This product is part of the RAND Corporation monograph series. RAND monographs present major research findings that address the challenges facing the public and private sectors. All RAND monographs undergo rigorous peer review to ensure high standards for research quality and objectivity.
This research was sponsored by the Office of the Secretary of Defense (OSD). The research was conducted within the RAND National Defense Research Institute, a federally funded research and development center sponsored by the OSD, the Joint Staff, the Unified Combatant Commands, the Department of the Navy, the Marine Corps, the defense agencies, and the defense Intelligence Community under Contract DASW01-01-C-0004.

Library of Congress Cataloging-in-Publication Data
Buddin, Richard J., 1951—
p. cm.
“MG-369.”
Includes bibliographical references.

UB373.B785 2005
362.4'086'970973—dc22
2005018315

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND’s publications do not necessarily reflect the opinions of its research clients and sponsors.

RAND® is a registered trademark.

© Copyright 2005 RAND Corporation
All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from RAND.

Published 2005 by the RAND Corporation
1776 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138
1200 South Hayes Street, Arlington, VA 22202-5050
201 North Craig Street, Suite 202, Pittsburgh, PA 15213-1516
RAND URL: http://www.rand.org/
To order RAND documents or to obtain additional information, contact
Distribution Services: Telephone: (310) 451-7002;
Fax: (310) 451-6915; Email: order@rand.org
Summary

Background

Both the Department of Defense (DoD) and the Department of Veterans Affairs (VA) pay disability compensation to military members who have been injured or whose injuries were aggravated while serving on active military duty. VA disability compensation depends on the individual’s degree of disability as a result of his or her injury. Implicit in this approach is the idea that the performance of physical tasks directly affects civilian earnings. The level of earnings before the injury does not affect the VA disability compensation that a service-member receives as a result of a disability.¹ This is in direct contrast to civilian disability compensation, which is tied to an employee’s pre-injury earnings.

Disability compensation for military personnel has received much attention recently, in part because of concern over those injured in the conflicts in Afghanistan and Iraq and whether they are receiving adequate compensation for their injuries. Another influence is the fact that the law affecting disability compensation recently changed to eliminate the offset between retired pay and disability compensation for those with a disability of over 50 percent and more

¹ Civilian earnings do not affect VA disability compensation, but member disability compensation offsets military retired pay for many retirees with a disability. Military retired pay does reflect the member’s rank and earnings.
than 20 years of service. More general influences pertain to advances in medical technology and changes in the workplace. The former results in far more effective rehabilitation efforts than in previous years. The latter affects the nature of the work done. Injuries that would make it much more difficult to carry out the agricultural or manufacturing tasks that were common years ago may not have much effect on being able to do the jobs associated with the service- and knowledge-based economy. It is unclear whether the military disability system has adjusted adequately to the opportunities available today to disabled veterans.

The population of veterans with a service-connected disability comprises four groups:

1. **Nonmedical military retirees.** Most retirees earn military retirement benefits by completing 20 or more years of active-duty service. Some of these retirees leave the military with some service-connected disability, or a disability may develop after leaving the military that is related to an injury or health problem during their active-duty service.

2. **Medical military retirees.** Some members are injured and are determined by a physical evaluation board to be unfit for military service. These members are discharged from the military and draw military retired pay that is a function of the severity of their disability, their years of service, and military retired pay.²

3. **Veterans who receive disability severance.** These members are injured and unfit to continue on active duty. They are given a lump sum payment as compensation for their disability and are discharged from the service. In general, members draw a disability

---

² Active-duty personnel retire from the military with either a nondisability or disability retirement. Nondisability retirement is based on length of service—usually 20 or more years. A portion of nondisability retired veterans have a service-connected disability and are eligible for military disability compensation. Although, technically speaking, these retirees are “nondisability retired veterans with a disability,” for expositional purposes of this research, we label this group “nonmedical military retirees.” DoD may also grant a disability retirement to servicemembers who are unfit to perform their duties for medical reasons. Disability retirees are labeled “medical military retirees.”
severance instead of a medical retirement if their injuries are less severe and their time in the military is short.

4. **Other disabled veterans.** Some individuals are injured in the military, but the injury is not severe enough to preclude their continued service or the completion of their term of service. After leaving the military, they are eligible for military disability compensation for these injuries. This group will have less time in the service than the retirees (nonmedical military retirees with disabilities and medical retirees).

A portion of this analysis focuses on the civilian labor market opportunities of military retirees. The analysis compares the civilian labor force participation and earnings of retirees with and without service-connected disabilities. In principle, a parallel analysis could examine the nonretiree, veteran population and compare the earnings of disabled and nondisabled veterans. No systematic data were available on the population of nonretiree veterans, however, so this analysis is restricted to the population of military retirees.

Military disability compensation is based on the Veteran’s Affairs Schedule for Rating Disabilities (VASRD). Military members are given medical evaluations and assigned disability ratings in 10-percentage-point intervals based on their medical conditions or limitations. By federal regulation, the ratings are designed to “represent as far as can practically be determined the average impairment in earning capacity resulting from such diseases and injuries and their residual conditions in civil occupations.”

The earnings capacity criterion means that compensation should be based on a comparison of what an individual could have earned in the absence of a disability and what he or she could earn with the disability. For the expositional purposes of this research, we label this loss in earnings capacity an *earnings loss*.

An alternative possible criterion for computing disability compensation would be to compare what an individual could have earned

---

in the absence of a disability with what he or she actually earns after the injury. The distinction between this absolute earnings loss and a loss of earnings capacity is subtle—the absolute earnings loss may exceed the loss of earnings capacity if an individual reduced his or her labor market work after an injury by more than would be “necessary.” For example, if an injury severely impairs civilian wage opportunities, then the individual may leave the labor force or reduce the amount of work, especially if military retirement and disability income along with savings and spousal income provide sufficient funds for living. The absolute earnings loss for a nonworking disabled retiree would then be the average individual earnings of similar nondisabled retirees (some working and some not). In contrast, the loss in the earnings capacity associated with the disability would be the difference between the earnings of a nondisabled retiree and the potential earnings of a similar disabled retiree who had actually worked—or at least had worked as much as his or her physical disability allowed.

The VASRD does not explicitly make allowances for pain and suffering associated with a service-connected disability unless these factors in some way affect civilian earnings. Disabled individuals may have more frequent or extended unpaid absences from work for health reasons. If so, these absences would reduce earnings and be reflected in the rating schedule.

**Purpose**

This research reviews the goals and effectiveness of current policies for compensating veterans with service-connected disabilities. It identifies trends in veterans’ disabilities, compares the military disability system with that used by civilian firms, and describes the effect of military disability on civilian labor market outcomes.
Civilian Labor Market Opportunities for Disabled Retirees

Service-connected disabilities may affect how much a military retiree is able to work, how much work is available in the workplace, and a retiree’s earnings in the workplace. The analysis of civilian labor market opportunities focused on retirees under age 62, since many military retirees begin to retire from the civilian labor force at that age.

The analysis focuses on four labor market outcome measures:

1. **Labor force participation.** Disabilities may affect whether retirees work in the civilian labor force as well as how much they work. About 84 percent of nondisabled retirees work, compared with 74 percent of disabled retirees. A statistical model shows how retirees’ disability ratings affect the extent of work in the civilian sector.

2. **Earnings of full-time workers.** About 55 percent of disabled retirees under age 62 work full time in the civilian labor market (i.e., they work at least 50 weeks per year and 35 hours per week). A model compares earnings for disabled retirees with those of similar nondisabled retirees, conditional on full-time work.

3. **Earnings of full- and part-time workers.** The model for full-time workers is expanded to include retirees who work only a portion of the year. About 74 percent of disabled retirees work either full- or part-time in the civilian labor market. The results are conditional on labor force participation and the number of weeks worked by the retiree.

4. **Earnings of workers and nonworkers.** About 16 and 26 percent of nondisabled and disabled retirees, respectively, are out of the civilian labor force for the entire year and have no civilian wage earnings. Nonparticipation rates are higher for retirees with disabilities, but there is no evidence on what nonparticipants might have earned if they had worked. This model assigned nonearners a value of zero for annual wage earnings and combines these “earnings” with those of full- and part-time workers. The model is complete in that all retirees are included, but the assumption of zero earnings for nonearners is likely to provide us with a lower bound on earnings for individuals who choose not to work.
The results show that labor market involvement varies considerably with the level of a retiree's disability rating. Labor force participation rates are much lower for severely disabled retirees than for nondisabled retirees—about 85 percent of nondisabled retirees work, but the participation rates are 10 and 66 percentage points lower for retirees with 50 and 100 percent disability ratings, respectively. Disabilities have a much smaller effect on how much work is performed by labor force participants. The reduction in weeks worked is only two weeks and five weeks for retirees with ratings of 50 and 100 percent, respectively. Hours worked per week vary little with the disability rating.

Retirees with less-severe disabilities have labor market involvement much more similar to nondisabled retirees. The median disability rating is 30 percent. At the median, the reduction in labor force participation is only four percentage points. Among participants, the weeks and usual hours for retirees with a 30 percent disability are not statistically different from those of nondisabled retirees.

The reasons for not working or reduced work are not clear, but the evidence shows that many retirees are reducing their work for reasons other than their disability. The results show that 43 percent of disabled retirees claim that they have no limit on the type or amount of civilian work that they can perform. Even among nonworkers with a disability, 20 percent claim that they have no work limitations. Most severely disabled retirees do report limitations on their work, however.

The first earnings model shows that earnings losses for disabilities are small for full-time workers. It indicates that many disabled retirees, especially those with relatively low levels of disability, are doing well in the civilian labor market. The other two models add first part-time workers and then nonworking retirees. These models show larger earnings losses for disabled retirees. A serious analytic problem for the models is the lack of information on what part-time workers or nonworkers may have earned in the labor force. The models for all workers and all retirees implicitly assume that all retirees work as much as possible in the labor market.
The results from all three earnings models show that the VA disability compensation for each disability rating is higher than the corresponding earnings loss. A more complete assessment of the disability compensation examines the extra value of the payment to the individual after adjusting for the combination of the offset, concurrent receipt, and tax exemption of disability compensation. On net, these adjustments scale down the payments to retirees with ratings less than 50 percent (disability compensation is mostly offset by retired payments) and scale up the payments to retirees with ratings of 50 percent or greater.

The results show that the adjusted payments for nonmedical retirees are insufficient to compensate retirees with small injuries for their earnings loss. The gap for full-time retirees ranges from $172 to $432 per year for ratings at the 10 and 40 percent levels, respectively. The gap grows to $476–$3,886 per year if we use the model for all retirees and account for reduced participation of disabled retirees.

More seriously disabled nonmedical retirees receive substantially more adjusted disability compensation than their estimated earnings loss. Among full-time workers, the net gain is $8,273 per year for a 50 percent disability rating; it rises to $36,123 for a 100 percent disability rating. The magnitude of the gains falls considerably when we consider the results from the model for all retirees including nonparticipants. Then, the net gain is $2,966 per year for a 50 percent disability and $14,153 per year for a 100 percent disability.

Consistent with section 1414(b) of title 10, United States Code, severely disabled medical retirees do not fare nearly as well as other disabled retirees because they are not eligible for concurrent receipt. The disability compensation for medical retirees is linked more directly to member pay and military experience at the time of the injury. Medical retirees comprise about 19 percent of all disabled retirees. Although medical retirees are not eligible for concurrent receipt, they have lower retired pay than nonmedical retirees because

---

4 More specifically, as full concurrent receipt becomes effective over the next few years for nonmedical retirees, severely disabled retirees will be overcompensated relative to their earnings loss.
they leave the military at lower ranks and with fewer years of military service. As a result, the disability compensation of medical retirees with disability ratings of 50 and above is not fully offset by their retired pay.

For full-time workers, the results show that the adjusted payments to medical retirees with disability ratings of less than 50 percent are slightly lower than their earnings losses. Among more severely disabled medical retirees, the earnings gains for full-time workers range from $5,736 per year at a 50 percent rating to $25,352 per year at a 100 percent rating.

As with nonmedical retirees, the magnitude of the earnings losses for medical retirees rises considerably when we look at the results from the model for all retirees including nonworkers. Medical retirees are undercompensated for their earnings losses in nine of ten ratings categories, with the magnitude of the losses ranging from about 1 to 11 percent of earnings per year.

Conclusions

Military and Civilian Philosophies of Disability Compensation Differ
Military and civilian disability programs differ in fundamental ways. Civilian programs focus on replacing a portion of workers’ earnings because they cannot work while recovering from an injury. The military, on the other hand, continues a member’s full pay and benefits if he or she is unable to work. If unable to return to duty, a military member is discharged with a military retirement or a disability severance. Civilian programs replace earnings; military programs supplement earnings on the assumption that those earnings are depressed as result of the disability. The military system is notably more generous than the civilian system in paying for short-term work loss.

Both Military and Civilian Systems Face Substantial Program Growth
Disability rates are rising rapidly, so programs in both sectors can expect substantial growth. The increase for military retirees was 22 percent points between the 1971 cohort and the 2001 cohort (35
percent to 57 percent). Because military disability compensation con-
tinues for life, the higher rates in recent cohorts will translate into 
higher future expenditures.

Disability Compensation Is Adequate to Offset Most Labor Market 
Losses from Service-Connected Disabilities

The comparisons of earnings for military retirees show that disabled 
retirees are less likely to work, work fewer weeks per year, and earn 
less than their counterparts without disabilities. The magnitude of 
these differences depends critically on two factors. First, the gaps are 
large for severe disabilities, but they are not large for the disabilities 
with ratings less than 50 percent. About 71 percent of disabled retir-
ees have disability ratings in the latter range. Second, the earnings 
losses from disability are sensitive to what assumptions are made 
about why retirees work either less or not at all. We cannot fully as-
certain the full reasons for reduced participation, but the losses are 
certainly higher if we attribute all the reduced participation to dis-
ability-related causes.

The comparison of earnings loss under a variety of assumptions 
shows that disability compensation is adequate. The VA disability 
compensation schedule is designed to reflect the loss of civilian earn-
ings capacity associated with a disability. The results from the earn-
ings models show that this schedule payment is systematically higher 
than the earnings loss for each rating. The story becomes more com-
plicated if the focus is on how much extra income the retiree receives. 
The value of the VA payment is affected by the offset with retired 
pay, the tax-exempt status of the receipt, and the phasing-in of con-
current receipt for retirees with disabilities of 50 percent or greater. 
With these adjustments, the results show that retirees with disability 
ratings of less than 50 percent receive slightly less than their earnings 
losses, whereas retirees with larger disabilities will be substantially 
overcompensated as the concurrent-receipt provisions are phased in.

Our labor market analysis has three limitations. First, the analy-
sis is limited to military retirees. Similar data are not currently avail-
able for nonretiree veteran groups (the disability severance and other 
disabled veteran groups), but this type of analysis would be useful to
further clarify the adequacy of military disability compensation programs. Second, this analysis looks at labor market outcomes of retirees several years after they have left the military and have adjusted to civilian labor markets. Service-connected disabilities may have consequence for how quickly retirees and other veterans find civilian work and what their earnings are at these initial civilian jobs. Finally, labor market results show only one dimension of disability effects of retirees. Injuries and disabilities diminish quality of life through pain and suffering as well as through limitations on household and leisure-time activities.

The Military Disability System Is Complex
The military disability is complex—unduly so, in our judgment. DoD and the VA evaluate injuries by somewhat different criteria. In addition, the compensation associated with a service-connected disability is based on a combination of military retired pay, the VA disability compensation schedule, and the offset of military retired pay. These complexities mean that it is difficult to assess why a member has received a given disability rating and harder still to assess how this disability rating translates into some incremental monthly income. In our view, these complexities are likely to confuse and frustrate veterans and policymakers alike.

Measuring Disabilities
An important issue for all disability systems is how to assess the validity of the current method of determining disability. Both systems are rooted in the history of medical decisions about performing in a workplace that differs greatly from the one that retirees find today. In addition, many retirees who are assigned VA disability ratings report that they have no health- or disability-related limitations on their civilian sector work.
Recommendations

We recommend that DoD consider the following actions:

• *DoD should determine why military disability rates for retirees are rising.* If the rising rates reflect rising injuries, then the higher cost may be necessary. But if the rising rates indicate an increasing laxness in applying the standards, the increased costs will provide little benefit to the military.

• *DoD should develop a more coherent system for measuring the economic loss from an injury.* Should it be measured in terms of civilian earnings, quality of life, or some other criteria? Disability compensation should be clearly defined as a specific payment that compensates for the effect of the injury. The current system confounds retired pay and disability compensation in formulas that make it difficult to determine how much of the payment is associated with the disability.

• *DoD and the VA should determine how well the current system assesses the effect of a disability on a member’s earning potential in the civilian sector.* This study shows small differences in labor market outcomes (participation and earnings) between disabled and nondisabled retirees. This finding suggests that the physical limitations measured in the VA disability schedule are weak indicators of labor market success.

• *DoD and the VA should collect better information on the civilian earnings of the nonretiree veteran population (veterans with disability severance and other disabled veterans).* Nonretiree veterans have less severe injuries than the retiree population, but the earnings losses for retirees may be a poor indication of the opportunities for the population of nonretiree veterans. Nonretiree veterans are younger and have less military experience than military retirees, so their civilian labor force outcome may differ somewhat from that of military retirees.