

# **SOCIAL SECURITY DISABILITY INSURANCE PROGRAM WORKER EXPERIENCE**

ACTUARIAL STUDY NO. 123

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## TABLE OF CONTENTS

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<b>I.</b>	<b>ENTITLEMENT TO DISABILITY INSURANCE BENEFITS .....</b>	<b>1</b>
A.	Disability Insured Status .....	1
B.	Filing an Application .....	1
C.	Definition of Disability .....	2
D.	Waiting Period .....	2
<b>II.</b>	<b>EXPERIENCE OF DISABILITY DETERMINATIONS .....</b>	<b>3</b>
A.	Substantial Gainful Activity (SGA).....	3
B.	Listing of Impairments .....	3
C.	Residual Functional Capacity (RFC).....	3
D.	Determination and Appeals Process.....	4
E.	Determination Experience of DI Program .....	4
<b>III.</b>	<b>EXPERIENCE OF DISABILITY INCIDENCE AND AWARDS .....</b>	<b>7</b>
A.	History .....	7
B.	Diagnostic Group Experience .....	8
C.	Award and Incidence Experience.....	9
<b>IV.</b>	<b>EXPERIENCE OF DISABILITY BENEFIT TERMINATION.....</b>	<b>11</b>
A.	Background .....	11
B.	History .....	12
C.	Recent Experience .....	13
D.	Actuarial Analysis—Death (2006-10).....	14
E.	Actuarial Analysis—Recovery (2006-10) .....	16
F.	Actuarial Analysis—Death or Recovery (2006-10).....	17
G.	Annuity Tables.....	17
<b>V.</b>	<b>STUDY POPULATION AND METHODS.....</b>	<b>91</b>
A.	Overview .....	91
B.	Data Considerations .....	91
C.	Data Selection .....	91
D.	Methods .....	91
E.	Entitlement Age and Exposure.....	92
F.	Duration and Graduation .....	92
G.	Continuance Tables .....	92
H.	Expected Future Time on Rolls .....	93
I.	Probabilities and Absolute Rates .....	93
J.	Annuity Tables.....	93
K.	Adjusted Decrement Rates.....	94
<b>VI.</b>	<b>TUTORIAL .....</b>	<b>99</b>
<b>VII.</b>	<b>GLOSSARY.....</b>	<b>105</b>



## LIST OF TABLES

Table	Description	Page
<b>HISTORICAL TABLES</b>		
1	Disposition of Worker Applications for Disability Benefits, by Level of Review .....	18
2A	Disabled Worker Benefits Awarded: Percentage Distribution, by Impairment Category.....	19
2B	Disabled Worker Benefits In Current-Payment Status: Percentage Distribution, by Impairment Category .....	20
3	Disabled Worker Benefits Awarded .....	21
4	Disabled Worker Incidence Rates Per Thousand Exposed .....	22
5	Disabled Worker Benefit Terminations, Conversions, and Ratios to In-force .....	23
6	Disabled Worker Benefits In Current-Payment Status .....	24
<b>DEATH EXPERIENCE BY ENTITLEMENT AGE AND DURATION (2006-10)</b>		
<i>Probability of Death</i>		
7A	Male Disabled Workers .....	27
7B	Female Disabled Workers .....	28
7C	Disabled Workers Age 76 and Older.....	29
<i>Benefit Continuance Tables (excluding recovery)</i>		
8A	Male Disabled Workers .....	30
8B	Female Disabled Workers .....	31
8C	Disabled Workers Age 76 and Older.....	32
<i>Expected Time on Combined Rolls (excluding recovery)</i>		
9A	Male Disabled Workers .....	33
9B	Female Disabled Workers .....	34
9C	Disabled Workers Age 76 and Older.....	35
<i>Absolute Death Rate Per Thousand Entitled</i>		
10A	Male Disabled Workers .....	36
10B	Female Disabled Workers .....	37
10C	Disabled Workers Age 76 and Older.....	38
<i>Aggregate Probability of Death and Expected Time on Combined Rolls (excluding recovery)</i>		
11	Disabled Workers, by Entitlement Age .....	39
12	Disabled Workers, by Attained Age .....	40
13	Disabled Workers, by Duration.....	41

## **RECOVERY EXPERIENCE BY ENTITLEMENT AGE AND DURATION (2006-10)**

	<i>Probability of Recovery</i>	
14A	Male Disabled Workers .....	45
14B	Female Disabled Workers .....	46
	<i>Benefit Continuance Tables (excluding death)</i>	
15A	Male Disabled Workers .....	47
15B	Female Disabled Workers .....	48
	<i>Expected Time on DI Rolls (excluding death)</i>	
16A	Male Disabled Workers .....	49
16B	Female Disabled Workers .....	50
	<i>Absolute Recovery Rate Per Thousand Entitled</i>	
17A	Male Disabled Workers .....	51
17B	Female Disabled Workers .....	52
	<i>Aggregate Probability of Recovery and Expected Time on DI Rolls (excluding death)</i>	
18	Disabled Workers, by Entitlement Age .....	53
19	Disabled Workers, by Attained Age .....	54
20	Disabled Workers, by Duration .....	55

## **COMBINED EXPERIENCE BY ENTITLEMENT AGE AND DURATION (2006-10)**

	<i>Probability of Death or Recovery</i>	
21A	Male Disabled Workers .....	59
21B	Female Disabled Workers .....	60
	<i>Benefit Continuance Tables</i>	
22A	Male Disabled Workers .....	61
22B	Female Disabled Workers .....	62
22C	Disabled Workers Age 76 and Older .....	63
	<i>Expected Time on Combined Rolls</i>	
23A	Male Disabled Workers .....	64
23B	Female Disabled Workers .....	65
	<i>Expected Time on DI Rolls</i>	
24A	Male Disabled Workers .....	66
24B	Female Disabled Workers .....	67
	<i>Aggregate Probability of Death or Recovery and Expected Time on the Rolls</i>	
25	Disabled Workers, by Entitlement Age .....	68
26	Disabled Workers, by Attained Age .....	69
27	Disabled Workers, by Duration .....	70

## ANNUITY TABLES

### *Life Annuity*

28A	Male Disabled Workers (Annual Due) .....	73
28B	Male Disabled Workers (Annual Immediate) .....	74
28C	Male Disabled Workers (Monthly Due) .....	75
28D	Male Disabled Workers (Monthly Immediate) .....	76
29A	Female Disabled Workers (Annual Due) .....	77
29B	Female Disabled Workers (Annual Immediate) .....	78
29C	Female Disabled Workers (Monthly Due) .....	79
29D	Female Disabled Workers (Monthly Immediate) .....	80

### *Life Annuity to Age 66*

30A	Male Disabled Workers (Annual Due) .....	81
30B	Male Disabled Workers (Annual Immediate) .....	82
30C	Male Disabled Workers (Monthly Due) .....	83
30D	Male Disabled Workers (Monthly Immediate) .....	84
31A	Female Disabled Workers (Annual Due) .....	85
31B	Female Disabled Workers (Annual Immediate) .....	86
31C	Female Disabled Workers (Monthly Due) .....	87
31D	Female Disabled Workers (Monthly Immediate) .....	88



## LIST OF FIGURES

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Figure	Description	Page
1	Substantial Gainful Activity Amounts for the Disability Insurance Program 1965-2015 .....	3
2	Disabled Worker Awards by Age Group, Calendar Years 1990-2014 .....	9
3	Disabled Worker Terminations and Conversions, Calendar Years 1990-2014 .....	13
4	Disabled Worker Termination and Conversion Ratios, Calendar Years 1990-2014 .....	13



## **INTRODUCTION**

The Social Security Old-Age, Survivors, and Disability Insurance (OASDI) program makes monthly income available to insured workers and their families at retirement, death, or disability. The OASDI program consists of two parts. Retired workers, their families, and survivors of deceased workers receive monthly benefits under the Old-Age and Survivors Insurance (OASI) program. Disabled workers and their families receive monthly benefits under the Disability Insurance (DI) program.

The most recent work dedicated to analyzing the experience of worker beneficiaries under the DI program is Actuarial Study #122, *Social Security Disability Insurance Program Worker Experience* (May 2011). That earlier study examined historical data with regard to disability incidence and benefit termination through calendar year 2009. A comprehensive analysis of termination activity of the DI rolls was also presented based on 100 percent worker data collected for the 5-year period 2001-05. The overall content of Actuarial Study #123, and the methods used to prepare those results, are consistent with those of the prior study; namely, disability incidence and benefit termination is examined through calendar year 2013, and a comprehensive analysis of termination activity is presented for the 5-year period 2006-10. Details of the underlying methodology for table construction are outlined in the appendix of this study.

While this study provides extensive information on recent actual DI disabled worker experience, it does not report on the projected future operations of the DI Trust Fund, nor does it provide information on other types of disability benefits administered by the Social Security Administration. Much information on these other topics is available in various publications on our website at <http://www.ssa.gov/OACT>. In particular, projections of the future actuarial status and financial operations of the OASI or DI Trust Funds are presented in the *Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds* (see <http://www.ssa.gov/OACT/TR/2015/index.html> for the detailed information on the 2015 edition of that report).



# SOCIAL SECURITY DISABILITY INSURANCE PROGRAM

## WORKER EXPERIENCE

### I. ENTITLEMENT TO DISABILITY INSURANCE BENEFITS

The Social Security Old-Age, Survivors, and Disability Insurance (OASDI) program provides for monthly disability insurance benefits after the onset of a severe physical or mental impairment. To become entitled to such benefits a worker must:

- Be insured for disability under the Social Security Act;
- File a claim for disability insurance benefits;
- Meet the definition of disability set forth in the Act;
- Complete a 5-month waiting period; and
- Have not attained *normal retirement age* (see table below).

A worker's cash benefit is classified as an *award* at the time of initial payment. Additional auxiliary benefits may also be payable to other family members based on the earnings record of the entitled worker. This study analyzes the experience of disabled workers of the Social Security Disability Insurance (DI) program as described under title II of the Social Security Act.

#### Scheduled Changes in Normal Retirement Age

Year of birth	Normal retirement age
1937 and earlier .....	65
1938 .....	65, 2 mo
1939 .....	65, 4 mo
1940 .....	65, 6 mo
1941 .....	65, 8 mo
1942 .....	65, 10 mo
1943-54 .....	66
1955 .....	66, 2 mo
1956 .....	66, 4 mo
1957 .....	66, 6 mo
1958 .....	66, 8 mo
1959 .....	66, 10 mo
1960 and later .....	67

#### A. Disability Insured Status

To qualify for Social Security benefits for themselves and their dependents, individuals must work in employment covered by Social Security or be self-employed for a certain period of time. Credit for this work is based on the amount of wages or self-employment income earned and is measured in quarters of coverage (QCs), or *credits*.<sup>1</sup>

<sup>1</sup> In 2015, a worker receives one credit (up to a maximum of four) for each \$1,220 of annual covered earnings. This amount is indexed each year by the increase in average wages. For determining QCs, different rules apply to earnings before 1978, and a simplified method applies for the 1937-50 period.

Entitlement to any benefit depends on whether the number of credits earned by a worker is sufficient to meet various insured status requirements. To be considered for disability benefits, a worker must be *disability insured*. This requires having obtained a specific number of credits in recent quarters, as well as enough total credits to be *fully insured*—at least 6 and no more than 40 credits are required for this insured status.<sup>2</sup> The recency-of-work test is satisfied if the worker has earned at least 20 credits during a 40-quarter period that ends with the quarter in which the disability begins.

A special recency-of-work test for younger workers provides an alternative to the 20/40 requirement. A worker who becomes disabled before the quarter in which he or she attains age 31 satisfies the special test requirement if credits have been earned for at least one-half of the quarters during the period beginning with the quarter after the quarter the worker attained age 21, and ending with the quarter in which the disability began. If this period contains 12 or fewer quarters—that is, if the disability begins in the quarter the worker attains age 24 or earlier—then a minimum of six credits must be earned in the 12-quarter period ending with the quarter in which the disability began.

Note that an individual who is disabled because of statutory blindness is not required to satisfy the recency-of-work test. Disability insured status is granted if the worker is fully insured only.

#### B. Filing an Application

An individual must file an application to become entitled to benefits. In general, a claimant may file for DI benefits at any time after onset of disability. A claimant who files after the first month he could have been entitled to benefits may receive retroactive benefits for up to 12 months immediately prior to the month of filing.

Retroactive benefits are also payable for any month of entitlement beginning with the month of filing and leading up to the month of award. The number of months of retroactive benefits paid in these instances ultimately depends on how long it takes to receive a favorable determination of disability.

<sup>2</sup> A fully insured worker has at least one credit (whenever acquired) for each year starting with the year the worker attains age 22 and ending with the year before the year the worker attains age 62, becomes disabled, or dies (whichever occurs earliest)—credits are not required for years that are partially or fully within a period of disability.

A claimant may also file for benefits no later than 12 months after the month in which the disability ends. In these instances, retroactive benefits are payable only for those months of entitlement within the 12-month period immediately prior to the month of filing. For purposes of establishing a closed period of *disability freeze*<sup>3</sup>, there are exceptions where the claimant is allowed to file no later than 36 months after the month in which disability ends.

### C. Definition of Disability

For purposes of entitlement to DI benefits, *disability* is defined as the inability to engage in any substantial gainful activity (SGA) by reason of any medically determinable physical or mental impairment. The impairment must be expected to result in death or to last for a continuous period of at least 12 months—called the *duration requirement*. Specifically, the disability must prevent the claimant from performing previous work, or engaging in any other kind of work in which a significant number of jobs exist. It doesn't matter whether or not such work is available in the claimant's immediate area, or whether the claimant would be hired upon applying for work.

SSA uses a five-step sequential evaluation process to decide whether disability exists. Claim processing for title II benefits of the Act stops as soon as a determination—favorable or unfavorable—can be reached.

**Step 1—Determine if claimant is engaging in SGA.** If the claimant is working and the work is SGA, then the claimant is not disabled for Social Security purposes. Otherwise, the adjudicator continues with claim processing.

**Step 2—Determine if impairment is “severe”.** The adjudicator will rule against a claim of disability if the impairment or combination of impairments do not significantly limit the claimant's physical or mental ability to do basic work activities. Otherwise claim processing continues.

**Step 3—Determine if the severity of the impairment(s) meets or medically equals a set of criteria in the Listing of Impairments.** The adjudicator will rule in favor of a disability if the impairment is counted among examples of impairments that

the agency considers severe enough to prevent the claimant from engaging in SGA, and the duration requirement is met. Otherwise claim processing continues.

**Step 4—Determine if the claimant has the residual functional capacity (RFC) to do his or her past relevant work.** The adjudicator will assess what the claimant is still able to do despite any limitations imposed by the impairment(s). If past work duties cannot be accomplished, then claim processing continues.

**Step 5—Determine if the impairment prevents claimant from engaging in any other work that exists in significant numbers in the national economy.** The adjudicator will rule in favor of a disability if the claimant is unable to perform any other work given his or her RFC, age, education, and work experience, and the duration requirement is met. Otherwise the claimant is found to be not disabled for Social Security purposes.

The same definition of disability is applied to each of the following types of adult claimants:

- Disabled worker;
- Disabled child age 18 or over based on a disability which occurred before age 22;
- Disabled widow(er) or surviving divorced spouse, age 50-59, of a person who died fully insured—for benefits payable after December 1990;
- Disabled adult under the Supplemental Security Income (SSI) program as described under title XVI of the Social Security Act—this means-tested cash benefits program is also administered by the Social Security Administration (SSA).

SSA uses special provisions for the evaluation of disability in cases of statutory blindness, and widow(er) or surviving divorced spouse benefits payable before January 1991.

### D. Waiting Period

The waiting period for DI benefits consists of 5 consecutive full calendar months beginning with the earliest full calendar month throughout which the worker satisfied both the disability insured requirements and definition of disability. Benefits are not payable during the waiting period. However, the waiting period is waived for individuals who had a prior period of disability which ended within 5 years of the current period of disability. In contrast, there is no waiting period for disability benefits under the SSI program.

<sup>3</sup> Freeze provisions were enacted to preserve the rights of individuals who are under a disability. Under these provisions, a worker's earnings record can be “frozen” at a time he or she qualifies for a period of disability, thereby preserving insured status and preventing loss of future disability or retirement benefits which are computed without considering periods of disability.

## II. EXPERIENCE OF DISABILITY DETERMINATIONS

SSA takes applications for worker disability benefits through field staff over the phone, in person in one of 1,300 local field offices, or over the internet. State agencies make disability and blindness determinations under regulations containing performance standards and other administrative requirements. Prior to a medical determination of disability, a claim may be denied for technical reasons, if the claimant:

- Is not disability insured;
- Is engaging in SGA;
- Dies before being disabled for 5 full months;
- Is not under normal retirement age (NRA).

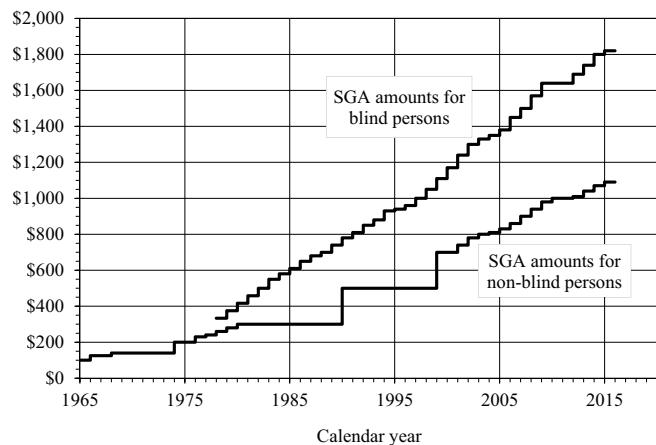
Upon satisfying the technical aspects of the determination process, claims are forwarded to the state Disability Determination Services for medical determination. The subsections below discuss in greater detail the following items: SGA, the impairment listings, residual functional capacity, the determination and appeals process, and the determination experience of the DI program.

### A. Substantial Gainful Activity (SGA)

*Substantial work activity* involves doing significant physical or mental activities; *gainful work activity* is done for pay or profit. In determining whether work is SGA, the state agencies consider things such as the nature and quality of the claimant's work, whether special conditions or equipment are needed to do the work, the amount of time spent at work, and earnings. Special evaluation guidelines exist for self-employed persons—agencies must measure the value of the claimant's services to the operation of the business, number of hours worked, skills, efficiency, and responsibilities.

SSA establishes certain earnings criteria to indicate whether an individual is engaging in SGA. The monthly dollar amount associated with defining SGA is specified in Federal regulations, and was originally set at \$100 at the inception of the DI program. This amount was updated on an ad hoc basis until January 2001, at which time the regulations were revised to provide for annual indexing of the SGA level based on the increase in average wages. From 1990 through 2000, the SGA level actually consisted of a primary amount and a lower secondary amount. Earnings above the primary amount ordinarily demonstrated SGA, whereas earnings less than the secondary amount demonstrated lack of SGA; earnings between the two amounts required consideration of all circumstances related to work activity. This tier structure was discontinued beginning in 2001. Since 1977, blind persons have been subject to a separate SGA amount.<sup>4</sup> **Figure 1** shows a history of these SGA amounts.

**Figure 1.—Substantial Gainful Activity Amounts for the Disability Insurance Program 1965-2015**



### B. Listing of Impairments

To establish a disability, claimants must provide sufficient evidence of any medical condition in the form of symptoms, clinical signs, and laboratory findings. As mentioned in the description of step 3 of the sequential evaluation process outlined in section I, SSA's *Listing of Impairments* is used to determine the severity of the disability. The listings are a set of medical evaluation criteria in the Federal regulations that describe physical and mental conditions which are so severe that it is presumed that individuals whose medical conditions meet or equal these criteria are disabled regardless of their age, education, or work experience. The listings are arranged by body system (musculoskeletal, cardiovascular, mental, etc.) and include both diagnostic and severity criteria.

Many individuals are found to be disabled even though impairments fail to meet the level of severity detailed in the listings. In these cases, an individual's medical condition is evaluated in conjunction with age, education, and job skills. These *vocational factors* are given increasing weight with the advancing age of the worker, and are particularly significant in determining disability among workers age 50 or older.

### C. Residual Functional Capacity (RFC)

Impairments and related symptoms, such as pain, may limit the ability to work. Residual functional capacity measures the most an individual can do given the physical and mental limitations. Careful assessment of RFC is the foundation of steps 4 and 5 of the sequential evaluation process. Limited ability to

<sup>4</sup> As of 2015, a blind individual earning over \$1,820 per month (net of impairment-related work expenses) is ordinarily considered to be engaging in SGA. The comparable amount for non-blind individuals is \$1,090 per month.

perform certain physical demands such as sitting, standing, walking, lifting, carrying, pushing, pulling, reaching, handling, or stooping may reduce the ability to do work. Similarly, a limited ability to carry out certain mental activities like understanding, remembering, following instructions, or responding appropriately to supervision may reduce the ability to do work.

Along with RFC, age and education play a vital role in step 5 of the evaluation process. When it comes to age, it is generally considered that younger persons (under 50) will be able to adjust to other work. Greater consideration is given to age and education for those approaching advanced age (50-54); and it is assumed that persons of advanced age (55 or older) are significantly hindered by vocational factors in their ability to adjust to other work.

#### **D. Determination and Appeals Process**

Regulations describe the process of administrative review performed by the Disability Determination Services (DDS) and the Office of Disability Adjudication and Review (ODAR). The DDS develops medical evidence and renders the initial determination of whether the claimant is disabled or blind under the law. If dissatisfied with the initial DDS decision, the claimant may request further administrative review by the DDS, ODAR, and beyond to the federal courts. The review process consists of several steps, which must be requested within specified time intervals, and in the following order:

- *Initial determination.* This is the original determination made by the DDS regarding entitlement to benefits.
- *Reconsideration.* If dissatisfied with an initial determination, the claimant may ask the DDS to reconsider it.
- *Hearing before an administrative law judge (ALJ).* If dissatisfied with the reconsideration determination, the claimant may appeal to ODAR and request a hearing before an ALJ.
- *Appeals Council (AC) review.* If dissatisfied with the decision of the ALJ, the claimant may request that the AC review the decision. This constitutes the administration's final decision.
- *Federal court review.* If dissatisfied with the administration's final decision, the claimant may request judicial review by filing an action in a Federal district court.

In general, appeals must be filed within 60 days after the date the claimant receives notice of the previous determination or decision. The claimant or a representative, such as an attorney, may submit new material evidence supporting the claim during any step of the review process. Failure to appeal a determination or decision within the stated time period will result in loss of the right to any further administrative or judicial review.

Many factors exist that affect the number of disability claims filed as well as the rate at which these claims are allowed or denied. However, the impact of any one factor is difficult to gauge. In general, economic, demographic, and administrative factors all have a direct effect on the size and scope of the DI program. Below is a list of determinants which can significantly influence the number of claims filed and/or the rate of favorable determinations<sup>5</sup>:

- The rate of unemployment in the U.S. economy;
- The level or "attractiveness" of DI benefits vis-a-vis loss of income;
- Level of the SGA amount;
- Changes in labor force participation or shifts in part-time work which can affect insured status;
- Population growth and demographic shifts such as the aging of the baby-boom generation;
- Technology to enhance the ability to work;
- Medical advancements or breakthroughs in the treatment of specific disorders;
- Changes in regulations, standards, or methods used to determine medical eligibility;
- Revisions to disability guidelines or impairment listings;
- Amount of administrative funding to process caseloads and backlogs;
- Level of ODAR and Federal court involvement in the appeals process;
- Results of appeals and class action suits challenging SSA's interpretation of the law;
- Actions by Federal, State, and local governments to increase program awareness or encourage enrollment.

#### **E. Determination Experience of DI Program**

**Table 1** presents data on the disposition of DI claims across the various stages of medical review, for calendar years 2002-2013. The data are tabulated by year of filing and level of review, as well as program involvement—showing claims for DI benefits only or concurrent entitlement to DI and SSI benefits. Although both programs use the same definition of disability for adults, eligibility for SSI benefits is further dependent upon the claimant's countable assets and income, which may include DI benefits.

The number of claims forwarded to the DDS for DI disabled worker benefits grew nearly 30 percent from 1.43 million in 2006 to 1.84 million in 2010. More than two-thirds of this growth occurred in the years following the Great Recession of 2008, as high levels of unemployment combined with the gen-

<sup>5</sup> For discussions on these topics, the reader is referred to *Trends in the Social Security and SSI Disability Programs* (Muller et al., August 2006), and *The Social Security Disability Insurance Program—an Analysis* (Department of Health and Human Services, December 1992).

eral effect of the aging of the baby-boom generation. Since 2010, the number of claims has fallen by roughly 10 percent to 1.64 million in 2013, even though the baby-boom continues to progress through the peak ages of disability. Opposing economic factors appear to be having a greater effect on applications after 2010. Clearly the number of claims decreases as people go back to work, but additionally labor force participation rates—which have reached their lowest levels since the late 1970s as those unable to find work stop looking and drop out of the labor force—indicate potential claimants may no longer satisfy the recency-of-work test for DI insured status.

### **DDS Initial Determinations**

As shown in table 1, the number of favorable initial determinations as a percentage of total claims processed steadily decreased from 37.1% in 2002 to 34.4% in 2006 before rising back to 37.1% in 2009 then dropping again through 2011. Determination experience for 2012-13 is still largely incomplete. The baby-boom continues to pass through their 50s incurring high incidence of musculoskeletal, circulatory, and neoplastic disorders. The appeal rate of initial denials fluctuates around 55%.

Allowance rates tend to be much lower among those concurrently filing for DI and SSI benefits than those filing for DI benefits only. This may be due to differences in the composition and economic status of the filers. Concurrent filers tend to be of lesser means (reflective of the nature of the SSI program) and are thus more likely affected by changes in the economy. Often the only alternative to unemployment is to seek aid from Federal, State, or local programs. Therefore, concurrent filers may have less severe disabilities, may provide less evidence of impairment, or are less likely to afford legal representation. The result is a lower proportion of allowances.

For years with pending workloads at the initial and reconsideration levels, it is likely that the allowance rates will ultimately be higher than those shown in table 1. This is due to the fact that denials are processed more quickly than allowances at these stages, leaving more allowances in pending workloads. As the workloads are processed and the allowances are realized, the allowance rate rises. The opposite is true at the ODAR level where favorable decisions are processed more quickly than unfavorable decisions, leaving more denials in pending workloads. So it is likely that the ODAR allowance rates will ultimately be lower than those shown.

### **DDS Reconsideration**

After a less than fully favorable initial determination, a claimant may appeal for a reconsideration at the DDS in all but 10 States (see Miscellaneous Items below for details). Allowance rates at the reconsideration level have been very consistent. Although the reconsideration stage is *de novo*<sup>6</sup> in concept, it is similar to the initial stage in that disability determination is

mostly a “paper review” process where claimants are rarely observed by the decision-maker. Assuming some uniformity among the initial decision-makers, it follows that initial denials are overturned at reconsideration in only a relatively small proportion of cases appealed.

### **Appeals Beyond DDS**

Claimants wishing to appeal a reconsideration determination—or initial determination for States without a reconsideration level—may request a hearing before an ALJ. Since the interpretation of evidence in assessing disability can be highly subjective, overturned decisions at ODAR and beyond occur frequently. Factors that contribute to the high reversal rate include:

- A group of decision-makers different from those at the initial and reconsideration stages;
- Changes in the nature and degree of the claimant’s impairment over time;
- Use of legal representation and the opportunity to submit new material evidence supporting the claim; and
- Initial face-to-face contact with decision-makers.

### **Miscellaneous Items**

Because the way in which the disability process operates has changed over time, we provide some background information to help interpret the data presented in table 1. First, beginning in the late 1990s SSA undertook the testing of a variety of alternative approaches to the disability determination process with the goal of streamlining the process while still providing accurate decisions as early in the process as possible. One of the largest such tests has been referred to as the *Prototype Model*. Major features of this model include providing additional authority for the DDS examiners in making initial disability determinations, and the elimination of the reconsideration step in the appeals process. This test continues to be run in 10 States representing roughly 25 percent of the initial disability determination workload. The results shown in table 1 reflect a mixture of experience combining the standard decision process with the prototype process, as well as other smaller test processes.

In the past, public pressure has surfaced in controversial areas. Changes in regulations, standards, and methods used to determine the severity of a disability—sometimes in response to legislation or legal suits—have shaped DDS determinations, ODAR decisions, and SSA policy in general. Major topics for deliberation have included:

- Mental impairment issues and obesity;
- The amount of leverage given to allegations of pain;

<sup>6</sup>That is, a case is reviewed in its entirety and a new decision is made unrelated to the initial decision.

- Evaluation of musculoskeletal and circulatory disorders;
- Statements by treating physicians in the absence of clinical evidence; and
- The use of vocational factors in the absence of a single debilitating impairment.

Other developments in the disability area deserve mention. The *electronic disability (eDIB)* process has substantially streamlined the storage and processing of claim data. As of January 2006, all state DDSs had begun using electronic disability folders. Furthermore, beginning in August 2002, claimants have been able to apply for disability benefits online.

The electronic environment allowed SSA to develop two fast-track processes to allow expeditious determinations of certain claims. The *quick disability determination (QDD)* process uses a predictive model to identify claims that have a high potential of allowance, and for which medical evidence can be easily obtained. Claims are automatically referred from the field office to the DDS whose aim is to complete the determination expeditiously.

Similar to QDD but having a slightly less complex “scoring” criteria is the *compassionate allowance (CAL)* initiative, which is designed to quickly identify diseases and conditions that are highly likely to qualify under the Listing of Impairments even with minimal, but sufficient, medical information. If the condition does not strictly meet these criteria, it is not designated as a CAL case. For the rollout of the initiative in the fall of 2008, fifty conditions were selected to meet the CAL guidelines. The list has since been expanded to include roughly 225 conditions such as early-onset Alzheimer’s disease, spinal cord injuries, and various cancers. A CAL case is identified solely on the claimant’s allegation of a disease or other medical condition that appears on the CAL list.

The fast-track initiatives represent a small but growing proportion of total DI worker claims filed. SSA identified 176,200 initial-stage QDD claims in fiscal year 2013, up from 163,600 in FY 2012. CAL claims totaled 10,800 in FY 2013 and 8,200 in FY 2012. Together, fast-track claims made up roughly 11 percent of total DI worker claims in FY 2013.

### III. EXPERIENCE OF DISABILITY INCIDENCE AND AWARDS

#### A. History

Since the payment of the first disability cash benefits in July 1957, the characteristics of the DI program have been shaped by congressional action, public opinion, and court rulings. Program fundamentals such as the definition of disability, the entitlement process, the level of benefits, and the review process for current beneficiaries ultimately determine program cost.<sup>7</sup> Prior to 1960, the DI program applied only to workers age 50 or older. Prior to 1965, a claimant needed to be permanently disabled to qualify for benefits. The *Social Security Amendments of 1967* (Public Law 90-248) eased the insured status requirements for persons under age 31, allowing a substantial number of young beneficiaries to enter the rolls. Then beginning in 1970, program growth began to accelerate for a number of reasons (see table).

Disabled Worker Benefits Awarded (1957-1990 Social Security DI disability experience)	
Year of award	Total
1957	178,802
<sup>1</sup> 1958	131,382
<sup>2</sup> 1959	177,811
1960	207,805
1961	279,758
1962	250,634
1963	223,739
1964	207,592
1965	253,499
1966	278,345
1967	301,359
1968	323,154
1969	344,741
1970	350,384
1971	415,897
1972	455,438
1973	491,616
1974	535,977
1975	592,049
1976	551,460
1977	568,874
1978	490,809
1979	440,519
1980	420,276
1981	381,016
1982	336,055
1983	428,461
1984	409,970
1985	416,103
1986	424,877
1987	420,295
1988	415,331
1989	430,678
1990	472,103

<sup>1</sup> January-November.

<sup>2</sup> Includes December 1958.

Source: *Annual Statistical Supplement to the Social Security Bulletin* (1957-74); SSA administration records (1975-90). See table 3 for awards in 1991 and later.

<sup>7</sup> For further discussions on the history of the DI program, the reader is referred to the *50th Anniversary of the Social Security Disability Insurance Program* (Social Security Bulletin Vol. 66, No.3 2005/2006).

The introduction of the Black Lung program (1970) and the SSI program (1974), and a severe economic recession (1974-75) led to hundreds of thousands of new DI claims. In particular, the SSI program requires applicants to apply for benefits from other programs—including DI—which may offset SSI benefits. As expediency in processing applications was naturally given high priority, the fraction of preeffectuation reviews of DDS initial allowances by the central office fell to roughly 5 percent in 1972 from 70 percent before 1972. This resulted in far more effectuations of allowances than would have otherwise occurred under the more stringent quality control efforts.

The automatic indexing of benefits by the cost-of-living adjustment (COLA) legislated in 1972 contributed to a dramatic increase in replacement rates. The ratio of annual benefits to past earnings rose from 50 percent to roughly 70 percent by the end of the decade. Not only was the agency paying out more in benefits, but it was thought that high replacement rates made benefits more “attractive”, thus providing incentive to file among individuals with a possible qualifying disability. And to those already on the DI rolls, high replacement rates may have created disincentive to leave the program and return to work.

Another trend seen in the early 1970s was the greater tendency of applicants to appeal an unfavorable decision. This significantly increased the number of awards made at the reconsideration and hearings levels, and further contributed to the sharp increase in awards from 1972-76.

In an effort to bring the cost of disability benefits under control and stabilize replacement rates, the *Social Security Amendments of 1977* (Public Law 95-216) revised the formula for determining benefits awarded in 1979 and later. Under the new calculation, the replacement rate for the average earner was projected to remain stable at around 40 percent. The *Social Security Disability Amendments of 1980* (Public Law 96-265) also had a significant impact on the DI program. The 1980 amendments introduced a more restrictive limit on the total monthly amount of Social Security benefits payable on a disabled worker’s account—allowing for higher total family benefits under the old-age program as compared to disability. For those eligible, this provided incentive to apply for or switch to old-age benefits in lieu of disability benefits.

In addition, the amendments mandated DDS performance standards and a preeffectuation review of 65 percent initial DDS allowances. This led the DDSs to give more careful consideration to allowances, and increased the chances of not effectuating an initially favorable determination.

The most controversial provision of the 1980 amendments was the requirement that SSA conduct a continuing disability review at least every 3 years for beneficiaries whose disability may not be permanent. The termination of a large number of beneficiaries (particularly among the mentally impaired) was met with intense public outcry. A temporary moratorium was placed on the review of the disability rolls pending a thorough review of the standards for evaluating certain mental impairments. Although many of those terminated were returned to the rolls through the appeals process, awards continued to decline steadily from 1977-82 prompting SSA's disability determination policies to come under fire through court appeals and class action suits.

By 1984, DI program policy had undergone another reversal. In response to the clamor over certain provisions of the 1980 amendments, Congress passed the *Social Security Disability Benefits Reform Act of 1984* (Public Law 98-460). Provisions of the Act include: revised mental impairment standards; increased emphasis on treating physician opinion; emphasis given to the combined effects of multiple impairments in the absence of a single severe impairment; required proof of medical improvement prior to termination of benefits; and standards to evaluate pain.

One significant pattern that emerged following the 1984 amendments involved beneficiaries with mental impairments. The revised listings reduced the weight given to medical factors and put greater emphasis on functional capabilities. By 1988, the proportion of awards for mental impairments had exceeded 20 percent, roughly twice the proportion experienced in 1982.

The early 1990s brought a period of rapid growth. The number of awards to disabled workers over 1991-95 were roughly 48 percent higher than the previous 5-year period (1986-90). Amidst a recession during which the unemployment rate rose above 7 percent, mental disorders continued to grow, comprising more than one-quarter of new awards by 1992. In partial response to this rapid growth, Congress enacted the *Contract with America Advancement Act of 1996* (Public Law 104-121), which provided for dedicated funding to conduct continuing disability reviews, and a change in policy for drug addiction and alcoholism to exclude from eligibility individuals for whom DA&A is a materially contributing factor in disability.

The *Ticket to Work and Work Incentives Improvement Act of 1999* (Public Law 106-170) established the Ticket-to-Work program, expedited reinstatement provisions for beneficiaries terminated for returning to work, and increased the period of extended Medicare coverage for disabled beneficiaries.

There were other notable events that shaped the experience of disability incidence. In 1999, obesity disorders were eliminated from the listings. In 2001, SSA discovered several hundred

thousand SSI recipients who, due to incorrect determination of insured status, potentially became disability insured because of earnings while receiving SSI, making them eligible for DI benefits. SSA completed processing of this *special disability workload (SDW)* in 2011, which on average added roughly 20,000 disabled worker awards per year over the 2003-10 period. In 2002, SSA issued a new musculoskeletal listing. In 2003, the legislated increase in the normal retirement age began with those attaining age 65 in that year with corresponding increases in DI worker awards at ages greater than 64. Finally, the large spike in awards in 2008-10 followed by the decline in 2011-14 reflects the severe economic recession which began in the first quarter of 2008 and the gradual recovery over the last several years.

### **B. Diagnostic Group Experience**

**Table 2A** shows the distribution by impairment for awards to DI disabled workers. The leading diagnostic categories for disability entitlement vary by gender and year of award. The share of musculoskeletal disorders has increased steadily every year since 1995 and has been the largest single category of impairment since 2002. Over the 5-year period 2009-13, 33.8 percent of all awards were attributable to this category—a trend that is largely explained by demographics. As the baby-boom generation ages through their most disability-prone years, arthritic, back, and bone disorders become more prevalent.

The apparent jump in the percentage of musculoskeletal impairments in 1995 can be explained by a change in reporting method. Prior to 1995, SSA reported the diagnosis of awards based on the distribution of allowances at the initial level. Allowances at the appeals level were then assumed to have the same diagnostic groupings as those at the initial level. Beginning in 1995, the information used to tabulate awards by diagnostic group was expanded to include diagnostic information from the reconsideration step of the appeals process. In addition, diagnosis information from reconsideration denials was used to infer a distribution of awards made at the ALJ level and beyond. These changes revealed a significantly higher proportion of musculoskeletal impairments at the appeals level as can be observed by the sudden jump in the number of musculoskeletal awards in 1995. The accompanying drop in the percentage of mental impairments in that year suggests that at least some of the awards in this category were among those misclassified under the old reporting method. Beginning in 2003, SSA developed a more direct way of assigning diagnoses for all awards regardless of decision level.

Mental impairments rank second in overall percentage of awards, but have been on a slight downtrend since 2002. Mental disorders were the leading cause of disability among each sex until 1996 and accounted for 19.5 percent of all awards over 2009-13. A slight jump in mental disorders occurred over

2003-05 due, in part, to the processing of the SDW. Many of the resulting awards from this misplaced cohort were for individuals diagnosed with a mental disorder.

Among males, circulatory disorders have always been a leading cause of disability, accounting for over 13 percent of awards over the last 10 years. Neoplastic disorders account for roughly 10 percent of total awards. Though not shown in the table, there are nearly four times as many circulatory impairments among those age 50 or older as among those age 35-49; and three times as many neoplastic disorders for the same age comparison. Although medical advancements continue against these impairments, their concentration at the older ages suggests they will continue to significantly impact the DI rolls as the population ages.

Neoplastic, nervous, and respiratory disorders rank higher among females, whereas circulatory disorders and injuries rank higher among males. The impairment listings were changed in 1999 to eliminate awards based solely on obesity, accounting for the large decline in the percentage of nutritional and metabolic impairments beginning in 2000.

**Table 2B** shows the distribution by impairment for DI disabled workers in current-payment status. Similar to table 2A, categories are rank-ordered by average percentage of impairments on the DI rolls over the 5-year period 2009-13. Due to differences in mortality and recovery rates among the different types of impairments, the current pay ranking can be quite different than the award ranking. Notably, mental disorders maintain the highest ranking among current pay but were less than one percentage point above musculoskeletal in 2013. And overall, impairments of the nervous system which are ranked 5th in awards are 3rd in current pay; and neoplastic impairments which are 4th in awards drop to 7th in current pay.

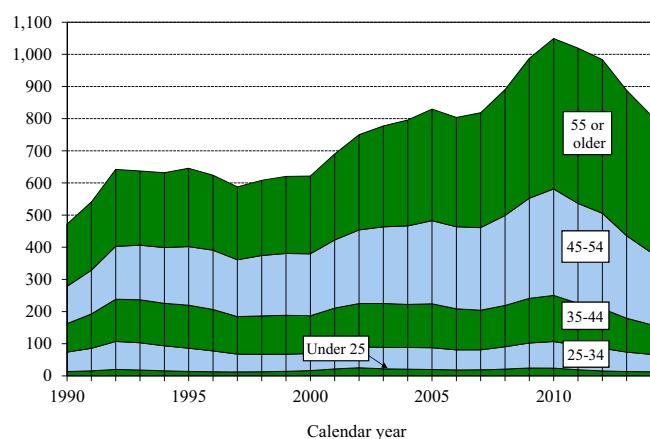
### C. Award and Incidence Experience

**Table 3** shows the number of DI disabled workers awarded benefits by sex and *calendar age*—the age attained on the birthday in the year the individual is awarded benefits—at time of award, for calendar years 1991-2014. This historical series is also illustrated in **figure 2**.

**Table 4** shows the associated disabled worker incidence rates, which are expressed as annual awards per thousand disability insured not already receiving benefits. Adjusted figures are based on the age and sex distributions of the exposed population as of 2000.

**Figure 2.—Disabled Worker Awards by Age Group (1990-2014)**

(In thousands)



Tables 3 and 4 are tabulated as of the year the beneficiary is added to the rolls. However, the year of award may actually be different from the year of disability onset or entitlement. Factors such as the waiting period, disability determination, and the claims and appeals process can delay payments for months or possibly years. So the incidence rates shown are not exactly representative of true morbidity rates for the stated calendar years.

The chance of suffering a disability impairment naturally increases with advancing age. Furthermore, in the disability determination decision, SSA must consider education, work experience, and the ability to adjust to other work given the claimant's age when the impairment does not meet or equal a listing. For claimants under age 50, SSA generally does not consider age to seriously affect the ability to adjust to other work. For claimants ages 50 to 54, SSA will generally consider that age will somewhat affect the ability to adjust, while claimants age 55 or older are considered to be significantly affected in their ability to adjust to other work.

Rates shown in table 4 for ages 60 and older are likely to underestimate the true incidence of impairment in the insured population because beginning at age 62, a disabled worker may elect to receive old-age benefits instead of disability benefits. This decision is influenced by a number of factors: the chance for higher maximum family benefits under old-age as compared to disability; avoidance of disability benefit reduction because of Federal or State workers' compensation offset<sup>8</sup>; or desire to avoid the potentially arduous application process and possibility of benefit denial.

<sup>8</sup> Offset is applied when total DI benefits payable to the worker and any auxiliaries, plus workers' compensation and/or public disability payments exceed 80 percent of the worker's average current earnings.

Age-specific disability incidence among female workers is typically lower than males. However beginning in the late 1990s, female incidence began to exceed that for males at ages 30-54. Although both genders were experiencing a general decline in incidence beginning in the mid-90s, the decline is more pronounced among males. This is likely due to the elimination of DA&A as a disabling impairment and a sharp decline in HIV impairments, both of which are predominantly male incidence categories. Note that the decline in incidence rates among females did not come from a decline in the number of awards, but rather from an increase in the exposed population. Over the 10-year period ending in 1996, female labor force participation among ages 35-54 increased between 3.5-10.0 percentage points. This contributed significantly to the additional 10.7 million females that became disability insured in that period; for the same age range, male labor force participation decreased by roughly 2.0-2.5 percentage points.

Some of the same factors that affect the number of DI applicants can also affect incidence rates. In general, a decline in incidence between 1975-82 (not shown) is attributable, in part, to stricter program administration. Following a generally declining period in incidence from 1983-89, the program experienced a surge in claims beginning in 1990, and incidence rates rose significantly and remained relatively high through 1995. The economic and political environment of the late 1990s featured robust economic expansion, low unemployment, and restrictions on DA&A and obesity impairments. In addition, continuing advancements in medical treatment, employer-sponsored healthcare, and an opportunity to build wealth in booming investment markets provided incentive to remain in the labor force and contributed to the decline in applications and awards during this period.

The sharp increase in incidence rates over 2001-05 represents a departure from the experience of the late 1990s, which generally showed modest annual declines in the age-sex-adjusted rate. While the aging of the baby-boom is always recognized as a factor in program growth, the increase in incidence in 2001 is likely due in large part to the severe economic contraction experienced in that year. It is also likely that the special administrative activity previously mentioned also had an impact—

namely, the disability redesign initiatives (late 1990s) and the identification and processing of the special disability workload (beginning in 2001).

The legislated increase in NRA beginning with those born in 1938 had an obvious and significant effect on the number of disability awards to individuals age 65 or older starting in 2003. The increase in NRA may have become an incentive to seek disability benefits for older workers facing higher actuarial reductions for early retirement.

After a substantial increase over 2008-10—thought to be attributable to the recession—incidence rates have subsided over the last few years as the economy recovered. The drop in incidence over 2011-14 is due to the combination of fewer awards and a slight uptick in the insured population which put downward pressure on disability incidence rates. The decline, however, may have been slightly constrained since many did not return to work and eventually dropped out of the labor force. This left the insured population slightly lower than it otherwise would have been.

**Table 5** presents historical conversion and termination data for disabled workers. Termination experience is discussed in detail in the next section.

**Table 6** shows the number of disabled workers in the *current-payment* population, at the end of calendar years 1991-2014. Other DI beneficiaries may have their benefits suspended for reasons such as engagement in SGA following completion of a trial work period, refusal of vocational rehabilitation services, and imprisonment. Because of the increase in NRA beginning with individuals born in 1938, DI beneficiaries age 65 or older appear for the first time in 2003.

As shown in the table below, the number of beneficiaries in current-payment status and *in force* (current-pay plus *suspensions*) began to grow rapidly beginning in the latter half of the 1980s. The expansion continued throughout the 1990s as the current-pay population increased 68.5 percent. The 2000s saw a slightly smaller increase of 59.9 percent. The growth in the *in-force* population is the difference between awards and terminations, as shown in the table.

**Growth in the DI Disabled Worker Rolls, by Calendar Period**  
(Numbers in Thousands)

Calendar period	In force beginning of period	Awards	Conversions/Terminations	In force end of period	Suspensions end of period	Current-payment	
						Number end of period	Growth rate <sup>1</sup>
1975-79	2,251.3	2,643.7	2,012.4	2,882.6	14.1	2,868.5	-
1980-84	2,882.6	1,975.9	2,241.3	2,617.1	24.9	2,592.2	-9.6%
1985-89	2,617.1	2,107.3	1,787.9	2,936.4	45.9	2,890.6	11.5%
1990-94	2,936.4	2,924.2	1,841.5	4,019.2	61.0	3,958.2	36.9%
1995-99	4,019.2	3,086.5	2,132.0	4,973.8	103.6	4,870.2	23.0%
2000-04	4,973.8	3,635.1	2,304.9	6,303.9	105.7	6,198.2	27.3%
2005-09	6,303.9	4,329.9	2,704.9	7,928.9	140.9	7,788.0	25.6%
2010-14	7,928.9	4,751.1	3,587.7	9,092.3	137.8	8,954.5	15.0%

<sup>1</sup> Percentage increase from the beginning of the period to the end of the period.

## IV. EXPERIENCE OF DISABILITY BENEFIT TERMINATION

### A. Background

DI disabled worker beneficiaries stop receiving worker benefits when they die, recover from their disabling condition, or return to work (disabled workers who remain on the DI rolls until NRA—currently age 66—are converted to retired worker status):

- *Death.* The last month of disability entitlement would be the month prior to the month of death. Beneficiary death accounted for 76 percent of total disabled worker terminations in 2014.
- *Recovery.* Beneficiaries who have had a medical recovery or successful, sustained re-entry to the workforce are removed from the DI rolls. Typically the last month of disability entitlement would be the second month after the month of recovery.<sup>9</sup> Recoveries accounted for 22 percent of total disabled worker terminations in 2014.

Under the Old-Age and Survivors Insurance program (OASI), a disabled worker benefit is automatically converted to a retired worker benefit in the month the beneficiary attains NRA.<sup>10</sup> Since *conversions* are simply a transfer of beneficiaries from the DI Trust Fund, the “conversion” rate is 100 percent for disabled workers reaching NRA. After conversion, recovery from disability is no longer relevant, and the last month of DI entitlement is the prior month.

Beginning at age 62, a disabled worker may elect to receive old-age benefits in lieu of disability benefits. Although most disabled beneficiaries stay in the DI program until NRA, some choose to switch. One of the most common reasons is the receipt of workers’ compensation benefits. WC benefits may partially or totally offset a DI benefit, but would not affect an OASI benefit. Another factor is the difference between the less-generous maximum family benefit payable under the DI program and the maximum payable under the OASI program.

Recovery from disability occurs when the beneficiary is judged to no longer meet the definition of disability either because there is medical improvement, or the individual demonstrates the ability to engage in SGA. The DDS or the central office will conduct a *continuing disability review (CDR)* upon, for example:

- Coming due of a scheduled CDR;
- Posting of substantial earnings;<sup>11</sup> or
- Receipt of vocational rehabilitation reports of medical improvement.

<sup>9</sup> Benefits may continue if the individual is currently enrolled in a vocational rehabilitation program, or has entered an extended period of eligibility.

<sup>10</sup> Switching to old-age benefits prior to normal retirement age is not normally considered a *conversion*. This type of benefit termination would fall in the miscellaneous category.

We mention an important caveat with regard to interpreting termination rates: *Absent any changes in the underlying rate of medical improvement, certain outside factors can impact the level of CDR activity and, in turn, the disability recovery rates.* These factors include the size of disability backlogs, budget restrictions, and legislation. Clearly, CDRs can be pursued vigorously only with adequate funding. Less obviously, these factors can affect the composition of the disabled worker population by influencing the nature of allowances and the likelihood of recovery.

Exogenous variables can also impact the overall mortality of the DI rolls. For instance, changes in the way medical impairments are adjudicated, the elimination of DA&A and obesity from the listings, and a greater number of allowances based on vocational factors may artificially lower overall disability mortality.

The Social Security Act contains several provisions to encourage beneficiaries to return to work despite their impairment:

- Trial work period;
- Extended period of eligibility;
- Extension of Medicare coverage;
- Expedited reinstatement; and
- Waiver of the waiting period.

#### **Trial Work Period (TWP)**

The *trial work period* provision allows the disabled beneficiary to do substantial work for 9 months—not necessarily consecutive—without losing any benefits. A month is not counted as a trial work month (“service month”) unless the beneficiary earns above a specified amount, or for self-employment, works a specified number of hours.<sup>12</sup> Earnings during the service months are not counted toward SGA, and benefits will continue as long as the beneficiary has not medically recovered. Note that work performed during a TWP cannot be used as the basis for determining that disability has ceased.

#### **Extended Period of Eligibility (EPE)**

Following the TWP and a 3-month grace period, beneficiaries who work at the SGA level in any month lose their benefit for that month. For continued incentive to work, the *extended period of eligibility* provision allows the disabled beneficiary to have benefits reinstated for any month in which work activity falls below the SGA level. The reentitlement period begins with the month immediately following completion of the TWP

<sup>11</sup> The Ticket to Work Act of 1999 prohibits initiation of a CDR during the period that a beneficiary is using a ticket; and under certain circumstances, prohibits the use of work activity as a reason for review. These provisions became effective January 1, 2002.

<sup>12</sup> In 2014, a service month is counted towards the TWP if earnings for that month exceed \$770. A self-employed worker can also be charged with a service month if work activity exceeds 80 hours.

and ends 36 months later. However, if the beneficiary is not engaging in SGA when the reentitlement period ends, the provision allows benefits to continue until SGA is performed. Of course, at any time during the TWP or EPE, if the beneficiary is found to have medically recovered then all benefits are terminated.

### **Medicare Coverage**

After 24 months of disability entitlement, a beneficiary becomes eligible for Medicare coverage—regardless of age—and receives services as long as DI entitlement continues. In the case of an individual engaging in SGA, coverage is provided throughout the TWP and EPE. Medicare benefits were further extended through a provision of the Ticket to Work Act of 1999: effective October 1, 2000, coverage for beneficiaries who return to work will generally continue for an additional 57 months beyond the EPE.

### **Expedited Reinstatement (EXR)**

The Ticket to Work Act also allows certain previously terminated beneficiaries to request *expedited reinstatement* of disability benefits in the event of impairment-related cessation of SGA. The provision provides a safety net for those who successfully return to work and, consequently, lose entitlement to disability benefits, but then find themselves unable to sustain the work effort. EXR allows an individual to request reinstatement without filing a new application, and provides up to six months of provisional (temporary) cash benefits while SSA conducts a medical review to determine whether the individual can be reinstated.<sup>13</sup> The request for reinstatement must be filed within 5 years of the termination of disability benefits. EXR became effective January 1, 2001.

### **Waiting Period Provisions**

Special provisions apply to persons disabled more than once. Individuals who become disabled within 5 years of the end of a previous period of disability are not required to satisfy the 5-month waiting period. In addition, the 24-month waiting period for Medicare coverage need not be consecutive months and may be satisfied by combining multiple periods of disability.

### **B. History**

Many variables can affect the rate at which beneficiaries are terminated from the disability rolls, including:

- Changes in normal retirement age;
- Overall disability mortality;
- CDR activity;
- Technology to enhance the ability to work;
- Advancements in medical treatment;
- Changes in legislation and in regulations.

<sup>13</sup> The claimant must be under a disability using the medical improvement review standards (MIRS) normally used in a CDR. The MIRS requires a sequence of evaluation different from that used in initial claims.

The *Social Security Amendments of 1965* (Public Law 89-97) modified the definition of disability by replacing the requirement of permanent disability with the requirement that the disability be expected to last at least 12 months. This led to the entitlement of less seriously impaired claimants and, therefore, lower mortality rates among the disabled. The 1967 amendments eased the insured status requirements for claimants under age 31. A growing presence of younger and relatively healthier beneficiaries on the DI rolls further contributed to the decline in DI mortality rates.

While mortality rates fell in the early years of the program, the rates of termination due to recovery generally increased, largely for the same reasons. With the introduction of government-funded rehabilitation programs, the elimination of the “permanently disabled” requirement, and the extension of benefits to younger claimants, the recovery rate among beneficiaries rose substantially through the late 1960s and remained high through the early 1970s. The recovery rate then decreased rapidly through 1975, due in large part to changes in the administration of the program. With the introduction of the Black Lung and SSI programs in the early 1970s, workload pressures resulted in the suspension or curtailment of some administrative review procedures. For example, by 1972 the central office reviewed only 10 percent of the cases in which expected medical recovery had not been found. By 1976, the recovery rate started to rise again due, in part, to the return to pre-1972 levels of 100 percent review of expected medical recoveries.

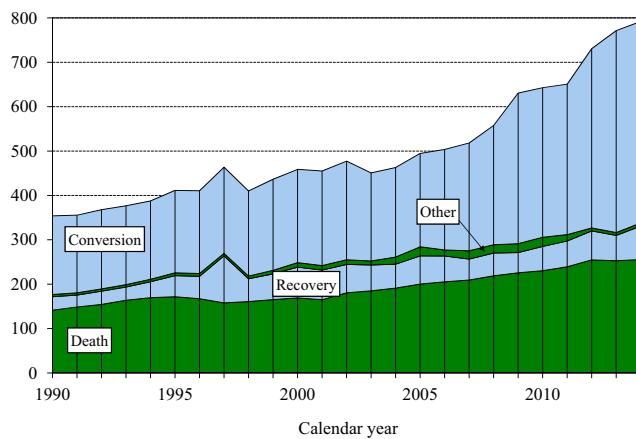
The substantial DI program growth in the 1970s created pressure for a more thorough review of the rolls. Under then-current policy, reviews were performed only when the beneficiary’s condition was expected to improve, or voluntary reports or posted earnings indicated work activity. As previously discussed, a significant provision of the 1980 amendments required that beneficiaries with non-permanent impairments be reviewed every 3 years, and permanently disabled beneficiaries be reviewed at intervals determined by the Commissioner. Using that legislative mandate, the Administration initiated a major review of the disability rolls that resulted in many terminations because it was determined that recovery had occurred.

After much public clamor over the new rules, a temporary moratorium was placed on the review of the rolls.<sup>14</sup> This caused the pendulum to swing the other way. Many persons were reinstated upon appeal, and legislation in 1984 imposed a medical improvement standard on the CDR process. The result was a sharp drop in recoveries through the rest of the decade.

<sup>14</sup> The moratorium applied to all cases on which an administrative or judicial appeal was pending on or after June 7, 1983. All persons claiming benefits based on mental impairment disability who received an unfavorable decision after March 1, 1981 were permitted to reapply within time constraints, as mandated in 1984 by Public Law 98-460.

In the latter part of the 1980s, the agency experienced reductions in both its work force and in administrative funding. By the early 1990s, without enough staff to handle both new claims and continuing disability reviews, the agency reduced the resources it committed to CDRs. Beginning in 1994, the number of initial claims began to level off and Congress enacted the *Contract With America Advancement Act of 1996* (Public Law 104-121) which included a provision authorizing the appropriation of funds to be used exclusively to conduct additional CDRs. The special funding helped the agency complete large numbers of backlogged periodic CDRs and become current with DI reviews by the end of 2000 and SSI reviews by the end of 2002. Since 2002, yearly funding constraints have hampered the timely review of all CDRs coming due based on matured medical diaries. As a result, SSA again faces a significant CDR backlog without sustained adequate funding.

**Figure 3.—Disabled Worker Terminations and Conversions, (1990-2014)**  
(In thousands)



### C. Recent Experience

**Table 5** shows a historical series of the number of disabled worker conversions and terminations, as well as conversion and termination ratios. Ratios are defined as the number of conversions or terminations to the average number of beneficiaries during the year. Most terminations occur as a result of death. With regard to conversions, there is a sharp decrease in 2003, which is the result of the increase in NRA.<sup>15</sup> The number of recoveries can vary considerably. This is sometimes the result of special circumstances, and may not indicate a change in the actual rate of recovery. As an example, the spike in recoveries in 1997 is the result of a provision which eliminated drug or alcohol addiction as a basis for disability entitlement.

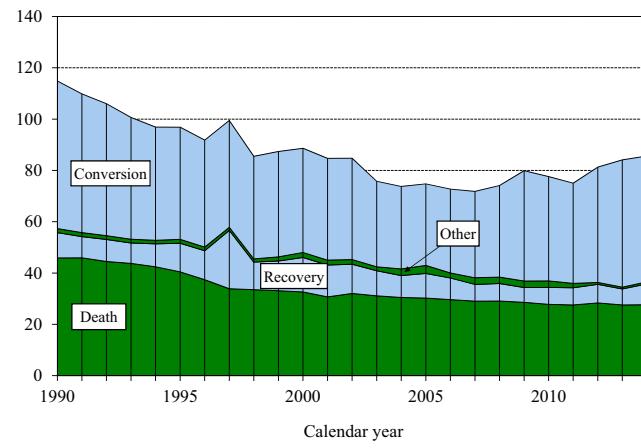
<sup>15</sup> This decrease is attributable to the increase in normal retirement age for the cohort born in 1938, resulting in the deferral of a portion of old-age conversions from 2003 to 2004. This pattern of deferral continues until NRA is 66 beginning with those born in 1943 resulting in a sharp increase conversions in 2009.

Although categorized in administrative records as “recoveries”, this group of beneficiaries was terminated from the rolls due to a change in law.

*Other* is a relatively small category comprised of beneficiaries terminated for various other reasons such as switching to old-age benefits prior to NRA.<sup>16</sup> Reasons for the switch are to avoid DI benefits that offset WC benefits, or to become entitled to an OASI family benefit. Notably, the size of this category was elevated throughout the 2000s due to the “termination” of a number of past-due-only awards which came out of the SDW workload. In many instances, only past due DI benefits were payable because the beneficiary had either died, recovered, or switched to old-age benefits by the time the case was processed. This type of SDW award was simultaneously counted as an “other” termination.

**Figure 3** shows the distribution of DI disabled worker terminations and conversions, while **figure 4** shows these categories divided by the average number of disabled worker beneficiaries. These ratios have been in a general decline since the early 1980s mostly because of two correlated trends that have developed over the years, namely, the reduction in the average age of beneficiaries and the increased share of mental and musculoskeletal disorders. Footnote 15 explains the sharp increase in conversions in 2009; and the leading edge of the baby-boom (1946-47 birth cohorts) began attaining NRA (66) causing an uptick in conversions over the last several years.

**Figure 4.—Ratio of Disabled Worker Terminations and Conversions to Average Number of Beneficiaries (1990-2014)**  
(Per thousand exposed)



As shown in the table below, the average age of male disabled workers in current-payment status steadily declined from 52.8 in 1980 to 49.8 in 1995; over the same period, the proportion of

<sup>16</sup> Although technically counted as a disability termination, in these situations the beneficiary remains entitled to the larger, but unpaid, disability benefit while becoming concurrently entitled to a reduced old-age benefit.

the DI rolls made up of beneficiaries aged 35-49 grew from 20 percent to 34 percent, while the proportion of those aged 50-65 fell from 71 percent to 55 percent. Similar trends were experienced among female disabled workers. A higher incidence of mental disorders led to a decrease in termination rates for mortality and conversion since these beneficiaries are younger and (physically) healthier on average.

Because of the post-war baby boom, the age pattern was reversed beginning in 1995. By 2014, the average male disabled worker in current-payment status was 53.7 years old; the

proportion of beneficiaries aged 35-49 declined to 21%; the proportion of those aged 50-65 grew to 74%. Similar trends were experienced among females.

As the baby-boom population ages, the DI rolls can be expected to have greater proportions of beneficiaries with musculoskeletal, circulatory, and neoplastic disorders. Just as progress in medicine has significantly contributed to longer life expectancy among the general population, it is likely to also have a considerable impact on some segments of the disability population.

### DI Disabled Workers in Current-Payment Status (Grouped by age at end of selected year)

Calendar year	Under 35		35-49		50-65		Total	
	Percentage of DI rolls	Average age						
<b>Male</b>								
1980	8.7%	29.2	20.0%	43.1	71.4%	58.4	100.0%	52.8
1985	9.9	29.4	22.9	42.5	67.2	58.6	100.0	52.0
1990	10.9	29.8	29.6	42.4	59.4	58.4	100.0	50.5
1995	10.2	29.9	34.4	42.7	55.4	57.8	100.0	49.8
2000	6.9	29.7	33.0	43.1	60.0	57.5	100.0	50.8
2005	6.5	29.1	28.4	43.5	65.1	57.8	100.0	51.9
2010	6.5	29.2	23.6	43.7	69.8	58.2	100.0	52.9
2011	6.4	29.4	22.7	43.7	70.9	58.3	100.0	53.1
2012	6.3	29.6	22.0	43.6	71.7	58.3	100.0	53.3
2013	6.1	29.7	21.3	43.5	72.6	58.4	100.0	53.5
2014	5.8	29.9	20.6	43.4	73.6	58.4	100.0	53.7
<b>Female</b>								
1980	7.3%	29.3	17.8%	43.2	74.9%	58.5	100.0%	53.7
1985	8.7	29.5	21.5	42.6	69.8	58.7	100.0	52.7
1990	9.8	29.8	29.1	42.6	61.1	58.3	100.0	50.9
1995	9.5	29.8	34.0	42.8	56.5	57.6	100.0	49.9
2000	6.8	29.8	33.2	43.1	60.1	57.4	100.0	50.8
2005	6.5	29.4	29.2	43.5	64.3	57.7	100.0	51.7
2010	6.0	29.6	25.1	43.6	68.9	58.0	100.0	52.7
2011	5.9	29.8	24.2	43.6	70.0	58.1	100.0	52.9
2012	5.6	29.9	23.4	43.6	70.9	58.2	100.0	53.1
2013	5.3	30.0	22.7	43.5	71.9	58.2	100.0	53.4
2014	5.0	30.2	21.9	43.4	73.1	58.3	100.0	53.6

Mortality rates continued to decline in the 1990s particularly after 1995. Contributing to the decline were the diminishing impact of HIV-related impairments and the new policy regarding DA&A. Other significant factors include: (1) a shift in the impairment mix to more musculoskeletal and mental disorders, which tend to be less life-threatening than circulatory or neoplastic disorders; (2) advancements in cancer treatments; and (3) a shift in the age mix to older disabled workers, whose determinations are often based on vocational factors rather than meeting a listing severity. Over the decade of the 2000s the gross death rate continued to decline to roughly 33 deaths per thousand males and 24 deaths per thousand females.

### **D. Actuarial Analysis—Death (2006-10)**

**Tables 7A-7C** show the probability of death for male and female DI disabled workers by age at entitlement to disability benefits, and *duration*—measured in completed years of disability entitlement. Data reflect the actual experience of the DI rolls from January 1, 2006 through December 31, 2010. The methods used in table construction and graduation are detailed in the appendix.

Mortality among disabled workers generally increases with entitlement age, albeit this trend can be heavily influenced by the severity-mix of disorders at different ages. Also, for any

given entitlement age, the probability of death is greatest during the first year of entitlement, then decreases dramatically during the second and third years of entitlement. Death probabilities tend to level off sometime around the fifth or sixth duration for males, and the third or fourth duration for females. For older entitlement ages, mortality trends upward in the later durations because of the effect of age. The sex differential in mortality in the disabled worker population is similar to that of the general population: mortality rates among male disabled workers are higher than female disabled workers for most attained ages. In the appendix we discuss how certain provisions in the law—such as the waiting period and the conversion to old-age benefits—affect the tabulation of mortality.

An analysis of broad age categories may explain some of the trends and characteristics of disability mortality. As of 2012, the top disorders for male awards under age 35 are mental (52%), musculoskeletal (13%), and nervous (10%). Following the predominant mental and musculoskeletal categories (combined 53%), ages 35-49 show a mix of circulatory (9%), nervous (9%), and neoplastic (7%) impairments. Ages 50 or older show the highest concentration of musculoskeletal (38%), along with considerable increases in circulatory (17%) and neoplastic (11%) disorders; though still an important category, the prevalence of mental impairments (9%) has declined considerably since the younger age groups.

Female trends are comparable to those of disabled males except for several differences in leading impairment categories. As of 2012, disabled females under age 35 show the highest concentration of mental (46%), musculoskeletal (16%), and nervous (12%) disorders. Ages 35-49 continue to show high incidence of mental and nervous impairments, along with large increases in musculoskeletal (31%) and neoplastic (9%) disorders. Ages 50 or older show the highest prevalence of musculoskeletal (44%), mental (12%), and neoplastic (11%) awards.

Disability mortality in the 5-year period covered by this study (2006-10) is lower than the previous 5-year period for 90 percent of all age-sex categories.<sup>17</sup> Among males, mortality in the more recent period is, on average, 8% lower—most attained ages experienced 5-15% reductions from the earlier period, while some younger entitlement ages may have experienced 20-30% reductions. Interestingly, the largest mortality improvements were in the first year of disability—*duration 0* in the tables—where there was an average reduction of over 12%. Males at entitlement ages 40-49 experienced 10% reduction in mortality and ages 50-59 experienced 12% reduction in mortality. Disabled females experienced similar reductions—mortality in the more recent period is, on average, 10% lower, and there were average reductions of 10% at duration 0, 9% at ages 40-49, and 13% at ages 50-59.

<sup>17</sup> Findings are based on comparisons with disability mortality tabulated for the period 2001-05 in Actuarial Study No. 122 *Social Security Disability Insurance Program Worker Experience* (Zayatz, May 2011).

The improvements are likely due to medical progress as well as the changing impairment mix of the rolls. The proportion of musculoskeletal disorders continues to increase while mental disorders are down slightly; together they make up 60 percent of total beneficiaries in current pay status over 2006-10 versus 58 percent for the prior 5-year period. Current pay beneficiaries with circulatory disorders fell to 9.0 percent from 9.9 percent. On average, musculoskeletal and mental disorders exhibit lower mortality than most other diagnostic groups, whereas circulatory disorders rank among the highest.

**Tables 8A-8C** show an assumed number of beneficiaries with benefit continuance over time for cohorts becoming entitled at various ages. These tables are based on the probabilities of death shown in tables 7A-7C. *Continuance tables* simplify the process of calculating the probability of continuing on the rolls for a given number of years. See the appendix for details on table construction and usage. In this context, *continuance* refers to beneficiaries who have not died and remain on the DI rolls.

**Tables 9A-9C** show the *expected future time* on the combined DI and OASI rolls—excluding the possibility of recovery—for disabled workers who have not yet died. Similar to the retired population, disabled females have a longer experience of continuance than males. Expected time on the rolls has a tendency to be higher in the second year of entitlement than in the first year of entitlement for older entitlement ages because of higher mortality during the first year on the rolls.

**Tables 10A-10C** show the *absolute rate of death* per thousand entitled disabled workers. These rates are derived from the probabilities of death shown in tables 7A-7C. In general, absolute rates consider only the effect of a single decrement in a multiple-decrement environment. For example, the absolute rate of death is disaggregated from the rate of recovery and reflects the rate of survival and ultimate termination under death only. The appendix gives further details.

**Tables 11** and **12** show the aggregate probability of death and expected future time on the combined DI and OASI rolls (excluding the possibility of recovery), by *entitlement* and *attained* age. Probabilities are based on aggregate counts of exposure and deaths across all durations. They represent the average probability of death within the next year for disability beneficiaries who became entitled at a particular age (table 11), or who have attained a particular age (table 12). Similarly, *expected future time* represents the average number of years a beneficiary will remain alive and on the rolls, as of a particular entitlement age or attained age. Values are exposure-weighted averages of the select-and-ultimate future times shown in tables 9A-9C and may be used as a general indication of the overall average lifetime of groups of disabled beneficiaries who share a particular entitlement or attained age.

**Table 13** shows the aggregate probability of death and expected future time on the combined DI and OASI rolls (excluding the possibility of recovery), as of a particular *duration*. Probabilities are based on aggregate counts of exposure and deaths across all entitlement ages, and represent the average probability of death within the next year. Similarly, *expected future time* represents the average number of years a beneficiary will remain alive and on the rolls, given the completed number of years of disability entitlement.

#### E. Actuarial Analysis—Recovery (2006-10)

**Tables 14A-14B** show the probability of recovery for male and female DI disabled workers by age at entitlement to disability benefits, and duration. In general, annual probabilities of recovery decline with advancing entitlement age. For any particular entitlement age, the probability of recovery exhibits a bimodal distribution that tends to peak during the second year of entitlement and then peaks again—frequently at a higher level—in the fifth year of entitlement. This pattern likely reflects the scheduling of Continuing Disability Reviews. Where *medical improvement is expected (MIE)*, the review is scheduled for 6 to 24 months following the most recent disability decision. Where *medical improvement is possible (MIP)* but less likely to occur within the first 2 years, the review is scheduled for 36 months later. Where *medical improvement is not expected (MINE)*, the review is scheduled between 5 and 7 years later.

According to data for title 2 disabled workers over the period 2006-10:

- Roughly 18% of full medical reviews fall in the MIE category and roughly 7.6% of these reviews ultimately result in cessation of benefits. This helps explain the first peak in recoveries.
- Roughly 75% of full medical reviews fall in the MIP category and roughly 5.5% of these reviews ultimately result in cessation of benefits. This helps explain the second peak in recoveries.
- The remaining 7 percent of full medical reviews fall in the MINE category and roughly 3.3% of these reviews ultimately result in cessation of benefits.

The probability of recovery for females is lower than males for almost 2/3 of attained ages (and 3/4 of attained ages less than 50). This is due, in part, to differences in the mix of impairments among men and women. Over the period 2006-10, 38% of awards to females under age 50 were for mental disorders, while awards to females over age 50 included 39% musculoskeletal and 21% circulatory and neoplastic. By comparison, 36% of awards to males under age 50 were for mental disorders, while awards to males over age 50 included 33% musculoskeletal and 29% circulatory and neoplastic. We think that

these types of impairments result in lower-than-average recovery rates—and longer expected times on the DI rolls—among females as compared to males.

The probability of recovery in the 5-year period covered by this study (2006-10) is lower than the previous 5-year period for almost 90 percent of all age-sex categories.<sup>18</sup> Among males, the chance of recovery in the more recent period is, on average, 28% lower—most attained ages experienced 15-40% percent reductions from the earlier period, while some younger entitlement ages experienced 50% reductions or more. The largest declines in the rate of recovery occurred in the fourth year of disability—*duration 3* in the tables—which saw an average reduction of over 55%. Entitlement ages 30-39 experienced 28% reduction and 40-49 experienced 22% reduction in recovery rates. Disabled females experienced similar reductions in recovery compared with the earlier period—overall female recovery rates are 26% lower, and there were average reductions of 54% at duration 3, 24% at ages 30-39, and 23% at ages 40-49.

Presumably the main reason for the decline in recovery rates is the reduction in funding for CDRs from the first half of the decade to the second half. In fact there were 1.39 million initial DDS decisions of medical CDRs conducted in the 2001-05 period, but only 567,000 in the 2006-10 period.<sup>19</sup>

**Tables 15A-15B** show an assumed number of beneficiaries with benefit continuance over time for cohorts becoming entitled at various ages. These tables are based on the probabilities of recovery shown in tables 14A-14B. In this context, *continuance* refers to beneficiaries who have not recovered and remain on the DI rolls.

**Tables 16A-16B** show the *expected future time* on the DI rolls—excluding the possibility of death—for disabled workers who have not yet recovered. The tables are discontinued at NRA since recovery is no longer tracked.

**Tables 17A-17B** show the *absolute rate of recovery* per thousand entitled disabled workers. These rates are derived from the probabilities of recovery shown in tables 14A-14B. The appendix gives details on the derivation of these rates.

**Tables 18** and **19** show the aggregate probability of recovery and expected future time on the DI rolls (excluding the possibility of death), by *entitlement* and *attained age*. Probabilities are based on aggregate counts of exposure and recoveries across all durations. They represent the average probability of

<sup>18</sup> Based on comparisons with disability recovery probabilities in Actuarial Study No. 122 *Social Security Disability Insurance Program Worker Experience* (Zayatz, May 2011).

<sup>19</sup> Does not include decisions on appeals. Data from the *Annual Report on Continuing Disability Reviews* (2012).

recovery within the next year for disability beneficiaries who became entitled at a particular age (table 18), or who have attained a particular age (table 19). Similarly, *expected future time* represents the average number of years a beneficiary will remain on the DI rolls—up to NRA—for a particular entitlement age or attained age. These values are exposure-weighted averages of the values shown in tables 16A-16B.

**Table 20** shows the aggregate probability of recovery and expected future time on the DI rolls (excluding the possibility of death), as of a particular *duration*. Probabilities are based on aggregate counts of exposure and recoveries across all entitlement ages, and represent the average probability of recovery within the next year. Similarly, *expected future time* represents the average number of years a beneficiary will remain on the DI rolls—up to NRA—given the completed number of years of disability entitlement.

#### F. Actuarial Analysis—Death or Recovery (2006-10)

**Tables 21A-21B** show the probability of death or recovery for male and female disabled workers, by entitlement age and duration. Values are the sum of the death probabilities shown in tables 7A-7B and recovery probabilities shown in tables 14A-14B.

**Tables 22A-22C** show an assumed number of beneficiaries with benefit continuance over time for cohorts becoming entitled at various ages. In this context, *continuance* refers to beneficiaries who have neither died nor recovered and remain on the DI or OASI rolls. Beneficiaries continue to be followed until death, even after their disability benefits are converted to retirement benefits.

**Tables 23A-23B** show the *expected future time* on the combined DI and OASI rolls for disabled workers who have neither died or recovered. Values are based on the continuance experience shown in tables 22A-22C.

**Tables 24A-24B** show the *expected future time* on the DI rolls for disabled workers who have neither died or recovered. Values are based on the continuance experience shown in tables 22A-22B and do not reflect entitlement beyond conversion to retirement benefits.

**Tables 25** and **26** show the aggregate probability of death or recovery and the expected future time on the beneficiary rolls, by *entitlement* and *attained age*. The values represent the average probability of benefit termination due to death or recovery within the next year for beneficiaries who became entitled at a particular age (table 25), or who have attained a particular age (table 26). Expected future time on the OASDI rolls represents the average number of years of combined entitlement for those originally entitled to disability benefits, and are exposure-weighted averages of expected time on the rolls shown in tables 23A-23B. Expected future time on the DI rolls represents the average number of years of disability entitlement, and are exposure-weighted averages of expected time on the DI rolls shown in tables 24A-24B.

**Table 27** shows the aggregate probability of death or recovery and the expected future time on the beneficiary rolls, as of a particular *duration*. The values represent the average probability of benefit termination due to death or recovery within the next year for beneficiaries who have neither died nor recovered as of the stated number of years of entitlement. As in table 26, aggregate expected times are shown for both OASDI combined entitlement and DI entitlement only.

#### G Annuity Tables

**Tables 28A-31D** show the present value of a stream of payments of \$1 to a disabled worker, by entitlement age. The various scenarios are based on combinations of several parameters: (a) the frequency of payments—annually or monthly; (b) the timing of payments—beginning (annuity-due) or end (annuity-immediate) of each period; and (c) the duration of payments—for life or up to age 66. Payments are discounted at various annual effective interest rates. Tables 28A-29D recognize only the risk of death and payments may continue beyond NRA, thus they use continuance experience shown in tables 8A-8C. Tables 30A-31D recognize the possibility of both death and recovery and payments are made up until age 66 (NRA), thus they use continuance experience shown in tables 22A-22B. The appendix gives details of the table construction and its usage.

**Table 1.—Disposition of Worker Applications for Disability Benefits, by Calendar Year of Filing<sup>1</sup> and Level of Review**  
 (2002-2013 Social Security DI disability experience)

Year of filing	Total claims filed	Initial determinations						Reconsiderations <sup>2</sup>						Appeals beyond reconsideration <sup>3</sup>						
		Allowances			Denials			Allowances			Denials			Appeals of denials			Allowances			
		Total	Pending	Percent <sup>4</sup>	No appeal	To recon	To ODAR <sup>5</sup>	Percent <sup>6</sup>	Pending	Number	Percent <sup>4</sup>	No appeal	To ODA R <sup>7</sup>	Percent <sup>6</sup>	Pending <sup>8</sup>	Number	Percent <sup>9</sup>	Denials	Appeals beyond reconsideration <sup>3</sup>	
DI claims (title II only)																				
2002	718,580	—	331,257	46.1	387,323	148,838	184,848	53,637	61.6	—	29,286	15.8	155,562	27,329	128,233	82.4	—	144,112	79.2	
2003	728,158	—	328,818	45.2	399,340	151,908	192,865	54,567	62.0	—	28,474	14.8	164,391	28,708	135,383	82.5	—	151,085	79.4	
2004	737,002	—	332,952	45.2	404,050	159,220	191,160	53,670	60.6	—	27,236	14.2	163,924	28,141	135,783	82.8	—	152,480	80.5	
2005	685,177	—	312,534	45.6	372,643	151,352	172,397	48,894	59.4	—	24,664	14.3	147,733	25,307	122,426	82.9	—	138,720	81.0	
2006	674,467	—	305,272	45.3	369,195	150,888	169,508	48,799	59.1	—	24,181	14.3	145,327	24,326	121,001	83.3	325	135,524	80.0	
2007	675,082	—	316,472	46.9	358,610	143,977	167,960	46,673	59.9	—	27,825	16.6	140,135	23,476	116,659	83.2	97	129,481	79.8	
2008	696,956	—	343,221	49.2	353,730	140,798	167,634	45,303	60.2	—	27,944	16.7	139,690	24,362	115,328	82.6	2,172	124,877	78.8	
2009	830,002	—	411,100	49.5	418,902	165,786	198,009	55,107	60.4	—	30,805	15.6	167,204	29,594	137,610	82.3	4,992	141,592	75.4	
2010	893,606	—	422,792	47.3	470,814	183,055	226,027	61,732	61.1	—	31,619	14.0	194,408	33,829	160,579	82.6	18,745	150,500	73.9	
2011	886,381	—	403,032	45.5	483,349	183,618	235,790	63,941	62.0	—	33,147	14.1	202,643	36,560	166,083	82.0	68,649	119,780	74.2	
2012	878,999	12,286	383,995	44.3	482,718	193,757	225,179	63,782	59.9	37,819	14.7	24,532	13.1	162,828	34,276	128,552	78.9	158,433	25,419	75.0
2013	851,742	158,978	299,967	43.3	392,797	191,564	154,425	46,808	51.2	50,304	14.197	13,6	89,924	31,170	58,754	65.3	102,483	1,969	63.9	
DI claims involving concurrent SSI (title XVI) claims																				
2002	662,457	—	181,693	27.4	480,764	237,071	193,849	49,844	50.7	—	24,365	12.6	169,484	43,174	126,310	74.5	—	113,275	64.3	
2003	731,668	—	192,184	26.3	539,484	265,123	217,176	57,185	50.9	—	25,523	11.8	191,653	49,548	142,105	74.1	—	127,750	64.1	
2004	795,839	—	204,796	25.7	591,043	298,858	229,236	62,949	49.4	—	25,559	11.1	203,677	53,023	150,654	74.0	—	137,158	64.2	
2005	759,312	—	194,434	25.6	564,878	292,528	213,016	59,334	48.2	—	22,369	10.5	190,647	48,621	142,026	74.5	—	132,307	65.7	
2006	758,757	—	187,787	24.7	570,970	295,572	212,650	62,748	48.2	—	21,828	10.3	190,822	46,962	143,860	75.4	582	131,543	63.8	
2007	761,253	—	193,310	25.4	567,943	286,521	218,091	63,331	49.6	—	24,016	11.0	194,075	46,530	147,545	76.0	1,751	132,398	63.3	
2008	807,733	—	214,164	26.5	593,569	286,606	241,346	65,617	51.7	—	26,290	10.9	215,056	53,017	162,039	75.3	3,918	137,164	61.3	
2009	925,073	—	239,713	25.9	685,360	326,019	283,413	75,928	52.4	—	27,466	9.7	255,947	62,259	193,588	75.7	9,363	148,091	56.9	
2010	946,844	—	229,130	24.2	71,714	303,973	80,054	53.5	—	25,586	8.4	278,387	61,915	213,472	76.7	33,500	142,290	54.7		
2011	918,648	—	210,629	22.9	708,019	320,015	306,605	81,399	54.8	—	25,347	8.3	281,258	64,135	217,123	77.2	107,029	104,561	54.6	
2012	876,123	11,952	194,980	22.6	669,191	311,845	280,365	76,981	53.4	41,457	18.352	7.7	220,556	55,082	163,474	75.0	211,346	16,840	54.1	
2013	783,527	152,370	147,060	23.3	484,097	266,973	167,595	49,529	44.9	53,646	8,693	7.6	105,256	38,219	67,037	63.7	114,115	1,050	42.8	
Total claims																				
2002	1,381,037	—	512,950	37.1	868,087	385,909	378,697	103,481	55.5	—	53,651	14.2	325,046	70,503	254,543	78.3	—	257,387	71.9	
2003	1,459,826	—	521,002	35.7	938,824	417,031	410,041	111,752	55.6	—	53,997	13.2	356,044	78,256	277,788	78.0	—	278,835	71.6	
2004	1,532,841	—	537,748	35.1	995,093	458,078	420,396	116,619	54.0	—	52,795	12.6	367,601	81,164	286,437	77.9	—	289,638	71.9	
2005	1,444,489	—	506,968	35.1	937,521	443,880	385,413	108,228	52.7	—	47,033	12.2	338,380	73,928	264,452	78.2	—	271,027	72.7	
2006	1,433,224	—	493,059	34.4	940,165	446,460	382,158	111,547	52.5	—	46,009	12.0	336,149	71,288	264,861	78.8	907	267,067	71.1	
2007	1,436,335	—	499,782	35.5	926,553	430,498	386,051	110,004	53.5	—	51,841	13.4	334,210	70,006	264,204	79.1	2,728	261,879	70.5	
2008	1,504,689	—	557,385	37.0	947,304	427,404	408,980	110,920	54.9	—	54,234	13.3	354,746	77,379	277,367	78.2	6,090	262,041	68.6	
2009	1,755,075	—	650,813	37.1	1,104,262	491,805	481,422	131,035	55.5	—	58,271	12.1	423,151	91,853	331,298	64.7	14,355	289,683	64.7	
2010	1,840,450	—	651,922	35.4	1,188,528	516,742	530,000	141,786	56.5	—	57,205	10.8	472,795	98,744	374,051	79.1	52,245	292,790	63.2	
2011	1,805,029	—	613,661	34.0	1,191,368	503,633	542,395	145,340	57.7	—	58,494	10.8	483,901	100,695	383,206	79.2	175,678	224,341	63.6	
2012	1,755,122	24,238	578,975	33.4	1,151,909	505,602	505,544	140,763	56.1	79,276	42,884	10.1	383,384	89,358	294,026	76.7	369,779	42,259	65.0	
2013	1,635,269	311,348	447,027	33.8	876,895	458,538	322,020	96,337	47.7	103,950	22,890	10.5	195,180	69,389	125,791	64.4	216,598	3,019	54.6	

<sup>1</sup> Claim data for 2002-2012 reflect results as of June 2013 (DDS) and July 2013 (ODAR). Claim data for 2013 are as of January 2014. Total claims for 2010-13 are subject to change. The number of allowances and denials are subject to change until all initial decisions have been completed and all appeals are final. Results do not include claims denied at Field Offices for technical reasons such as SGA or lack of insured status.

<sup>2</sup> Includes cases which skip the normal reconsideration process upon appeal and instead are reviewed via the Federal Reviewing Official as part of the Disability Service Improvement process. Implemented in the Boston Region, the DSI process was in effect from August 2006 through January 2008.

<sup>3</sup> Includes cases appealed to the Office of Disability Adjudication and Review as well as beyond ODAR to the Federal courts.

<sup>4</sup> Number of allowances as a percentage of determinations (allowances plus denials) at this level.

<sup>5</sup> Cases appealed directly to ODAR under prototype model—currently being conducted in 10 states—which eliminates reconsideration step in disability determination process.

<sup>6</sup> Number of appeals as a percentage of denials at this level. For years where decisions are still pending, the preliminary percentage shown could change substantially as all claims are processed.

<sup>7</sup> Number of persons appealing beyond the reconsideration level.

<sup>8</sup> Includes cases remanded to ODAR from the Federal courts.

<sup>9</sup> Number of allowances as a percentage of decisions at this level. For years where decisions are still pending, the preliminary allowance percentage shown will decline as all cases are processed. This is due to longer average processing times for denials as compared to allowances.

<sup>10</sup> Includes claims where the final administrative action was a dismissal of an appeal request (examples include not filing in a timely fashion, or failing to appear at a scheduled hearing). Cases may be further appealed.

**Table 2A.—Disabled Worker Benefits Awarded: Percentage Distribution, by Impairment Category**  
 (1992–2013 Social Security DI disability experience)

Impairment category <sup>1</sup>	Year of Award											
	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002
Male												
Musculoskeletal <sup>2</sup>	34.0%	33.6%	32.2%	30.7%	29.2%	28.0%	27.1%	26.2%	25.8%	24.7%	23.8%	22.9%
Mental disorders <sup>3</sup>	15.6	16.7	17.7	19.8	20.8	21.0	20.8	21.1	22.2	22.9	23.0	21.4
Circulatory <sup>4</sup>	13.8	13.4	13.4	13.0	13.1	13.4	13.8	13.7	13.9	14.1	14.4	14.6
Neoplastic <sup>5</sup>	9.5	9.1	8.7	8.6	8.9	9.4	9.7	10.0	9.9	9.2	9.1	9.5
Nervous system <sup>6</sup>	7.8	7.6	7.8	7.8	7.9	7.8	7.8	7.7	7.9	8.2	8.1	7.8
Injuries	4.1	4.3	4.5	4.7	4.8	4.9	4.9	4.6	4.7	4.6	4.9	5.0
Respiratory <sup>7</sup>	3.8	3.7	3.9	3.8	3.8	3.9	3.9	4.0	4.0	4.1	4.0	4.1
Nutritional/metabolic <sup>8</sup>	3.2	3.3	3.4	3.5	3.5	3.4	3.4	3.4	3.3	3.1	3.3	3.0
Infectious/parasitic <sup>9</sup>	1.2	1.2	1.3	1.4	1.4	1.5	1.7	1.7	1.8	1.9	2.0	2.3
Other <sup>10</sup>	7.1	7.1	7.2	6.9	6.6	6.9	7.2	7.3	7.0	7.1	6.8	6.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Female												
Musculoskeletal <sup>2</sup>	38.1	37.4	35.8	34.5	33.5	32.3	31.3	30.5	29.8	29.0	28.2	27.2
Mental disorders <sup>3</sup>	18.2	19.5	21.0	23.0	24.0	24.7	25.1	25.5	26.5	27.5	28.2	28.0
Neoplastic <sup>5</sup>	10.6	10.0	9.7	9.5	9.8	10.0	10.5	10.6	10.4	9.8	9.7	10.1
Nervous system <sup>6</sup>	8.6	8.5	8.6	8.6	8.6	8.4	8.6	8.6	8.8	8.9	8.8	9.0
Circulatory <sup>4</sup>	7.5	7.3	7.3	7.0	7.1	7.2	7.3	7.3	7.4	7.5	7.8	7.9
Respiratory <sup>7</sup>	4.3	4.2	4.3	4.2	4.1	4.1	4.1	4.2	4.3	4.4	4.2	4.3
Nutritional/metabolic <sup>8</sup>	3.3	3.4	3.4	3.5	3.5	3.5	3.5	3.5	3.5	3.2	3.1	3.9
Injuries	2.4	2.6	2.7	2.9	2.9	2.9	2.8	2.8	2.8	2.8	3.1	3.0
Infectious/parasitic <sup>9</sup>	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.0
Other <sup>10</sup>	6.3	6.4	6.5	6.1	5.7	5.9	6.1	6.2	6.1	6.0	5.6	6.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total												
Musculoskeletal <sup>2</sup>	35.9	35.4	33.8	32.5	31.2	30.0	29.0	28.2	27.6	27.1	26.3	25.4
Mental disorders <sup>3</sup>	16.8	18.0	19.2	21.3	22.3	22.8	23.2	24.2	24.9	25.4	25.5	23.5
Circulatory <sup>4</sup>	10.8	10.6	10.6	10.2	10.3	10.5	10.8	10.7	10.9	11.0	11.4	11.5
Neoplastic <sup>5</sup>	10.0	9.5	9.2	9.0	9.3	9.6	10.1	10.3	10.1	9.5	9.4	9.8
Nervous system <sup>6</sup>	8.2	8.0	8.2	8.2	8.1	8.1	8.2	8.1	8.3	8.5	8.4	8.0
Respiratory <sup>7</sup>	4.0	4.0	4.1	4.0	3.9	3.9	4.0	4.1	4.2	4.2	4.3	4.1
Injuries	3.3	3.5	3.7	3.8	4.0	4.0	3.9	3.9	3.8	3.8	4.1	4.1
Nutritional/metabolic <sup>8</sup>	3.2	3.3	3.4	3.5	3.5	3.4	3.4	3.3	3.1	3.1	3.6	3.1
Infectious/parasitic <sup>9</sup>	0.9	0.9	1.0	1.1	1.1	1.2	1.3	1.3	1.4	1.4	1.5	1.7
Other <sup>10</sup>	6.7	6.8	6.9	6.5	6.2	6.4	6.7	6.8	6.6	6.5	6.3	6.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>1</sup> Ranked by average percentage over the 5-year period 2009–13.

<sup>2</sup> Includes arthritis, amputation, back and bone disorders.

<sup>3</sup> Includes schizophrenia, paranoia, mental retardation, and personality disorders.

<sup>4</sup> Includes heart disease, hypertension, and aneurysm.

<sup>5</sup> Includes malignant growths.

<sup>6</sup> Includes epilepsy, Parkinson's disease, cerebral palsy, and multiple sclerosis.

<sup>7</sup> Includes asthma, tuberculosis, and cystic fibrosis.

<sup>8</sup> Includes diabetes and disorders of the thyroid, pituitary, and adrenal glands. (Effective October 1999, the Listing of Impairments was changed to eliminate awards based solely on obesity.)

<sup>9</sup> Includes impairments related to HIV.

<sup>10</sup> Includes congenital anomalies, blood, digestive, genitourinary, and skin disorders, "other" and unknown categories.

Note: Totals may not equal sum of rounded components.

Source: *Annual Statistical Supplement to the Social Security Bulletin* (1992–2002); *Annual Statistical Report on the Social Security Disability Insurance Program* (2003–13).

**Table 2B.—Disabled Worker Benefits In Current-Payment Status: Percentage Distribution by Impairment Category**  
 (1992–2013 Social Security DI disability experience)

Impairment category <sup>1</sup>	Male												Female											
	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992		
	End of Year																							
Mental disorders <sup>3</sup>	30.4%	30.8%	31.3%	31.9%	32.2%	32.4%	32.5%	32.6%	32.7%	32.8%	32.8%	32.8%	31.6%	30.8%	30.5%	30.0%	30.7%	30.4%	30.0%	29.5%	29.5%	28.7%		
Musculoskeletal <sup>2</sup>	29.2	28.4	27.6	26.8	26.1	25.6	25.0	24.6	24.1	23.6	23.1	22.7	22.2	21.8	21.3	20.9	21.2	20.5	19.9	19.3	18.9	18.3		
Circulatory <sup>4</sup>	10.5	10.6	10.7	10.8	11.0	11.3	11.5	11.7	11.8	12.0	12.2	12.4	12.6	12.8	13.1	13.4	14.1	14.3	14.6	15.2	15.7	16.4		
Nervous system <sup>6</sup>	8.6	8.7	8.7	8.7	8.8	8.8	8.8	8.8	8.9	8.9	8.9	8.8	8.7	8.7	8.6	8.9	8.9	9.0	9.0	9.1	9.1	9.2		
Injuries	5.2	5.3	5.4	5.4	5.5	5.5	5.5	5.6	5.6	5.7	5.8	5.8	5.9	6.0	6.9	7.1	7.3	7.5	7.5	7.7	7.7			
Nutritional/metabolic <sup>8</sup>	3.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.2	3.2	3.3	3.5	3.6	3.6	3.3	3.2	3.0	2.8	2.8	2.7		
Neoplastic <sup>5</sup>	2.8	2.8	2.8	2.8	2.8	2.7	2.7	2.6	2.6	2.5	2.4	2.4	2.4	2.3	2.4	2.5	2.5	2.7	2.6	2.7	2.7	2.7		
Respiratory <sup>7</sup>	2.6	2.6	2.7	2.7	2.7	2.7	2.8	2.9	2.9	2.9	3.0	3.0	3.1	3.2	3.3	3.3	3.5	3.5	3.6	3.6	3.8	3.8		
Infectious/parasitic <sup>9</sup>	1.9	2.0	2.0	2.1	2.2	2.2	2.3	2.3	2.4	2.5	2.5	2.6	2.6	2.7	2.7	2.6	2.6	2.6	2.6	2.6	2.5	2.5		
Other <sup>10</sup>	5.7	5.7	5.7	5.8	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.8	7.7	8.4	8.9	6.8	6.9	7.1	7.3	7.5	8.0	8.0		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
	Total																							
Mental disorders <sup>3</sup>	32.4	32.8	33.3	33.8	34.1	34.2	34.4	34.4	34.4	34.4	34.0	33.5	32.8	32.1	31.8	31.2	31.1	30.9	30.6	30.1	29.0	29.0		
Musculoskeletal <sup>2</sup>	32.0	31.4	30.6	29.8	29.2	28.6	28.0	27.5	26.9	26.4	25.9	25.4	24.8	24.6	23.5	23.1	23.3	23.0	22.4	22.3	21.6	21.3		
Nervous system <sup>6</sup>	10.1	10.1	10.1	10.1	10.2	10.3	10.3	10.4	10.4	10.5	10.5	10.6	10.6	10.5	10.5	10.4	10.4	10.7	10.6	10.6	10.9	11.3	11.5	
Circulatory <sup>4</sup>	6.0	6.1	6.1	6.2	6.3	6.4	6.6	6.7	6.8	6.9	7.1	7.3	7.4	7.6	7.8	8.1	8.8	9.2	9.6	10.0	10.5	11.2		
Nutritional/metabolic <sup>8</sup>	3.6	3.8	3.9	4.0	4.1	4.3	4.4	4.6	4.8	5.0	5.3	5.6	6.1	6.6	7.2	7.0	6.7	6.4	6.2	5.8	5.7	5.2		
Neoplastic <sup>5</sup>	3.4	3.4	3.4	3.4	3.4	3.4	3.3	3.3	3.2	3.2	3.1	3.1	3.1	3.2	3.2	3.2	3.6	3.3	3.4	3.5	3.7	4.0		
Respiratory <sup>7</sup>	3.1	3.2	3.2	3.2	3.2	3.3	3.3	3.4	3.4	3.4	3.5	3.5	3.5	3.6	3.7	3.8	4.1	4.0	4.1	4.1	4.3	4.3		
Injuries	2.8	2.8	2.8	2.8	2.9	2.9	2.8	2.8	2.9	2.9	2.9	2.9	3.0	3.0	3.1	3.5	3.7	3.7	3.7	3.8	3.8	3.8		
Infectious/parasitic <sup>9</sup>	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.2	1.2	1.1	1.1	1.1	1.1	1.1		
Other <sup>10</sup>	5.7	5.7	5.7	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.5	6.6	7.5	8.0	8.4	7.3	7.5	7.9	8.0	8.2	8.6	8.6		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
Mental disorders <sup>3</sup>	31.4	31.8	32.3	32.8	33.1	33.3	33.4	33.4	33.5	33.5	33.4	33.3	32.9	32.1	31.4	31.1	30.5	30.9	30.6	30.2	29.7	28.8		
Musculoskeletal <sup>2</sup>	30.5	29.8	29.0	28.2	27.6	27.0	26.4	25.9	25.4	24.9	24.4	23.9	23.4	22.9	22.3	21.8	22.1	21.5	20.9	20.4	19.9	19.4		
Nervous system <sup>6</sup>	9.3	9.3	9.4	9.4	9.4	9.5	9.5	9.6	9.6	9.6	9.6	9.5	9.4	9.4	9.6	9.6	9.7	9.7	9.9	9.9	10.0	10.0		
Circulatory <sup>4</sup>	8.3	8.4	8.5	8.6	8.8	9.0	9.2	9.3	9.5	9.7	9.9	10.1	10.3	10.6	10.8	11.2	11.9	12.2	12.7	13.2	13.8	14.5		
Injuries	4.0	4.1	4.2	4.2	4.2	4.2	4.3	4.3	4.3	4.4	4.4	4.5	4.6	4.6	4.7	4.8	5.5	5.6	5.8	6.0	6.1	6.3		
Nutritional/metabolic <sup>8</sup>	3.3	3.4	3.5	3.5	3.6	3.6	3.7	3.8	3.9	4.0	4.1	4.3	4.5	4.8	5.2	5.0	4.8	4.5	4.3	4.0	3.9	3.6		
Neoplastic <sup>5</sup>	3.1	3.1	3.1	3.1	3.1	3.0	2.9	2.9	3.0	3.0	3.1	3.1	3.2	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.8	3.9		
Respiratory <sup>7</sup>	2.9	2.9	2.9	2.9	2.9	2.9	3.0	3.0	3.1	3.1	3.1	3.1	3.2	3.2	3.3	3.3	3.4	3.4	3.5	3.6	3.7	3.8		
Injuries/parasitic <sup>9</sup>	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.1	2.0	2.2	2.1	2.0	2.0		
Other <sup>10</sup>	5.7	5.7	5.7	5.7	5.8	5.8	6.0	6.1	6.3	6.4	6.5	6.8	7.6	8.2	8.7	7.0	7.2	7.4	7.6	7.8	8.2	8.2		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

<sup>1</sup> Ranked by average percentage over the 5-year period 2009–13.

<sup>2</sup> Includes arthritis, amputation, back and bone disorders.

<sup>3</sup> Includes schizophrenia, paranoia, mental retardation, and personality disorders.

<sup>4</sup> Includes heart disease, hypertension, and aneurysm.

<sup>5</sup> Includes malignant growths.

<sup>6</sup> Includes epilepsy, Parkinson's disease, cerebral palsy, and multiple sclerosis.

<sup>7</sup> Includes asthma, tuberculosis, and cystic fibrosis.

<sup>8</sup> Includes congenital anomalies, blood, digestive, genitourinary, and adrenal glands. (Effective October 1999, the Listing of Impairments was changed to eliminate awards based solely on obesity).

<sup>9</sup> Includes diabetes and disorders of the thyroid, pituitary, and adrenal glands. (Effective October 1999, the Listing of Impairments was changed to eliminate awards based solely on obesity).

<sup>10</sup> Includes impairments related to HIV.

<sup>11</sup> Includes congenital anomalies, blood, digestive, genitourinary, and skin disorders, "other" and unknown categories.

Note: Totals may not equal sum of rounded components.  
 Source: *Annual Statistical Supplement to the Social Security Bulletin* (1992–2002); *Annual Statistical Report on the Social Security Disability Insurance Program* (2003–13).

**Table 3.—Disabled Worker Benefits Awarded**  
 (By age and year of award, 1991-2014 Social Security DI disability experience)

Year	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 or older	Total
	Male											
1991	857	9,588	19,095	27,436	32,203	35,344	36,122	45,289	65,366	68,354	3,785	343,439
1992	857	12,045	23,156	33,911	40,369	42,147	43,984	53,276	73,522	75,197	4,223	402,687
1993	817	10,784	21,379	33,526	39,831	43,093	44,953	54,286	71,538	70,299	3,912	394,418
1994	655	9,218	18,416	30,679	38,478	41,098	44,692	54,205	71,254	68,905	3,842	381,442
1995	633	8,054	16,291	27,743	36,740	41,264	46,018	54,802	73,295	69,937	3,749	378,526
1996	642	7,200	14,402	23,957	33,524	38,832	44,427	54,546	69,722	64,870	3,349	355,471
1997	605	6,890	12,164	19,115	27,867	34,676	39,802	52,742	68,569	61,255	3,143	326,828
1998	628	7,110	11,876	17,965	27,304	35,774	41,745	55,569	70,654	61,333	3,074	333,032
1999	684	7,833	11,901	16,884	27,159	36,235	42,842	57,155	71,341	62,267	3,232	337,533
2000	733	9,065	12,136	16,198	25,966	35,509	42,335	58,396	72,226	63,034	3,186	338,784
2001	941	11,770	14,653	18,472	27,587	38,340	46,185	63,976	80,621	68,680	3,130	374,355
2002	1,003	13,991	15,276	18,926	28,272	40,624	50,522	68,588	90,078	75,908	3,148	406,336
2003	869	11,974	15,176	19,438	28,411	41,869	52,936	72,030	95,297	79,744	3,854	421,598
2004	697	11,390	15,391	19,335	27,236	41,334	53,692	73,375	99,501	81,882	4,839	428,672
2005	581	11,210	15,714	18,995	27,549	42,122	56,479	77,337	104,099	83,573	6,650	444,309
2006	505	10,399	14,952	17,334	25,818	38,673	54,660	76,301	99,277	82,129	7,199	427,247
2007	539	10,954	15,217	16,913	24,751	37,198	53,729	78,030	100,632	88,531	9,440	435,934
2008	607	12,217	17,791	18,629	25,916	38,101	57,037	85,868	109,212	96,866	11,652	473,896
2009	655	13,952	19,751	21,272	28,627	41,666	62,911	97,503	123,736	108,320	12,070	530,463
2010	528	13,880	20,699	22,936	29,274	43,603	65,937	106,870	135,864	115,767	13,051	568,409
2011	322	11,005	18,468	21,502	26,211	39,572	58,877	102,661	138,505	118,643	14,382	550,148
2012	210	9,030	16,475	20,565	24,422	36,704	54,641	97,518	134,601	114,069	15,288	523,523
2013	162	7,998	14,001	17,846	21,017	30,595	45,016	84,915	125,083	108,208	14,447	469,288
2014	181	7,568	12,853	15,979	18,991	26,139	37,896	74,782	117,416	103,602	13,395	428,802
Female												
1991	402	4,945	9,447	14,029	17,661	21,518	24,118	30,257	38,999	34,125	1,854	197,355
1992	513	6,596	12,270	17,546	22,337	26,688	30,044	36,909	44,531	39,839	2,129	239,402
1993	433	6,104	11,985	17,844	23,464	27,377	32,115	38,270	45,336	37,936	2,106	242,970
1994	395	5,343	10,991	17,808	23,778	28,594	33,738	41,068	47,772	38,992	1,952	250,431
1995	414	4,886	10,472	17,690	25,094	30,618	36,844	44,563	52,577	41,755	2,206	267,119
1996	381	4,449	9,802	16,688	25,087	31,620	38,310	47,032	53,027	40,317	2,070	268,783
1997	391	4,364	8,980	14,957	23,429	30,874	36,740	47,343	52,852	38,939	2,003	260,872
1998	366	4,816	9,315	14,930	24,175	32,453	39,440	50,954	56,550	40,434	1,917	275,350
1999	396	5,468	9,842	14,291	24,177	33,416	40,730	51,732	58,681	42,261	2,032	283,026
2000	482	6,353	10,097	14,372	23,460	32,625	39,366	52,554	58,487	42,868	1,868	282,532
2001	621	8,104	12,454	16,735	25,578	35,794	43,769	57,677	65,956	47,438	2,022	316,148
2002	605	9,554	13,511	17,684	26,551	38,800	48,249	61,624	72,010	52,899	2,180	343,667
2003	555	8,659	13,431	18,668	26,591	39,524	49,768	63,708	76,329	56,053	2,576	355,862
2004	481	8,315	13,766	18,835	25,906	39,476	50,831	66,473	80,498	59,221	3,301	367,103
2005	389	7,771	14,081	18,718	26,714	40,416	53,320	71,368	86,081	62,096	4,420	385,374
2006	360	7,094	13,186	17,118	25,254	37,855	52,709	71,497	83,915	62,529	5,042	376,559
2007	370	7,306	12,933	16,612	24,894	36,511	52,299	72,838	84,871	67,502	6,394	382,530
2008	390	8,200	14,534	18,199	26,576	37,976	55,880	80,885	92,289	73,617	7,948	416,494
2009	445	9,429	16,035	20,698	28,757	39,982	61,211	89,715	102,619	80,341	7,868	457,100
2010	371	9,447	16,732	21,982	29,527	41,430	62,128	95,974	109,755	84,844	8,667	480,857
2011	204	7,514	15,216	20,592	26,342	38,780	55,961	93,187	113,817	87,792	9,588	468,993
2012	160	6,134	13,445	19,727	25,109	37,183	53,090	91,315	115,154	88,118	10,688	460,123
2013	129	5,331	11,313	17,059	21,982	31,657	44,848	81,800	109,421	85,437	9,805	418,782
2014	111	5,001	10,174	15,070	19,889	27,604	38,582	73,070	102,488	80,769	9,413	382,171
Total												
1991	1,259	14,533	28,542	41,465	49,864	56,862	60,240	75,546	104,365	102,479	5,639	540,794
1992	1,370	18,641	35,426	51,457	62,706	68,835	74,028	90,185	118,053	115,036	6,352	642,089
1993	1,250	16,888	33,364	51,370	63,295	70,470	77,068	92,556	116,874	108,235	6,018	637,388
1994	1,050	14,561	29,407	48,487	62,256	69,692	78,430	95,273	119,026	107,897	5,794	631,873
1995	1,047	12,940	26,763	45,433	61,834	71,882	82,862	99,365	125,872	111,692	5,955	645,645
1996	1,023	11,649	24,204	40,645	58,611	70,452	82,737	101,578	122,749	105,187	5,419	624,254
1997	996	11,254	21,144	34,072	51,296	65,550	76,542	100,085	121,421	100,194	5,146	587,700
1998	994	11,926	21,191	32,895	51,479	68,227	81,185	106,523	127,204	101,767	4,991	608,382
1999	1,080	13,301	21,743	31,175	51,336	69,651	83,572	108,887	130,022	104,528	5,264	620,559
2000	1,215	15,418	22,233	30,570	49,426	68,134	81,701	110,950	130,713	105,902	5,054	621,316
2001	1,562	19,874	27,107	35,207	53,165	74,134	89,954	121,653	146,577	116,118	5,152	690,503
2002	1,608	23,545	28,787	36,610	54,823	79,424	98,771	130,212	162,088	128,807	5,328	750,003
2003	1,424	20,633	28,607	38,106	55,002	81,393	102,704	135,738	171,626	135,797	6,430	777,460
2004	1,178	19,705	29,157	38,170	53,142	80,810	104,523	139,848	179,999	141,103	8,140	795,775
2005	970	18,981	29,795	37,713	54,263	82,538	109,799	148,705	190,180	145,669	11,070	829,683
2006	865	17,493	28,138	34,452	51,072	76,528	107,369	147,798	183,192	144,658	12,241	803,806
2007	909	18,260	28,150	33,525	49,645	73,709	106,028	150,868	185,503	156,033	15,834	818,464
2008	997	20,417	32,325	36,828	52,492	76,077	112,917	166,753	201,501	170,483	19,600	890,390
2009	1,100	23,381	35,786	41,970	57,384	81,648	124,122	187,218	226,355	188,661	19,938	987,563
2010	899	23,327	37,431	44,918	58,801	85,033	128,065	202,844	245,619	200,611	21,718	1,049,266
2011	526	18,519	33,684	42,094	52,553	78,352	114,838	195,848	252,322	206,435	23,970	1,019,141
2012	370	15,164	29,920	40,292	49,531	73,887	107,731	188,833	249,755	202,187	25,976	983,646
2013	291	13,329	25,314	34,905	42,999	62,252	89,864	166,715	234,504	193,645	24,252	888,070
2014	292	12,569	23,027	31,049	38,880	53,743	76,478	147,852	219,904	184,371	22,808	810,973

Source: SSA administration records

**Table 4.—Disabled Worker Incidence Rates Per Thousand Exposed**  
 (Awards per thousand by age and year of award, 1991-2014 Social Security DI disability experience)

Year	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 or older	Total	
												Gross	Adjusted
Male													
1991	0.50	1.22	2.00	2.77	3.49	4.41	5.76	9.51	16.56	19.92	12.59	5.29	5.78
1992	0.57	1.59	2.49	3.41	4.27	5.21	6.62	10.60	18.46	22.35	13.72	6.18	6.67
1993	0.59	1.48	2.36	3.35	4.14	5.21	6.52	10.26	17.64	21.23	13.19	6.02	6.45
1994	0.48	1.31	2.08	3.07	3.94	4.81	6.20	9.91	17.21	21.00	13.05	5.78	6.15
1995	0.44	1.18	1.85	2.83	3.71	4.66	6.11	9.79	17.34	21.26	12.62	5.68	6.02
1996	0.42	1.07	1.64	2.50	3.36	4.27	5.74	9.21	16.14	19.50	11.61	5.28	5.55
1997	0.38	1.02	1.40	2.05	2.78	3.72	5.10	8.37	15.00	18.21	11.08	4.80	5.00
1998	0.37	1.03	1.39	1.97	2.72	3.77	5.22	8.48	14.60	17.85	10.73	4.83	4.97
1999	0.38	1.11	1.42	1.89	2.71	3.76	5.18	8.34	14.23	17.63	11.46	4.84	4.91
2000	0.40	1.24	1.50	1.81	2.63	3.63	4.93	8.13	14.03	17.40	10.50	4.79	4.79
2001	0.52	1.58	1.84	2.07	2.85	3.88	5.22	8.64	14.74	18.41	10.49	5.24	5.16
2002	0.60	1.86	1.92	2.14	2.99	4.09	5.56	9.16	15.46	19.14	10.60	5.64	5.45
2003	0.59	1.62	1.90	2.23	3.07	4.20	5.72	9.39	15.70	18.97	9.93	5.83	5.50
2004	0.53	1.57	1.91	2.27	2.99	4.16	5.72	9.27	15.65	18.80	8.74	5.90	5.45
2005	0.47	1.57	1.91	2.31	3.02	4.30	5.94	9.42	15.70	18.72	9.62	6.07	5.52
2006	0.40	1.45	1.78	2.15	2.84	4.03	5.72	9.05	14.59	17.36	9.62	5.79	5.21
2007	0.43	1.51	1.78	2.11	2.76	3.98	5.60	9.05	14.65	17.54	9.32	5.86	5.19
2008	0.49	1.68	2.05	2.32	2.95	4.18	5.94	9.82	15.56	18.46	10.07	6.33	5.54
2009	0.61	1.96	2.28	2.62	3.34	4.66	6.61	11.04	17.11	19.79	10.02	7.10	6.14
2010	0.63	2.05	2.41	2.78	3.55	4.91	7.08	12.00	18.21	20.33	10.60	7.67	6.53
2011	0.47	1.70	2.19	2.57	3.27	4.49	6.48	11.52	18.18	20.37	10.85	7.48	6.22
2012	0.32	1.41	1.97	2.43	3.07	4.23	6.20	10.96	17.36	19.47	10.04	7.14	5.87
2013	0.25	1.25	1.66	2.07	2.62	3.60	5.24	9.57	16.05	18.22	9.34	6.40	5.19
2014	0.26	1.21	1.50	1.83	2.32	3.14	4.48	8.47	14.97	17.02	8.71	5.84	4.69
Female													
1991	0.27	0.74	1.16	1.75	2.48	3.39	4.88	8.05	13.10	13.47	8.64	3.78	4.29
1992	0.38	1.01	1.55	2.16	3.04	4.10	5.61	9.14	14.63	15.64	9.78	4.52	5.03
1993	0.34	0.96	1.56	2.18	3.08	4.06	5.67	8.93	14.25	14.93	9.51	4.52	4.95
1994	0.32	0.87	1.45	2.17	3.04	4.08	5.59	9.12	14.56	15.24	8.78	4.59	4.96
1995	0.31	0.81	1.38	2.19	3.15	4.21	5.73	9.53	15.40	16.25	9.84	4.81	5.14
1996	0.26	0.74	1.29	2.11	3.10	4.23	5.73	9.41	14.81	15.52	9.11	4.75	5.02
1997	0.26	0.71	1.18	1.94	2.86	4.02	5.40	8.80	13.83	14.69	8.85	4.52	4.72
1998	0.23	0.76	1.23	1.97	2.95	4.12	5.64	8.99	13.99	14.66	8.61	4.68	4.81
1999	0.24	0.83	1.31	1.90	2.94	4.16	5.63	8.60	13.87	14.88	9.11	4.71	4.78
2000	0.28	0.93	1.37	1.89	2.88	3.98	5.27	8.22	13.36	14.49	8.13	4.61	4.61
2001	0.36	1.15	1.71	2.18	3.19	4.29	5.69	8.68	14.09	15.30	8.61	5.06	4.99
2002	0.38	1.35	1.83	2.30	3.38	4.60	6.11	9.11	14.23	15.93	8.93	5.43	5.25
2003	0.39	1.24	1.80	2.44	3.45	4.68	6.14	9.16	14.29	15.92	7.60	5.56	5.27
2004	0.37	1.21	1.82	2.50	3.38	4.68	6.17	9.26	14.21	16.08	7.26	5.69	5.29
2005	0.31	1.15	1.82	2.55	3.47	4.87	6.39	9.65	14.33	16.31	7.81	5.91	5.41
2006	0.28	1.04	1.66	2.38	3.27	4.68	6.27	9.42	13.50	15.37	8.02	5.71	5.16
2007	0.29	1.06	1.60	2.29	3.26	4.65	6.20	9.41	13.44	15.33	7.54	5.73	5.12
2008	0.31	1.18	1.77	2.48	3.52	4.97	6.66	10.22	14.24	15.84	8.21	6.19	5.47
2009	0.39	1.38	1.95	2.78	3.89	5.30	7.36	11.21	15.35	16.32	7.66	6.77	5.94
2010	0.41	1.44	2.04	2.90	4.10	5.50	7.62	11.88	16.01	16.27	7.99	7.15	6.19
2011	0.28	1.19	1.87	2.67	3.75	5.14	7.05	11.52	16.21	16.28	8.11	6.99	5.92
2012	0.24	0.99	1.66	2.52	3.56	4.99	6.89	11.28	16.12	16.10	7.79	6.86	5.73
2013	0.19	0.86	1.39	2.14	3.07	4.30	5.97	10.11	15.02	15.28	6.99	6.22	5.13
2014	0.15	0.83	1.23	1.86	2.70	3.79	5.20	9.02	13.82	14.05	6.59	5.63	4.60
Total													
1991	0.40	1.00	1.62	2.32	3.05	3.96	5.37	8.87	15.07	17.18	10.95	4.62	5.09
1992	0.48	1.32	2.06	2.85	3.73	4.72	6.17	9.95	16.80	19.46	12.08	5.43	5.90
1993	0.47	1.24	1.99	2.83	3.67	4.69	6.13	9.67	16.15	18.49	11.61	5.35	5.75
1994	0.40	1.10	1.79	2.67	3.54	4.48	5.92	9.55	16.04	18.48	11.22	5.24	5.60
1995	0.38	1.01	1.63	2.54	3.46	4.46	5.93	9.67	16.47	19.06	11.40	5.29	5.61
1996	0.34	0.91	1.48	2.32	3.24	4.25	5.74	9.30	15.53	17.75	10.50	5.04	5.30
1997	0.32	0.87	1.30	2.00	2.82	3.86	5.24	8.57	14.47	16.66	10.08	4.67	4.87
1998	0.30	0.90	1.32	1.97	2.82	3.93	5.41	8.72	14.32	16.43	9.80	4.76	4.89
1999	0.31	0.98	1.37	1.89	2.81	3.94	5.39	8.46	14.07	16.40	10.42	4.78	4.85
2000	0.34	1.09	1.43	1.85	2.74	3.79	5.09	8.17	13.73	16.09	9.48	4.71	4.71
2001	0.44	1.37	1.78	2.12	3.00	4.07	5.44	8.66	14.44	16.99	9.66	5.15	5.08
2002	0.49	1.61	1.88	2.21	3.16	4.32	5.82	9.14	14.89	17.68	9.85	5.54	5.36
2003	0.49	1.43	1.85	2.33	3.24	4.42	5.92	9.28	15.04	17.58	8.85	5.70	5.40
2004	0.45	1.40	1.86	2.38	3.17	4.40	5.93	9.26	14.97	17.55	8.07	5.80	5.38
2005	0.39	1.36	1.86	2.42	3.23	4.56	6.15	9.53	15.05	17.61	8.80	5.99	5.47
2006	0.34	1.25	1.72	2.26	3.04	4.33	5.97	9.23	14.07	16.44	8.89	5.75	5.19
2007	0.36	1.29	1.69	2.20	2.99	4.29	5.88	9.22	14.07	16.51	8.51	5.80	5.16
2008	0.40	1.44	1.92	2.40	3.21	4.54	6.28	10.01	14.93	17.23	9.22	6.27	5.51
2009	0.50	1.67	2.12	2.69	3.60	4.96	6.96	11.12	16.26	18.14	8.94	6.94	6.05
2010	0.51	1.75	2.23	2.83	3.81	5.18	7.33	11.95	17.16	18.39	9.38	7.42	6.37
2011	0.37	1.45	2.03	2.61	3.49	4.79	6.74	11.52	17.24	18.40	9.56	7.25	6.08
2012	0.28	1.20	1.82	2.47	3.30	4.58	6.52	11.11	16.77	17.84	8.97	7.01	5.81
2013	0.22	1.06	1.52	2.10	2.83	3.92	5.58	9.83	15.55	16.79	8.22	6.31	5.16
2014	0.20	1.02	1.37	1.85	2.50	3.45	4.81	8.73	14.41	15.58	7.68	5.74	4.65

Source: SSA administration records

(1) Age-specific and gross rates computed as the ratio of annual awards, to the exposure of the disability insured population not receiving benefits.

(2) Adjusted rate (by sex) computed using the age distribution and exposure of the disability insured population not receiving benefits as of calendar year 2000.

(3) Adjusted rate (total) computed using the combined age-sex distribution and exposure of the disability insured population not receiving benefits as of calendar year 2000.

**Table 5.—Disabled Worker Benefit Terminations, Conversions, and Ratios to In-force**  
 (By reason for termination and year, 1991-2014 Social Security DI disability experience)

Year	Number of terminations			Conv	Total	Terminations per thousand beneficiaries								Conv ratio	Gross Total	
						Death		Recovery		Other		Subtotal				
	Death	Recov	Other			Gross	Adj	Gross	Adj	Gross	Adj	Gross	Adj			
Male																
1991	106,561	18,064	3,513	113,903	242,041	50.46	49.97	8.55	8.18	1.66	1.56	60.68	59.70	53.94	114.62	
1992	110,501	20,135	3,684	115,580	249,900	49.30	49.11	8.98	8.47	1.64	1.44	59.93	59.02	51.57	111.50	
1993	117,054	19,900	3,850	114,402	255,206	48.97	49.06	8.33	7.78	1.61	1.48	58.91	58.31	47.86	106.77	
1994	120,239	24,043	3,873	112,283	260,438	47.63	47.86	9.52	8.76	1.53	1.46	58.69	58.08	44.48	103.17	
1995	120,707	30,934	4,555	117,534	273,730	45.70	45.99	11.71	10.68	1.72	1.66	59.14	58.33	44.50	103.64	
1996	114,672	32,608	4,337	116,756	268,373	41.93	42.38	11.92	10.94	1.59	1.55	55.44	54.88	42.69	98.13	
1997	104,632	76,591	3,861	120,359	305,443	37.30	37.90	27.30	26.00	1.38	1.36	65.97	65.26	42.90	108.87	
1998	105,417	30,167	3,935	117,540	257,059	37.23	37.59	10.65	10.22	1.39	1.39	49.27	49.20	41.51	90.78	
1999	107,252	34,908	5,439	124,049	271,648	36.90	37.08	12.01	11.79	1.87	1.87	50.78	50.73	42.68	93.46	
2000	108,226	41,826	6,966	125,583	282,601	36.42	36.42	14.07	14.07	2.34	2.34	52.83	52.83	42.26	95.09	
2001	104,516	39,933	6,878	125,567	276,894	34.31	34.12	13.11	13.33	2.26	2.29	49.68	49.73	41.22	90.89	
2002	113,756	36,918	6,794	129,017	286,485	36.02	35.66	11.69	12.13	2.15	2.19	49.86	49.98	40.85	90.72	
2003	115,760	33,066	6,073	113,850	268,749	35.05	34.37	10.01	10.61	1.84	1.75	46.89	46.72	34.47	81.36	
2004	119,344	30,002	10,418	114,495	274,259	34.53	33.57	8.68	9.46	3.01	2.78	46.23	45.81	33.13	79.36	
2005	124,344	35,138	13,051	118,369	290,902	34.42	33.18	9.73	10.80	3.61	3.29	47.76	47.28	32.77	80.53	
2006	126,730	31,856	8,133	126,382	293,101	33.80	32.35	8.50	9.61	2.17	2.17	44.47	44.13	33.71	78.17	
2007	128,819	25,512	11,076	134,800	300,207	33.21	31.49	6.58	7.54	2.86	3.00	42.64	42.02	34.75	77.40	
2008	134,036	27,528	11,144	147,657	320,365	33.33	31.21	6.85	7.94	2.77	2.92	42.95	42.07	36.72	79.67	
2009	137,108	24,373	11,703	184,807	357,991	32.67	30.52	5.81	6.85	2.79	2.91	41.27	40.28	44.04	85.31	
2010	139,716	28,946	12,942	182,931	364,535	31.83	29.47	6.60	7.83	2.95	3.27	41.38	40.56	41.68	83.06	
2011	145,003	30,345	8,736	183,963	368,047	31.64	29.21	6.62	8.07	1.91	2.04	40.16	39.32	40.14	80.30	
2012	153,740	33,969	3,781	218,083	409,573	32.47	29.73	7.17	9.01	0.80	0.76	40.44	39.50	46.06	86.50	
2013	152,030	29,761	3,605	246,232	431,628	31.62	28.90	6.19	7.87	0.75	0.72	38.56	37.49	51.22	89.78	
2014	153,143	38,567	3,976	244,381	440,067	31.74	28.75	7.99	10.44	0.82	0.82	40.55	40.01	50.64	91.19	
Female																
1991	42,124	8,642	1,593	61,070	113,429	37.46	37.52	7.69	7.58	1.42	1.31	46.56	46.41	54.31	100.87	
1992	43,895	9,719	1,425	62,872	117,911	35.74	35.92	7.91	7.74	1.16	0.99	44.81	44.64	51.18	95.99	
1993	46,786	9,767	1,593	63,220	121,366	34.62	35.01	7.23	6.94	1.18	1.05	43.03	43.00	46.78	89.81	
1994	49,435	11,872	1,680	64,142	127,129	33.49	34.02	8.04	7.61	1.14	1.06	42.67	42.68	43.45	86.12	
1995	51,164	16,348	2,015	68,105	137,632	31.86	32.36	10.18	9.50	1.25	1.18	43.30	43.04	42.41	85.70	
1996	52,473	17,964	1,990	69,671	142,098	30.24	30.69	10.35	9.70	1.15	1.11	41.73	41.49	40.15	81.88	
1997	53,322	29,365	1,735	73,800	158,222	28.73	29.13	15.82	15.05	0.93	0.91	45.49	45.09	39.76	85.25	
1998	55,398	21,364	2,032	74,190	152,984	28.18	28.44	10.87	10.56	1.03	1.04	40.09	40.04	37.74	77.83	
1999	58,175	22,894	2,682	81,030	164,781	27.86	27.99	10.96	10.81	1.28	1.28	40.10	40.07	38.80	78.90	
2000	60,770	27,657	3,215	84,484	176,126	27.57	27.57	12.55	12.55	1.46	1.46	41.57	41.57	38.32	79.90	
2001	60,452	26,832	3,378	87,553	178,215	25.99	25.86	11.53	11.68	1.45	1.47	38.97	39.01	37.64	76.61	
2002	66,846	27,139	3,506	93,336	190,827	27.01	26.79	10.97	11.23	1.42	1.44	39.39	39.47	37.71	77.10	
2003	69,449	24,957	3,145	84,484	182,035	26.25	25.86	9.43	9.81	1.19	1.12	36.87	36.78	31.93	68.81	
2004	71,990	23,675	5,770	87,243	188,678	25.52	24.98	8.39	8.90	2.05	1.88	35.95	35.75	30.92	66.87	
2005	75,843	28,384	7,530	91,928	203,685	25.25	24.53	9.45	10.17	2.51	2.30	37.20	37.00	30.60	67.81	
2006	78,651	26,378	5,339	100,178	210,546	24.78	23.95	8.31	9.08	1.68	1.71	34.77	34.75	31.56	66.34	
2007	80,594	21,693	7,633	108,094	218,014	24.17	23.14	6.50	7.21	2.29	2.42	32.96	32.77	32.41	65.37	
2008	84,836	23,841	7,614	121,112	237,403	24.20	23.00	6.80	7.64	2.17	2.31	33.18	32.94	34.56	67.73	
2009	88,655	21,118	8,332	154,591	272,696	23.98	22.72	5.71	6.49	2.25	2.38	31.94	31.59	41.81	73.75	
2010	90,695	25,636	7,876	154,031	278,238	23.29	21.98	6.58	7.59	2.02	2.21	31.90	31.77	39.56	71.45	
2011	94,180	27,748	5,718	155,096	282,742	23.03	21.58	6.78	8.03	1.40	1.49	31.21	31.10	37.92	69.13	
2012	101,119	31,167	2,932	185,995	321,213	23.76	22.19	7.32	8.96	0.69	0.70	31.77	31.85	43.70	75.46	
2013	100,776	27,337	2,841	208,764	339,718	23.10	21.45	6.27	7.82	0.65	0.66	30.01	29.93	47.85	77.86	
2014	102,464	36,800	3,030	209,679	351,973	23.16	21.48	8.32	10.73	0.68	0.72	32.17	32.93	47.40	79.57	
Total																
1991	148,685	26,706	5,106	174,973	355,470	45.94	44.66	8.25	7.92	1.58	1.45	55.77	54.04	54.07	109.84	
1992	154,396	29,854	5,109	178,452	367,811	44.50	43.49	8.60	8.16	1.47	1.25	54.58	52.89	51.43	106.01	
1993	163,840	29,667	5,443	177,622	376,572	43.79	43.08	7.93	7.42	1.45	1.29	53.17	51.79	47.47	100.64	
1994	169,674	35,915	5,553	176,425	387,567	42.41	41.96	8.98	8.27	1.39	1.29	52.78	51.52	44.10	96.88	
1995	171,871	47,282	6,570	185,639	411,362	40.47	40.18	11.13	10.18	1.55	1.45	53.15	51.82	43.71	96.86	
1996	167,145	50,572	6,327	186,427	410,471	37.39	37.40	11.31	10.41	1.42	1.36	50.12	49.18	41.70	91.82	
1997	157,954	105,956	5,596	194,159	463,665	33.89	34.17	22.73	21.33	1.20	1.17	57.82	56.67	41.65	99.47	
1998	160,815	51,531	5,967	191,730	410,043	33.52	33.69	10.74	10.36	1.24	1.24	45.51	45.30	39.97	85.48	
1999	165,427	57,802	8,121	205,079	436,429	33.12	33.21	11.57	11.37	1.63	1.61	46.32	46.19	41.06	87.38	
2000	168,996	69,483	10,181	210,067	458,727	32.65	32.65	13.42	13.42	1.97	1.97	48.04	48.04	40.58	88.62	
2001	164,968	66,765	10,256	213,120	455,109	30.71	30.60	12.43	12.63	1.91	1.94	45.04	45.17	39.67	84.71	
2002	180,602	64,057	10,300	222,353	477,312	32.06	31.88	11.37	11.75	1.83	1.87					

**Table 6.—Disabled Worker Benefits In Current-Payment Status**  
 (By age at end of year, 1991–2014 Social Security DI disability experience)

Year	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 or older	Total
Male												
1991	986	21,571	70,563	135,237	183,677	221,850	231,902	269,504	384,237	544,572	0	2,064,099
1992	1,026	25,800	77,210	147,210	205,492	242,603	261,813	297,159	403,011	554,960	0	2,216,284
1993	1,021	27,255	81,425	156,849	223,302	264,000	289,244	324,984	424,358	560,766	0	2,353,204
1994	840	26,148	81,233	160,540	235,217	281,312	317,133	349,847	441,579	575,163	0	2,469,012
1995	797	23,036	79,269	157,816	241,116	295,687	344,892	370,632	460,966	589,096	0	2,563,307
1996	768	20,025	75,593	150,936	242,640	307,286	363,195	396,309	482,044	599,705	0	2,638,501
1997	729	18,330	69,226	139,506	233,304	308,492	362,595	417,193	503,624	607,320	0	2,660,319
1998	763	18,103	64,835	132,429	230,690	317,452	374,073	440,585	529,592	622,743	0	2,731,265
1999	815	18,920	60,732	124,586	226,686	323,580	386,484	467,617	551,624	633,107	0	2,794,151
2000	887	20,792	57,535	118,869	218,318	325,885	397,952	494,644	569,818	647,231	0	2,851,931
2001	1,082	25,291	59,109	116,707	211,521	329,107	412,356	515,749	603,613	673,161	0	2,947,696
2002	1,182	30,579	63,206	115,533	205,695	331,221	430,058	529,673	647,693	712,309	0	3,067,149
2003	1,052	32,437	69,442	116,011	201,779	334,681	447,952	551,669	688,353	756,310	21,685	3,221,371
2004	870	32,332	75,641	116,293	196,709	335,834	462,482	573,435	737,309	796,437	46,345	3,373,687
2005	697	31,312	80,573	115,271	194,958	330,913	474,246	596,708	788,316	829,479	74,786	3,517,259
2006	611	29,420	84,002	115,225	193,448	322,471	481,242	619,122	814,662	875,884	107,034	3,643,121
2007	623	28,380	86,530	118,519	192,012	314,743	483,943	643,244	825,507	932,822	147,589	3,773,912
2008	706	28,965	90,268	125,312	191,469	308,761	488,247	671,212	851,524	982,985	185,075	3,924,524
2009	770	31,435	95,185	136,107	194,594	308,454	499,108	706,505	895,303	1,050,371	182,575	4,100,407
2010	665	33,206	100,188	147,694	197,445	314,907	506,533	745,740	953,061	1,126,306	183,933	4,309,678
2011	399	31,222	101,835	156,392	199,196	317,767	502,455	771,376	1,011,826	1,182,862	218,481	4,493,811
2012	272	27,280	100,152	161,117	202,861	316,371	493,181	781,189	1,063,399	1,213,681	246,541	4,606,044
2013	215	23,426	95,651	161,933	206,427	308,773	475,772	777,957	1,097,757	1,249,308	244,915	4,642,134
2014	220	19,977	88,847	157,903	207,815	294,581	451,294	759,308	1,114,755	1,282,955	250,020	4,627,675
Female												
1991	472	10,691	34,546	66,704	95,323	116,463	131,302	156,506	218,899	295,570	0	1,126,476
1992	596	13,569	39,481	74,931	108,441	132,862	152,508	180,070	236,697	308,270	0	1,247,425
1993	562	15,092	43,366	82,743	121,626	149,635	173,245	203,995	257,800	319,794	0	1,367,858
1994	496	14,959	45,238	89,252	133,117	166,905	195,900	228,308	278,388	336,586	0	1,489,149
1995	506	13,795	46,724	93,006	143,574	184,757	221,128	252,531	303,682	356,246	0	1,615,949
1996	478	12,380	47,206	94,145	152,053	201,631	242,748	281,299	331,849	376,021	0	1,739,810
1997	457	11,590	45,861	92,644	155,082	213,006	256,741	308,246	361,640	395,107	0	1,840,374
1998	445	11,748	44,863	91,709	160,302	226,100	274,984	334,305	394,759	420,462	0	1,959,677
1999	474	12,644	43,926	89,852	164,335	238,202	294,693	362,563	426,265	443,091	0	2,076,045
2000	573	14,296	43,177	89,670	164,859	246,800	312,538	391,464	451,582	468,756	0	2,183,715
2001	715	17,339	45,741	92,537	165,846	256,575	332,522	416,824	489,879	502,151	0	2,320,129
2002	727	20,884	50,590	95,515	167,600	266,622	353,508	438,776	531,718	546,347	0	2,472,287
2003	682	22,578	55,878	99,774	169,470	277,724	375,324	465,180	570,499	593,608	16,532	2,647,249
2004	591	22,898	61,383	103,753	169,586	286,702	394,572	494,833	616,509	638,275	35,435	2,824,537
2005	473	22,141	65,812	105,867	173,619	291,295	412,264	527,063	667,304	677,094	58,798	3,001,730
2006	441	20,623	68,643	107,464	177,935	290,318	426,597	557,006	701,363	727,849	85,558	3,163,797
2007	436	19,552	69,937	111,023	181,609	288,752	437,617	584,975	725,575	784,345	120,990	3,324,811
2008	454	19,907	71,794	116,647	185,996	288,694	451,000	616,848	761,221	834,659	154,947	3,502,167
2009	519	21,485	74,016	125,724	192,169	291,177	468,127	653,845	811,562	895,273	153,715	3,687,612
2010	454	22,651	76,703	135,257	196,262	300,892	480,270	692,026	870,176	964,283	155,286	3,894,260
2011	278	21,498	77,277	140,993	198,055	309,068	479,372	720,873	928,821	1,019,213	186,285	4,081,733
2012	195	18,847	75,479	142,956	201,596	313,329	473,983	739,885	982,563	1,062,235	209,479	4,220,547
2013	158	15,956	71,994	141,452	204,214	311,248	461,327	747,605	1,023,339	1,111,262	210,261	4,298,816
2014	123	13,518	66,532	135,082	203,925	301,667	442,009	739,758	1,047,793	1,159,642	216,794	4,326,843
Total												
1991	1,458	32,262	105,109	201,941	279,000	338,313	363,204	426,010	603,136	840,142	0	3,190,575
1992	1,622	39,369	116,691	222,141	313,933	375,465	414,321	477,229	639,708	863,230	0	3,463,709
1993	1,583	42,347	124,791	239,592	344,928	413,635	462,489	528,979	682,158	880,560	0	3,721,062
1994	1,336	41,107	126,471	249,792	368,334	448,217	513,033	578,155	719,967	911,749	0	3,958,161
1995	1,303	36,831	125,993	250,822	384,690	480,444	566,020	623,163	764,648	945,342	0	4,179,256
1996	1,246	32,405	122,799	245,081	394,693	508,917	605,943	677,608	813,893	975,726	0	4,378,311
1997	1,186	29,920	115,087	232,150	388,386	521,498	619,336	725,439	865,264	1,002,427	0	4,500,693
1998	1,208	29,851	109,698	224,138	390,992	543,552	649,057	774,890	924,351	1,043,205	0	4,690,942
1999	1,289	31,564	104,658	214,438	391,021	561,782	681,177	830,180	977,889	1,076,198	0	4,870,196
2000	1,460	35,088	100,712	208,539	383,177	572,685	710,490	886,108	1,021,400	1,115,987	0	5,035,646
2001	1,797	42,630	104,850	209,244	377,367	585,682	744,878	932,573	1,093,492	1,175,312	0	5,267,825
2002	1,909	51,463	113,796	211,048	373,295	597,843	783,566	968,449	1,179,411	1,258,656	0	5,539,436
2003	1,734	55,015	125,320	215,785	371,249	612,405	823,276	1,016,849	1,258,852	1,349,918	38,217	5,868,620
2004	1,461	55,230	137,024	220,046	366,295	622,536	857,054	1,068,268	1,353,818	1,434,712	81,780	6,198,224
2005	1,170	53,453	146,385	221,138	368,577	622,208	886,510	1,123,771	1,455,620	1,506,573	133,584	6,518,989
2006	1,052	50,043	152,645	226,689	371,383	612,789	907,839	1,176,128	1,516,025	1,603,733	192,592	6,806,918
2007	1,059	47,932	156,467	229,542	373,621	603,495	921,560	1,228,219	1,551,082	1,717,167	268,579	7,098,723
2008	1,160	48,872	162,062	241,959	377,465	597,455	939,247	1,288,060	1,612,745	1,817,644	340,022	7,426,691
2009	1,289	52,920	169,201	261,831	386,763	599,631	967,235	1,360,350	1,706,865	1,945,644	336,290	7,788,019
2010	1,119	55,857	176,891	282,951	393,707	615,799	986,803	1,437,766	1,823,237	2,090,589	339,219	8,203,938
2011	677	52,720	179,112	297,385	397,251	626,835	981,827	1,492,249	1,940,647	2,202,075</		

**Death Experience  
by Entitlement Age and Duration  
(2006-10)**



**Table 7A.—Male Disabled Workers**  
**Probability of Death**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age
	0	1	2	3	4	5	6	7	8	9	
16	0.004005	0.007118	0.005243	0.005808	0.004028	0.002434	0.009198	0.007122	0.005716	0.006213	0.008136
17	0.005733	0.008269	0.006200	0.006732	0.004814	0.004741	0.007013	0.007116	0.006395	0.005513	0.006905
18	0.007308	0.008883	0.006932	0.007155	0.006209	0.007076	0.004693	0.006643	0.006733	0.005497	0.006352
19	0.009912	0.008377	0.007283	0.007686	0.006205	0.006500	0.004569	0.005458	0.007248	0.005377	0.005880
20	0.010149	0.008646	0.006905	0.007953	0.006470	0.006162	0.004441	0.006121	0.007672	0.005341	0.006108
21	0.011103	0.010265	0.007296	0.007620	0.006774	0.005655	0.005015	0.004967	0.006140	0.006874	0.007012
22	0.012094	0.011228	0.009187	0.008027	0.007389	0.006408	0.006813	0.005581	0.006505	0.006665	0.007916
23	0.013836	0.011179	0.009447	0.007643	0.006611	0.007118	0.007323	0.005613	0.007006	0.006227	0.008116
24	0.015161	0.011926	0.009826	0.008297	0.009101	0.009227	0.007863	0.007654	0.007651	0.007779	0.009324
25	0.018140	0.014673	0.011113	0.010623	0.011169	0.008417	0.008942	0.008349	0.008298	0.008464	0.009091
26	0.018564	0.016495	0.013518	0.011573	0.010589	0.008277	0.009743	0.010199	0.009877	0.010236	0.009375
27	0.020113	0.017388	0.013371	0.013152	0.011160	0.008675	0.011310	0.010835	0.010458	0.010874	0.010365
28	0.020724	0.018155	0.013458	0.014264	0.011917	0.010631	0.011378	0.011353	0.010614	0.011099	0.011003
29	0.021458	0.016934	0.013899	0.012967	0.012085	0.013262	0.011405	0.011686	0.012879	0.012467	0.011339
30	0.023200	0.017115	0.015756	0.014714	0.011684	0.012936	0.012060	0.012233	0.012293	0.013085	0.011527
31	0.024571	0.017734	0.015653	0.015981	0.012800	0.012994	0.013193	0.013713	0.013573	0.014216	0.013354
32	0.024515	0.017861	0.017122	0.014963	0.013807	0.014220	0.013867	0.013669	0.013467	0.014543	0.013894
33	0.025472	0.019277	0.015627	0.015147	0.014157	0.014467	0.014338	0.014137	0.013848	0.015326	0.014453
34	0.026543	0.021196	0.016385	0.016307	0.015505	0.015411	0.014422	0.015058	0.015485	0.015910	0.015402
35	0.028307	0.020641	0.016911	0.016015	0.015144	0.015943	0.015318	0.015467	0.017319	0.017290	0.015730
36	0.029553	0.021818	0.015583	0.017742	0.015664	0.015792	0.016567	0.016336	0.016864	0.018095	0.016623
37	0.031385	0.024737	0.018076	0.017275	0.016308	0.016980	0.017910	0.017621	0.017296	0.019528	0.017254
38	0.031170	0.024702	0.020663	0.018570	0.016709	0.017127	0.016991	0.017793	0.018280	0.020344	0.018444
39	0.031760	0.023666	0.020930	0.019676	0.017793	0.016971	0.018185	0.019764	0.019799	0.020364	0.019330
40	0.033996	0.025886	0.021615	0.020828	0.018276	0.019744	0.019021	0.020915	0.019346	0.020367	0.021099
41	0.037454	0.027476	0.021614	0.019927	0.021049	0.020233	0.021340	0.020950	0.021474	0.022797	0.022125
42	0.042254	0.029028	0.024078	0.021666	0.021654	0.021111	0.020751	0.022591	0.024108	0.024209	0.022946
43	0.043253	0.030026	0.025109	0.023848	0.021864	0.023325	0.022413	0.023813	0.024088	0.025639	0.024665
44	0.047810	0.030554	0.025663	0.024035	0.024225	0.023838	0.025207	0.025413	0.026245	0.028749	0.026031
45	0.048081	0.031913	0.028376	0.025577	0.025257	0.026351	0.026729	0.026663	0.026773	0.028648	0.027221
46	0.052341	0.033774	0.028944	0.026922	0.026840	0.026631	0.026597	0.027912	0.029313	0.030353	0.028951
47	0.058179	0.037569	0.030009	0.029002	0.028099	0.028074	0.027621	0.029062	0.030591	0.032001	0.030184
48	0.063102	0.039881	0.032815	0.030991	0.029464	0.029392	0.029290	0.029774	0.030323	0.032387	0.031587
49	0.064043	0.043206	0.033119	0.031247	0.029065	0.030218	0.030251	0.031965	0.031652	0.032654	0.033641
50	0.047733	0.034242	0.029994	0.029417	0.028782	0.028373	0.029795	0.031248	0.030506	0.033644	0.034318
51	0.060387	0.040972	0.033382	0.030202	0.030311	0.030353	0.031738	0.032343	0.033140	0.036774	0.036444
52	0.064606	0.042419	0.034941	0.032608	0.030983	0.032156	0.032335	0.033528	0.034646	0.036037	0.038363
53	0.067887	0.045619	0.037972	0.034237	0.032802	0.032727	0.031872	0.034376	0.037637	0.038761	0.041034
54	0.069555	0.046707	0.035569	0.034591	0.032746	0.033390	0.034824	0.037122	0.038282	0.041385	0.042186
55	0.053986	0.039017	0.032103	0.030704	0.030946	0.031538	0.033814	0.035627	0.037044	0.040646	0.041976
56	0.062545	0.042695	0.034206	0.033525	0.032278	0.033869	0.035190	0.039125	0.039132	0.041303	0.047624
57	0.063949	0.043076	0.035000	0.033490	0.033836	0.036481	0.038043	0.040093	0.040390	0.045543	0.049946
58	0.066925	0.045721	0.037491	0.035357	0.036548	0.038511	0.040046	0.038783	0.045576	0.048301	0.052884
59	0.066950	0.046406	0.038999	0.036654	0.037211	0.037375	0.038736	0.043914	0.047481	0.051386	0.055771
60	0.064286	0.046916	0.039314	0.037607	0.037372	0.037410	0.043402	0.045616	0.048726	0.052754	0.058466
61	0.074153	0.049555	0.041682	0.039464	0.038908	0.043873	0.047364	0.048433	0.052576	0.054822	0.061678
62	0.081539	0.054098	0.044189	0.042764	0.045562	0.045980	0.049717	0.052812	0.055874	0.057919	0.065458
63	0.095425	0.063973	0.051745	0.050283	0.050324	0.054444	0.056046	0.060056	0.065220	0.065203	0.069131
64	0.115021	0.070370	0.055579	0.055825	0.056144	0.062203	0.061766	0.064501	0.073359	0.073558	0.073835
65	0.123763	0.074767	0.055770	0.060810	0.060725	0.062011	0.064728	0.066258	0.081121	0.081981	0.079210

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Experience after NRA reflects workers who remain on the DI rolls until NRA and then convert to the OASI rolls thereafter, as well as workers who voluntarily switch from DI to OASI prior to NRA.
2. The value  $q_{[x]+t}$  at duration  $t$  represents the probability of death—in a multiple-decrement environment—during the  $(t+1)$  year of entitlement for those originally entitled to disability benefits at entl age  $[x]$  who have attained age  $[x]+t$ .
3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement. See table 7C for attained ages beyond age 75.
4. Results have been graduated using the Whittaker-Henderson Type B two-dimensional method.

**Table 7B.—Female Disabled Workers**  
**Probability of Death**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age	
	0	1	2	3	4	5	6	7	8	9		
16	0.002658	0.004147	0.003886	0.005301	0.002729	0.002983	0.004693	0.008797	0.006399	0.003891	0.006018	26
17	0.005155	0.006352	0.004714	0.005212	0.003813	0.004076	0.005824	0.007905	0.005629	0.004977	0.006102	27
18	0.007548	0.008296	0.005429	0.005711	0.004812	0.004944	0.006739	0.007348	0.004588	0.006013	0.005964	28
19	0.009750	0.008725	0.006035	0.005879	0.005938	0.004206	0.006868	0.007082	0.004904	0.006804	0.006404	29
20	0.009209	0.008893	0.005486	0.006412	0.005531	0.004502	0.006699	0.005799	0.005786	0.007034	0.007357	30
21	0.008853	0.008749	0.006374	0.006418	0.005043	0.005153	0.005067	0.005268	0.006487	0.006387	0.006437	31
22	0.010456	0.007957	0.008638	0.006825	0.005194	0.005517	0.005655	0.005977	0.005867	0.006623	0.006821	32
23	0.012323	0.010298	0.008646	0.007240	0.005693	0.005601	0.006956	0.006625	0.005840	0.007409	0.006958	33
24	0.013222	0.011330	0.007574	0.006682	0.006947	0.006319	0.006958	0.006688	0.007153	0.008527	0.007247	34
25	0.014412	0.012192	0.008099	0.007552	0.007601	0.007357	0.007331	0.006054	0.008567	0.008665	0.007563	35
26	0.015869	0.013782	0.009713	0.008131	0.008220	0.006557	0.007754	0.006164	0.008628	0.008416	0.008902	36
27	0.018568	0.012815	0.009088	0.008390	0.008448	0.007458	0.008406	0.007131	0.007973	0.007569	0.008624	37
28	0.017060	0.014452	0.010665	0.008915	0.007890	0.007942	0.008312	0.007197	0.008461	0.008830	0.009053	38
29	0.017180	0.013369	0.011671	0.009849	0.008973	0.008262	0.009258	0.008848	0.009670	0.009624	0.009698	39
30	0.019371	0.014874	0.012718	0.010437	0.008079	0.008219	0.008471	0.009088	0.008830	0.009844	0.010284	40
31	0.020304	0.015223	0.013321	0.009271	0.008172	0.008781	0.008371	0.009265	0.010377	0.009011	0.010057	41
32	0.020219	0.015476	0.012849	0.010537	0.009858	0.010009	0.008342	0.008794	0.009561	0.010244	0.011045	42
33	0.020601	0.017199	0.012246	0.011135	0.008962	0.009468	0.009323	0.009131	0.010025	0.009657	0.011452	43
34	0.021780	0.017219	0.013132	0.011203	0.010219	0.009423	0.008668	0.010100	0.010015	0.010768	0.011468	44
35	0.024277	0.018407	0.014134	0.010683	0.011787	0.009355	0.009837	0.010327	0.010322	0.010981	0.012035	45
36	0.024825	0.017330	0.013951	0.012652	0.012280	0.010637	0.011231	0.010735	0.010542	0.012725	0.013051	46
37	0.026561	0.018835	0.014910	0.012201	0.012344	0.011605	0.011980	0.011071	0.010894	0.012274	0.013477	47
38	0.026281	0.019585	0.015816	0.013079	0.011725	0.011828	0.011514	0.012413	0.011958	0.012287	0.014012	48
39	0.026941	0.021430	0.016048	0.012897	0.013672	0.012459	0.012617	0.013117	0.013621	0.014177	0.015020	49
40	0.030039	0.023086	0.017040	0.015072	0.013017	0.013590	0.011700	0.013659	0.013795	0.014052	0.014972	50
41	0.030618	0.024372	0.018334	0.014800	0.014070	0.013623	0.012804	0.014282	0.013849	0.014882	0.016122	51
42	0.032748	0.023726	0.019303	0.015277	0.014078	0.013591	0.013571	0.014530	0.014929	0.016072	0.016938	52
43	0.034374	0.024845	0.019428	0.016820	0.016001	0.014886	0.014231	0.015755	0.014611	0.016189	0.017025	53
44	0.037010	0.026114	0.019913	0.017809	0.015975	0.015412	0.015365	0.016867	0.015455	0.017517	0.018023	54
45	0.038807	0.026422	0.020231	0.017309	0.016226	0.016170	0.016105	0.017340	0.016837	0.017865	0.018834	55
46	0.040464	0.028115	0.021222	0.018650	0.016445	0.016714	0.017037	0.017975	0.018331	0.018786	0.019602	56
47	0.043439	0.029289	0.022854	0.020102	0.018218	0.016908	0.017062	0.017986	0.019342	0.017477	0.020381	57
48	0.047401	0.031736	0.022880	0.020367	0.018486	0.018265	0.018161	0.018721	0.018228	0.018865	0.021790	58
49	0.049188	0.033086	0.023177	0.020019	0.019483	0.017782	0.018292	0.018337	0.021136	0.022378	0.023241	59
50	0.034800	0.026452	0.020089	0.018711	0.017469	0.017206	0.018054	0.018532	0.020905	0.021966	0.023479	60
51	0.044183	0.030204	0.023619	0.021707	0.020014	0.019136	0.019921	0.021147	0.020662	0.022655	0.025342	61
52	0.045248	0.030904	0.024238	0.021377	0.019513	0.019663	0.020859	0.022547	0.021829	0.023926	0.026661	62
53	0.047363	0.033837	0.024167	0.022111	0.020565	0.021867	0.021866	0.022574	0.024181	0.025867	0.028052	63
54	0.049597	0.035549	0.025710	0.022929	0.023197	0.022873	0.022310	0.024057	0.026393	0.027094	0.029049	64
55	0.040332	0.030798	0.022630	0.021947	0.021597	0.021104	0.021764	0.023932	0.025645	0.026213	0.027770	65
56	0.048755	0.034287	0.026364	0.023528	0.023864	0.023257	0.025797	0.026426	0.027259	0.025594	0.032170	66
57	0.050029	0.035592	0.027304	0.025821	0.024584	0.025678	0.026968	0.026791	0.027577	0.030120	0.034475	67
58	0.051823	0.035666	0.028397	0.025628	0.026473	0.025788	0.027020	0.026848	0.030421	0.032327	0.036526	68
59	0.053349	0.038506	0.030781	0.027944	0.028793	0.027118	0.026691	0.031142	0.032520	0.034949	0.038214	69
60	0.053890	0.039981	0.031359	0.028702	0.027901	0.027644	0.029689	0.032108	0.033413	0.036736	0.041030	70
61	0.061995	0.042093	0.033071	0.030774	0.027749	0.032939	0.032992	0.036253	0.039311	0.041570	0.043767	71
62	0.066980	0.047808	0.038159	0.032880	0.034093	0.034971	0.036726	0.038876	0.042402	0.045475	0.046781	72
63	0.079760	0.055266	0.041331	0.040768	0.037425	0.040520	0.043163	0.043178	0.048631	0.048940	0.050292	73
64	0.100447	0.060386	0.049733	0.043582	0.046125	0.044295	0.049059	0.049045	0.054979	0.055358	0.053434	74
65	0.108487	0.068326	0.056379	0.046410	0.051687	0.045036	0.053099	0.054934	0.061211	0.061746	0.057982	75

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Experience after NRA reflects workers who remain on the DI rolls until NRA and then convert to the OASI rolls thereafter, as well as workers who voluntarily switch from DI to OASI prior to NRA.
2. The value  $q_{[x]+t}$  at duration  $t$  represents the probability of death—in a multiple-decrement environment—during the  $(t+1)$  year of entitlement for those originally entitled to disability benefits at entl age  $[x]$  who have attained age  $[x]+t$ .
3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement. See **table 7C** for attained ages beyond age 75.
4. Results have been graduated using the Whittaker-Henderson Type B two-dimensional method.

**Table 7C.—Disabled Workers Age 76 and Older**  
***Probability of Death***  
(2006-10 Social Security DI disability experience)

Attained age	Male	Female
76	0.083534	0.062005
77	0.088329	0.066664
78	0.095884	0.072160
79	0.102637	0.077637
80	0.109178	0.083616
81	0.118024	0.090503
82	0.127082	0.098096
83	0.137380	0.105813
84	0.145437	0.115272
85	0.156293	0.122620
86	0.169966	0.131024
87	0.178678	0.142562
88	0.198189	0.154668
89	0.208951	0.168299
90	0.219466	0.179299
91	0.241438	0.196629
92	0.250499	0.207569
93	0.266052	0.223198
94	0.279355	0.242218
95	0.293322	0.254586
96	0.307989	0.269352
97	0.323388	0.284975
98	0.339557	0.301503
99	0.356535	0.318990
100	0.374362	0.337492
101	0.393080	0.357066
102	0.412734	0.377776
103	0.433371	0.399687
104	0.455039	0.422869
105	0.477791	0.447396
106	0.501681	0.473344
107	0.526765	0.500798
108	0.553103	0.529845
109	0.580758	0.560576
110	0.609796	0.593089

Notes:

1. The value at attained age  $x$  represents the probability of death within one year for those originally entitled to disability benefits who have attained that particular age. Experience after NRA reflects workers who remain on the DI rolls until NRA and then convert to the OASI rolls thereafter, as well as workers who voluntarily switch from DI to OASI prior to NRA.
2. Results have been blended based on attributes from general population mortality for calendar year 2000. Values are an extension of the ultimate column of **tables 7A** and **7B**.

**Table 8A.—Male Disabled Workers**  
**Benefit Continuance Table (excluding possibility of recovery)**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age
	0	1	2	3	4	5	6	7	8	9	
16	100,000	99,600	98,891	98,373	97,802	97,408	97,171	96,277	95,591	95,045	94,454
17	99,751	99,179	98,359	97,749	97,091	96,624	96,166	95,492	94,812	94,206	93,686
18	99,522	98,795	97,917	97,238	96,542	95,943	95,264	94,817	94,187	93,553	93,039
19	99,039	98,057	97,236	96,528	95,786	95,192	94,573	94,141	93,627	92,948	92,448
20	98,579	97,579	96,735	96,067	95,303	94,686	94,103	93,685	93,112	92,398	91,904
21	98,161	97,071	96,075	95,374	94,647	94,006	93,474	93,005	92,543	91,975	91,343
22	98,281	97,092	96,002	95,120	94,356	93,659	93,059	92,425	91,909	91,311	90,703
23	97,711	96,359	95,282	94,382	93,661	93,042	92,380	91,704	91,189	90,550	89,985
24	98,146	96,658	95,505	94,567	93,782	92,928	92,071	91,347	90,648	89,954	89,255
25	98,589	96,801	95,381	94,321	93,319	92,277	91,500	90,682	89,925	89,179	88,423
26	98,774	96,940	95,341	94,052	92,964	91,980	91,219	90,330	89,409	88,526	87,619
27	98,671	96,686	95,005	93,735	92,502	91,470	90,676	89,650	88,679	87,752	86,798
28	98,269	96,232	94,485	93,213	91,883	90,788	89,823	88,801	87,793	86,861	85,898
29	97,725	95,628	94,009	92,702	91,500	90,394	89,195	88,178	87,148	86,026	84,953
30	97,212	94,957	93,332	91,861	90,509	89,451	88,294	87,229	86,162	85,103	83,990
31	97,008	94,624	92,946	91,491	90,029	88,877	87,722	86,565	85,378	84,219	83,022
32	96,063	93,708	92,034	90,458	89,104	87,874	86,624	85,423	84,255	83,120	81,913
33	95,092	92,670	90,884	89,464	88,109	86,862	85,605	84,378	83,185	82,033	80,775
34	94,718	92,204	90,250	88,771	87,323	85,969	84,644	83,423	82,167	80,895	79,608
35	93,844	91,188	89,306	87,796	86,390	85,082	83,726	82,443	81,168	79,762	78,382
36	92,903	90,157	88,190	86,816	85,276	83,940	82,614	81,245	79,918	78,570	77,149
37	92,589	89,683	87,465	85,884	84,400	83,024	81,614	80,152	78,740	77,378	75,867
38	91,478	88,627	86,438	84,652	83,080	81,692	80,293	78,929	77,525	76,108	74,558
39	90,393	87,522	85,451	83,663	82,017	80,558	79,191	77,751	76,214	74,705	73,183
40	89,657	86,609	84,367	82,543	80,824	79,347	77,780	76,301	74,705	73,260	71,768
41	89,064	85,728	83,373	81,571	79,946	78,263	76,680	75,044	73,472	71,894	70,254
42	88,643	84,897	82,433	80,448	78,705	77,001	75,375	73,811	72,144	70,405	68,700
43	87,676	83,884	81,365	79,322	77,430	75,737	73,970	72,312	70,590	68,890	67,124
44	87,147	82,981	80,446	78,382	76,498	74,645	72,866	71,029	69,224	67,407	65,468
45	85,987	81,853	79,241	76,992	75,023	73,128	71,201	69,298	67,450	65,644	63,764
46	84,979	80,531	77,811	75,559	73,525	71,552	69,646	67,794	65,902	63,970	62,028
47	84,302	79,397	76,414	74,121	71,971	69,949	67,985	66,107	64,186	62,222	60,232
48	83,237	77,985	74,875	72,418	70,174	68,106	66,104	64,168	62,257	60,369	58,414
49	81,450	76,234	72,940	70,524	68,320	66,334	64,330	62,384	60,390	58,479	56,569
50	75,982	72,355	69,877	67,781	65,787	63,894	62,081	60,231	58,349	56,569	54,666
51	76,170	71,570	68,638	66,347	64,343	62,393	60,499	58,579	56,684	54,805	52,790
52	74,525	69,710	66,753	64,421	62,320	60,389	58,447	56,557	54,661	52,767	50,866
53	73,151	68,185	65,074	62,603	60,460	58,477	56,563	54,760	52,878	50,888	48,915
54	70,906	65,974	62,893	60,656	58,558	56,640	54,749	52,842	50,880	48,932	46,908
55	65,209	61,689	59,282	57,379	55,617	53,896	52,196	50,431	48,634	46,832	44,929
56	64,356	60,331	57,755	55,779	53,909	52,169	50,402	48,628	46,725	44,897	43,043
57	62,324	58,338	55,825	53,871	52,067	50,305	48,470	46,626	44,757	42,949	40,993
58	60,675	56,614	54,026	52,001	50,162	48,329	46,468	44,607	42,877	40,923	38,946
59	58,183	54,288	51,769	49,750	47,926	46,143	44,418	42,697	40,822	38,884	36,886
60	55,413	51,851	49,418	47,475	45,690	43,982	42,337	40,499	38,652	36,769	34,829
61	54,273	50,248	47,758	45,767	43,961	42,251	40,397	38,484	36,620	34,695	32,793
62	53,103	48,773	46,134	44,095	42,209	40,286	38,434	36,523	34,594	32,661	30,770
63	54,167	48,998	45,863	43,490	41,303	39,224	37,088	35,009	32,906	30,760	28,756
64	54,709	48,416	45,009	42,507	40,134	37,881	35,525	33,331	31,181	28,894	26,768
65	53,130	46,554	43,073	40,671	38,198	35,878	33,653	31,475	29,390	27,006	24,792

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Experience after NRA reflects workers who remain on the DI rolls until NRA and then convert to the OASI rolls thereafter, as well as workers who voluntarily switch from DI to OASI prior to NRA.
2. The value  $l_{[x]}$  at duration 0 represents an assumed number of lives originally entitled to disability benefits at entl age [x]; the value  $l_{[x]+t}$  at duration  $t > 0$  represents the number of lives from the original  $l_{[x]}$  who have not died and remain on the rolls as of attained age  $[x]+t$ . Lives are decremented using probabilities from **table 7A**.
3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement. See **table 8C** for attained ages beyond age 75.

**Table 8B.—Female Disabled Workers**  
**Benefit Continuance Table (excluding possibility of recovery)**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age
	0	1	2	3	4	5	6	7	8	9	
16	100,000	99,734	99,320	98,934	98,410	98,141	97,848	97,389	96,532	95,914	95,541
17	100,216	99,699	99,066	98,599	98,085	97,711	97,313	96,746	95,981	95,441	94,966
18	100,387	99,629	98,802	98,266	97,705	97,235	96,754	96,102	95,396	94,958	94,387
19	100,268	99,290	98,424	97,830	97,255	96,677	96,270	95,609	94,932	94,466	93,824
20	99,541	98,624	97,747	97,211	96,588	96,054	95,622	94,981	94,430	93,884	93,223
21	98,654	97,781	96,926	96,308	95,690	95,207	94,716	94,236	93,740	93,132	92,537
22	98,505	97,475	96,699	95,864	95,210	94,715	94,192	93,659	93,099	92,553	91,941
23	98,618	97,403	96,400	95,567	94,875	94,335	93,807	93,154	92,537	91,997	91,314
24	98,404	97,103	96,003	95,276	94,639	93,982	93,388	92,738	92,118	91,459	90,679
25	98,327	96,910	95,728	94,953	94,236	93,520	92,832	92,151	91,593	90,808	90,022
26	98,119	96,562	95,231	94,306	93,539	92,770	92,162	91,447	90,883	90,099	89,341
27	97,503	95,693	94,467	93,608	92,823	92,039	91,353	90,585	89,939	89,222	88,546
28	97,041	95,385	94,006	93,003	92,174	91,447	90,721	89,967	89,320	88,564	87,782
29	96,841	95,177	93,905	92,809	91,895	91,070	90,318	89,482	88,690	87,832	86,987
30	96,217	94,353	92,950	91,768	90,810	90,076	89,336	88,579	87,774	86,999	86,143
31	95,437	93,499	92,076	90,849	90,007	89,271	88,487	87,746	86,933	86,031	85,257
32	94,840	92,922	91,484	90,309	89,357	88,476	87,590	86,859	86,095	85,272	84,400
33	93,971	92,035	90,452	89,344	88,349	87,557	86,728	85,919	85,134	84,281	83,468
34	93,345	91,312	89,740	88,562	87,570	86,675	85,858	85,114	84,254	83,410	82,512
35	92,989	90,732	89,062	87,803	86,865	85,841	85,038	84,201	83,331	82,471	81,566
36	92,503	90,207	88,644	87,407	86,301	85,241	84,334	83,387	82,492	81,622	80,584
37	91,833	89,394	87,710	86,402	85,348	84,294	83,316	82,318	81,407	80,520	79,532
38	90,946	88,556	86,822	85,449	84,331	83,342	82,356	81,408	80,397	79,436	78,460
39	90,633	88,191	86,301	84,916	83,821	82,675	81,645	80,615	79,558	78,474	77,361
40	90,011	87,307	85,291	83,838	82,574	81,499	80,391	79,450	78,365	77,284	76,199
41	89,259	86,526	84,417	82,869	81,643	80,494	79,397	78,380	77,261	76,191	75,058
42	88,377	85,483	83,455	81,844	80,594	79,459	78,379	77,315	76,192	75,055	73,848
43	87,709	84,694	82,590	80,985	79,623	78,349	77,183	76,085	74,886	73,792	72,597
44	87,129	83,904	81,713	80,086	78,660	77,403	76,210	75,039	73,773	72,633	71,361
45	86,075	82,735	80,549	78,919	77,553	76,295	75,061	73,852	72,571	71,349	70,075
46	85,360	81,906	79,603	77,914	76,461	75,204	73,947	72,687	71,380	70,072	68,755
47	84,460	80,791	78,425	76,633	75,093	73,725	72,478	71,241	69,960	68,607	67,407
48	83,634	79,670	77,142	75,377	73,842	72,477	71,153	69,861	68,553	67,303	66,033
49	82,637	78,572	75,972	74,211	72,725	71,308	70,040	68,759	67,498	66,071	64,594
50	78,356	75,629	73,628	72,149	70,799	69,562	68,365	67,131	65,887	64,510	63,093
51	78,838	75,355	73,079	71,353	69,804	68,407	67,098	65,761	64,370	63,040	61,612
52	77,383	73,882	71,599	69,864	68,371	67,037	65,719	64,348	62,897	61,524	60,051
53	76,436	72,816	70,352	68,652	67,134	65,753	64,315	62,909	61,489	60,002	58,450
54	75,472	71,729	69,179	67,400	65,855	64,327	62,856	61,454	59,976	58,393	56,810
55	71,500	68,616	66,503	64,998	63,571	62,198	60,885	59,560	58,135	56,644	55,160
56	71,639	68,146	65,809	64,074	62,566	61,073	59,653	58,114	56,578	55,036	53,628
57	70,438	66,914	64,532	62,770	61,149	59,646	58,114	56,547	55,032	53,514	51,903
58	68,712	65,151	62,827	61,043	59,479	57,904	56,411	54,887	53,413	51,788	50,114
59	67,683	64,072	61,605	59,709	58,040	56,369	54,840	53,376	51,714	50,032	48,284
60	65,749	62,206	59,719	57,846	56,186	54,618	53,108	51,531	49,876	48,209	46,439
61	65,550	61,486	58,898	56,950	55,197	53,665	51,897	50,185	48,366	46,465	44,534
62	65,325	60,950	58,036	55,821	53,986	52,145	50,321	48,473	46,589	44,614	42,585
63	66,367	61,074	57,699	55,314	53,059	51,073	49,004	46,889	44,864	42,682	40,593
64	68,191	61,341	57,637	54,771	52,384	49,968	47,755	45,412	43,185	40,811	38,551
65	68,398	60,978	56,812	53,609	51,121	48,479	46,296	43,838	41,430	38,894	36,491

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Experience after NRA reflects workers who remain on the DI rolls until NRA and then convert to the OASI rolls thereafter, as well as workers who voluntarily switch from DI to OASI prior to NRA.
2. The value  $l_{[x]}$  at duration 0 represents an assumed number of lives originally entitled to disability benefits at entl age [x]; the value  $l_{[x]} + t$  at duration  $t > 0$  represents the number of lives from the original  $l_{[x]}$  who have not died and remain on the rolls as of attained age [x]+t. Lives are decremented using probabilities from **table 7B**.
3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement. See **table 8C** for attained ages beyond age 75.

**Table 8C.—Disabled Workers Age 76 and Older**  
**Benefit Continuance Table (excluding possibility of recovery)**  
(2006-10 Social Security DI disability experience)

Attained age	Male	Female
76	22,828	34,375
77	20,921	32,244
78	19,073	30,094
79	17,244	27,922
80	15,474	25,754
81	13,785	23,601
82	12,158	21,465
83	10,613	19,359
84	9,155	17,311
85	7,824	15,316
86	6,601	13,438
87	5,479	11,677
88	4,500	10,012
89	3,608	8,463
90	2,854	7,039
91	2,228	5,777
92	1,690	4,641
93	1,267	3,678
94	930	2,857
95	670	2,165
96	473	1,614
97	327	1,179
98	221	843
99	146	589
100	94	401
101	59	266
102	36	171
103	21	106
104	12	64
105	7	37
106	4	20
107	2	11
108	1	5
109	0	2
110	0	1

Notes:

1. The value at attained age  $x$  represents the number of lives remaining from those originally entitled to disability benefits who have attained that particular age. Experience after NRA reflects workers who remain on the DI rolls until NRA and then convert to the OASI rolls thereafter, as well as workers who voluntarily switch from DI to OASI prior to NRA.
2. Lives are decremented using probabilities from **table 7C**. Values are an extension of the ultimate column of **tables 8A** and **8B**.

**Table 9A.—Male Disabled Workers**  
**Expected Future Time on Combined DI and OASI Rolls (excluding possibility of recovery)**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age
	0	1	2	3	4	5	6	7	8	9	
16	44.37	43.55	42.86	42.08	41.32	40.49	39.59	38.95	38.23	37.44	36.67
17	43.47	42.72	42.07	41.33	40.61	39.80	38.99	38.26	37.53	36.77	35.97
18	42.57	41.88	41.26	40.54	39.83	39.07	38.35	37.53	36.78	36.02	35.22
19	41.78	41.19	40.54	39.83	39.13	38.37	37.62	36.79	35.99	35.25	34.44
20	40.99	40.40	39.75	39.02	38.33	37.58	36.81	35.97	35.19	34.46	33.64
21	40.17	39.61	39.02	38.30	37.59	36.85	36.05	35.23	34.41	33.61	32.84
22	39.16	38.63	38.06	37.41	36.71	35.98	35.21	34.45	33.64	32.85	32.07
23	38.39	37.92	37.34	36.70	35.97	35.21	34.46	33.71	32.90	32.13	31.32
24	37.29	36.86	36.30	35.65	34.95	34.26	33.58	32.84	32.09	31.33	30.58
25	36.18	35.84	35.37	34.76	34.13	33.51	32.79	32.08	31.34	30.60	29.86
26	35.19	34.85	34.43	33.89	33.28	32.63	31.90	31.21	30.53	29.82	29.13
27	34.29	33.99	33.58	33.03	32.46	31.82	31.10	30.45	29.78	29.08	28.40
28	33.49	33.18	32.79	32.23	31.69	31.06	30.39	29.74	29.07	28.38	27.69
29	32.74	32.44	32.00	31.44	30.85	30.22	29.62	28.95	28.29	27.65	26.99
30	31.95	31.70	31.24	30.74	30.19	29.54	28.92	28.27	27.61	26.95	26.30
31	31.10	30.87	30.42	29.90	29.37	28.75	28.12	27.49	26.86	26.23	25.60
32	30.44	30.19	29.73	29.24	28.68	28.08	27.47	26.85	26.22	25.57	24.94
33	29.79	29.55	29.12	28.58	28.01	27.40	26.80	26.18	25.55	24.90	24.28
34	28.97	28.75	28.36	27.82	27.28	26.70	26.11	25.48	24.86	24.25	23.63
35	28.29	28.10	27.68	27.15	26.59	25.99	25.40	24.79	24.17	23.59	22.99
36	27.62	27.45	27.05	26.47	25.94	25.34	24.74	24.15	23.54	22.94	22.35
37	26.79	26.64	26.31	25.78	25.23	24.63	24.05	23.48	22.89	22.29	21.72
38	26.16	25.99	25.63	25.16	24.63	24.04	23.45	22.84	22.25	21.65	21.09
39	25.53	25.35	24.95	24.48	23.96	23.38	22.78	22.19	21.63	21.05	20.48
40	24.79	24.65	24.29	23.82	23.31	22.74	22.18	21.60	21.05	20.46	19.88
41	24.04	23.96	23.62	23.13	22.59	22.06	21.51	20.97	20.40	19.84	19.29
42	23.24	23.24	22.92	22.47	21.96	21.43	20.89	20.32	19.78	19.25	18.72
43	22.57	22.57	22.25	21.81	21.33	20.80	20.28	19.74	19.21	18.67	18.15
44	21.82	21.89	21.56	21.12	20.63	20.13	19.60	19.10	18.58	18.07	17.59
45	21.19	21.23	20.91	20.51	20.04	19.54	19.06	18.57	18.06	17.55	17.05
46	20.52	20.63	20.33	19.92	19.46	18.98	18.49	17.98	17.48	17.00	16.51
47	19.78	19.97	19.73	19.33	18.89	18.42	17.94	17.44	16.94	16.46	15.99
48	19.11	19.37	19.15	18.78	18.37	17.91	17.44	16.95	16.45	15.95	15.47
49	18.60	18.84	18.67	18.29	17.87	17.39	16.91	16.42	15.95	15.45	14.96
50	18.86	18.78	18.43	17.98	17.51	17.01	16.50	15.99	15.49	14.96	14.46
51	17.92	18.04	17.79	17.39	16.92	16.43	15.93	15.43	14.93	14.43	13.96
52	17.36	17.53	17.28	16.89	16.44	15.95	15.46	14.96	14.46	13.96	13.47
53	16.76	16.95	16.73	16.37	15.93	15.46	14.96	14.44	13.94	13.46	12.99
54	16.34	16.52	16.30	15.89	15.44	14.94	14.44	13.95	13.46	12.98	12.52
55	16.60	16.52	16.17	15.69	15.17	14.64	14.10	13.57	13.06	12.54	12.05
56	15.88	15.90	15.59	15.12	14.63	14.10	13.58	13.05	12.57	12.06	11.55
57	15.41	15.43	15.10	14.63	14.12	13.59	13.09	12.59	12.09	11.58	11.11
58	14.85	14.88	14.57	14.12	13.62	13.12	12.62	12.13	11.60	11.13	10.67
59	14.47	14.47	14.15	13.70	13.20	12.70	12.17	11.64	11.15	10.68	10.23
60	14.14	14.07	13.74	13.28	12.78	12.26	11.72	11.23	10.74	10.26	9.81
61	13.48	13.52	13.20	12.75	12.25	11.73	11.24	10.78	10.30	9.84	9.39
62	12.84	12.93	12.64	12.20	11.73	11.26	10.78	10.32	9.87	9.42	8.97
63	11.86	12.06	11.85	11.47	11.05	10.61	10.19	9.76	9.35	8.97	8.56
64	11.01	11.37	11.19	10.82	10.43	10.02	9.66	9.26	8.86	8.52	8.16
65	10.49	10.91	10.75	10.35	9.99	9.60	9.21	8.81	8.40	8.09	7.77

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Experience after NRA reflects workers who remain on the DI rolls until NRA and then convert to the OASI rolls thereafter, as well as workers who voluntarily switch from DI to OASI prior to NRA.
2. The value  $e_{[x]+t}$  at duration  $t$  represents the average number of future years a beneficiary will remain on the combined DI and OASI rolls for those originally entitled to disability benefits at entl age  $[x]$  who have not died as of attained age  $[x]+t$ . Values are based on continuance experience from tables 8A and 8C.
3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement. See table 9C for attained ages beyond age 75.

**Table 9B.—Female Disabled Workers**  
**Expected Future Time on Combined DI and OASI Rolls (excluding possibility of recovery)**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age
	0	1	2	3	4	5	6	7	8	9	
16	48.69	47.82	47.02	46.20	45.44	44.57	43.70	42.90	42.28	41.55	40.71
17	47.60	46.84	46.14	45.36	44.59	43.76	42.94	42.19	41.52	40.75	39.95
18	46.54	45.89	45.27	44.51	43.76	42.97	42.18	41.47	40.77	39.96	39.19
19	45.61	45.05	44.44	43.71	42.97	42.22	41.40	40.68	39.97	39.16	38.43
20	44.94	44.35	43.75	42.98	42.26	41.49	40.68	39.95	39.18	38.40	37.67
21	44.32	43.71	43.09	42.36	41.63	40.84	40.05	39.25	38.46	37.71	36.95
22	43.40	42.86	42.20	41.56	40.84	40.05	39.27	38.49	37.72	36.94	36.18
23	42.39	41.91	41.34	40.70	39.99	39.21	38.43	37.70	36.95	36.16	35.43
24	41.52	41.06	40.53	39.84	39.10	38.37	37.61	36.87	36.12	35.37	34.67
25	40.58	40.17	39.66	38.98	38.27	37.56	36.84	36.11	35.32	34.62	33.92
26	39.69	39.33	38.87	38.24	37.55	36.86	36.10	35.38	34.60	33.89	33.18
27	38.95	38.68	38.17	37.52	36.83	36.14	35.41	34.71	33.95	33.22	32.47
28	38.17	37.82	37.37	36.77	36.09	35.38	34.66	33.94	33.18	32.46	31.75
29	37.30	36.95	36.44	35.87	35.22	34.53	33.82	33.13	32.42	31.73	31.03
30	36.55	36.26	35.80	35.26	34.62	33.90	33.18	32.46	31.75	31.03	30.33
31	35.86	35.59	35.14	34.60	33.92	33.20	32.49	31.76	31.05	30.37	29.64
32	35.12	34.83	34.37	33.81	33.17	32.49	31.81	31.08	30.35	29.64	28.94
33	34.45	34.16	33.75	33.16	32.53	31.82	31.12	30.41	29.68	28.98	28.26
34	33.70	33.44	33.02	32.45	31.81	31.14	30.43	29.69	28.99	28.28	27.58
35	32.86	32.67	32.27	31.73	31.07	30.43	29.71	29.00	28.30	27.59	26.89
36	32.09	31.90	31.45	30.89	30.28	29.65	28.96	28.28	27.58	26.87	26.21
37	31.35	31.19	30.78	30.24	29.60	28.97	28.30	27.64	26.94	26.23	25.55
38	30.68	30.49	30.09	29.57	28.95	28.29	27.62	26.94	26.27	25.58	24.90
39	29.85	29.66	29.30	28.77	28.14	27.53	26.87	26.20	25.55	24.89	24.24
40	29.08	28.97	28.64	28.13	27.55	26.91	26.27	25.58	24.92	24.27	23.60
41	28.37	28.25	27.94	27.46	26.86	26.24	25.59	24.92	24.27	23.61	22.96
42	27.69	27.61	27.27	26.80	26.21	25.57	24.92	24.26	23.61	22.96	22.32
43	26.95	26.89	26.56	26.08	25.52	24.92	24.29	23.64	23.01	22.34	21.70
44	26.19	26.18	25.87	25.38	24.83	24.23	23.60	22.96	22.35	21.69	21.07
45	25.55	25.57	25.25	24.76	24.18	23.57	22.95	22.32	21.71	21.07	20.44
46	24.83	24.86	24.56	24.08	23.53	22.91	22.30	21.67	21.06	20.44	19.83
47	24.13	24.20	23.92	23.47	22.94	22.35	21.73	21.10	20.47	19.87	19.21
48	23.42	23.56	23.31	22.85	22.31	21.72	21.12	20.50	19.88	19.24	18.60
49	22.77	22.92	22.69	22.22	21.66	21.08	20.46	19.83	19.19	18.59	18.01
50	22.94	22.75	22.36	21.80	21.21	20.58	19.93	19.29	18.64	18.03	17.42
51	21.89	21.87	21.54	21.05	20.50	19.91	19.29	18.67	18.07	17.44	16.83
52	21.32	21.31	20.97	20.48	19.92	19.30	18.68	18.07	17.47	16.85	16.25
53	20.64	20.64	20.35	19.84	19.28	18.67	18.08	17.47	16.86	16.27	15.69
54	19.96	19.98	19.69	19.20	18.64	18.07	17.48	16.87	16.27	15.70	15.12
55	19.97	19.79	19.40	18.84	18.25	17.64	17.01	16.38	15.76	15.17	14.56
56	19.02	18.97	18.62	18.11	17.54	16.96	16.35	15.77	15.18	14.59	13.96
57	18.39	18.33	17.99	17.48	16.93	16.35	15.76	15.19	14.59	13.99	13.41
58	17.86	17.81	17.45	16.95	16.38	15.81	15.22	14.63	14.01	13.44	12.87
59	17.19	17.13	16.80	16.32	15.77	15.22	14.63	14.02	13.46	12.89	12.34
60	16.70	16.62	16.29	15.80	15.26	14.68	14.08	13.50	12.93	12.36	11.81
61	15.88	15.90	15.58	15.09	14.56	13.96	13.42	12.86	12.32	11.80	11.29
62	15.07	15.11	14.85	14.42	13.89	13.36	12.83	12.30	11.78	11.28	10.79
63	14.06	14.23	14.04	13.62	13.18	12.67	12.18	11.71	11.22	10.77	10.29
64	12.98	13.37	13.20	12.86	12.42	12.00	11.53	11.10	10.65	10.24	9.81
65	12.20	12.63	12.52	12.23	11.81	11.42	10.94	10.52	10.10	9.73	9.34

Notes:

1. Entl age denotes age last birthday at entitlement to disability benefits. Duration measured in years since entitlement. Attained age calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Experience after NRA reflects workers who remain on the DI rolls until NRA and then convert to the OASI rolls thereafter, as well as workers who voluntarily switch from DI to OASI prior to NRA.
2. The value  $e_{[x]+t}$  at duration  $t$  represents the average number of future years a beneficiary will remain on the combined DI and OASI rolls for those originally entitled to disability benefits at entl age  $[x]$  who have not died as of attained age  $[x]+t$ . Values are based on continuance experience from tables 8B and 8C.
3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement. See table 9C for attained ages beyond age 75.

**Table 9C.—Disabled Workers Age 76 and Older**  
**Expected Future Time on the OASI Rolls (excluding possibility of recovery)**  
(2006-10 Social Security DI disability experience)

Attained age	Male	Female
76	7.40	8.88
77	7.03	8.44
78	6.66	8.00
79	6.31	7.59
80	5.98	7.18
81	5.65	6.79
82	5.34	6.42
83	5.04	6.06
84	4.77	5.72
85	4.49	5.40
86	4.23	5.09
87	4.00	4.78
88	3.76	4.49
89	3.56	4.22
90	3.37	3.97
91	3.18	3.73
92	3.03	3.52
93	2.87	3.31
94	2.73	3.12
95	2.59	2.95
96	2.47	2.79
97	2.34	2.63
98	2.23	2.48
99	2.12	2.34
100	2.01	2.20
101	1.91	2.07
102	1.81	1.94
103	1.74	1.82
104	1.67	1.69
105	1.50	1.55
106	1.25	1.45
107	1.00	1.23
108	0.50	1.10
109	0.00	1.00
110	0.00	0.50

Notes:

1. The value at attained age  $x$  represents the average number of future years a beneficiary will remain on the OASI rolls for those originally entitled to disability benefits who have attained that particular age. Experience after NRA reflects workers who remain on the DI rolls until NRA and then convert to the OASI rolls thereafter, as well as workers who voluntarily switch from DI to OASI prior to NRA.

2. Values are based on continuance experience from **table 8C** and are an extension of the ultimate column of **tables 9A** and **9B**.

**Table 10A.—Male Disabled Workers**  
**Absolute Death Rate Per Thousand Entitled**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age
	0	1	2	3	4	5	6	7	8	9	
16	4.024	7.196	5.303	5.845	4.191	2.568	9.757	7.405	5.885	6.397	8.306
17	5.757	8.339	6.245	6.775	4.990	4.962	7.340	7.354	6.563	5.652	7.031
18	7.333	8.938	6.961	7.204	6.399	7.333	4.846	6.819	6.883	5.605	6.451
19	9.936	8.415	7.306	7.737	6.354	6.677	4.681	5.573	7.382	5.460	5.958
20	10.168	8.678	6.924	8.003	6.596	6.299	4.530	6.224	7.787	5.402	6.172
21	11.127	10.304	7.317	7.665	6.888	5.762	5.100	5.043	6.222	6.942	7.077
22	12.126	11.278	9.214	8.066	7.502	6.521	6.922	5.657	6.580	6.733	7.981
23	13.874	11.235	9.476	7.676	6.699	7.225	7.438	5.689	7.085	6.293	8.172
24	15.209	11.990	9.858	8.337	9.229	9.355	7.973	7.754	7.739	7.863	9.389
25	18.210	14.761	11.155	10.681	11.321	8.540	9.058	8.462	8.392	8.552	9.156
26	18.625	16.607	13.571	11.633	10.720	8.382	9.861	10.320	9.985	10.332	9.435
27	20.190	17.511	13.427	13.218	11.291	8.782	11.435	10.963	10.571	10.972	10.428
28	20.807	18.318	13.514	14.344	12.052	10.757	11.497	11.486	10.724	11.190	11.067
29	21.536	17.085	13.958	13.039	12.219	13.409	11.529	11.815	13.014	12.566	11.399
30	23.281	17.260	15.825	14.777	11.798	13.067	12.193	12.359	12.407	13.181	11.585
31	24.666	17.879	15.724	16.059	12.919	13.124	13.330	13.832	13.694	14.321	13.417
32	24.617	18.013	17.195	15.030	13.935	14.357	13.998	13.779	13.574	14.647	13.953
33	25.604	19.441	15.696	15.210	14.279	14.598	14.468	14.254	13.940	15.428	14.511
34	26.658	21.384	16.467	16.370	15.636	15.547	14.542	15.181	15.592	16.010	15.458
35	28.420	20.815	16.982	16.078	15.268	16.072	15.436	15.576	17.441	17.392	15.783
36	29.673	22.000	15.646	17.807	15.789	15.915	16.685	16.445	16.970	18.197	16.678
37	31.502	24.943	18.149	17.338	16.434	17.107	18.026	17.723	17.394	19.633	17.304
38	31.292	24.905	20.740	18.634	16.831	17.240	17.088	17.896	18.369	20.445	18.493
39	31.879	23.855	21.016	19.736	17.910	17.071	18.282	19.866	19.895	20.449	19.375
40	34.118	26.091	21.698	20.896	18.393	19.847	19.123	21.014	19.429	20.442	21.145
41	37.598	27.674	21.687	19.985	21.167	20.338	21.444	21.034	21.552	22.875	22.165
42	42.416	29.240	24.161	21.723	21.763	21.206	20.845	22.680	24.186	24.276	22.982
43	43.398	30.226	25.197	23.911	21.977	23.425	22.505	23.898	24.165	25.700	24.701
44	47.956	30.761	25.743	24.092	24.330	23.930	25.291	25.497	26.318	28.810	26.063
45	48.251	32.128	28.456	25.635	25.364	26.450	26.806	26.735	26.836	28.711	27.251
46	52.490	33.990	29.018	26.974	26.951	26.715	26.673	27.983	29.367	30.400	28.979
47	58.344	37.778	30.077	29.052	28.211	28.160	27.695	29.124	30.644	32.052	30.210
48	63.263	40.072	32.871	31.044	29.580	29.474	29.356	29.827	30.378	32.435	31.610
49	64.163	43.377	33.167	31.303	29.164	30.297	30.309	32.019	31.700	32.691	33.663
50	47.798	34.326	30.026	29.451	28.861	28.436	29.853	31.290	30.542	33.675	34.340
51	60.473	41.087	33.416	30.239	30.390	30.421	31.787	32.382	33.172	36.804	36.466
52	64.697	42.518	34.972	32.646	31.058	32.214	32.376	33.564	34.675	36.065	38.382
53	67.974	45.697	38.001	34.273	32.884	32.779	31.908	34.409	37.667	38.790	41.052
54	69.614	46.765	35.585	34.618	32.830	33.438	34.861	37.154	38.309	41.412	42.198
55	54.014	39.052	32.115	30.728	31.008	31.575	33.848	35.657	37.067	40.662	41.983
56	62.576	42.731	34.218	33.550	32.337	33.908	35.223	39.153	39.147	41.314	47.624
57	63.982	43.105	35.009	33.510	33.890	36.515	38.070	40.116	40.402	45.543	49.946
58	66.953	45.748	37.500	35.376	36.595	38.543	40.070	38.800	45.576	48.301	52.884
59	66.973	46.429	39.005	36.670	37.259	37.403	38.752	43.914	47.481	51.386	55.771
60	64.306	46.931	39.316	37.622	37.403	37.432	43.402	45.616	48.726	52.754	58.466
61	74.171	49.561	41.684	39.476	38.935	43.873	47.364	48.433	52.576	54.822	61.678
62	81.550	54.103	44.191	42.770	45.562	45.980	49.717	52.812	55.874	57.919	65.458
63	95.437	63.981	51.748	50.283	50.324	54.444	56.046	60.056	65.220	65.203	69.131
64	115.037	70.381	55.579	55.825	56.144	62.203	61.766	64.501	73.359	73.558	73.835
65	123.780	74.767	55.770	60.810	60.725	62.011	64.728	66.258	81.121	81.981	79.210

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Experience after NRA reflects workers who remain on the DI rolls until NRA and then convert to the OASI rolls thereafter, as well as workers who voluntarily switch from DI to OASI prior to NRA.
2. The value  $q_{[x]+t}$  at duration  $t$  represents the number of deaths per thousand during the  $(t+1)$  year of entitlement for those originally entitled to disability benefits at entl age  $[x]$  who have not died as of attained age  $[x]+t$ . Rates are derived from death probabilities shown in **table 7A** and recovery probabilities shown in **table 14A**. See appendix for details.
3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement. See **table 10C** for attained ages beyond age 75.

**Table 10B.—Female Disabled Workers**  
**Absolute Death Rate Per Thousand Entitled**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age
	0	1	2	3	4	5	6	7	8	9	
16	2.674	4.187	3.914	5.333	2.795	3.096	4.881	9.113	6.636	4.013	6.165
17	5.179	6.398	4.737	5.241	3.906	4.208	6.022	8.148	5.806	5.105	6.222
18	7.571	8.340	5.449	5.743	4.923	5.071	6.926	7.535	4.704	6.128	6.059
19	9.768	8.761	6.052	5.909	6.049	4.288	7.011	7.225	5.003	6.904	6.488
20	9.224	8.923	5.502	6.444	5.614	4.585	6.819	5.891	5.877	7.117	7.435
21	8.871	8.787	6.393	6.446	5.106	5.235	5.145	5.342	6.567	6.453	6.500
22	10.477	7.993	8.664	6.856	5.255	5.595	5.730	6.053	5.931	6.687	6.884
23	12.351	10.341	8.671	7.272	5.754	5.676	7.036	6.704	5.901	7.478	7.013
24	13.255	11.387	7.597	6.714	7.021	6.396	7.041	6.764	7.228	8.599	7.302
25	14.447	12.260	8.124	7.586	7.684	7.438	7.418	6.119	8.662	8.742	7.618
26	15.916	13.859	9.745	8.166	8.305	6.622	7.835	6.229	8.720	8.492	8.960
27	18.619	12.898	9.119	8.424	8.531	7.534	8.494	7.201	8.057	7.637	8.679
28	17.109	14.543	10.713	8.952	7.963	8.019	8.394	7.269	8.540	8.902	9.110
29	17.229	13.450	11.714	9.889	9.045	8.341	9.345	8.933	9.758	9.698	9.755
30	19.425	14.975	12.763	10.478	8.149	8.289	8.551	9.167	8.906	9.922	10.345
31	20.359	15.326	13.376	9.303	8.239	8.851	8.451	9.348	10.458	9.082	10.110
32	20.276	15.580	12.898	10.565	9.936	10.095	8.414	8.871	9.627	10.317	11.100
33	20.663	17.304	12.287	11.171	9.034	9.540	9.397	9.205	10.093	9.722	11.507
34	21.841	17.331	13.179	11.241	10.294	9.494	8.737	10.174	10.078	10.833	11.519
35	24.336	18.524	14.189	10.716	11.872	9.423	9.910	10.395	10.390	11.045	12.085
36	24.893	17.433	13.998	12.692	12.360	10.708	11.314	10.800	10.603	12.797	13.102
37	26.627	18.954	14.964	12.237	12.424	11.681	12.051	11.136	10.956	12.338	13.524
38	26.342	19.715	15.869	13.118	11.802	11.907	11.582	12.488	12.019	12.348	14.057
39	27.012	21.575	16.100	12.929	13.751	12.536	12.685	13.186	13.689	14.235	15.064
40	30.124	23.228	17.097	15.108	13.090	13.663	11.758	13.725	13.855	14.112	15.010
41	30.701	24.522	18.396	14.834	14.139	13.691	12.866	14.346	13.904	14.935	16.159
42	32.837	23.867	19.356	15.317	14.145	13.653	13.633	14.588	14.975	16.125	16.974
43	34.470	24.991	19.477	16.857	16.077	14.949	14.290	15.811	14.657	16.237	17.060
44	37.100	26.248	19.961	17.848	16.039	15.475	15.424	16.918	15.498	17.557	18.053
45	38.899	26.559	20.282	17.340	16.292	16.229	16.157	17.393	16.881	17.903	18.863
46	40.565	28.257	21.270	18.678	16.511	16.773	17.093	18.026	18.379	18.825	19.627
47	43.540	29.424	22.899	20.134	18.276	16.961	17.113	18.029	19.384	17.507	20.405
48	47.492	31.863	22.917	20.396	18.544	18.315	18.208	18.761	18.254	18.895	21.812
49	49.272	33.195	23.213	20.046	19.542	17.833	18.335	18.374	21.167	22.407	23.261
50	34.844	26.510	20.109	18.734	17.517	17.246	18.085	18.563	20.934	21.989	23.499
51	44.244	30.274	23.643	21.728	20.071	19.174	19.954	21.176	20.691	22.677	25.359
52	45.302	30.976	24.259	21.393	19.561	19.702	20.891	22.579	21.853	23.945	26.676
53	47.416	33.896	24.185	22.132	20.614	21.907	21.894	22.601	24.207	25.882	28.064
54	49.637	35.598	25.722	22.945	23.250	22.908	22.339	24.077	26.413	27.111	29.058
55	40.358	30.828	22.638	21.962	21.643	21.133	21.789	23.951	25.659	26.224	27.775
56	48.784	34.320	26.373	23.544	23.910	23.286	25.817	26.443	27.269	25.597	32.170
57	50.057	35.627	27.311	25.838	24.622	25.701	26.986	26.803	27.584	30.120	34.475
58	51.849	35.692	28.405	25.642	26.510	25.809	27.034	26.853	30.421	32.327	36.526
59	53.371	38.528	30.787	27.954	28.828	27.132	26.696	31.142	32.520	34.949	38.214
60	53.913	39.996	31.361	28.713	27.926	27.654	29.689	32.108	33.413	36.736	41.030
61	62.008	42.102	33.073	30.785	27.765	32.939	32.992	36.253	39.311	41.570	43.767
62	66.985	47.815	38.162	32.884	34.093	34.971	36.726	38.876	42.402	45.475	46.781
63	79.768	55.273	41.333	40.768	37.425	40.520	43.163	43.178	48.631	48.940	50.292
64	100.459	60.393	49.733	43.582	46.125	44.295	49.059	49.045	54.979	55.358	53.434
65	108.499	68.326	56.379	46.410	51.687	45.036	53.099	54.934	61.211	61.746	57.982

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Experience after NRA reflects workers who remain on the DI rolls until NRA and then convert to the OASI rolls thereafter, as well as workers who voluntarily switch from DI to OASI prior to NRA.
2. The value  $q'_{[x]+t}$  at duration  $t$  represents the number of deaths per thousand during the  $(t+1)$  year of entitlement for those originally entitled to disability benefits at entl age  $[x]$  who have not died as of attained age  $[x]+t$ . Rates are derived from death probabilities shown in **table 7B** and recovery probabilities shown in **table 14B**. See appendix for details.
3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement. See **table 10C** for attained ages beyond age 75.

**Table 10C.—Disabled Workers Age 76 and Older**  
**Absolute Death Rate Per Thousand Entitled**  
(2006-10 Social Security DI disability experience)

Attained age	Male	Female
76	83.534	62.005
77	88.329	66.664
78	95.884	72.160
79	102.637	77.637
80	109.178	83.616
81	118.024	90.503
82	127.082	98.096
83	137.380	105.813
84	145.437	115.272
85	156.293	122.620
86	169.966	131.024
87	178.678	142.562
88	198.189	154.668
89	208.951	168.299
90	219.466	179.299
91	241.438	196.629
92	250.499	207.569
93	266.052	223.198
94	279.355	242.218
95	293.322	254.586
96	307.989	269.352
97	323.388	284.975
98	339.557	301.503
99	356.535	318.990
100	374.362	337.492
101	393.080	357.066
102	412.734	377.776
103	433.371	399.687
104	455.039	422.869
105	477.791	447.396
106	501.681	473.344
107	526.765	500.798
108	553.103	529.845
109	580.758	560.576
110	609.796	593.089

Notes:

1. The value at attained age  $x$  represents the number of deaths per thousand within one year for those originally entitled to disability benefits who have attained that particular age. Experience after NRA reflects workers who remain on the DI rolls until NRA and then convert to the OASI rolls thereafter, as well as workers who voluntarily switch from DI to OASI prior to NRA.
2. Values are derived from death probabilities shown in **table 7C** and are an extension of the ultimate column of **tables 10A** and **10B**.

**Table 11.—Disabled Workers**  
**Aggregate Probability of Death and Expected Future Time on Combined**  
**DI and OASI Rolls (excluding possibility of recovery), by Entitlement Age**  
(2006-10 Social Security DI disability experience)

Entl age	Male		Female	
	Probability of death	Future time on OASDI rolls	Probability of death	Future time on OASDI rolls
16	0.007946	33.42	0.006644	40.03
17	0.009202	34.30	0.006895	40.02
18	0.010080	33.63	0.007649	39.09
19	0.010483	32.48	0.008283	38.08
20	0.011281	31.57	0.008861	37.13
21	0.011756	30.41	0.008800	36.09
22	0.013029	29.49	0.009078	35.16
23	0.013204	28.63	0.010372	34.23
24	0.014580	27.70	0.010966	33.42
25	0.016134	26.76	0.011752	32.61
26	0.017394	26.03	0.012125	31.90
27	0.018351	25.39	0.012915	31.25
28	0.018975	24.81	0.013128	30.60
29	0.019745	24.22	0.013672	29.91
30	0.020325	23.70	0.014305	29.32
31	0.021691	23.22	0.014293	28.82
32	0.021859	22.79	0.014830	28.18
33	0.022458	22.35	0.015183	27.71
34	0.023779	21.91	0.015630	27.16
35	0.024599	21.46	0.016237	26.59
36	0.025279	21.07	0.017135	25.97
37	0.026721	20.58	0.017670	25.38
38	0.027045	20.18	0.018155	24.85
39	0.028093	19.73	0.019495	24.20
40	0.029349	19.32	0.020391	23.66
41	0.030810	18.84	0.021175	23.10
42	0.032302	18.38	0.022075	22.52
43	0.033735	17.94	0.023207	21.97
44	0.035889	17.45	0.024627	21.36
45	0.036918	17.01	0.025530	20.81
46	0.038904	16.56	0.026990	20.21
47	0.041142	16.08	0.028630	19.63
48	0.043623	15.60	0.030114	19.01
49	0.045295	15.12	0.032051	18.37
50	0.041114	15.20	0.028516	18.39
51	0.046365	14.49	0.032996	17.47
52	0.048313	14.06	0.034082	16.93
53	0.051082	13.61	0.036076	16.35
54	0.052686	13.14	0.038360	15.74
55	0.048173	13.11	0.035643	15.64
56	0.052940	12.53	0.040480	14.88
57	0.054865	12.12	0.042597	14.36
58	0.057598	11.68	0.044356	13.89
59	0.059788	11.29	0.046798	13.39
60	0.060859	10.92	0.048443	12.94
61	0.065135	10.52	0.052289	12.46
62	0.068574	10.17	0.056632	11.98
63	0.076559	9.76	0.061833	11.50
64	0.083732	9.42	0.070322	11.01
65	0.086694	10.56	0.076329	12.31

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits.
2. *Probability of death* at entl age [x] represents the average probability of death within one year for disability beneficiaries who became entitled at that particular age. Values are based on aggregate counts of exposure and deaths across all durations, and have been graduated using Whittaker-Henderson method.
3. *Future time on OASDI rolls* at entl age [x] represents the aggregate expected number of years on the combined DI and OASI rolls for disability beneficiaries who became entitled at that particular age. Values are exposure-weighted averages of expected future times across all durations from tables 9A, 9B, and 9C. Experience reflects continuing entitlement after NRA.

**Table 12.—Disabled Workers**  
**Aggregate Probability of Death and Expected Future Time on Combined**  
**DI and OASI Rolls (excluding possibility of recovery), by Attained Age**  
(2006-10 Social Security DI disability experience)

Attained age	Male		Female	
	Probability of death	Future time on OASDI rolls	Probability of death	Future time on OASDI rolls
16	0.003959	44.37	0.001572	48.69
17	0.005863	43.48	0.004227	47.62
18	0.006763	42.60	0.006528	46.61
19	0.009864	41.83	0.009685	45.74
20	0.008931	41.10	0.008098	45.04
21	0.009076	40.35	0.007953	44.38
22	0.009445	39.54	0.007807	43.63
23	0.009911	38.79	0.008141	42.82
24	0.009599	37.99	0.008848	42.03
25	0.010097	37.16	0.008856	41.24
26	0.009835	36.32	0.008860	40.45
27	0.010376	35.48	0.009366	39.67
28	0.011475	34.65	0.009203	38.90
29	0.011877	33.86	0.009807	38.11
30	0.011850	33.08	0.010259	37.34
31	0.012701	32.28	0.010546	36.60
32	0.012883	31.51	0.010851	35.86
33	0.013743	30.76	0.011482	35.14
34	0.014850	30.03	0.011533	34.42
35	0.014994	29.32	0.011902	33.69
36	0.015207	28.62	0.012721	32.96
37	0.016306	27.90	0.012906	32.25
38	0.016639	27.21	0.012910	31.54
39	0.017274	26.54	0.013791	30.82
40	0.017611	25.86	0.014303	30.10
41	0.018954	25.18	0.014878	29.39
42	0.020172	24.50	0.015540	28.70
43	0.020866	23.84	0.016375	28.01
44	0.021829	23.18	0.016685	27.32
45	0.022667	22.53	0.017630	26.64
46	0.023957	21.89	0.018154	25.97
47	0.025420	21.25	0.019148	25.30
48	0.026838	20.63	0.019951	24.64
49	0.027966	20.03	0.021012	23.99
50	0.029207	19.49	0.020580	23.41
51	0.030335	18.93	0.021612	22.78
52	0.031707	18.39	0.021895	22.17
53	0.033052	17.85	0.022557	21.55
54	0.034420	17.32	0.023512	20.93
55	0.034579	16.88	0.023551	20.36
56	0.035357	16.40	0.024225	19.75
57	0.036188	15.92	0.024831	19.15
58	0.036784	15.43	0.026389	18.55
59	0.038036	14.94	0.027023	17.96
60	0.038617	14.47	0.027727	17.37
61	0.040571	13.98	0.029199	16.78
62	0.041806	13.50	0.030342	16.20
63	0.043676	13.00	0.031408	15.61
64	0.044687	12.52	0.032220	15.04
65	0.043189	12.06	0.029821	14.50
66	0.047022	11.58	0.033021	13.93
67	0.048966	11.13	0.034283	13.39
68	0.052007	10.68	0.036572	12.85
69	0.055270	10.24	0.038575	12.32
70	0.058141	9.81	0.041394	11.80
71	0.061653	9.39	0.044179	11.28
72	0.065626	8.97	0.047009	10.79
73	0.069228	8.56	0.050414	10.29
74	0.073835	8.16	0.053425	9.81
75	0.079210	7.77	0.057985	9.34

Notes:

1. *Attained age* calculated as sum of entitlement age and duration.
2. *Probability of death* at attained age  $x$  represents the average probability of death within one year for disability beneficiaries who have attained that particular age. Values are based on aggregate counts of exposure and deaths across all durations, and have been graduated using Whittaker-Henderson method. See **table 7C** for attained ages beyond age 75.
3. *Future time on OASDI rolls* at attained age  $x$  represents the aggregate expected number of years on the combined DI and OASI rolls for disability beneficiaries who have attained that particular age. Values are exposure-weighted averages of expected future times across all durations from **tables 9A** and **9B**. See **table 9C** for attained ages beyond age 75. Experience reflects continuing entitlement after NRA.

**Table 13.—Disabled Workers**  
**Aggregate Probability of Death and Expected Future Time on Combined**  
**DI and OASI Rolls (excluding possibility of recovery), by Duration**  
(2006-10 Social Security DI disability experience)

Duration	Male		Female	
	Probability of death	Future time on OASDI rolls	Probability of death	Future time on OASDI rolls
0	0.055896	19.62	0.042532	23.70
1	0.037856	19.83	0.029926	23.84
2	0.030849	19.60	0.022787	23.61
3	0.029097	19.26	0.020195	23.25
4	0.028238	18.92	0.019124	22.86
5	0.028682	18.55	0.018746	22.41
6	0.029494	18.13	0.019081	21.89
7	0.030705	17.68	0.020021	21.30
8	0.032009	17.20	0.020931	20.67
9	0.033931	16.69	0.022026	20.02
10	0.035786	16.18	0.023234	19.37
11	0.037097	15.71	0.024877	18.81
12	0.038793	15.32	0.025503	18.33
13	0.039822	15.02	0.027259	17.91
14	0.041371	14.77	0.027807	17.52
15	0.041784	14.54	0.029742	17.16
16	0.043605	14.31	0.030637	16.77
17	0.045148	14.05	0.032502	16.35
18	0.047074	13.74	0.034821	15.88
19	0.049718	13.43	0.037957	15.40
20	0.052927	13.12	0.041011	14.89
21	0.055196	12.88	0.043872	14.46
22	0.057759	12.70	0.047594	14.09
23	0.059844	12.56	0.049545	13.80
24	0.061516	12.39	0.052724	13.48
25	0.065644	12.12	0.056555	13.02
26	0.068244	11.77	0.061281	12.45
27	0.073731	11.38	0.066218	11.82
28	0.077587	10.98	0.072606	11.19
29	0.081459	10.62	0.076866	10.62
30	0.083684	10.36	0.081530	10.17
31	0.087191	10.16	0.087759	9.80
32	0.085201	9.99	0.094428	9.47
33	0.087244	9.82	0.095227	9.19
34	0.091582	9.67	0.099373	8.95
35	0.089510	9.54	0.101418	8.76
36	0.090311	9.43	0.105111	8.60
37	0.091328	9.36	0.104794	8.53
38	0.089104	9.30	0.106253	8.52
39	0.093663	9.00	0.104866	8.33
40	0.099184	8.62	0.111145	8.02

Notes:

1. *Duration* measured in years since entitlement.
2. *Probability of death* at duration  $t$  represents the average probability of death during the  $(t+1)$  year of entitlement to benefits. Values are based on aggregate counts of exposure and deaths across all entitlement ages. Results have been graduated using Whittaker-Henderson method, and blended to reflect mortality trends established in **table 7C**.
3. *Future time on OASDI rolls* at duration  $t$  represents the aggregate expected number of years on the combined DI and OASI rolls for disability beneficiaries who have not died after  $t$  years. Values are exposure-weighted averages of expected future times across all ages from **tables 9A, 9B, and 9C**. Experience reflects continuing entitlement after NRA.



**Recovery Experience  
by Entitlement Age and Duration  
(2006-10)**



**Table 14A.—Male Disabled Workers**  
**Probability of Recovery Termination**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age
	0	1	2	3	4	5	6	7	8	9	
16	0.009456	0.021605	0.022333	0.012668	0.076435	0.102141	0.112060	0.075165	0.056866	0.056944	0.040505
17	0.008263	0.016584	0.014498	0.012572	0.069437	0.087636	0.087495	0.063740	0.050628	0.048795	0.035679
18	0.006705	0.012183	0.008357	0.013495	0.058735	0.069197	0.062385	0.051173	0.043173	0.038157	0.030488
19	0.004731	0.008923	0.006305	0.013196	0.046345	0.052405	0.047538	0.040872	0.035954	0.030026	0.025868
20	0.003801	0.007313	0.005540	0.012486	0.037918	0.043175	0.038960	0.032915	0.029194	0.022511	0.020527
21	0.004310	0.007458	0.005672	0.011793	0.032966	0.036781	0.033040	0.029886	0.026121	0.019484	0.018244
22	0.005236	0.008845	0.005890	0.009636	0.029830	0.034482	0.031147	0.026683	0.022646	0.020102	0.016206
23	0.005429	0.009958	0.006181	0.008444	0.025983	0.029475	0.030816	0.026646	0.022049	0.020810	0.013696
24	0.006242	0.010656	0.006560	0.009645	0.027481	0.027089	0.027318	0.025628	0.022667	0.021184	0.013826
25	0.007648	0.011888	0.007529	0.010833	0.026606	0.028674	0.025358	0.026461	0.022247	0.020365	0.014102
26	0.006549	0.013340	0.007816	0.010271	0.024290	0.024920	0.023704	0.023370	0.021464	0.018400	0.012618
27	0.007563	0.013941	0.008334	0.009890	0.023088	0.024230	0.021713	0.023206	0.021162	0.017782	0.011951
28	0.007923	0.017593	0.008180	0.011126	0.022280	0.023187	0.020553	0.023050	0.020348	0.016104	0.011494
29	0.007177	0.017537	0.008419	0.011019	0.021686	0.021771	0.021350	0.021740	0.020618	0.015613	0.010513
30	0.006881	0.016619	0.008681	0.008522	0.019225	0.019875	0.021596	0.020181	0.018277	0.014402	0.010029
31	0.007607	0.016116	0.008922	0.009687	0.018238	0.019678	0.020464	0.017132	0.017577	0.014517	0.009350
32	0.008217	0.016769	0.008475	0.008901	0.018296	0.018955	0.018508	0.015846	0.015679	0.014042	0.008419
33	0.010175	0.016707	0.008764	0.008232	0.016907	0.017822	0.017770	0.016243	0.013144	0.013104	0.007899
34	0.008517	0.017416	0.009862	0.007608	0.016561	0.017356	0.016323	0.016099	0.013640	0.012451	0.007247
35	0.007884	0.016586	0.008312	0.007737	0.016155	0.015863	0.015143	0.013863	0.013872	0.011641	0.006730
36	0.008026	0.016401	0.008036	0.007249	0.015754	0.015292	0.014062	0.013122	0.012343	0.011092	0.006526
37	0.007339	0.016354	0.008012	0.007165	0.015247	0.014776	0.012776	0.011393	0.011200	0.010574	0.005774
38	0.007686	0.016104	0.007326	0.006855	0.014420	0.013029	0.011315	0.011411	0.009584	0.009782	0.005238
39	0.007349	0.015713	0.008160	0.006051	0.012930	0.011670	0.010576	0.010150	0.009558	0.008197	0.004609
40	0.007042	0.015555	0.007579	0.006430	0.012572	0.010279	0.010605	0.009323	0.008432	0.007241	0.004304
41	0.007536	0.014152	0.006676	0.005805	0.011060	0.010238	0.009594	0.007908	0.007193	0.006778	0.003542
42	0.007539	0.014294	0.006834	0.005244	0.009924	0.008887	0.008947	0.007788	0.006399	0.005488	0.003130
43	0.006562	0.013072	0.006888	0.005228	0.010195	0.008444	0.008067	0.007083	0.006281	0.004720	0.002923
44	0.005981	0.013286	0.006166	0.004718	0.008574	0.007644	0.006566	0.006511	0.005530	0.004209	0.002431
45	0.006913	0.013215	0.005590	0.004520	0.008333	0.007382	0.005687	0.005306	0.004614	0.004324	0.002204
46	0.005567	0.012563	0.005043	0.003791	0.008134	0.006241	0.005638	0.005007	0.003667	0.003079	0.001895
47	0.005530	0.010929	0.004480	0.003430	0.007820	0.006044	0.005261	0.004194	0.003390	0.003134	0.001686
48	0.004992	0.009404	0.003368	0.003374	0.007756	0.005509	0.004436	0.003495	0.003566	0.002933	0.001412
49	0.003660	0.007768	0.002872	0.003526	0.006725	0.005145	0.003780	0.003338	0.002989	0.002256	0.001289
50	0.002690	0.004822	0.002118	0.002293	0.005390	0.004373	0.003866	0.002666	0.002340	0.001841	0.001240
51	0.002777	0.005525	0.002034	0.002430	0.005110	0.004450	0.003038	0.002363	0.001880	0.001613	0.001201
52	0.002736	0.004583	0.001748	0.002279	0.004762	0.003542	0.002509	0.002131	0.001627	0.001509	0.000976
53	0.002496	0.003369	0.001493	0.002054	0.004913	0.003136	0.002259	0.001873	0.001568	0.001479	0.000851
54	0.001644	0.002427	0.000884	0.001532	0.005041	0.002826	0.002081	0.001705	0.001378	0.001306	0.000539
55	0.001025	0.001787	0.000718	0.001556	0.003938	0.002339	0.001960	0.001676	0.001235	0.000766	0.000322
56	0.000969	0.001669	0.000702	0.001465	0.003623	0.002280	0.001843	0.001388	0.000759	0.000529	—
57	0.001009	0.001333	0.000490	0.001203	0.003138	0.001815	0.001405	0.001153	0.000563	—	67
58	0.000811	0.001152	0.000453	0.001058	0.002529	0.001644	0.001200	0.000873	—	—	68
59	0.000677	0.000981	0.000295	0.000878	0.002568	0.001487	0.000797	—	—	—	69
60	0.000623	0.000626	0.000110	0.000793	0.001620	0.001171	—	—	—	—	70
61	0.000475	0.000229	0.000088	0.000624	0.001386	—	—	—	—	—	71
62	0.000260	0.000164	0.000070	0.000265	—	—	—	—	—	—	72
63	0.000250	0.000241	0.000109	—	—	—	—	—	—	—	73
64	0.000259	0.000297	—	—	—	—	—	—	—	—	74
65	0.000257	—	—	—	—	—	—	—	—	—	75

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Recovery is not considered beyond NRA.
2. The value  $q_{[x]+t}$  at duration  $t$  represents the probability of recovery while on the DI rolls—in a multiple-decrement environment—during the  $(t+1)$  year of entitlement for those originally entitled to disability benefits at entl age  $[x]$  who have attained age  $[x]+t$ .
3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement.
4. Results have been graduated using the Whittaker-Henderson Type B two-dimensional method.

**Table 14B.—Female Disabled Workers**  
**Probability of Recovery Termination**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age	
	0	1	2	3	4	5	6	7	8	9		
16	0.012151	0.018994	0.014082	0.012065	0.047060	0.072175	0.076092	0.068259	0.070327	0.060100	0.047138	26
17	0.009336	0.014397	0.009586	0.010991	0.046968	0.061956	0.064836	0.058914	0.060321	0.049663	0.038233	27
18	0.006091	0.010576	0.007151	0.011074	0.044637	0.049647	0.053373	0.049032	0.048837	0.037076	0.030978	28
19	0.003622	0.008175	0.005680	0.010073	0.036436	0.038087	0.040477	0.039143	0.039245	0.028696	0.025747	29
20	0.003286	0.006613	0.005661	0.009786	0.029334	0.035754	0.034821	0.030852	0.030893	0.023135	0.020749	30
21	0.004107	0.008652	0.005880	0.008655	0.024684	0.031218	0.030029	0.027366	0.024088	0.020297	0.019288	31
22	0.003967	0.008981	0.005982	0.009084	0.023253	0.027577	0.025930	0.024857	0.021509	0.018943	0.018261	32
23	0.004450	0.008261	0.005713	0.008892	0.021137	0.026151	0.022522	0.023463	0.020496	0.018316	0.015574	33
24	0.004977	0.009996	0.006109	0.009512	0.020853	0.023967	0.023538	0.022480	0.020735	0.016672	0.015020	34
25	0.004795	0.011093	0.006215	0.008821	0.021375	0.021567	0.023406	0.021088	0.021835	0.017486	0.014365	35
26	0.005867	0.011005	0.006621	0.008638	0.020253	0.019434	0.020589	0.020620	0.021076	0.017726	0.012807	36
27	0.005389	0.012847	0.006710	0.007922	0.019437	0.019939	0.020581	0.019457	0.020721	0.017741	0.012715	37
28	0.005671	0.012369	0.008957	0.008210	0.018229	0.019086	0.019365	0.019637	0.018435	0.016056	0.012452	38
29	0.005663	0.012009	0.007272	0.008010	0.015840	0.018868	0.018456	0.018834	0.017904	0.015120	0.011556	39
30	0.005523	0.013407	0.007079	0.007784	0.017160	0.016700	0.018586	0.017193	0.016932	0.015540	0.011658	40
31	0.005353	0.013386	0.008116	0.006897	0.016059	0.015618	0.018851	0.017579	0.015474	0.015642	0.010487	41
32	0.005622	0.013270	0.007607	0.005312	0.015607	0.017008	0.017092	0.017196	0.013629	0.014123	0.009780	42
33	0.005967	0.012065	0.006657	0.006413	0.015810	0.015031	0.015686	0.015950	0.013464	0.013364	0.009508	43
34	0.005506	0.012863	0.007099	0.006712	0.014492	0.014950	0.015794	0.014502	0.012494	0.011939	0.008839	44
35	0.004843	0.012525	0.007737	0.006042	0.014235	0.014283	0.014719	0.013033	0.012975	0.011489	0.008276	45
36	0.005404	0.011770	0.006651	0.006316	0.012899	0.013169	0.014547	0.012034	0.011370	0.011252	0.007813	46
37	0.004923	0.012451	0.007190	0.005914	0.012783	0.013014	0.011750	0.011574	0.011237	0.010302	0.006882	47
38	0.004578	0.013027	0.006688	0.005956	0.012996	0.013120	0.011596	0.011916	0.010043	0.009837	0.006383	48
39	0.005224	0.013297	0.006387	0.004999	0.011359	0.012264	0.010664	0.010379	0.009911	0.008161	0.005768	49
40	0.005576	0.012111	0.006570	0.004726	0.011153	0.010641	0.009890	0.009589	0.008661	0.008472	0.005042	50
41	0.005318	0.012131	0.006714	0.004605	0.009686	0.009917	0.009551	0.008856	0.007817	0.007048	0.004507	51
42	0.005386	0.011696	0.005401	0.005138	0.009479	0.009049	0.008991	0.007920	0.006130	0.006529	0.004209	52
43	0.005511	0.011541	0.004955	0.004407	0.009405	0.008440	0.008261	0.007060	0.006259	0.005826	0.004060	53
44	0.004765	0.010110	0.004818	0.004384	0.007902	0.008045	0.007636	0.005942	0.005563	0.004543	0.003268	54
45	0.004676	0.010191	0.005008	0.003533	0.008087	0.007235	0.006450	0.006095	0.005131	0.004256	0.003103	55
46	0.004887	0.009935	0.004524	0.003009	0.007917	0.006956	0.006555	0.005670	0.005220	0.004135	0.002529	56
47	0.004553	0.009089	0.003907	0.003189	0.006353	0.006221	0.005976	0.004712	0.004342	0.003372	0.002317	57
48	0.003754	0.007903	0.003242	0.002786	0.006256	0.005411	0.005174	0.004199	0.002876	0.003177	0.002032	58
49	0.003359	0.006497	0.003077	0.002704	0.006039	0.005730	0.004619	0.003976	0.002949	0.002545	0.001746	59
50	0.002498	0.004333	0.001943	0.002413	0.005421	0.004638	0.003454	0.003354	0.002760	0.002100	0.001679	60
51	0.002694	0.004559	0.002001	0.001929	0.005647	0.003953	0.003297	0.002744	0.002756	0.001904	0.001349	61
52	0.002361	0.004579	0.001710	0.001478	0.004905	0.003903	0.002998	0.002797	0.002172	0.001575	0.001113	62
53	0.002197	0.003444	0.001499	0.001903	0.004731	0.003668	0.002577	0.002344	0.002090	0.001129	0.000861	63
54	0.001566	0.002745	0.000933	0.001373	0.004536	0.003000	0.002556	0.001623	0.001487	0.001211	0.000624	64
55	0.001295	0.001925	0.000722	0.001394	0.004224	0.002693	0.002257	0.001601	0.001069	0.000800	0.000350	65
56	0.001175	0.001907	0.000647	0.001363	0.003846	0.002436	0.001528	0.001254	0.000702	0.000255	—	66
57	0.001113	0.001953	0.000534	0.001301	0.003070	0.001785	0.001339	0.000915	0.000467	—	—	67
58	0.000973	0.001450	0.000568	0.001088	0.002766	0.001605	0.000991	0.000357	—	—	—	68
59	0.000807	0.001129	0.000356	0.000716	0.002403	0.001014	0.000385	—	—	—	—	69
60	0.000843	0.000762	0.000096	0.000750	0.001757	0.000692	—	—	—	—	—	70
61	0.000425	0.000412	0.000138	0.000715	0.001145	—	—	—	—	—	—	71
62	0.000141	0.000276	0.000143	0.000267	—	—	—	—	—	—	—	72
63	0.000203	0.000255	0.000084	—	—	—	—	—	—	—	—	73
64	0.000222	0.000223	—	—	—	—	—	—	—	—	—	74
65	0.000212	—	—	—	—	—	—	—	—	—	—	75

Notes:

1. Entl age denotes age last birthday at entitlement to disability benefits. Duration measured in years since entitlement. Attained age calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Recovery is not considered beyond NRA.
2. The value  $q_{[x]+t}$  at duration  $t$  represents the probability of recovery while on the DI rolls—in a multiple-decrement environment—during the  $(t+1)$  year of entitlement for those originally entitled to disability benefits at entl age  $[x]$  who have attained age  $[x]+t$ .
3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement.
4. Results have been graduated using the Whittaker-Henderson Type B two-dimensional method.

**Table 15A.—Male Disabled Workers**  
**Benefit Continuance Table (excluding possibility of death)**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age
	0	1	2	3	4	5	6	7	8	9	
16	100,000	99,054	96,914	94,750	93,550	86,400	77,575	68,882	63,704	60,081	56,660
17	87,451	86,728	85,290	84,053	82,996	77,233	70,465	64,300	60,202	57,154	54,365
18	76,140	75,629	74,708	74,084	73,084	68,791	64,031	60,036	56,964	54,505	52,425
19	68,072	67,750	67,145	66,722	65,842	62,791	59,500	56,671	54,355	52,401	50,827
20	62,795	62,556	62,099	61,755	60,984	58,672	56,139	53,952	52,176	50,653	49,512
21	59,855	59,597	59,153	58,817	58,123	56,207	54,140	52,351	50,786	49,459	48,496
22	57,978	57,674	57,164	56,827	56,279	54,600	52,717	51,075	49,712	48,586	47,611
23	56,527	56,220	55,660	55,316	54,849	53,424	51,849	50,251	48,912	47,834	46,839
24	55,673	55,325	54,735	54,376	53,852	52,372	50,953	49,561	48,291	47,196	46,197
25	55,076	54,655	54,005	53,598	53,017	51,606	50,126	48,855	47,562	46,504	45,558
26	53,554	53,203	52,493	52,083	51,548	50,296	49,043	47,880	46,761	45,757	44,916
27	52,703	52,304	51,575	51,145	50,639	49,470	48,271	47,223	46,127	45,151	44,349
28	52,042	51,630	50,722	50,307	49,747	48,639	47,511	46,535	45,462	44,537	43,819
29	51,264	50,896	50,003	49,582	49,036	47,973	46,929	45,927	44,929	44,003	43,315
30	50,076	49,731	48,905	48,480	48,067	47,143	46,206	45,208	44,296	43,486	42,860
31	49,355	48,980	48,191	47,761	47,298	46,435	45,521	44,589	43,825	43,055	42,430
32	48,583	48,184	47,376	46,974	46,556	45,704	44,838	44,008	43,311	42,632	42,033
33	47,938	47,450	46,657	46,248	45,867	45,092	44,288	43,501	42,794	42,232	41,679
34	47,413	47,009	46,190	45,734	45,386	44,634	43,859	43,143	42,448	41,869	41,350
35	46,652	46,284	45,516	45,138	44,789	44,065	43,366	42,709	42,117	41,533	41,050
36	46,073	45,703	44,953	44,592	44,269	43,572	42,906	42,303	41,748	41,233	40,774
37	45,470	45,136	44,398	44,042	43,726	43,059	42,423	41,881	41,404	40,940	40,508
38	44,873	44,528	43,811	43,490	43,192	42,569	42,014	41,539	41,065	40,671	40,274
39	44,316	43,990	43,299	42,946	42,686	42,134	41,642	41,202	40,784	40,394	40,063
40	43,876	43,567	42,889	42,564	42,290	41,758	41,329	40,891	40,510	40,168	39,878
41	43,330	43,003	42,394	42,111	41,867	41,404	40,980	40,587	40,266	39,976	39,706
42	42,934	42,610	42,001	41,714	41,495	41,083	40,718	40,354	40,040	39,784	39,565
43	42,592	42,313	41,760	41,472	41,255	40,834	40,489	40,162	39,878	39,628	39,441
44	42,155	41,903	41,346	41,091	40,897	40,546	40,236	39,972	39,712	39,492	39,326
45	41,912	41,622	41,072	40,842	40,657	40,318	40,020	39,792	39,581	39,398	39,230
46	41,520	41,289	40,770	40,564	40,410	40,081	39,831	39,606	39,408	39,263	39,144
47	41,254	41,026	40,578	40,396	40,257	39,942	39,701	39,492	39,326	39,193	39,070
48	40,962	40,758	40,375	40,239	40,103	39,792	39,573	39,397	39,259	39,119	39,004
49	40,626	40,477	40,163	40,048	39,907	39,639	39,435	39,286	39,155	39,038	38,949
50	40,182	40,074	39,881	39,797	39,706	39,492	39,319	39,167	39,063	38,972	38,899
51	40,085	39,974	39,753	39,672	39,576	39,374	39,199	39,080	38,988	38,915	38,851
52	39,885	39,776	39,594	39,525	39,435	39,247	39,108	39,010	38,927	38,864	38,804
53	39,734	39,635	39,501	39,442	39,361	39,168	39,045	38,957	38,884	38,823	38,766
54	39,549	39,484	39,388	39,353	39,293	39,095	38,985	38,904	38,838	38,784	38,733
55	39,376	39,336	39,266	39,238	39,177	39,023	38,932	38,856	38,791	38,743	38,712
56	39,294	39,256	39,190	39,162	39,105	38,963	38,874	38,802	38,748	38,719	—
57	39,212	39,173	39,121	39,102	39,055	38,932	38,861	38,806	38,761	—	67
58	39,131	39,099	39,054	39,036	38,995	38,896	38,832	38,785	—	—	68
59	39,049	39,023	38,985	38,973	38,939	38,839	38,781	—	—	—	69
60	38,968	38,943	38,919	38,915	38,884	38,821	—	—	—	—	70
61	38,887	38,868	38,859	38,856	38,832	—	—	—	—	—	71
62	38,806	38,795	38,789	38,786	—	—	—	—	—	—	72
63	38,725	38,715	38,706	—	—	—	—	—	—	—	73
64	38,644	38,634	—	—	—	—	—	—	—	—	74
65	38,564	—	—	—	—	—	—	—	—	—	75

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Recovery is not considered beyond NRA.
2. The value  $l_{[x]}$  at duration 0 represents an assumed number of lives originally entitled to disability benefits at entl age  $[x]$ ; the value  $l_{[x]+t}$  at duration  $t > 0$  represents the number of lives from the original  $l_{[x]}$  who have not recovered and remain on the rolls as of attained age  $[x]+t$ . Lives are decremented using probabilities from **table 14A**.
3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement.

**Table 15B.—Female Disabled Workers**  
**Benefit Continuance Table (excluding possibility of death)**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age
	0	1	2	3	4	5	6	7	8	9	
16	100,000	98,785	96,909	95,544	94,391	89,949	83,457	77,107	71,844	66,791	62,777
17	89,019	88,188	86,918	86,085	85,139	81,140	76,113	71,178	66,985	62,944	59,818
18	79,594	79,109	78,272	77,712	76,851	73,421	69,776	66,052	62,813	59,745	57,531
19	71,870	71,610	71,025	70,622	69,911	67,364	64,798	62,175	59,741	57,396	55,749
20	67,220	66,999	66,556	66,179	65,531	63,609	61,335	59,199	57,373	55,601	54,314
21	64,138	63,875	63,322	62,950	62,405	60,865	58,965	57,194	55,629	54,289	53,187
22	61,946	61,700	61,146	60,780	60,228	58,828	57,206	55,723	54,338	53,169	52,161
23	60,153	59,885	59,390	59,051	58,526	57,289	55,791	54,534	53,254	52,163	51,208
24	59,179	58,884	58,295	57,939	57,388	56,191	54,844	53,553	52,349	51,264	50,410
25	58,221	57,942	57,299	56,943	56,441	55,235	54,044	52,779	51,666	50,538	49,653
26	57,041	56,706	56,082	55,711	55,230	54,111	53,059	51,967	50,895	49,822	48,940
27	56,248	55,945	55,226	54,855	54,420	53,362	52,298	51,222	50,225	49,184	48,313
28	55,265	54,952	54,272	53,786	53,344	52,372	51,372	50,377	49,388	48,478	47,699
29	54,133	53,826	53,180	52,793	52,370	51,540	50,568	49,635	48,700	47,828	47,105
30	53,395	53,100	52,388	52,017	51,612	50,726	49,879	48,952	48,110	47,295	46,561
31	52,615	52,333	51,632	51,213	50,860	50,043	49,261	48,332	47,482	46,747	46,018
32	51,721	51,430	50,748	50,362	50,094	49,312	48,473	47,644	46,825	46,187	45,535
33	50,901	50,597	49,987	49,654	49,336	48,556	47,826	47,076	46,325	45,701	45,090
34	50,209	49,933	49,291	48,941	48,613	47,909	47,193	46,448	45,774	45,202	44,661
35	49,540	49,300	48,683	48,306	48,014	47,331	46,655	45,968	45,369	44,780	44,266
36	48,810	48,546	47,975	47,656	47,355	46,744	46,128	45,457	44,910	44,399	43,900
37	48,220	47,983	47,386	47,045	46,767	46,169	45,568	45,033	44,512	44,012	43,557
38	47,821	47,602	46,982	46,668	46,390	45,787	45,186	44,662	44,130	43,687	43,257
39	47,175	46,929	46,305	46,009	45,779	45,259	44,704	44,227	43,768	43,334	42,981
40	46,655	46,395	45,833	45,532	45,317	44,812	44,335	43,897	43,476	43,099	42,733
41	46,152	45,907	45,350	45,046	44,839	44,405	43,965	43,545	43,159	42,822	42,518
42	45,670	45,424	44,893	44,651	44,422	44,001	43,603	43,211	42,869	42,606	42,326
43	45,292	45,042	44,522	44,301	44,106	43,691	43,322	42,964	42,661	42,394	42,148
44	44,748	44,535	44,085	43,873	43,681	43,336	42,987	42,659	42,406	42,170	41,977
45	44,466	44,258	43,807	43,588	43,434	43,083	42,771	42,495	42,236	42,019	41,840
46	44,245	44,029	43,592	43,395	43,264	42,921	42,622	42,343	42,103	41,883	41,710
47	43,820	43,620	43,224	43,055	42,918	42,645	42,380	42,127	41,928	41,746	41,605
48	43,415	43,252	42,910	42,771	42,652	42,385	42,156	41,938	41,762	41,642	41,509
49	43,184	43,039	42,759	42,627	42,512	42,255	42,013	41,819	41,653	41,530	41,425
50	42,739	42,632	42,447	42,365	42,263	42,034	41,839	41,694	41,554	41,439	41,353
51	42,607	42,492	42,298	42,213	42,132	41,894	41,728	41,590	41,476	41,362	41,284
52	42,421	42,321	42,127	42,055	41,993	41,787	41,624	41,499	41,383	41,293	41,228
53	42,251	42,158	42,013	41,950	41,870	41,672	41,519	41,412	41,315	41,229	41,182
54	42,023	41,957	41,842	41,803	41,746	41,557	41,432	41,326	41,259	41,198	41,147
55	41,868	41,814	41,734	41,704	41,646	41,470	41,358	41,265	41,199	41,155	41,121
56	41,734	41,685	41,606	41,579	41,522	41,362	41,261	41,198	41,146	41,117	—
57	41,600	41,554	41,473	41,451	41,397	41,270	41,196	41,141	41,103	—	67
58	41,467	41,427	41,367	41,344	41,299	41,185	41,119	41,078	—	—	68
59	41,335	41,301	41,254	41,239	41,209	41,110	41,068	—	—	—	69
60	41,202	41,168	41,137	41,133	41,102	41,030	—	—	—	—	70
61	41,070	41,053	41,036	41,030	41,001	—	—	—	—	—	71
62	40,939	40,933	40,922	40,916	—	—	—	—	—	—	72
63	40,808	40,800	40,790	—	—	—	—	—	—	—	73
64	40,677	40,668	—	—	—	—	—	—	—	—	74
65	40,547	—	—	—	—	—	—	—	—	—	75

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Recovery is not considered beyond NRA.
2. The value  $l_{[x]}$  at duration 0 represents an assumed number of lives originally entitled to disability benefits at entl age  $[x]$ ; the value  $l_{[x]+t}$  at duration  $t > 0$  represents the number of lives from the original  $l_{[x]}$  who have not recovered and remain on the rolls as of attained age  $[x]+t$ . Lives are decremented using probabilities from **table 14B**.
3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement.

**Table 16A.—Male Disabled Workers**  
**Expected Future Time on DI Rolls (excluding possibility of death)**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age
	0	1	2	3	4	5	6	7	8	9	
16	25.24	24.48	24.01	23.55	22.84	23.69	25.33	27.46	28.65	29.35	30.09
17	27.32	26.54	25.98	25.35	24.67	25.47	26.87	28.40	29.30	29.84	30.34
18	29.71	28.91	28.26	27.49	26.86	27.51	28.51	29.38	29.94	30.26	30.45
19	31.69	30.84	30.11	29.30	28.68	29.05	29.63	30.09	30.35	30.46	30.39
20	32.96	32.08	31.31	30.48	29.86	30.02	30.35	30.56	30.58	30.49	30.18
21	33.38	32.52	31.77	30.94	30.31	30.32	30.46	30.49	30.41	30.21	29.80
22	33.37	32.54	31.83	31.01	30.31	30.23	30.29	30.25	30.06	29.75	29.35
23	33.19	32.37	31.69	30.88	30.14	29.93	29.82	29.76	29.56	29.21	28.82
24	32.71	31.91	31.25	30.45	29.75	29.57	29.38	29.19	28.95	28.61	28.22
25	32.10	31.34	30.71	29.94	29.27	29.05	28.89	28.63	28.40	28.03	27.60
26	31.94	31.15	30.57	29.80	29.11	28.82	28.54	28.22	27.89	27.49	26.99
27	31.46	30.70	30.13	29.38	28.66	28.33	28.02	27.63	27.28	26.85	26.33
28	30.87	30.12	29.65	28.89	28.21	27.84	27.49	27.05	26.68	26.22	25.64
29	30.37	29.58	29.10	28.34	27.65	27.26	26.85	26.43	26.00	25.54	24.94
30	30.05	29.26	28.75	27.99	27.23	26.75	26.29	25.85	25.38	24.84	24.20
31	29.50	28.72	28.18	27.43	26.70	26.18	25.70	25.23	24.66	24.09	23.44
32	28.96	28.20	27.67	26.90	26.14	25.62	25.10	24.57	23.95	23.33	22.65
33	28.35	27.64	27.10	26.34	25.55	24.98	24.43	23.86	23.25	22.55	21.84
34	27.70	26.94	26.40	25.66	24.86	24.27	23.69	23.07	22.44	21.74	21.01
35	27.16	26.37	25.81	25.02	24.21	23.60	22.97	22.32	21.62	20.92	20.16
36	26.51	25.72	25.14	24.34	23.51	22.88	22.23	21.54	20.82	20.07	19.29
37	25.86	25.05	24.46	23.65	22.82	22.17	21.49	20.76	20.00	19.22	18.42
38	25.21	24.40	23.79	22.96	22.12	21.43	20.71	19.94	19.16	18.34	17.52
39	24.52	23.70	23.07	22.26	21.39	20.66	19.90	19.11	18.30	17.47	16.61
40	23.78	22.94	22.30	21.47	20.60	19.86	19.06	18.26	17.42	16.57	15.69
41	23.07	22.25	21.56	20.70	19.82	19.03	18.23	17.40	16.53	15.65	14.75
42	22.29	21.46	20.76	19.90	19.00	18.19	17.35	16.50	15.63	14.72	13.80
43	21.49	20.63	19.90	19.03	18.13	17.31	16.45	15.58	14.69	13.78	12.84
44	20.71	19.83	19.09	18.21	17.29	16.44	15.56	14.66	13.75	12.83	11.88
45	19.85	18.98	18.23	17.33	16.40	15.54	14.65	13.73	12.80	11.86	10.91
46	19.03	18.14	17.36	16.45	15.51	14.63	13.72	12.79	11.86	10.90	9.93
47	18.17	17.27	16.46	15.53	14.58	13.69	12.77	11.84	10.88	9.92	8.95
48	17.31	16.40	15.55	14.60	13.65	12.75	11.82	10.87	9.90	8.94	7.96
49	16.46	15.51	14.63	13.67	12.72	11.80	10.86	9.90	8.93	7.96	6.97
50	15.62	14.66	13.73	12.76	11.79	10.85	9.89	8.93	7.95	6.97	5.98
51	14.66	13.70	12.78	11.80	10.83	9.88	8.92	7.95	6.97	5.98	4.99
52	13.73	12.77	11.83	10.85	9.87	8.92	7.95	6.96	5.98	4.99	3.99
53	12.79	11.82	10.86	9.88	8.90	7.94	6.96	5.97	4.98	3.99	2.97
54	11.85	10.87	9.89	8.90	7.92	6.95	5.97	4.98	3.99	2.97	1.91
55	10.90	9.91	8.93	7.93	6.94	5.97	4.98	3.99	2.97	1.91	0.92
56	9.92	8.93	7.94	6.95	5.96	4.98	3.99	2.97	1.92	0.93	—
57	8.95	7.95	6.96	5.97	4.97	3.99	2.96	1.92	0.93	—	67
58	7.96	6.97	5.98	4.98	3.98	2.96	1.92	0.93	—	—	68
59	6.98	5.98	4.99	3.99	2.96	1.92	0.92	—	—	—	69
60	5.99	4.99	3.99	2.96	1.91	0.92	—	—	—	—	70
61	5.00	4.00	2.97	1.91	0.91	—	—	—	—	—	71
62	4.00	2.97	1.91	0.92	—	—	—	—	—	—	72
63	2.97	1.92	0.92	—	—	—	—	—	—	—	73
64	1.93	0.92	—	—	—	—	—	—	—	—	74
65	0.51	—	—	—	—	—	—	—	—	—	75

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Recovery is not considered beyond NRA.
2. The value  $e_{[x]} + t$  at duration  $t$  represents the average number of future years a beneficiary will remain on the DI rolls for those originally entitled to disability benefits at entl age  $[x]$  who have not recovered as of attained age  $[x]+t$ . Values are based on continuance experience from **table 15A**.
3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement.

The average future years on the DI rolls for attained ages 62 and older are adjusted to reflect less than a full year of DI exposure after attaining age 65 for birth cohorts 1938-42 to account for the phased-in increase in NRA from 65 to 66.

**Table 16B.—Female Disabled Workers**  
**Expected Future Time on DI Rolls (excluding possibility of death)**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age
	0	1	2	3	4	5	6	7	8	9	
16	26.97	26.30	25.80	25.16	24.46	24.64	25.52	26.58	27.49	28.53	29.33
17	28.74	28.01	27.41	26.67	25.96	26.22	26.92	27.75	28.45	29.25	29.75
18	30.57	29.76	29.07	28.27	27.59	27.85	28.28	28.85	29.31	29.79	29.91
19	32.32	31.44	30.69	29.86	29.16	29.24	29.38	29.60	29.79	29.98	29.85
20	33.21	32.32	31.53	30.71	30.01	29.90	29.99	30.05	29.99	29.93	29.63
21	33.58	32.72	32.00	31.18	30.45	30.21	30.17	30.08	29.92	29.64	29.25
22	33.63	32.76	32.05	31.24	30.52	30.24	30.08	29.87	29.62	29.26	28.81
23	33.53	32.68	31.94	31.12	30.40	30.04	29.84	29.51	29.21	28.81	28.34
24	33.05	32.21	31.53	30.72	30.01	29.64	29.36	29.06	28.71	28.31	27.78
25	32.59	31.74	31.09	30.28	29.55	29.18	28.81	28.49	28.10	27.71	27.20
26	32.22	31.40	30.75	29.95	29.21	28.80	28.36	27.95	27.52	27.11	26.59
27	31.67	30.84	30.24	29.44	28.67	28.23	27.79	27.36	26.90	26.46	25.92
28	31.20	30.37	29.75	29.01	28.25	27.76	27.30	26.82	26.35	25.84	25.25
29	30.81	29.99	29.35	28.56	27.78	27.22	26.74	26.23	25.72	25.18	24.56
30	30.23	29.40	28.79	27.99	27.21	26.67	26.12	25.60	25.04	24.47	23.84
31	29.67	28.83	28.21	27.44	26.63	26.05	25.46	24.94	24.38	23.75	23.12
32	29.15	28.32	27.69	26.90	26.04	25.44	24.88	24.30	23.72	23.04	22.36
33	28.60	27.77	27.10	26.28	25.45	24.85	24.22	23.60	22.97	22.28	21.58
34	27.98	27.13	26.48	25.66	24.83	24.19	23.55	22.92	22.25	21.52	20.78
35	27.35	26.48	25.81	25.00	24.15	23.50	22.83	22.16	21.45	20.72	19.96
36	26.73	25.88	25.18	24.34	23.50	22.80	22.09	21.41	20.67	19.90	19.12
37	26.05	25.17	24.49	23.66	22.80	22.09	21.37	20.62	19.85	19.07	18.27
38	25.28	24.39	23.71	22.87	22.00	21.28	20.56	19.79	19.03	18.21	17.39
39	24.60	23.73	23.04	22.19	21.29	20.53	19.78	18.99	18.18	17.36	16.50
40	23.87	23.00	22.28	21.42	20.52	19.75	18.95	18.14	17.31	16.46	15.59
41	23.12	22.24	21.51	20.65	19.74	18.93	18.12	17.29	16.44	15.56	14.67
42	22.35	21.47	20.72	19.83	18.93	18.11	17.27	16.42	15.55	14.64	13.73
43	21.54	20.66	19.90	18.99	18.07	17.24	16.38	15.52	14.62	13.71	12.79
44	20.78	19.88	19.08	18.17	17.25	16.38	15.51	14.62	13.71	12.78	11.84
45	19.92	19.01	18.20	17.29	16.35	15.48	14.59	13.68	12.76	11.83	10.88
46	19.04	18.13	17.31	16.38	15.43	14.55	13.65	12.74	11.81	10.87	9.91
47	18.21	17.29	16.44	15.51	14.56	13.65	12.73	11.80	10.85	9.90	8.93
48	17.37	16.43	15.56	14.61	13.65	12.73	11.79	10.85	9.90	8.92	7.95
49	16.47	15.52	14.62	13.66	12.70	11.77	10.84	9.89	8.92	7.95	6.97
50	15.62	14.66	13.72	12.74	11.77	10.83	9.88	8.92	7.94	6.96	5.98
51	14.67	13.71	12.77	11.79	10.81	9.87	8.91	7.94	6.96	5.98	4.99
52	13.73	12.76	11.82	10.84	9.85	8.90	7.93	6.96	5.97	4.99	3.99
53	12.79	11.81	10.85	9.87	8.89	7.93	6.95	5.97	4.98	3.99	2.97
54	11.85	10.87	9.90	8.90	7.92	6.95	5.97	4.98	3.99	2.97	1.91
55	10.89	9.90	8.92	7.93	6.94	5.97	4.98	3.99	2.97	1.91	0.92
56	9.92	8.93	7.94	6.95	5.96	4.98	3.99	2.97	1.92	0.93	—
57	8.94	7.95	6.96	5.97	4.98	3.99	2.97	1.92	0.93	—	67
58	7.96	6.97	5.98	4.98	3.98	2.96	1.92	0.93	—	—	68
59	6.98	5.98	4.99	3.99	2.96	1.92	0.92	—	—	—	69
60	5.99	4.99	3.99	2.96	1.91	0.92	—	—	—	—	70
61	4.99	4.00	2.97	1.91	0.91	—	—	—	—	—	71
62	4.00	2.97	1.91	0.92	—	—	—	—	—	—	72
63	2.97	1.92	0.92	—	—	—	—	—	—	—	73
64	1.93	0.92	—	—	—	—	—	—	—	—	74
65	0.51	—	—	—	—	—	—	—	—	—	75

Notes:

1. Entl age denotes age last birthday at entitlement to disability benefits. Duration measured in years since entitlement. Attained age calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Recovery is not considered beyond NRA.

2. The value  $e_{[x]+t}$  at duration  $t$  represents the average number of future years a beneficiary will remain on the DI rolls for those originally entitled to disability benefits at entl age  $[x]$  who have not recovered as of attained age  $[x]+t$ . Values are based on continuance experience from **table 15B**.

3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement.

The average future years on the DI rolls for attained ages 62 and older are adjusted to reflect less than a full year of DI exposure after attaining age 65 for birth cohorts 1938-42 to account for the phased-in increase in NRA from 65 to 66.

**Table 17A.—Male Disabled Workers**  
**Absolute Recovery Rate Per Thousand Entitled**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement									Attained age		
	0	1	2	3	4	5	6	7	8			
16	9.475	21.683	22.392	12.705	76.593	102.270	112.599	75.441	57.032	57.125	40.673	26
17	8.287	16.653	14.543	12.615	69.609	87.851	87.813	63.973	50.793	48.932	35.804	27
18	6.730	12.238	8.386	13.544	58.922	69.449	62.535	51.347	43.321	38.264	30.586	28
19	4.755	8.961	6.328	13.247	46.492	52.579	47.649	40.986	36.087	30.108	25.945	29
20	3.820	7.345	5.559	12.536	38.043	43.311	39.048	33.017	29.308	22.572	20.590	30
21	4.334	7.497	5.693	11.838	33.079	36.887	33.124	29.961	26.202	19.552	18.309	31
22	5.268	8.895	5.917	9.675	29.942	34.594	31.255	26.758	22.721	20.170	16.271	32
23	5.467	10.014	6.210	8.477	26.070	29.581	30.931	26.722	22.127	20.876	13.752	33
24	6.290	10.720	6.593	9.685	27.608	27.216	27.427	25.727	22.755	21.267	13.891	34
25	7.718	11.976	7.571	10.891	26.757	28.797	25.473	26.573	22.341	20.452	14.167	35
26	6.611	13.452	7.869	10.331	24.421	25.025	23.821	23.491	21.571	18.495	12.678	36
27	7.640	14.064	8.390	9.956	23.219	24.337	21.838	23.334	21.274	17.880	12.014	37
28	8.006	17.756	8.236	11.206	22.415	23.312	20.672	23.183	20.458	16.195	11.558	38
29	7.255	17.688	8.478	11.091	21.819	21.918	21.474	21.869	20.753	15.712	10.573	39
30	6.962	16.764	8.750	8.586	19.339	20.006	21.728	20.306	18.391	14.498	10.087	40
31	7.702	16.261	8.993	9.765	18.356	19.808	20.601	17.251	17.698	14.622	9.413	41
32	8.320	16.921	8.549	8.968	18.424	19.092	18.638	15.956	15.786	14.146	8.478	42
33	10.307	16.871	8.833	8.295	17.029	17.953	17.899	16.360	13.236	13.206	7.957	43
34	8.632	17.604	9.944	7.671	16.691	17.492	16.443	16.222	13.747	12.552	7.304	44
35	7.998	16.761	8.383	7.800	16.279	15.992	15.261	13.972	13.994	11.743	6.784	45
36	8.147	16.584	8.099	7.314	15.879	15.415	14.180	13.231	12.449	11.194	6.581	46
37	7.457	16.561	8.085	7.228	15.373	14.904	12.892	11.495	11.298	10.679	5.824	47
38	7.809	16.307	7.403	6.920	14.542	13.142	11.413	11.514	9.673	9.883	5.287	48
39	7.469	15.903	8.247	6.111	13.047	11.771	10.674	10.252	9.654	8.282	4.654	49
40	7.165	15.761	7.662	6.498	12.689	10.382	10.708	9.422	8.515	7.316	4.350	50
41	7.681	14.351	6.749	5.864	11.179	10.343	9.698	7.992	7.272	6.857	3.582	51
42	7.703	14.507	6.918	5.302	10.033	8.982	9.041	7.878	6.478	5.556	3.167	52
43	6.708	13.273	6.976	5.291	10.308	8.544	8.159	7.169	6.358	4.782	2.960	53
44	6.129	13.494	6.247	4.776	8.680	7.737	6.650	6.595	5.604	4.271	2.463	54
45	7.085	13.431	5.671	4.579	8.440	7.481	5.765	5.378	4.677	4.387	2.235	55
46	5.718	12.781	5.118	3.843	8.245	6.326	5.714	5.078	3.722	3.127	1.923	56
47	5.698	11.140	4.549	3.481	7.932	6.131	5.335	4.256	3.443	3.185	1.712	57
48	5.157	9.597	3.425	3.427	7.873	5.592	4.502	3.548	3.621	2.982	1.435	58
49	3.783	7.941	2.921	3.582	6.825	5.224	3.838	3.393	3.037	2.294	1.311	59
50	2.756	4.907	2.150	2.327	5.469	4.436	3.925	2.709	2.376	1.873	1.262	60
51	2.864	5.642	2.069	2.467	5.189	4.519	3.087	2.402	1.912	1.643	1.223	61
52	2.828	4.683	1.779	2.317	4.837	3.600	2.550	2.168	1.656	1.537	0.995	62
53	2.585	3.448	1.522	2.090	4.996	3.189	2.296	1.906	1.598	1.508	0.869	63
54	1.704	2.486	0.900	1.559	5.126	2.874	2.118	1.737	1.405	1.334	0.551	64
55	1.054	1.823	0.730	1.580	4.000	2.377	1.994	1.707	1.258	0.782	0.329	65
56	1.001	1.706	0.714	1.490	3.683	2.320	1.876	1.416	0.774	0.540	—	66
57	1.043	1.363	0.499	1.224	3.192	1.849	1.432	1.177	0.575	—	—	67
58	0.839	1.179	0.462	1.077	2.576	1.677	1.225	0.890	—	—	—	68
59	0.701	1.004	0.301	0.895	2.617	1.516	0.813	—	—	—	—	69
60	0.644	0.641	0.112	0.808	1.651	1.193	—	—	—	—	—	70
61	0.494	0.235	0.090	0.637	1.414	—	—	—	—	—	—	71
62	0.271	0.169	0.072	0.271	—	—	—	—	—	—	—	72
63	0.263	0.249	0.112	—	—	—	—	—	—	—	—	73
64	0.275	0.308	—	—	—	—	—	—	—	—	—	74
65	0.274	—	—	—	—	—	—	—	—	—	—	75

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Recovery is not considered beyond NRA.
2. The value  $q'_{[x]+t}$  at duration  $t$  represents the number of recoveries per thousand during the  $(t+1)$  year of entitlement for those originally entitled to disability benefits at entl age  $[x]$  who have attained age  $[x]+t$ . Rates are derived from death probabilities shown in **table 7A** and recovery probabilities shown in **table 14A**. See appendix for details.
3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement.

**Table 17B.—Female Disabled Workers**  
**Absolute Recovery Rate Per Thousand Entitled**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age
	0	1	2	3	4	5	6	7	8	9	
16	12.167	19.034	14.110	12.097	47.125	72.286	76.276	68.568	70.559	60.220	47.283
17	9.360	14.443	9.609	11.020	47.059	62.085	65.030	59.153	60.495	49.789	38.352
18	6.114	10.620	7.171	11.106	44.746	49.772	53.557	49.216	48.951	37.189	31.072
19	3.640	8.211	5.697	10.103	36.546	38.168	40.619	39.284	39.343	28.795	25.831
20	3.301	6.643	5.677	9.818	29.416	35.836	34.940	30.943	30.984	23.217	20.826
21	4.125	8.690	5.899	8.683	24.747	31.300	30.106	27.439	24.167	20.363	19.351
22	3.988	9.017	6.008	9.115	23.314	27.654	26.004	24.932	21.573	19.006	18.324
23	4.478	8.304	5.738	8.924	21.198	26.225	22.601	23.542	20.556	18.385	15.629
24	5.010	10.053	6.132	9.544	20.926	24.044	23.621	22.556	20.810	16.744	15.075
25	4.830	11.161	6.240	8.855	21.457	21.647	23.493	21.153	21.930	17.563	14.420
26	5.914	11.082	6.653	8.673	20.337	19.498	20.670	20.684	21.168	17.801	12.865
27	5.440	12.930	6.741	7.956	19.520	20.014	20.669	19.527	20.805	17.809	12.770
28	5.720	12.460	9.005	8.247	18.302	19.163	19.446	19.708	18.514	16.128	12.509
29	5.712	12.090	7.315	8.050	15.912	18.947	18.543	18.918	17.992	15.194	11.613
30	5.577	13.508	7.125	7.825	17.230	16.769	18.666	17.272	17.008	15.617	11.719
31	5.408	13.489	8.171	6.929	16.125	15.687	18.931	17.661	15.555	15.713	10.540
32	5.680	13.374	7.656	5.340	15.685	17.094	17.164	17.273	13.695	14.196	9.835
33	6.029	12.170	6.698	6.449	15.882	15.103	15.760	16.024	13.532	13.429	9.563
34	5.567	12.976	7.146	6.750	14.567	15.021	15.863	14.576	12.557	12.004	8.890
35	4.903	12.642	7.792	6.075	14.320	14.351	14.792	13.101	13.043	11.553	8.326
36	5.472	11.874	6.698	6.356	12.979	13.240	14.630	12.099	11.431	11.324	7.865
37	4.990	12.570	7.244	5.950	12.863	13.090	11.821	11.639	11.299	10.366	6.929
38	4.639	13.157	6.742	5.995	13.073	13.199	11.664	11.991	10.104	9.898	6.428
39	5.296	13.442	6.439	5.032	11.438	12.341	10.732	10.448	9.979	8.220	5.812
40	5.662	12.254	6.627	4.762	11.227	10.714	9.949	9.655	8.721	8.532	5.080
41	5.401	12.282	6.776	4.639	9.755	9.985	9.613	8.920	7.872	7.101	4.544
42	5.476	11.838	5.454	5.178	9.547	9.111	9.053	7.978	6.176	6.582	4.245
43	5.608	11.687	5.004	4.445	9.481	8.504	8.321	7.116	6.305	5.874	4.095
44	4.856	10.245	4.867	4.424	7.966	8.108	7.695	5.993	5.607	4.583	3.298
45	4.769	10.329	5.059	3.564	8.154	7.294	6.503	6.149	5.175	4.295	3.133
46	4.989	10.078	4.573	3.037	7.983	7.015	6.612	5.722	5.269	4.174	2.554
47	4.655	9.225	3.952	3.222	6.412	6.274	6.028	4.755	4.385	3.402	2.341
48	3.846	8.031	3.280	2.815	6.315	5.461	5.222	4.239	2.903	3.207	2.054
49	3.445	6.607	3.113	2.731	6.099	5.782	4.662	4.013	2.981	2.574	1.767
50	2.543	4.391	1.963	2.436	5.469	4.678	3.486	3.386	2.789	2.123	1.699
51	2.755	4.629	2.025	1.950	5.704	3.991	3.330	2.773	2.785	1.926	1.366
52	2.416	4.651	1.731	1.494	4.954	3.942	3.030	2.829	2.196	1.594	1.128
53	2.251	3.504	1.517	1.924	4.780	3.709	2.606	2.371	2.116	1.144	0.873
54	1.606	2.795	0.945	1.389	4.590	3.035	2.585	1.643	1.507	1.228	0.633
55	1.322	1.955	0.730	1.410	4.270	2.722	2.282	1.620	1.083	0.811	0.355
56	1.205	1.940	0.656	1.379	3.893	2.465	1.548	1.271	0.712	0.258	—
57	1.142	1.989	0.541	1.318	3.108	1.808	1.357	0.927	0.474	—	67
58	0.999	1.477	0.576	1.102	2.803	1.626	1.005	0.362	—	—	68
59	0.829	1.151	0.362	0.726	2.438	1.028	0.390	—	—	—	69
60	0.867	0.778	0.098	0.761	1.782	0.702	—	—	—	—	70
61	0.439	0.421	0.140	0.726	1.161	—	—	—	—	—	71
62	0.146	0.283	0.146	0.271	—	—	—	—	—	—	72
63	0.212	0.262	0.086	—	—	—	—	—	—	—	73
64	0.234	0.230	—	—	—	—	—	—	—	—	74
65	0.224	—	—	—	—	—	—	—	—	—	75

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Recovery is not considered beyond NRA.
2. The value  $q'_{[x]+t}$  at duration  $t$  represents the number of recoveries per thousand during the  $(t+1)$  year of entitlement for those originally entitled to disability benefits at entl age  $[x]$  who have attained age  $[x]+t$ . Rates are derived from death probabilities shown in **table 7B** and recovery probabilities shown in **table 14B**. See appendix for details.
3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement.

**Table 18.—Disabled Workers**  
**Aggregate Probability of Recovery and Expected Future Time on DI Rolls**  
**(excluding possibility of death), by Entitlement Age**  
(2006-10 Social Security DI disability experience)

Entl age	Male		Female	
	Probability of recovery	Future time on DI rolls	Probability of recovery	Future time on DI rolls
16	0.028932	24.37	0.030476	25.42
17	0.033874	25.42	0.032630	26.50
18	0.023963	26.05	0.024479	27.09
19	0.018206	26.20	0.017880	27.50
20	0.014180	26.18	0.015429	27.47
21	0.012124	25.53	0.013065	27.05
22	0.011362	25.00	0.012075	26.57
23	0.010367	24.34	0.010891	26.00
24	0.010157	23.65	0.011084	25.41
25	0.010366	22.89	0.011268	24.83
26	0.009586	22.44	0.010621	24.33
27	0.009458	21.98	0.010779	23.80
28	0.009819	21.47	0.010903	23.32
29	0.009779	20.98	0.010395	22.82
30	0.009167	20.56	0.009962	22.30
31	0.009120	20.19	0.009749	21.82
32	0.008986	19.84	0.009502	21.30
33	0.008833	19.41	0.009124	20.85
34	0.008658	18.99	0.009043	20.34
35	0.008278	18.53	0.008686	19.77
36	0.008183	18.12	0.008099	19.19
37	0.007742	17.59	0.007760	18.54
38	0.007342	17.09	0.007685	17.89
39	0.006968	16.56	0.007103	17.25
40	0.006735	16.02	0.006767	16.62
41	0.006253	15.49	0.006352	15.97
42	0.005961	14.92	0.005865	15.32
43	0.005686	14.33	0.005736	14.65
44	0.005242	13.76	0.005025	13.96
45	0.005154	13.14	0.004904	13.29
46	0.004672	12.54	0.004792	12.61
47	0.004437	11.95	0.004164	11.92
48	0.004021	11.29	0.003653	11.25
49	0.003595	10.68	0.003523	10.59
50	0.002837	10.33	0.002880	10.23
51	0.002868	9.57	0.002800	9.43
52	0.002592	8.95	0.002596	8.79
53	0.002376	8.29	0.002407	8.16
54	0.002017	7.63	0.002033	7.51
55	0.001685	7.03	0.001801	6.94
56	0.001610	6.37	0.001630	6.29
57	0.001382	5.75	0.001465	5.69
58	0.001202	5.14	0.001290	5.10
59	0.001076	4.56	0.001002	4.52
60	0.000740	3.98	0.000809	3.95
61	0.000438	3.40	0.000477	3.38
62	0.000181	2.84	0.000189	2.83
63	0.000230	2.27	0.000211	2.26
64	0.000270	1.65	0.000222	1.64
65	0.000257	0.51	0.000212	0.51

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits.
2. *Probability of recovery* at entl age [x] represents the average probability of recovery within one year for disability beneficiaries who became entitled at that particular age. Values are based on aggregate counts of exposure and recoveries across all durations, and have been graduated using Whittaker-Henderson method.
3. *Future time on DI rolls* at entl age [x] represents the aggregate expected number of years on the DI rolls for disability beneficiaries who became entitled at that particular age. Values are exposure-weighted averages of expected future times across all durations from tables 16A and 16B. Experience does not reflect continuing entitlement after NRA.

**Table 19.—Disabled Workers**  
**Aggregate Probability of Recovery and Expected Future Time on DI Rolls**  
*(excluding possibility of death), by Attained Age*  
(2006-10 Social Security DI disability experience)

Attained age	Male		Female	
	Probability of recovery	Future time on DI rolls	Probability of recovery	Future time on DI rolls
16	0.009456	25.24	0.012151	26.97
17	0.009784	27.13	0.012208	28.55
18	0.009713	29.00	0.008691	29.98
19	0.007614	30.41	0.005588	31.13
20	0.005996	31.36	0.005660	31.76
21	0.008390	31.66	0.006961	31.95
22	0.012554	31.61	0.010934	31.89
23	0.016369	31.47	0.013420	31.77
24	0.018781	31.29	0.014621	31.56
25	0.020486	31.08	0.016539	31.30
26	0.020484	30.90	0.017843	31.06
27	0.020389	30.66	0.016644	30.78
28	0.020094	30.37	0.016833	30.44
29	0.019498	30.02	0.015511	30.08
30	0.018190	29.65	0.015185	29.64
31	0.017318	29.22	0.014712	29.17
32	0.017099	28.74	0.014272	28.66
33	0.016062	28.24	0.013745	28.14
34	0.015324	27.69	0.013357	27.58
35	0.014984	27.12	0.012604	27.00
36	0.014545	26.52	0.012285	26.39
37	0.013596	25.90	0.012327	25.75
38	0.012956	25.25	0.011532	25.09
39	0.012353	24.57	0.011524	24.41
40	0.011739	23.86	0.011216	23.71
41	0.011373	23.13	0.010429	22.99
42	0.010494	22.38	0.010095	22.24
43	0.009864	21.61	0.009576	21.47
44	0.008991	20.81	0.008978	20.68
45	0.008612	19.98	0.008407	19.87
46	0.008066	19.14	0.007919	19.03
47	0.007476	18.28	0.007526	18.19
48	0.006646	17.40	0.006690	17.32
49	0.005846	16.51	0.006178	16.44
50	0.005080	15.61	0.005257	15.55
51	0.004380	14.68	0.004672	14.63
52	0.004056	13.74	0.004307	13.70
53	0.003584	12.80	0.004042	12.76
54	0.003076	11.84	0.003521	11.82
55	0.002557	10.88	0.003144	10.86
56	0.002354	9.91	0.002587	9.89
57	0.002023	8.93	0.002394	8.92
58	0.001803	7.95	0.002182	7.94
59	0.001621	6.97	0.001972	6.96
60	0.001446	5.98	0.001806	5.97
61	0.001316	4.99	0.001464	4.99
62	0.001080	3.99	0.001134	3.99
63	0.001009	2.97	0.001001	2.97
64	0.000761	1.91	0.000757	1.91
65	0.000560	0.91	0.000413	0.91

Notes:

1. *Attained age* calculated as sum of entitlement age and duration.
2. *Probability of recovery* at attained age  $x$  represents the average probability of recovery within one year for disability beneficiaries who have attained that particular age. Values are based on aggregate counts of exposure and recoveries across all durations, and have been graduated using Whittaker-Henderson method.
3. *Future time on DI rolls* at attained age  $x$  represents the aggregate expected number of years on the DI rolls for disability beneficiaries who have attained that particular age. Values are exposure-weighted averages of expected future times across all durations from **tables 16A** and **16B**. Experience does not reflect continuing entitlement after NRA.

**Table 20.—Disabled Workers**  
**Aggregate Probability of Recovery and Expected Future Time on DI Rolls**  
*(excluding possibility of death), by Duration*  
(2006-10 Social Security DI disability experience)

Duration	Male		Female	
	Probability of recovery	Future time on DI rolls	Probability of recovery	Future time on DI rolls
0	0.003342	15.10	0.002890	15.87
1	0.006684	14.61	0.006124	15.30
2	0.003265	14.12	0.003121	14.77
3	0.003704	13.68	0.003247	14.29
4	0.008909	13.42	0.008059	13.93
5	0.008627	13.39	0.007976	13.75
6	0.008276	13.35	0.007909	13.53
7	0.007841	13.29	0.007527	13.27
8	0.007268	13.19	0.007024	12.97
9	0.006591	13.05	0.006397	12.66
10	0.005981	12.98	0.005971	12.41
11	0.005536	12.88	0.005554	12.18
12	0.005085	12.76	0.005186	11.99
13	0.004839	12.71	0.004839	11.88
14	0.004509	12.70	0.004660	11.83
15	0.004129	12.74	0.004335	11.85
16	0.003864	12.70	0.004028	11.81
17	0.003227	12.54	0.003611	11.66
18	0.002932	12.35	0.003143	11.48
19	0.002282	12.14	0.002872	11.30
20	0.002181	11.94	0.002535	11.09
21	0.001923	11.76	0.002446	10.93
22	0.001831	11.58	0.002097	10.79
23	0.001532	11.39	0.001821	10.67
24	0.001451	11.19	0.001856	10.54
25	0.001188	10.95	0.001557	10.38
26	0.001272	10.68	0.001410	10.19
27	0.000928	10.35	0.001132	9.93
28	0.000709	9.95	0.001084	9.59
29	0.000510	9.48	0.000901	9.16
30	0.000576	9.01	0.000729	8.71
31	0.000680	8.56	0.000567	8.27
32	0.000406	8.09	0.000493	7.81
33	0.000364	7.61	0.000568	7.32
34	0.000390	7.11	0.000498	6.79
35	0.000291	6.63	0.000217	6.26
36	0.000401	6.17	0.000421	5.73
37	0.000292	5.70	0.000316	5.19
38	0.000412	5.13	0.000766	4.61
39	0.000338	4.53	0.000166	4.05
40	0.000154	3.92	0.000333	3.54

Notes:

1. *Duration* measured in years since entitlement.
2. *Probability of recovery* at duration  $t$  represents the average probability of recovery during the  $(t+1)$  year of entitlement to benefits. Values are based on aggregate counts of exposure and recoveries across all entitlement ages. Results have been graduated using Whittaker-Henderson method.
3. *Future time on DI rolls* at duration  $t$  represents the aggregate expected number of years on the DI rolls for disability beneficiaries who have not recovered after  $t$  years. Values are exposure-weighted averages of expected future times across all ages from **tables 16A** and **16B**. Experience does not reflect continuing entitlement after NRA.



**Combined Experience  
by Entitlement Age and Duration  
(2006-10)**



**Table 21A.—Male Disabled Workers**  
**Probability of Death or Recovery Termination**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age
	0	1	2	3	4	5	6	7	8	9	
16	0.013461	0.028723	0.027576	0.018476	0.080463	0.104575	0.121258	0.082287	0.062582	0.063157	0.048641
17	0.013996	0.024853	0.020698	0.019304	0.074251	0.092377	0.094508	0.070856	0.057023	0.054308	0.042584
18	0.014013	0.021066	0.015289	0.020650	0.064944	0.076273	0.067078	0.057816	0.049906	0.043654	0.036840
19	0.014643	0.017300	0.013588	0.020882	0.052550	0.058905	0.052107	0.046330	0.043202	0.035403	0.031748
20	0.013950	0.015959	0.012445	0.020439	0.044388	0.049337	0.043401	0.039036	0.036866	0.027852	0.026635
21	0.015413	0.017723	0.012968	0.019413	0.039740	0.042436	0.038055	0.034853	0.032261	0.026358	0.025256
22	0.017330	0.020073	0.015077	0.017663	0.037219	0.040890	0.037960	0.032264	0.029151	0.026767	0.024122
23	0.019265	0.021137	0.015628	0.016087	0.032594	0.036593	0.038139	0.032259	0.029055	0.027037	0.021812
24	0.021403	0.022582	0.016386	0.017942	0.036582	0.036316	0.035181	0.033282	0.030318	0.028963	0.023150
25	0.025788	0.026561	0.018642	0.021456	0.037775	0.037091	0.034300	0.034810	0.030545	0.028829	0.023193
26	0.025113	0.029835	0.021334	0.021844	0.034879	0.033197	0.033447	0.033569	0.031341	0.028636	0.021993
27	0.027676	0.031329	0.021705	0.023042	0.034248	0.032905	0.033023	0.034041	0.031620	0.028656	0.022316
28	0.028647	0.035748	0.021638	0.025390	0.034197	0.033818	0.031931	0.034403	0.030962	0.027203	0.022497
29	0.028635	0.034471	0.022318	0.023986	0.033771	0.035033	0.032755	0.033426	0.033497	0.028080	0.021852
30	0.030081	0.033734	0.024437	0.023236	0.030909	0.032811	0.033656	0.032414	0.030570	0.027487	0.021556
31	0.032178	0.033850	0.024575	0.025668	0.031038	0.032672	0.033657	0.030845	0.031150	0.028733	0.022704
32	0.032732	0.034630	0.025597	0.023864	0.032103	0.033175	0.032375	0.029515	0.029146	0.028585	0.022313
33	0.035647	0.035984	0.024391	0.023379	0.031064	0.032289	0.032108	0.030380	0.026992	0.028430	0.022352
34	0.035060	0.038612	0.026247	0.023915	0.032066	0.032767	0.030745	0.031157	0.029125	0.028361	0.022649
35	0.036191	0.037227	0.025223	0.023752	0.031299	0.031806	0.030461	0.029330	0.031191	0.028931	0.022460
36	0.037579	0.038219	0.023619	0.024991	0.031418	0.031084	0.030629	0.029458	0.029207	0.029187	0.023149
37	0.038724	0.041091	0.026088	0.024440	0.031555	0.031756	0.030686	0.029014	0.028496	0.030102	0.023028
38	0.038856	0.040806	0.027989	0.025425	0.031129	0.030156	0.028306	0.029204	0.027864	0.030126	0.023682
39	0.039109	0.039379	0.029090	0.025727	0.030723	0.028641	0.028761	0.029914	0.029357	0.028561	0.023939
40	0.041038	0.041441	0.029194	0.027258	0.030848	0.030023	0.029626	0.030238	0.027778	0.027608	0.025403
41	0.044990	0.041628	0.028290	0.025732	0.032109	0.030471	0.030934	0.028858	0.028667	0.029575	0.025667
42	0.049793	0.043322	0.030912	0.026910	0.031578	0.029998	0.029698	0.030379	0.030507	0.029697	0.026076
43	0.049815	0.043098	0.031997	0.029076	0.032059	0.031769	0.030480	0.030896	0.030369	0.030359	0.027588
44	0.053791	0.043840	0.031829	0.028753	0.032799	0.031482	0.031773	0.031924	0.031775	0.032958	0.028462
45	0.054994	0.045128	0.033966	0.030097	0.033590	0.033733	0.032416	0.031969	0.031387	0.032972	0.029425
46	0.057908	0.046337	0.033987	0.030713	0.034974	0.032872	0.032235	0.032919	0.032980	0.033432	0.030846
47	0.063709	0.048498	0.034489	0.032432	0.035919	0.034118	0.032882	0.033256	0.033981	0.035135	0.031870
48	0.068094	0.049285	0.036183	0.034365	0.037220	0.034901	0.033726	0.033269	0.033889	0.035320	0.032999
49	0.067703	0.050974	0.035991	0.034773	0.035790	0.035363	0.034031	0.035303	0.034641	0.034910	0.034930
50	0.050423	0.039064	0.032112	0.031710	0.034172	0.032746	0.033661	0.033914	0.032846	0.035485	0.035558
51	0.063164	0.046497	0.035416	0.032632	0.035421	0.034803	0.034776	0.034706	0.035020	0.038387	0.037645
52	0.067342	0.047002	0.036689	0.034887	0.035745	0.035698	0.034844	0.035659	0.036273	0.037546	0.039339
53	0.070383	0.048988	0.039465	0.036291	0.037715	0.035863	0.034131	0.036249	0.039205	0.040240	0.041885
54	0.071199	0.049134	0.036453	0.036123	0.037787	0.036216	0.036905	0.038827	0.039660	0.042691	0.042725
55	0.055011	0.040804	0.032821	0.032260	0.034884	0.033877	0.035774	0.037303	0.038279	0.041412	0.042298
56	0.063514	0.044364	0.034908	0.034990	0.035901	0.036149	0.037033	0.040513	0.039891	0.041832	0.047624
57	0.064958	0.044409	0.035490	0.034693	0.036974	0.038296	0.039448	0.041246	0.040953	0.045543	0.049946
58	0.067736	0.046873	0.037944	0.036415	0.039077	0.040155	0.041246	0.039656	0.045576	0.048301	0.052884
59	0.067627	0.047387	0.039294	0.037532	0.039779	0.038862	0.039533	0.043914	0.047481	0.051386	0.055771
60	0.064909	0.047542	0.039424	0.038400	0.038992	0.038581	0.043402	0.045616	0.048726	0.052754	0.058466
61	0.074628	0.049784	0.041770	0.040088	0.040294	0.043873	0.047364	0.048433	0.052576	0.054822	0.061678
62	0.081799	0.054262	0.044259	0.043029	0.045562	0.045980	0.049717	0.052812	0.055874	0.057919	0.065458
63	0.095675	0.064214	0.051854	0.050283	0.050324	0.054444	0.056046	0.060056	0.065220	0.065203	0.069131
64	0.115280	0.070667	0.055579	0.055825	0.056144	0.062203	0.061766	0.064501	0.073359	0.073558	0.073835
65	0.124020	0.074767	0.055770	0.060810	0.060725	0.062011	0.064728	0.066258	0.081121	0.081981	0.079210

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Experience after NRA reflects workers who remain on the DI rolls until NRA and then convert to the OASI rolls thereafter, as well as workers who voluntarily switch from DI to OASI prior to NRA.

2. The value  $q_{[x]+t}$  at duration  $t$  represents the probability of death or recovery from disability during the  $(t+1)$  year of entitlement for those originally entitled to benefits at entl age  $[x]$  who have attained age  $[x]+t$ . Values are derived from death probabilities (**table 7A**) and recovery probabilities (**table 14A**).

3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement. See **table 7C** for death probabilities beyond attained age 75.

**Table 21B.—Female Disabled Workers**  
**Probability of Death or Recovery Termination**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age	
	0	1	2	3	4	5	6	7	8	9		
16	0.014809	0.023141	0.017968	0.017366	0.049789	0.075158	0.080785	0.077056	0.076726	0.063991	0.053156	26
17	0.014491	0.020749	0.014300	0.016203	0.050781	0.066032	0.070660	0.066819	0.065950	0.054640	0.044335	27
18	0.013639	0.018872	0.012580	0.016785	0.049449	0.054591	0.060112	0.056380	0.053425	0.043089	0.036942	28
19	0.013372	0.016900	0.011715	0.015952	0.042374	0.042293	0.047345	0.046225	0.044149	0.035500	0.032151	29
20	0.012495	0.015506	0.011147	0.016198	0.034865	0.040256	0.041520	0.036651	0.036679	0.030169	0.028106	30
21	0.012960	0.017401	0.012254	0.015073	0.029727	0.036371	0.035096	0.032634	0.030575	0.026684	0.025725	31
22	0.014423	0.016938	0.014620	0.015909	0.028447	0.033094	0.031585	0.030834	0.027376	0.025566	0.025082	32
23	0.016773	0.018559	0.014359	0.016132	0.026830	0.031752	0.029478	0.030088	0.026336	0.025725	0.022532	33
24	0.018199	0.021326	0.013683	0.016194	0.027800	0.030286	0.030496	0.029168	0.027888	0.025199	0.022267	34
25	0.019207	0.023285	0.014314	0.016373	0.028976	0.028924	0.030737	0.027142	0.030402	0.026151	0.021928	35
26	0.021736	0.024787	0.016334	0.016769	0.028473	0.025991	0.028343	0.026784	0.029704	0.026142	0.021709	36
27	0.023957	0.025662	0.015798	0.016312	0.027885	0.027397	0.028987	0.026588	0.028694	0.025310	0.021339	37
28	0.022731	0.026821	0.019622	0.017125	0.026119	0.027028	0.027677	0.026834	0.026896	0.024886	0.021505	38
29	0.022843	0.025378	0.018943	0.017859	0.024813	0.027130	0.027714	0.027682	0.027574	0.024744	0.021254	39
30	0.024894	0.028281	0.019797	0.018221	0.025239	0.024919	0.027057	0.026281	0.025762	0.025384	0.021942	40
31	0.025657	0.028609	0.021437	0.016168	0.024231	0.024399	0.027222	0.026844	0.025851	0.024653	0.020544	41
32	0.025841	0.028746	0.020456	0.015849	0.025465	0.027017	0.025434	0.025990	0.023190	0.024367	0.020825	42
33	0.026568	0.029264	0.018903	0.017548	0.024772	0.024499	0.025009	0.025081	0.023489	0.023021	0.020960	43
34	0.027286	0.030082	0.020231	0.017915	0.024711	0.024373	0.024462	0.024602	0.022509	0.022707	0.020307	44
35	0.029120	0.030932	0.021871	0.016725	0.026022	0.023638	0.024556	0.023360	0.023297	0.022470	0.020311	45
36	0.030229	0.029100	0.020602	0.018968	0.025179	0.023806	0.025778	0.022769	0.021912	0.023977	0.020864	46
37	0.031484	0.031286	0.022100	0.018115	0.025127	0.024619	0.023730	0.022645	0.022131	0.022576	0.020359	47
38	0.030859	0.032612	0.022504	0.019035	0.024721	0.024948	0.023110	0.024329	0.022001	0.022124	0.020395	48
39	0.032165	0.034727	0.022435	0.017896	0.025031	0.024723	0.023281	0.023496	0.023532	0.022338	0.020788	49
40	0.035615	0.035197	0.023610	0.019798	0.024170	0.024231	0.021590	0.023248	0.022456	0.022524	0.020014	50
41	0.035936	0.036503	0.025048	0.019405	0.023756	0.023540	0.022355	0.023138	0.021666	0.021930	0.020629	51
42	0.038134	0.035422	0.024704	0.020415	0.023557	0.022640	0.022562	0.022450	0.021059	0.022601	0.021147	52
43	0.039885	0.036386	0.024383	0.021227	0.025406	0.023326	0.022492	0.022815	0.020870	0.022015	0.021085	53
44	0.041775	0.036224	0.024731	0.022193	0.023877	0.023457	0.023001	0.022809	0.021018	0.022060	0.021291	54
45	0.043483	0.036613	0.025239	0.020842	0.024313	0.023405	0.022555	0.023435	0.021968	0.022121	0.021937	55
46	0.045351	0.038050	0.025746	0.021659	0.024362	0.023670	0.023592	0.023645	0.023551	0.022921	0.022131	56
47	0.047992	0.038378	0.026761	0.023291	0.024571	0.023129	0.023038	0.022698	0.023684	0.020849	0.022698	57
48	0.051155	0.039639	0.026122	0.023153	0.024742	0.023676	0.023335	0.022920	0.021104	0.022042	0.023822	58
49	0.052547	0.039583	0.026254	0.022723	0.025522	0.023512	0.022911	0.022313	0.024085	0.024923	0.024987	59
50	0.037298	0.030785	0.022032	0.021124	0.022890	0.021844	0.021508	0.021886	0.023665	0.024066	0.025158	60
51	0.046877	0.034763	0.025620	0.023636	0.025661	0.023089	0.023218	0.023891	0.023418	0.024559	0.026691	61
52	0.047609	0.035483	0.025948	0.022855	0.024418	0.023566	0.023857	0.025344	0.024001	0.025501	0.027774	62
53	0.049560	0.037281	0.025666	0.024014	0.025296	0.025535	0.024443	0.024918	0.026271	0.026996	0.028913	63
54	0.051163	0.038294	0.026643	0.024302	0.027733	0.025873	0.024866	0.025680	0.027880	0.028305	0.029673	64
55	0.041627	0.032723	0.023352	0.023341	0.025821	0.023797	0.024021	0.025533	0.026714	0.027013	0.028120	65
56	0.049930	0.036194	0.027011	0.024891	0.027710	0.025693	0.027325	0.027680	0.027961	0.025849	0.032170	66
57	0.051142	0.037545	0.027838	0.027122	0.027654	0.027463	0.028307	0.027706	0.028044	0.030120	0.034475	67
58	0.052796	0.037116	0.028965	0.026716	0.029239	0.027393	0.028011	0.027205	0.030421	0.032327	0.036526	68
59	0.054156	0.039635	0.031137	0.028660	0.031196	0.028132	0.027076	0.031142	0.032520	0.034949	0.038214	69
60	0.054733	0.040743	0.031455	0.029452	0.029658	0.028336	0.029689	0.032108	0.033413	0.036736	0.041030	70
61	0.062420	0.042505	0.033209	0.031489	0.028894	0.032939	0.032992	0.036253	0.039311	0.041570	0.043767	71
62	0.067121	0.048084	0.038302	0.033147	0.034093	0.034971	0.036726	0.038876	0.042402	0.045475	0.046781	72
63	0.079963	0.055521	0.041415	0.040768	0.037425	0.040520	0.043163	0.043178	0.048631	0.048940	0.050292	73
64	0.100669	0.060609	0.049733	0.043582	0.046125	0.044295	0.049059	0.049045	0.054979	0.055358	0.053434	74
65	0.108699	0.068326	0.056379	0.046410	0.051687	0.045036	0.053099	0.054934	0.061211	0.061746	0.057982	75

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Experience after NRA reflects workers who remain on the DI rolls until NRA and then convert to the OASI rolls thereafter, as well as workers who voluntarily switch from DI to OASI prior to NRA.
2. The value  $q_{[x]+t}$  at duration  $t$  represents the probability of death or recovery from disability during the  $(t+1)$  year of entitlement for those originally entitled to benefits at entl age  $[x]$  who have attained age  $[x]+t$ . Values are derived from death probabilities (**table 7B**) and recovery probabilities (**table 14B**).
3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement. See **table 7C** for death probabilities beyond attained age 75.

**Table 22A.—Male Disabled Workers**  
**Benefit Continuance Table**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age
	0	1	2	3	4	5	6	7	8	9	
16	100,000	98,654	95,820	93,178	91,456	84,097	75,303	66,172	60,727	56,927	53,332
17	87,160	85,940	83,804	82,069	80,485	74,509	67,626	61,235	56,896	53,652	50,738
18	75,651	74,591	73,020	71,904	70,419	65,846	60,824	56,744	53,463	50,795	48,577
19	67,252	66,267	65,121	64,236	62,895	59,590	56,080	53,158	50,695	48,505	46,787
20	61,723	60,862	59,891	59,146	57,937	55,365	52,633	50,349	48,384	46,600	45,302
21	58,563	57,660	56,638	55,904	54,819	52,640	50,406	48,488	46,798	45,288	44,095
22	56,793	55,809	54,689	53,864	52,913	50,944	48,861	47,006	45,489	44,163	42,981
23	55,043	53,983	52,842	52,016	51,179	49,511	47,699	45,880	44,400	43,110	41,944
24	54,461	53,295	52,091	51,237	50,318	48,477	46,717	45,073	43,573	42,252	41,029
25	54,126	52,730	51,329	50,372	49,291	47,429	45,670	44,104	42,569	41,269	40,079
26	52,724	51,400	49,866	48,802	47,736	46,071	44,542	43,052	41,607	40,303	39,149
27	51,832	50,397	48,818	47,758	46,658	45,060	43,577	42,138	40,704	39,417	38,288
28	50,975	49,515	47,745	46,712	45,526	43,969	42,482	41,126	39,711	38,481	37,434
29	49,933	48,503	46,831	45,786	44,688	43,179	41,666	40,301	38,954	37,649	36,592
30	48,506	47,047	45,460	44,349	43,319	41,980	40,603	39,236	37,964	36,803	35,792
31	47,706	46,171	44,608	43,512	42,395	41,079	39,737	38,400	37,216	36,057	35,020
32	46,497	44,975	43,418	42,307	41,297	39,971	38,645	37,394	36,290	35,232	34,225
33	45,411	43,792	42,216	41,186	40,223	38,974	37,716	36,505	35,396	34,441	33,461
34	44,735	43,167	41,500	40,411	39,445	38,180	36,929	35,794	34,679	33,669	32,713
35	43,603	42,025	40,461	39,440	38,503	37,298	36,112	35,012	33,985	32,925	31,972
36	42,623	41,021	39,453	38,521	37,558	36,378	35,247	34,167	33,161	32,192	31,254
37	41,921	40,298	38,642	37,634	36,714	35,555	34,426	33,370	32,402	31,479	30,531
38	40,867	39,279	37,676	36,621	35,690	34,579	33,536	32,587	31,635	30,754	29,828
39	39,875	38,316	36,807	35,736	34,817	33,747	32,780	31,837	30,885	29,978	29,122
40	39,155	37,548	35,992	34,941	33,989	32,941	31,952	31,005	30,067	29,232	28,425
41	38,408	36,680	35,153	34,159	33,280	32,211	31,229	30,263	29,390	28,547	27,703
42	37,874	35,988	34,429	33,365	32,467	31,442	30,499	29,593	28,694	27,819	26,992
43	37,158	35,307	33,785	32,704	31,753	30,735	29,759	28,852	27,961	27,112	26,288
44	36,549	34,583	33,067	32,015	31,094	30,074	29,127	28,202	27,302	26,434	25,563
45	35,854	33,882	32,353	31,254	30,313	29,295	28,307	27,389	26,513	25,681	24,835
46	35,095	33,063	31,531	30,459	29,524	28,491	27,554	26,666	25,788	24,938	24,104
47	34,589	32,385	30,814	29,751	28,786	27,752	26,805	25,924	25,062	24,210	23,360
48	33,906	31,597	30,040	28,953	27,958	26,917	25,978	25,102	24,267	23,445	22,616
49	32,897	30,670	29,107	28,059	27,083	26,114	25,191	24,334	23,475	22,662	21,870
50	30,336	28,806	27,681	26,792	25,942	25,056	24,236	23,420	22,626	21,883	21,106
51	30,340	28,424	27,102	26,142	25,289	24,393	23,544	22,725	21,936	21,168	20,356
52	29,533	27,544	26,249	25,286	24,404	23,532	22,692	21,901	21,120	20,354	19,590
53	28,875	26,843	25,528	24,521	23,631	22,740	21,924	21,176	20,408	19,608	18,819
54	27,854	25,871	24,600	23,703	22,847	21,984	21,188	20,406	19,614	18,836	18,031
55	25,498	24,095	23,112	22,353	21,632	20,877	20,170	19,448	18,723	18,006	17,261
56	25,111	23,516	22,473	21,689	20,930	20,179	19,450	18,730	17,971	17,254	16,531
57	24,240	22,665	21,658	20,889	20,164	19,418	18,674	17,937	17,197	16,493	15,744
58	23,541	21,946	20,917	20,123	19,390	18,632	17,884	17,146	16,466	15,716	14,958
59	22,527	21,004	20,009	19,223	18,502	17,766	17,076	16,401	15,681	14,936	14,167
60	21,393	20,004	19,053	18,302	17,599	16,913	16,260	15,554	14,844	14,121	13,377
61	20,906	19,346	18,383	17,615	16,909	16,228	15,516	14,781	14,065	13,326	12,595
62	20,412	18,742	17,725	16,941	16,212	15,473	14,762	14,028	13,287	12,545	11,818
63	20,817	18,825	17,616	16,703	15,863	15,065	14,245	13,447	12,639	11,815	11,044
64	21,025	18,601	17,287	16,326	15,415	14,550	13,645	12,802	11,976	11,097	10,281
65	20,412	17,881	16,544	15,621	14,671	13,780	12,925	12,088	11,287	10,371	9,522

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Experience after NRA reflects workers who remain on the DI rolls until NRA and then convert to the OASI rolls thereafter, as well as workers who voluntarily switch from DI to OASI prior to NRA.
2. The value  $l_{[x]}$  at duration 0 represents an assumed number of lives originally entitled to disability benefits at entl age [x]; the value  $l_{[x]} + t$  at duration  $t > 0$  represents the number of lives from the original  $l_{[x]}$  who have not died or recovered and remain on the rolls as of attained age [x]+t. Lives are decremented using probabilities from **table 21A**.
3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement. See **table 22C** for attained ages beyond age 75.

**Table 22B.—Female Disabled Workers**  
**Benefit Continuance Table**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age	
	0	1	2	3	4	5	6	7	8	9		
16	100,000	98,519	96,239	94,510	92,869	88,245	81,613	75,020	69,239	63,927	59,836	26
17	89,172	87,880	86,057	84,826	83,452	79,214	73,983	68,755	64,161	59,930	56,655	27
18	79,824	78,735	77,249	76,277	74,997	71,288	67,396	63,345	59,774	56,581	54,143	28
19	71,952	70,990	69,790	68,972	67,872	64,996	62,247	59,300	56,559	54,062	52,143	29
20	66,779	65,945	64,922	64,198	63,158	60,956	58,502	56,073	54,018	52,037	50,467	30
21	63,128	62,310	61,226	60,476	59,564	57,793	55,691	53,736	51,982	50,393	49,049	31
22	60,868	59,990	58,974	58,112	57,187	55,560	53,721	52,024	50,420	49,040	47,787	32
23	59,169	58,177	57,097	56,277	55,369	53,883	52,172	50,634	49,111	47,818	46,588	33
24	58,085	57,028	55,812	55,048	54,157	52,651	51,056	49,499	48,055	46,715	45,538	34
25	57,098	56,001	54,697	53,914	53,031	51,494	50,005	48,468	47,152	45,718	44,524	35
26	55,817	54,604	53,251	52,381	51,503	50,037	48,736	47,355	46,087	44,718	43,548	36
27	54,692	53,382	52,012	51,190	50,355	48,951	47,610	46,230	45,001	43,710	42,603	37
28	53,476	52,260	50,858	49,860	49,006	47,726	46,436	45,151	43,939	42,757	41,694	38
29	52,268	51,074	49,778	48,835	47,963	46,773	45,504	44,243	43,018	41,832	40,797	39
30	51,218	49,943	48,531	47,570	46,703	45,524	44,390	43,189	42,054	40,971	39,930	40
31	50,055	48,771	47,376	46,360	45,610	44,505	43,419	42,237	41,103	40,040	39,054	41
32	48,891	47,628	46,259	45,313	44,595	43,459	42,285	41,210	40,139	39,208	38,252	42
33	47,667	46,401	45,043	44,192	43,417	42,341	41,304	40,271	39,261	38,339	37,455	43
34	46,702	45,428	44,061	43,170	42,397	41,349	40,341	39,354	38,386	37,522	36,670	44
35	45,900	44,563	43,185	42,241	41,535	40,454	39,498	38,528	37,628	36,751	35,925	45
36	44,982	43,622	42,353	41,480	40,693	39,668	38,724	37,726	36,867	36,059	35,195	46
37	44,113	42,724	41,387	40,472	39,739	38,740	37,786	36,889	36,054	35,256	34,461	47
38	43,322	41,985	40,616	39,702	38,946	37,983	37,035	36,179	35,299	34,522	33,759	48
39	42,586	41,216	39,785	38,892	38,196	37,240	36,319	35,473	34,640	33,825	33,070	49
40	41,823	40,333	38,913	37,994	37,242	36,342	35,461	34,695	33,888	33,127	32,383	50
41	41,023	39,549	38,105	37,151	36,430	35,565	34,728	33,952	33,166	32,447	31,735	51
42	40,188	38,655	37,286	36,365	35,623	34,784	33,996	33,229	32,483	31,799	31,080	52
43	39,552	37,974	36,592	35,700	34,942	34,054	33,260	32,512	31,770	31,107	30,423	53
44	38,813	37,192	35,845	34,959	34,183	33,367	32,584	31,835	31,109	30,455	29,782	54
45	38,098	36,441	35,107	34,221	33,508	32,693	31,928	31,208	30,477	29,807	29,148	55
46	37,594	35,889	34,523	33,634	32,906	32,104	31,344	30,605	29,881	29,177	28,509	56
47	36,834	35,066	33,720	32,818	32,054	31,266	30,543	29,839	29,162	28,471	27,878	57
48	36,131	34,283	32,924	32,064	31,322	30,547	29,824	29,128	28,460	27,859	27,245	58
49	35,507	33,641	32,309	31,461	30,746	29,961	29,257	28,587	27,949	27,276	26,596	59
50	33,307	32,065	31,078	30,393	29,751	29,070	28,435	27,823	27,214	26,570	25,931	60
51	33,409	31,843	30,736	29,949	29,241	28,491	27,833	27,187	26,537	25,916	25,279	61
52	32,647	31,093	29,990	29,212	28,544	27,847	27,191	26,542	25,869	25,248	24,604	62
53	32,116	30,524	29,386	28,632	27,944	27,237	26,542	25,893	25,248	24,585	23,921	63
54	31,535	29,922	28,776	28,009	27,328	26,570	25,883	25,239	24,591	23,905	23,229	64
55	29,761	28,522	27,589	26,945	26,316	25,636	25,026	24,425	23,801	23,165	22,540	65
56	29,722	28,238	27,216	26,481	25,822	25,106	24,461	23,793	23,134	22,487	21,906	66
57	29,145	27,654	26,616	25,875	25,173	24,477	23,805	23,131	22,490	21,859	21,201	67
58	28,352	26,855	25,858	25,109	24,438	23,723	23,073	22,427	21,817	21,153	20,470	68
59	27,841	26,333	25,289	24,502	23,800	23,058	22,409	21,802	21,123	20,436	19,722	69
60	26,992	25,515	24,475	23,705	23,007	22,325	21,692	21,048	20,372	19,691	18,968	70
61	26,853	25,177	24,107	23,306	22,572	21,920	21,198	20,499	19,756	18,979	18,190	71
62	26,706	24,913	23,715	22,807	22,051	21,299	20,554	19,799	19,029	18,222	17,394	72
63	27,123	24,954	23,569	22,593	21,672	20,861	20,016	19,152	18,325	17,434	16,580	73
64	27,866	25,061	23,542	22,371	21,396	20,409	19,505	18,548	17,638	16,668	15,746	74
65	27,944	24,907	23,205	21,897	20,881	19,802	18,910	17,906	16,922	15,886	14,905	75

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Experience after NRA reflects workers who remain on the DI rolls until NRA and then convert to the OASI rolls thereafter, as well as workers who voluntarily switch from DI to OASI prior to NRA.

2. The value  $l_{[x]}$  at duration 0 represents an assumed number of lives originally entitled to disability benefits at entl age [x]; the value  $l_{[x]+t}$  at duration  $t > 0$  represents the number of lives from the original  $l_{[x]}$  who have not died or recovered and remain on the rolls as of attained age [x]+t. Lives are decremented using probabilities from **table 21B**.

3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement. See **table 22C** for attained ages beyond age 75.

**Table 22C.—Disabled Workers Age 76 and Older*****Benefit Continuance Table***

(2006-10 Social Security DI disability experience)

Attained age	Male	Female
76	8,768	14,041
77	8,036	13,170
78	7,326	12,292
79	6,624	11,405
80	5,944	10,520
81	5,295	9,640
82	4,670	8,768
83	4,077	7,908
84	3,517	7,071
85	3,005	6,256
86	2,535	5,489
87	2,104	4,770
88	1,728	4,090
89	1,386	3,457
90	1,096	2,875
91	855	2,360
92	649	1,896
93	486	1,502
94	357	1,167
95	257	884
96	182	659
97	126	481
98	85	344
99	56	240
100	36	163
101	23	108
102	14	69
103	8	43
104	5	26
105	3	15
106	2	8
107	1	4
108	0	2
109	0	1
110	0	0

## Notes:

1. The value at attained age  $x$  represents the number of lives remaining from those originally entitled to disability benefits who have attained that particular age. Experience after NRA reflects workers who remain on the DI rolls until NRA and then convert to the OASI rolls thereafter, as well as workers who voluntarily switch from DI to OASI prior to NRA.
2. Lives are decremented using probabilities from **table 7C**. Values are an extension of the ultimate column of **tables 22A** and **22B**.

**Table 23A.—Male Disabled Workers**  
**Expected Future Time on Combined DI and OASI Rolls**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age	
	0	1	2	3	4	5	6	7	8	9		
16	22.69	21.99	21.63	21.23	20.62	21.38	22.81	24.89	26.08	26.79	27.56	26
17	24.47	23.81	23.41	22.89	22.33	23.08	24.38	25.87	26.81	27.40	27.94	27
18	26.54	25.91	25.46	24.84	24.36	25.01	26.04	26.88	27.49	27.91	28.16	28
19	28.31	27.72	27.20	26.57	26.13	26.55	27.18	27.65	27.96	28.20	28.22	29
20	29.47	28.88	28.34	27.69	27.26	27.50	27.90	28.15	28.27	28.33	28.13	30
21	29.88	29.34	28.86	28.23	27.78	27.91	28.12	28.21	28.22	28.14	27.89	31
22	29.75	29.27	28.86	28.29	27.79	27.85	28.01	28.10	28.02	27.84	27.60	32
23	29.66	29.24	28.86	28.31	27.76	27.68	27.71	27.79	27.70	27.52	27.27	33
24	29.07	28.69	28.34	27.81	27.31	27.32	27.33	27.31	27.24	27.07	26.86	34
25	28.33	28.07	27.82	27.34	26.93	26.97	26.99	26.93	26.88	26.71	26.49	35
26	28.10	27.81	27.65	27.24	26.84	26.79	26.69	26.60	26.50	26.34	26.11	36
27	27.64	27.42	27.29	26.88	26.50	26.43	26.31	26.19	26.10	25.93	25.68	37
28	27.17	26.95	26.94	26.52	26.20	26.11	26.00	25.85	25.75	25.56	25.26	38
29	26.82	26.60	26.53	26.12	25.75	25.63	25.55	25.40	25.26	25.11	24.83	39
30	26.62	26.43	26.33	25.98	25.59	25.39	25.23	25.09	24.92	24.69	24.37	40
31	26.15	26.00	25.89	25.53	25.19	24.98	24.81	24.66	24.43	24.19	23.90	41
32	25.85	25.71	25.62	25.27	24.88	24.69	24.52	24.32	24.05	23.75	23.44	42
33	25.51	25.43	25.36	24.98	24.57	24.34	24.14	23.92	23.65	23.30	22.96	43
34	24.99	24.88	24.86	24.51	24.10	23.88	23.67	23.41	23.14	22.82	22.48	44
35	24.69	24.60	24.53	24.15	23.73	23.48	23.23	22.94	22.62	22.34	21.99	45
36	24.31	24.23	24.18	23.75	23.35	23.09	22.81	22.52	22.19	21.84	21.48	46
37	23.79	23.72	23.72	23.34	22.91	22.65	22.37	22.06	21.71	21.33	20.98	47
38	23.44	23.37	23.34	23.00	22.59	22.30	21.97	21.60	21.23	20.83	20.46	48
39	23.08	23.00	22.92	22.59	22.17	21.86	21.49	21.11	20.75	20.36	19.94	49
40	22.56	22.51	22.46	22.12	21.72	21.40	21.05	20.67	20.30	19.87	19.42	50
41	22.08	22.09	22.03	21.66	21.22	20.90	20.55	20.18	19.77	19.34	18.91	51
42	21.47	21.57	21.53	21.20	20.77	20.43	20.05	19.65	19.25	18.84	18.40	52
43	20.98	21.06	20.98	20.66	20.26	19.92	19.55	19.15	18.75	18.32	17.88	53
44	20.44	20.57	20.49	20.15	19.73	19.38	19.00	18.60	18.20	17.78	17.37	54
45	19.92	20.05	19.97	19.66	19.25	18.90	18.55	18.15	17.73	17.29	16.86	55
46	19.43	19.60	19.52	19.19	18.78	18.45	18.06	17.64	17.23	16.80	16.36	56
47	18.82	19.07	19.02	18.68	18.29	17.95	17.57	17.15	16.72	16.29	15.87	57
48	18.29	18.59	18.53	18.20	17.83	17.51	17.12	16.70	16.26	15.81	15.37	58
49	17.92	18.18	18.13	17.79	17.41	17.04	16.65	16.22	15.79	15.34	14.88	59
50	18.33	18.28	18.00	17.58	17.14	16.73	16.28	15.83	15.37	14.87	14.40	60
51	17.44	17.59	17.42	17.04	16.60	16.19	15.76	15.31	14.84	14.36	13.91	61
52	16.96	17.15	16.97	16.60	16.18	15.76	15.32	14.86	14.39	13.91	13.44	62
53	16.42	16.63	16.46	16.11	15.70	15.30	14.85	14.36	13.88	13.42	12.97	63
54	16.07	16.26	16.08	15.67	15.23	14.81	14.35	13.88	13.42	12.95	12.51	64
55	16.38	16.31	15.98	15.51	15.01	14.53	14.02	13.52	13.03	12.53	12.05	65
56	15.69	15.72	15.43	14.97	14.49	14.01	13.52	13.02	12.55	12.05	11.55	66
57	15.26	15.29	14.98	14.51	14.01	13.53	13.05	12.57	12.09	11.58	11.11	67
58	14.74	14.78	14.48	14.03	13.54	13.07	12.60	12.12	11.60	11.13	10.67	68
59	14.38	14.39	14.08	13.63	13.14	12.67	12.16	11.64	11.15	10.68	10.23	69
60	14.08	14.02	13.70	13.24	12.75	12.25	11.72	11.23	10.74	10.26	9.81	70
61	13.45	13.49	13.17	12.72	12.24	11.73	11.24	10.78	10.30	9.84	9.39	71
62	12.83	12.93	12.64	12.20	11.73	11.26	10.78	10.32	9.87	9.42	8.97	72
63	11.85	12.05	11.85	11.47	11.05	10.61	10.19	9.76	9.35	8.97	8.56	73
64	11.00	11.37	11.19	10.82	10.43	10.02	9.66	9.26	8.86	8.52	8.16	74
65	10.49	10.91	10.75	10.35	9.99	9.60	9.21	8.81	8.40	8.09	7.77	75

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Experience after NRA reflects workers who remain on the DI rolls until NRA and then convert to the OASI rolls thereafter, as well as workers who voluntarily switch from DI to OASI prior to NRA.
2. The value  $e_{[x]}+t$  at duration  $t$  represents the average number of future years a beneficiary will remain on the combined DI and OASI rolls for those originally entitled to disability benefits at entl age  $[x]$  who have not died or recovered as of attained age  $[x]+t$ . Values are based on continuance experience from tables 22A and 22C.
3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement. See table 9C for attained ages beyond age 75.

**Table 23B.—Female Disabled Workers**  
**Expected Future Time on Combined DI and OASI Rolls**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age	
	0	1	2	3	4	5	6	7	8	9		
16	26.06	25.45	25.04	24.49	23.91	24.14	25.06	26.22	27.37	28.60	29.52	26
17	27.69	27.09	26.65	26.03	25.45	25.79	26.58	27.56	28.50	29.47	30.15	27
18	29.38	28.78	28.32	27.68	27.14	27.53	28.09	28.85	29.55	30.19	30.52	28
19	31.08	30.50	30.01	29.36	28.83	29.08	29.35	29.78	30.20	30.57	30.68	29
20	32.15	31.55	31.04	30.38	29.87	29.93	30.17	30.45	30.59	30.74	30.68	30
21	32.75	32.18	31.74	31.13	30.60	30.52	30.65	30.75	30.77	30.72	30.55	31
22	32.85	32.32	31.87	31.34	30.83	30.72	30.76	30.74	30.71	30.56	30.34	32
23	32.72	32.27	31.87	31.33	30.84	30.67	30.66	30.58	30.51	30.32	30.11	33
24	32.34	31.93	31.62	31.05	30.55	30.41	30.35	30.29	30.18	30.03	29.79	34
25	31.93	31.54	31.28	30.73	30.23	30.12	30.00	29.94	29.76	29.68	29.46	35
26	31.64	31.33	31.12	30.62	30.14	30.01	29.79	29.65	29.45	29.34	29.11	36
27	31.30	31.05	30.86	30.35	29.84	29.68	29.50	29.37	29.16	29.01	28.75	37
28	31.01	30.72	30.55	30.15	29.67	29.45	29.25	29.07	28.86	28.64	28.36	38
29	30.74	30.45	30.23	29.80	29.34	29.07	28.87	28.67	28.48	28.27	27.97	39
30	30.37	30.13	29.99	29.59	29.13	28.87	28.59	28.37	28.13	27.86	27.57	40
31	30.07	29.85	29.72	29.36	28.83	28.54	28.24	28.01	27.77	27.50	27.18	41
32	29.79	29.57	29.43	29.03	28.49	28.22	27.99	27.71	27.43	27.07	26.74	42
33	29.54	29.33	29.20	28.75	28.26	27.96	27.65	27.35	27.04	26.68	26.30	43
34	29.15	28.96	28.84	28.42	27.93	27.63	27.31	26.98	26.65	26.25	25.85	44
35	28.69	28.53	28.43	28.05	27.52	27.24	26.89	26.56	26.18	25.79	25.37	45
36	28.31	28.17	28.00	27.58	27.10	26.79	26.43	26.12	25.72	25.28	24.89	46
37	27.87	27.76	27.64	27.26	26.75	26.43	26.08	25.70	25.29	24.85	24.41	47
38	27.42	27.28	27.18	26.79	26.30	25.96	25.61	25.20	24.82	24.37	23.91	48
39	26.93	26.81	26.76	26.36	25.83	25.48	25.12	24.71	24.29	23.86	23.39	49
40	26.44	26.40	26.35	25.97	25.49	25.11	24.72	24.25	23.82	23.35	22.88	50
41	25.99	25.94	25.91	25.56	25.06	24.65	24.24	23.78	23.33	22.84	22.34	51
42	25.56	25.56	25.48	25.11	24.62	24.20	23.75	23.29	22.81	22.29	21.80	52
43	25.02	25.04	24.97	24.58	24.10	23.71	23.27	22.79	22.31	21.78	21.26	53
44	24.54	24.59	24.49	24.10	23.63	23.20	22.75	22.27	21.78	21.23	20.70	54
45	24.05	24.12	24.01	23.62	23.12	22.68	22.21	21.71	21.22	20.69	20.14	55
46	23.45	23.54	23.45	23.05	22.55	22.10	21.63	21.14	20.64	20.12	19.58	56
47	22.95	23.08	22.98	22.60	22.13	21.67	21.18	20.66	20.13	19.61	19.01	57
48	22.44	22.62	22.53	22.12	21.63	21.17	20.67	20.15	19.61	19.03	18.44	58
49	21.91	22.09	21.98	21.56	21.05	20.59	20.08	19.53	18.97	18.42	17.88	59
50	22.26	22.10	21.79	21.27	20.72	20.19	19.63	19.05	18.46	17.90	17.33	60
51	21.28	21.30	21.05	20.59	20.07	19.59	19.04	18.48	17.92	17.34	16.76	61
52	20.80	20.81	20.56	20.09	19.55	19.03	18.48	17.91	17.37	16.78	16.21	62
53	20.19	20.22	19.98	19.50	18.97	18.44	17.91	17.35	16.78	16.22	15.66	63
54	19.62	19.65	19.41	18.93	18.39	17.90	17.36	16.79	16.22	15.67	15.11	64
55	19.68	19.51	19.15	18.60	18.03	17.50	16.91	16.32	15.73	15.15	14.56	65
56	18.79	18.75	18.43	17.93	17.38	16.86	16.29	15.73	15.17	14.59	13.96	66
57	18.20	18.16	17.85	17.34	16.81	16.28	15.72	15.17	14.58	13.99	13.41	67
58	17.72	17.68	17.34	16.84	16.29	15.77	15.20	14.62	14.01	13.44	12.87	68
59	17.09	17.04	16.73	16.25	15.71	15.20	14.63	14.02	13.46	12.89	12.34	69
60	16.63	16.56	16.24	15.76	15.22	14.67	14.08	13.50	12.93	12.36	11.81	70
61	15.84	15.87	15.55	15.07	14.54	13.96	13.42	12.86	12.32	11.80	11.29	71
62	15.06	15.10	14.84	14.41	13.89	13.36	12.83	12.30	11.78	11.28	10.79	72
63	14.05	14.23	14.04	13.62	13.18	12.67	12.18	11.71	11.22	10.77	10.29	73
64	12.97	13.37	13.20	12.86	12.42	12.00	11.53	11.10	10.65	10.24	9.81	74
65	12.20	12.63	12.52	12.23	11.81	11.42	10.94	10.52	10.10	9.73	9.34	75

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Experience after NRA reflects workers who remain on the DI rolls until NRA and then convert to the OASI rolls thereafter, as well as workers who voluntarily switch from DI to OASI prior to NRA.

2. The value  $e_{[x]+t}$  at duration  $t$  represents the average number of future years a beneficiary will remain on the combined DI and OASI rolls for those originally entitled to disability benefits at entl age  $[x]$  who have not died or recovered as of attained age  $[x]+t$ . Values are based on continuance experience from tables 22B and 22C.

3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement. See table 9C for attained ages beyond age 75.

**Table 24A.—Male Disabled Workers**  
**Expected Future Time on DI Rolls**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age
	0	1	2	3	4	5	6	7	8	9	
16	20.78	20.05	19.63	19.18	18.53	19.10	20.28	22.01	22.93	23.43	23.98
17	22.28	21.59	21.13	20.56	19.96	20.52	21.56	22.75	23.45	23.84	24.18
18	24.02	23.35	22.84	22.19	21.65	22.11	22.90	23.51	23.92	24.15	24.23
19	25.47	24.84	24.27	23.60	23.09	23.34	23.77	24.05	24.20	24.27	24.14
20	26.38	25.74	25.15	24.46	23.96	24.05	24.27	24.35	24.32	24.23	23.91
21	26.61	26.02	25.48	24.81	24.29	24.28	24.33	24.27	24.13	23.92	23.55
22	26.39	25.85	25.36	24.75	24.18	24.10	24.10	24.03	23.82	23.52	23.15
23	26.19	25.70	25.24	24.63	24.03	23.82	23.71	23.63	23.40	23.08	22.71
24	25.56	25.11	24.68	24.08	23.51	23.38	23.24	23.07	22.85	22.55	22.21
25	24.80	24.45	24.10	23.55	23.05	22.94	22.80	22.60	22.39	22.08	21.72
26	24.47	24.09	23.82	23.32	22.83	22.64	22.40	22.16	21.91	21.60	21.23
27	23.96	23.63	23.38	22.88	22.41	22.19	21.93	21.66	21.40	21.09	20.69
28	23.42	23.10	22.93	22.43	22.00	21.76	21.51	21.20	20.94	20.59	20.15
29	23.00	22.66	22.45	21.95	21.48	21.21	20.96	20.66	20.35	20.04	19.61
30	22.68	22.37	22.13	21.67	21.18	20.84	20.53	20.22	19.88	19.50	19.03
31	22.14	21.86	21.61	21.14	20.69	20.33	20.00	19.68	19.29	18.90	18.44
32	21.74	21.46	21.22	20.76	20.26	19.91	19.58	19.21	18.78	18.33	17.86
33	21.30	21.07	20.84	20.34	19.82	19.44	19.07	18.69	18.26	17.75	17.25
34	20.72	20.45	20.25	19.78	19.26	18.88	18.50	18.07	17.64	17.15	16.64
35	20.31	20.05	19.81	19.31	18.76	18.35	17.94	17.49	17.00	16.53	16.01
36	19.82	19.58	19.34	18.79	18.26	17.84	17.39	16.93	16.43	15.91	15.37
37	19.23	18.98	18.78	18.27	17.71	17.27	16.82	16.34	15.81	15.26	14.72
38	18.77	18.50	18.27	17.78	17.23	16.77	16.28	15.74	15.20	14.62	14.05
39	18.29	18.01	17.73	17.24	16.69	16.20	15.66	15.11	14.56	13.99	13.38
40	17.68	17.42	17.15	16.65	16.10	15.60	15.07	14.51	13.95	13.33	12.70
41	17.10	16.88	16.60	16.06	15.48	14.97	14.43	13.87	13.27	12.65	12.02
42	16.43	16.27	15.98	15.47	14.89	14.36	13.78	13.19	12.59	11.97	11.32
43	15.84	15.65	15.33	14.82	14.25	13.70	13.13	12.53	11.92	11.27	10.61
44	15.21	15.05	14.71	14.18	13.59	13.03	12.44	11.83	11.20	10.55	9.90
45	14.59	14.41	14.07	13.55	12.95	12.38	11.80	11.18	10.53	9.85	9.17
46	13.99	13.82	13.46	12.92	12.31	11.74	11.13	10.48	9.82	9.14	8.44
47	13.30	13.17	12.82	12.26	11.65	11.07	10.44	9.78	9.10	8.40	7.69
48	12.66	12.54	12.17	11.61	11.00	10.41	9.77	9.09	8.39	7.66	6.92
49	12.11	11.95	11.57	10.98	10.36	9.73	9.07	8.37	7.65	6.91	6.14
50	12.03	11.65	11.10	10.45	9.78	9.10	8.40	7.67	6.92	6.14	5.35
51	11.15	10.87	10.37	9.73	9.04	8.36	7.64	6.90	6.13	5.33	4.53
52	10.49	10.21	9.69	9.04	8.35	7.64	6.90	6.14	5.34	4.53	3.68
53	9.81	9.51	8.98	8.32	7.62	6.90	6.14	5.34	4.52	3.68	2.78
54	9.21	8.88	8.31	7.61	6.87	6.12	5.33	4.52	3.68	2.78	1.83
55	8.89	8.38	7.71	6.96	6.17	5.38	4.55	3.70	2.80	1.83	0.90
56	8.08	7.60	6.93	6.16	5.37	4.55	3.70	2.79	1.84	0.91	—
57	7.38	6.86	6.16	5.37	4.54	3.70	2.79	1.84	0.91	—	67
58	6.63	6.07	5.35	4.54	3.69	2.79	1.84	0.91	—	—	68
59	5.91	5.30	4.54	3.70	2.80	1.84	0.90	—	—	—	69
60	5.17	4.50	3.70	2.79	1.83	0.90	—	—	—	—	70
61	4.34	3.65	2.79	1.83	0.89	—	—	—	—	—	71
62	3.51	2.75	1.82	0.90	—	—	—	—	—	—	72
63	2.62	1.80	0.89	—	—	—	—	—	—	—	73
64	1.73	0.88	—	—	—	—	—	—	—	—	74
65	0.45	—	—	—	—	—	—	—	—	—	75

Notes:

1. Entl age denotes age last birthday at entitlement to disability benefits. Duration measured in years since entitlement. Attained age calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Death or recovery are not considered beyond NRA.

2. The value  $e_{[x]+t}$  at duration  $t$  represents the average number of future years a beneficiary will remain on the DI rolls for those originally entitled to disability benefits at entl age  $[x]$  who have not died or recovered as of attained age  $[x]+t$ . Values are based on continuance experience from **table 22A**, however, entitlement is not considered after conversion to old-age benefits.

3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement.

The average future years on the DI rolls for attained ages 62 and older are adjusted to reflect less than a full year of DI exposure after attaining age 65 for birth cohorts 1938-42 to account for the phased-in increase in NRA from 65 to 66.

**Table 24B.—Female Disabled Workers**  
**Expected Future Time on DI Rolls**  
(2006-10 Social Security DI disability experience)

Entl age	Completed duration of disability entitlement										Attained age
	0	1	2	3	4	5	6	7	8	9	
16	23.01	22.34	21.86	21.25	20.62	20.67	21.31	22.14	22.95	23.81	24.41
17	24.26	23.61	23.10	22.43	21.79	21.93	22.44	23.11	23.73	24.37	24.75
18	25.55	24.90	24.36	23.67	23.06	23.24	23.55	24.03	24.43	24.78	24.88
19	26.83	26.19	25.63	24.93	24.32	24.38	24.43	24.62	24.79	24.91	24.81
20	27.57	26.91	26.32	25.62	25.03	24.91	24.94	25.00	24.93	24.86	24.62
21	27.91	27.27	26.74	26.07	25.46	25.23	25.16	25.06	24.88	24.65	24.31
22	27.82	27.22	26.68	26.07	25.49	25.22	25.06	24.86	24.64	24.32	23.94
23	27.56	27.02	26.52	25.90	25.31	25.00	24.80	24.54	24.29	23.93	23.55
24	27.08	26.57	26.14	25.49	24.90	24.60	24.36	24.11	23.82	23.48	23.08
25	26.57	26.08	25.69	25.06	24.47	24.18	23.89	23.63	23.28	22.99	22.59
26	26.16	25.73	25.37	24.79	24.20	23.89	23.52	23.19	22.81	22.50	22.09
27	25.71	25.32	24.98	24.37	23.77	23.43	23.08	22.75	22.36	22.01	21.57
28	25.29	24.86	24.54	24.02	23.43	23.04	22.67	22.30	21.90	21.49	21.03
29	24.89	24.46	24.08	23.54	22.96	22.53	22.14	21.76	21.37	20.96	20.48
30	24.40	24.01	23.69	23.16	22.58	22.15	21.70	21.29	20.85	20.39	19.91
31	23.96	23.58	23.26	22.76	22.13	21.66	21.19	20.77	20.33	19.86	19.35
32	23.53	23.14	22.81	22.28	21.63	21.18	20.76	20.29	19.81	19.27	18.74
33	23.12	22.74	22.41	21.83	21.21	20.74	20.25	19.75	19.25	18.70	18.13
34	22.60	22.22	21.90	21.34	20.72	20.23	19.73	19.21	18.68	18.10	17.51
35	22.03	21.67	21.35	20.81	20.16	19.68	19.15	18.62	18.05	17.47	16.86
36	21.51	21.16	20.78	20.21	19.59	19.08	18.53	18.01	17.42	16.80	16.20
37	20.94	20.60	20.25	19.70	19.05	18.53	17.99	17.41	16.80	16.17	15.53
38	20.36	19.99	19.65	19.09	18.45	17.91	17.35	16.75	16.15	15.51	14.85
39	19.75	19.39	19.07	18.50	17.83	17.27	16.70	16.08	15.46	14.82	14.14
40	19.13	18.82	18.49	17.92	17.28	16.69	16.09	15.44	14.79	14.12	13.43
41	18.54	18.21	17.88	17.33	16.66	16.05	15.43	14.77	14.11	13.41	12.70
42	17.95	17.64	17.27	16.70	16.04	15.41	14.76	14.08	13.40	12.67	11.96
43	17.29	16.98	16.61	16.01	15.35	14.73	14.07	13.38	12.69	11.95	11.20
44	16.66	16.36	15.96	15.35	14.69	14.03	13.36	12.66	11.95	11.19	10.43
45	16.02	15.72	15.30	14.69	13.99	13.32	12.63	11.91	11.18	10.42	9.65
46	15.31	15.01	14.59	13.96	13.26	12.58	11.87	11.14	10.40	9.64	8.85
47	14.65	14.36	13.91	13.28	12.59	11.89	11.16	10.41	9.64	8.87	8.04
48	13.97	13.70	13.24	12.58	11.87	11.16	10.42	9.65	8.87	8.05	7.22
49	13.29	13.00	12.52	11.84	11.11	10.38	9.62	8.84	8.03	7.21	6.38
50	13.08	12.56	11.95	11.20	10.43	9.67	8.87	8.06	7.23	6.39	5.53
51	12.12	11.69	11.10	10.37	9.61	8.85	8.05	7.23	6.40	5.54	4.66
52	11.43	10.97	10.36	9.62	8.84	8.04	7.23	6.39	5.54	4.67	3.78
53	10.67	10.20	9.58	8.82	8.02	7.22	6.39	5.54	4.67	3.78	2.84
54	9.92	9.42	8.78	8.01	7.19	6.38	5.54	4.67	3.78	2.84	1.85
55	9.40	8.79	8.07	7.25	6.41	5.57	4.69	3.79	2.85	1.86	0.91
56	8.50	7.92	7.20	6.38	5.53	4.68	3.79	2.85	1.87	0.92	—
57	7.71	7.10	6.36	5.52	4.66	3.78	2.85	1.86	0.92	—	67
58	6.93	6.29	5.52	4.66	3.78	2.85	1.86	0.92	—	—	68
59	6.11	5.44	4.64	3.77	2.84	1.86	0.91	—	—	—	69
60	5.31	4.59	3.76	2.83	1.85	0.91	—	—	—	—	70
61	4.45	3.72	2.83	1.85	0.90	—	—	—	—	—	71
62	3.59	2.78	1.84	0.90	—	—	—	—	—	—	72
63	2.68	1.82	0.90	—	—	—	—	—	—	—	73
64	1.75	0.89	—	—	—	—	—	—	—	—	74
65	0.46	—	—	—	—	—	—	—	—	—	75

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits. *Duration* measured in years since entitlement. *Attained age* calculated as sum of entl age and duration. Results do not include auxiliary beneficiaries payable under the DI program. Death or recovery are not considered beyond NRA.
  2. The value  $e_{[x]+t}$  at duration  $t$  represents the average number of future years a beneficiary will remain on the DI rolls for those originally entitled to disability benefits at entl age  $[x]$  who have not died or recovered as of attained age  $[x]+t$ . Values are based on continuance experience from **table 22B**, however, entitlement is not considered after conversion to old-age benefits.
  3. Select-and-ultimate table is read across the row for 0-10 years of entitlement, and down the last (ultimate) column for 10 or more years of entitlement.
- The average future years on the DI rolls for attained ages 62 and older are adjusted to reflect less than a full year of DI exposure after attaining age 65 for birth cohorts 1938-42 to account for the phased-in increase in NRA from 65 to 66.

**Table 25.—Disabled Workers**  
**Aggregate Probability of Death or Recovery and Expected Future Time on the Rolls,**  
**by Entitlement Age**  
(2006-10 Social Security DI disability experience)

Entl age	Male			Female		
	Probability of death or recovery	Future time on OASDI rolls	Future time on DI rolls	Probability of death or recovery	Future time on OASDI rolls	Future time on DI rolls
16	0.036878	23.49	19.51	0.037120	26.37	21.34
17	0.043076	24.23	20.37	0.039525	27.33	22.19
18	0.034043	24.94	20.86	0.032128	28.14	22.64
19	0.028689	25.35	20.96	0.026163	28.82	22.95
20	0.025461	25.53	20.90	0.024290	29.12	22.93
21	0.023880	25.24	20.37	0.021865	29.12	22.62
22	0.024391	24.92	19.90	0.021153	28.92	22.20
23	0.023571	24.53	19.36	0.021263	28.61	21.68
24	0.024737	24.00	18.73	0.022050	28.22	21.16
25	0.026500	23.43	18.08	0.023020	27.82	20.65
26	0.026980	23.07	17.67	0.022746	27.51	20.23
27	0.027809	22.70	17.28	0.023694	27.17	19.81
28	0.028794	22.33	16.88	0.024031	26.85	19.41
29	0.029524	21.94	16.47	0.024067	26.51	18.96
30	0.029492	21.66	16.14	0.024267	26.17	18.56
31	0.030811	21.34	15.82	0.024042	25.90	18.20
32	0.030845	21.06	15.55	0.024332	25.53	17.77
33	0.031291	20.76	15.23	0.024307	25.27	17.43
34	0.032437	20.43	14.89	0.024673	24.93	17.03
35	0.032877	20.10	14.54	0.024923	24.55	16.56
36	0.033462	19.82	14.24	0.025234	24.14	16.08
37	0.034463	19.45	13.83	0.025430	23.73	15.58
38	0.034387	19.16	13.46	0.025840	23.32	15.07
39	0.035061	18.81	13.06	0.026598	22.86	14.52
40	0.036084	18.48	12.65	0.027158	22.45	14.02
41	0.037063	18.10	12.23	0.027527	22.03	13.50
42	0.038263	17.71	11.77	0.027940	21.57	12.98
43	0.039421	17.33	11.31	0.028943	21.11	12.42
44	0.041131	16.93	10.85	0.029652	20.64	11.85
45	0.042072	16.53	10.38	0.030434	20.16	11.30
46	0.043576	16.15	9.92	0.031782	19.62	10.73
47	0.045579	15.72	9.45	0.032794	19.14	10.16
48	0.047644	15.29	8.95	0.033767	18.61	9.61
49	0.048890	14.86	8.49	0.035574	18.02	9.04
50	0.043951	14.97	8.36	0.031396	18.08	8.85
51	0.049233	14.30	7.74	0.035796	17.22	8.12
52	0.050905	13.90	7.28	0.036678	16.72	7.61
53	0.053458	13.47	6.77	0.038483	16.17	7.07
54	0.054703	13.03	6.28	0.040393	15.61	6.52
55	0.049858	13.02	5.93	0.037444	15.52	6.11
56	0.054550	12.46	5.37	0.042110	14.80	5.50
57	0.056247	12.06	4.87	0.044062	14.30	4.97
58	0.058800	11.64	4.35	0.045646	13.84	4.45
59	0.060864	11.26	3.86	0.047800	13.35	3.92
60	0.061599	10.90	3.36	0.049252	12.92	3.41
61	0.065573	10.51	2.86	0.052766	12.45	2.91
62	0.068755	10.17	2.37	0.056821	11.98	2.40
63	0.076789	9.76	1.86	0.062044	11.50	1.89
64	0.084002	9.42	1.35	0.070544	11.00	1.36
65	0.086951	10.56	0.45	0.076541	12.30	0.46

Notes:

1. *Entl age* denotes age last birthday at entitlement to disability benefits.
2. *Probability of death or recovery* at entl age [x] represents the average probability of death or recovery within one year for disability beneficiaries who became entitled at that particular age. Values are derived from the average death probabilities shown in **table 11** and the average recovery probabilities shown in **table 18**.
3. *Future time on OASDI rolls* at entl age [x] represents the aggregate expected number of years on the combined DI and OASI rolls for disability beneficiaries who became entitled at that particular age. Values are exposure-weighted averages of expected future times across all durations from **tables 23A, 23B and 9C**. Experience reflects continuing entitlement after NRA.
4. *Future time on DI rolls* at entl age [x] represents the aggregate expected number of years on the DI rolls for disability beneficiaries who became entitled at that particular age. Values are exposure-weighted averages of expected future times across all durations from **tables 24A and 24B**. Experience does not reflect continuing entitlement after NRA.

**Table 26.—Disabled Workers**  
**Aggregate Probability of Death or Recovery and Expected Future Time on the Rolls,**  
**by Attained Age**  
(2006-10 Social Security DI disability experience)

Attained age	Male			Female		
	Probability of death or recovery	Future time on OASDI rolls	Future time on DI rolls	Probability of death or recovery	Future time on OASDI rolls	Future time on DI rolls
16	0.013415	22.69	20.78	0.013723	26.06	23.01
17	0.015647	24.31	22.13	0.016435	27.51	24.11
18	0.016476	25.93	23.48	0.015219	28.86	25.10
19	0.017478	27.21	24.49	0.015273	30.01	25.93
20	0.014927	28.12	25.19	0.013758	30.80	26.44
21	0.017466	28.46	25.36	0.014914	31.20	26.61
22	0.021999	28.45	25.25	0.018741	31.30	26.54
23	0.026280	28.41	25.09	0.021561	31.30	26.38
24	0.028380	28.31	24.88	0.023469	31.24	26.17
25	0.030583	28.15	24.63	0.025395	31.15	25.92
26	0.030319	28.03	24.39	0.026703	31.07	25.69
27	0.030765	27.85	24.12	0.026010	30.97	25.43
28	0.031569	27.64	23.80	0.026036	30.83	25.13
29	0.031375	27.41	23.47	0.025318	30.65	24.80
30	0.030040	27.17	23.12	0.025444	30.42	24.42
31	0.030019	26.87	22.72	0.025258	30.17	24.03
32	0.029982	26.56	22.30	0.025123	29.91	23.62
33	0.029805	26.24	21.88	0.025227	29.64	23.19
34	0.030174	25.89	21.43	0.024890	29.36	22.75
35	0.029978	25.55	20.98	0.024506	29.04	22.28
36	0.029752	25.20	20.51	0.025006	28.70	21.79
37	0.029902	24.82	20.02	0.025233	28.35	21.28
38	0.029595	24.44	19.52	0.024442	27.99	20.76
39	0.029627	24.04	19.01	0.025315	27.59	20.21
40	0.029350	23.63	18.48	0.025519	27.19	19.65
41	0.030327	23.19	17.92	0.025307	26.78	19.08
42	0.030666	22.75	17.36	0.025635	26.36	18.49
43	0.030730	22.30	16.78	0.025951	25.92	17.88
44	0.030820	21.83	16.18	0.025663	25.48	17.27
45	0.031279	21.34	15.57	0.026037	25.01	16.63
46	0.032023	20.86	14.95	0.026073	24.53	15.98
47	0.032896	20.36	14.31	0.026674	24.04	15.31
48	0.033484	19.87	13.67	0.026641	23.56	14.64
49	0.033812	19.38	13.03	0.027190	23.06	13.95
50	0.034287	18.94	12.41	0.025837	22.62	13.29
51	0.034715	18.46	11.76	0.026284	22.10	12.57
52	0.035763	17.99	11.09	0.026202	21.59	11.85
53	0.036636	17.51	10.41	0.026599	21.05	11.10
54	0.037496	17.04	9.73	0.027033	20.51	10.34
55	0.037136	16.64	9.06	0.026695	20.02	9.59
56	0.037711	16.20	8.35	0.026812	19.47	8.80
57	0.038211	15.75	7.63	0.027225	18.92	8.00
58	0.038587	15.29	6.88	0.028571	18.36	7.18
59	0.039657	14.83	6.11	0.028995	17.81	6.35
60	0.040063	14.39	5.33	0.029533	17.26	5.51
61	0.041887	13.92	4.51	0.030663	16.70	4.64
62	0.042886	13.46	3.67	0.031476	16.14	3.76
63	0.044685	12.97	2.78	0.032409	15.58	2.83
64	0.045448	12.50	1.83	0.032977	15.02	1.85
65	0.043749	12.05	0.89	0.030234	14.49	0.91
66	0.047022	11.58	—	0.033021	13.93	—
67	0.048966	11.13	—	0.034283	13.39	—
68	0.052007	10.68	—	0.036572	12.85	—
69	0.055270	10.24	—	0.038575	12.32	—
70	0.058141	9.81	—	0.041394	11.80	—
71	0.061653	9.39	—	0.044179	11.28	—
72	0.065626	8.97	—	0.047009	10.79	—
73	0.069228	8.56	—	0.050414	10.29	—
74	0.073835	8.16	—	0.053425	9.81	—
75	0.079210	7.77	—	0.057985	9.34	—

Notes:

1. *Attained age* calculated as sum of entitlement age and duration.
2. *Probability of death or recovery* at attained age  $x$  represents the average probability of death or recovery within one year for disability beneficiaries who have attained that particular age. Values are derived from the average death probabilities shown in **table 12** and the average recovery probabilities shown in **table 19**. See **table 7C** for attained ages beyond age 75.
3. *Future time on OASDI rolls* at attained age  $x$  represents the aggregate expected number of years on the combined DI and OASI rolls for disability beneficiaries who have attained that particular age. Values are exposure-weighted averages of expected future times across all durations from **tables 23A** and **23B**. See **table 9C** for attained ages beyond age 75. Experience reflects continuing entitlement after NRA.
4. *Future time on DI rolls* at attained age  $x$  represents the aggregate expected number of years on the DI rolls for disability beneficiaries who have attained that particular age. Values are exposure-weighted averages of expected future times across all durations from **tables 24A** and **24B**. Experience does not reflect continuing entitlement after NRA.

**Table 27.—Disabled Workers**  
**Aggregate Probability of Death or Recovery and Expected Future Time on the Rolls,**  
**by Duration**  
(2006-10 Social Security DI disability experience)

Duration	Male			Female		
	Probability of death or recovery	Future time on OASDI rolls	Future time on DI rolls	Probability of death or recovery	Future time on OASDI rolls	Future time on DI rolls
0	0.059238	18.20	11.60	0.045422	22.01	13.04
1	0.044540	18.39	11.46	0.036050	22.12	12.79
2	0.034114	18.27	11.17	0.025908	22.00	12.46
3	0.032801	17.96	10.82	0.023442	21.66	12.07
4	0.037147	17.64	10.59	0.027183	21.28	11.75
5	0.037309	17.39	10.53	0.026722	20.97	11.55
6	0.037770	17.11	10.53	0.026990	20.60	11.38
7	0.038546	16.80	10.49	0.027548	20.17	11.15
8	0.039277	16.45	10.42	0.027955	19.70	10.90
9	0.040522	16.07	10.31	0.028423	19.20	10.63
10	0.041767	15.67	10.20	0.029205	18.70	10.36
11	0.042633	15.26	10.21	0.030431	18.21	10.23
12	0.043878	14.92	10.13	0.030689	17.79	10.08
13	0.044661	14.65	10.08	0.032098	17.42	9.98
14	0.045880	14.42	10.08	0.032467	17.07	9.93
15	0.045913	14.21	10.07	0.034077	16.73	9.91
16	0.047469	14.00	10.12	0.034665	16.37	9.94
17	0.048375	13.76	10.02	0.036113	15.99	9.84
18	0.050006	13.48	9.88	0.037964	15.55	9.69
19	0.052000	13.19	9.72	0.040829	15.11	9.55
20	0.055108	12.90	9.57	0.043546	14.64	9.38
21	0.057119	12.68	9.44	0.046318	14.23	9.25
22	0.059590	12.52	9.31	0.049691	13.88	9.15
23	0.061376	12.39	9.18	0.051366	13.61	9.06
24	0.062967	12.23	9.04	0.054580	13.30	8.97
25	0.066832	11.97	8.85	0.058112	12.86	8.84
26	0.069516	11.64	8.65	0.062691	12.31	8.68
27	0.074659	11.27	8.39	0.067350	11.71	8.46
28	0.078296	10.88	8.08	0.073690	11.10	8.19
29	0.081969	10.54	7.72	0.077767	10.54	7.84
30	0.084260	10.29	7.37	0.082259	10.10	7.48
31	0.087871	10.10	7.03	0.088326	9.75	7.14
32	0.085607	9.94	6.68	0.094921	9.43	6.75
33	0.087608	9.78	6.31	0.095795	9.15	6.33
34	0.091972	9.63	5.94	0.099871	8.92	5.92
35	0.089801	9.51	5.55	0.101635	8.74	5.47
36	0.090712	9.41	5.20	0.105532	8.58	5.02
37	0.091620	9.34	4.84	0.105110	8.51	4.53
38	0.089516	9.28	4.36	0.107019	8.51	4.01
39	0.094001	8.99	3.88	0.105032	8.33	3.51
40	0.099338	8.62	3.35	0.111478	8.02	3.04

Notes:

1. *Duration* measured in years since entitlement.
2. *Probability of death or recovery* at duration  $t$  represents the average probability of death or recovery during the  $(t+1)$  year of entitlement to benefits. Values are derived from the average death probabilities shown in **table 13** and the average recovery probabilities shown in **table 20**.
3. *Future time on OASDI rolls* at duration  $t$  represents the aggregate expected number of years on the combined DI and OASI rolls for disability beneficiaries who have not died or recovered after  $t$  years. Values are exposure-weighted averages of expected future times across all ages from **tables 23A, 23B and 9C**. Experience reflects continuing entitlement after NRA.
4. *Future time on DI rolls* at duration  $t$  represents the aggregate expected number of years on the DI rolls for disability beneficiaries who have not died or recovered after  $t$  years. Values are exposure-weighted averages of expected future times across all ages from **tables 24A and 24B**. Experience does not reflect continuing entitlement after NRA.

## **ANNUITY TABLES**



**Table 28A.—Male Disabled Workers**  
**Annual Life Annuity Due (excluding possibility of recovery prior to NRA)<sup>1</sup>**  
 (2006-10 Social Security DI disability experience)

Entl age	Actuarial present value of \$1 annuity									
	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	5.5%
16	35,220	31,560	28,478	25,864	23,632	21,713	20,054	18,610	17,346	16,233
17	34,638	31,085	28,087	25,539	23,359	21,483	19,857	18,440	17,198	16,103
18	34,057	30,611	27,697	25,215	23,088	21,253	19,661	18,272	17,052	15,976
19	33,548	30,201	27,362	24,941	22,861	21,064	19,502	18,136	16,936	15,876
20	33,044	29,794	27,032	24,670	22,638	20,879	19,348	18,007	16,827	15,783
21	32,510	29,358	26,673	24,373	22,390	20,670	19,171	17,856	16,697	15,671
22	31,824	28,785	26,192	23,965	22,041	20,370	18,910	17,628	16,497	15,494
23	31,320	28,373	25,852	23,683	21,806	20,172	18,743	17,486	16,375	15,388
24	30,558	27,730	25,306	23,215	21,403	19,822	18,437	17,217	16,137	15,177
25	29,772	27,062	24,733	22,720	20,971	19,444	18,103	16,921	15,872	14,939
26	29,082	26,478	24,236	22,295	20,605	19,126	17,825	16,676	15,656	14,747
27	28,456	25,951	23,788	21,912	20,275	18,840	17,576	16,458	15,464	14,576
28	27,896	25,480	23,390	21,573	20,085	18,590	17,359	16,268	15,297	14,429
29	27,383	25,052	23,052	21,030	21,269	19,726	18,369	17,170	16,105	15,156
30	26,832	24,585	22,633	20,928	19,433	18,114	16,947	15,910	14,983	14,153
31	26,225	24,068	22,190	20,546	19,101	17,826	16,694	15,687	14,786	13,977
32	25,767	23,683	21,864	20,270	18,865	17,623	16,520	15,535	14,654	13,862
33	25,309	23,297	21,537	19,991	18,627	17,418	16,342	15,381	14,519	13,743
34	24,715	22,786	21,095	19,607	18,291	17,122	16,081	15,149	14,312	13,558
35	24,232	22,374	20,743	19,304	18,029	16,895	15,883	14,975	14,159	13,423
36	23,748	21,961	20,387	18,996	17,762	16,662	15,678	14,795	14,000	13,281
37	23,128	21,421	19,915	18,581	17,395	16,336	15,387	14,535	13,765	13,069
38	22,670	21,028	19,576	18,288	17,140	16,113	15,192	14,362	13,612	12,933
39	22,209	20,632	19,234	17,991	16,881	14,993	14,993	14,187	13,458	12,796
40	21,654	20,146	18,807	17,614	16,547	15,589	14,727	13,947	13,241	12,756
41	21,082	19,644	17,355	17,223	16,199	15,278	14,448	13,697	13,015	12,437
42	20,464	19,097	17,879	16,789	15,810	14,929	14,132	13,410	12,754	12,156
43	19,956	18,652	17,486	16,441	15,501	14,653	13,885	13,188	12,554	11,975
44	19,374	18,136	17,028	16,032	15,134	14,323	13,587	12,918	12,308	11,750
45	18,887	17,706	16,646	15,692	14,831	14,051	13,342	12,697	12,108	11,568
46	18,368	17,245	16,235	15,324	14,500	13,752	13,072	12,451	11,883	11,363
47	17,780	16,718	15,760	14,895	14,111	13,398	12,748	12,155	11,611	11,112
48	17,249	16,242	15,332	14,508	13,760	13,078	12,457	11,887	11,365	10,885
49	16,851	15,888	15,017	14,227	13,508	12,852	12,253	11,703	11,198	10,733
50	17,116	16,154	15,282	14,490	13,767	13,108	12,503	11,948	11,438	10,968
51	16,346	15,452	14,639	13,899	13,224	12,524	11,907	11,305	10,885	10,444
52	15,894	15,045	14,272	13,567	12,921	12,330	11,786	11,285	10,823	10,396
53	15,409	14,606	13,874	13,205	12,591	12,028	11,509	11,031	10,589	10,179
54	15,073	14,307	13,606	12,965	12,376	11,834	11,334	10,872	10,445	10,049
55	15,338	14,571	13,869	13,224	12,631	12,085	11,580	11,113	10,680	10,278
56	14,737	14,020	13,363	12,759	12,201	11,687	11,211	10,771	10,361	9,981
57	14,358	13,678	13,053	12,477	11,946	11,454	10,999	10,576	10,183	9,817
58	13,899	13,260	12,672	12,126	11,623	11,157	10,724	10,322	9,947	9,598
59	13,586	12,977	12,415	11,895	11,413	10,966	10,550	10,163	9,802	9,465
60	13,323	12,741	12,203	11,704	11,241	10,811	10,410	10,036	9,687	9,361
61	12,763	12,223	11,722	11,258	10,826	10,423	10,048	9,698	9,370	9,063
62	12,215	11,715	11,250	10,819	10,416	10,041	9,691	9,363	9,055	8,767
63	11,364	10,919	10,505	10,119	9,759	9,423	9,108	8,812	8,535	8,274
64	10,618	10,220	9,849	9,505	9,178	8,875	8,590	8,322	8,071	7,834
65	10,177	9,809	9,465	9,143	8,842	8,559	8,293	8,043	7,807	7,585

<sup>1</sup>Present value of annual payments of \$1 made at the beginning of each year of disability entitlement and continuing beyond NRA. Entitlement ends upon death of the beneficiary (recovery is not considered prior to NRA). Payments are discounted to the beginning of the entitlement period using the stated annual effective interest rate, and continuation experience shown in tables 8A and 8C.

**Table 28B.—Male Disabled Workers**  
**Annual Life Annuity Immediate (excluding possibility of recovery prior to NRA)<sup>1</sup>**  
(2006-10 Social Security DI disability experience)

Entl age	Actuarial present value of \$1 annuity									
	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	5.5%
16	34,220	30,560	27,478	24,864	22,632	20,713	19,054	17,610	16,346	15,233
17	33,638	30,085	27,087	24,539	22,359	20,483	18,857	17,440	16,198	15,103
18	33,057	29,611	26,697	24,215	22,088	20,253	18,661	17,272	16,052	14,976
19	32,548	29,201	26,362	23,941	21,861	20,064	18,502	17,136	15,936	14,876
20	32,044	28,794	26,032	23,670	21,638	19,879	18,348	17,007	15,827	14,783
21	31,510	28,358	25,673	23,373	21,390	19,670	18,171	16,856	15,697	14,671
22	30,824	27,785	25,192	22,965	21,041	19,370	17,910	16,628	15,497	14,494
23	30,320	27,373	24,852	22,683	20,806	19,172	17,743	16,486	15,375	14,388
24	29,558	26,730	24,306	22,215	20,403	18,182	17,437	16,217	15,137	14,177
25	28,772	26,062	23,733	21,720	19,971	18,444	17,103	15,921	14,872	13,939
26	28,082	25,478	23,256	21,295	19,605	18,126	16,825	15,676	14,656	13,747
27	27,456	24,951	22,788	20,912	19,275	17,840	16,576	15,458	14,464	13,576
28	26,896	24,480	22,390	20,573	18,985	17,590	16,359	15,268	14,297	13,429
29	26,383	24,052	22,030	20,269	18,726	17,369	16,170	15,105	14,156	13,306
30	25,832	23,585	21,633	19,928	18,433	17,114	15,947	14,910	13,983	13,153
31	25,225	23,068	21,190	19,546	18,101	16,826	15,694	14,687	13,786	12,977
32	24,767	22,683	20,864	19,270	17,865	16,623	15,520	14,535	13,654	12,862
33	24,309	22,297	20,537	18,991	17,627	16,418	15,342	14,381	13,519	12,743
34	23,715	21,786	20,095	18,607	17,291	16,122	15,081	14,149	13,312	12,558
35	23,232	21,374	19,743	18,304	17,029	15,895	14,883	13,975	13,159	12,423
36	22,748	20,961	19,387	17,996	16,762	15,661	14,678	13,795	13,000	12,249
37	22,128	20,421	18,915	17,581	16,395	15,336	14,387	13,535	12,765	12,069
38	21,670	20,028	18,576	17,288	16,140	15,113	14,192	13,362	12,612	11,933
39	21,209	19,632	18,234	16,991	15,881	14,887	13,993	13,187	12,458	11,796
40	20,654	19,146	17,807	16,614	15,547	14,589	13,727	12,947	12,241	11,600
41	20,082	18,644	17,365	16,223	15,199	14,278	13,448	12,697	12,015	11,395
42	19,464	18,097	16,879	15,789	14,810	13,929	13,132	12,410	11,754	11,156
43	18,956	17,652	16,486	15,441	14,501	13,653	12,885	12,188	11,554	10,975
44	18,374	17,136	16,028	15,032	14,134	13,323	12,587	11,918	11,308	10,750
45	17,887	16,706	15,646	14,692	13,831	13,051	12,342	11,697	11,108	10,568
46	17,368	16,245	15,255	14,324	13,500	12,752	12,072	11,451	10,883	10,363
47	16,780	15,718	14,760	13,895	13,111	12,398	11,748	11,155	10,611	10,112
48	16,249	15,242	14,332	13,508	12,760	12,077	11,457	10,887	10,365	9,885
49	15,851	14,888	14,017	13,227	12,508	11,852	11,253	10,703	10,198	9,733
50	16,116	15,154	14,282	13,490	12,767	12,108	11,503	10,948	10,438	9,968
51	15,346	14,452	13,639	12,899	12,224	11,605	11,038	10,516	10,036	9,592
52	14,894	14,045	13,272	12,567	11,921	11,330	10,786	10,285	9,823	9,396
53	14,409	13,606	12,744	12,205	11,591	11,028	10,509	10,031	9,589	9,179
54	14,073	13,307	12,606	11,965	11,376	10,834	10,334	9,872	9,445	9,049
55	14,338	13,571	12,869	12,224	11,631	11,085	10,580	10,113	9,680	9,278
56	13,737	13,020	12,363	11,759	11,201	10,687	10,211	9,771	9,361	8,981
57	13,358	12,678	12,053	11,477	10,946	10,454	9,999	9,576	9,183	8,817
58	12,899	12,260	11,670	11,126	10,623	10,157	9,724	9,322	8,947	8,598
59	12,586	11,977	11,415	10,895	10,413	9,966	9,550	9,163	8,802	8,465
60	12,323	11,741	11,203	10,704	10,241	9,811	9,410	9,036	8,687	8,361
61	11,763	11,223	10,722	10,258	9,826	9,423	9,048	8,698	8,370	8,063
62	11,215	10,715	10,250	9,819	9,416	9,041	8,691	8,363	8,055	7,767
63	10,364	9,919	9,505	9,119	8,759	8,423	8,108	7,812	7,535	7,274
64	9,618	9,220	8,849	8,502	8,178	7,875	7,590	7,322	7,071	6,834
65	9,177	8,809	8,465	8,143	7,842	7,559	7,293	7,043	6,807	6,585

<sup>1</sup>Present value of annual payments of \$1 made at the end of each year of disability entitlement and continuing beyond NRA. Entitlement ends upon death of the beneficiary (recovery is not considered prior to NRA). Payments are discounted to the beginning of the entitlement period using the stated annual effective interest rate, and continuance experience shown in tables 8A and 8C.

**Table 28C.—Male Disabled Workers**  
**Monthly Life Annuity Due (excluding possibility of recovery prior to NRA)<sup>1</sup>**  
 (2006-10 Social Security DI disability experience)

Entl age	Actuarial present value of \$1 annuity									
	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	5.5%
16	417.124	373.195	336.202	304.829	278.040	255.014	235.096	217.763	202.590	189.235
17	410.134	367.498	331.514	300.934	274.773	252.248	232.732	215.724	200.816	187.678
18	403.162	361.812	326.834	297.048	271.517	249.496	230.386	213.07	199.067	186.151
19	397.065	356.885	322.821	293.753	268.789	247.219	228.471	212.082	197.679	184.955
20	391.016	352.003	318.854	290.507	266.116	245.003	226.621	210.529	196.367	183.839
21	384.608	346.772	314.551	286.941	263.138	242.497	224.497	208.715	194.806	182.487
22	376.369	339.888	308.770	282.040	258.950	238.892	221.372	205.986	192.408	180.365
23	370.328	334.956	304.699	278.662	256.129	236.520	219.362	204.273	190.938	179.096
24	361.183	327.242	298.142	273.050	251.290	232.318	215.691	201.045	188.082	176.555
25	351.752	319.217	291.262	267.105	246.116	227.783	211.689	197.491	184.906	173.700
26	343.467	312.218	285.307	262.003	241.716	223.963	208.352	194.557	182.312	171.394
27	335.958	305.886	279.929	257.406	237.759	220.536	205.365	191.938	180.002	169.345
28	329.237	300.237	275.151	253.337	234.273	217.531	202.758	189.663	178.006	167.584
29	323.082	295.055	270.831	249.689	231.175	214.886	200.488	187.706	176.310	166.108
30	316.465	289.495	266.061	245.600	227.648	211.825	197.816	185.560	174.238	164.268
31	309.183	283.292	260.745	241.017	223.675	208.361	194.780	182.684	171.868	162.159
32	303.683	278.669	256.840	237.700	220.843	205.930	192.683	180.867	170.285	160.773
33	298.185	274.034	252.911	234.352	217.976	203.463	190.548	179.011	168.664	159.351
34	291.059	267.905	247.609	229.741	213.943	199.918	187.416	176.229	166.181	157.125
35	285.261	262.968	243.385	223.108	210.804	197.192	185.038	174.145	164.347	155.503
36	279.455	258.001	239.114	222.418	207.600	194.396	182.587	171.986	162.437	153.805
37	272.014	251.525	233.448	217.435	203.194	190.483	179.095	168.855	159.618	151.256
38	266.521	246.809	229.382	213.913	200.130	187.805	176.744	166.783	157.784	149.627
39	260.996	242.057	225.277	210.351	197.028	185.092	174.361	164.683	155.925	147.976
40	254.329	236.227	220.153	205.828	193.016	181.517	171.162	161.808	153.331	145.626
41	247.466	230.207	214.848	201.132	188.841	177.790	167.822	158.801	150.615	143.162
42	240.045	223.644	209.019	195.931	184.180	173.595	164.031	155.563	147.483	140.300
43	233.957	218.299	204.305	191.758	180.471	170.285	161.066	152.697	145.079	138.123
44	226.970	212.109	198.800	186.841	176.063	166.318	157.483	149.449	142.124	135.427
45	221.123	206.946	194.223	182.768	172.424	163.036	154.548	146.799	133.244	127.297
46	214.903	201.418	189.290	173.201	163.781	155.220	148.451	131.301	127.031	120.802
47	207.844	195.088	183.592	170.139	161.252	153.138	145.710	135.420	133.760	127.764
48	201.474	189.376	178.451	168.556	159.570	151.388	143.919	137.084	130.814	125.049
49	196.693	185.135	174.676	165.185	156.550	148.674	141.472	134.871	128.806	123.222
50	199.871	188.324	177.855	168.337	159.662	151.737	144.479	137.816	131.686	126.034
51	190.631	179.894	170.139	161.252	153.138	145.710	138.896	132.631	126.857	121.526
52	185.209	175.013	165.731	157.259	149.508	142.402	135.872	129.308	119.176	114.421
53	179.386	169.749	160.957	152.918	145.549	138.781	132.551	126.804	121.492	116.573
54	175.355	166.154	157.743	150.037	142.961	136.450	130.447	124.900	119.766	115.004
55	178.543	169.330	160.892	153.147	146.024	139.460	133.397	127.789	122.590	117.763
56	171.324	162.719	154.823	147.561	140.869	134.691	128.976	123.680	118.763	114.191
57	166.772	158.609	151.102	144.186	137.800	131.895	124.423	121.344	112.222	110.090
58	161.273	153.588	146.508	139.972	133.927	128.326	123.128	118.295	113.794	109.596
59	157.518	150.200	143.444	137.196	131.407	126.034	121.039	116.388	112.050	107.998
60	154.358	147.365	140.898	134.905	129.343	124.172	119.358	114.867	110.673	106.750
61	147.633	141.144	135.131	129.549	124.358	119.524	115.015	110.803	106.863	103.171
62	141.056	135.048	129.469	124.280	119.446	114.937	110.723	106.678	103.086	99.620
63	130.849	125.503	120.528	115.890	111.561	107.514	103.726	100.174	97.707	90.758
64	121.902	117.117	112.655	108.486	104.588	100.936	97.511	94.294	91.269	88.421
65	116.602	112.177	108.043	104.174	100.548	97.146	93.949	90.942	88.110	85.439

<sup>1</sup>Present value of monthly payments of \$1 made at the beginning of each month of disability entitlement and continuing beyond NRA. Entitlement ends upon death of the beneficiary (recovery is not considered prior to NRA). Payments are discounted to the beginning of the entitlement period using the stated annual effective interest rate, and continuance experience shown in tables 8A and 8C.

**Table 28D.—Male Disabled Workers**  
**Monthly Life Annuity Immediate (excluding possibility of recovery prior to NRA)<sup>1</sup>**  
 (2006-10 Social Security DI disability experience)

Entl age	Actuarial present value of \$1 annuity									
	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	5.5%
16	416,124	372,195	335,202	303,829	277,040	254,014	234,096	216,763	201,590	188,235
17	409,134	366,498	330,514	299,934	273,773	251,248	231,732	214,724	199,816	186,678
18	402,162	360,812	326,048	270,517	248,496	229,386	212,707	195,151	175,067	163,488
19	396,065	355,385	321,821	292,753	267,753	246,219	227,471	211,082	196,679	183,955
20	390,016	351,003	317,854	289,507	265,116	244,003	225,621	209,529	195,367	182,839
21	383,608	345,772	313,551	285,941	262,138	241,497	223,497	207,715	193,806	181,487
22	375,369	338,898	307,770	281,040	257,950	237,892	220,372	204,986	191,408	179,365
23	369,328	333,256	303,699	277,662	255,520	238,362	203,273	189,938	178,096	167,532
24	360,183	326,242	297,142	272,050	250,290	231,318	214,691	200,045	187,082	175,555
25	350,752	318,217	290,262	266,105	245,116	226,783	210,689	196,491	183,906	172,700
26	342,467	311,218	284,307	261,003	240,716	222,963	207,352	193,557	181,312	170,394
27	334,958	304,886	278,929	256,406	236,759	219,536	204,365	190,938	179,002	168,345
28	328,237	299,237	274,151	252,337	233,273	216,531	201,758	188,663	177,006	166,584
29	322,082	294,095	269,831	248,689	230,175	213,886	199,488	176,706	165,108	155,938
30	315,465	288,495	265,061	244,600	226,648	210,825	196,816	184,360	173,238	163,268
31	308,183	282,292	259,745	240,017	222,675	207,361	193,780	181,684	170,868	161,159
32	302,683	277,669	255,840	236,700	219,843	204,930	191,683	179,867	169,285	159,773
33	297,185	273,034	251,911	233,352	216,976	202,463	189,548	178,011	167,664	158,351
34	290,059	266,905	246,609	228,741	212,943	198,918	186,416	175,229	165,181	156,125
35	284,261	261,968	242,385	225,108	209,804	196,038	184,038	173,145	163,347	154,503
36	278,455	257,001	238,114	221,418	206,600	193,396	181,587	170,986	161,437	152,410
37	271,014	250,525	232,448	216,435	202,194	189,483	178,095	167,855	158,618	142,664
38	265,521	245,809	228,382	212,913	199,130	186,805	175,744	165,783	156,784	142,313
39	259,996	241,057	224,277	209,351	196,028	184,092	173,361	163,683	154,925	146,976
40	253,329	235,227	219,153	204,828	192,016	180,517	170,162	160,808	152,331	144,626
41	246,466	229,207	213,848	200,132	187,841	176,790	166,822	157,801	149,615	142,162
42	239,045	222,644	208,019	194,931	183,180	172,595	163,031	154,363	146,483	139,300
43	232,957	217,299	203,305	190,758	179,471	169,285	160,066	151,697	144,079	137,123
44	225,970	211,109	197,800	185,841	175,063	165,318	156,483	148,449	141,124	134,427
45	220,123	205,946	193,223	181,768	171,424	162,056	153,548	145,799	138,722	132,244
46	213,903	200,418	188,290	177,349	167,451	158,471	150,301	142,848	136,031	129,781
47	206,844	194,088	182,592	172,201	162,781	154,220	146,418	139,290	127,760	126,764
48	200,474	188,376	177,451	167,556	150,388	142,919	136,084	129,814	124,049	118,736
49	195,693	184,35	173,676	164,185	155,250	147,674	140,472	133,871	127,806	122,222
50	198,871	187,324	176,855	167,337	158,662	150,737	143,479	136,816	130,686	125,034
51	189,631	178,894	169,139	160,252	152,138	144,710	137,896	131,631	125,857	120,526
52	184,209	174,013	164,731	156,259	148,508	141,402	134,872	128,858	123,308	118,176
53	178,386	168,749	159,957	156,743	149,037	141,961	135,450	129,447	121,551	115,573
54	174,355	165,154	156,743	149,037	141,961	135,450	129,447	123,900	118,766	110,494
55	177,543	168,330	159,892	152,147	145,024	138,460	132,397	126,789	121,590	116,763
56	170,324	161,719	153,823	146,561	139,869	133,691	127,976	122,680	117,763	113,191
57	165,772	157,609	150,102	143,186	136,800	130,895	125,423	120,344	115,621	111,222
58	160,273	152,388	145,508	138,972	132,927	127,326	122,128	117,295	112,794	108,596
59	156,518	149,200	142,444	136,196	130,407	125,034	120,039	115,588	111,050	106,998
60	153,358	146,365	139,898	133,905	128,343	123,172	118,358	113,867	109,673	105,750
61	146,633	140,144	134,131	128,549	123,358	118,524	114,015	109,803	105,863	102,171
62	140,056	134,048	128,469	123,280	118,446	113,937	109,723	105,780	102,086	98,620
63	129,849	124,563	119,528	114,890	110,561	106,514	102,726	99,174	95,841	92,707
64	120,902	116,117	111,655	107,486	103,588	99,936	96,511	93,294	90,269	87,421
65	115,602	111,177	107,043	103,174	99,146	95,548	96,146	89,942	87,110	84,439

<sup>1</sup>Present value of monthly payments of \$1 made at the end of each month of disability entitlement and continuing beyond NRA. Entitlement ends upon death of the beneficiary (recovery is not considered prior to NRA). Payments are discounted to the beginning of the entitlement period using the stated annual effective interest rate, and continuance experience shown in tables 8A and 8C.

**Table 29A.—Female Disabled Workers**  
**Annual Life Annuity Due (excluding possibility of recovery prior to NRA)<sup>1</sup>**  
 (2006-10 Social Security DI disability experience)

Entl age	Actuarial present value of \$1 annuity									
	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	5.5%
16	37.848	33.634	30.127	27.187	24.702	22.586	20.772	19.205	17.844	16.654
17	37.147	33.063	29.656	26.794	24.571	22.304	20.529	18.994	17.659	16.489
18	36.462	32.504	29.196	26.410	24.046	22.027	20.291	18.787	17.477	16.329
19	35.877	32.032	28.811	26.093	23.783	21.806	20.103	18.626	17.338	16.207
20	35.484	31.728	28.575	25.909	23.639	21.693	20.013	18.555	17.281	16.162
21	35.123	31.451	28.362	25.744	23.510	21.593	19.935	18.494	17.233	16.125
22	34.534	30.972	27.968	25.418	23.238	21.362	19.739	18.326	17.088	15.997
23	33.863	30.419	27.508	25.031	22.910	21.082	19.498	18.115	16.903	15.835
24	33.301	29.962	27.133	24.721	22.652	20.865	19.314	17.958	16.768	15.718
25	32.686	29.455	26.713	24.369	22.354	20.611	19.096	17.770	16.604	15.573
26	32.094	28.967	26.306	24.028	22.065	20.364	18.883	17.585	16.442	15.430
27	31.613	28.576	25.985	23.763	21.844	20.179	18.726	17.451	16.327	15.331
28	31.101	28.157	25.640	23.476	21.605	20.978	18.556	17.306	16.203	15.223
29	30.521	27.677	25.240	23.141	21.321	19.737	18.349	17.128	16.048	15.089
30	30.018	27.261	24.894	22.850	21.075	19.527	18.169	16.972	15.912	14.969
31	29.564	26.889	24.587	22.595	20.863	19.349	18.018	16.844	15.802	14.875
32	29.063	26.475	24.242	22.306	20.619	19.142	17.841	16.692	15.671	14.761
33	28.617	26.107	23.938	22.052	20.406	18.962	17.689	16.562	15.559	14.664
34	28.107	25.682	23.581	21.751	20.150	18.743	17.500	16.398	15.417	14.539
35	27.519	25.184	23.156	21.386	19.835	18.469	17.261	16.188	15.231	14.374
36	26.980	24.730	22.772	21.060	19.556	18.229	17.053	16.007	15.073	14.235
37	26.457	24.288	22.395	20.737	19.278	17.988	16.843	15.823	14.910	13.945
38	25.993	23.898	22.067	20.459	19.040	17.785	16.668	15.672	14.779	13.976
39	25.398	23.389	21.629	20.080	18.711	17.497	16.415	15.448	14.581	13.800
40	24.840	22.910	21.215	19.720	18.397	17.221	16.171	15.231	14.387	13.603
41	24.328	22.473	20.839	19.396	18.116	16.976	15.957	15.043	14.220	13.481
42	23.841	22.056	20.482	19.087	17.848	16.743	15.753	14.864	14.062	13.337
43	23.293	21.583	20.071	18.729	17.534	16.466	15.508	14.646	13.868	13.163
44	22.731	21.096	19.646	18.357	17.207	16.177	15.251	14.417	13.663	12.978
45	22.266	20.695	19.300	18.057	16.945	15.948	15.050	14.239	13.505	12.838
46	21.723	20.222	18.886	17.896	16.793	16.624	15.624	14.797	14.013	13.302
47	21.195	19.760	18.480	17.335	16.306	15.380	14.544	13.786	13.098	12.470
48	20.653	19.285	18.061	16.964	15.976	15.086	14.280	13.548	12.883	12.276
49	20.165	18.858	17.687	16.635	15.686	14.828	14.051	13.344	12.699	12.111
50	20.369	19.072	17.907	16.945	15.910	15.052	14.273	13.564	12.916	12.324
51	19.523	18.310	17.219	16.220	15.886	14.936	14.033	13.127	12.656	12.066
52	19.096	17.936	16.890	15.944	15.087	14.307	13.597	12.947	11.807	11.305
53	18.562	17.462	16.468	15.567	14.748	14.002	13.321	12.698	12.126	11.600
54	18.028	16.985	16.041	15.184	14.403	13.691	13.039	12.442	11.893	11.388
55	18.081	17.056	16.125	15.278	14.505	13.799	13.152	12.558	12.011	11.507
56	17.307	16.353	15.485	14.543	13.543	12.745	12.140	11.625	11.148	10.707
57	16.807	15.905	15.083	14.332	13.643	13.012	12.431	11.896	11.401	10.944
58	16.389	15.532	14.749	13.032	13.374	12.769	12.211	11.696	11.220	10.779
59	15.844	15.039	14.302	13.625	13.003	12.430	11.901	11.412	10.959	10.538
60	15.450	14.685	13.984	13.339	12.745	12.197	11.689	11.220	10.784	10.379
61	14.772	14.065	13.415	12.816	12.263	11.751	11.277	10.838	10.429	10.048
62	14.088	13.436	12.835	12.281	11.768	11.292	10.851	10.440	9.058	9.702
63	13.226	12.637	12.094	11.590	11.124	10.691	10.288	9.913	9.563	9.236
64	12.294	11.769	11.284	10.833	10.415	10.025	9.663	9.324	9.007	8.711
65	11.631	11.154	10.711	10.300	9.917	9.560	9.226	8.914	8.623	8.349

<sup>1</sup>Present value of annual payments of \$1 made at the beginning of each year of disability entitlement and continuing beyond NRA. Entitlement ends upon death of the beneficiary (recovery is not considered prior to NRA). Payments are discounted to the beginning of the entitlement period using the stated annual effective interest rate, and continuance experience shown in tables 8B and 8C.

**Table 29B.—Female Disabled Workers**  
**Annual Life Annuity Immediate (excluding possibility of recovery prior to NRA)<sup>1</sup>**  
 (2006-10 Social Security DI disability experience)

Entl age	Actuarial present value of \$1 annuity									
	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	5.5%
16	36,848	32,634	29,127	26,187	23,702	21,586	19,772	18,205	16,844	15,654
17	36,147	32,063	28,656	25,794	23,371	21,304	19,529	17,994	16,659	15,489
18	35,462	31,504	28,196	25,410	23,046	21,027	19,291	17,787	16,477	15,329
19	34,877	31,032	27,811	25,093	22,783	20,806	19,103	17,626	16,338	15,207
20	34,484	30,728	27,575	24,909	22,639	20,693	19,013	17,555	16,281	15,162
21	34,123	30,451	27,362	24,744	22,510	20,593	18,935	17,494	16,233	15,125
22	33,534	29,972	26,968	24,418	22,238	20,362	18,739	17,326	16,088	14,997
23	32,863	29,419	26,508	24,031	21,910	20,082	18,498	17,115	15,903	14,835
24	32,301	28,962	26,133	23,721	21,652	19,865	18,314	16,958	15,768	14,718
25	31,686	28,455	25,713	23,369	21,354	19,611	18,096	16,770	15,604	14,573
26	31,094	27,967	25,306	23,028	21,065	19,364	17,883	16,585	15,442	14,430
27	30,613	27,576	24,985	22,763	20,844	19,179	17,726	16,451	15,327	14,345
28	30,101	27,157	24,640	22,476	20,605	18,978	17,556	16,306	15,203	14,223
29	29,521	26,677	24,240	22,141	20,321	18,737	17,349	16,128	15,048	14,089
30	29,018	26,261	23,894	21,850	20,075	18,527	17,169	15,972	14,912	13,965
31	28,564	25,889	23,587	21,595	19,863	18,349	17,018	15,844	14,802	13,875
32	28,063	25,475	23,242	21,306	19,619	18,142	16,841	15,692	14,671	13,761
33	27,617	25,107	22,938	21,052	19,406	17,962	16,689	15,562	14,559	13,664
34	27,107	24,682	22,581	20,751	19,150	17,743	16,500	15,398	14,417	13,539
35	26,519	24,184	21,156	20,386	18,835	17,469	16,261	15,188	14,231	13,374
36	25,980	23,730	21,772	20,060	18,556	17,229	16,053	15,007	14,073	13,235
37	25,457	23,288	21,395	19,737	18,278	16,988	15,843	14,823	13,910	13,091
38	24,993	22,898	21,067	19,459	18,040	16,785	15,668	14,672	13,779	12,976
39	24,398	22,389	20,629	19,080	17,711	16,497	15,415	14,448	13,581	12,800
40	23,840	21,910	20,215	18,720	17,397	16,221	15,171	14,231	13,387	12,625
41	23,328	21,473	19,839	18,396	17,116	15,976	14,957	14,043	13,220	12,477
42	22,841	21,056	19,482	18,087	16,848	15,743	14,753	13,864	13,062	12,337
43	22,293	20,583	19,071	17,729	16,534	15,466	14,508	13,646	12,868	12,163
44	21,731	20,096	18,646	17,357	16,207	15,177	14,251	13,417	12,663	11,978
45	21,266	19,695	18,300	17,057	15,945	14,948	14,050	13,239	12,505	11,838
46	20,723	19,222	17,886	16,693	15,624	14,663	13,797	13,013	12,302	11,656
47	20,195	18,760	16,335	15,306	14,380	13,544	12,786	12,098	11,470	10,897
48	19,653	18,285	17,061	15,964	14,976	14,086	13,280	12,548	11,883	11,270
49	19,165	17,858	16,687	15,635	14,686	13,828	13,051	12,344	11,699	11,111
50	19,369	18,072	16,907	15,858	14,910	14,052	13,273	12,564	11,916	11,324
51	18,523	17,310	16,219	15,234	14,343	13,534	12,798	12,127	11,514	10,951
52	18,096	16,936	15,890	14,944	14,087	13,307	12,597	11,947	11,353	10,807
53	17,562	16,462	15,468	14,567	13,748	13,002	12,321	11,698	11,126	10,600
54	17,028	15,985	15,041	14,184	13,403	12,691	12,039	11,421	10,893	10,388
55	17,081	16,056	15,125	14,278	13,505	12,799	12,152	11,558	11,011	10,507
56	16,307	15,353	14,485	13,694	12,971	12,308	11,700	11,140	10,625	10,148
57	15,807	14,905	14,083	13,332	12,643	12,012	11,431	10,896	10,401	9,944
58	15,389	14,532	13,749	13,032	12,374	11,769	11,211	10,696	10,220	9,779
59	14,844	14,039	13,302	12,625	12,003	11,430	10,901	10,412	9,959	9,538
60	14,450	13,685	12,944	12,339	11,745	11,197	10,689	10,220	9,784	9,379
61	13,772	13,065	12,415	11,816	11,263	10,751	10,277	9,838	9,429	9,048
62	13,088	12,436	11,835	11,281	10,768	10,292	9,851	9,440	9,058	8,702
63	12,226	11,637	11,094	10,124	9,691	9,288	8,913	8,563	8,236	7,930
64	11,294	10,769	10,284	9,833	9,415	9,025	8,663	8,324	8,007	7,711
65	10,631	10,154	9,711	9,300	8,917	8,560	8,226	7,914	7,623	7,349

<sup>1</sup>Present value of annual payments of \$1 made at the end of each year of disability entitlement and continuing beyond NRA. Entitlement ends upon death of the beneficiary (recovery is not considered prior to NRA). Payments are discounted to the beginning of the entitlement period using the stated annual effective interest rate, and continuance experience shown in tables 8B and 8C.

**Table 29C.—Female Disabled Workers**  
**Monthly Life Annuity Due (excluding possibility of recovery prior to NRA)<sup>1</sup>**  
 (2006-10 Social Security DI disability experience)

Entl age	Actuarial present value of \$1 annuity									
	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	5.5%
16	448,660	398,081	355,998	320,706	290,380	265,487	243,712	224,911	208,572	194,283
17	440,249	391,228	350,349	315,996	286,909	262,102	240,796	222,375	206,346	192,312
18	432,033	384,526	344,820	311,383	283,019	258,787	237,942	219,894	204,169	190,386
19	425,008	378,859	340,201	307,580	279,855	256,127	235,684	217,959	202,495	188,925
20	420,294	375,219	337,377	305,377	278,129	254,769	234,611	217,108	201,819	188,386
21	415,961	371,892	334,812	303,392	276,387	253,568	233,673	216,374	201,243	187,934
22	408,887	366,140	330,090	299,479	273,315	250,806	231,321	214,354	199,493	186,406
23	400,838	359,506	324,570	294,844	269,385	247,445	228,422	211,831	197,281	184,452
24	394,090	354,017	320,068	291,121	266,282	244,837	226,213	209,946	195,660	183,048
25	386,712	347,941	315,022	286,893	262,709	241,793	223,598	207,682	193,685	181,312
26	379,616	342,084	310,145	282,797	259,239	238,828	221,044	205,464	191,743	179,600
27	373,843	337,387	306,295	279,617	256,591	236,607	219,165	203,363	190,369	178,411
28	367,691	332,355	302,149	276,178	253,719	234,190	217,118	202,117	188,870	177,117
29	360,741	326,603	297,355	272,153	250,317	231,290	214,638	199,979	187,016	175,498
30	354,695	321,606	293,193	268,660	247,362	228,776	212,474	198,105	185,381	174,062
31	349,248	317,144	289,516	265,610	244,816	226,638	210,667	196,568	184,066	172,930
32	343,238	312,170	285,373	262,138	241,889	224,153	208,546	194,746	182,492	171,561
33	337,884	307,761	281,720	259,093	239,336	222,000	206,719	193,187	181,533	170,405
34	331,772	302,660	275,436	255,473	236,258	219,367	204,452	191,224	179,443	168,907
35	324,710	296,680	272,338	251,100	232,481	216,084	201,581	186,698	177,207	166,917
36	318,248	291,241	267,736	247,183	229,129	213,201	199,087	186,530	175,313	165,253
37	311,969	285,928	263,214	243,310	225,793	210,309	196,566	184,319	173,363	163,524
38	306,401	281,255	259,270	239,966	222,942	207,868	194,464	182,501	171,782	162,144
39	299,261	275,146	254,016	235,422	218,992	204,415	191,431	179,823	169,407	160,027
40	292,563	269,393	249,046	231,103	215,217	201,097	188,500	177,228	167,080	157,937
41	286,423	264,147	244,542	227,216	211,846	198,160	185,927	174,954	165,078	156,159
42	280,571	259,147	240,248	223,512	208,636	195,364	183,481	172,804	163,180	154,476
43	274,003	253,472	235,321	219,213	204,866	192,043	180,541	170,191	160,846	152,382
44	267,259	247,623	230,223	214,750	200,940	188,574	177,462	167,445	158,387	150,171
45	261,669	242,812	222,065	211,141	197,795	185,821	175,042	165,310	156,496	149,665
46	255,154	237,136	221,099	206,776	193,942	182,406	172,003	162,594	154,059	146,294
47	248,817	231,592	216,227	202,477	190,131	179,013	168,971	151,604	144,072	137,192
48	242,323	225,890	211,200	198,025	186,172	175,478	165,801	157,018	149,026	141,734
49	236,468	220,775	206,713	194,076	182,684	172,385	163,049	154,562	146,826	139,757
50	238,909	223,334	209,348	196,753	185,378	175,076	165,721	157,202	149,426	142,310
51	228,759	214,199	201,096	189,271	178,569	168,858	160,023	151,604	145,959	137,841
52	223,631	209,707	197,150	185,794	175,496	166,133	157,600	149,804	142,663	136,108
53	217,232	204,022	192,082	181,260	171,428	162,472	154,924	146,809	139,943	133,629
54	210,813	198,299	186,963	176,667	167,294	158,740	150,915	143,740	137,148	131,077
55	211,454	199,142	187,966	177,796	168,519	160,037	152,265	145,128	138,560	132,503
56	202,167	190,713	180,292	170,789	162,102	154,145	146,840	140,120	133,925	128,202
57	196,169	185,338	175,464	166,439	158,174	143,612	137,182	131,245	125,752	120,660
58	191,147	180,855	171,450	162,838	154,935	147,668	140,973	134,791	129,074	123,776
59	184,611	174,941	166,087	157,962	150,490	143,607	137,253	131,377	125,933	120,880
60	179,880	170,699	162,274	154,528	147,391	140,804	134,713	129,070	123,833	118,965
61	171,748	163,256	155,447	148,250	141,606	135,462	129,768	124,485	119,572	114,998
62	163,537	155,707	148,491	141,827	135,662	129,949	124,646	119,716	115,124	110,841
63	153,193	146,121	139,589	133,543	127,938	122,734	117,894	113,385	109,178	105,247
64	142,010	135,707	129,870	124,457	119,428	114,748	110,387	106,317	102,512	98,951
65	134,053	128,319	122,999	118,054	113,450	109,158	105,150	101,402	97,893	94,602

<sup>1</sup>Present value of monthly payments of \$1 made at the beginning of each month of disability entitlement and continuing beyond NRA. Entitlement ends upon death of the beneficiary (recovery is not considered prior to NRA). Payments are discounted to the beginning of the entitlement period using the stated annual effective interest rate, and continuance experience shown in tables 8B and 8C.

**Table 29D.—Female Disabled Workers**  
**Monthly Life Annuity Immediate (excluding possibility of recovery prior to NRA)<sup>1</sup>**  
 (2006-10 Social Security DI disability experience)

Entl age	Actuarial present value of \$1 annuity									
	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	5.5%
16	447,660	397,081	354,998	319,706	289,880	264,487	242,712	223,911	207,572	193,283
17	439,249	390,228	349,349	314,996	285,909	261,102	239,796	221,375	205,346	191,312
18	431,033	383,526	343,820	310,383	282,019	257,787	236,942	218,894	203,169	189,386
19	424,008	377,859	339,201	306,580	278,855	255,127	234,684	216,559	201,495	187,925
20	419,294	374,219	336,377	304,377	277,129	253,769	233,611	216,108	200,819	187,386
21	414,961	370,892	333,812	302,392	275,587	252,568	232,673	215,574	200,243	186,934
22	407,887	365,140	329,090	298,479	272,315	249,806	230,321	213,354	198,493	185,406
23	399,838	358,506	323,570	293,844	268,385	246,445	227,422	210,831	196,281	183,452
24	393,090	353,017	319,068	290,121	265,282	243,837	225,213	204,660	182,048	174,966
25	385,712	346,941	314,022	285,893	261,709	240,793	222,598	206,682	192,685	180,312
26	378,616	341,084	309,145	281,797	258,239	237,828	220,044	204,464	190,743	178,600
27	372,843	336,387	305,295	278,617	255,591	235,607	218,165	202,863	189,369	177,411
28	366,691	331,355	301,149	275,178	252,719	233,190	216,118	201,117	187,870	176,117
29	359,741	325,603	296,355	271,153	249,317	230,295	213,638	198,979	186,016	174,498
30	353,695	320,606	292,193	267,660	246,362	227,776	211,474	197,105	184,381	173,062
31	348,248	316,144	288,16	264,610	243,816	225,638	209,667	195,568	183,066	171,930
32	342,238	311,170	284,373	261,138	240,889	223,153	207,546	193,746	181,492	170,561
33	336,884	306,761	280,720	258,093	238,336	221,000	205,719	192,187	180,153	169,405
34	330,772	301,660	276,436	254,473	235,258	218,367	203,452	190,224	178,443	167,907
35	323,710	295,680	271,338	250,100	231,481	215,084	200,581	187,698	176,207	165,901
36	317,248	290,241	266,736	246,183	228,129	212,201	198,087	185,530	174,313	164,253
37	310,969	284,928	260,928	242,310	224,793	209,309	195,566	183,319	172,363	162,524
38	305,401	280,255	258,270	238,966	221,942	206,868	193,464	181,501	170,782	161,144
39	298,261	274,146	253,016	234,422	217,992	203,415	190,431	178,823	168,407	159,027
40	291,563	268,393	248,046	230,103	214,217	200,097	187,500	176,218	166,080	156,937
41	285,423	263,147	243,542	226,216	210,846	197,160	184,927	173,954	164,078	155,159
42	279,571	258,147	239,347	222,512	207,636	194,364	182,481	171,804	162,180	153,476
43	273,003	252,472	234,321	218,213	203,866	191,043	179,541	169,191	159,846	151,382
44	266,259	246,623	229,223	213,750	199,940	187,574	176,462	166,445	157,387	149,171
45	260,669	241,812	225,065	210,141	196,795	184,821	174,042	164,310	155,496	147,489
46	254,154	236,136	220,099	205,776	192,942	181,406	171,003	161,594	153,059	145,294
47	247,817	230,592	215,227	201,477	189,131	178,013	167,970	158,871	150,604	143,072
48	241,323	224,890	210,200	197,025	185,172	174,478	164,801	156,018	148,026	140,734
49	235,468	219,775	205,713	193,076	181,684	171,385	162,049	153,562	145,826	138,757
50	237,909	222,334	208,348	195,753	184,378	174,076	164,721	156,202	148,426	141,310
51	227,759	213,199	200,096	188,271	177,569	167,858	159,023	150,964	143,595	136,841
52	222,631	208,707	196,150	184,794	174,496	165,133	156,600	148,804	141,663	135,108
53	216,232	203,022	191,963	180,267	166,294	161,472	153,294	145,809	138,943	132,629
54	209,813	197,299	185,963	175,667	157,740	149,915	142,740	136,148	129,077	124,474
55	210,454	198,142	186,966	176,796	167,519	151,265	144,128	137,560	131,503	125,906
56	201,167	189,713	179,292	169,789	161,102	153,145	145,840	139,120	132,925	127,202
57	195,169	184,338	174,464	165,439	157,174	149,589	142,612	136,182	130,245	124,752
58	190,147	179,855	170,450	161,838	153,935	146,668	139,973	133,791	128,074	122,776
59	183,611	173,941	165,087	156,962	149,490	142,607	136,253	130,377	124,933	119,880
60	178,880	169,699	161,274	153,528	146,391	139,804	133,713	128,070	122,833	117,965
61	170,748	162,256	154,447	147,250	140,606	134,462	128,768	123,485	118,572	113,998
62	162,537	154,707	147,491	140,827	134,662	128,949	123,646	118,716	114,124	109,841
63	152,193	145,121	138,589	132,543	126,338	121,734	116,894	112,385	108,178	104,247
64	141,010	134,707	128,870	123,457	118,428	113,748	109,387	105,317	101,512	97,951
65	133,053	127,319	121,999	117,054	112,450	108,158	104,150	100,402	96,893	93,602

<sup>1</sup>Present value of monthly payments of \$1 made at the end of each month of disability entitlement and continuing beyond NRA. Entitlement ends upon death of the beneficiary (recovery is not considered prior to NRA). Payments are discounted to the beginning of the entitlement period using the stated annual effective interest rate, and continuance experience shown in tables 8B and 8C.

**Table 30A.—Male Disabled Workers**  
**Annual Life Annuity to Age 66 Due<sup>1</sup>**  
 (2006-10 Social Security DI disability experience)

Entl age	Actuarial present value of \$1 annuity									
	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	5.5%
16	17.972	16.670	15.533	14.533	13.652	12.870	12.175	11.553	10.995	10.492
17	19.189	17.774	16.535	15.447	14.486	13.634	12.875	12.197	11.588	11.039
18	20.598	19.054	17.700	16.509	15.457	14.523	13.691	12.948	12.280	11.679
19	21.794	20.145	18.638	17.423	16.296	15.294	14.401	13.602	12.885	12.239
20	22.559	20.852	19.351	18.027	16.854	15.811	14.880	14.046	13.297	12.621
21	22.793	21.082	19.574	18.241	17.059	16.005	15.064	14.220	13.460	12.775
22	22.658	20.979	19.496	18.183	17.016	15.974	15.042	14.204	13.450	12.769
23	22.549	20.902	19.444	18.150	16.997	15.967	15.043	14.212	13.463	12.785
24	22.084	20.501	19.096	17.847	16.732	15.733	14.836	14.028	13.298	12.636
25	21.512	20.000	18.655	17.456	16.383	15.421	14.555	13.774	13.066	12.424
26	21.290	19.818	18.507	17.335	16.284	15.340	14.489	13.719	13.022	12.388
27	20.916	19.498	18.232	17.097	16.078	15.160	14.331	13.581	12.899	12.279
28	20.518	19.155	17.934	16.838	15.852	14.961	14.156	13.425	12.760	12.154
29	20.216	18.901	17.721	16.659	15.701	14.834	14.048	13.334	12.684	12.089
30	20.001	18.725	17.577	16.542	15.605	14.757	14.986	13.285	12.644	12.059
31	19.600	18.378	17.276	16.279	15.377	14.557	13.810	13.129	12.507	11.936
32	19.312	18.134	17.069	16.104	15.227	14.430	13.702	13.037	12.428	11.869
33	18.982	17.850	16.825	15.894	15.046	14.272	13.566	12.918	12.324	11.778
34	18.535	17.460	16.482	15.591	14.779	14.036	13.356	12.732	12.158	11.630
35	18.234	17.202	16.262	15.404	14.169	13.900	13.240	12.633	12.074	11.559
36	17.865	16.881	15.982	15.159	14.405	13.712	13.075	12.489	11.947	11.446
37	17.399	16.468	15.616	14.833	14.115	13.453	12.843	12.280	11.759	11.276
38	17.042	16.156	15.342	14.594	13.905	13.269	12.681	12.138	11.634	11.166
39	16.669	15.828	15.054	14.341	13.682	13.073	12.509	11.986	11.500	11.048
40	16.186	15.396	14.667	13.993	13.370	12.791	12.255	11.756	11.292	10.859
41	15.718	14.977	14.291	13.656	13.066	12.518	12.098	11.533	11.090	10.676
42	15.166	14.477	13.838	13.243	12.691	12.176	11.695	11.247	10.828	10.436
43	14.685	14.043	13.445	12.889	12.370	11.885	11.432	11.008	10.611	10.238
44	14.163	13.569	13.015	12.497	12.012	11.559	11.134	10.735	10.361	10.009
45	13.645	13.097	12.583	12.102	11.651	11.228	10.831	10.457	10.105	9.774
46	13.139	12.634	12.160	11.715	11.296	10.902	10.531	10.182	9.852	9.541
47	12.552	12.093	11.660	11.252	10.868	10.506	10.164	9.841	9.535	9.246
48	11.999	11.581	11.187	10.815	10.463	10.130	9.815	9.516	9.233	8.965
49	11.531	11.150	10.790	10.448	10.125	9.818	9.526	9.250	8.987	8.737
50	11.477	11.116	10.772	10.447	10.137	9.843	9.563	9.296	9.042	8.800
51	10.694	10.379	10.079	9.793	9.520	9.260	9.013	8.776	8.550	8.335
52	10.111	9.832	9.565	9.311	9.068	8.835	8.613	8.400	8.197	8.002
53	9.500	9.256	9.023	8.800	8.585	8.380	8.183	7.994	7.813	7.639
54	8.961	8.748	8.544	8.347	8.159	7.978	7.803	7.636	7.475	7.319
55	8.663	8.472	8.288	8.112	7.941	7.777	7.619	7.466	7.319	7.177
56	7.923	7.765	7.613	7.466	7.324	7.186	7.053	6.925	6.800	6.680
57	7.271	7.141	7.015	6.894	6.776	6.661	6.550	6.443	6.338	6.237
58	6.563	6.460	6.360	6.263	6.168	6.076	5.986	5.899	5.814	5.732
59	5.876	5.796	5.718	5.642	5.568	5.496	5.426	5.357	5.290	5.225
60	5.172	5.113	5.055	4.998	4.943	4.889	4.836	4.784	4.734	4.684
61	4.373	4.333	4.294	4.255	4.217	4.180	4.143	4.107	4.072	4.038
62	3.566	3.541	3.517	3.493	3.446	3.424	3.401	3.379	3.357	3.336
63	2.725	2.712	2.700	2.688	2.676	2.652	2.640	2.617	2.606	2.595
64	1.876	1.872	1.867	1.863	1.859	1.855	1.851	1.847	1.843	1.835
65	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

<sup>1</sup>Present value of annual payments of \$1 made at the beginning of each year of disability entitlement. Entitlement ends upon death, recovery, or attainment of age 66 (NRA) of the beneficiary. Payments are discounted to the beginning of the entitlement period using the stated annual effective interest rate, and continuance experience shown in table 22A.

**Table 30B.—Male Disabled Workers  
Annual Life Annuity to Age 66 Immediate<sup>1</sup>**  
(2006-10 Social Security DI disability experience)

Entl age	Actuarial present value of \$1 annuity								
	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%
16	17,072	15,749	14,594	13,581	12,689	11,900	11,198	10,571	10,009
17	18,305	16,865	15,607	14,503	13,530	12,669	11,903	11,218	10,605
18	19,734	18,161	16,785	15,576	14,510	13,565	12,725	11,974	11,301
19	20,948	19,267	19,267	16,500	15,357	14,343	13,440	12,633	11,910
20	21,728	19,987	18,459	17,113	15,922	14,866	13,924	13,081	12,325
21	21,974	20,227	18,690	17,334	16,133	15,065	14,112	13,259	12,492
22	21,846	20,130	18,618	17,281	16,095	15,038	14,094	13,246	12,484
23	21,745	20,060	18,572	17,254	16,081	15,035	14,099	13,258	12,500
24	21,284	19,663	18,229	16,955	15,819	14,805	13,895	13,076	12,337
25	20,715	19,165	17,791	16,567	15,474	14,496	13,616	12,824	12,108
26	20,500	18,991	17,649	16,452	15,380	14,419	13,554	12,773	12,066
27	20,132	18,677	17,379	16,219	15,179	14,244	13,400	12,638	11,947
28	19,740	18,339	17,087	15,965	14,957	14,049	13,229	12,486	11,811
29	19,445	18,092	16,880	15,792	14,812	13,927	13,126	12,399	11,738
30	19,239	17,924	16,744	15,682	14,723	13,856	13,069	12,355	11,703
31	18,844	17,584	16,449	15,425	14,500	13,661	12,898	12,203	11,570
32	18,565	17,348	16,250	15,258	14,358	13,540	12,796	12,117	11,496
33	18,244	17,073	16,014	15,055	14,183	13,389	12,665	12,003	11,397
34	17,804	16,689	15,678	14,759	13,923	13,159	12,462	11,822	11,236
35	17,512	16,441	15,467	14,580	13,771	13,031	12,353	11,730	11,158
36	17,153	16,129	15,196	14,344	13,565	12,851	12,195	11,592	11,037
37	16,695	15,724	14,838	14,026	13,282	12,592	11,969	11,390	10,855
38	16,348	15,423	14,575	13,797	13,082	12,423	11,816	11,256	10,737
39	15,986	15,106	14,297	13,554	12,869	12,237	11,652	11,112	10,611
40	15,512	14,683	13,920	13,216	12,565	11,964	11,407	10,890	10,410
41	15,054	14,274	13,554	12,888	12,271	11,700	11,169	10,676	10,217
42	14,510	13,783	13,109	12,485	11,905	11,367	10,866	10,399	9,963
43	14,038	13,359	12,728	12,141	11,595	11,087	10,612	10,170	9,756
44	13,527	12,895	12,307	11,759	11,248	10,771	10,324	9,907	9,515
45	13,019	12,434	11,887	11,377	10,899	10,452	10,033	9,640	9,271
46	12,525	11,984	11,477	11,002	10,557	10,139	9,746	9,377	9,030
47	11,948	11,453	10,988	10,551	10,141	9,754	9,391	9,048	8,724
48	11,407	10,954	10,528	10,127	9,749	9,392	9,055	8,737	8,436
49	10,956	10,541	10,149	9,778	9,429	9,098	8,784	8,488	8,206
50	10,942	10,545	10,169	9,814	9,477	9,157	8,853	8,565	8,292
51	10,164	9,815	9,483	9,169	8,870	8,586	8,315	8,058	7,812
52	9,598	9,286	8,990	8,707	8,438	8,181	7,936	7,702	7,479
53	9,003	8,728	8,466	8,215	7,975	7,527	7,317	7,117	6,925
54	8,487	8,244	8,011	7,789	7,575	7,370	7,174	6,986	6,805
55	8,244	8,022	7,810	7,606	7,410	7,221	7,040	6,866	6,698
56	7,519	7,333	7,153	6,980	6,814	6,653	6,498	6,349	6,205
57	6,893	6,736	6,585	6,438	6,297	6,160	6,028	5,901	5,777
58	6,209	6,081	5,957	5,837	5,720	5,607	5,497	5,391	5,288
59	5,555	5,452	5,352	5,255	5,160	5,068	4,979	4,892	4,725
60	4,888	4,808	4,730	4,654	4,580	4,507	4,437	4,368	4,301
61	4,112	4,054	3,997	3,941	3,887	3,833	3,781	3,730	3,680
62	3,329	3,290	3,251	3,213	3,175	3,138	3,102	3,067	3,032
63	2,504	2,480	2,433	2,410	2,387	2,365	2,343	2,322	2,301
64	1,682	1,670	1,658	1,646	1,622	1,611	1,600	1,588	1,577
65	0,867	0,863	0,859	0,855	0,850	0,846	0,842	0,838	0,830

<sup>1</sup>Present value of annual payments of \$1 made at the end of each year of disability entitlement. Entitlement ends upon death, recovery, or attainment of age 66 (NRA) of the beneficiary. Payments are discounted to the beginning of the entitlement period using the stated annual effective interest rate, and continuance experience shown in table 22A.

**Table 30C.—Male Disabled Workers  
Monthly Life Annuity to Age 66 Due<sup>1</sup>**  
(2006-10 Social Security DI disability experience)

Entl age	Actuarial present value of \$1 annuity								
	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%
16	210.701	194.954	181.199	169.127	158.483	149.056	140.668	133.172	126.447
17	225.388	208.263	193.289	180.135	168.530	158.246	149.094	140.916	133.578
18	242.410	223.709	207.337	192.941	180.229	168.929	149.958	141.911	134.665
19	256.863	236.894	219.384	203.969	190.342	178.249	167.475	157.840	149.192
20	266.126	245.446	227.280	211.262	197.082	184.483	173.247	163.189	154.153
21	269.000	248.259	230.003	213.875	199.574	186.848	175.482	165.296	156.135
22	267.416	247.058	229.101	213.204	199.083	186.494	175.234	165.127	156.027
23	266.156	246.174	228.508	212.838	198.890	186.434	175.273	165.241	156.195
24	260.590	241.380	224.357	209.223	195.724	183.646	172.804	163.042	154.226
25	253.747	235.386	219.078	204.547	191.560	169.446	160.002	151.460	143.711
26	251.123	233.248	217.336	203.126	190.400	178.969	168.671	159.368	150.941
27	246.668	229.439	214.063	200.303	187.953	176.837	166.805	157.727	149.488
28	241.924	225.349	210.522	197.222	185.260	174.472	164.717	155.874	147.837
29	238.342	222.346	208.002	195.105	183.480	172.974	163.456	154.811	146.940
30	235.805	220.275	206.316	193.737	182.373	172.083	162.742	154.244	146.493
31	231.029	216.147	202.737	190.625	179.658	169.706	160.654	152.403	144.864
32	227.623	213.268	200.300	188.560	177.907	168.219	159.391	151.327	143.947
33	223.708	209.911	197.416	186.077	175.765	166.367	157.785	149.931	142.730
34	218.390	205.237	193.335	182.488	172.600	163.569	155.305	147.727	140.765
35	214.824	202.220	190.748	180.286	170.727	161.977	153.952	146.578	139.792
36	210.448	198.415	187.434	177.396	168.202	159.767	152.014	144.877	138.295
37	204.906	193.511	183.085	173.530	164.758	156.691	149.262	142.407	136.073
38	200.676	189.820	179.862	170.712	162.293	154.533	147.369	140.746	134.614
39	196.255	185.946	176.464	167.731	159.675	152.232	145.347	138.048	127.548
40	190.514	180.815	171.872	163.613	155.975	148.903	142.344	136.255	130.593
41	184.950	175.839	167.439	159.615	152.385	145.673	139.435	133.629	123.174
42	178.375	169.890	162.022	154.719	147.932	141.616	135.733	130.244	125.120
43	172.650	164.734	157.374	150.525	144.142	138.189	132.629	127.431	122.567
44	166.448	159.106	152.262	145.876	139.909	134.329	129.106	124.211	119.620
45	160.289	153.498	147.150	141.210	135.647	130.431	125.537	120.039	115.308
46	154.286	148.018	142.143	136.631	131.455	126.590	122.013	117.704	113.643
47	147.294	141.576	136.202	131.146	126.385	121.899	117.668	113.674	109.902
48	140.723	135.512	130.601	125.968	121.594	117.462	113.555	109.858	106.358
49	135.200	130.435	125.930	121.669	117.635	113.814	110.193	106.578	103.497
50	134.773	130.234	125.933	121.853	117.981	114.304	110.810	107.487	104.327
51	125.406	121.430	117.650	114.056	110.635	107.379	104.273	101.314	98.492
52	118.502	114.967	111.598	108.385	105.318	102.379	99.592	95.919	91.917
53	111.260	108.158	105.192	102.355	99.640	97.041	94.551	92.165	89.878
54	104.915	102.190	99.579	97.073	94.668	92.360	90.142	88.012	85.964
55	101.640	99.180	96.814	94.538	92.348	90.240	88.210	86.255	84.370
56	92.846	90.792	88.811	86.899	85.054	83.273	81.553	79.892	78.286
57	85.164	83.455	81.801	80.202	78.653	75.702	72.795	71.611	69.088
58	76.806	75.427	74.090	72.791	71.530	69.306	67.962	66.749	64.688
59	68.740	67.651	65.560	62.592	60.556	58.579	56.749	55.050	52.212
60	60.497	59.669	58.861	57.301	56.548	55.813	55.094	54.392	53.705
61	51.037	50.452	49.880	49.320	48.232	47.705	47.189	46.682	46.186
62	41.484	41.103	40.729	40.362	40.001	39.646	39.297	38.954	38.616
63	31.478	31.262	31.049	30.840	30.633	30.429	30.029	29.834	29.451
64	21.441	21.344	21.247	21.152	20.965	20.873	20.782	20.692	20.603
65	11.268	11.243	11.218	11.194	11.170	11.146	11.122	11.098	11.075

<sup>1</sup>Present value of monthly payments of \$1 made at the beginning of each month of disability entitlement. Entitlement ends upon death, recovery, or attainment of age 66 (NRA) of the beneficiary. Payments are discounted to the beginning of the entitlement period using the stated annual effective interest rate, and continuance experience shown in table 22A.

**Table 30D.—Male Disabled Workers  
Monthly Life Annuity to Age 66 Immediate<sup>1</sup>**  
(2006-10 Social Security DI disability experience)

Entl age	Actuarial present value of \$1 annuity								
	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%
16	209,801	194,032	180,260	168,175	157,521	148,085	139,691	132,191	125,461
17	224,504	207,355	192,361	179,192	167,574	157,281	148,122	139,938	125,983
18	241,546	222,816	206,421	192,007	179,282	168,001	157,959	148,984	140,932
19	256,017	236,016	218,481	203,046	189,403	177,297	166,514	156,871	148,216
20	265,295	244,581	226,388	210,348	196,151	183,538	172,291	162,224	153,182
21	268,180	247,403	229,119	212,968	198,649	185,908	174,530	164,335	155,167
22	266,604	246,209	228,222	212,303	198,162	185,558	174,285	164,169	155,061
23	265,351	245,332	227,637	211,942	197,974	185,502	174,329	164,287	155,232
24	259,790	240,542	223,489	204,812	182,812	171,863	162,090	153,265	145,272
25	252,950	234,552	218,214	203,658	190,650	178,991	168,507	159,052	150,501
26	250,333	232,421	216,478	202,243	189,496	178,048	167,737	158,422	149,985
27	245,884	228,617	213,211	199,425	187,054	175,921	165,875	156,784	148,536
28	241,146	224,533	209,674	196,349	184,365	173,560	163,791	154,935	146,887
29	237,571	221,537	207,161	194,238	182,591	172,067	162,534	153,876	145,994
30	235,044	219,475	205,483	192,877	181,491	171,182	161,825	153,314	145,552
31	230,273	215,353	201,911	189,771	178,781	168,810	159,742	151,477	143,927
32	226,876	212,482	199,482	187,714	177,037	167,330	158,484	150,407	143,014
33	222,971	209,134	196,606	185,238	174,902	165,484	156,885	149,017	141,803
34	217,658	204,487	192,531	181,656	171,744	162,692	154,410	146,817	139,843
35	214,102	201,459	189,954	179,463	169,879	161,107	151,074	145,064	138,457
36	209,736	197,663	186,648	176,580	167,361	158,905	151,134	143,981	137,385
37	204,202	192,767	182,307	172,723	163,925	155,837	148,388	141,517	135,169
38	199,983	189,087	179,094	169,915	161,469	153,687	146,504	139,864	133,718
39	195,571	185,223	175,707	166,944	158,862	151,396	144,491	138,094	132,159
40	189,840	180,102	171,124	162,835	155,171	148,075	141,497	135,589	129,712
41	184,285	175,135	166,677	158,847	151,590	147,147	140,808	134,903	132,773
42	177,719	169,195	161,294	153,961	147,147	140,805	134,903	129,396	124,255
43	172,004	164,050	156,656	149,777	143,368	137,391	131,810	126,593	121,173
44	165,811	158,432	151,555	145,138	139,145	133,542	128,297	123,383	118,774
45	159,663	152,835	146,454	140,485	134,895	129,655	124,739	120,122	115,782
46	153,672	147,368	141,460	135,919	130,716	125,827	121,228	116,899	112,821
47	146,690	140,937	135,530	130,445	125,657	121,147	116,894	112,881	109,091
48	140,130	134,885	129,825	125,289	120,999	116,939	113,094	109,451	102,716
49	134,625	129,825	125,289	120,999	116,939	113,094	109,403	106,407	99,603
50	134,238	129,664	125,330	121,220	117,320	113,618	110,100	106,757	103,576
51	124,875	120,866	117,055	113,432	109,984	106,702	103,576	100,596	97,754
52	117,989	114,422	111,022	107,781	104,688	101,735	98,916	96,221	93,645
53	110,763	107,630	104,635	101,771	99,030	96,407	93,895	91,1488	89,181
54	104,441	101,687	99,045	96,514	94,085	91,752	89,513	87,362	85,294
55	101,221	98,730	96,335	94,033	91,817	89,684	87,631	85,654	83,749
56	92,442	90,359	88,351	86,414	84,544	82,740	80,998	79,316	77,691
57	84,786	83,050	81,371	79,746	78,174	76,653	75,180	73,753	72,370
58	76,452	75,048	73,687	72,365	71,083	69,838	68,628	67,454	66,313
59	68,419	67,307	66,225	65,173	64,148	63,150	62,178	61,231	60,309
60	60,213	59,364	58,536	57,728	56,938	56,167	55,414	54,678	53,939
61	50,775	50,173	49,583	49,006	48,440	47,886	47,343	46,811	46,290
62	41,248	40,852	40,463	40,081	39,706	39,338	38,976	38,620	38,270
63	31,257	31,029	30,805	30,585	30,367	30,152	29,941	29,733	29,527
64	21,247	21,142	21,038	20,935	20,833	20,733	20,633	20,535	20,438
65	11,135	11,106	11,077	11,049	11,020	10,992	10,964	10,937	10,882

<sup>1</sup>Present value of monthly payments of \$1 made at the end of each month of disability entitlement. Entitlement ends upon death, recovery, or attainment of age 66 (NRA) of the beneficiary. Payments are discontinued to the beginning of the entitlement period using the stated annual effective interest rate, and continuance experience shown in table 22A.

**Table 31A.—Female Disabled Workers**  
**Annual Life Annuity to Age 66 Due<sup>1</sup>**  
 (2006-10 Social Security DI disability experience)

Entl age	Actuarial present value of \$1 annuity									
	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	5.5%
16	19,699	18,212	16,916	15,780	14,781	13,897	13,113	12,413	11,786	10,713
17	20,711	19,128	17,747	16,535	15,468	14,524	13,685	12,937	12,267	11,665
18	21,757	20,077	18,609	17,321	16,185	15,179	14,285	13,487	12,772	12,129
19	22,809	21,038	19,487	18,124	16,921	15,855	14,906	14,059	13,300	12,617
20	23,435	21,619	20,026	18,623	17,383	16,283	15,303	14,427	13,641	12,934
21	23,753	21,924	20,317	18,899	17,643	16,527	15,532	14,642	13,842	13,121
22	23,732	21,926	20,335	18,928	17,680	16,570	15,578	14,689	13,889	13,168
23	23,567	21,798	20,236	18,853	17,623	16,526	15,545	14,665	13,872	13,155
24	23,233	21,518	20,001	18,653	17,454	16,381	15,421	14,557	13,777	13,073
25	22,876	21,218	19,747	18,437	17,269	16,223	15,284	14,438	13,674	12,982
26	22,592	20,982	19,550	18,273	17,131	16,106	15,184	14,353	13,601	12,918
27	22,272	20,713	19,324	18,082	16,969	15,969	15,067	14,253	13,514	12,844
28	21,981	20,471	19,122	17,914	16,828	15,851	14,968	14,169	13,444	12,784
29	21,709	20,248	18,939	17,764	16,707	15,751	14,887	14,103	13,391	12,741
30	21,350	19,941	18,677	17,539	16,512	15,583	14,741	13,976	13,280	12,643
31	21,043	19,684	18,461	17,358	16,360	15,455	14,634	13,885	13,203	12,579
32	20,736	19,426	18,244	17,175	16,206	15,326	14,525	13,794	13,126	12,514
33	20,442	19,180	18,038	17,002	16,061	15,205	14,424	13,710	13,056	12,456
34	20,057	18,848	17,751	16,755	15,847	15,020	14,263	13,570	12,934	12,350
35	19,617	18,466	17,418	16,463	15,592	14,796	14,066	13,396	12,780	12,213
36	19,227	18,229	17,127	16,212	15,374	14,607	13,902	13,254	12,657	12,106
37	18,790	17,745	16,791	15,916	15,114	14,377	13,699	13,074	12,497	11,964
38	18,343	17,353	16,446	15,614	14,848	14,143	13,492	12,891	12,336	11,821
39	17,868	16,934	16,075	15,285	14,556	13,884	13,262	12,686	12,152	11,657
40	17,375	16,495	15,684	14,936	14,245	13,605	13,012	12,461	11,950	11,474
41	16,903	16,076	15,311	14,604	13,948	13,340	12,776	12,250	11,761	11,305
42	16,434	15,658	14,939	14,271	13,651	13,075	12,538	12,037	11,570	11,134
43	15,893	15,171	14,500	13,875	13,293	12,751	12,245	11,771	11,329	10,914
44	15,379	14,708	14,082	13,498	12,953	12,443	11,966	11,519	11,100	10,707
45	14,852	14,230	13,649	13,106	12,597	12,120	11,672	11,252	10,857	10,485
46	14,259	13,689	13,155	12,654	12,183	11,741	11,325	10,933	10,564	10,216
47	13,701	13,179	12,687	12,225	11,790	11,380	10,993	10,628	10,284	9,958
48	13,125	12,649	12,200	11,777	11,377	11,000	10,642	10,305	9,985	9,681
49	12,546	12,115	11,708	11,322	10,957	10,612	10,284	9,973	9,678	9,398
50	12,371	11,967	11,585	11,221	10,877	10,549	10,238	9,942	9,660	9,392
51	11,533	11,181	10,846	10,527	10,224	9,935	9,659	9,396	9,146	8,906
52	10,923	10,611	10,313	10,029	9,758	9,499	9,252	9,015	8,788	8,572
53	10,248	9,977	9,717	9,468	9,230	9,001	8,783	8,573	8,372	8,179
54	9,571	9,337	9,113	8,897	8,690	8,491	8,300	8,116	7,940	7,769
55	9,099	8,894	8,697	8,507	8,324	8,148	7,978	7,815	7,657	7,504
56	8,274	8,106	7,944	7,787	7,636	7,490	7,348	7,211	7,079	6,951
57	7,548	7,411	7,278	7,149	7,025	6,904	6,787	6,673	6,563	6,456
58	6,820	6,711	6,605	6,502	6,402	6,210	6,118	6,029	5,941	5,857
59	6,049	5,965	5,884	5,805	5,728	5,653	5,579	5,508	5,438	5,370
60	5,283	5,222	5,162	5,104	5,047	4,991	4,936	4,883	4,831	4,779
61	4,459	4,417	4,376	4,337	4,298	4,229	4,185	4,148	4,113	4,078
62	3,623	3,598	3,573	3,548	3,524	3,501	3,477	3,454	3,432	3,409
63	2,763	2,750	2,737	2,725	2,712	2,700	2,688	2,676	2,653	2,641
64	1,890	1,886	1,882	1,873	1,877	1,873	1,865	1,861	1,857	1,844
65	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

<sup>1</sup>Present value of annual payments of \$1 made at the beginning of each year of disability entitlement. Entitlement ends upon death, recovery, or attainment of age 66 (NRA) of the beneficiary. Payments are discounted to the beginning of the entitlement period using the stated annual effective interest rate, and continuance experience shown in table 22B.

**Table 31B.—Female Disabled Workers  
Annual Life Annuity to Age 66 Immediate<sup>1</sup>**  
(2006-10 Social Security DI disability experience)

Entl age	Actuarial present value of \$1 annuity								
	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%
16	18.832	17.316	15.997	14.844	13.831	12.937	12.144	11.437	10.805
17	19.862	18.247	16.840	15.608	14.526	13.570	12.721	11.966	10.682
18	20.927	19.212	17.716	16.405	15.251	14.232	13.327	12.520	11.799
19	21.999	20.189	18.607	17.219	15.997	14.915	13.954	13.098	12.331
20	22.643	20.784	19.158	17.729	16.468	15.351	14.357	13.471	12.676
21	22.975	21.102	19.459	18.013	16.735	15.601	14.592	13.690	12.880
22	22.964	21.113	19.485	18.050	16.779	15.649	14.642	13.741	12.931
23	22.808	20.993	19.394	17.981	16.727	15.611	14.614	13.720	12.917
24	22.481	20.720	19.165	17.787	16.563	15.470	14.493	13.616	12.826
25	22.132	20.426	18.917	17.577	16.383	15.317	14.361	13.501	12.726
26	21.856	20.198	18.727	17.419	16.251	15.205	14.266	13.420	12.656
27	21.544	19.938	18.509	17.235	16.096	15.074	14.154	13.325	12.574
28	21.261	19.704	18.315	17.074	15.962	14.960	13.246	12.508	11.837
29	20.999	19.489	18.140	16.932	15.846	14.868	13.985	13.185	12.460
30	20.649	19.192	17.887	16.715	15.660	14.707	13.846	13.064	12.353
31	20.352	18.944	17.680	16.542	15.515	14.586	13.744	12.979	12.282
32	20.055	18.696	17.472	16.368	15.370	14.465	13.643	12.894	12.211
33	19.773	18.461	17.277	16.206	15.235	14.353	13.550	12.818	12.148
34	19.398	18.139	17.000	15.968	15.030	14.176	13.397	12.684	12.032
35	18.968	17.766	16.676	15.685	14.783	13.960	13.207	12.518	11.885
36	18.589	17.440	16.396	15.444	14.575	13.780	13.052	12.384	11.770
37	18.162	17.068	16.070	15.159	14.325	13.561	12.859	12.213	11.618
38	17.725	16.887	15.737	14.867	14.069	13.336	12.661	12.039	11.465
39	17.261	16.228	15.377	14.549	13.788	13.087	12.440	11.843	11.290
40	16.779	15.851	14.997	14.212	13.488	12.819	12.201	11.628	11.097
41	16.319	15.444	14.637	13.892	13.203	12.566	11.976	11.428	10.919
42	15.863	15.039	14.278	13.573	12.920	12.314	11.751	11.227	10.739
43	15.334	14.564	13.851	13.189	12.574	12.002	11.469	10.973	10.509
44	14.833	14.115	13.447	12.826	12.247	11.708	11.204	10.733	10.293
45	14.318	13.651	13.029	12.448	11.906	11.399	10.924	10.480	10.063
46	13.737	13.122	12.547	12.010	11.506	11.034	10.591	10.175	9.784
47	13.193	12.627	12.096	11.597	11.129	10.276	9.886	9.519	9.173
48	12.632	12.113	11.625	11.166	10.733	10.326	9.942	9.579	9.237
49	12.067	11.594	11.148	10.728	10.331	9.956	9.601	9.265	8.947
50	11.932	11.486	11.064	10.664	10.286	9.928	9.589	9.267	8.961
51	11.098	10.705	10.333	9.980	9.645	9.326	9.023	8.735	8.461
52	10.506	10.155	9.822	9.504	9.202	8.914	8.639	8.377	8.127
53	9.848	9.539	9.244	8.963	8.694	8.438	8.192	7.958	7.733
54	9.187	8.918	8.660	8.414	8.177	7.951	7.526	7.326	7.135
55	8.759	8.519	8.289	8.068	7.856	7.652	7.457	7.268	7.087
56	7.941	7.741	7.549	7.363	7.184	7.012	6.846	6.686	6.532
57	7.234	7.067	6.906	6.750	6.600	6.454	6.314	6.178	6.047
58	6.531	6.394	6.262	6.134	6.010	5.889	5.772	5.659	5.549
59	5.779	5.671	5.566	5.464	5.365	5.268	5.174	5.083	4.994
60	5.040	4.957	4.876	4.797	4.720	4.645	4.572	4.500	4.430
61	4.235	4.175	4.116	4.058	4.002	3.947	3.893	3.840	3.788
62	3.416	3.376	3.336	3.296	3.258	3.220	3.183	3.147	3.111
63	2.571	2.547	2.522	2.498	2.475	2.451	2.429	2.406	2.384
64	1.719	1.706	1.694	1.682	1.669	1.638	1.646	1.634	1.623
65	0.882	0.878	0.874	0.870	0.865	0.861	0.857	0.853	0.849

<sup>1</sup>Present value of annual payments of \$1 made at the end of each year of disability entitlement. Entitlement ends upon death, recovery, or attainment of age 66 (NRA) of the beneficiary. Payments are discounted to the beginning of the entitlement period using the stated annual effective interest rate, and continuance experience shown in table 22B.

**Table 31C.—Female Disabled Workers  
Monthly Life Annuity to Age 66 Due<sup>1</sup>**  
(2006-10 Social Security DI disability experience)

Entl age	Actuarial present value of \$1 annuity								
	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%
16	231,605	213,596	197,909	184,178	172,103	161,435	151,967	143,527	135,970
17	243,850	224,671	207,944	193,289	180,392	168,991	158,869	149,844	141,764
18	256,502	236,146	218,369	202,776	189,040	176,889	166,095	156,468	147,847
19	269,238	247,763	228,978	212,479	197,927	185,042	173,586	163,362	154,203
20	276,849	254,819	235,513	218,528	203,526	190,224	178,385	167,809	158,326
21	280,747	258,551	239,062	221,884	206,686	193,191	181,164	170,407	160,752
22	280,550	258,618	239,317	222,274	207,167	193,730	181,736	170,994	161,340
23	278,613	257,126	238,175	221,403	206,509	193,237	181,372	170,728	161,150
24	274,647	253,807	235,384	219,044	204,504	191,523	179,897	169,451	160,036
25	270,407	250,241	232,371	216,485	202,320	189,649	178,280	168,048	158,811
26	267,044	247,451	230,049	214,545	200,691	188,274	177,113	167,051	157,955
27	263,249	244,275	227,383	212,299	198,792	186,662	175,738	165,873	156,940
28	259,799	241,413	225,003	210,316	197,137	185,277	174,576	164,896	154,131
29	256,592	238,784	222,851	208,558	195,704	184,112	173,633	164,136	155,507
30	252,328	235,155	219,753	205,904	193,420	182,140	171,923	162,645	154,201
31	248,706	232,124	217,214	203,776	191,636	180,643	170,665	161,588	153,312
32	245,072	229,077	214,659	201,634	189,839	179,136	169,402	160,529	152,425
33	241,615	226,186	212,243	199,616	188,156	177,733	168,234	159,560	151,621
34	237,045	222,259	208,863	196,701	185,637	175,553	166,343	157,915	150,187
35	231,826	217,724	204,914	193,254	182,623	172,910	164,020	155,868	148,379
36	227,206	213,743	201,480	190,291	180,063	170,698	162,106	154,212	146,945
37	222,013	209,203	197,504	186,803	176,998	167,998	159,724	152,104	145,076
38	216,705	204,556	193,432	183,229	173,858	165,236	157,290	149,958	143,181
39	211,065	199,582	189,040	179,345	170,418	162,184	154,580	147,546	141,031
40	205,210	194,382	180,904	175,224	166,740	151,635	144,904	138,655	132,847
41	199,611	189,416	180,904	171,305	163,252	155,790	148,865	142,430	136,444
42	194,060	184,478	175,609	167,389	159,761	152,674	146,082	139,943	134,218
43	187,630	178,698	170,407	162,702	155,533	148,855	142,629	136,816	131,384
44	181,536	173,216	165,472	158,255	151,522	145,235	139,358	133,858	128,707
45	175,279	167,562	160,359	153,627	147,331	141,436	135,912	130,730	125,864
46	168,229	161,138	154,500	148,279	142,445	136,968	131,822	126,582	122,428
47	161,613	155,094	148,974	143,224	137,816	132,726	127,932	123,412	119,148
48	154,784	148,829	143,222	137,939	132,958	128,256	123,816	119,620	115,651
49	147,907	142,502	137,399	132,576	128,015	123,700	119,613	115,741	112,069
50	140,030	140,947	136,134	131,573	127,248	123,144	119,248	115,547	112,030
51	135,996	131,544	127,316	123,297	119,475	115,839	112,378	109,081	105,938
52	128,775	124,813	121,040	117,443	114,013	110,740	107,616	104,632	101,780
53	120,768	117,300	113,985	110,817	107,488	102,112	99,454	96,466	92,126
54	112,735	109,730	106,849	104,087	101,438	98,896	96,455	94,112	91,861
55	107,314	104,660	102,110	99,657	97,298	95,028	92,842	90,738	88,711
56	97,454	95,257	93,140	91,097	89,126	87,224	85,388	83,615	81,902
57	88,840	87,028	85,276	83,581	81,940	80,353	78,815	77,326	74,486
58	80,247	78,784	77,364	73,350	74,648	70,884	69,674	68,518	67,394
59	71,099	69,959	68,850	67,771	66,720	65,697	64,700	63,729	62,783
60	62,059	61,202	60,365	59,548	58,750	57,971	57,209	56,465	55,738
61	52,270	51,667	51,076	50,497	49,930	49,375	48,830	48,297	47,774
62	42,337	41,946	41,562	41,184	40,813	40,449	40,091	39,738	39,052
63	32,096	31,875	31,656	31,441	31,229	31,020	30,813	30,610	30,409
64	21,737	21,638	21,443	21,347	21,252	21,159	21,066	20,974	20,884
65	11,352	11,326	11,302	11,277	11,252	11,228	11,204	11,180	11,156

<sup>1</sup>Present value of monthly payments of \$1 made at the beginning of each month of disability entitlement. Entitlement ends upon death, recovery, or attainment of age 66 (NRA) of the beneficiary. Payments are discounted to the beginning of the entitlement period using the stated annual effective interest rate, and continuance experience shown in table 22B.

**Table 31D.—Female Disabled Workers  
Monthly Life Annuity to Age 66 Immediate<sup>1</sup>**  
(2006-10 Social Security DI disability experience)

Entl age	Actuarial present value of \$1 annuity								
	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%
16	230.738	212.700	196.991	183.242	171.153	160.474	150.998	142.551	134.989
17	243.001	223.790	207.037	192.363	179.450	168.036	157.905	148.872	140.787
18	255.672	235.280	217.475	201.860	188.106	175.942	165.137	155.501	146.873
19	268.429	246.914	228.098	211.574	197.003	184.102	172.634	162.401	153.234
20	276.057	253.984	234.645	217.633	202.610	189.291	177.439	166.852	157.361
21	279.969	257.729	238.204	220.998	205.778	192.265	180.224	169.455	159.791
22	279.782	257.805	238.469	221.396	206.265	192.809	180.800	170.046	160.382
23	277.855	256.321	237.333	220.531	205.613	192.321	180.440	169.784	160.195
24	273.895	253.009	234.548	218.178	203.613	190.612	178.969	168.510	159.085
25	269.663	249.449	231.541	215.625	201.434	188.743	177.357	167.111	157.863
26	266.308	246.667	229.226	213.691	199.811	187.373	176.195	166.119	157.010
27	262.520	243.500	226.568	211.452	197.919	185.767	174.825	164.945	156.000
28	259.080	240.645	224.196	209.477	196.270	184.388	173.669	163.973	155.180
29	255.882	238.025	220.962	207.727	194.844	183.230	172.731	163.218	154.575
30	251.627	234.405	218.962	205.079	192.568	181.264	171.027	161.733	153.275
31	248.015	231.384	216.433	202.961	190.792	179.774	169.776	160.682	152.391
32	244.391	228.347	213.888	200.827	189.003	178.275	168.520	159.629	151.510
33	240.945	225.467	211.482	198.819	187.329	176.881	167.360	158.667	150.713
34	236.386	221.550	208.111	195.913	184.819	174.709	165.476	157.029	149.286
35	231.177	217.025	204.172	192.476	181.814	172.074	163.161	153.402	145.560
36	226.568	213.054	200.749	189.523	179.264	169.871	161.257	153.342	146.057
37	221.385	208.525	196.784	186.046	176.208	167.181	158.883	151.243	144.079
38	216.088	203.890	192.722	182.483	173.079	164.429	156.459	149.105	142.310
39	210.458	198.926	188.341	178.609	169.649	161.388	153.758	146.703	140.169
40	204.614	193.738	183.727	174.500	165.983	158.110	150.824	144.071	137.803
41	199.028	188.784	179.350	170.593	162.507	155.016	148.065	141.608	139.341
42	193.489	183.860	174.948	166.691	159.029	151.913	145.295	139.132	133.387
43	187.070	178.091	169.755	162.015	154.813	148.106	141.851	136.017	130.564
44	180.990	172.623	164.837	157.582	150.817	144.500	138.596	133.073	127.900
45	174.746	166.983	159.738	152.970	146.640	140.715	135.164	129.958	125.071
46	167.707	160.571	153.892	147.635	141.767	136.260	131.088	126.224	121.647
47	161.105	154.542	148.383	142.596	137.155	132.036	127.214	122.670	118.383
48	154.291	148.293	142.647	137.328	132.314	127.583	123.115	118.894	114.903
49	147.428	141.981	136.839	131.982	127.304	123.044	118.930	115.033	111.338
50	145.591	140.466	135.613	131.016	126.658	122.524	118.600	114.873	111.331
51	135.561	131.069	126.803	122.750	118.896	115.231	111.742	108.419	105.254
52	128.358	124.358	120.548	116.918	113.456	110.154	107.003	103.994	101.119
53	120.368	116.862	113.513	110.312	107.251	104.324	101.522	98.839	96.269
54	112.352	109.311	106.397	103.604	100.925	98.356	95.889	93.522	91.247
55	106.974	104.285	101.702	99.218	96.830	94.532	92.320	90.192	88.141
56	97.121	94.893	92.744	90.673	88.675	86.747	84.886	83.089	81.354
57	88.525	86.684	84.903	83.181	81.515	79.903	78.342	76.831	75.367
58	79.958	78.467	77.021	75.617	74.256	72.934	71.651	70.405	69.195
59	70.829	69.665	68.532	67.430	66.357	65.312	64.295	63.305	62.340
60	61.816	60.937	60.078	59.241	58.423	57.624	56.844	56.082	55.338
61	52.047	51.424	50.815	50.219	49.634	49.062	48.501	47.952	47.414
62	42.130	41.724	41.324	40.932	40.547	40.168	39.796	39.431	39.071
63	31.905	31.671	31.441	31.215	30.991	30.771	30.554	30.340	30.129
64	21.565	21.458	21.352	21.143	21.041	20.940	20.840	20.741	20.643
65	11.234	11.205	11.175	11.147	11.118	11.089	11.061	11.033	10.978

<sup>1</sup>Present value of monthly payments of \$1 made at the end of each month of disability entitlement. Entitlement ends upon death, recovery, or attainment of age 66 (NRA) of the beneficiary. Payments are discontinued to the beginning of the entitlement period using the stated annual effective interest rate, and continuance experience shown in table 22B.

## **APPENDIX**



## V. STUDY POPULATION AND METHODS

### A. Overview

This study is based on over 14.5 million records of Social Security Disability Insurance (DI) worker beneficiaries drawn from the administration's Master Beneficiary Record (MBR) in February 2014. The 5-year observation period covers January 1, 2006 through December 31, 2010. These records provide 29.4 million life-years of exposure for males and 25.5 million life-years of exposure for females. The primary variables of interest are: the reason for termination of benefits, the age at entitlement, the number of years since entitlement, and sex of the beneficiary.

The main reasons that disabled workers stop receiving disability benefits are:

- Conversion to old-age benefits;
- Death of the beneficiary; and
- Recovery—includes medical recovery or return to SGA.

There are a small number of terminations due to other reasons that are not explicitly examined. The table below provides the number of deaths and recoveries observed during the observation period. To a certain extent, this study traverses the activity of the OASI rolls by tracking deaths of former disabled workers who converted to old-age worker benefits either by choice or upon attaining normal retirement age.

**Number of Disabled Worker Terminations, by Reason**  
(January 2006-December 2010)

Reason	Male	Female	Total
Death	1,233,326	784,745	2,018,071
Recovery	117,112	103,015	220,127
Total	1,350,438	887,760	2,238,198

Source: MBR database as of February 2014. Refer to table 5 in section IV for the number of conversions and terminations due to other reasons. The number of deaths and recoveries shown above will differ from those found in table 5 due to differences in statistical methods used in tabulations. The number of deaths will be dramatically different as they include a substantial number from the OASI rolls.

### B. Data Considerations

Mortality experience of the DI rolls is affected by several unique circumstances. Since experience begins with entitlement, deaths that occur during the 5-month waiting period prior to entitlement to DI benefits are outside the scope of this study. It is also true that a claimant may die in the first month of entitlement, or before final disposition of the disability claim—in which case only retroactive disability benefits may be payable. These cases are handled by counting the death, but crediting no exposure on the record.

Participants in this study may have multiple periods of disability under examination. There are instances, however, where very little time passes between periods of entitlement for reasons such as a failed work-attempt, an expedited reinstatement, or a successful appeal of an unfavorable CDR. So although a recovery has occurred, the beneficiary may be back on the rolls shortly thereafter. Also, it is not uncommon for beneficiaries with multiple periods of disability to become re-entitled under the same or a similar impairment. Although re-entering the rolls at a different entitlement age, such individuals may, in essence, recover from the same disability more than once.

### C. Data Selection

After various screenings and checks, data for up to five separate periods of disability were included for the following beneficiaries in the final overall sample:

- Workers entitled to disability benefits at some time during the observation period;
- Workers entitled to old-age benefits at some time during the observation period who are former disabled-worker beneficiaries with no break between DI and OASI entitlement.

Records of persons from the Special Disability Workload (SDW) were excluded from this study. This group of SSI recipients who are potentially eligible for DI benefits due to previously unrecognized disability-insured status caused a supplemental increase in awards over the period 2001-10. In most instances, entitlement is retroactive to well before the date of final review. However, due to the guidelines established for processing the workload, completed SDW cases represent a biased sample of records and were therefore eliminated.

### D. Methods

The availability of complete data on each person in the study (sex, date of birth, date of entitlement, date of decrement, and cause of decrement) allows for direct estimation of the *multiple-decrement probabilities*  $q^{(i)}$ , where  $i$  represents the cause of decrement. Each unit age interval  $(x, x + 1]$  represents one life-year of potential exposure. For each interval that an individual is under observation, the person enters the interval at age  $x + r$  ( $0 \leq r < 1$ ), and is scheduled to exit the interval at age  $x + s$  ( $0 < s \leq 1$ ). Note that  $r = 0$  except for instances where the beginning of the observation period falls within the age interval. Similarly  $s = 1$  except for instances where the end of the observation period falls within the interval. Clearly,  $s - r$  is the amount of time that the person is scheduled to be exposed to the risks of decrement. The total *scheduled exposure* for an interval is obtained by summing over all persons.<sup>20</sup>

<sup>20</sup>For a complete discussion, refer to *Survival Models and Their Estimation* (London 1988, second edition).

As an example of the above method, consider a disabled worker entering an interval at age  $x + r$ . The *scheduled ending age*,  $x + s$ , is established for the interval under the expectation that the person will either survive to the end ( $s = 1$ ), or exit the study due to the end of the observation period ( $s < 1$ ). Scheduled exposure is then credited as follows: if the person survives to the end of the interval, then exposure is credited from  $x + r$  to  $x + 1$ ; if the person dies or recovers during the interval, exposure is still credited from  $x + r$  to  $x + 1$ .<sup>21</sup> If the observation period ends during the interval, then exposure is credited from  $x + r$  to  $x + s$ . A modification is made to the way exposure is calculated for determining recovery probabilities. Since recovery is no longer a consideration after converting to old-age benefits, exposure is credited only up until the month of the switch.

Multiple-decrement probabilities are calculated by dividing the observed number of deaths or recoveries in an interval by the aggregate scheduled exposure for that interval. As will be discussed later, *single-decrement (absolute) rates* can be derived from these probabilities by using a constant force assumption for the distribution of decrement within the interval.<sup>22</sup>

#### **E. Entitlement Age and Exposure**

This is a select-and-ultimate study with a 10-year select period implying that the risks of decrement for beneficiaries 10 or more years beyond entitlement are no longer a function of entitlement age, but a function of attained age only.

Rarely does entitlement to disability benefits occur on a beneficiary's birthday. To facilitate exposure calculations, *insuring age* and the corresponding *insuring date of birth* may be substituted for the actual age at entitlement and the actual date of birth, respectively. This study uses an insuring age that is set at the beneficiary's *age last birthday* as of entitlement. As an example:

**Date of entitlement:** February 1, 2010

**Date of birth:** July 10, 1965

**Actual age at entitlement:** 44 years, 206 days

**Insuring age:** 44 years

**Insuring date of birth:** February 1, 1966

Use of the integral insuring age at entitlement ensures that subsequent durations begin on the beneficiary's birthday. This is true whether the participant enters the study during the observation period, or is already part of the entitlement group when the observation period opens.

<sup>21</sup>All persons are *expected* to survive to the end of the interval, even those who wind up dying or recovering at age  $x + t \leq x + s$ . The important point is that decrement was not expected so the scheduled ending age is set at  $x + 1$ .

<sup>22</sup>For a complete discussion on multiple-decrement probabilities, the associated single-decrement rates, and construction of the select-and-ultimate multiple-decrement tables found in this study, the reader is referred to *Actuarial Mathematics* (Bowers et al. 1997).

#### **F. Duration and Graduation**

The unit intervals for which a beneficiary is under observation are called *durations*. For each entitlement age  $[x]$  and duration  $n$ , the quantity  $s - r$  represents the amount of exposure contributed to the observation interval  $([x] + n, [x] + n + 1]$ . For durations beyond the 10-year select period, exposure is credited to the appropriate attained age interval  $(x + n, x + n + 1]$ .

The select-and-ultimate multiple-decrement probabilities are graduated using the two-dimensional Whittaker-Henderson Type B method.<sup>23</sup> The horizontal and vertical smoothing coefficients were chosen to obtain some degree of smoothness within individual durations (columns) as well as within entitlement ages (rows), without deviating much from the original estimates.

#### **G. Continuance Tables**

Continuance tables 8A-8C are constructed from select-and-ultimate death probabilities. The values  $l_{[x]}, l_{[x]+1}, \dots, l_{110}$  are first calculated for entitlement age  $[x] = 16$ , using a radix of 100,000. This step determines values for the ultimate period of the table and attained ages greater than 75. Values for entitlement ages  $[x] > 16$  are then derived from the ultimate values by working backwards. For example,  $l_{[x]}$  is determined from  $l_{x+10}$  using the survival probabilities of the select period for the given entitlement age. The value for  $l_{[x]+t}$  is the number of lives remaining from the original  $l_{[x]}$  who have attained age  $[x] + t$ . The number alive at any given entitlement or attained age is not an actual count of disability beneficiaries, but is the product of combining probabilities with an arbitrary radix.

Continuance tables for the decrement of recovery (15A-15B) and the combined decrements of death and recovery (22A-22C) are constructed in the same manner. Since recovery is no longer considered after attaining normal retirement age, tables 15A-15B are truncated after attained age 65.<sup>24</sup>

The continuance tables are read across the row, or *select period*, for 0-10 years since entitlement, then down the last column, or *ultimate period* for 10 or more years since entitlement. The example below uses numbers from table 8A for male disabled beneficiaries becoming entitled at age 50.

Completed years of entitlement	Number living	Probability of continuance	Attained age
0	75,982	1.000	50
1	72,355	.952	51
5	63,894	.841	55
10	54,666	.719	60
15	44,929	.591	65

<sup>23</sup>For details, refer to *Graduation: The Revision of Estimates* (London 1985).

<sup>24</sup>For the observation period 2006-10, disabled beneficiaries are converted to old-age benefits as early as 65 years 6 months (1940 birth cohort) or as late as age 66 (1944 birth cohort). See chart in section I.

## H. Expected Future Time on Rolls

Tables showing *expected future time on the rolls* are derived from the continuance functions described above using the basic actuarial principles found in any standard actuarial text on life contingencies. We also present in this study the results of aggregating over duration, by entitlement age (see tables 11, 18, and 25) or attained age (see tables 12, 19, and 26).

Expected future time for a specific *entitlement* age is an exposure-weighted average of the expected future time at each duration of that age. This differs from the expected future time for a specific *attained* age, which is an exposure-weighted average of the expected future time at various durations of various entitlement ages.

For example, expected future time for *entitlement* age 40 is a weighted average of the expected times across the select row and down the ultimate column. Each cell represents a different attained age. In contrast, expected future time for *attained* age 40 is a weighted average of the expected times for a 40-year-old at duration 0, a 39-year-old at duration 1,...and a 16-year-old at duration 24—all of whom are attained age 40.

## I. Probabilities and Absolute Rates

In this study we present probabilities of decrement for two of the several decrements affecting the disabled population—death and recovery. The symbol  $q^{(d)}$  represents the probability of death in the presence of the other decrements and is defined as follows:

$$q_x^{(d)} = \int_0^1 p_x^{(\tau)} \mu_{x+t}^{(d)} dt$$

where  $p^{(\tau)}$  is the probability of continuance under all decrements; and  $\mu^{(d)}$  is the force of mortality. The probability of recovery  $q^{(r)}$  is similarly defined.

For each cause of decrement in a multiple-decrement model, it is possible to associate a single-decrement rate that depends only on a particular cause of decrement. For example,  $q'^{(d)}$  represents the *single-decrement (absolute) rate* of death and is defined as follows:

$$q_x'^{(d)} = \int_0^1 p_x'^{(d)} \mu_{x+t}^{(d)} dt$$

where  $p'^{(d)}$  is the probability of *not dying*. In this representation, beneficiaries who decrement for causes other than death are “taken out” of the total number exposed. Observation stops at the point of non-death decrement resulting in total exposure which is somewhat less than that used in formulating death probabilities.

For example, the multiple-decrement probability  $q^{(d)}$  is calculated for each combination of entitlement age and duration by dividing the observed number of deaths by the exposure for that cell. Assuming a uniform distribution for each decrement over the age interval  $(x, x+1)$ , the absolute rate of death  $q'^{(d)}$  can be calculated by dividing the observed number of deaths by the exposure for that cell reduced by one-half of the number of recoveries observed for that cell. The absolute rate of recovery  $q'^{(r)}$  is similarly defined.

This study uses an alternative method to calculate absolute rates. First, derive the total decrement probability:

$$q^{(\tau)} = q^{(d)} + q^{(r)}$$

Then derive the absolute rates using the assumption of constant force for each decrement over the age interval  $(x, x+1)$ :

$$q'^{(d)} = 1 - [1 - q^{(\tau)}]^{q^{(d)}/q^{(\tau)}}$$

$$q'^{(r)} = 1 - [1 - q^{(\tau)}]^{q^{(r)}/q^{(\tau)}}$$

Absolute rates are presented on a “per thousand” basis.

## J. Annuity Tables

In general, a *life annuity* is a series of payments made at regular intervals (such as months or years) during the lifetime of the annuitant. Payments may be limited to a given number of years, or payable for the whole of life, and are made at the beginning (*due*) or end (*immediate*) of each period. Any standard actuarial text on life contingencies will explain the present value calculation of an annuity.

The table below illustrates the present value of lifetime combined DI and OASI benefits (considering only the possibility of death), as well as DI benefits to age 66 (NRA) for a male worker entitled to disability benefits at age 50. To simplify calculations, we assume no cost-of-living adjustments to benefits.

**Present Value of Future Benefits, Male Age 50**  
(3 percent annual interest rate)

<b>\$14,400 annual payment</b>	
Annuity value (table 28A)	13.767
Life annuity (due)	\$198,245
<b>\$1,200 monthly payment</b>	
Annuity value (table 30A)	10.137
Life annuity to age 66 (due)	\$145,973
<b>\$1,200 monthly payment</b>	
Annuity value (table 28C)	159.662
Life annuity (due)	\$191,594
Annuity value (table 30C)	117.981
Life annuity to age 66 (due)	\$141,577

### **K. Adjusted Decrement Rates**

Shifts in the age, gender, and impairment composition of the DI rolls occur over time. To compare disability rates of death and recovery between different observation periods, we need to eliminate the distortions caused by these shifts. For this reason, gross rates are adjusted to provide a measure of the rate at which disabled individuals are dying or recovering that is independent of demographic and programmatic shifts.

As explained in section D of this appendix, gross decrement rates are calculated by dividing the observed number of deaths or recoveries in an interval by the aggregate exposure for that interval. *Adjusted* decrement rates for a group of beneficiaries in an particular observation period are calculated by dividing the total number of adjusted deaths or recoveries by the aggregate exposure for that group in the *standard* DI beneficiary population. “Adjusted” decrements represent the number that would occur in a group if the exposure had the same age-sex-duration-specific profile as the exposure of the standard population, and are computed by multiplying the age-sex-duration-specific decrement rates of the particular observation period by the age-sex-duration-specific exposures of the standard population. The resulting adjusted decrements are summed across durations (or over select ages) and divided by the corresponding exposure of the standard population to get duration-adjusted (or age-adjusted) rates.

The following tables compare the adjusted death and recovery rates for various age and duration groupings, over the 20-year period 1991-2010. Results are split into four different 5-year observation periods. The standard DI beneficiary exposure population used in the calculations corresponds to the 2006-10

observation period. Note that data is not available (“n/a”) for several age groups in the 1991-95 and 1996-00 periods due to data limitations and methods particular to those studies.

**Tables K1-K4** show adjusted death rates by various entitlement age, attained age, and duration groupings. In general, DI disabled worker death rates have steadily declined over all observation periods. The overall death rate of 45.8 deaths per thousand as measured in 1991-95 has fallen 20% to 36.7 in 2006-10. Most of the decline (17%) occurred in the last 10 years. Over the period measured, male mortality rates were down 21% compared to 18% for females. The reasons for mortality improvement among disabled workers have been discussed in detail in this and the prior three actuarial studies dedicated to the specific observation periods. Main factors include a greater proportion of mental and musculoskeletal impairments, advancement in medical treatments, and broader use of vocational factors in disability determinations.

**Tables K5-K8** show adjusted recovery rates by various entitlement age, attained age, and duration groupings. Chance of recovery is not applicable beyond normal retirement age, at which time disabled workers are converted to old-age benefits. As detailed throughout the prior studies, changes in recovery experience can be less intuitive than changes in mortality experience since rates are largely affected by exogenous variables. The overall recovery rate spiked to 8.5 recoveries per thousand in 1996-00 before settling back to 6.8 in 2001-05. This was followed by a 22% drop to 5.3 in 2006-10. The erratic pattern is, in part, due to a spike in recoveries from eliminating DA&A impairments in the 1996-00 period, followed by constraints in special funding needed to complete CDRs in the 2006-10 period.

**Table K1.—Duration-Adjusted DI Disabled Worker DEATH Rates Comparison by Entitlement Age**  
(Deaths per 1000 beneficiaries)

Entl Age	Observation Period			
	1991-95	1996-00	2001-05	2006-10
Male				
16-19	n/a	12.09	11.11	10.29
20-24	16.93	15.80	14.36	13.32
25-29	25.28	22.03	19.69	18.07
30-34	30.72	26.89	23.87	21.72
35-39	35.95	31.97	28.76	26.00
40-44	41.82	39.09	35.62	32.16
45-49	49.89	48.40	44.88	40.79
50-54	58.53	57.28	52.35	47.51
55-59	68.75	67.70	61.63	54.96
60-64	83.20	84.88	76.29	67.81
65	n/a	n/a	110.17	87.70
Total	53.01	51.17	46.57	41.89
Female				
16-19	n/a	9.36	8.16	7.83
20-24	11.73	11.46	10.32	9.51
25-29	14.78	14.48	12.93	12.22
30-34	17.48	16.70	15.40	14.37
35-39	20.96	20.22	18.83	17.47
40-44	26.59	25.41	23.98	22.06
45-49	34.03	33.07	30.96	28.41
50-54	42.00	40.26	37.71	34.16
55-59	52.03	49.94	47.03	42.20
60-64	64.97	64.70	60.70	54.42
65	n/a	n/a	96.41	77.32
Total	37.43	36.10	33.87	30.72
Total				
16-19	n/a	11.05	9.98	9.35
20-24	14.90	14.11	12.79	11.84
25-29	20.75	18.77	16.77	15.55
30-34	24.74	22.30	20.05	18.40
35-39	28.92	26.46	24.10	22.00
40-44	34.42	32.44	29.96	27.25
45-49	41.99	40.76	37.95	34.62
50-54	50.37	48.88	45.13	40.92
55-59	61.08	59.55	54.93	49.11
60-64	75.60	76.47	69.79	62.23
65	n/a	n/a	104.89	83.72
Total	45.76	44.17	40.67	36.70

**Table K2.—Duration-Adjusted DI Disabled Worker DEATH Rates Comparison by Attained Age**  
(Deaths per 1000 beneficiaries)

Attained Age	Observation Period			
	1991-95	1996-00	2001-05	2006-10
Male				
16-19	n/a	16.48	10.94	8.64
20-24	19.01	15.41	10.94	9.55
25-29	25.52	16.85	12.40	10.78
30-34	31.14	21.72	15.84	13.30
35-39	31.29	23.37	19.11	16.21
40-44	30.75	26.53	23.28	20.10
45-49	32.43	30.84	29.05	25.53
50-54	38.87	36.66	34.04	31.83
55-59	46.48	43.98	39.09	36.26
60-64	56.22	53.48	46.36	41.76
65-69	63.02	61.15	55.77	48.66
70-74	78.62	80.34	73.34	64.95
75-79	99.61	104.49	99.69	88.49
80-84	126.96	140.88	137.01	124.75
85-89	161.36	188.65	190.19	177.13
90+	221.78	245.54	261.68	250.57
Total	53.01	51.17	46.57	41.89
Female				
16-19	n/a	12.49	9.22	8.25
20-24	14.91	13.33	9.89	8.28
25-29	14.34	13.00	10.33	9.27
30-34	15.53	14.40	11.78	10.98
35-39	17.35	16.02	14.12	12.91
40-44	19.98	18.89	17.25	15.69
45-49	23.21	22.29	20.52	19.26
50-54	27.71	26.51	24.08	22.08
55-59	32.99	30.84	27.93	25.26
60-64	39.47	37.68	33.04	30.07
65-69	43.63	42.79	39.87	33.99
70-74	55.96	54.49	52.48	46.63
75-79	74.43	70.44	72.52	66.20
80-84	99.74	98.81	102.57	97.04
85-89	133.04	143.60	149.28	140.74
90+	185.05	206.09	228.97	212.60
Total	37.43	36.10	33.87	30.72
Total				
16-19	n/a	14.81	10.22	8.48
20-24	17.32	14.55	10.51	9.02
25-29	20.41	15.10	11.46	10.10
30-34	23.48	18.14	13.85	12.17
35-39	24.43	19.76	16.66	14.59
40-44	25.56	22.85	20.38	17.98
45-49	28.01	26.75	24.98	22.54
50-54	33.53	31.81	29.28	27.17
55-59	40.17	37.84	33.87	31.12
60-64	48.62	46.31	40.31	36.45
65-69	54.36	52.95	48.68	42.12
70-74	68.78	69.12	64.28	56.99
75-79	88.77	89.84	88.00	78.90
80-84	114.37	121.42	121.08	111.93
85-89	146.35	164.77	168.50	157.84
90+	198.95	221.02	241.35	226.97
Total	45.76	44.17	40.67	36.70

**Table K3.—Age-Adjusted DI Disabled Worker DEATH Rates Comparison by Duration**  
(Deaths per 1000 beneficiaries)

Duration	Observation Period			
	1991-95	1996-00	2001-05	2006-10
Male				
0	85.83	85.59	66.50	55.90
1	56.96	47.50	41.25	37.86
2	43.52	37.77	33.78	30.85
3	38.60	34.89	32.04	29.10
4	37.78	34.06	31.61	28.24
5	38.43	34.18	32.85	28.68
6	39.39	35.33	33.35	29.49
7	40.42	36.62	34.63	30.71
8	42.68	38.77	35.65	32.01
9	43.73	40.60	37.12	33.93
10+	58.83	60.23	56.65	51.65
Total	53.01	51.17	46.57	41.89
Female				
0	62.52	63.58	49.39	42.53
1	40.40	36.79	32.04	29.93
2	28.83	26.57	24.94	22.79
3	24.89	23.14	22.06	20.20
4	24.05	21.83	21.27	19.12
5	24.59	22.03	21.12	18.75
6	25.33	22.56	21.80	19.08
7	26.30	23.37	22.54	20.02
8	27.91	24.94	23.17	20.93
9	28.56	26.19	24.05	22.03
10+	44.71	44.59	43.95	40.34
Total	37.43	36.10	33.87	30.72
Total				
0	75.03	75.40	58.58	49.71
1	49.17	42.47	36.92	34.13
2	36.53	32.44	29.58	27.02
3	32.05	29.28	27.27	24.85
4	31.21	28.21	26.67	23.88
5	31.78	28.35	27.22	23.92
6	32.62	29.18	27.79	24.48
7	33.59	30.21	28.78	25.54
8	35.50	32.05	29.59	26.63
9	36.35	33.59	30.77	28.14
10+	52.50	53.24	50.97	46.60
Total	45.76	44.17	40.67	36.70

**Table K4.—Age-Adjusted DI Disabled Worker DEATH Rates Comparison by Duration (Group)**  
(Deaths per 1000 beneficiaries)

Duration	Observation Period			
	1991-95	1996-00	2001-05	2006-10
Male				
0-4	54.30	49.78	42.29	37.39
5-9	40.65	36.77	34.50	30.70
10-14	46.21	45.94	42.21	38.47
15-19	54.41	54.90	51.13	46.32
20-24	64.14	66.28	62.54	56.85
25-29	76.79	81.15	77.91	71.39
30-34	90.21	95.64	93.07	85.82
35-39	94.20	99.31	96.43	88.64
40+	111.68	120.51	117.78	107.81
Total	53.01	51.17	46.57	41.89
Female				
0-4	37.20	35.51	30.72	27.57
5-9	26.34	23.61	22.40	20.00
10-14	31.10	30.80	28.99	26.34
15-19	38.91	38.01	36.71	33.38
20-24	50.25	49.13	48.71	44.81
25-29	68.12	68.40	69.50	64.59
30-34	89.50	92.57	96.52	89.81
35-39	99.60	103.68	109.12	101.57
40+	109.66	114.44	120.96	112.72
Total	37.43	36.10	33.87	30.72
Total				
0-4	46.22	43.04	36.83	32.75
5-9	33.73	30.41	28.66	25.53
10-14	39.01	38.72	35.91	32.69
15-19	47.53	47.41	44.74	40.58
20-24	58.47	59.29	56.90	51.95
25-29	73.31	76.05	74.55	68.67
30-34	89.89	94.27	94.61	87.60
35-39	96.55	101.20	101.91	94.23
40+	110.88	118.12	119.03	109.74
Total	45.76	44.17	40.67	36.70

**Table K5.—Duration-Adjusted DI Disabled Worker RECOVERY Rates Comparison by Entitlement Age**  
(Recoveries per 1000 beneficiaries)

Entl Age	Observation Period			
	1991-95	1996-00	2001-05	2006-10
Male				
16-19	n/a	36.34	24.63	22.62
20-24	13.27	22.56	16.81	12.72
25-29	8.69	17.57	13.80	10.11
30-34	7.25	15.28	11.79	8.66
35-39	6.20	13.55	9.66	7.31
40-44	4.86	10.49	7.52	5.75
45-49	3.51	6.67	5.22	4.28
50-54	2.09	3.46	2.92	2.53
55-59	1.01	1.60	1.53	1.43
60-64	0.41	0.50	0.58	0.49
65	n/a	n/a	2.42	0.26
Total	4.52	9.12	6.86	5.33
Female				
16-19	n/a	34.55	24.64	22.46
20-24	13.75	21.68	17.64	13.43
25-29	9.73	16.93	14.60	10.98
30-34	8.15	14.33	11.91	9.34
35-39	6.89	11.65	9.64	7.59
40-44	5.20	8.52	7.44	5.77
45-49	3.38	5.38	5.01	4.14
50-54	1.97	2.82	2.94	2.55
55-59	0.98	1.42	1.55	1.49
60-64	0.41	0.41	0.59	0.53
65	n/a	n/a	0.89	0.21
Total	4.59	7.70	6.64	5.29
Total				
16-19	n/a	35.66	24.63	22.56
20-24	13.46	22.22	17.13	13.00
25-29	9.14	17.29	14.15	10.49
30-34	7.66	14.85	11.85	8.97
35-39	6.53	12.65	9.66	7.44
40-44	5.03	9.51	7.48	5.76
45-49	3.44	6.02	5.12	4.21
50-54	2.03	3.14	2.93	2.54
55-59	1.00	1.52	1.54	1.46
60-64	0.41	0.46	0.58	0.51
65	n/a	n/a	1.84	0.24
Total	4.55	8.45	6.76	5.32

**Table K6.—Duration-Adjusted DI Disabled Worker RECOVERY Rates Comparison by Attained Age**  
(Recoveries per 1000 beneficiaries)

Attained Age	Observation Period			
	1991-95	1996-00	2001-05	2006-10
Male				
16-19	n/a	9.74	5.25	8.07
20-24	15.61	33.31	18.51	14.33
25-29	24.42	41.48	28.20	20.13
30-34	17.75	32.48	24.46	16.72
35-39	12.37	24.88	18.46	13.54
40-44	8.38	18.24	13.61	10.35
45-49	5.41	11.92	9.09	7.24
50-54	2.95	5.86	4.74	4.00
55-59	1.41	2.45	2.27	2.05
60-64	0.55	1.00	1.23	1.14
65	n/a	n/a	0.63	0.56
Total	4.52	9.12	6.86	5.33
Female				
16-19	n/a	9.25	4.99	6.87
20-24	11.75	26.75	16.39	11.77
25-29	19.79	31.39	22.92	16.61
30-34	14.72	24.30	19.53	14.16
35-39	11.20	18.99	15.69	12.01
40-44	8.88	14.66	12.45	9.95
45-49	6.12	10.55	9.17	7.27
50-54	3.37	5.45	5.31	4.33
55-59	1.63	2.38	2.69	2.44
60-64	0.56	0.91	1.26	1.26
65	n/a	n/a	0.64	0.42
Total	4.59	7.70	6.64	5.29
Total				
16-19	n/a	9.54	5.14	7.57
20-24	14.01	30.59	17.63	13.27
25-29	22.30	36.90	25.80	18.54
30-34	16.26	28.48	22.05	15.47
35-39	11.79	21.99	17.10	12.79
40-44	8.62	16.52	13.05	10.16
45-49	5.75	11.26	9.13	7.26
50-54	3.15	5.66	5.02	4.16
55-59	1.51	2.42	2.47	2.23
60-64	0.55	0.96	1.24	1.19
65	n/a	n/a	0.63	0.49
Total	4.55	8.45	6.76	5.32

**Table K7.—Age-Adjusted DI Disabled Worker RECOVERY Rates Comparison by Duration**  
(Recoveries per 1000 beneficiaries)

Duration	Observation Period			
	1991-95	1996-00	2001-05	2006-10
Male				
0	3.90	4.83	4.09	3.34
1	7.51	10.80	7.73	6.68
2	4.19	8.82	4.87	3.27
3	4.49	11.89	7.38	3.71
4	8.31	18.34	13.09	8.90
5	8.03	16.97	11.66	8.63
6	6.79	14.28	10.03	8.28
7	5.66	11.90	9.24	7.84
8	4.71	10.24	8.49	7.27
9	3.86	8.71	7.72	6.59
10+	1.63	3.95	4.08	3.62
Total	4.52	9.12	6.86	5.33
Female				
0	3.00	3.69	3.21	2.89
1	5.92	8.09	6.53	6.12
2	3.75	6.03	4.25	3.12
3	4.39	8.79	6.57	3.25
4	8.13	14.59	11.81	8.05
5	8.19	13.45	10.82	7.98
6	7.04	11.71	9.52	7.91
7	6.20	10.15	8.86	7.53
8	5.17	8.95	8.42	7.02
9	4.40	7.78	7.70	6.40
10+	2.09	4.09	4.56	4.19
Total	4.59	7.70	6.64	5.29
Total				
0	3.48	4.30	3.68	3.13
1	6.76	9.52	7.17	6.42
2	3.98	7.49	4.57	3.20
3	4.44	10.40	6.99	3.49
4	8.22	16.52	12.47	8.49
5	8.11	15.25	11.25	8.31
6	6.91	13.02	9.78	8.09
7	5.93	11.03	9.05	7.69
8	4.94	9.60	8.46	7.15
9	4.13	8.25	7.71	6.49
10+	1.83	4.01	4.29	3.87
Total	4.55	8.45	6.76	5.32

**Table K8.—Age-Adjusted DI Disabled Worker RECOVERY Rates Comparison by Duration (Group)**  
(Recoveries per 1000 beneficiaries)

Duration	Observation Period			
	1991-95	1996-00	2001-05	2006-10
Male				
0-4	5.58	10.42	7.14	5.05
5-9	6.13	13.04	9.71	7.87
10-14	1.94	4.62	4.71	4.14
15-19	1.62	4.04	4.21	3.75
20-24	1.34	3.38	3.54	3.17
25-29	1.08	2.67	2.85	2.56
30-34	0.75	1.74	1.98	1.78
35-39	0.49	1.09	1.38	1.23
40+	0.28	0.63	0.95	0.87
Total	4.52	9.12	6.86	5.33
Female				
0-4	4.91	7.93	6.25	4.59
5-9	6.46	10.80	9.26	7.48
10-14	2.28	4.48	4.93	4.54
15-19	2.07	4.06	4.55	4.17
20-24	1.79	3.52	3.98	3.65
25-29	1.47	2.91	3.39	3.10
30-34	0.95	1.88	2.40	2.25
35-39	0.54	1.08	1.56	1.50
40+	0.24	0.58	0.92	0.94
Total	4.59	7.70	6.64	5.29
Total				
0-4	5.26	9.24	6.72	4.83
5-9	6.29	11.93	9.49	7.68
10-14	2.11	4.55	4.82	4.34
15-19	1.81	4.05	4.36	3.94
20-24	1.50	3.43	3.70	3.35
25-29	1.21	2.75	3.02	2.74
30-34	0.82	1.79	2.12	1.93
35-39	0.50	1.08	1.43	1.31
40+	0.27	0.62	0.94	0.89
Total	4.55	8.45	6.76	5.32

## VI. TUTORIAL

In this section, we explain probabilities, continuance tables, and the select-and-ultimate (S&U) structure of the data, where *entitlement age* denotes age last birthday at entitlement to disability benefits, *duration* is the number of completed years of disability entitlement, and *attained age* is the sum of entitlement age and duration.

### Probability of Death (Refer to Table 7A)

A male disabled worker who became entitled to DI benefits at age 50—denoted as *male [50]*—has probability .047733 of dying in the first year on the rolls. The probability of not dying in the first year is  $(1 - .047733) = .952267$ . Similarly, we find the following probabilities in table 7A by *duration*:

*Male [50] after 5 years entitled has probability .028373 of death in year 6 after attaining age 55*

*Male [50] after 10 years entitled has probability .034318 of death in year 11 after attaining age 60*

*Male [50] after 15 years entitled has probability .041976 of death in year 16 after attaining age 65*

We refer to the values in the last column of S&U tables as *ultimate* because at high durations we assume the chance of dying is not affected by an incremental increase in duration. In the ultimate period, beneficiaries of the same attained age will have the same probability of death within the next year:

*Male [30] after 30 years entitled has probability .034318 of death in year 31 after attaining age 60*

*Male [40] after 20 years entitled has probability .034318 of death in year 21 after attaining age 60*

*Male [50] after 10 years entitled has probability .034318 of death in year 11 after attaining age 60*

Before duration 10 however, the probability of dying within the next year does depend on the entitlement age and duration, so we find the probability of death in the *select* part of the S&U table:

*Male [54] after 6 years entitled has probability .034824 of death in year 7 after attaining age 60*

*Male [56] after 4 years entitled has probability .032278 of death in year 5 after attaining age 60*

*Male [58] after 2 years entitled has probability .037491 of death in year 3 after attaining age 60*

### Benefit Continuance Table (Refer to Table 8A)

We can also calculate the probability that a disabled beneficiary will remain entitled for a certain number of years using table 7A. However, this calculation becomes tedious after several iterations:

Probability *male [50]* remains entitled 1 year =  $(1 - .047733) = .952267$

Probability *male [50]* remains entitled 3 years =  $(1 - .047733) \times (1 - .034242) \times (1 - .029994) = .892075$

Probability *male [50]* entitled for 5 years will remain entitled another 10 years =

$$(1 - .028373) \times (1 - .029795) \times (1 - .031248) \times (1 - .030506) \times (1 - .033644) \times (1 - .034318) \times \\ (1 - .036444) \times (1 - .038363) \times (1 - .041034) \times (1 - .042186) = .703177$$

The values, however, are easily calculated using table 8A. Note that the numbers in this table are not actual counts of beneficiaries, but rather an assumed number living at the beginning of each duration corresponding to the probabilities derived from table 7A and an initial arbitrary value of 100,000 (called the *radix*) at entitlement age 16, duration 0. Differences in the precision of the following probabilities as compared with those derived directly from table 7A are due to rounding the number of lives to integer values in constructing table 8A:

Probability *male [50]* remains entitled 1 year = 72,355 / 75,982 = .952265

Probability *male [50]* remains entitled 3 years = 67,781 / 75,982 = .892067

Probability *male [50]* entitled for 5 years will remain entitled another 10 years = 44,929 / 63,894 = .703180

In this section, we explain *expectation* and the differences in the interpretation of the numbers for death, recovery, and combined experience.

***Expected Future Time on Combined OASDI Rolls (Refer to Table 9A—Death Experience Only)***

In table 9A, we measure how long a beneficiary may remain on the combined OASDI rolls before dying. We do not consider recovery. In this context, we expect a *male [50]* who just became entitled to DI to remain entitled for 18.86 years if he does not die. If he lives 10 years and is on the DI rolls at attained age 60 then we expect him to remain entitled for another 14.46 years. If he lives 30 years and is on the OASI rolls at attained age 80 then we expect him to remain entitled for another 5.98 years (table 9C). Note that table 9A only shows how long we expect a beneficiary *to live* and remain entitled. It does not reflect the chance of recovering.

***Expected Future Time on DI Rolls (Refer to Table 16A—Recovery Experience Only)***

In table 16A, we measure how long a beneficiary may remain on the DI rolls before recovering or switching to old-age benefits. We do not consider death. In this context, we expect a *male [50]* who just became entitled to DI to remain entitled for 15.62 years if he does not recover. If he has not recovered after 10 years and is on the DI rolls at attained age 60 then we expect him to remain entitled for another 5.98 years. Note that similar to table 9A, table 16A only shows how long we expect a beneficiary *not to recover* and remain entitled. It does not reflect the chance of dying. In order to measure the *total* amount of time we expect a beneficiary to remain on the rolls, we must consider both death and recovery.

***Expected Future Time on Combined OASDI Rolls (Refer to Table 23A—Combined Experience)***

In table 23A, we measure how long a beneficiary may remain on the combined OASDI rolls considering both death and recovery. In this context, we expect a *male [50]* to remain entitled for 18.33 years. If after 10 years he is still on the DI rolls at attained age 60 then we expect him to remain entitled for another 14.40 years. After a DI beneficiary converts to OASI benefits at NRA, we no longer track the occurrence of recovery, however, we continue to track the occurrence of death.

***Expected Future Time on DI Rolls (Refer to Table 24A—Combined Experience)***

In table 24A, we measure how long a beneficiary may remain on the DI rolls. Observation stops once the beneficiary dies, recovers, or switches to OASI benefits. In this context, we expect a *male [50]* to remain on the DI rolls for 12.03 years. Similarly, we expect a *male [60]* who has been on the DI rolls for two years and is attained age 62 to remain on the DI rolls for another 3.70 years.

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In this section, we explain *absolute rates* and address the issue of designing a single decrement model that is restricted to a particular cause of decrement in a multiple-decrement environment. In such a model, one decrement does not “compete” with other decrements in the sense that all other decrements are “removed” once they are observed. We will clarify this concept in the examples that follow. In table 10, we isolate death as a particular cause of decrement. In table 17, we isolate recovery as a particular cause of decrement.

***Absolute Death Rate per Thousand Entitled (Refer to Table 10A)***

The probabilities in table 7A are calculated by dividing the total number of deaths observed in an entitlement-age-and-duration “cell” by the total exposure for that cell. In the single-decrement model, we subtract the exposure from all the beneficiaries who recover in that same cell—if they recover then they are no longer exposed to the decrement of death. Note that by reducing the amount of exposure for that cell, the probability of death is calculated to be slightly higher.

In actuarial mathematics, we avoid calling this re-calculated value a “probability” because some of the persons providing exposure exit before the end of a duration for a different decrement. So we express this quantity as a *rate per thousand per year*. Dividing the number of deaths by the reduced exposure and multiplying by 1000 gives us an *absolute death rate*. In the first year of entitlement, a *male [50]* has an absolute rate of 47.798 deaths per 1000 beneficiaries as found in table 10A, which is slightly higher than 1000 times the probability shown in table 7A.

**Absolute Recovery Rate per Thousand Entitled (Refer to Table 17A)**

Similarly, the probabilities in table 14A are calculated by dividing the total number of recoveries by the total exposure for a particular cell. In the single-decrement model, we adjust for the beneficiaries who die in a particular cell. Dividing the number of recoveries by the reduced exposure and multiplying by 1000 gives us an *absolute recovery rate*. In the first year of entitlement, a *male [50]* has an absolute rate of 2.756 recoveries per 1000 beneficiaries as found in table 17A. Again, this is slightly higher than 1000 times the probability shown in table 14A.

---

In the next 3 sections, we explain the grouping methods used to aggregate data by entitlement age, attained age, and duration.

**Aggregate Probability of Death and Expected Future Time, by Entitlement Age (Refer to Table 11)**

In this aggregation, we calculate the probability of death by summing the number of deaths across all durations for each *entitlement age* and divide by the total exposure for that age. For example, tabulations show that for males entl age 50 there are 45,750 total deaths and 1,112,892.90 total life-years of exposure in the observation period 2006-10:

Age-duration Cell	Deaths	Life-years Exposure
<i>Male [50], Dur 0</i>	4,848	103,312.84
<i>Male [50], Dur 1</i>	3,112	92,318.05
<i>Male [50], Dur 2</i>	2,515	84,458.66
.	.	.
<i>Male [50], Dur 10+</i>	35,275	832,803.35
Total	45,750	1,112,892.90

The aggregate probability of death within the next year is:

$$45,750 / 1,112,892.90 = .041109$$

This value is calculated for each entitlement age 16-65. The series is then graduated—for example, the above value is adjusted to be .041114—and the results are shown in table 11.

The aggregate future time is a weighted-average of all the individual expected future times found in table 9A. Each expected time is weighted by the total life-years of exposure for that cell. For example:

Age-duration Cell	Expected Future Time	Life-years Exposure
<i>Male [50], Dur 0</i>	18.86	103,312.84
<i>Male [50], Dur 1</i>	18.78	92,318.05
<i>Male [50], Dur 2</i>	18.43	84,458.66
.	.	.
<i>Male [50], Dur 47</i>	2.34	1.64
<i>Male [50], Dur 48</i>	2.23	0.00
Total		1,112,892.90

Multiply (expected time) x (exposure) and sum to get total exposure-weighted future time 16,918,854.85 and the aggregate expected future time for male entitlement age 50 is:

$$16,918,854.85 / 1,112,892.90 = \underline{15.20}$$

This value is calculated for each entitlement age 16-65. The results are shown in table 11. Similar calculations are performed for table 18 and table 25.

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**Aggregate Probability of Death and Expected Future Lifetime, by Attained Age (Refer to Table 12)**

In this aggregation, we calculate the probability of death by summing the number of deaths across all durations for each *attained age* and divide by the total exposure for that age. For example, tabulations show that for males attained age 50 there are 21,170 total deaths and 724,837.86 total life-years of exposure in the observation period 2006-10:

Age-duration Cell	Deaths	Life-years Exposure
<i>Male [50], Dur 0</i>	4,848	103,312.84
<i>Male [49], Dur 1</i>	2,553	58,136.65
<i>Male [48], Dur 2</i>	1,681	51,123.40
.	.	.
.	.	.
<i>Male [17], Dur 33</i>	2	234.09
<i>Male [16], Dur 34</i>	0	24.01
Total	21,170	724,837.86

The aggregate probability of death within the next year is:

$$21,170 / 724,837.86 = .029206$$

This value is calculated for each attained age 16-75. The series is then graduated—for example, the above value is adjusted to be .029207—and the results are shown in table 12.

The aggregate future time is a weighted-average of all the individual expected future times found in table 9A. Each expected time is weighted by the total life-years of exposure for that cell. For example:

Age-duration Cell	Expected Future Time	Life-years Exposure
<i>Male [50], Dur 0</i>	18.86	103,312.84
<i>Male [49], Dur 1</i>	18.84	58,136.65
<i>Male [48], Dur 2</i>	19.15	51,123.40
.	.	.
.	.	.
<i>Male [17], Dur 33</i>	19.88	234.09
<i>Male [16], Dur 34</i>	19.88	24.01
Total		724,837.86

Multiply (expected time) x (exposure) and sum to get total exposure-weighted future time 14,126,387.70 and the aggregate expected future time for male attained age 50 is:

$$14,126,387.70 / 724,837.86 = \underline{19.49}$$

This value is calculated for each attained age 16-75. The results are shown in table 12. Similar calculations are performed for table 19 and table 26.

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**Aggregate Probability of Death and Expected Future Lifetime, by Duration (Refer to Table 13)**

In this aggregation, we calculate the probability of death by summing the number of deaths for each *duration* and divide by the total exposure for that duration. For example, tabulations show that for males in the first year of entitlement (duration 0) there are 129,932 total deaths and 2,324,476.32 total life-years of exposure in the observation period 2006-10:

Age-duration Cell	Deaths	Life-years Exposure
<i>Male [16], Dur 0</i>	0	50.68
<i>Male [17], Dur 0</i>	6	821.80
<i>Male [18], Dur 0</i>	20	3,367.84
.	.	.
.	.	.
<i>Male [64], Dur 0</i>	4,066	35,109.21
<i>Male [65], Dur 0</i>	1,455	11,841.57
Total	129,932	2,324,476.32

The aggregate probability of death within the next year is:

$$129,932 / 2,324,476.32 = .055897$$

This value is calculated for each duration 0-40. The series is then graduated—for example, the above value is adjusted to be .055896—and the results are shown in table 13.

The aggregate future time is a weighted-average of all the individual expected future times found in table 9A. Each expected time is weighted by the total life-years of exposure for that cell. For example:

Age-duration Cell	Expected Future Time	Life-years Exposure
<i>Male [16], Dur 0</i>	44.37	50.68
<i>Male [17], Dur 0</i>	43.47	821.80
<i>Male [18], Dur 0</i>	42.57	3,367.84
.	.	.
.	.	.
<i>Male [64], Dur 0</i>	11.01	35,109.21
<i>Male [65], Dur 0</i>	10.49	11,841.57
Total		2,324,476.32

Multiply (expected time) x (exposure) and sum to get total exposure-weighted future time 45,606,117.37 and the aggregate expected future time for male duration 0 is:

$$45,606,117.37 / 2,324,476.32 = \underline{19.62}$$

This value is calculated for each duration 0-40. The results are shown in table 13. Similar calculations are performed for table 20 and table 27.

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### Annuity Values (Refer to Tables 28-31)

Once entitled to Social Security DI benefits, the beneficiary receives monthly cash payments as long as he remains entitled. To calculate the present value of future benefits (PVFB), we discount a stream of future cash payments using an assumed interest rate to account for the time-value of money. In addition, we discount for *survivorship* to account for the condition that the beneficiary must remain entitled or “survive” to the next payment.

The following illustration shows the value of a disability benefit payable to age 66 (NRA). The value found in table 30B for a male entitled at age 58 assuming 3% annual interest rate and continuance experience shown in table 22A is calculated as shown below. We simplify the mathematics by using a hypothetical annual payment (instead of monthly), and annual interest and continuance factors. For example, instead of a monthly DI benefit of \$1500, we assume the beneficiary receives an annual benefit of \$18,000 at the end of each duration up until he attains age 66:

Duration	Age	Annual Payment (End of duration)	Interest Factor	Continuance Factor	Actuarial Present Value	Present Value Future Benefits
0	58	\$18,000	.970874	.932246	.905093	\$16,291.67
1	59	18,000	.942596	.888535	.837530	15,075.54
2	60	18,000	.915142	.854807	.782270	14,080.86
3	61	18,000	.888487	.823669	.731819	13,172.74
4	62	18,000	.862609	.791470	.682729	12,289.12
5	63	18,000	.837484	.759696	.636233	11,452.19
6	64	18,000	.813091	.728346	.592212	10,659.82
7	65	18,000	.789409	.699460	.552160	9,938.88
8	66	no payment	-	-	-	-
Total					5.720046	\$102,960.82

The *interest factor* represents the amount of money that, if invested at 3% annual interest, will grow to \$1 by the end of the stated duration. Discounting for interest is the first part of the PVFB calculation—the present value of the annual payment made at the end of duration 0 (discounting for interest only) is:

$$\begin{aligned} PV &= \$18,000 \times (.970874) \\ &= \$17,475.73 \end{aligned}$$

The *continuance (survivorship) factor* is derived from table 22A and represents the probability that the beneficiary makes it to the next payment by neither dying nor recovering. For example, the probability of making it to the first payment is:

$$21,946 / 23,541 = .932246$$

The present value of the annual payment made at the end of duration 0 (discounting for interest and survivorship) is called the *actuarial present value*, and is calculated as:

$$\begin{aligned} APV &= \$18,000 \times (.970874 \times .932246) \\ &= \$18,000 \times (.905093) \\ &= \$16,291.67 \end{aligned}$$

This dollar amount is shown in the last column of the above table. The PVFB is the sum of the APV over all durations = \$102,960.82. Shown in the second-to-last column is the series of APV factors = (interest factor) x (survivorship factor). Summing these factors over all durations gives the annuity value shown in table 30B, which is easily used to calculate PVFB directly:

$$\begin{aligned} PVFB &= \$18,000 \times 5.720 \\ &= \$102,960 \end{aligned}$$

## VII. GLOSSARY

<b>AC</b> — Appeals Council
<b>ALJ</b> — Administrative law judge
<b>CDR</b> — Continuing disability review
<b>COLA</b> — Cost of living adjustment
<b>DA&amp;A</b> — Drug addiction and alcoholism
<b>DDS</b> — Disability Determination Services
<b>DI</b> — Disability Insurance
<b>EPE</b> — Extended period of eligibility
<b>NRA</b> — Normal retirement age
<b>OASI</b> — Old-Age and Survivors Insurance
<b>ODAR</b> — Office of Disability Adjudication and Review
<b>RFC</b> — Residual functional capacity
<b>SGA</b> — Substantial gainful activity
<b>SSA</b> — Social Security Administration
<b>SSI</b> — Supplemental Security Income
<b>TWP</b> — Trial work period

**Administrative Law Judge.** An official of the Social Security Administration’s Office of Disability Adjudication and Review (ODAR) who is specially qualified to hold hearings and make independent decisions regarding eligibility for SSA programs on the basis of all evidence and testimony. ALJs conduct impartial hearings and issue decisions to claimants who have appealed previous determinations by SSA.

**Allowance (or denial).** A determination by the Disability Determination Services, ODAR, or federal district court that a claimant meets (or does not meet) the medical definition of disability under the Social Security Act.

**Appeals Council.** The organization within ODAR that makes the final decision in the administrative review process. The council is the last line of appeal within SSA for partially favorable or unfavorable decisions. A claimant’s next recourse would be the federal court system.

**Auxiliary benefits.** Monthly benefits payable to a spouse or child of a retired or disabled worker, or to a survivor of a deceased worker.

**Award.** An administrative determination that an individual is entitled to receive a specified type of OASDI benefit. Awards can represent not only new entrants to the benefit rolls but also for persons already on the rolls who become entitled to a different type of benefit. Awards usually result in the immediate payment of benefits, although payments may be deferred or withheld depending on the individual’s particular circumstances.

**Baby boom.** The period from the end of World War II (1946) through 1965 marked by unusually high birth rates.

**Beneficiary.** A person who has been awarded benefits on the basis of his or her own or another’s earnings record. The benefits may be either in current-payment status or withheld.

**Code of Federal Regulations.** A record of the general and permanent rules published in the Federal Register by executive departments and agencies of the Federal government. The second volume (parts 400-499) of this three-volume publication includes sections under Title 20, Chapter III, which cover OASDI, SSI, and all other regulations issued by the Social Security Administration.

**Concurrent claim/benefit.** A claim for both Title II (Social Security) and Title XVI (Supplemental Security Income) benefits. Since SSI provides “assistance of last resort”—taking into account all income and resources that an individual has—concurrent beneficiaries must include Title II cash benefits as part of income when determining the amount of Title XVI benefits to be received.

**Continuing Disability Review.** An evaluation to determine if a disability beneficiary is still eligible for cash benefits. Payment of benefits will end if medical or other evidence shows the beneficiary is no longer disabled under the standards set in the Social Security Act. The frequency of reviews varies by the severity of impairment or can be “triggered” by work activity.

**Current-payment status.** Status of a beneficiary to whom a benefit is being paid for a given month.

**Diagnostic group.** Classification of impairments, by body system, which identifies the medical condition(s) underlying a disability. Before 1985, the coding of primary and secondary diagnoses for Social Security claimants was in accordance with the *International Classification of Diseases: 9<sup>th</sup> Revision* using 4-digit ICD-9 codes. In 1985, SSA implemented a revised impairment coding system using 3 digits followed by a zero. Although not identical, the new codes closely parallel the major ICD-9 categories.

**Disability conversion.** Automatic conversion of a disabled worker beneficiary to retired-worker status upon attainment of normal retirement age.

**Disability Determination Services.** The state agency responsible for developing medical evidence and rendering the initial determination and reconsideration on whether a claimant is disabled or a beneficiary continues to be disabled within the meaning of the Social Security Act.

**Disability incidence rate.** The proportion of workers in a given year, insured for but not receiving disability benefits, which apply for and are awarded disability benefits. Gross incidence rates are calculated as the ratio of the total number of awards for a given year to the total exposure for that year. Age-adjusted incidence rates are calculated as the ratio of the total number of adjusted awards for a given year to the total exposure for the standardizing year. For example, mul-

tiplying single-year-of-age incidence rates in 2010 by the exposure for those same ages in, say, 2000 would give adjusted awards. The age-adjusted incidence rate for 2010 is then calculated as the total number of adjusted awards divided by the total exposure for 2000.

Gross rates are not directly comparable over time because of the year-to-year differences in the age and sex composition of the underlying insured population. We adjust gross rates to factor out these effects allowing for a “cleaner” comparison of rates from year to year.

**Disability termination rate.** The proportion of disabled-worker beneficiaries in a given year whose disability benefits terminate because of the individual’s death or recovery.

**Drug Addiction and Alcoholism.** If shown to be material to the determination of disability, drug addiction or alcoholism will prevent entitlement to benefits or cause removal from the rolls.

**Exposure.** In general, exposure is a measure of the amount of time that a cohort of individuals are exposed to the possibility of an event, such as disability, death, or recovery. The quantity of measurement is called “life-years”. There are different methods of calculating life-years of exposure. With regard to incidence of disability, we measure the amount of time that a cohort of workers (who are not already disabled) are exposed to the possibility of becoming disabled over the course of a year. Alternatively, you can think of this quantity as the average number of disability-insured workers for the year who are not already receiving benefits.

With regard to the select-and-ultimate tables for death or recovery probabilities presented in this study, exposure depends on how long beneficiaries are “scheduled” to be on the disability rolls during a specific period of time (called the “observation period”). There are various ways to calculate this quantity as well and the reader is referred to the appendix for details.

**Federal court review.** When an individual disagrees with SSA’s final decision in the administrative review process, they may request judicial review by filing a civil action in a federal district court.

**Hearing.** The level following reconsideration in the administrative review process. The hearing is a *de novo* procedure at which the claimant and/or representative may appear in person, submit new evidence, give testimony, and present witnesses.

**Initial determination.** The first decision made in determining entitlement to benefits. The field office makes the decision on nonmedical factors such as insured status or substantial gainful activity. If nonmedical factors are met, DDS adjudicators make the decision on the medical factors.

**Listing of Impairments.** Describes, for each major body system, impairments which are considered severe enough to prevent a person from doing any gainful activity. Most of the

listed impairments are permanent or expected to result in death, or a specific statement of duration is made. For all others, the evidence must show that the impairment is expected to last at least 12 months.

**Maximum family benefit.** The maximum monthly amount that can be paid on a worker’s earnings record. Whenever the total of the individual monthly benefits payable to all beneficiaries entitled on one earnings record exceeds the maximum, each auxiliary benefit is proportionately reduced to bring the total within the maximum.

**Normal retirement age.** The age at which a person may first become entitled to unreduced retirement benefits (see chart on page 1).

**Pre-effectuation review.** A comprehensive on-going program under which a prescribed percentage of determinations involving the issue of disability are evaluated prior to their effectuation, even though there is no request for review.

**Recession.** A period of adverse economic conditions; in particular, two or more successive calendar quarters of negative growth in GDP.

**Reconsideration.** An independent reexamination of all evidence on record related to a case. It is based on the evidence submitted for the initial determination and any further evidence or information that the claimant submits. Adjudicators making a reconsideration determination are different from those who made the initial determination.

**Recovery.** The termination of disability benefits because of medical improvement or a successful reentry to the workforce.

**Replacement rate.** The ratio of the total amount of (annualized) cash benefits received during the first year of entitlement to the total earnings of the beneficiary in the immediately preceding year. This ratio measures the fraction of prior earnings that are replaced by current benefits.

**Residual Functional Capacity.** A measurement of the amount of activity an individual can perform in spite of physical or mental limitations. Disability adjudicators assess the extent that the impairment(s) prevent the claimant from performing particular work activities, and use RFC to determine the types of work that can be performed despite impairments.

**Retroactive benefits.** Benefits that are paid for months that have already passed. For disability cases, the retroactive period can include up to 12 months prior to application for benefits; and can also include any number of months between application and award.

**Social Security Act.** Provisions of the law governing most operations of the Social Security program. Title II of the Act authorized the Old-Age, Survivors, and Disability Insurance program. Title XVI of the Act authorized the Supplemental Security Income (SSI) program.

**Statutory blindness.** Central visual acuity of 20/200 or less in the better eye with the use of a correcting lens or tunnel vision of 20 degrees or less.

**Supplemental Security Income.** A federal program for low-income aged, blind, and disabled individuals who meet income and resource requirements. SSI is funded by general tax revenues, not Social Security taxes.

**Vocational factors.** When it is determined that a claimant cannot perform past relevant work based on residual functional capacity alone, adjudicators further consider vocational factors of age, education, and work experience to

determine the claimant's ability to adjust to other work that exists in significant numbers in the economy.

**Workers' Compensation offset.** A reduction in the monthly benefits for a disabled-worker family when the monthly DI cash benefit amount plus the State or Federal workers' compensation benefit amount or other Federal, State, or local disability benefits (excluding VA or needs-based benefits or benefits based on Federal, State, or local covered employment) exceeds 80 percent of the worker's *average current earnings* before the onset of disability. The offset is imposed for any month in which individuals are entitled to both DI benefits and other applicable benefits.