



Income of Working-Age Veterans Receiving Disability Compensation



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At a Glance

The Department of Veterans Affairs (VA) compensates veterans for medical conditions or injuries that occurred or worsened while they were on active duty in the military. In fiscal year 2022, VA spent \$125 billion (in 2022 dollars) on disability payments for 5.3 million beneficiaries. By law, those payments are based on VA disability ratings that reflect, as much as practicable, the severity of veterans' service-connected conditions and the average earnings they would be expected to lose as a result of those conditions.

For this report, the Congressional Budget Office compared the earnings, personal income, and household income of veterans who have a disability rating with those of veterans who do not have one. The agency's analysis focused on differences between those groups for working-age men, ages 22 to 54, from 2017 to 2019. CBO found the following:

- Male veterans who received VA disability compensation (including those who did not work) had average annual earnings of \$52,200—16 percent less than the earnings of veterans without a VA disability rating. Median earnings (the midpoint value) of veterans with a rating were also less, by 12 percent. CBO did not adjust any of those calculations for demographic characteristics. Regression analysis, which accounts for such characteristics, indicates that veterans with a rating of 10 percent or 20 percent earned about the same as similar veterans with no rating; veterans with a rating of 30 percent to 60 percent earned slightly less; and veterans with a rating of 70 percent or more earned much less.
- Annual earnings were substantially lower for veterans with a high disability rating, a finding driven in part by lower labor force participation among veterans with a high rating. For veterans who were not in the labor force, it is unclear whether poor health meant that they could not work, whether the extra income from VA allowed them to exit the labor force, or whether they left the work force for other reasons.
- CBO also looked at the earnings of male veterans who were potential workers—those who were not students and did not report functional disabilities (medical conditions that cause substantial difficulty with physical or mental activities). Veterans in that group had the same general earnings patterns as all working-age veterans, but differences in earnings between those with and without a VA disability rating were smaller.
- Overall, veterans with a disability rating who were potential workers had average annual earnings that were lower by \$1,900, or 3 percent, than the earnings of those without a rating, and fewer of them were in the labor force. Median earnings, which are not skewed by extremely high or low values, yielded a different result, indicating that veterans with a rating typically earned 5 percent more than veterans without a rating. Regression analysis suggests, however, that veterans with a rating of 10 percent or 20 percent earned the same as veterans with no rating and similar demographic characteristics and that veterans with a higher rating earned less.
- The average personal income (earnings plus other income) of all male veterans who received VA disability compensation was about 10 percent higher than that of veterans who did not, mainly because VA disability payments were greater, on average, than any differences in earnings. The annual household income of all veterans, regardless of disability status, was more than \$100,000, on average.

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Unless this report indicates otherwise, all years referred to are calendar years. Occasionally, the report refers to federal fiscal years, which run from October 1 to September 30 and are designated by the calendar year in which they end.

Numbers in the text, tables, and figures may not add up to totals because of rounding.

All dollar values are expressed in 2019 dollars, unless otherwise indicated. To remove the effects of inflation, the Congressional Budget Office adjusted those values using the gross domestic product price index from the Bureau of Economic Analysis.

Income of Working-Age Veterans Receiving Disability Compensation

Summary

The Department of Veterans Affairs (VA) compensates veterans for service-connected disabilities, which are medical conditions or injuries that occurred or worsened during military service. In fiscal year 2022, those payments totaled \$125 billion (in 2022 dollars), or roughly 45 percent of the department's spending. That spending has increased more than fourfold since fiscal year 2000.

In previous reports, the Congressional Budget Office has documented the growth in VA's spending on disability compensation and trends in veterans' employment.¹ In this report, CBO explores the interaction of those two topics, comparing the earnings, personal income, and household income of working-age male veterans who received VA disability payments with those of veterans who did not receive such payments.² The results allow policymakers and others to compare the financial security of veterans receiving disability payments with that of veterans not receiving payments as a way to gauge the importance of that compensation.

Characteristics of Working-Age Male Veterans With and Without a VA Disability Rating

CBO used the Census Bureau's American Community Survey (ACS) data from 2017 to 2019 to estimate that about 30 percent of working-age male veterans (ages 22

to 54) had a VA disability rating. Those ratings, which are the basis for VA disability payments, generally reflect the severity of a veteran's service-connected medical condition on a scale of zero to 100 percent.

CBO found that veterans with a disability rating were younger, and were more likely to be married and to have a college degree, than veterans without a rating. In addition, a greater share of veterans with a rating were enrolled in postsecondary education, and a greater share had functional disabilities. (Functional disabilities are medical conditions that cause substantial difficulty with physical or mental activities; disabilities determined by VA are defined differently.)

Earnings of Working-Age Male Veterans With and Without a VA Disability Rating

CBO found that veterans without a disability rating earned \$62,400, on average. Veterans who received VA disability benefits had average annual earnings that were 16 percent, or \$10,200, less than those of veterans who did not receive the benefits. (CBO did not adjust those calculations for demographic characteristics observable in the data.) Veterans with the lowest disability ratings—that is, the least severe disabilities—earned the most, or about 5 percent more, on average, than veterans with no rating. Veterans with a disability rating of 30 percent to 60 percent earned about 6 percent less than veterans with no rating. Veterans with the highest ratings earned the least, or 38 percent less than veterans with no rating.

To compare the earnings of veterans with and without a rating who most closely resembled each other, CBO also estimated earnings by accounting for different characteristics (age, marital status, racial or ethnic group, educational attainment, and region of residence) among veterans by VA disability rating. According to that estimate, veterans with any disability rating earned less than similar veterans without a rating, but the differences between the earnings of veterans without a rating and those of veterans with a rating of 10 percent or 20 percent were small.

1. Congressional Budget Office, *Possible Higher Spending Paths for Veterans' Benefits* (December 2018), www.cbo.gov/publication/54881, *Labor Force Experiences of Recent Veterans* (May 2017), www.cbo.gov/publication/52418, and *Veterans' Disability Compensation: Trends and Policy Options* (August 2014), www.cbo.gov/publication/45615.
2. For this analysis, CBO defined "earnings" as the amount of money received in the previous 12 months as wages, salaries, and self-employment income; "personal income" as earnings minus income in the "retirement" and "any other sources" categories of the Census Bureau's American Community Survey plus VA disability payments as provided by the Department of Veterans Affairs and other nonlabor income; and "household income" as the amount indicated in the ACS minus income in its "retirement" and "any other sources" categories and plus VA disability payments.

CBO also looked at the earnings of a subset of veterans that it referred to as potential workers—those who were neither in school nor functionally disabled. Within that subset, veterans with a rating earned \$64,900 a year, on average, or 3 percent less than those without a rating. In particular, veterans with a rating of 60 percent or less had higher average annual earnings than those with no rating. Overall, the labor force participation rate was higher for potential workers than for all working-age veterans.³

When estimating earnings of potential workers to account for different characteristics by disability rating, CBO found that veterans with a low rating (10 percent or 20 percent) earned the same as similar veterans with no rating, but veterans with a rating of 30 percent or higher earned less. The higher the disability rating, the larger the difference in earnings compared with veterans with no rating.

There is no single reason that many veterans with a disability rating earned less than veterans without such a rating. About one-fifth of veterans with a rating were not in the labor force. For some veterans with a rating, poor health may have limited their ability to work. Others may have chosen jobs that paid less or may have chosen not to work because of the extra income they received from VA or for other reasons.

Personal Income and Household Income of Working-Age Male Veterans With and Without a VA Disability Rating

Personal income, which includes VA disability payments, was higher, on average, for veterans who received such payments than for veterans who did not, mainly because disability payments from VA were larger than the average difference in wages. Household income for veterans was similar regardless of the presence of a disability rating—more than \$100,000, on average. (CBO did not adjust those calculations for demographic characteristics.)

Limitations of CBO's Analysis

The disability payment data that CBO received from VA were aggregated by age group, so actual amounts for individual recipients may have been larger or smaller. Similarly, excluding retirement income understated the personal and household income of the small share of

military retirees in CBO's analysis who were receiving those payments. The agency's analysis is mainly descriptive and cannot identify the causes of differences in income among veterans. Although CBO performed a statistical analysis of the data to better compare similar veterans, those with and without a rating may differ in ways that are not observable in the data, and such factors could also contribute to differences in earnings and income.

Background

In 2022, 18 million men and women in the United States were veterans, or about 7 percent of adults. Most veterans are men, and they tend to be older than non-veterans. About 8 million veterans served during the Gulf War era, which began in August 1990. The remainder served before 1990.⁴ This report focuses on the income of veterans of the Gulf War era.

The Veteran Population

More than half of all veterans, 54 percent, were under age 65 in 2022. Most working-age veterans—defined in this report as those ages 22 to 54—served in the military during the Gulf War era, which is typically divided into two distinct periods. Those who served between August 1990 and August 2001 are sometimes called Gulf War I veterans. The more recent group, often referred to as post-9/11 or Gulf War II veterans, served during or after September 2001. About 2 million of the 5 million post-9/11 veterans were deployed to operations in and around Iraq and Afghanistan; about 500,000 Gulf War I veterans were deployed to Iraq during the conflict. Nearly two-thirds of working-age veterans served after August 2001.

VA's Disability Compensation Program

In 2022, nearly 30 percent of all veterans had a compensable service-connected disability, which is a medical condition that develops or worsens during a service member's time in the military. Among post-9/11 veterans, 40 percent reported a service-connected disability; for Gulf War I veterans, the rate was 30 percent. Compensable conditions range widely in severity and type, from the loss of a limb to hypertension or scars. Such disabilities are not necessarily the same as functional disabilities,

3. The labor force participation rate is the percentage of people in the civilian noninstitutionalized population who are at least 16 years old and have jobs or are available for work and either seeking work or expecting to be recalled from a temporary layoff.

4. The Bureau of Labor Statistics reports veterans whose service spans more than one era by their most recent era of wartime service. For example, a service member who entered the military in 1989 and separated in 2009 would have served during peacetime and the Gulf War but is classified as a veteran of the Gulf War era. The survey used in this report, the American Community Survey, allows respondents to indicate multiple periods of military service.

which are medical conditions that cause substantial difficulty with physical or mental activities.

Disability Ratings. VA determines whether a veteran has a service-connected disability and rates the severity of each medical condition in increments of 10 percent; a veteran with a 100 percent rating is considered totally disabled. (Some veterans receive no compensation even though they are deemed to have at least one service-connected disability; in those cases, VA cannot determine an actual limitation from the disability, and the assigned rating is zero.)

The cumulative disability rating is not strictly additive but rather is an aggregated, nonlinear combination of ratings for each physical or mental condition.⁵ Within an aggregated rating, veterans may have different degrees of disability. For example, the rating of a VA-determined medical condition may be based on the physical limitations of the condition (such as the degree to which a veteran can flex a knee) or on the ability to control the condition (such as with diabetes). The nonlinear combination of ratings means that some disability ratings may not accurately reflect the cumulative effect of multiple disabilities. They may have an aggravating effect, or they may have little additional effect on functional limitations and earnings.

Veterans can apply for a disability rating and compensation shortly before separation from the military and at any time after they leave active-duty service. They can also request an increase in their rating if their condition worsens. Veterans' ratings are rarely revised downward.

Benefits. Disability payments are based on a veteran's service-connected disability rating (as well as on whether the veteran has dependents or meets other criteria). The Congress sets the payment amounts, and VA determines the criteria for a given rating. In 2023, VA disability payments ranged from \$165 per month (in nominal dollars) for a veteran with a 10 percent rating (such as for diabetes managed through diet) to \$3,620 per month for a veteran with a 100 percent rating (such as for kidney dysfunction requiring dialysis).⁶ Among veterans of

the Gulf War era, the most prevalent service-connected medical conditions and injuries were related to hearing (6.6 percent of all disabilities), the knee (6.0 percent), and the neck or lower back (4.7 percent). Post-traumatic stress disorder accounted for 3.6 percent of service-connected conditions.⁷

VA's disability program is unlike most other disability programs. Veterans do not have to show that their disabilities affect their ability to work or forgo working to receive VA disability benefits. Indeed, most veterans under age 55 who received VA disability compensation in 2022 were employed. Recipients receive the same disability compensation regardless of whether they work or what their income is. (By contrast, to receive benefits under the Social Security Disability Insurance program, a person must be deemed unable to perform "substantial gainful activity." Recipients are also subject to limits on the amount they can earn, and benefit payments are based on their work history.) VA payments take the form of a tax-free monthly annuity that is indexed to inflation and, with few exceptions, continues for the life of the veteran. Survivors of some veterans with disabilities may also receive VA compensation; the department reported that nearly 500,000 did so in fiscal year 2022.

By law, the Secretary of Veterans Affairs "shall adopt and apply a schedule of ratings of reductions in earning capacity from specific injuries or combination of injuries. The ratings shall be based, as far as practicable, upon the average impairments of earning capacity resulting from such injuries in civil occupations."⁸ The current disability ratings are generally based on physicians' and lawyers' judgments made in 1945 about the effect of service-connected conditions on veterans' ability to perform jobs requiring manual or physical labor.⁹ Since then,

5. For information on how VA calculates disability ratings, see Department of Veterans Affairs, "About VA Disability Ratings" (October 20, 2022), www.va.gov/disability/about-disability-ratings.

6. VA may increase payments above those amounts for certain medical conditions or circumstances. For instance, some veterans with a lower rating may qualify for supplemental compensation for "individual unemployability," which pays them at the 100 percent rate if they cannot maintain "substantial gainful employment" because of the severity of their service-connected disabilities.

7. The rates for those conditions among beneficiaries are as stipulated at the end of fiscal year 2022. For detailed data on service-connected disabilities and compensation, see Veterans Benefits Administration, *Annual Benefits Report: Fiscal Year 2022* (February 2023), www.benefits.va.gov/reports/abr.

8. See 38 U.S.C. § 1155.

9. See General Accounting Office (now the Government Accountability Office), *VA Disability Compensation: Disability Ratings May Not Reflect Veterans' Economic Losses*, GAO/HEHS-97-9 (January 1997), pp. 10–11, www.gao.gov/products/hehs-97-9. Researchers at RAND concluded that VA ratings do not reflect changes in modern medicine or the limitations of service-connected conditions in the labor market. See Richard Buddin and Bing Han, *Is Military Disability Compensation Adequate to Offset Civilian Earnings Losses From Service-Connected Disabilities?* (RAND Corporation, 2012), www.rand.org/pubs/monographs/MG1098.html.

substantial advances in medical technology and changes in the economy have affected how accurately those ratings reflect disabled veterans' reduction—if any—in earning capacity. Changes to the ratings since 1945 have generally focused on improving clinical measures of illness or injury rather than on adjusting payments to reflect economic losses. Further, because the payments are based on average losses, they probably do not reflect an individual veteran's experience.

The share of veterans and the average payment per veteran receiving VA disability compensation have climbed sharply over the past two decades. According to VA, 9 percent of all veterans in fiscal year 2000 had a disability rating; in 2020, about 25 percent of all veterans did. The average number of medical conditions per veteran increased from 2.5 in 2000 to 5.7 in 2020, and the average rating increased from about 33 percent to about 56 percent over that period. (In 2022, the most common rating for all veterans was 100 percent; 20 percent of them had that maximum rating.) The annual spending per recipient has increased even faster, almost doubling over that period to about \$20,000 in 2020 (after adjusting that amount to remove the effects of inflation), CBO estimates.

Those increases since 2000 can be partly attributed to the long conflicts in Iraq and Afghanistan, the aging of the veteran population, policy changes that have made it easier to qualify for benefits (including more conditions considered “presumptive,” for which veterans do not need to prove a service connection), and an expansion of VA's outreach efforts. An additional reason could be a cultural change among veterans with regard to applying for VA benefits, resulting in much higher application rates for VA disability compensation and in more conditions per application than in previous service eras.

Characteristics of Working-Age Male Veterans Receiving VA Disability Compensation

Various characteristics—including age, education, and sex—influence the employment and, consequently, the income of adults. In this analysis, CBO focused on male veterans included in the ACS who were ages 22 to 54 between 2017 and 2019.

Veterans receiving disability compensation (29 percent of the entire group) were similar to those who did not receive it in some ways but different from them in others.

For example, veterans with a disability rating were younger than veterans without a rating, and they were more likely to be married and to have a college degree (see Table 1). Two characteristics, in particular, differentiated veterans with a disability rating: A greater share of them reported that they were enrolled in postsecondary education, and a larger share had functional disabilities. Both factors could substantially affect veterans' decisions to work and their subsequent earnings.

Age

The median age of veterans with a VA disability rating (age 42) was two years younger than that of other veterans. Because younger workers have less job experience and therefore fewer skills, they may earn less than older workers, on average. Younger veterans were more likely to have served during recent conflicts and, as a result, to have been aware of VA benefits as VA increased its outreach efforts. Younger veterans were also more likely to have been deployed and to have experienced combat than older veterans. In 2019, about 40 percent of all post-9/11 veterans received VA compensation for a service-connected disability, compared with about 25 percent of Gulf War I veterans, who were older, on average, than post-9/11 veterans.

Racial and Ethnic Groups

A majority of service members in the active-duty forces are White, and the same was true of the veterans in CBO's sample. CBO found that, in general, White veterans were modestly underrepresented in the population of veterans with a VA disability rating, and they had lower ratings. Some researchers have determined that Black veterans earn less than White veterans but earn more than Black men who never served.¹⁰ CBO found that as VA disability ratings increased, so did the share of Black and Hispanic veterans in those rating groups.

Educational Attainment

Educational attainment—the highest level of school or degree completed—is strongly related to labor force outcomes in the general population. People with more schooling are more likely to work and to have a full-time job;

10. For more information on differences in veterans' income by race, see Tepring Piquado and others, *Among Black Americans, Is Military Service Associated With Better Quality of Life?* (RAND Corporation, 2022), <https://doi.org/10.7249/RR1202-1>; and Brandon Vick and Gabrielle Fontanella, “Gender, Race, and the Veteran Wage Gap,” *Social Science Research*, vol. 61 (January 2017), pp. 11–28, <https://dx.doi.org/10.1016/j.ssresearch.2016.07.005>.

Table 1.

Characteristics of Male Veterans Ages 22 to 54, by VA Disability Rating

Percent

	No disability rating	All disability ratings	Disability rating group		
			10 percent or 20 percent	30 percent to 60 percent	70 percent or higher
Median age (in years)	44	42	43	41	42
Racial or ethnic group ^a					
White	71	66	72	68	62
Black	13	15	12	14	18
Hispanic	11	12	10	12	14
Another race or multiracial	6	6	6	6	6
Total	100	100	100	100	100
Educational attainment					
High school	29	16	19	15	16
Some college or an associate's degree	44	50	47	49	52
At least a bachelor's degree	27	34	34	36	33
Total	100	100	100	100	100
Marital status: married	61	69	67	68	70
Region					
Northeast	12	9	10	9	9
Midwest	21	17	20	18	14
South	44	49	44	48	52
West	23	24	26	24	24
Total	100	100	100	100	100
Most recent service era ^b					
Pre-August 1990	16	5	8	5	4
Gulf War I (August 1990 to August 2001)	35	22	33	20	17
Post-9/11 (September 2001 onward)	49	73	59	75	80
Total	100	100	100	100	100
Addendum:					
Total population (thousands)	9,500	3,800	900	1,300	1,600
Share of total population (percent)	71	29	7	10	12

Data source: Congressional Budget Office, using data from the Census Bureau's American Community Survey, 2017 to 2019. See www.cbo.gov/publication/59380#data.

The Department of Veterans Affairs (VA) provides tax-free disability compensation to veterans with medical conditions or injuries that occurred or worsened during active-duty military service. VA determines and rates the severity of each medical condition in increments of 10 percent.

a. The "Hispanic" category includes anyone who reported Hispanic ancestry; the other categories exclude them. The "another race or multiracial" category includes Asian veterans, Black veterans reporting more than one race, and any other combination of race not in the above groups.

b. Service era refers to the most recent period in which a veteran served. About 10 percent of veterans served in more than one era.

they also tend to earn more. Estimates of the wage premium for college graduates are well-documented but vary. One study found that the lifetime earnings gap between

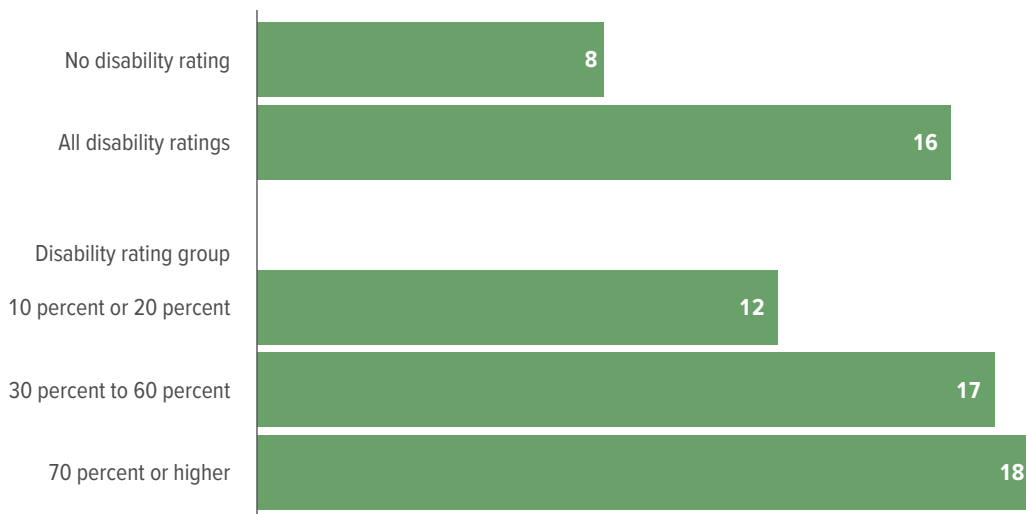
high school and college graduates (including those with a graduate degree) was about \$1 million for men.¹¹

11. Christopher R. Tamborini, ChangHwan Kim, and Arthur Sakamoto, "Education and Lifetime Earnings in the United States," *Demography*, vol. 52, no. 4 (June 2015), pp. 1383–1407, <https://doi.org/10.1007/s13524-015-0407-0>.

Figure 1.

Share of Male Veterans Ages 22 to 54 Enrolled in School, by VA Disability Rating

Percent



Working-age veterans with a VA disability rating were about twice as likely to be enrolled in school as those without a rating. The higher earnings associated with postsecondary education may have made up for the lower earnings that veterans with VA disabilities might otherwise have received.

Data source: Congressional Budget Office, using data from the Census Bureau's American Community Survey, 2017 to 2019. See www.cbo.gov/publication/59380#data.

The Department of Veterans Affairs (VA) provides tax-free disability compensation to veterans with medical conditions or injuries that occurred or worsened during active-duty military service. VA determines the severity of each medical condition and assigns ratings in increments of 10 percent.

Almost all officers (who account for about 10 percent of new service members each year) have a college degree when they begin their military careers. But most enlisted service members enter with a high school diploma and then pursue higher education during active-duty service or after leaving the military.¹²

A pronounced difference in educational attainment exists between veterans who received VA disability compensation and those who did not. In CBO's sample, 34 percent of veterans who received disability payments had at least a bachelor's degree, compared with 27 percent of veterans who did not receive those payments.¹³ (In contrast, functionally disabled people have less education, on average, than other adults.) Physical impairments may push veterans with a VA disability rating toward jobs that rely on cognitive skills gained through more education

(rather than on physical skills or stamina), and most recent veterans have access to education funding and occupational training through VA.¹⁴ Those with further education may also be more aware of VA benefits or better able to navigate the application process for disability benefits than others.

Enrollment in Postsecondary School

CBO found that 16 percent of working-age veterans with a VA disability rating were enrolled in postsecondary institutions, twice the enrollment rate of veterans with no rating (see Figure 1). In general, veteran students were older than typical community college or undergraduate students because they were in their early or mid-20s after completing their first enlistment (when many choose to leave military service). The most recent educational benefit provided by VA, the Post-9/11 GI Bill, pays all tuition and fees at the in-state rate for eligible veterans attending public institutions of higher education and pays a set amount for private institutions (up to \$26,400 for the 2022 academic year) for up to

12. Research has shown that veterans enroll in college at a much higher rate than their civilian peers. See Meredith Kleykamp, "Unemployment, Earnings, and Enrollment Among Post 9/11 Veterans," *Social Science Research*, vol. 42, no. 3 (May 2013), pp. 836–851, <https://doi.org/10.1016/j.ssresearch.2012.12.017>.

13. Bureau of Labor Statistics, "Persons With a Disability: Labor Force Characteristics—2022" (press release, February 23, 2023), www.bls.gov/news.release/pdf/disabl.pdf.

14. For veterans with neurological and psychological conditions, the effect of educational benefits is unclear. Cognitive and other difficulties may push veterans away from further education and toward occupations requiring more physical labor.

36 months (or four academic years). Veteran students who are enrolled more than half time also receive a housing stipend that is often larger than the tuition benefit. The average payment for tuition and fees, housing, and other educational benefits was \$14,400 per recipient in fiscal year 2022.

The Post-9/11 GI Bill is available to all eligible veterans who served on or after September 11, 2001.¹⁵ Those educational benefits may be available after serving for at least 30 continuous days if a veteran was discharged for a service-connected disability; otherwise, veterans may receive partial benefits after having served 90 days in the military and full benefits after three years of service. Veterans who left service after 2012 have no time limit on the receipt of those benefits.

Veterans who receive VA disability compensation might be more likely to use the educational benefit for several reasons. First, VA disability compensation may allow students with a disability rating to work less and maintain their level of income while they are in school more easily than veterans without that source of income. Second, for veterans with a rating who earn less than their counterparts, the forgone earnings from attending school are lower. Third, the return on higher education may compensate, or more than compensate, veterans with disabilities who would otherwise earn less over their lifetime. For example, additional education may help veterans with a rating qualify for jobs that do not require manual labor if they have a disability that limits that type of work. Lastly, veterans who are knowledgeable about VA disability benefits may also be more aware of other VA benefits, including the Post-9/11 GI Bill.¹⁶

Functional Impairment

Functional impairments—which are defined differently from VA-determined disabilities—may restrict daily activities and the ability to work or affect the income earned from working. The ACS data included respondents' answers to six questions about whether they had difficulty or serious difficulty in several physical, sensory,

and mental domains. Although some veterans might consider a medical condition to be both a functional impairment and a VA-determined disability, those categories differ in several ways. For instance, VA's definition of a service-connected disability can include medical conditions with mild symptoms. Another difference is that a VA-determined disability must occur or worsen during a veteran's military service, whereas a functional disability might arise at any time.

About 14 percent of all working-age veterans reported a functional impairment—that is, having difficulty or serious difficulty with hearing, seeing, remembering, walking, self-care, independent living, or a combination of those. (By contrast, about 6 percent of working-age adults in the United States have a functional disability.) About 30 percent of veterans with a VA disability rating reported a functional disability (see Figure 2).¹⁷

In the ACS, as the severity of VA disability ratings increased, so did the share of veterans who reported functional impairments. Among veterans with the highest VA ratings, 44 percent cited a functional disability. It is not clear why more than half of those veterans did not report having a functional disability, although several explanations are possible. First, the veterans in that rating group probably were more concentrated in occupations less affected by disabilities or in workplaces with greater degrees of accommodation. Second, those veterans may have had a rating for conditions that are not well aligned with functional limitations, which can happen when treatment and clinical outcomes improve over time but rating criteria have not yet been updated. Third, those veterans may not have considered themselves as having a disability.

Among veterans with a VA rating, the most common functional disabilities were cognitive, ambulatory, and hearing difficulties; about 15 percent of veterans with a VA rating of 70 percent or higher reported limitations in living independently (see Table 2). (Of all veterans with functional disabilities, about 60 percent had a VA disability rating.)

15. Some veterans may be eligible for educational benefits under the older Montgomery GI Bill. Most veterans use the benefits available under the newer, more generous program.

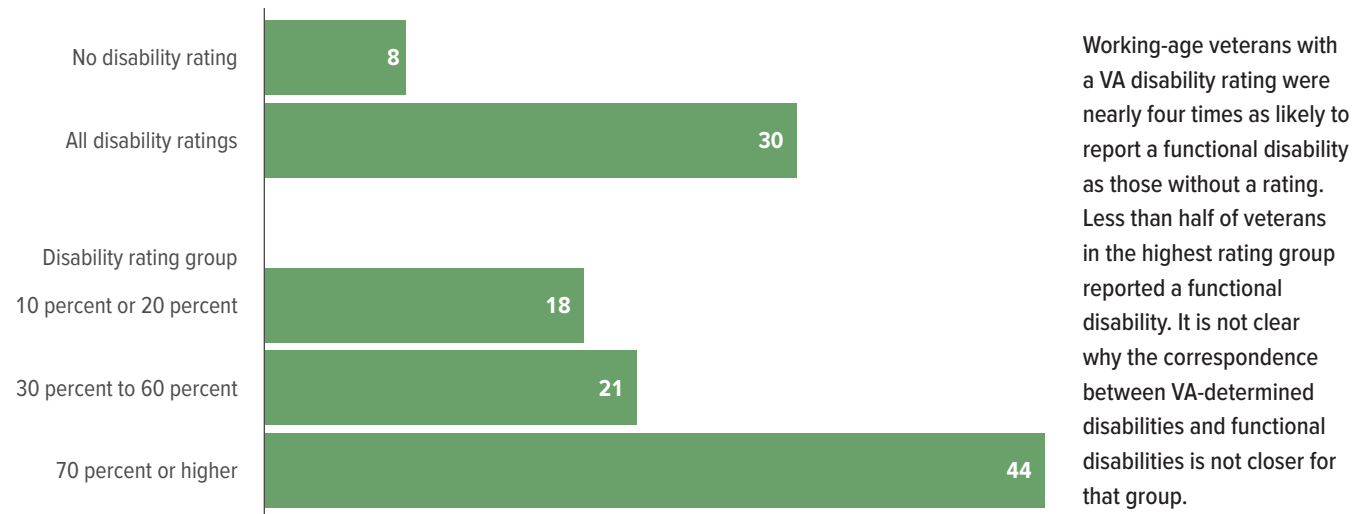
16. For a more extensive discussion, see Sebastian Negrusa, Projesh P. Ghosh, and Sarmistha Pal, "Do Veterans With Disabilities Respond Differently to the Post-9/11 GI Bill?" *Defense and Peace Economics* (July 12, 2021), <https://doi.org/10.1080/10242694.2021.1945427>.

17. Some research indicates that more working-age male veterans of the post-9/11 era received VA disability compensation than reported a functional disability. See Clayton Gumber and Jonathan Vespa, *The Employment, Earnings, and Occupations of Post-9/11 Veterans*, American Community Survey Report ACS-46 (Census Bureau, November 2020), <https://tinyurl.com/yjeymb2> (PDF).

Figure 2.

Share of Male Veterans Ages 22 to 54 With Functional Disabilities, by VA Disability Rating

Percent



Data source: Congressional Budget Office, using data from the Census Bureau's American Community Survey, 2017 to 2019. See www.cbo.gov/publication/59380#data.

The Department of Veterans Affairs (VA) provides tax-free disability compensation to veterans with medical conditions or injuries that occurred or worsened during active-duty military service. VA determines the severity of each medical condition and assigns ratings in increments of 10 percent.

Functional disabilities are medical conditions that cause substantial difficulty with physical or mental activities, as self-reported in the American Community Survey. Disabilities determined by VA are defined differently, but some medical conditions qualify as both.

Income of Working-Age Male Veterans

CBO compared the income of all working-age male veterans, ages 22 to 54, who received VA disability compensation with the income of those who did not. The agency looked at personal income, which includes earnings, VA disability payments, and small amounts of other income.

For several reasons, CBO excluded veterans' retirement payments from personal income and household income. Few adults in the United States are eligible for retirement income before age 55, but some people who served in the military are an exception. Specifically, service members may retire after 20 years of service (some retire earlier because of disability), but few do so. Using the Department of Defense's administrative data, CBO calculated that about 7 percent of all working-age veterans receive military pensions. More working-age veterans—about 12 percent—reported retirement income in the ACS. Those who did so reported receiving about \$24,000 a year, on average, compared with an average military pension of about \$33,000 recorded in the administrative data. Many veterans may have erroneously reported VA disability payments as retirement

income in the ACS. Veterans with a VA disability rating are probably more likely to receive retirement pay, but because relatively few working-age veterans receive military retirement income, CBO's measure of personal income includes most of the income that veterans receive.¹⁸

Personal income was higher, on average, for veterans who received VA disability payments than for veterans who did not receive them. Aside from earnings and VA payments, working-age veterans had little other personal income from sources such as investments. CBO also compared the household income of veterans with and without a disability rating and determined that the differences were small. This report presents earnings amounts that were and were not adjusted for demographic characteristics, but CBO did not adjust any other calculations or estimates.

18. Veterans receiving a military pension were probably also more likely to receive VA disability compensation, in part because they had more years to develop medical conditions while on active duty.

Table 2.

Share of Male Veterans Ages 22 to 54 With Functional Disabilities, by Type of Disability and VA Disability Rating

Percent

	No disability rating	All disability ratings	Disability rating group		
			10 percent or 20 percent	30 percent to 60 percent	70 percent or higher
Functional disability (one or more) ^a	8	30	18	21	44
Cognitive	3	16	5	9	27
Ambulatory	3	12	6	8	19
Hearing	3	11	10	9	14
Independent living	2	8	2	4	15
Self-care	1	4	1	2	7
Vision	1	3	2	2	4
No functional disabilities	92	70	82	79	56

Data source: Congressional Budget Office, using data from the Census Bureau’s American Community Survey, 2017 to 2019. See www.cbo.gov/publication/59380#data.

The Department of Veterans Affairs (VA) provides tax-free disability compensation to veterans with medical conditions or injuries that occurred or worsened during active-duty military service. VA determines the severity of each medical condition and assigns ratings in increments of 10 percent.

Functional disabilities are medical conditions that cause substantial difficulty with physical or mental activities, as self-reported in the American Community Survey. Disabilities determined by VA are defined differently, but some medical conditions qualify as both.

a. Types of functional disabilities are not mutually exclusive. Among veteran respondents who reported any functional disability, 3 percent listed more than one; among veterans receiving VA disability compensation, 6 percent listed more than one.

Personal Income

Overall, male veterans with a VA disability rating received more, on average, in personal income than veterans who did not have a VA rating. The average annual personal income of veterans with a rating, \$70,200, was 10 percent higher than that of veterans with no rating, \$63,700 (see Table 3). Veterans with the highest disability rating had the highest annual personal income—\$70,800, on average. The share of income from sources other than earnings and VA disability compensation was small.

Calculating Average Earnings. Veterans who received VA disability benefits earned \$52,200 a year, on average. That is \$10,200, or 16 percent, less than the \$62,400 in average annual earnings of veterans who did not receive those benefits (with no accounting for demographic characteristics).¹⁹ Differences in earnings by disability

rating varied substantially. Veterans with the lowest disability ratings earned the most, or 5 percent more, on average, than veterans with no rating; veterans with the highest ratings earned the least, or 38 percent less, on average, than veterans with no rating.²⁰

To exclude extremely high and low values that often skew earnings calculations, CBO also examined median earnings (the midpoint value). The same pattern emerged for median earnings, which were \$43,800 for veterans with a rating and \$50,000 for veterans without a rating.

19. Several researchers have found that post-9/11 veterans have higher earnings than their nonveteran counterparts. See Clayton Gumber and Jonathan Vespa, *The Employment, Earnings, and Occupations of Post-9/11 Veterans*, American Community Survey Report ACS-46 (Census Bureau, November 2020), <https://tinyurl.com/yjeymyb2> (PDF); and Meredith

Kleykamp, “Unemployment, Earnings, and Enrollment Among Post 9/11 Veterans,” *Social Science Research*, vol. 42, no. 3 (May 2013), pp. 836–851, <https://doi.org/10.1016/j.ssresearch.2012.12.017>. Others have found a modest decline in wages for veterans compared with nonveterans. See Brandon Vick and Gabrielle Fontanella, “Gender, Race, and the Veteran Wage Gap,” *Social Science Research*, vol. 61 (January 2017), pp. 11–28, <https://dx.doi.org/10.1016/j.ssresearch.2016.07.005>.

20. Some veterans without a VA disability rating probably had service-connected disabilities but had not applied to VA for compensation. If those medical conditions resulted in lost earnings, the observed difference in earnings was smaller than it would have been if the veterans had received a rating.



Table 3.

Average Income and Labor Force Status of Male Veterans Ages 22 to 54, by VA Disability Rating

Thousands of dollars

	No disability rating	All disability ratings	Disability rating group		
			10 percent or 20 percent	30 percent to 60 percent	70 percent or higher
All veterans in CBO's sample					
Personal income					
Earnings	62.4	52.2	65.6	58.6	38.8
VA disability compensation	0	16.1	2.3	10.4	29.2
Other income	1.3	1.9	1.3	1.2	2.8
Total personal income	63.7	70.2	69.2	70.2	70.8
Additional household income	46.5	38.7	43.6	38.7	35.7
Total household income	110.2	108.9	112.8	108.9	106.5
In the labor force (percent)	91	78	91	87	62
Veterans enrolled in school					
Personal income					
Earnings	44.7	36.5	45.0	39.5	30.7
VA disability compensation	0	17.0	2.3	10.4	28.3
Other income	0.8	1.0	0.6	0.8	1.4
Total personal income	45.5	54.5	47.9	50.7	60.4
Additional household income	52.1	38.7	44.3	40.3	34.9
Total household income	97.6	93.2	92.2	91.0	95.3
In the labor force (percent)	82	68	79	74	58
Veterans with functional disabilities					
Personal income					
Earnings	33.8	31.4	45.9	40.5	24.2
VA disability compensation	0	20.7	2.3	10.8	29.2
Other income	3.5	3.3	1.8	1.6	4.4
Total personal income	37.3	55.4	50.0	52.9	57.8
Additional household income	38.4	33.3	38.8	33.5	31.7
Total household income	75.7	88.7	88.8	86.4	89.5
In the labor force (percent)	64	57	81	74	44

Data source: Congressional Budget Office, using data from the Census Bureau's American Community Survey, 2017 to 2019, and the Department of Veterans Affairs. See www.cbo.gov/publication/59380#data.

The Department of Veterans Affairs (VA) provides tax-free disability compensation to veterans with medical conditions or injuries that occurred or worsened during active-duty military service. VA determines the severity of each medical condition and assigns ratings in increments of 10 percent.

Functional disabilities are medical conditions that cause substantial difficulty with physical or mental activities, as self-reported in the American Community Survey. Disabilities determined by VA are defined differently, but some medical conditions qualify as both.

Earnings are income that an employee received in the previous 12 months in the form of wages and salaries (including tips, commissions, and bonuses), as well as self-employment income from a business, professional practice, or farm after subtracting business expenses from gross receipts. The average includes respondents who had no earnings.

For these comparisons, CBO restricted its data sample to male veterans ages 22 to 54 who were U.S. citizens and had a high school diploma or higher. CBO did not adjust the results for demographic characteristics.

Median earnings were lower than the averages reported in the table. For example, median earnings for veterans with no VA disability rating were \$50,000; for those with a rating, median earnings were \$43,800.

Veterans in the labor force either were working or were not working but were available for and actively looking for a job.

The lower median amounts confirm that the averages included workers with very high earnings. Thus, the median may be preferable for describing the typical earnings (or the center of the earnings distribution).

Much of the difference in earnings was probably due to the lower rates of labor force participation among veterans with a rating. Although a majority of veterans were in the labor force, participation rates differed substantially by rating group.²¹ Veterans with the highest ratings had the lowest labor force participation rate, 62 percent. Conversely, veterans with the lowest ratings had the same labor force participation rate as veterans without a rating, 91 percent. Veterans with a rating of 10 percent or 20 percent probably had relatively minor service-connected medical conditions (such as scars or tinnitus) that did not affect their ability to work. For veterans in the labor force, the average earnings of those with a rating were almost the same as the average earnings of those without a rating (data not shown).

The source of veterans' earnings—whether from employment or self-employment—differed between veterans who received VA disability compensation and those who did not. Overall, 6 percent of veterans were self-employed. The share of those who were self-employed was higher for veterans who did not receive disability compensation (7 percent) than for those who received it (5 percent), even though disability payments can provide capital for starting a business and for income support, and self-employment could allow the greatest flexibility in work. Self-employment rates were higher among older veterans, regardless of whether they received disability compensation. A recent study of older veterans that took into account differences in veterans' demographic characteristics found that such veterans were more likely

21. CBO's findings about labor force participation rates among working-age veterans are consistent with other research. According to the Bureau of Labor Statistics, in 2021, about one-third of Gulf War veterans with a disability rating were not in the labor force, compared with about 20 percent of veterans without a disability rating. See Bureau of Labor Statistics, "Employment Situation of Veterans—2021" (press release, April 21, 2022), www.bls.gov/news.release/archives/vet_04212022.pdf. In addition, a Census Bureau study examined survey responses of post-9/11 veterans from 2014 to 2018. The majority of them were employed, and their unemployment rate was lower than that of adults who had never served. See Clayton Gumber and Jonathan Vespa, *The Employment, Earnings, and Occupations of Post-9/11 Veterans*, American Community Survey Report ACS-46 (Census Bureau, November 2020), <https://tinyurl.com/yjeymyb2> (PDF).

to become self-employed if they received VA disability compensation, although the results of other studies have been mixed.²²

Estimating Average Earnings by Accounting for Demographic Characteristics. Although men with the lowest disability ratings earned more, on average, than those without a rating, differing demographic characteristics contributed to that result. Using regression analysis to account for those differences, CBO determined that veterans with any disability rating earned less than similar veterans without a rating.²³ The differences between the earnings of veterans without a rating and those with a rating of 10 percent or 20 percent were small, but the higher the rating, the less a veteran earned compared with veterans with no rating.

Those findings from the regression analysis are similar to the general pattern of the prior calculations. That is, veterans with a low rating earned about the same as veterans with no rating. Veterans with a rating of 30 percent to 60 percent earned slightly less. Veterans with a rating of 70 percent or more earned much less than veterans with no rating.

VA Disability Compensation. The average annual VA disability payment for all working-age veterans who received that compensation was \$16,100. The average annual benefit for the lowest rating group was relatively small, \$2,300; the average annual benefit for the highest rating group was \$29,200.

VA's data show that rating levels and, consequently, VA payments tended to be higher for older veterans. That

22. See Courtney Coile, Mark Duggan, and Audrey Guo, "To Work for Yourself, for Others, or Not at All? How Disability Benefits Affect the Employment Decisions of Older Veterans," *Journal of Policy Analysis and Management*, vol. 40, no. 3 (Summer 2021), pp. 686–714, <http://dx.doi.org/10.1002/pam.22261>. Conversely, some prior research found either no relationship or a negative relationship between self-employment and veterans' disability. For a negative relationship, see John Hope, Brian Oh, and Patrick Mackin, *Factors Affecting Entrepreneurship Among Veterans* (Small Business Administration, Office of Advocacy, March 2011); and Small Business Administration, Office of Advocacy, *Self-Employment in the Veteran and Service-Disabled Veteran Population* (prepared by Open Blue Solutions, January 2007).
23. To estimate earnings, CBO used ordinary least squares, a method that aims to minimize the sum of squared differences between the observed and predicted values. Specifications included age, race, ethnicity, marital status, region of residence, level of education, and disability rating as explanatory variables.

is, a greater share of older veterans than of younger veterans had a high rating, and the average disability compensation older veterans received was greater, even when the ratings were the same. Older veterans might be more likely to request and receive an increase in their rating as medical conditions manifest or worsen with age. Another reason that older veterans may receive larger payments for a disability rating is that payments increase when they marry and have dependent children. In 2018, VA's data showed that among all veterans ages 25 to 29 with a VA rating, 8 percent of recipients had a rating at the 100 percent level; for the oldest veterans CBO analyzed, those ages 50 to 54, 13 percent did.²⁴ In addition, younger veterans with a rating of 100 percent (a small group) received \$39,900 a year, on average, in VA disability compensation; that amount was 3 percent larger, \$40,900, for veterans ages 50 to 54.

Household Income

Average differences in household income between veterans with and without a disability rating were negligible. For veterans with no disability rating, average annual household income was \$110,200; for veterans with a rating, it was \$108,900. According to the Census Bureau's data, that income level roughly corresponded to the 70th percentile of American households in 2019.²⁵

Household income varied little among the rating groups. Although annual personal income was higher for veterans with a VA rating, additional income to the household from spouses or other household members was \$7,800 less, on average, than it was for veterans without a rating, and the difference was bigger as the average rating increased. The lower average income may have been influenced by several factors: A larger share of veterans with a rating had dependent children, which may have affected spouses' labor force participation; veterans' higher personal income may have decreased

spouses' need or preference for work; and caring for a disabled veteran may have affected spouses' labor force participation.

Income of Working-Age Veterans Who Were Enrolled in School or Functionally Disabled

Although CBO included all working-age male veterans in its analysis of personal and household income, the income and labor force participation of veterans who are enrolled in school or who are functionally disabled differ substantially from those of veterans who are not. For those reasons, CBO estimated the income of those two groups separately from the income of all working-age veterans. The share of male veterans ages 22 to 54 in those groups was relatively small—11 percent were enrolled in school, 14 percent reported a functional disability, and 2 percent were in both groups. Veterans with a disability rating had higher average personal income than veterans without a rating in both samples. Average household income was higher for veterans who were students than for those who were functionally disabled. Veterans who were functionally disabled but did not have a VA disability rating had the lowest average personal and household income.

Veterans Enrolled in School

Veterans enrolled in school had average annual earnings that were about 30 percent lower than the average annual earnings of all veterans. Veteran students were less likely than nonstudents to work, but the majority of them (76 percent) were in the labor force. On average, students with a VA disability rating earned \$36,500, about 18 percent less than the \$44,700 earned by those without a rating (see Table 3 on page 10). Average earnings declined as the VA rating increased. For veteran students with the highest ratings, average earnings were about \$30,700, or 31 percent lower than the average earnings of those who did not have a rating.

Total personal income for students receiving VA disability compensation was \$54,500, on average, or 20 percent more than the total average personal income, \$45,500, of veteran students not receiving that compensation. Veteran students with the highest VA ratings had the highest personal income, an average of \$60,400 annually. Veterans enrolled in school did not appear to report as income the housing stipend (received as a cash payment) for those using VA educational benefits. The annual benefits received by veterans under the Post-9/11 GI

24. VA's administrative data on average disability payments included women. Because women are a small share of working-age veterans, CBO used those data for this analysis. Additional data published by VA indicated that women received smaller payments, on average, than male veterans at higher disability ratings, possibly because they were less likely than men to be married, which is a factor in determining monthly payments.

25. See Jessica Semega and others, *Income and Poverty in the United States: 2019*, Current Population Report P60-270 (Census Bureau, September 2020), Table A-4 (revised), <https://tinyurl.com/34csnbj7>. The method CBO used to calculate household income differs from that used by the Census Bureau but should result in roughly similar amounts.

Bill averaged \$15,000 per person. CBO estimates that about half of that was for housing.²⁶ Household income was 5 percent higher, on average, for veteran students without a VA rating.

Functionally Disabled Veterans

Veterans who reported functional disabilities earned less, on average, and were less likely to be in the labor force than other veterans. As with the other groups (all veterans and veteran students), those with the highest VA disability ratings earned the least—about \$24,200 a year, on average, or 28 percent less than veterans without a VA rating (see Table 3 on page 10). The average earnings of veterans with the lowest ratings, however, were substantially higher than the average earnings of those without a rating. The majority of veterans with functional disabilities were in the labor force, except for those with the highest ratings.

Personal income was lower by one-third, on average, for veterans with functional disabilities who did not have a VA rating than for those who did have a rating.²⁷ Income for veterans with functional disabilities in the form of federal or state aid was, on average, relatively low: Altogether, other income (that is, neither earnings nor VA disability compensation) was not more than \$4,400, on average, for any rating group. CBO determined that about 14 percent of veterans who reported a functional disability received Social Security Disability Insurance benefits averaging \$13,400 annually. (Overall, among veterans receiving VA disability compensation, 6 percent received those benefits.)

The annual household income of veterans with functional disabilities was also lower, on average, than that of veterans in school and of all working-age veterans. As with total personal income, veterans with the highest disability ratings had the highest total household income—\$89,500 a year, on average—among the subset of functionally disabled veterans. Veterans who were functionally disabled and did not have a VA rating had the lowest total household income, \$75,700, of all the veteran groups that CBO examined.

26. Tuition is paid directly to the educational institutions, but housing stipends are paid to students. See Congressional Budget Office, *The Post-9/11 GI Bill: Beneficiaries, Choices, and Cost* (May 2019), www.cbo.gov/publication/55179.

27. Veterans with functional disabilities and no VA rating either had not yet applied for VA disability benefits or—more likely—had developed a medical condition or sustained an injury after separating from the military.

Income of Potential Workers

CBO analyzed the earnings and other income of potential workers—veterans who were not enrolled in school or functionally disabled and thus most likely to be working. For that group, as with the others, CBO compared veterans with and without a VA disability rating without accounting for differences in demographic characteristics. The same general patterns mostly persisted as with all veterans:

- On average, veterans with a rating of 10 percent or 20 percent earned the most;
- Veterans with a disability rating had higher personal income than veterans with no rating; and
- The differences in household income among all groups of potential workers were relatively modest, typically less than \$10,000 (see Table 4).

For the regression analysis of earnings, CBO found that among potential workers, veterans with the lowest ratings earned the same as similar veterans with no rating. Veterans with a rating of 30 percent or higher earned less, on average, than similar veterans with no rating.

Calculating Average Earnings

Among potential workers, average annual earnings were similar for veterans with no rating, who earned \$66,800, and those with a rating, who earned \$64,900 (or 3 percent less). Median earnings, which are not skewed by extremely high or low values, yielded a different result, indicating that veterans with a rating typically earned 5 percent more than veterans without a rating. Median earnings for veterans with a rating were \$55,000, compared with \$52,100 for veterans without a rating.

Veterans with a rating below 70 percent earned more than veterans without a rating. Those with the lowest ratings earned 9 percent more, on average, than veterans without a rating, and those with a rating of 30 percent to 60 percent earned 2 percent more. Higher average earnings among the lower rating groups may be attributed, at least in part, to the concept of selection: Those with more ability or more motivation—and who, consequently, have higher average earnings—may also be more aware of VA disability benefits and more likely to apply for them. That trait is impossible to observe directly but has been considered by other researchers.²⁸

28. Sebastian Negrusa, Projesh P. Ghosh, and Sarmistha Pal, “Do Veterans With Disabilities Respond Differently to the Post-9/11 GI Bill?” *Defense and Peace Economics* (July 12, 2021), <https://doi.org/10.1080/10242694.2021.1945427>.

Table 4.

Average Income and Labor Force Status of Male Veterans Ages 22 to 54 Who Were Potential Workers, by VA Disability Rating

Thousands of 2019 dollars

	No disability rating	All disability ratings	Disability rating group		
			10 percent or 20 percent	30 percent to 60 percent	70 percent or higher
Personal income					
Earnings	66.8	64.9	72.9	68.3	53.4
VA disability compensation	0	14.0	2.3	10.2	29.4
Other income	1.1	1.3	1.2	1.1	1.7
Total personal income	67.9	80.2	76.4	79.6	84.5
Additional household income	46.7	40.9	44.4	39.8	38.8
Total household income	114.6	121.1	120.8	119.4	123.3
In the labor force (percent)	95	89	95	93	78
Addendum:					
Number in sample (thousands)	75	22	7	8	7
Total population (thousands)	8,000	2,200	700	900	700
Percentage of veterans	78	22	7	9	7

Data source: Congressional Budget Office, using data from the Census Bureau's American Community Survey, 2017 to 2019, and the Department of Veterans Affairs. See www.cbo.gov/publication/59380#data.

The Department of Veterans Affairs (VA) provides tax-free disability compensation to veterans with medical conditions or injuries that occurred or worsened during active-duty military service. VA determines the severity of each medical condition and assigns ratings in increments of 10 percent.

Potential workers are male veterans who were not enrolled in school and did not have functional disabilities. Functional disabilities are medical conditions that cause substantial difficulty with physical or mental activities, as self-reported in the American Community Survey. Disabilities determined by VA are defined differently, but some medical conditions qualify as both.

Earnings are income that an employee received in the previous 12 months in the form of wages and salaries (including tips, commissions, and bonuses), as well as self-employment income from a business, professional practice, or farm after subtracting business expenses from gross receipts. The average includes respondents who had no earnings.

For these comparisons, CBO restricted its data sample to male veterans ages 22 to 54 who were U.S. citizens and had a high school diploma or higher. CBO did not adjust the results for demographic characteristics.

Median earnings were lower than the averages reported in the table. For example, median earnings for veterans with no VA disability rating were \$52,100; for those with a rating, median earnings were \$55,000.

Veterans in the labor force either were working or were not working but were available for and actively looking for a job.

Veterans with the highest ratings earned 20 percent less, on average, than veterans with no rating, partly because 22 percent of them were not in the labor force at the time of the survey and had little or no income from wages or salaries in the previous 12 months. Overall, the labor force participation rate of veterans without a VA disability rating was 6 percentage points higher than that of veterans with a rating.

Federal preferences in hiring and promotion may play a role in supporting the work and earnings of certain veterans, particularly those with service-connected disabilities. Partly to retain veterans who might otherwise exit the labor force, legislation enacted in 1944 (and amended many times since then) gives veterans who

have VA-determined disabilities or who served in certain conflicts preference in hiring and promotion for positions in the federal government. The result has been a significant concentration of veterans in the federal civilian workforce. CBO found that potential workers with a VA rating—and all veterans—make up a larger share of federal workers (21 percent) than those with no disability rating (11 percent), probably in part because they receive greater hiring preference than veterans who do not have a disability rating. In addition, one in four potential workers with a service-connected disability rating of 70 percent or higher was a federal worker (or had been before exiting the labor force). (By contrast, the Bureau of Labor Statistics reported that, in August 2019, federal workers made up less than 2 percent of the U.S. workforce.)

Federal preferences may cause a larger share of veterans with disabilities to work and, consequently, to increase their average earnings. However, greater federal employment could lead to lower or higher earnings for working veterans. On the one hand, the private sector pays more, on average, to college graduates, so the earnings of veterans with greater educational attainment who work for the federal government could be lower than they would be otherwise. On the other hand, because the federal government pays higher wages (and provides better employee benefits), on average, to workers with only a high school degree than the private sector does, average earnings of those veterans could be higher than they would be otherwise.²⁹

Personal income was higher for veterans with a rating than for those without a rating by \$12,300, or 18 percent, on average. Those findings are unsurprising because average earnings were higher or about the same for veterans with ratings up to and including 60 percent and because veterans with a disability rating had additional income from VA. For veterans with the highest ratings, personal income was \$16,600, or 24 percent, higher than it was for veterans with no rating. On average, other income in the form of investments, Social Security Disability Insurance payments, and state and local aid were only a small portion of veterans' personal income, 2 percent or less for each group. Veterans with no rating had the lowest average total household income, \$114,600.

Estimating Average Earnings by Accounting for Demographic Characteristics

Estimates from the regression analysis changed the results slightly, suggesting instead that veterans who were potential workers with a rating of 60 percent or less did not earn more than similar veterans with no rating. That analysis indicates that, for potential workers, veterans with a rating of 10 percent or 20 percent earned the same, on average, as similar veterans with no rating. As in the previous findings, veterans with a rating of 30 percent to 60 percent earned less than similar veterans with

no rating. For veterans with the highest ratings—many of whom probably had more severe health problems—the difference in earnings was greatest.

Higher educational attainment among veterans with a VA rating accounted for some of the differences in average earnings between those with a rating and those without. (Among potential workers with a VA rating, 38 percent had earned at least a bachelor's degree, compared with 28 percent of those without a rating.)³⁰

CBO also looked at a subset of potential workers—those who were working. Estimates of the regression for that group suggest that veterans with the highest ratings still earned less than veterans without a rating, but the gap was smaller. Veterans who were working had greater educational attainment and were more likely to be married and White than those who were not in the labor force. Veterans with a rating were also more likely to work in managerial, professional, and related occupations than veterans with no rating.

Possible Reasons for the Lower Earnings of Many Veterans Receiving Disability Compensation

CBO found that veterans with a VA disability rating of 70 percent or higher had much lower earnings, on average, than veterans without a disability rating.³¹ For other veterans, those with the lowest ratings earned about the

29. See Congressional Budget Office, *Comparing the Compensation of Federal and Private-Sector Employees, 2011 to 2015* (April 2017), www.cbo.gov/publication/52637. Others who examined earnings from all types of employers have concluded that, among all working veterans, those with the least education accrue the greatest wage advantage compared with nonveteran peers. See Meredith Kleykamp, "Unemployment, Earnings, and Enrollment Among Post 9/11 Veterans," *Social Science Research*, vol. 42, no. 3 (May 2013), pp. 836–851, <https://doi.org/10.1016/j.ssresearch.2012.12.017>.

30. Estimates of the wage premium for college graduates vary; among civilians the median earnings of full-time employed graduates of four-year colleges are about 60 percent higher, on average, than those of high school graduates.

31. One study of veterans who served after 1980 found similar patterns by rating. It also found that VA compensation was higher than the decline in earnings of veterans with a VA rating. See Department of Veterans Affairs, *A Study of Compensation Payments for Service-Connected Disabilities, Volume I: Executive Report* (prepared by Economic Systems, September 2008). Researchers at RAND suggested that VA disability compensation for most veterans exceeded their average earnings losses. See Richard Buddin and Bing Han, *Is Military Disability Compensation Adequate to Offset Civilian Earnings Losses From Service-Connected Disabilities?* (RAND Corporation, 2012), www.rand.org/pubs/monographs/MG1098.html. Other research showed that, over the lifetime of disabled veterans, the lost earnings were usually about equal to the VA compensation, except for mental health conditions that were not fully compensated. See Eric Christensen and others, *Final Report for the Veterans' Disability Benefits Commission: Compensation, Survey Results, and Selected Topics*, CRM D0016570.A2 (submitted by CNA Corporation to the Veterans' Disability Benefits Commission, August 2007).

same as veterans with no rating, whereas the earnings of those with a rating of 30 percent to 60 percent were typically between the earnings of the highest and lowest rating groups. Possible reasons for lower earnings among many veterans with a disability rating include differences in skills, prior workforce experience, and other factors that are hard to identify. CBO focused on two main reasons for lower average earnings among veterans with a VA rating, particularly those who were potential workers: poor health and additional nonlabor income from VA.

Effects of Poor Health

Poor health is one likely explanation for the lower labor force participation and lower average earnings of veterans who receive VA disability compensation. Adults who have disabilities in the United States generally work less and earn less than adults of the same age without disabilities.³² Among veterans, however, the extent of health differences between those with a rating and those without one is unclear, as is how much those differences affect labor market participation and average earnings. Research by others has found that combat exposure among veterans led to higher rates of injury and mental illnesses.³³ Mortality rates may also be higher for veterans with service-connected disabilities than for other veterans.³⁴

32. Jennifer Cheeseman Day and Danielle Taylor, “Do People With Disabilities Earn Equal Pay?” (Census Bureau, March 21, 2019), <https://tinyurl.com/mt5c3kpk>.

33. Deployment to theater and health, particularly post-traumatic stress disorder, were correlated in a sample of Vietnam War veterans. See Bruce P. Dohrenwend and others, “The Psychological Risks of Vietnam for U.S. Veterans: A Revisit With New Data and Methods,” *Science*, vol. 313, no. 5789 (August 18, 2006), pp. 979–982, <https://dx.doi.org/10.1126/science.1128944>. Research indicates that Vietnam veterans who were deployed overseas in support of military operations were more likely to receive VA disability compensation and more likely to self-report disability than those who were not deployed. See David H. Autor, Mark G. Duggan, and David S. Lyle, “Battle Scars? The Puzzling Decline in Employment and Rise in Disability Receipt Among Vietnam Era Veterans,” *American Economic Review*, vol. 101, no. 3 (May 2011), pp. 339–344, <https://dx.doi.org/10.1257/aer.101.3.339>.

34. Jason D. Jobson and Chris Gentry, “The Mortality Rate of 100% Service-Connected U.S. Veterans,” *SOCRA Source*, vol. 108 (May 2021), pp. 31–39, www.ncbi.nlm.nih.gov/pmc/articles/PMC8961813; and Charles Maynard, Karin Nelson, and Stephan D. Fihn, “Disability Rating and One-Year Mortality Among Veterans With Service-Connected Health Conditions,” *Public Health Reports*, vol. 133, no. 6 (2018), pp. 692–699, <https://doi.org/10.1177/0033354918794929>.

One measure of ill health is the presence of functional disabilities. A third of respondents in the ACS who had a VA rating reported functional disabilities, although veterans with the same rating may experience different limitations on their ability to work. The most common functional limitation noted in the ACS data was cognitive, reported by 16 percent of veterans with a rating. That sort of disability might be harder to accommodate or to overcome in the workforce than other types of impairments. If so, poor health could lead to lower earnings for veterans who accept a lower-paying job or who work less or not at all. (When limitations are accommodated in the workplace or the veteran’s occupation is largely unaffected by the medical conditions, their effect on earnings may be minimal.)

However, functional disability may not be a good measure of health. More than half of veterans with a VA rating did not report any functional disabilities, which suggests that health did not limit their ability to work. It could be that, because health status is difficult to measure, the survey questions about functional disability might not completely reflect work-limiting medical conditions. Some researchers posit that the VA rating system does not correlate well with limitations on working or the likelihood of working, possibly because ratings do not measure overall performance or assess the effect of disability on function.³⁵ Others found a higher mortality rate for veterans with a VA rating than for those without; that difference was substantially lessened—but did not disappear—when the presence of functional disabilities was taken into account.³⁶ In general, little research exists about the effects of health on the earnings of veterans receiving VA disability compensation, particularly with regard to functional disabilities.

Effects of Nonlabor Income

VA disability compensation, a source of income not tied to the recipient’s earnings, could also explain veterans’ lower workforce participation rates and earnings through

35. For a list of literature on the topic, see Lynn H. Gerber and others, “Disability Among Veterans: Analysis of the National Survey of Veterans (1997–2001),” *Military Medicine*, vol. 181, no. 3 (March 2016), pp. 219–226, <http://dx.doi.org/10.7205/MILMED-D-14-00694>.

36. Scott D. Landes, Andrew S. London, and Janet M. Wilmoth, “Service-Connected Disability and the Veteran Mortality Disadvantage,” *Armed Forces and Society*, vol. 47, no. 3 (July 2021), pp. 457–479, <https://doi.org/10.1177/0095327X19884721>.

what is known as the income effect. Having more non-labor income gives veterans flexibility in job decisions because they are not as dependent on earnings for household income. For veterans who receive VA disability payments and remain in the workforce, that VA compensation, along with free VA health care and other benefits, may allow them to choose part-time employment, less demanding occupations, or a lower-paying job that they prefer to higher-paying options. For example, some researchers have shown that VA disability income has allowed some older veterans to start their own business or retire gradually through self-employment.³⁷

The additional income from VA may have allowed some veterans to leave the labor market entirely.³⁸ Other research—often focusing on Vietnam veterans—has found that veterans who receive VA payments have lower labor force participation rates than they would have otherwise because the current program creates a disincentive to work.³⁹

Veterans in CBO's analyses might also have had certain family support, assets, or other types of income—such as an inheritance—not reported in the ACS that affected their choice not to work. Nearly one-quarter of veterans receiving VA disability compensation who were not in the labor force had at least a bachelor's degree, so their opportunity cost of not working was presumably high.

37. Courtney Coile, Mark Duggan, and Audrey Guo, "To Work for Yourself, for Others, or Not at All? How Disability Benefits Affect the Employment Decisions of Older Veterans," *Journal of Policy Analysis and Management*, vol. 40, no. 3 (Summer 2021), pp. 686–714, <http://dx.doi.org/10.1002/pam.22261>.

38. The compensation benefit (with no dependents) for a 100 percent rating in 2023 is \$43,500, enough for some veterans to live without working, particularly because that compensation is tax free. In addition to the base payment, some veterans also receive supplemental payments for special circumstances or medical disabilities, such as the loss of a hand or foot or deafness in both ears.

39. For analyses of the effects of VA disability compensation on labor force participation, see David H. Autor and others, "The Impact of Disability Benefits on Labor Supply: Evidence From the VA's Disability Compensation Program," *American Economic Journal: Applied Economics*, vol. 8, no. 3 (July 2016), pp. 31–68, <https://tinyurl.com/3baa655z>; and Courtney Coile, Mark Duggan, and Audrey Guo, "Veterans' Labor Force Participation: What Role Does the VA's Disability Compensation Program Play?" *American Economic Review*, vol. 105, no. 5 (May 2015), pp. 131–136, <https://tinyurl.com/rz4kx8v8>.

CBO's Approach to Analyzing Veterans' Earnings and Other Income

To compare the income of working-age veterans who have VA-determined disabilities with that of other veterans, CBO analyzed data from the ACS and administrative data on disability payments from VA. The ACS is among the largest of the Census Bureau's surveys, reaching about 2 million households each year, and is designed to represent the entire U.S. population.⁴⁰ Households responding to the ACS provide information on demographics, earnings and other sources of regularly received income, employment status, functional disabilities, VA disability rating, and military service, among other subjects. CBO used administrative data from VA to determine VA disability payments, in part because those payments are mingled with several other types of income in a residual category in the ACS. The ACS data include only the number of veterans receiving VA disability compensation, not the specific amount of that compensation. CBO used VA's data on average payments by disability rating, age, and sex to estimate the average payment to each veteran in the ACS.

CBO's sample from the ACS represents a total of 13.3 million male veterans, ages 22 to 54, in 2017, 2018, and 2019 combined. Because the labor market experiences and income of men and women differ substantially, CBO focused its analysis on men, who constitute the majority of veterans. (For an overview of the characteristics and income of female veterans, see Box 1.) Veterans under age 22 were excluded because they probably left the military before the end of their initial enlistment contract and are therefore unlike other veterans. Using three years of combined data gave CBO a large enough sample to examine how outcomes varied across VA rating groups. CBO analyzed the outcomes of veterans with a VA disability rating in the years immediately before the coronavirus pandemic. The pandemic influenced employment and income in ways that were not typical, and it affected the Census Bureau's data collection efforts and the resulting quality of the data in its survey.

CBO first segmented the sample group into veterans with and without a VA disability rating and then sorted those with a rating into three categories—10 percent or 20 percent, 30 percent to 60 percent, and 70 percent or

40. For the ACS data and related documentation, see Steven Ruggles and others, "IPUMS-USA: Version 10.0" (census data, accessed May 1, 2021), <https://dx.doi.org/10.18128/D010.V10.0>.

Box 1.

Working-Age Female Veterans

In 2019, the population of veterans of the Gulf War era included more than 1.2 million women, or about 17 percent of those veterans. Women made up about the same share of veterans for both Gulf Wars. To better understand the difference in income between female veterans with and without a disability rating from the Department of Veterans Affairs (VA), the Congressional Budget Office analyzed it separately from that between male veterans.

Characteristics of Working-Age Female Veterans

Working-age female veterans—those ages 22 to 54—with and without a VA rating were similar in some ways associated with earnings, but they were different in other ways. Using data from the Census Bureau’s American Community Survey from 2017 to 2019, CBO determined that the two groups had about the same median age and that similar shares were married (about 58 percent) and had children under age 5 (about 16 percent). The groups differed in several ways:

- A smaller share (54 percent) of working-age female veterans with a VA rating were White than those without a rating (61 percent). A larger share (27 percent) of working-age female veterans with a VA rating were Black than those without a rating (19 percent).
- Working-age female veterans with a VA rating had greater educational attainment than those without a rating. Although about 45 percent of both groups had taken some college courses or had an associate’s degree, 49 percent of women with a rating had obtained at least a bachelor’s degree, compared with 38 percent of those without a rating. Women with a rating were also more likely to be enrolled in a postsecondary school at the time of the survey.
- Nearly 30 percent of working-age female veterans with a VA rating reported functional disabilities, compared with about 10 percent of those without a rating.
- The share of working-age female veterans with a VA rating who worked in the federal government was 28 percent, compared with 16 percent of those without a rating.

Income of Working-Age Female Veterans

CBO calculated the income of working-age female veterans by VA rating group and compared it with the income of veterans without a rating, similar to the analysis CBO conducted for working-age male veterans. The agency examined earnings, VA disability payments, and more comprehensive measures of income for the full sample of working-age female veterans. CBO also computed those income measures for the following subgroups: those who were enrolled in school (16 percent), those who were functionally disabled (14 percent), and those

who were neither in school nor functionally disabled and thus were potential workers (71 percent). The patterns CBO found for female veterans were similar to those of male veterans: Female veterans with a rating had lower average earnings and labor force participation but higher average personal and household income than those without a rating.

Personal Income

Overall, working-age female veterans with a VA rating had average annual earnings of \$34,900, which was lower than the \$42,900 earned by those without a rating, unadjusted for demographic characteristics. Female veterans with the highest ratings had the lowest earnings, on average (see the table). Labor force participation was 16 percentage points lower for those with a rating than for those without one; for women with the highest ratings, labor force participation was 30 percentage points lower than it was for those without a rating, similar to the pattern CBO observed for male veterans.

Among the potential worker group, the annual earnings of female veterans with a rating were \$3,400 less, on average, than the earnings of those without a rating; female veterans with the highest ratings in that subgroup had annual earnings that were \$11,300 lower, on average, than the earnings of those without a rating. When CBO adjusted the sample for some demographic characteristics (age, race, ethnicity, marital status, presence of children under age 5, education, and region of residence), female veterans with the highest ratings had even lower earnings. Among female veterans with higher ratings, CBO found that a larger share had at least a bachelor’s degree than those without a rating, which probably boosted their earnings in the unadjusted results.

In all ratings groups for the four samples, the average personal income of female veterans with a rating was higher than that of those with no rating. VA disability compensation provided substantial financial support for those with the highest ratings, contributing between 40 percent and 55 percent of veterans’ annual personal income in each subgroup.

Household Income

In each subgroup except for those with functional disabilities, household income for female veterans with a rating was similar to that of their counterparts without one. For female veterans with functional disabilities, household income was substantially higher for those with a rating—by \$16,200 a year, or 23 percent, on average—than for those without one. As it was for male veterans, total household income for female veterans in the full sample with and without a rating was more than \$100,000, on average.

Box 1.

Continued

Working-Age Female Veterans

Average Income and Labor Force Status of Female Veterans Ages 22 to 54, by VA Disability Rating

Thousands of dollars

	Disability rating group				
	No disability rating	All disability ratings	10 percent or 20 percent	30 percent to 60 percent	70 percent or higher
All veterans in CBO's sample					
Personal income					
Earnings	42.9	34.9	45.2	38.7	26.8
VA disability compensation	0	15.8	2.3	10.3	27.1
Other income	1.0	2.0	1.4	1.2	2.6
Total personal income	43.9	52.7	48.9	50.2	56.5
Additional household income	62.3	51.3	58.9	53.4	45.9
Total household income	106.2	104.0	107.8	103.6	102.4
In the labor force (percent)	83	67	82	75	53
Veterans enrolled in school					
Personal income					
Earnings	33.3	26.4	36.7	27.1	22.1
VA disability compensation	0	16.2	2.3	10.4	26
Other income	0.7	1.1	0.6	0.5	1.8
Total personal income	34.0	43.7	39.6	38.0	49.9
Additional household income	56.1	49.7	58.7	51.7	44.8
Total household income	90.1	93.4	98.3	89.7	94.7
In the labor force (percent)	79	61	76	64	53
Veterans with functional disabilities					
Personal income					
Earnings	22.0	20.3	28.3	25.4	17
VA disability compensation	0	20.4	2.3	10.8	27.2
Other income	3.1	3.4	2.1	1.1	4.4
Total personal income	25.1	44.1	32.7	37.3	48.6
Additional household income	46.7	43.9	51.5	44.8	42.3
Total household income	71.8	88	84.2	82.1	90.9
In the labor force (percent)	55	47	60	67	37
Veterans who were potential workers					
Personal income					
Earnings	46.9	43.5	49.7	46.2	35.6
VA disability compensation	0	14	2.3	10.2	27.4
Other income	0.8	1.5	1.5	1.5	1.7
Total personal income	47.7	59	53.5	57.9	64.7
Additional household income	65.0	54.8	59.8	56.3	49.0
Total household income	112.7	113.8	113.3	114.2	113.7
In the labor force (percent)	86	78	88	81	66

Data source: Congressional Budget Office, using data from the Census Bureau's American Community Survey, 2017 to 2019. See www.cbo.gov/publication/59380#data.

The Department of Veterans Affairs (VA) provides tax-free disability compensation to veterans with medical conditions or injuries that occurred or worsened during active-duty military service. VA determines the severity of each medical condition and assigns ratings in increments of 10 percent.

Potential workers are veterans who were not enrolled in school and did not have functional disabilities (medical conditions that cause substantial difficulty with physical or mental activities and that are defined differently from disabilities determined by VA).

Earnings are income that an employee received in the previous 12 months as wages, salaries, or self-employment income. The data sample includes female veterans ages 22 to 54 who were U.S. citizens and had a high school diploma or higher. CBO did not adjust the results for demographic characteristics.



higher—to see how outcomes differed by rating group.⁴¹ Those groups were aggregated in the ACS, and CBO could not determine the precise rating for each veteran.⁴² Additionally, the agency assigned the sample to three subgroups: veterans who were enrolled in school, those who reported a functional disability, and the remainder, who were potential workers. Veterans could be in both the group enrolled in school and the group that reported a functional disability.

CBO added earnings (which include salaries, wages, and self-employment income), VA disability payments, and other nonlabor sources of income to construct annual personal income.⁴³ The agency reported average disability payments and average total income because VA's data were provided as averages.

CBO's definition of total household income differed from that in the ACS to reflect the agency's construction of personal income. To calculate household income, CBO used the amount provided in the ACS and then subtracted income from the survey's "retirement" and "any other sources" categories and added VA's data on disability payments.

Analyzing the Average Income of Veterans

CBO estimated the earnings, VA disability compensation, other personal income, and total household income for veterans with and without a VA disability rating. The agency also reported labor force participation because that

is the source of the earnings. For the analysis in this section, CBO calculated average earnings and did not account for any differences in veterans' demographic characteristics.

CBO looked at veterans enrolled in school separately because the labor market decisions and outcomes of adult students differ from those of other working-age adults. Veterans in school may make different employment decisions because they receive support from VA for their education. They may prefer not to have a job while concentrating on their studies, or they may accept certain low-wage or part-time jobs only while in school. The financial and personal returns on postsecondary education can be substantial; thus, veterans who are in school probably have better long-term prospects in the labor market than veterans who do not seek additional education. Lower rates of labor force participation or lower earnings of veterans in school may be a misleading indicator of their later labor market outcomes.

CBO also looked separately at veterans who reported a functional disability because people with those disabilities are unlikely to make the same decisions about working as other adults. For example, people with functional disabilities may not be able to perform certain jobs or to be employed at all. In addition, some functionally disabled people receive monthly benefit payments from the federal government, beyond those provided by VA.

Veterans in the final group analyzed by CBO, identified as potential workers, were not in school or functionally disabled and thus were the veterans most likely to be employed. Because potential workers are the largest of the three subgroups, accounting for 77 percent of all veterans ages 22 to 54, any differences in income between veterans with and without a disability rating are of particular interest. Nearly 60 percent of veterans who reported a rating were potential workers.

Using Regression Analysis to Estimate Earnings of All Veterans and of Potential Workers

For most working-age men in the labor force, earnings are the single largest source of income. CBO conducted a detailed analysis of the earnings of all working-age male veterans and of the subset of potential workers. Specifically, CBO used regression analysis to account for differences in demographic characteristics among veterans. That technique—an alternative to calculating the average values—allows analysts to estimate annual earnings by controlling for factors that might influence the amount of earnings. Because VA makes disability

41. Because veterans who receive a zero rating generally are not considered impaired and do not receive VA disability compensation, CBO combined them with the veterans without a rating.

42. CBO combined two ACS categories, disability ratings of 30 percent to 40 percent and 50 percent to 60 percent, because the results for those categories were almost the same.

43. CBO defined "earnings" as money that an employee received in the previous 12 months in the form of wages and salaries (including tips, commissions, and bonuses), as well as self-employment income from a business, professional practice, or farm after subtracting business expenses from gross receipts. No distinction was made between incorporated and unincorporated businesses. Other nonlabor income included regular income from investments, estates and trusts, Supplemental Security Income, Social Security Disability Insurance, and public assistance. VA disability payment amounts, found in the ACS's residual category (called "any other sources of income") that also included such items as alimony and child support, were vastly understated. Therefore, CBO excluded that residual category from personal income and household income and instead used VA's administrative data to assign disability payment amounts on the basis of self-reported VA disability ratings.

payments to veterans whether or not they work, CBO included veterans who were not in the labor force at the time of the survey and who reported little or no earnings. That is, some veterans included in the analyses of earnings had no wages or salary.

Limitations of CBO's Approach

CBO's study has limitations that are common to any analysis based on survey data: The data may be inaccurate because of misreporting and because some people may not answer certain questions. Both problems have been extensively noted.⁴⁴ Information about wages and salaries is generally reported correctly, except for self-employment income, which may not be reported or may be under-reported.⁴⁵ The consequences of those errors were probably minimal in this report because only about 6 percent of veterans in CBO's sample reported being self-employed, and veterans, on average, earned little of their income from self-employment (about \$2,300 annually).

In addition, because CBO did not include retirement income, personal income and household income are probably underestimated for a small share of veterans. Because relatively few veterans receive such income, however, the results presented should be largely unaffected.

CBO used VA's data to estimate the average amount of disability compensation veterans received by disability rating and age range. Actual amounts per person may have been larger or smaller. Moreover, CBO did not know the medical conditions for which a veteran received a VA rating, nor did the ACS survey ask respondents for their exact rating (so that, within the survey's "70 percent or higher" category, for example, CBO did not know the share of veterans with a rating of 70 percent, 80 percent, 90 percent, or 100 percent). The highest rating group, 70 percent or higher, probably had the most variance in individual payments because the increase in payments from one rating to the next is nonlinear. For example, veterans with a rating of 100 percent receive about 40 percent more than those with a rating of 90 percent.

CBO did not estimate the causal effects of VA disability ratings. Although the agency used regressions to better compare similar veterans, those with and without a rating may differ along dimensions not observable in the data, and those factors could also contribute to differences in earnings and income. Specifically, CBO could not determine whether earnings differences stemmed from poor health among veterans with a VA rating, from veterans' choosing to earn less because of the extra income provided by VA disability compensation, or from other reasons that CBO could not observe. CBO did not take into account changes in behavior that may have been attributable to receiving VA disability compensation; the unusual nature of VA's disability program make such changes in behavior difficult to estimate. Finally, CBO did not determine the adequacy of payment amounts associated with a VA rating.

44. C. Adam Bee and Joshua W. Mitchell, *Do Older Americans Have More Income Than We Think?* Working Paper SEHSD-WP2017-39 (Census Bureau, July 2017), <https://tinyurl.com/5kmcdmhc>; Bruce D. Meyer, Wallace K. C. Mok, and James X. Sullivan, "Household Surveys in Crisis," *Journal of Economic Perspectives*, vol. 29, no. 4 (Fall 2015), pp. 199–226, <https://dx.doi.org/10.1257/jep.29.4.199>; and Charles F. Manski, "Communicating Uncertainty in Official Economic Statistics: An Appraisal Fifty Years After Morgenstern," *Journal of Economic Literature*, vol. 53, no. 3 (September 2015), pp. 631–653, <https://dx.doi.org/10.1257/jel.53.3.631>.

45. A study matching administrative data from the national income and product accounts to ACS responses found that amounts reported in the ACS for wages and salaries were at least 92 percent of the values reported in the administrative data; self-employment amounts, however, were one-half to one-third of administrative amounts depending on the year. See Jonathan L. Rothbaum, *Comparing Income Aggregates: How Do the CPS and ACS Match the National Income and Product Accounts, 2007–2012*, Working Paper SEHSD-WP2015-01 (Census Bureau, January 2015), <https://tinyurl.com/vxh33hkk>.

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About This Document

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CBO seeks feedback to make its work as useful as possible. Please send any comments to communications@cbo.gov.



Phillip L. Swagel
Director
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