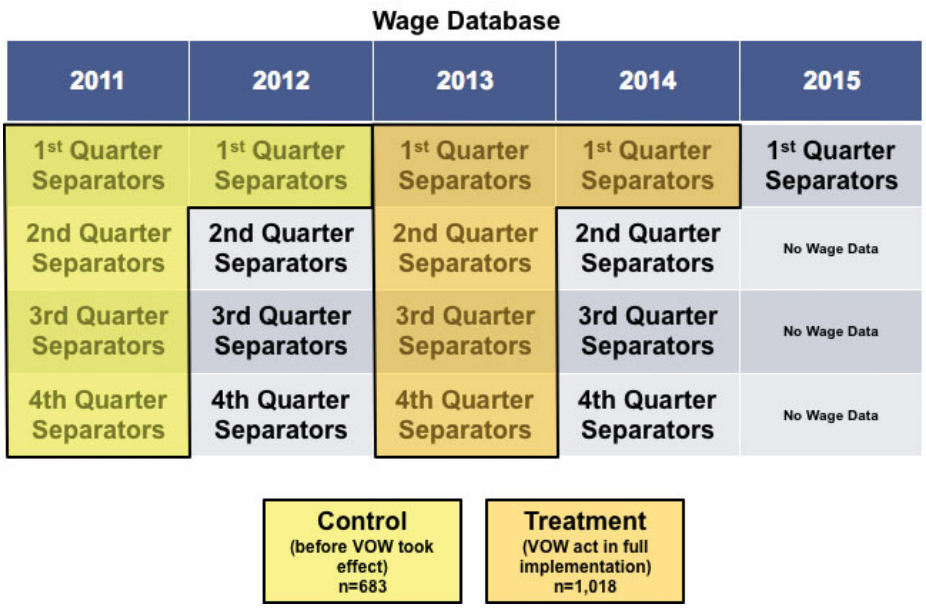
Length of Time to Highest Salary Attained- the length of time (in quarters) it takes a veteran to reach his or her highest salary following transition.

Highest Salary Attained- the highest salary attained by a veteran in the wage database following transition. OFM calculates this as an annual salary.

JBLM instructed OFM to control for whatever demographic or macroeconomic variables may create bias in the results. Furthermore, by virtue of data restrictions, OFM's analysis of the VOW Act would be limited to impact on outcomes for separating Army soldiers who transitioned into the Washington State workforce. The results do not represent the other services or national trends.

The design of the experiment was relatively simple. The following chart demonstrates the wage data on hand for analysis. Essentially, OFM classifies a veteran by the quarter that he or she was discharged, and then tracks his or her employment in quarterly snapshots following the transition:

Figure 2: Research Design



OFM took five quarters of transitioning service members, from 1st quarter 2011 through 1st quarter 2012, and used this group as the control. The Army discharged these veterans before the TAP program met VOW mandates. By January of 2013, the law and all of its subordinate policies were in full effect, and all of these veterans would have had to meet CRS Standards before discharge. This group constituted the treatment group.

The next step was to examine the demographic proportions in both the treatment and control. For example, if there were more women in the control group, our estimate would be biased because statistically women earn less than men in the state workforce. OFM used a standard T Test[6] to determine that, statistically speaking, the treatment and control group are structurally the same for the following variables: proportion of officers, proportion of NCOs, proportion of junior enlisted (rank E1-E4), education, proportion of gender, and the proportion of less than honorable discharged.[7]

This T Test methodology also helped OFM identify numerous ways in which the treatment and control were statistically different. First, the treatment group is a year younger, meaning that the Army discharged a younger cohort after the VOW act. Additionally, the treatment group had more non-white and non-Asian minorities. Like women, minorities typically earn less in the state workforce. Also, between 2011 and 2013 the proportion of disabled vets among veterans separating into Washington State grew from 10.5% to 28.7%. This is significant because, statistically, those with disabilities earn less than their non-disabled peers. Finally, the control group also had a larger proportion of married veterans. Due to these statistical differences between treatment and control, OFM realized it would have to use multivariate regression with a series of controls rather than a simple means-test to compare these two groups. Stated differently, because the control group and treatment group are so different, the analysis cannot make a direct comparison between the two groups simply by comparing averages (i.e. average wages earned, average length of job search, etc). Instead, OFM would have to use linear regression with a series of controls.

OFM also realized that there are other exogenous variables that have the potential to introduce bias into the results. For example, the economic conditions in 2013 were far better than in 2011, as Washington and the rest of the country was beginning to pull out of recession. Therefore, OFM controlled for economic conditions by appending each veteran's record with the state unemployment rate, minus 5%, during the quarter that the veteran transitioned from active duty. The five percent adjustment represents the structural unemployment when the labor market is at a typical equilibrium. Subtracting 5% therefore provides us the additional unemployment beyond structural unemployment, and OFM can use this value as a sensor of economic conditions throughout the state.

Additionally, OFM also controlled for the number of involuntary separations per quarter. In 2013, the Army was reducing its overall numbers, and there was potential that more veterans were fighting for the same jobs in 2013 than in 2011. Therefore, the number of involuntary separations was also a regression control.[8]

Another confounding variable is the issue of unemployment insurance. From 2011 through 2015, the laws and regulations surrounding unemployment benefits for transitioning veterans in Washington State fluctuated significantly. In 2011, veterans could draw up to a year of benefits, but by 2014, the overall benefit reduced to 22 weeks. The payouts also fluctuated significantly. This variable was too difficult to control through additional regressors, so the design of the experiment had to change. OFM mitigated the effect of different unemployment benefits by ensuring that everyone in both the treatment and control never drew unemployment insurance benefits. Therefore, the percentage in both the treatment and control of veterans who drew unemployment benefits, at any point in time, is 0%. It is important to note that this approach would likely favor the impact of the VOW act, because less generous unemployment insurance benefits in the treatment group would incentivize greater participation in the work force.[9]

Finally, OFM had to decide which measure of inflation to use in its analysis, because a dollar in wages earned in 2011 is worth less than a dollar in 2013. OFM uses CPI-W, adjusted quarterly, to compensate for inflation and convert all wage reports into real (4th quarter 2015) dollars. CPI-W is Washington State government convention, and Annex A contains more information on these calculations.

Results

According to the best data currently on-hand, OFM estimates that the VOW Act has not had a statistically significant impact on the following

[6] 10% threshold for these T Tests.

[7] The DMDC uses a numerical value from 0 to 61 to capture a service member's level of education. For reference, a high school diploma corresponds with "31" and a doctoral degree corresponds with "61."

[8] OFM did not control for total separation rate because of the endogeneity problem. Because soldiers have the potential to influence their discharge date, one could assume that they would be more inclined to transition in a year with better economic conditions. Therefore, the total separation rate is a bad candidate for the regression analysis.

[9] OFM relaxed this constraint and repeated the analysis keeping those who drew unemployment insurance. There was no statistically significant difference between the treatment and control with regard to the percentage of those soldiers who drew unemployment insurance. Additionally, it did not meaningfully impact the results.

outcome variables for Army veterans who transitioned into the Washington State Workforce between 2013 and 2014:

Length of Time in Job Search- the length of time (in quarters) it takes a veteran to find a job after transition from active duty.

First Salary- the first salary a veteran earns following transition.

Average Salary- the average salary a veteran has earned following transition.

Length of Time to Highest Salary Attained- the length of time (in quarters) it takes a veteran to reach his highest earning salary following transition.

Highest Salary Attained- the highest salary attained by a veteran in the wage database following transition.

Stated differently, the VOW Act has not meaningfully influenced how long it takes a Washington State Army veteran to find employment after separation, nor has it demonstrably impacted earnings.

The following regression table summarizes these results:

Figure 3: Regression Table; Impact of VOW Act

	Job Search b/se	First Salary b/se	Avg Salary b/se	Job Search H b/se	High Salary b/se
age	-0.043***	667.477***	801.204***	-0.028**	945.893***
	(0.01)	(58.53)	(57.33)	(0.01)	(70.89)
minority	0.339*	-5033.469***	-5673.651***	0.154	-7211.439***
	(0.16)	(1082.31)	(1034.48)	(0.19)	(1289.58)
disabled	0.700***	-4608.610***	-5510.147***	0.419**	-6843.427***
	(0.16)	(911.01)	(886.77)	(0.16)	(1133.89)
married	-0.517**	2403.389*	2516.487**	-0.378*	3784.891**
	(0.17)	(956.78)	(956.57)	(0.19)	(1237.25)
un_rate	1.306***	-217.941	412.325	2.416***	3344.497
	(0.27)	(1795.19)	(1728.16)	(0.31)	(2191.51)
invol_sep_rate	0.001	10.418	6.142	-0.001	3.494
	(0.00)	(7.43)	(7.41)	(0.00)	(9.50)
VOW	0.178	-1251.144	-43.748	1.033	3986.684
	(0.78)	(5094.08)	(4935.77)	(0.90)	(6217.84)
constant	-1.104	19842.310**	21493.242***	-1.647	17708.695*
	(0.96)	(6308.11)	(6119.16)	(1.10)	(7739.86)
R-sqr	0.200	0.120	0.173	0.365	0.172
dfres					
BIC	8328.3	38367.9	38232.3	8774.3	39006.0

* p<0.05, ** p<0.01, *** p<0.001

This regression table summarizes the impact of various independent variables in the left hand column on dependent variables in the top row. The asterisks communicate the statistical significance of the independent variables. More asterisks means that the analysis is more "confident" with the data and that there is a negligible chance that the result came about by sampling fluctuations. By convention, a variable must be at the five percent level (one asterisk) before we can conclude statistical significance. Put simply, we assume that an independent variable (such as age or minority status) has no impact on a dependent variable (such as salary) unless the regression analysis meets the five percent level. So no asterisk means that the data cannot reject the null hypothesis that the independent variable has no effect. Again, OFM chose these regressors to control for the statistical imbalance between the treatment (VOW) and control group (before VOW).

This section of the white paper will walk the reader through the table to help read these results. The intent is to provide a foundation to discuss the effect of the VOW Act in more detail:

Age- The "age" variable is essentially a veteran's age at time of transition minus 18. So for a veteran who was 30 years old when he transitioned, his

"age" variable is 12. The table shows that every year of "age" is associated with a -.043 quarter (3.6 day decrease) in the length of time spent in the initial job search. Also, every year of "age" is associated with a $667 increase in annual salary for the first job. The regression analysis shows us that, on average, older veterans find jobs faster, earn higher salaries, and that this variable is statistically significant across all dependent variables.

Minority - The "minority" variable is a Boolean variable that differentiates between ethnicities typically associated with high and low earnings. A "minority" is therefore defined as someone whose ethnicity is neither Caucasian nor Asian. Being in the "minority" category is associated with a .339 quarter (40 day) increase in the length of time spent in the job search. However, because there is no statistical significance, being in the "minority" category is not associated with any change in how long it takes a veteran to reach his highest recorded earnings (Job Search H). The "minority" category is also associated with a -$5,033 dollar decrease in the first salary after transition and a -$7,211 decrease in the highest salary attained.

Disability- The "disability" Boolean variable represents a flag from the Defense Manpower Data Center Interservice Separation Code. Essentially, in this analysis a veteran is in the "disability" category if his or her interservice separation code falls in the range 1010-1017. This captures those veterans who had a disability condition prior to service, earn disability severance pay, are on permanent disability retirement, temporary disability retirement, disability retirement as defined by USC Title 10, became physically unqualified for active duty, or were separated for not meeting military height and weight standards. Falling into the "disability" category is strongly correlated with much lower earnings and more time spent looking for a job after transition. Also, those in the "disability" category see earnings that rise much slower over time. For example, the "disability" category is associated with a .7 quarter (84 day) increase in the amount of time it takes a veteran to find a job after transition.

Married- "Married" is a Boolean variable that captures whether or not the veteran is married. Being "married" is typically associated with higher earnings, finding a job faster, and a faster rising salary.

Un Rate- "Un_rate" is Washington State's unemployment rate for the quarter that the veteran transitioned, minus five percent. So if a veteran transitioned in first quarter 2014, and the unemployment rate across Washington was six percent, this veteran's "un_rate" is one (1). Inversely, if the veteran transitioned into a state workforce where the unemployment rate was four percent, his or her "un_rate" would be negative one (-1). The five percent adjustment represents typical structural unemployment rates. The data suggests that a higher unemployment rate is associated with a longer time spent in the initial job search, and the time it takes a veteran to reach his or her highest wages. However, the unemployment rate is not associated with any change in the actual salary once the veteran has a job.

Invol Sep Rate- "Invol_Sep_Rate" is the Involuntary Separation Rate. This variable captures the number of soldiers that JBLM was involuntarily dismissing from military service in the quarter that the veteran transitioned. The analysis cannot discern any notable impact or association from "Invol_Sep_Rate" on salary, the length of time in job search, or how much time elapsed before the veteran reached his or her highest salary.

Constant- "Constant" is an intermediate variable used in the linear regression. It has no direct importance for this analysis.

Hopefully, this review has provided some insight as to how to interpret the regression table. With this foundation, we can discuss the VOW Act in more detail.

When looking at those veterans who transitioned under the VOW Act, the data demonstrates that there is no statistically significant variation in salary, the length of time to find the first job after transition, and the length of time to reach the highest salary. **Therefore, the data cannot reject the hypothesis that the VOW Act has had no meaningful impact on these outcome variables.**

Discussion

Now that we have a clear understanding of the data, it is important to frame these results in a larger context. It is important to remember that there are essentially two levels to the VOW Act. There is policy, and then there is the operationalization of that policy. As policy, the VOW Act has demonstrated strong results. However, the military has not effectively operationalized this policy into its Transition Assistance Program (TAP).

The VOW Act became official in November of 2011. Its most important impact was twofold. First, it mandated that veterans participate in the Transition Assistance Program (TAP). Second, it raised the level of awareness of for the challenges veterans face when separating from active duty. In terms of raising awareness here in Washington, the VOW Act was a success. The legislation attracted the attention of many stakeholders, both public and private, who threw their influence behind the effort. For example, when Jay Inslee became Governor in January of 2013, his first executive action was to reorganize portions of the state government dealing with veterans' issues into the Washington State Military Council. He charged this team to increase data sharing between organizations and improve employment outcomes for transitioning veterans. In March 2014, the Schultz Family foundation dedicated $30 Million dollars to help veterans navigate the return to civilian life. These efforts are not directly related to the VOW Act, but they demonstrate how a policy initiative at the national level provided impetus at the state level.

Furthermore, the VOW Act also helped coalesce efforts and recruit additional resources around veteran services. In 2013, the Washington State Employment Security Department (ESD) approached the national Chamber of Commerce and requested a $5.5 Million dollar National Emergency Grant to help offset the impending labor imbalance that would occur in Washington State as the military began downsizing its numbers. ESD used these resources to create a program that would marshal the state's workforce development system, non-profits, and private industry into a comprehensive job placement service for transitioning veterans. This program became known as Camo2Commerce, and the results have been exemplary. For example, OFM estimates that Camo2Commerce has created $11.7 Million dollars in economic activity within the state of Washington, brought in $1.1 Million dollars of tax revenue, and saved the federal government $1.4 Million dollars in reduced unemployment insurance claims. The VOW Act created a policy climate that made efforts such as these possible.

On the policy level, the VOW Act has been inordinately successful. However, these positive results have not directly transferred into the TAP program. The Undersecretary of Defense for Personnel & Readiness issued Directive Type Memorandum (DTM) 12-007 shortly after the President signed the VOW Act. This memorandum further emphasized that participation in the TAP program is now mandatory, and it also outlined what would become known as Career Readiness Standards (CRS). CRS is essentially a checklist of briefings, services, and counseling that a veteran must receive before he or she separates. For example, this checklist includes informational sessions on veteran education benefits, financial counseling, completing a resume, translating military training into civilian skills, et al. Annex B provides an abbreviated list of CRS standards, and Annex C is a copy of the DD Forms 2958 and 2648 which document a veteran's having successfully met these standards. The various services issued their own TAP guidance through various policy documents. (The Army's is EXORD 054-12.) Generally speaking, all services follow the same guidance in DTM 12-007.

In some respects, DTM 12-007's directives have led to improvements. It is important to remember that the military anticipated significant drawdowns following extensive military operations in Iraq and Afghanistan. TAP is not exclusive to finding service members jobs. It was also responsible for conveying information and insuring that the military had enough resources to accommodate the large number of veterans who would leave military service. Prior to the Vow Act of 2011, 10.5% of US Army soldiers transitioning into Washington State separated with some form of disability claim. By 2013, this number had grown to 28.7%. This is evidence that soldiers better understood their benefits and knew how to apply for them.

The unfortunate downside to CRS standards is that it directed the attention of the military's Transition Assistance Program to outputs instead of outcomes. The military has become focused on ensuring that veterans attend the various workshops and briefings, and complete all of the tasks required to meet CRS standards. TAP directors at the

various military posts and bases report their CRS percentages, but there is no corresponding focus on what happens to these veterans after transition. The Government Accountability Office echoes this observation in GAO Report 14-144:

"… The [military's] efforts to evaluate TAP results have focused on basic end-of-course evaluations and gauging servicemembers' readiness prior to separation instead of higher impact program evaluations, such as assessing the effectiveness of TAP on servicemembers 6 months after they have separated from the military."[10]

Stated differently, a higher CRS percentage for transitioning veterans is an output. Whether or not a service member finds a job, the associated salary, and how long it took to find the job are outcomes. The focus must transition to these outcomes.

The quantitative analysis offered in this report is the first of its kind. To Washington State's knowledge, OFM is the only government office, at either the state or federal level, which has tied employment outcomes to a service member's transition. The preliminary data suggests that all of this emphasis on CRS standards, as dictated by DTM 12-007, is not leading to improved outcomes.

Recommendations

OFM Planning and Strategy offers the following recommendations based on these findings:

(1) ***Better Data Sharing Frameworks to repeat this analysis…***

The analysis provided in this report is specific to veteran's employment outcomes in Washington State. Conditions may vary across the country, so other government agencies should attempt to repeat this analysis at their level. It would be premature to extrapolate these results to the national level.

To achieve this, the Department of Defense will have to be proactive in sharing its data with state and government officials who are likely to have access to wage data. It took Washington State over *three years* to establish a data-sharing agreement between JBLM, the Employment Security Division, OFM, The Washington State Department of Veteran Affairs, and the Defense Manpower Data Center. Transition directors across the country should be empowered to pursue similar arrangements. This will only lead to better accountability and better results for the investment of taxpayers' money. OFM is ready and willing to provide its legal documentation to provide an example of data share frameworks to other organizations.

(1) ***More Focused Services…***

Better data sharing frameworks will inevitably lead to better analysis. For example, OFM can predict with better than 10% accuracy which separating service members will reach a living wage in Washington State within a year of transitioning. Predictive data models such as these would allow transition services to focus their efforts and resources on those target populations in greatest need of an intervention.

For example, a 35 year-old officer with a master's degree who transitions in Washington State is almost statistically assured of finding a job that provides a living wage after separating from the military. Is it really necessary to have this officer receive the full gambit of CRS-mandated classes and counseling? Would these resources be better focused on the 22 year-old enlisted soldier with only a high-school education? Contracted career counselors who have since left their jobs at JBLM lament that their contact time with transitioning service members is too short.

The VOW Act only mandates participation in the TAP program. It does not mandate complete participation. Transition services should be allowed to tailor packages based on the need of the individual service member. Better data sharing agreements would help the military make more informed decision as to which specific services have the best impact.

(1) ***Let the Outside In***

JBLM's success in transition, by far, is owed to the "one team" mentality of partners throughout the state. State organizations offering job placement services have office space inside the post. Microsoft sponsors soldiers to participate in IT classes. Academic institutions provide counselors that volunteer their time to help service members find the right educational program. JBLM allows Washington State government departments to recruit candidates from inside the gate. There is no separation between the military post and the rest of the community.

[10] "TRANSITIONING VETERANS: Improved Oversight Needed to Enhance Implementation of Transition Assistance Program," U.S. Government Accountability Office, http://www.gao.gov/products/GAO-14-144, (March 5 2014).

Again, the military must empower its transition managers across the country to pursue similar arrangements.

Final Thought

This report fully recognizes that the scope of this analysis is limited. However, to date it is the only comprehensive analysis in existence that examines employment outcomes for veterans after separation. *To be clear, the results do not demonstrate any appreciable improvement in employment outcomes in Washington State after the VOW Act came into effect.*

OFM has gone to great lengths to offer the detail of our technical methodology in Annex A. OFM's director and Washington State Department of Veteran Affairs hopes that other agencies may attempt to repeat this analysis with other data sets.

OFM will update this report with more recent wage data as it becomes available to our department.

Annex A: Technical Detail

Following some of OFM's initial reports, there have been many inquiries into the technical details of our analysis. These questions are valid because, in the end, analysis is only as good as the assumptions that inform it. The purpose of this annex is to provide some insight into OFM's econometric approach and to disseminate some of the lessons-learned to other departments.

To begin, OFM is interested in five outcome variables. OFM analyzes these variables to determine whether or not a treatment program is having an effect:

Length of Time in Job Search- the length of time (in quarters) it takes a veteran to find a job after transition from active duty. OFM estimates this outcome by counting the number of quarters between a veteran's discharge and when he or she populated the state's wage database.

First Salary- the first salary a veteran earns following transition. OFM calculates this as an annual salary.

Average Salary- the average salary a veteran has earned following transition. Again, OFM calculates this as annual salary.

Length of Time to Highest Salary Attained- the length of time (in quarters) it takes a veteran to reach his highest earning salary following transition.

Highest Salary Attained- the highest salary attained by a veteran in the wage database following transition. OFM calculates this as an annual salary.

As of 23 January 2016, OFM has approximately 47,000 veteran records on file to conduct analysis. These records represent veterans who have transitioned from active duty in Washington between 2011 and 2015. However, not all of these records are useable. First, only (approximately) 18,000 individuals of these original 47,000 have wage records on file here in Washington State. This means that the overwhelming majority of veterans who transitioned from active duty in Washington State moved to another state, stayed out of the job market, or worked in a job (such as a federal job) whose wages OFM cannot track.

Of these 18,000 records, only 16,000 are what OFM classifies as 'normative wages.' Stated differently, OFM makes a series of assumptions as to which wage reports it should use. Wage reports come to OFM in a series of quarterly reports for each identified veteran. The wage report lists the total hours worked, total wages earned, and the industry sector. First, OFM discards all wage reports where the veteran is earning more than $30K in a quarter ($120K adjusted annual salary). This is to ensure that our results focus on the center of the earnings distribution and that these high earners do not skew the results. Second, OFM discards all wage reports where the veteran is earning less than $3K in a quarter ($12K adjusted annual salary). OFM believes that beneath this threshold, the veteran has not decisively 'entered the job market.' Consider that at the minimum wage for Washington State ($9.47 per hour), a veteran who works 2,080 hours in a year would earn approximately $20K per year. Therefore, OFM assumes that those earning less than $3K per quarter ($12K adjusted annual salary) have not fully committed to the job market because, even with a minimum wage job and working close to full time, their earnings should be closer to $20K. This methodology helps skim out retirees or other veterans who are only working part time.

A key distinction in this analysis is that OFM only discards wage reports and does not necessarily get rid of the entire veteran record. For example, consider a hypothetical situation where a veteran has two wage reports. In one quarter she earned

$2,500, and in the second she earned $3,500. OFM would only discard the first wage report for the first quarter and keep the other. This helps OFM preserve data and keep more records in the analysis.

OFM has approximately 16,000 veteran records with their associated wage reports. The next step is to identify the exact date of the veteran's transition so that the calculations only examine earnings *after separation from the military*. The data shows that more than 40% of veterans who transitioned in Washington State have wage reports on file from before their discharge date. This means that a large population of veterans worked second jobs while still in the military. OFM must discard those wage reports from before the transition date because they typically represent secondary or part-time jobs and they would pull estimates downs. For example, consider a soldier who delivered pizza on the weekends while still on active duty. OFM does not want to include these wages in our calculations because they would lead us to understate average earnings post transition.

Therefore, of the 16,000 veterans still on-hand, OFM must discard approximately half of them. This is because roughly 8,000 veterans in our database joined the National Guard or Reserves after transition. The Defense Manpower Data Center (DMDC) considers these veterans as 'still serving,' and cannot provide a clear discharge date. Because OFM does not want to confuse full time earnings post-separation with part-time earnings prior to separation, OFM discards the entire veteran record.

So now, approximately 8,000 records are still available for analysis. Once again, OFM must cut approximately half of these records. The data shows that half of these veterans do not have *post-separation* wage reports, meaning that they only earned income in Washington State while still on active duty. Ostensibly, they left the state after their discharge, or stayed in Washington but did not join the workforce. This leaves OFM with approximately 4,424 useable veteran records with associated wage reports.

OFM now makes a series of assumptions to calculate earnings and adjust for inflation. First, OFM considers *wages earned* to calculate adjusted annual salary and not the quarterly hourly wage. Stated differently, OFM takes the total wages earned by a veteran in the quarterly wage report, and then multiplies it by 4 to get an adjusted annual salary. Other departments would calculate the average hourly wage for that quarter, and then multiply by 2080 to determine an adjusted annual salary. OFM prefers the former method because many veterans may be able to find a job, but the job does not provide enough hours to allow the veteran to work full time. To streamline calculations, OFM's methodology uses wages that are actually earned instead of a projected annual salary off of quarterly hourly salary.

Second, OFM uses the Consumer Price Index (CPI-W) to adjust for inflation and ensure that all calculations are in terms of real dollars. The CPI-W is a measure of the average change over time for a basket of goods and services paid by urban consumers, urban wage earners, and clerical workers. By convention, the Washington State Employment Security Division (ESD) uses the CPI-W, as published by the National Bureau of Labor Statistics, when analyzing its data. OFM defers to ESD on matters of which consumer price index to use. OFM controls for inflation using quarterly adjustments. For example, if last quarter the rate of inflation as estimated by CPI-W was 5%, then OFM would use the following calculation to take the amount in last quarter's wage report and convert it to real (present value) dollars:

This approach ensures that OFM's analysis considers real dollars and the effects of inflation.

At this point, the following example may help illustrate how OFM calculates its five outcome variables. Consider the following chart:

Figure 1: Hypothetical Earnings Database

OFM_ID	20104	20111	20112	20113	20114	20121	20122
01_Paul		1 s	4				
02_Mary	s		1	2	2	2	4
03_Dave	s		2	3	2	2	3

OFM has 4,424 records similar to this with wages earned from 1st quarter 2011 through 1st quarter 2015. (In reality, there is a research number called the OFM ID number used in lieu of a veteran's name, but for illustrative purposes this white paper will use names to explain the methodology.) The numbers in each cell represent the adjusted annual salary (in dollars) earned by the veteran. The purple "s" represents the quarter of when that veteran

transitioned from the military.

Let's examine Mary. Mary left active duty in 4th quarter in 2010. A full quarter elapsed before she found a job that populates the state's database in 2nd quarter 2011. OFM imputes that it took Mary 3 months to find this job. Her first salary would be $1 per year, her average salary would be $2.2 (by averaging all the wage data post separation), and the length of time it took her to find her highest paying job/salary is 5 quarters (15 months), because 5 quarters elapsed between her discharge and the quarter where she earned her highest wages. Her highest salary earned was $4 per year.[11] The following table summarizes the same approach for all three fictional workers:

Figure 2: Hypothetical Outcomes Database

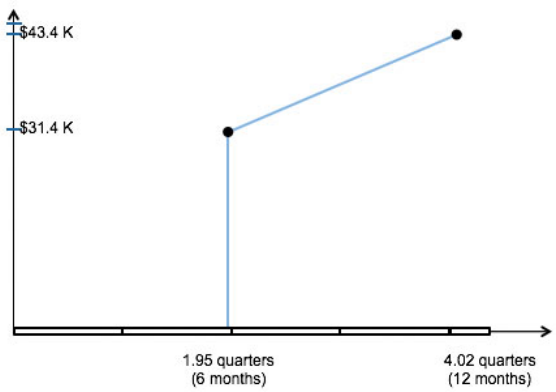
OFM_ID	Length Time Job Search (qtr)	First Salary	Avg Salary	Length Time Job Search High (qtr)	High Salary
01_Paul	0	4	4	0	4
02_Mary	1	1	2.2	5	4
03_Dave	1	2	2.4	5	3

Essentially, this is the methodology OFM uses to calculate its five outcome variables. OFM recognizes that Average Salary, High Salary, and the Length of Time to Highest Salary Attained depend greatly on when the veteran left active duty. In other words, veterans who transitioned earlier and have had more time to populate the state's database with their quarterly earnings. Regardless, OFM feels that the data is still useful, but any conclusions must be measured against this limitation.

OFM can now aggregate all 4,424 veteran records with the following table and graph. This figure summarizes the typical experience of the Washington State veteran:

Figure 3: Aggregate Vet Data[12]

Wage & UCX Data	
n=4,424	Population
Time to find the First Job	1.95 quarters (6 months)
Salary of First Job	$31,351.98 per year
Average Salary	$35,555.43
Time to find High Paying Job	4.02 quarters (12 months)
Salary of High Paying Job	$43,409.47



The narrative that accompanies this figure is as follows: Basically, A veteran's discharge corresponds to 0,0 on the axis. He or she is not earning a wage and is looking for a job. At about the six month mark, the typical veteran in Washington State has found a job and earns approximately $31,400 a year.

Over the next six months that follows, the veteran's earnings rise to approximately $43,400 a year. This is where the veteran has reached his or her full productivity. Data suggests that the after the 1-year mark, earnings flatten out, but this may change as OFM receives more wage data.

As an aside, this figure clearly demonstrates that there is a barrier-to-entry as the veteran joins the job market. It would seem the veteran has to accept a job that pays less than his or her full potential right after transition. This may be from difficulty articulating his or her military experience/skills in a manner that a hiring manager can understand. However, at about the one year mark, the veteran's true value is evident and his or her earnings have risen considerably. OFM's cost-benefit analysis of various service programs demonstrates that there is enormous economic benefit to the state by bringing veterans into the workforce sooner and getting them into a job that pays their true potential. For example, the Camo2Commerce program has serviced over 573 veterans and, on average, brings them into the workforce 4.5 months earlier. OFM estimates that this has brought over $1.1 million dollars into state coffers in the form of additional tax revenue.

This methodology essentially represents the framework for how OFM conducts its analysis. OFM can now identify a subpopulation of veterans who may have received a treatment in the form of a various service program, and then compare them with the rest of the population on the five outcome variables. Furthermore, OFM can control for numerous demographic variables (such as age, ethnicity, education, etc.) to reduce bias in the results. OFM has data between the range of 1st quarter of 2011 through 1st quarter of 2015.

[11] In actually, a quarterly income must exceed the previous highest quarterly income by 5% for it to be considered the 'highest' salary earned. This is to allow for variation and fluctuation in hours worked, number of workdays per quarter, etc.

[12] OFM recognizes that these numbers are slightly different from previously reported statistics. This is because now OFM is using CPI-W to adjust for inflation and is also placing the 5% criteria in highest wage calculation. (See earlier footnote.)

Annex B: Career Readiness Standards

The following bullet points synthesize the activities that must occur before a transitioning veteran has met Career Readiness Standards as dictated by DTM 12-007:

- Preseparation Counseling (Captured on DD From 2648-1)
- Individual Transition Plan (A veteran generated roadmap to plan employment and career goals following transition).
- VA Benefits (Two day-long classes explaining all veteran benefits.)
- Registration on eBenefits and MyHealtheVet
- The Department of Labor Employment Workshop
- 12-month post-service budget (Complete a personal budget)
- Military Occupational Specialties Crosswalk with Gap Analysis (This helps the veteran translate his military training and experience into skills that he or she can take into the job market.)
- Produce a private or federal resume, references sheet, submit two job applications, or present a job offer letter
- Counseling on the potential to continue serving in the National Guard or Reserve
- Complete an Individual Assessment Tool to explore potential career options
- Participate in a Capstone Event (a qualitative assessment if the veteran is ready for transition)
- Track Completion (This is a specialized suite of services depending on whether the veteran intends to look for a job, start his own business, join a technical career track, or go back to school.)

SERVICE MEMBER'S INDIVIDUAL TRANSITION PLAN CHECKLIST

PRIVACY ACT STATEMENT

AUTHORITY: 10 U.S.C. 1142, Pre-separation Counseling; DoD Directive 1332.35, Transition Assistance for Military Personnel; DoD Instruction 1332.36, Pre-separation Counseling for Military Personnel; and E.O. 9397, as amended (SSN).
PRINCIPAL PURPOSE(S): To document achievement of Career Readiness Standards commensurate with the Service member's desired employment, education, technical training, and/or entrepreneurial objectives.
ROUTINE USE(S): The DoD "Blanket Routine Uses" found at http://dpclo.defense.gov/privacy/SORNs/blanket_routine_uses.html apply.
DISCLOSURE: Voluntary; however, if SSN is not provided, the form may not be filed in the correct Official Military Personnel File.

SECTION I - SERVICE MEMBER INFORMATION

1. NAME *(Last, First, Middle Initial)*	2. GRADE *(Select one)*	3. SSN	4. SEPARATION DATE *(YYYYMMDD)*

5. SERVICE *(Select one)*	6. UNIT	7. DATE ATTENDED PRE-SEPARATION COUNSELING *(YYYYMMDD)*

8. EXEMPTED FROM ATTENDING *(X one)*

☐ None ☐ DOL Employment Workshop

9. REASON EXEMPTED *(X one)*

☐ Not Exempt ☐ Confirmed Employment *(NG & RC only)* ☐ WII Transition Program ☐ Pending Unit Deployment
☐ Retiring with 20 years AFS ☐ Confirmed Education/Training School Enrollment *(NG & RC only)* ☐ Previously Attended DOLEW *(NG & RC only)*

SECTION II - ASSESSMENT OF PERSONAL/FAMILY NEEDS	TASK COMPLETED *(X one)* YES	NO
10. Completed Individual Transition Plan.		
11. Evaluated post-military transportation requirements and developed a plan to meet personal/family needs.		
12. Evaluated post-military housing requirements and developed a plan to meet personal/family needs.		
13. Prepared a 12-month post-separation budget reflecting personal/family goals.		

SECTION III - EVALUATION OF MILITARY SERVICE BENEFITS, TRAINING, EXPERIENCE AND ACQUIRED SKILLS	YES	NO	N/A
14. Registered on eBenefits.			
15. Completed a continuum of Military Service opportunity counseling (active component Service members only).			
16. Evaluated transferability of military skills to civilian workforce (MOC CROSSWALK) and completed gap analysis.			
17. Documented requirements and eligibility for licensure, certification and apprenticeship (if applicable).			
18. Evaluated civilian education credits earned through military schools, training and experience.			

SECTION IV - EMPLOYMENT, EDUCATION, AND TECHNICAL TRAINING CAREER READINESS STANDARDS	YES	NO	N/A
19. Completed an assessment tool to identify aptitudes, interests, strengths, and skills.			
20. Attended the VA Benefits Briefing.			
21. Attended the Department of Labor (DOL) Employment Workshop (if applicable).			
22. Completed a job application package or received a job offer letter.			
23. Received a DOL Gold Card Certificate for DOL American Job Centers (if applicable).			
24. Completed an assessment tool to identify aptitudes, interests, strengths, and skills.			
25. Completed a comparison of academic or training institution choices.			
26. Completed a college, university or technical training application or received an acceptance letter.			
27. Confirmed their one-on-one counseling with a college, university or technical training institution advisor or counselor.			

SECTION V - HAND-OFF TO SUPPORTING AGENCIES CONTACT INFORMATION

	b. LOCATION	c. TELEPHONE NUMBER	d. REFERRAL REQUIRED *(X)*
28.a. VA REPRESENTATIVE NAME *(Last, First, Middle Initial)*			☐
29.a. DOL REPRESENTATIVE NAME *(Last, First, Middle Initial)*			☐
30.a. OTHER RESOURCES			☐

SECTION VI - VERIFICATION

I verify that all applicable Career Readiness Standards ☐ were ☐ were not met, as documented in the Individual Transition Plan.

31.a. SERVICE MEMBER'S SIGNATURE	b. DATE *(YYYYMMDD)*

32.a. TRANSITION COUNSELOR NAME *(Last, First, Middle Initial)*	b. SIGNATURE	c. DATE *(YYYYMMDD)*

33.a. COMMANDER OR THEIR DESIGNEE NAME *(Last, First, Middle Initial)*	b. SIGNATURE	c. DATE *(YYYYMMDD)*

INSTRUCTIONS

This checklist coincides with the Individual Transition Plan and certifies achievement of the Career Readiness Standards commensurate with the Service member's desired employment, education, technical training and/or entrepreneurial objectives. This checklist must be completed prior to the Service member's separation, certified by the Transition Counselor and Service member's Commander or designated representative. Items 10, 13, 14 - 17, 19, and 22-27 are bolded to indicate that these are the Career Readiness Standards. This form will be filed in the Service member's personnel record along with the Pre-separation Counseling Checklist (DD Form 2648/DD Form 2648-1).

1. Name. Self-explanatory.

2. Grade. Enter or select E1 - E9; W1 - W5; or O1 - O10 from the drop-down list.

3. Social Security Number (SSN). Self-explanatory.

4. Separation Date. Enter expected date of retirement, ETS, discharge, or release from active duty.

5. Service. Enter or select your specific Service Branch from the drop-down list.

6. Unit. Enter designation of current unit of assignment.

7. Date Attended Pre-Separation Counseling. Self-explanatory; enter in YYYYMMDD format.

8. Exempted from Attending. Mark (X) the box "None" if the Service member attends the DOL Employment Worshop. Mark (X) in the other box if the Service member meets exemption criteria in Item 9 below and does not attend the DOL Employment Workshop.

9. Reason Exempted. Mark (X) in the box corresponding to the reason the Service member may be exempted from attending some the DOL Employment workshop. Mark (X) in the "Not Exempt" box if the Service member does not meet the following exemption criteria:

a. Service members retiring after 20 years or more of active Federal service (AFS) in the Military Services.

b. Members of the Reserve Components who are being demobilized or deactivated after 180 continuous or more days on active duty, if they meet one of the following criteria:

I. Be able to confirm employment.

II. Provide documented acceptance into an accredited technical training, undergraduate, or graduate degree program.

III. Have previously attended the DOL Employment Workshop.

c. Service members with specialized skills who, due to unavoidable circumstances, are needed to support a unit on orders to be deployed within 60 days. The first commander in the Service member's chain of command with authority pursuant to chapter 47 of Title 10, United States Code (also known as the "Uniform Code of Military Justice (UCMJ)" must certify on the ITP checklist any such request for exemption from the DOL Employment Workshop. A make-up plan must accompany the postponement certification.

d. Wounded, ill and injured recovering Service members most likely to transition out of active duty, who are enrolled in the Education and Employment Initiative (E2I) or a similar transition program designed to secure employment, further education, or technical training post-separation.

Items 10. - 13. A response is required for each entry. Mark the applicable box in response to whether the Service member completed the corresponding transition activity or Career Readiness Standard. Service members must meet the common Career Readiness Standards and the Career Readiness Standards associated with their chosen Transition GPS track(s) in addition to those alighed to the DOL Employment Workshop.

Items 14. - 27. A response is required for each entry. Mark the applicable box - Yes, No, Not Applicable (N/A) - in response to whether the Service member completed the corresponding Career Readiness Standards. Service members are required to meet the Career Readiness Standards associated with their chosen transition training track(s) in addition to those aligned to the DOL Employment Workshop.

Item 15. Item 15 pertains only to Active Component Service members. Active Component Service members who are separating must receive counseling from a career counselor on the value and importance of continuing Military Service in the Reserve Components.

Items 28. - 30. Enter the name and contact information of the Veterans Administration, Department of Labor, and other employment, education, or supporting resources available to provide assistance to the Service member after they leave active military service. These entries are required for Service members identified to be at risk for attaining their employment or educational goals upon leaving active duty. Mark (X) the "Referral Required" box in items 28d. - 30d. for the appropriate supporting partner agency if the Service member fails to meet any required Career Readiness Standard or requests additional assistance.

Section VI - Verification. Upon reviewing the Service member's completed Individual Transition Plan (ITP) and assessing the quality of the transition products (e.g., 12-month post-separation integrated budget, job application package (resume, references, cover letter), application to a degree completion or technical institution) aligned to the Career Readiness Standards, the Transition Counselor and the Service member's Commander or Commander Designated Representative, will agree and verify whether or not the Service member successfully met their Career Readiness Standards.

Items 31. - 33. Self-explanatory.