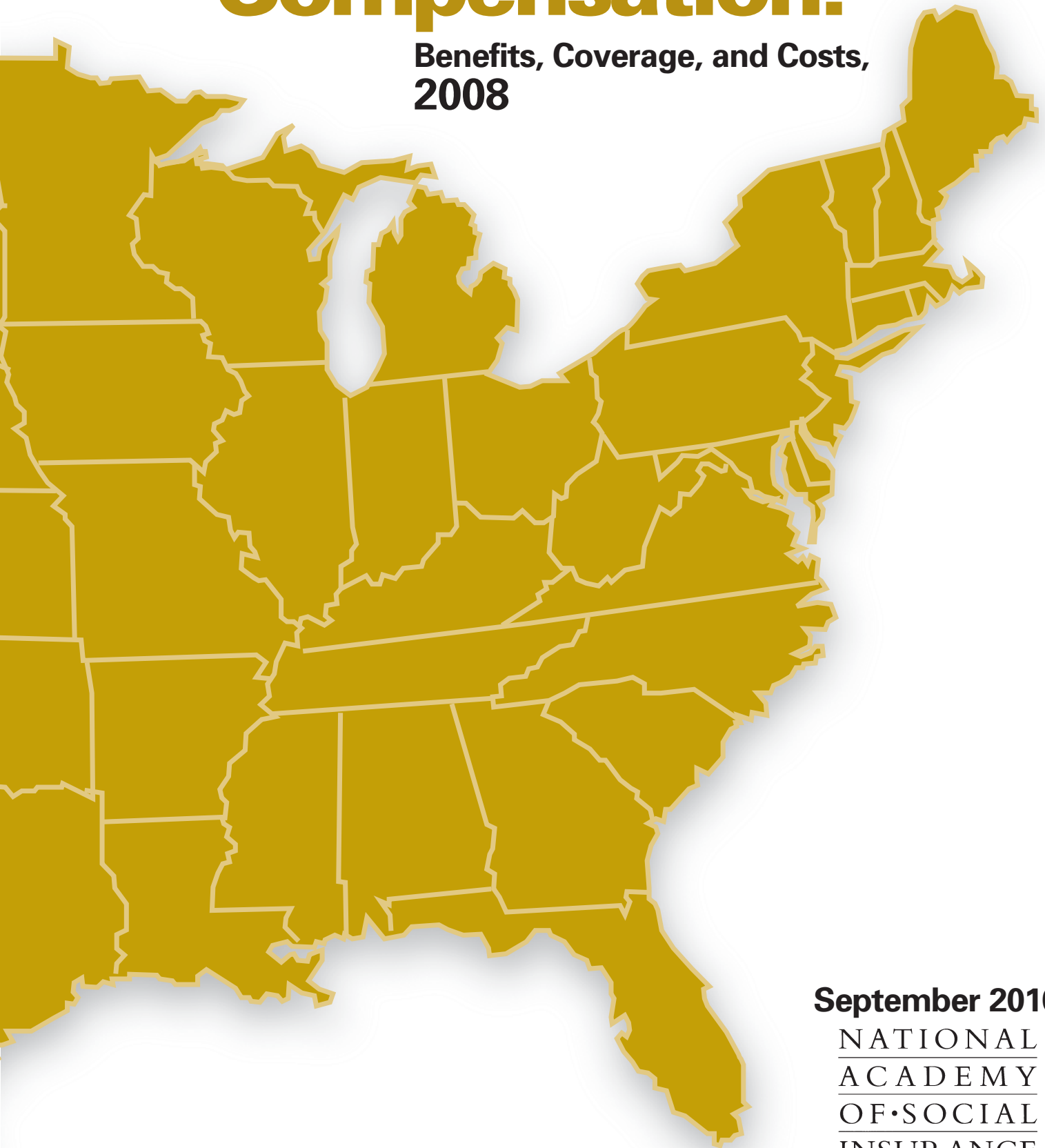


Workers' Compensation:

**Benefits, Coverage, and Costs,
2008**



September 2010

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The National Academy of Social Insurance is a nonprofit, nonpartisan organization made up of the nation's leading experts on social insurance. Its mission is to promote understanding of how social insurance contributes to economic security and a vibrant economy. Social insurance encompasses broad-based systems for insuring workers and their families against economic insecurity caused by loss of income from work and the cost of health care. NASI's scope covers social insurance such as Social Security; Medicare; workers' compensation; and unemployment insurance, related public assistance, and private employee benefits. The Academy convenes study panels that are charged with conducting research, issuing findings, and, in some cases, reaching recommendations based on their analysis. Members of these groups are selected for their recognized expertise and with due consideration for the balance of disciplines and perspectives appropriate to the project. This research report presents new data and does not make recommendations. It was prepared with the guidance of the Study Panel on National Data on Workers' Compensation. In accordance with procedures of the Academy, it has been reviewed by a committee of the Board for completeness, accuracy, clarity, and objectivity. This project received financial support from the Social Security Administration, the Centers for Medicare & Medicaid Services, and the Office of Workers' Compensation Programs of the U.S. Department of Labor. It also received in-kind support in data from the National Council of Compensation Insurance and the National Association of Insurance Commissioners.

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Workers' Compensation:

**Benefits, Coverage, and Costs,
2008**

by

Ishita Sengupta, Virginia Reno, and John F. Burton, Jr.

with advice of the

**Study Panel on National Data on
Workers' Compensation**

September 2010

**NATIONAL
ACADEMY
OF SOCIAL
INSURANCE
Washington, DC**

Preface

This is the thirteenth report the Academy has issued on workers' compensation national data. Before the National Academy of Social Insurance began the publication, the U.S. Social Security Administration (SSA) produced the only comprehensive national data on workers' compensation benefits and costs with annual estimates dating back to 1946. SSA discontinued the series in 1995 after publishing data for 1992–93. In February 1997, the Academy received start-up funding from The Robert Wood Johnson Foundation to launch a research initiative in workers' compensation with its first task to develop methods to continue the national data series. In December 1997, it published a report that extended the data series through 1995. Today funding for the project comes from the Social Security Administration, the Centers for Medicare & Medicaid Services, and the U.S. Department of Labor. In addition, the National Council on Compensation Insurance and the National Association of Insurance Commissioners provide access to important data for the project. Without support from these sources, continuing this vital data series would not be possible. This is the sixth edition of the report co-authored by Ishita Sengupta, Virginia Reno, and me. Ishita warrants her name being listed first in recognition of the amounts of time and energy she devoted to the publication.

This report also benefited from the expertise of members of the Study Panel on National Data on Workers' Compensation, who gave generously of their time and knowledge in advising on data sources and presentation, interpreting results, and reviewing the draft report. The panel is listed on page ii. We would like to especially acknowledge Barry Llewellyn, with the National Council on Compensation Insurance; Eric Nordman, National Association of Insurance Commissioners; Greg Krohm, International Association of Industrial Accident Boards and Commissions; Les Boden, Boston University; and Frank Neuhauser, University of California, Berkeley, all of whom provided the Academy with data and their considerable expertise on many data issues. We are also grateful for the useful comments provided by Allan Hunt, W.E. Upjohn Institute; Mike Manley, Oregon Department of Consumer and Business Services; Doug Holmes, UWC; William Wiatrowski, BLS; and Shelby Hallmark, OWCP, DOL. This report also benefited from helpful comments during Board review by Bob Aurbach, Lachlan Taylor and Ed Welch.

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Highlights

This report provides a benchmark of the coverage, benefits, and costs of workers' compensation to facilitate policymaking and comparisons with other social insurance and employee benefit programs. Workers' compensation pays for medical care, rehabilitation, and cash benefits for workers who are injured on the job or who contract work-related illnesses. It also pays benefits to families of workers who die of work-related causes. Each state has its own workers' compensation program.

Need for this Report

The lack of uniform reporting of states' experiences with workers' compensation makes it necessary to piece together data from various sources to develop estimates of benefits paid, costs to employers, and the number of workers covered by workers' compensation. Unlike other U.S. social insurance programs, state workers' compensation programs have no federal involvement in financing or administration. And, unlike private pensions or employer-sponsored health benefits that receive favorable federal tax treatment, no federal laws set standards for "tax-qualified" plans or require comprehensive reporting of workers' compensation coverage and benefits.¹ The general lack of federally-mandated data means that states vary greatly in the data they have available to assess the performance of workers' compensation programs.

For more than forty years, the research office of the U.S. Social Security Administration produced national and state estimates of workers' compensation benefits, but that activity ended in 1995. In response to requests from stakeholders and scholars in the workers' compensation field, the National Academy of Social Insurance took on the challenge of continuing that data series. This is the Academy's thirteenth annual report on workers' compensation benefits, coverage, and costs. This report presents new data on developments in workers' compensation in 2008 and updates estimates of benefits, costs, and coverage for the years 2004–2007. The revised estimates in this report replace estimates in the Academy's prior reports.

Target Audience

The audience for the Academy's reports on workers' compensation includes journalists, business and labor leaders, insurers, employee benefit specialists, federal and state policymakers, and researchers in universities, government, and private consulting firms. The data are published in the *Statistical Abstract of the United States* by the U.S. Census Bureau, *Injury Facts* by the National Safety Council, *Employee Benefit News*, which tracks developments for human resource professionals, and *Fundamentals of Employee Benefit Programs* from the Employee Benefit Research Institute. The U.S. Social Security Administration publishes the data in its *Annual Statistical Supplement to the Social Security Bulletin*. The federal Centers for Medicare & Medicaid Services use the data in their estimates and projections of health care spending in the United States. The National Institute for Occupational Safety and Health uses the data to track the cost of workplace injuries in the United States. In addition, the International Association of Industrial Accident Boards and Commissions (the organization of state and provincial agencies that administer workers' compensation in the United States and Canada) uses the information to track and compare the performance of workers' compensation programs in the United States with similar systems in Canada.

The report is produced with the oversight of the members of the Academy's Study Panel on National Data on Workers' Compensation, who are listed in the front of this report. The Academy and its expert advisors are continually seeking ways to improve the report and to adapt estimation methods to track new developments in the insurance industry and in workers' compensation programs.

Workers' Compensation and Other Disability Benefits

Workers' compensation is an important part of American social insurance. As a source of support for disabled workers, it is surpassed in size only by Social Security Disability Insurance and Medicare. Workers' compensation programs in the fifty states, the District of Columbia, and federal programs paid

1 A new reporting requirement enacted in 2007, Section 111 of S 2499 (now Public Law No. 110-173), requires workers' compensation claims administrators to report to the CMS (Centers for Medicare and Medicaid Services) information about workers' compensation recipients who are entitled to Medicare.

Table 1**Workers' Compensation Benefits*, Coverage, and Costs**, 2007–2008, Summary**

Aggregate Amounts	2007	2008	Change In Percent
United States			
Covered workers (in thousands)	131,734	130,643	-0.8
Covered wages (in billions)	\$5,855	\$5,953	1.7
Workers' compensation benefits paid (in billions)	55.2	57.6	4.4
Medical benefits	26.7	29.1	8.8
Cash benefits	28.5	28.6	0.3
Employer costs for workers' compensation (in billions)	84.6	78.9	-6.7
California			
Covered workers (in thousands)	15,395	15,248	-1.0
Covered wages (in billions)	\$775	\$782	0.9
Workers' compensation benefits paid (in billions)	9.5	9.4	-0.9
Medical benefits	4.9	5.1	5.5
Cash benefits	4.6	4.3	-7.5
Employer costs for workers' compensation (in billions)	14.2	12.4	-12.1
Outside California			
Covered workers (in thousands)	116,339	115,395	-0.8
Covered wages (in billions)	\$5,081	\$5,171	1.8
Workers' compensation benefits paid (in billions)	45.7	48.2	5.5
Medical benefits	21.9	23.9	9.5
Cash benefits	23.9	24.3	1.8
Employer costs for workers' compensation (in billions)	70.4	66.4	-5.7
			Change In Amount[#]
United States			
Benefits paid	\$0.94	\$0.97	\$0.03
Medical payments	0.47	0.50	0.03
Cash payments to workers	0.49	0.48	-0.01
Employer costs	1.44	1.33	-0.11
California			
Benefits paid	\$1.23	\$1.21	-\$0.02
Medical payments	0.63	0.66	0.03
Cash payments to workers	0.60	0.55	-0.05
Employer costs	1.83	1.59	-0.24
Outside California			
Benefits paid	\$0.90	\$0.93	\$0.03
Medical payments	0.43	0.46	0.03
Cash payments to workers	0.47	0.47	0.00
Employer costs	1.39	1.28	-0.11

Figures may not add to total due to rounding.

Table 1 continued

* Benefits are payments in the calendar year to injured workers and to providers of their medical care.

** Costs are employer expenditures in the calendar year for workers' compensation benefits, administrative costs, and/or insurance premiums. Costs for self-insuring employers are benefits paid in the calendar year plus the administrative costs associated with providing those benefits. Costs for employers who purchase insurance include the insurance premiums paid during the calendar year plus the payments of benefits under large deductible plans during the year. The insurance premiums must pay for all of the compensable consequences of the injuries that occur during the year, including the benefits paid in the current as well as future years.

Source: National Academy of Social Insurance estimates based on Tables 2, 8, 9, 11, 12 and D1.

\$57.6 billion in benefits in 2008. Of the total, \$29.1 billion paid for medical care and \$28.6 billion paid for cash benefits (Table 1).

Workers' compensation differs from Social Security disability insurance and Medicare in important ways. Workers' compensation pays for medical care for work-related injuries beginning immediately after the injury occurs; it pays temporary disability benefits after a waiting period of three to seven days; it pays permanent partial and permanent total disability benefits to workers who have lasting consequences of disabilities caused on the job; in most states it pays rehabilitation and training benefits for those unable to return to pre-injury careers; and it pays benefits to survivors of workers who die of work-related causes. Social Security, in contrast, pay benefits to workers with long-term disabilities of any cause, but only when the disabilities preclude substantial paid employment. It also encourages return to work and still pays benefits even if there is some self-employment and "transitional work". Social Security also pays for rehabilitation services and survivor benefits to families of deceased workers. Social Security Disability Insurance benefits begin after a five-month waiting period and Medicare begins twenty-nine months after the onset of medically verified inability to work. In 2008, Social Security paid \$106.0 billion in cash benefits to disabled workers and their dependents, while Medicare paid \$63.6 billion for health care for disabled persons under age 65 (SSA, 2009d and CMS, 2009).

Paid sick leave, temporary disability benefits, and long-term disability insurance for non-work-related injuries or diseases are also available to some workers. About 39 percent of all private sector employees are

not provided any paid sick leave (U.S. DOL, 2009a). Sick leave typically pays 100 percent of wages for a few weeks. Private long-term disability insurance that is financed, at least in part, by employers covers about 30 percent of private sector employees and is usually paid after a waiting period of three to six months, or after short-term disability benefits end. Long-term disability insurance is generally designed to replace 60 percent of earnings and is reduced if the worker receives workers' compensation or Social Security disability benefits.

Trends in Workers' Compensation Benefits and Costs – Big Increases in Medical Payments

Total cash benefits to injured workers and medical payments for their health care were \$57.6 billion in 2008, a 4.4 percent increase from \$55.2 billion in 2007. Medical payments increased by 8.8 percent to \$29.1 billion, and cash benefits to injured workers slightly increased, to \$28.6 billion, from the prior year (Table 1). This is the largest percentage increase in medical payments since 2001. Costs to employers fell by a substantial 6.7 percent in 2008 to \$78.9 billion. This is the biggest percentage decline in employer costs since 1987 when the data series in Table 11 began. Costs for self-insured employers are the benefits they pay plus an estimate of their administrative costs. For employers who buy insurance, costs are the premiums they pay in the year plus benefits they pay under deductible arrangements in their insurance policies. From an insurance company's perspective, premiums received in a year are not expected to match up with benefits paid that year. Rather, the premiums are expected to cover all future liabilities for injuries that occur in the year. NASI measures of benefits and employer costs are

designed to reflect the aggregate experience of two stakeholder groups – workers who rely on compensation for workplace injuries and employers who pay the bills. The NASI measures are not designed to assess the performance of the insurance industry or insurance markets. Other organizations analyze insurance trends.²

For long-term trends, it is useful to consider workers' compensation benefits and employer costs relative to aggregate wages of covered workers. In a steady state, one might expect benefits to keep pace with covered wages. This would be the case with no change in the frequency or severity of injuries and if wage replacement benefits for workers and medical payments to providers tracked the growth of wages in the econo-

my generally. However, in reality, benefits and costs relative to wages vary significantly over the years.

In 2008, aggregate wages of covered workers rose by 1.7 percent (Table 2). When measured relative to the wages of covered workers, workers' compensation benefits for workers rose whereas employer costs fell in 2008 (Table 1). Total payments on workers' behalf rose by three cents to \$0.97 per \$100 of covered wages: medical payments rose from \$0.47 per \$100 of wages in 2007 to \$0.50 in 2008, while cash benefits fell by one cent per \$100 of wages to \$0.48. The cost to employers fell by 11 cents per \$100 of covered wages, to \$1.33 in 2008 from \$1.44 in 2007.

Figure 1 shows the trends in employer costs and in cash and medical benefits combined as a share of

Table 2

Number of Workers Covered under Workers' Compensation Programs and Total Covered Wages, 1989–2008

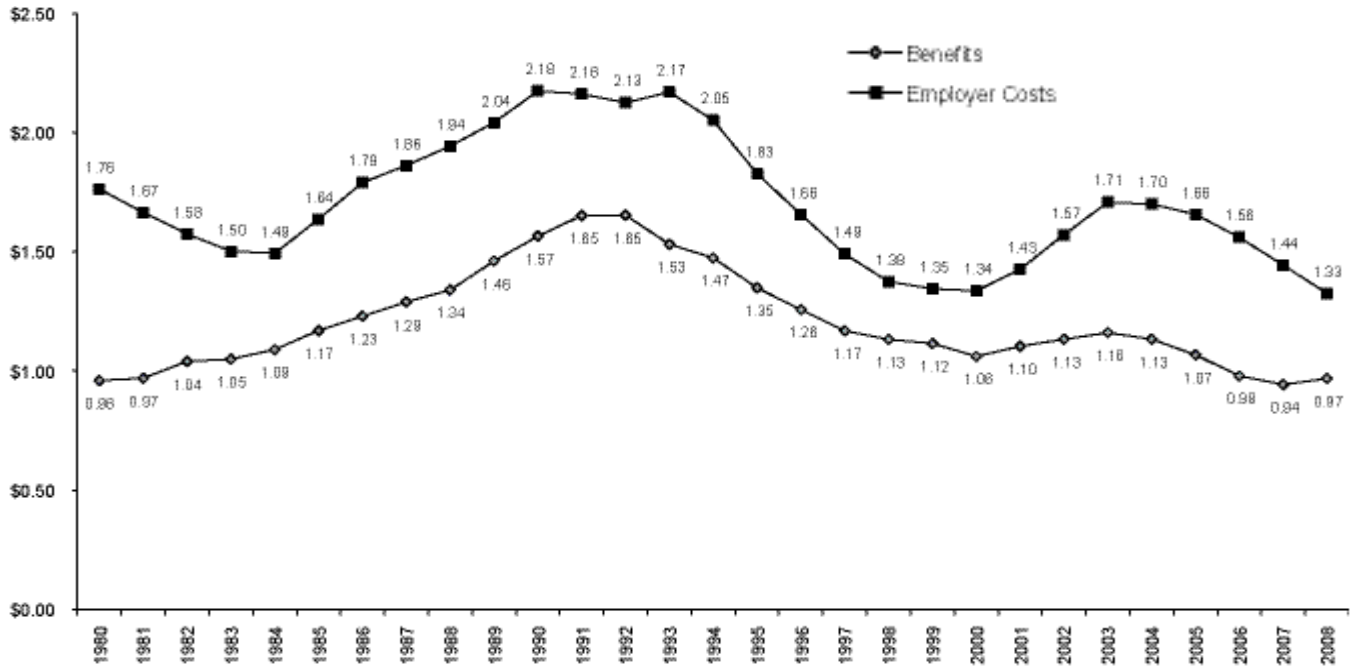
Year	Total Workers		Total Wages	
	(in thousands)	Percent Change	(in billions)	Percent Change
1989	103,900		\$ 2,347	
1990	105,500	1.5	2,442	4.0
1991	103,700	-1.7	2,553	4.5
1992	104,300	0.6	2,700	5.7
1993	106,200	1.8	2,802	3.8
1994	109,400	3.0	2,949	5.2
1995	112,800	3.1	3,123	5.9
1996	114,773	1.7	3,337	6.9
1997	118,145	2.9	3,591	7.6
1998	121,485	2.8	3,885	8.2
1999	124,349	2.4	4,151	6.8
2000	127,141	2.2	4,495	8.3
2001	126,972	-0.1	4,604	2.4
2002	125,603	-1.1	4,615	0.2
2003	124,685	-0.7	4,717	2.2
2004	125,878	1.0	4,953	5.0
2005	128,158	1.8	5,212	5.2
2006	130,339	1.7	5,543	6.3
2007	131,734	1.1	5,855	5.6
2008	130,643	-0.8	5,953	1.7

Source: National Academy of Social Insurance estimates. See Appendix A.

2 The National Council on Compensation Insurance (NCCI) and state rating bureaus, for example, assess insurance developments in the states and advise regulators and insurers on proposed system changes.

Figure 1

Workers' Compensation Benefits* and Employer Costs Per \$100 of Covered Wages, 1980–2008**



Source: National Academy of Social Insurance estimates.

* Benefits are payments in the calendar year to injured workers and to providers of their medical care.

** Costs are employer expenditures in the calendar year for workers' compensation benefits, administrative costs, and/or insurance premiums. Costs for self-insuring employers are benefits paid in the calendar year plus the administrative costs associated with providing those benefits. Costs for employers who purchase insurance include the insurance premiums paid during the calendar year plus the payments of benefits under large deductible plans during the year. The insurance premiums must pay for all of the compensable consequences of the injuries that occur during the year, including the benefits paid in the current as well as future years.

covered wages over the past 29 years. Benefits and costs declined sharply from their peaks in the early 1990s, reached a low in 2000, rebounded somewhat after 2000, and then declined in the last few years. As a share of covered wages, employers' costs in 2008 were lower than in any year since 1980. As a share of covered wages, benefits in 2008 were slightly higher than they were in 2007 at \$0.97 per \$100 of wages in 2008 (discussed in detail later in the report). As a percent of covered wages, paid benefits in 2007 and 2008 were lower than in any year since 1982.

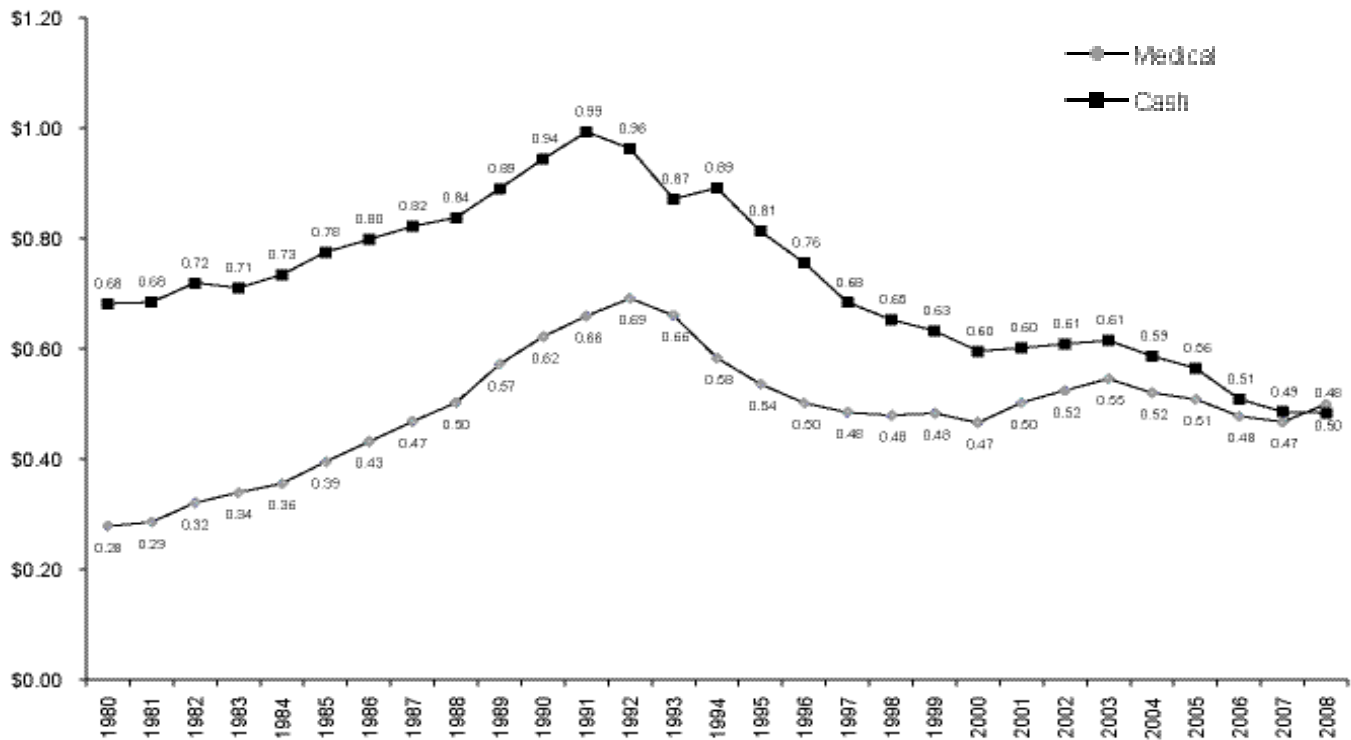
Figure 2 shows the trend in medical and cash payments separately. In 2008, cash benefits at \$0.48 per \$100 of wages were at their lowest point since 1980 when the data in Figure 2 begin. However medical benefits, which were \$0.50 per \$100 of wages in 2008, were much higher than at their lowest point since 1980, which was \$0.28 per \$100 of wages in 1980.

National Trends With and Without California

California's workers' compensation program has changed significantly over the past few years. Because it is a big state (with 13.1 percent of national payroll and 16.3 percent of total benefits in 2008), California's large shifts in benefits and employer costs have altered the course of national trends. For this reason, it is useful to examine national trends outside of California. Unprecedented growth in California workers' compensation costs in 2001-2003 led to major reforms in 2003 and 2004. The comprehensive changes sought to limit spending by introducing evidence based medical treatment guidelines, creating medical provider networks, setting time limits on temporary disability benefits, establishing a new rating schedule for permanent disability, and setting transparent fee schedules for outpatient surgery centers, hospitals, and pharmaceuticals. An Academy brief, *Workers' Compensation in California and the*

Figure 2

Workers' Compensation Medical and Cash Benefits Per \$100 of Covered Wages, 1980–2008



Source: National Academy of Social Insurance estimates.

Nation: Benefit and Employer Cost Trends, 1989-2005, tracks the California changes through 2005 (Sengupta, Reno, Baker, and Taylor, 2008).

Table 1 shows the 2008 changes in California and in the rest of the nation outside California. California's cash benefit payments dropped 7.5 percent in 2008. California medical benefit payments increased in 2008 by 5.5 percent. Costs to California employers fell 12.1 percent in 2008, which continued a trend of decreasing employer costs in California over the past five years. When California is excluded, total benefit payments in the rest of the nation increased by 5.5 percent (in contrast with a 4.4 percent increase when California is included). Employer costs outside California decreased by 5.7 percent (in contrast with a drop of 6.7 percent when California is included).

When changes in California are shown per \$100 of wages of covered workers, medical payments rose by three cents to \$0.66 per \$100 of wages and cash payments per \$100 of covered wages fell by five cents to \$0.55. Outside California medical benefits rose by

three cents to \$0.46, cash benefits remained unchanged at \$0.47 per \$100 of wages, and employer costs fell by 11 cents to \$1.28 per \$100 of covered wages.

Overview of Workers' Compensation

Workers' compensation provides benefits to workers who are injured on the job or who contract a work related illness. Benefits include medical treatment for work-related conditions and cash payments that partially replace lost wages. Temporary total disability benefits are paid while the worker recuperates away from work. If the condition has lasting consequences after the worker's healing period, permanent disability benefits may be paid. In case of a fatality, the worker's dependents receive survivor benefits. Workers' compensation benefits are not subject to federal or state income taxes.

Germany enacted the first modern workers' compensation laws, known as Sickness and Accident Laws, in 1884, following their introduction by Chancellor

Otto von Bismarck (Clayton, 2004). The next such laws were adopted in England in 1897. Workers' compensation was the first form of social insurance in the United States. The first workers' compensation law in the United States was enacted in 1908 to cover certain federal civilian workers. The first state laws were passed in 1911. The adoption of state workers' compensation programs has been called a significant event in the nation's economic, legal, and political history. The adoption of these laws in each state required great efforts by business and labor to reach agreements on the specifics of the benefits to be provided and on which industries and employers would have to provide these benefits. Today, each of the fifty states, the District of Columbia, and US territories has its own program. A separate program covers federal civilian employees. Other federal programs provide benefits to coal miners with black lung disease, Longshore and Harbor workers, employees of overseas contractors with the U.S. government, certain energy employees exposed to hazardous material, workers engaged in the manufacturing of atomic bombs, and veterans injured while on active duty in the armed forces.

Before workers' compensation laws were enacted, an injured worker's only legal remedy for a work-related injury was to bring a tort suit against the employer and prove that the employer's negligence caused the injury. At the time, employers could use three common-law defenses to avoid compensating the worker: assumption of risk (showing, for example, that the injury resulted from an ordinary hazard of employment³); the fellow worker rule (showing that the injury was due to a fellow-worker's negligence); and contributory negligence (showing that, regardless of any fault of the employer, the worker's own negligence contributed to the accident).

Under the tort system, workers often did not recover damages and experienced delays or high costs when they did. While employers generally prevailed in court, they nonetheless were at risk for substantial and unpredictable losses if the workers' suits were successful. Litigation created friction between employers and workers. Initial reforms took the form

of employer liability acts, which eliminated some of the common-law defenses. Nonetheless, employees still had to prove negligence, which remained a significant obstacle to recovery (Burton and Mitchell, 2003).⁴ Ultimately, both employers and employees favored workers' compensation legislation to ensure that a worker who sustained an occupational injury or disease arising out of and in the course of employment would receive predictable compensation without delay, regardless of who was at fault. As a quid pro quo, the employer's liability was limited. Under the exclusive remedy concept, the worker accepts workers' compensation as payment in full and gives up the right to sue. (There are limited exceptions to the exclusive remedy concept in some states, such as when there is an intentional injury of the employee.)

Workers' compensation programs vary across states in terms of who is allowed to provide insurance, which injuries or illnesses are compensable, and the level of benefits. Workers' compensation is financed almost exclusively by employers, although economists argue that workers pay for a substantial portion of the costs of the program in the form of lower wages (Leigh et al., 2000). Workers' compensation coverage is mandatory in all states but Texas. Generally, state laws require employers who wish to self-insure for workers' compensation to obtain approval from the state regulatory authority after demonstrating financial ability to carry their own risk (self-insure). For those employers who purchase insurance, the premiums are based in part on their industry classifications and the occupational classifications of their workers. Many employers are also experience-rated, which results in higher (or lower) premiums for employers whose past experience – as evaluated by actuarial formulas that consider injury frequency and aggregate benefit payments – is worse (or better) than the experience of similar employers in the same insurance classification. The employers' costs of workers' compensation can also be affected by other factors, such as deviations, schedule rating, and dividends (Thomason, Schmidle, and Burton, 2001). These competitive pricing adjustments vary over the course of the insurance underwriting cycle.

3 A more complete definition is provided by Willborn et. al (2007:851); "The assumption of risk doctrine barred recovery for the ordinary risks of employment; the extraordinary risks of employment, if the worker knew of them or might reasonably have been expected to know of them; and the risks arising from the carelessness, ignorance, or incompetency of fellow servants."

4 As a result, the employers' liability approach was abandoned in all jurisdictions and industries except the railroads, where it still exists.

Covered Employment and Wages

In 2008, workers' compensation covered an estimated 130.6 million workers, a decrease of 0.8 percent from the 131.7 million workers covered in 2007 (Table 2). Total wages of covered workers were \$5.9 trillion in 2008, an increase of 1.7 percent from 2007. This increase was the combined effect of 0.8 percent decrease in covered workers – due to recession which began in December 2007 – and a 2.5 percent increase in the workers' average wages. Workers' compensation coverage rules did not change significantly during this period.

Coverage Rules

Every state except Texas requires almost all private employers to provide workers' compensation coverage (IAIABC-WCRI, 2009). In Texas, coverage is voluntary, but employers not providing coverage are not protected from tort suits. An employee not covered by workers' compensation insurance or an approved self-insurance plan is allowed to file suit claiming the employer is liable for his or her work-related injury or illness in every state. Other states exempt employers from mandatory coverage of certain categories of workers, such as those in very small firms, certain agricultural workers, household workers, employees of charitable or religious organizations, or employees of some units of state and local government.

Employers with fewer than three workers are exempt from mandatory workers' compensation coverage in Arkansas, Georgia, Michigan, New Mexico, North Carolina, Virginia, West Virginia, and Wisconsin. Employers with fewer than four workers are exempt in Florida and South Carolina. Those with fewer than five employees are exempt in Alabama, Mississippi, Missouri, and Tennessee. The rules for agricultural workers vary among states. In all except fourteen states, farm employers are exempt from mandatory workers' compensation coverage altogether. In other states, coverage is compulsory for some or all farm employers.

Method for Estimating Coverage

Because no national system exists for counting workers covered by workers' compensation, the number of covered workers and their covered wages must be estimated. The Academy's methods for estimating coverage are described in Appendix A. In brief, we start with the number of workers and total wages in each state that are covered by unemployment insurance (UI). Almost all of U.S. wage and salary workers are covered by UI (NASI, 2002). We subtract from UI coverage the estimates of the workers and wages that are not required to be covered by workers' compensation because of exemptions for small firms and farm employers and because coverage for employers in Texas is voluntary. Using these methods we estimate that in 2008, 96.9 percent of all UI-covered workers and wages were covered by workers' compensation.⁵ Self-employed persons are not covered by unemployment insurance or usually by workers' compensation.

NASI's coverage estimates seek to count the number of workers who are legally required to be covered under the state laws. The methodology may undercount the number of persons who are actually covered. For example, in some states, self-employed persons may voluntarily elect to be covered and in those states with numerical exemptions, some small firms may voluntarily purchase workers' compensation insurance. The NASI methodology may also over estimate the number of workers actually covered by workers' compensation. Several recent studies have found that actual coverage is less than legally required coverage because of evasive strategies used by employers, such as not reporting employees or misclassifying them as independent contractors (Greenhouse, 2008; FPI, 2007). As a practical matter, NASI lacks the information needed to systematically estimate compliance or non-compliance with state laws.

5 According to unpublished estimates provided by the Bureau of Labor Statistics, only 3 percent of all employees who worked for employers who participated in the BLS National Compensation Survey (NCS) were employed in establishments that reported zero workers' compensation costs. The 3% figure was for all employees covered by the survey, as well as for employees in the private sector and employees in the state and local government sector. The NASI estimate of legally required coverage has a national average (96.9 percent of all UI covered workers in 2008) that is virtually identical to the workers' compensation coverage shown by the NCS.

Changes in State Coverage

Because the primary workers' compensation coverage rules did not change between 2007 and 2008, differences in growth rates among states generally reflect changes in the states' overall employment and wages. In Texas, where workers' compensation is voluntary for employers, coverage decreased from 76 percent of workers in 2007 to 75 percent in 2008 according to surveys of Texas employers. About 30 states recorded a fall in employment in 2008. With regard to wages covered under workers' compensation, all jurisdictions registered increases in 2008 over 2007 except Arizona, Florida, Georgia, Idaho, Michigan and Nevada (Table 3).

Workers' Compensation Benefits

Workers' compensation pays for medical care immediately and pays cash benefits for lost work time after a three-to-seven-day waiting period. Most workers' compensation cases do not involve lost work time greater than the waiting period for cash benefits. In these cases, only medical benefits are paid. "Medical only" cases are quite common, but they represent a small share of benefit payments. Medical-only cases accounted for 77 percent of workers' compensation cases, but only 8 percent of all benefits paid, according to information about insured employers in forty one states for policy years spanning 1998–2005 (NCCI, 2009). The remaining 23 percent of cases that involved cash benefits accounted for 92 percent of benefits for cash and medical care combined.

Cash benefits differ according to the duration and severity of the worker's disability. Temporary total disability benefits are paid when the worker is temporarily precluded from performing the pre-injury job or another job for the employer that the worker could have performed prior to the injury. Most states pay weekly benefits for temporary total disability that replace two-thirds of the worker's pre-injury wage (tax free), subject to a dollar maximum that varies from state to state. The maximum weekly benefit for Temporary Total Disability (TTD) ranged from

\$1,366 in Iowa to 398.93 in Mississippi. Nine states had a maximum of \$1,000 or more: Connecticut, District of Columbia, Illinois, Iowa, Massachusetts, New Hampshire, Oregon, Vermont and Washington. The eleven states with a maximum of weekly TTD of less than \$600 include Arizona, Arkansas, Georgia, Idaho, Kansas, Louisiana, Maine, Mississippi, New York, Oklahoma and South Dakota.⁶

Countrywide, roughly 70 percent of all workers compensation claims are for medical payments only, i.e., there is no compensable claim for lost time from work. For most lost time injuries, workers fully recover, return to work, and benefits end. In some cases, they return to work before they reach maximum medical improvement, usually with restricted duties and lower pay. In those cases, they receive temporary partial disability benefits in most states. Temporary disability benefits are the most common type of cash benefits. They account for 63 percent of cases involving cash benefits and 16 percent of benefits incurred (Figure 3). If a worker has very significant impairments that are judged to be permanent after he or she reaches maximum medical improvement, permanent total disability benefits might be paid. These cases are relatively rare. Permanent total disabilities, together with fatalities, account for one percent of all cases that involve cash benefits, and 17 percent of total cash benefit payments (Figure 3).

Permanent partial disability benefits are paid when the worker has physical impairments that, although permanent, do not completely limit the worker's ability to work. States differ in their methods for determining whether a worker is entitled to permanent partial benefits, the degree of partial disability and the amount of benefits to be paid (Barth and Niss, 1999; Burton, 2005). In some states, the permanent partial disability benefit begins after maximum medical improvement has been achieved. In some cases permanent disability benefits can simply be the extension of temporary disability benefits until the disabled worker returns to employment. Cash benefits for permanent partial disability are frequently limited to a specified duration or an

6 Details on benefit provisions of state laws are compiled in *Workers' Compensation Laws, 2nd Edition*, issued jointly by the IAIABC (International Association of Industrial Accident Board and Commissions) and the WCRI (Workers Compensation Research Institute), and are summarized in Appendix I.

Table 3**Number of Workers Covered by Workers' Compensation and Total Covered Wages, By State, 2004–2008**

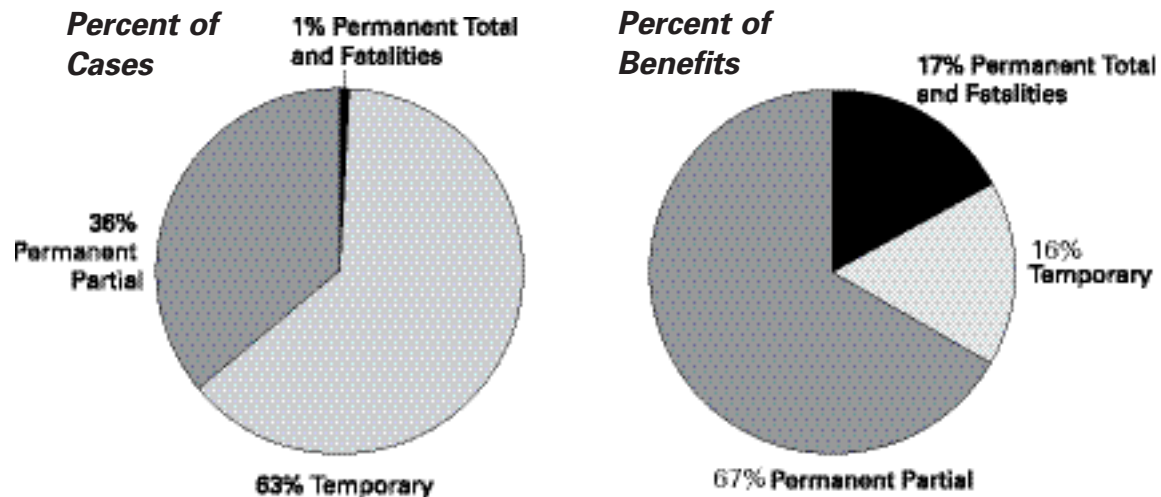
	Covered Workers (in thousands)					Covered Wages (in millions)					2007-2008 % Change
	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008	
Alabama	1,720	1,763	1,797	1,823	1,808	\$56,310	\$59,734	\$63,733	\$66,881	\$68,530	2.5
Alaska	279	285	291	294	298	10,582	11,145	11,829	12,576	13,344	6.1
Arizona	2,304	2,438	2,562	2,595	2,529	83,541	92,048	101,587	106,805	106,477	-0.3
Arkansas	1,073	1,092	1,112	1,119	1,117	32,014	33,674	35,512	37,684	38,472	2.1
California	14,706	14,992	15,256	15,395	15,248	653,145	689,220	734,344	774,856	781,948	0.9
Colorado	2,090	2,137	2,190	2,241	2,247	82,643	87,206	93,534	99,900	103,687	3.8
Connecticut	1,611	1,624	1,652	1,666	1,668	82,095	85,989	90,531	96,705	97,322	0.6
Delaware	406	412	417	418	416	17,209	18,370	19,259	19,727	19,720	0.0
District of Columbia	467	474	479	487	491	27,418	28,975	31,082	33,345	34,822	4.4
Florida	7,039	7,309	7,498	7,504	7,177	245,133	266,392	285,969	295,537	288,339	-2.4
Georgia	3,663	3,751	3,838	3,891	3,831	137,088	144,796	153,029	162,094	161,107	-0.6
Hawaii	554	572	586	594	587	18,893	20,170	21,527	22,751	23,213	2.0
Idaho	578	601	631	648	640	16,988	18,234	20,259	21,433	21,398	-0.2
Illinois	5,611	5,660	5,733	5,782	5,741	235,915	246,223	260,371	274,339	278,314	1.4
Indiana	2,802	2,827	2,845	2,858	2,823	96,522	99,459	103,263	106,460	107,620	1.1
Iowa	1,404	1,428	1,453	1,467	1,460	44,770	46,958	49,539	52,115	53,625	2.9
Kansas	1,263	1,272	1,293	1,324	1,342	40,854	42,610	45,708	48,589	50,775	4.5
Kentucky	1,688	1,717	1,738	1,760	1,748	55,423	57,711	60,527	63,553	64,742	1.9
Louisiana	1,831	1,807	1,776	1,837	1,853	57,648	59,917	64,267	69,554	74,131	6.6
Maine	583	581	584	588	585	18,282	18,636	19,387	20,272	20,854	2.9
Maryland	2,332	2,372	2,405	2,422	2,407	95,769	101,405	107,102	112,688	114,895	2.0
Massachusetts	3,087	3,110	3,146	3,185	3,197	150,515	155,261	164,373	175,410	180,867	3.1
Michigan	4,152	4,148	4,085	4,031	3,904	166,930	170,240	171,402	173,932	171,902	-1.2
Minnesota	2,567	2,607	2,637	2,655	2,631	103,238	105,878	110,727	117,268	120,038	2.4

Mississippi	1,026	1,032	1,042	1,057	1,053	-0.4	28,730	30,123	31,895	33,524	34,653	3.4
Missouri	2,466	2,499	2,532	2,555	2,541	-0.5	85,074	88,993	93,134	97,736	101,623	4.0
Montana	390	400	413	423	424	0.2	10,542	11,342	12,304	13,303	13,792	3.7
Nebraska	866	876	886	901	898	-0.3	26,990	28,106	29,637	31,420	32,219	2.5
Nevada	1,127	1,197	1,253	1,265	1,234	-2.5	41,514	46,104	49,863	53,018	52,688	-0.6
New Hampshire	605	613	619	622	621	-0.2	23,566	24,714	26,140	27,104	27,714	2.2
New Jersey	3,812	3,856	3,890	3,900	3,875	-0.6	182,512	190,048	200,091	209,120	213,418	2.1
New Mexico	703	720	748	763	766	0.4	21,420	22,790	25,116	26,986	28,284	4.8
New York	8,142	8,220	8,302	8,427	8,462	0.4	405,898	426,395	460,017	500,392	509,954	1.9
North Carolina	3,633	3,707	3,812	3,909	3,866	-1.1	125,399	132,140	141,640	150,910	152,519	1.1
North Dakota	309	316	323	330	338	2.7	8,811	9,313	9,978	10,720	11,686	9.0
Ohio	5,214	5,232	5,238	5,230	5,159	-1.4	188,314	193,622	200,236	206,919	208,573	0.8
Oklahoma	1,382	1,420	1,461	1,489	1,499	0.7	41,442	43,994	48,671	51,750	54,861	6.0
Oregon	1,565	1,623	1,671	1,699	1,684	-0.9	55,191	58,792	63,001	66,588	67,559	1.5
Pennsylvania	5,390	5,446	5,503	5,549	5,535	-0.2	206,104	214,203	225,608	237,990	243,716	2.4
Rhode Island	447	468	471	470	459	-2.4	16,576	17,865	18,771	19,304	19,480	0.9
South Carolina	1,697	1,725	1,759	1,795	1,780	-0.8	53,504	56,244	59,723	62,910	63,862	1.5
South Dakota	358	365	373	381	383	0.4	9,930	10,410	11,068	11,828	12,331	4.3
Tennessee	2,494	2,537	2,579	2,598	2,575	-0.9	86,074	89,989	95,817	100,434	101,910	1.5
Texas	6,949	7,193	7,498	7,636	7,651	0.2	265,326	286,422	315,913	338,828	349,132	3.0
Utah	1,037	1,080	1,135	1,184	1,182	-0.2	32,742	35,320	39,176	43,139	44,198	2.5
Vermont	292	295	297	297	294	-1.0	9,610	9,962	10,440	10,864	11,152	2.6
Virginia	3,268	3,348	3,401	3,437	3,418	-0.5	128,706	137,742	145,707	153,522	156,661	2.0
Washington	2,625	2,697	2,781	2,857	2,817	-1.4	102,162	108,677	118,182	127,500	130,084	2.0
West Virginia	665	673	683	684	669	-2.3	19,689	20,550	21,770	22,714	23,418	3.1
Wisconsin	2,626	2,657	2,679	2,694	2,668	-1.0	90,812	93,822	98,170	102,040	103,920	1.8
Wyoming	240	247	260	270	279	3.1	7,373	8,087	9,400	10,499	11,461	9.2
Total non-federal	123,139	125,424	127,610	129,007	127,881	-0.9	4,796,160	5,049,814	5,374,520	5,680,035	5,771,232	1.6
Federal employees	2,740	2,734	2,729	2,726	2,762	1.3	158,294	163,663	169,525	176,858	183,095	3.5
TOTAL	125,878	128,158	130,339	131,734	130,643	-0.8	4,953,089	5,212,075	5,542,613	5,855,361	5,952,522	1.7

Source: National Academy of Social Insurance estimates. See Appendix A.

Figure 3

Types of Disabilities in Workers' Compensation Cases with Cash Benefits, 2005



Cases classified as permanent partial include cases that are closed with lump sum settlements. Benefits paid in cases classified as permanent partial, permanent total and fatalities can include any temporary total disability benefits also paid in such cases. The data are from the first report from the NCCI *Annual Statistical Bulletin*.

Source: *Annual Statistical Bulletin*, NCCI 2009, Exhibits X and XII.

aggregate dollar limit. Permanent partial disabilities account for 36 percent of cases that involve any cash payments and for 67 percent of benefit payments.

An in-depth study examined the likelihood that workers' compensation claimants would receive permanent partial disability benefits. It focused on individuals in six states who had experienced more than seven days of lost work time. Those who subsequently received permanent partial benefits ranged from about three in ten in one state to more than half of cases with at least one week of lost work time in two other states (Barth, Helvacian, and Liu, 2002). Methods for compensating permanent impairments fall into several broad categories (Barth, 2004). About 44 jurisdictions use a schedule—a list of body parts that are covered. Typically, a schedule appears in the underlying statute and lists benefits to be paid for specific losses (e.g. the loss of a finger). These losses schedules include the upper and lower extremities and may also include one or both eyes. Most state schedules also include the loss of hearing in one or both ears. Injuries to the spine that are permanently disabling are typically not scheduled, nor are injuries to internal organs, head injuries, and occupational diseases. Historically, the schedules

were the list of covered injuries and the unscheduled injury methodologies followed later. For unscheduled conditions, the approaches used can be categorized into four methods:

- An *impairment-based approach*, used in 19 states, is most common. In approximately 14 of these states, a worker with an unscheduled permanent partial disability receives benefits based entirely on the degree of impairment with or without a formula that takes into account the personal characteristics of the injured worker. Any future earnings losses of the worker are not considered.
- A *loss-of-earning-capacity approach* is used in 13 states. This approach links the benefit to the worker's ability to earn or to compete in the labor market and involves a forecast of the economic impact that the impairment will have on the worker's future earnings.
- In a *wage-loss approach*, used in 10 states, benefits are paid for the actual or ongoing earnings losses that a worker incurs.
- In a *bifurcated approach* used in ten jurisdictions, the benefit for a permanent disability

depends on the worker's employment status at the time that the worker's condition is assessed, after the condition has stabilized. If the worker has returned to employment with earnings at or near the pre-injury level, the benefit is based on the degree of impairment. If the worker has not returned to employment, or has returned but at lower wages than before the injury, the benefit is based on the degree of lost earning capacity.

In Massachusetts, Rhode Island, and Oregon (since 2005) injured workers can qualify for two tracks of permanent partial disability benefits paid concurrently, one of which is designed to compensate for work disability and one of which is designed to compensate for noneconomic loss (Burton, 2008b). The noneconomic loss benefits are known as impairment benefits in Oregon and as specific injuries in Massachusetts. Florida also used the concurrent or dual benefits approach from 1979 to 1990, where one track of benefits was based on the extent of actual wage loss and the other on the degree of permanent impairment.

Method for Estimating Paid Benefits

Our estimates of workers' compensation benefits paid are based on three main sources: responses to the Academy's questionnaire from state agencies, data from the National Association of Insurance Commissioners (NAIC), and data purchased from A.M. Best, a private company that specializes in collecting insurance data and rating insurance companies. The A.M. Best data used for this report show benefits paid in each state for 2004 through 2008. They include information for all private carriers in every state and for eighteen of the twenty-six state funds, but do not include any information about the remaining state funds, self-insured employers, or benefits paid under deductible arrangements. Under deductible policies written by private carriers or state funds, the insurer pays all of the workers' compensation benefits, but employers are responsible for reimbursing the insurer for those benefits up to a specified deductible amount.

Deductibles may be written into an insurance policy on a per-injury basis, an aggregate basis, or a combination of a per-injury basis with an aggregate cap. States vary in the maximum deductibles they allow.

In return for accepting a policy with a deductible, the employer pays a lower premium. Appendix C summarizes the kinds of data each state reported. States had the most difficulty reporting amounts of benefits paid under deductible arrangements. The Academy's methods for estimating these benefits are described in Appendix G. If states were unable to report benefits paid by self-insured employers, these amounts had to be estimated; the methods for estimating self-insured benefits are described in Appendix E.

In addition to private carriers, state funds, and self-insurance, many states also have second injury funds, which are described in Appendix C. The data for second injury fund payments are included in Appendix Table J1 and nationally resulted in more than \$1 billion of paid benefits in each year from 2004 to 2008. For the first time, the benefit data in this report contain second injury fund data, which in Table 4 are distributed across private carrier, state fund, and self-insurance benefits data according to the share of benefits paid by these three types of insurance arrangements in each state. Second injury funds reimburse employers or insurance carriers for part of workers' compensation benefits in certain instances when an employee with a pre-existing impairment suffers a further work-related injury or disease. The employer is responsible for workers' compensation benefits only for the second injury or disease. The purpose of second injury funds is to encourage employers to hire disabled workers. Second injury funds are financed through general state revenues or assessments on workers' compensation insurers and self-insuring employers.

Many states also have one or more funds that guarantee payment of benefits in case private carriers or self-insuring employers are unable to make payments because of bankruptcy or other financial problems. The guaranty funds are described in Appendix C and the data on benefits paid by these guarantee funds from 2004 to 2008 are shown in Appendix Tables J2 and J3. The national total of payments by guaranty funds for private insurance carriers declined from \$718 million in 2004 to \$248 million in 2008 (Table J2). The national total of payments by guaranty funds for self-insuring employers varied from \$12.6 million to \$40.3 million between 2004 and 2008 (Table J3). For the first time, the benefits data in this report includes the data on payments by guaranty funds. The benefits paid by guaranty funds for

Table 4**Workers' Compensation Benefits by Type of Insurer and Share of Medical Benefits, 1960–2008 (in millions)**

Year	Total Benefits		Private Carriers(a)		State Funds(a)		Federal(b)		Self-Insured		Medical	
	Total	Percent Change	Total	Percent Share	Total	Percent Share	Total	Percent Share	Total	Percent Share	Total	Percent Medical
1960	\$1,295	11.0	\$810	62.5	\$264	20.4	\$61	4.7	\$160	12.4	\$435	33.6
1961	1,374	6.1	851	61.9	284	20.7	63	4.6	176	12.8	460	33.5
1962	1,489	8.4	924	62.1	305	20.5	66	4.4	194	13.0	495	33.2
1963	1,583	6.3	988	62.4	318	20.1	70	4.4	207	13.1	525	33.2
1964	1,708	7.9	1,070	62.6	339	19.8	73	4.3	226	13.2	565	33.1
1965	1,813	6.1	1,124	62.0	371	20.5	74	4.1	244	13.5	600	33.1
1966	2,000	10.3	1,239	62.0	404	20.2	82	4.1	275	13.8	680	34.0
1967	2,190	9.5	1,363	62.2	430	19.6	94	4.3	303	13.8	750	34.2
1968	2,376	8.5	1,482	62.4	451	19.0	105	4.4	338	14.2	830	34.9
1969	2,634	10.9	1,641	62.3	486	18.5	121	4.6	386	14.7	920	34.9
1970	3,030	15.0	1,843	60.8	497	16.4	258	8.5	432	14.3	1,050	34.7
1971	3,563	17.6	2,005	56.3	549	15.4	549	15.4	460	12.9	1,130	31.7
1972	4,062	14.0	2,179	53.6	633	15.6	746	18.4	504	12.4	1,250	30.8
1973	5,104	25.7	2,514	49.3	720	14.1	1,278	25.0	592	11.6	1,480	29.0
1974	5,781	13.3	2,971	51.4	823	14.2	1,263	21.8	724	12.5	1,760	30.4
1975	6,598	14.1	3,422	51.9	957	14.5	1,367	20.7	852	12.9	2,030	30.8
1976	7,585	15.0	3,976	52.4	1,088	14.3	1,482	19.5	1,039	13.7	2,380	31.4
1977	8,629	13.8	4,629	53.6	1,209	14.0	1,541	17.9	1,250	14.5	2,680	31.1
1978	9,796	13.5	5,256	53.7	1,221	12.5	1,822	18.6	1,497	15.3	2,980	30.4
1979	12,027	22.8	6,157	51.2	1,709	14.2	2,313	19.2	1,848	15.4	3,520	29.3
1980	13,618	13.2	7,029	51.6	1,797	13.2	2,533	18.6	2,259	16.6	3,947	29.0
1981	15,054	10.5	7,876	52.3	2,017	13.4	2,578	17.1	2,583	17.2	4,431	29.4
1982	16,408	9.0	8,647	52.7	2,191	13.4	2,577	15.7	2,993	18.2	5,058	30.8
1983	17,575	7.1	9,265	52.7	2,443	13.9	2,618	14.9	3,249	18.5	5,681	32.3
1984	19,686	12.0	10,610	53.9	2,754	14.0	2,651	13.5	3,671	18.6	6,424	32.6
1985	22,217	12.9	12,341	55.5	3,059	13.8	2,685	12.1	4,132	18.6	7,498	33.7
1986	24,613	10.8	13,827	56.2	3,554	14.4	2,694	10.9	4,538	18.4	8,642	35.1
1987	27,317	11.0	15,453	56.6	4,084	15.0	2,698	9.9	5,082	18.6	9,912	36.3
1988	30,703	12.4	17,512	57.0	4,687	15.3	2,760	9.0	5,744	18.7	11,507	37.5
1989	34,316	11.8	19,918	58.0	5,205	15.2	2,760	8.0	6,433	18.7	13,424	39.1
1990	38,237	11.4	22,222	58.1	5,873	15.4	2,893	7.6	7,249	19.0	15,187	39.7
1991	42,187	10.3	24,515	58.1	6,713	15.9	2,998	7.1	7,962	18.9	16,832	39.9
1992	44,660	5.9	24,030	53.8	7,829	17.5	3,158	7.1	9,643	21.6	18,664	41.8
1993	42,925	-3.9	21,773	50.7	8,105	18.9	3,189	7.4	9,857	23.0	18,503	43.1
1994	43,482	1.3	21,391	49.2	7,398	17.0	3,166	7.3	11,527	26.5	17,194	39.5
1995	42,122	-3.1	20,106	47.7	7,681	18.2	3,103	7.4	11,232	26.7	16,733	39.7
1996	41,960	-.4	21,024	50.1	8,042	19.2	3,066	7.3	9,828	23.4	16,739	39.9
1997	41,971	.0	21,676	51.6	7,157	17.1	2,780	6.6	10,357	24.7	17,397	41.5
1998	43,987	4.8	23,579	53.6	7,187	16.3	2,868	6.5	10,354	23.5	18,622	42.3
1999	46,313	5.3	26,383	57.0	7,083	15.3	2,862	6.2	9,985	21.6	20,055	43.3
2000	47,699	3.0	26,874	56.3	7,388	15.5	2,957	6.2	10,481	22.0	20,933	43.9
2001	50,827	6.6	27,905	54.9	8,013	15.8	3,069	6.0	11,839	23.3	23,137	45.5
2002	52,297	2.9	28,085	53.7	9,139	17.5	3,154	6.0	11,920	22.8	24,203	46.3
2003	54,739	4.7	28,395	51.9	10,442	19.1	3,185	5.8	12,717	23.2	25,733	47.0
2004	56,149	2.6	28,632	51.0	11,146	19.9	3,256	5.8	13,115	23.4	26,079	46.4
2005	55,630	-.9	28,483	51.2	11,036	19.8	3,258	5.9	12,853	23.1	26,036	46.8
2006	54,274	-2.4	27,733	51.1	10,628	19.6	3,270	6.0	12,643	23.3	25,962	47.8
2007	55,217	1.7	28,492	51.6	10,323	18.7	3,340	6.0	13,062	23.7	26,720	48.4
2008	57,633	4.4	30,150	52.3	10,482	18.2	3,424	5.9	13,578	23.6	29,063	50.4

Table 4 continued

- (a) Estimated benefits paid under deductible provisions are included beginning in 1992. Benefits are payments in the calendar year to injured workers and to providers of their medical care.
- (b) In all years, federal benefits includes those paid under the Federal Employees' Compensation Act for civilian employees and the portion of the Black Lung benefit program that is financed by employers and are paid through the federal Black Lung Disability Trust Fund. In years before 1997, federal benefits also include the other part of the Black Lung program that is financed solely by federal funds. In 1997–2008, federal benefits also include a portion of employer-financed benefits under the Longshore and Harbor Workers Compensation Act that are not reflected in state data—namely, benefits paid by self-insured employers and by special funds under the LHWCA. See Appendix H for more information about federal programs.

Source: National Academy of Social Insurance estimates. See Appendices B and H. SSA's Annual Statistical Supplement, 2009 and DOL, 2010

private carriers are included in the total of benefit payments by private carriers in Table 4 and the benefits paid by guaranty funds for self-insuring employers are included in the self-insured employers benefit payments in Table 4.

This is the first year that the NASI report has included payments by second injury funds and guaranty funds in the state data in Table 4 and in the national data used throughout the report. We have revised our estimates of state benefit payments for 2004 to 2007 to include these payments, as shown in Appendix Tables D1 to D4, and these revised state data are included in our revised data on benefits payments. Since this is the first year for this expanded scope of benefit payments, we anticipate that we may have missed data on benefit payments from some states despite our best efforts to obtain these data. We hope to add data from other states to our 2011 report, which will provide data of state benefit payments from 2005 to 2009. In addition, many states have funds that pay benefits to workers whose employers are illegally uninsured, and we hope to add data on benefit payments by these funds to our 2011 report.

We made significant changes in the procedures used to estimate benefit payments for two states in this report. In California, we included not only benefit payments (or losses, to use the insurance terminology included in the *Glossary*), but also medical cost containment expenses in our data on paid benefits in previous editions of the NASI report on workers' compensation benefits, coverage, and costs. In other states, we restricted our data to benefit payments and excluded medical cost containment expenses from

our estimates of paid benefits. We have revised the California data from 2001 onwards to only include paid benefits for California (and not medical cost containment expenses) for medical benefits in California. The effect of the changes in our procedure for estimating benefits in California was to reduce paid benefits in 2007 from \$9.9 billion (Table 8 of Sengupta, Reno, and Burton (2009)) to \$9.5 billion (Table D1 of the current report.)

In New Jersey, in previous years, we had estimated the benefit payments for self-insuring employers using the national average for the share of benefits accounted for by self-insurers, using the procedure we still use for New York described in Step F of Appendix E in this report. This year we have imputed New Jersey's self-insured benefits using payroll data provided by the New Jersey Compensation Rating & Inspection Bureau as described in Step E of Appendix E. The new procedure indicates that payments by self-insuring employers in New Jersey are relatively less important than we previously reported. For example, the share of benefits paid for by New Jersey self-insuring employers in 2007 shown in Table 8 of the NASI report published in 2009 was 23.7 percent, while the share of 2007 benefits paid for by self-insured employers shown in Appendix Table D1 is 18.7 percent.

A detailed, state-by-state explanation of how the estimates in this report are produced is provided in *Sources and Methods: A Companion to Workers' Compensation: Benefits, Coverage, and Costs, 2008* on the Academy's website at www.nasi.org.

National Trends in Benefits by Insurance Arrangements

Workers' compensation benefits can be paid by private insurance carriers, by state or federal workers' compensation funds, or by self-insuring employers. Table 4 provides data on workers' compensation benefits by type of insurer for 1960 through 2008. (The data in Table 4 do not show separately benefits paid under deductible insurance policies, which are considered in a subsequent subsection.)

Private insurance carriers remain the largest source of workers' compensation benefits in 2008, when they accounted for 52.3 percent of benefits paid. Private carriers currently are allowed to sell workers' compensation insurance in all but four states that have exclusive state funds—Ohio, North Dakota, Washington, and Wyoming.⁷ As shown in Table 4, the share of benefits paid by private carriers has varied between 47.7 and 62.6 percent since 1960.

The share of benefits paid by state workers' compensation funds has varied from 12.5 and 20.7 percent since 1960. The share of benefits provided by state funds declined from 18.7 percent in 2007 to 18.2 percent in 2008. A total of twenty-six states had state funds that paid workers' compensation in 2008. They include the four exclusive state fund states (plus West Virginia, where the former exclusive state fund continued to pay benefits), and twenty-one others in which the state funds compete with private carriers. In general, state funds are established by an act of the state legislature, have at least part of their board appointed by the governor, are usually exempt from federal taxes, and typically serve as the insurer of last resort—that is, provide insurance coverage to employers who have difficulty purchasing it privately. Not all state funds meet all these criteria, however. In some cases, it is not altogether clear whether an entity is a state fund or a private insurer, or whether it is a state fund or a state entity that is self-insuring workers' compensation benefits for its own employees. Consequently, the Academy's expert panel decided to classify as state funds all twenty-six entities that are members of the American Association of State Compensation Insurance Funds (AASCIF, 2009). This includes the South Carolina fund, which

is the required insurer for state employees and is available to cities and counties to insure their employees, but does not insure private employers.

Payments of workers' compensation benefits by federal funds have varied between 4.1 and 25.0 percent of all benefit payments since 1960. The share declined from 7.4 percent of all benefit payments in 1995 to 5.9 percent in 2008. These benefits include payments under the Federal Employees' Compensation Act for civilian employees and the portion of the Black Lung benefit program that is financed by employers and paid through the federal Black Lung Disability Trust Fund. Federal benefits also include benefits under the Longshore and Harbor Workers' Compensation Act that are paid by self-insured employers and by special funds under that Act. More details about these federal programs, and the Energy Employees Occupational Illness Program Act, which is not included here, are in Appendix H.

The share of benefits accounted for by self-insuring employers has varied between 11.6 and 26.7 percent since 1960. Since 2000, the share has been relatively stable, varying from 22.0 to 23.7 percent. Employers are allowed to self-insure for workers' compensation in all states except North Dakota and Wyoming, which require all employers to obtain insurance from their state funds. In other states, employers may apply for permission from the regulatory authority to self-insure their risk for workers' compensation benefits if they prove they have the financial capacity to do so. Many large employers choose to self-insure. Some states permit groups of employers in the same industry or trade association or self-insure through group self-insurance. Benefits provided under group self-insurance are included with the self-insured benefits in this report.

National Trends in Cash and Medical Benefits

On the national level, total benefits (cash plus medical) were 4.4 percent higher in 2008 than in 2007. This national increase in benefit payments was solely due to an increase in medical benefits by 8.8 percent, since cash benefits increased only by 0.3 percent between 2007 and 2008.

7 The West Virginia exclusive state fund was no longer selling policies in 2008 but was still paying benefits in 2008 for policies sold in previous years.

The shares of paid benefits accounted for by medical benefits for 1960 to 2008 are shown in Table 4 and Figure 4. Medical benefits accounted for 33.1 percent to 34.9 percent of all benefit payments in the 1960s, and then generally declined during the 1970s until reaching a low point of 29.0 percent of benefit payments in 1980. Since then, medical benefits have increased their relative importance, accounting for 39.7 percent of all benefit by 1990 and for 43.9 percent of all benefits by 2000. During the current decade, medical benefits have continued to grow more rapidly than cash benefits, and in 2008 for the first time accounted for over half (50.4 percent) of all benefits paid during the year. The increasing importance of medical benefits in recent decades is due in part to the general factors that have increased the share of Gross National Product devoted to medical care.

National Trends in Deductibles and Self Insurance

Under deductible policies written by private carriers or state funds, the insurer pays all of the workers' compensation benefits, but employers are required to

reimburse the insurers for those benefits up to a specified deductible amount, or pay claims themselves up to the deductible amount. In the previous analysis, the deductible amounts were attributed to the private carriers or state funds that initially paid the benefits. In this subsection, the deductible amounts are attributed to the employers who are required to reimburse the insurers for the deductible amounts.

Prior to the 1990s, policies with deductibles were not common, but their popularity grew in the mid 1990s. In 1992, benefits under deductible policies totaled \$1.3 billion, or about 2.8 percent of total benefits (Table 5). By 2000 they had risen to \$6.2 billion, or 13.0 percent of total benefits. In 2008, deductibles totaled \$8.1 billion, which was 14.1 percent of total benefits paid. Table 5 also shows separately the estimated dollar amount of benefits that employers paid under deductible provisions with each type of insurance.

In Table 4, benefits reimbursed by employers under deductible policies were included with private carri-

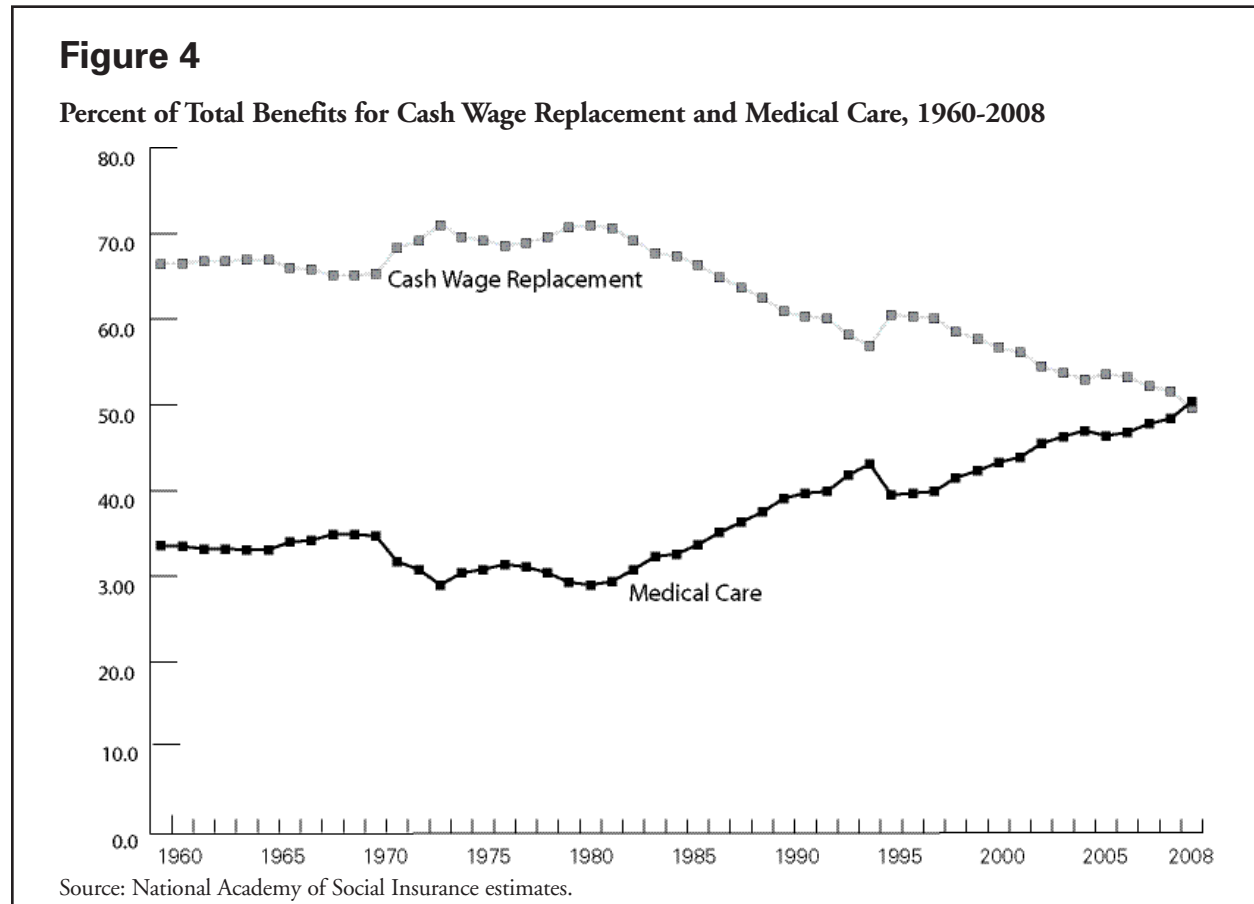


Table 5**Estimated Employer-Paid Benefits under Deductible Provisions for Workers' Compensation, 1992–2008 (in millions)**

Year	Total	Private Carriers	State Funds	Deductibles as a % of Total Benefits
1992	\$1,250	\$1,250	*	2.8
1993	2,027	2,008	\$ 19	4.7
1994	2,834	2,645	189	6.5
1995	3,384	3,060	324	8.0
1996	3,716	3,470	246	8.9
1997	3,994	3,760	234	9.5
1998	4,644	4,399	245	10.6
1999	5,684	5,452	232	12.3
2000	6,201	5,931	270	13.0
2001	6,388	6,085	303	12.6
2002	6,922	6,511	411	13.2
2003	8,020	7,547	474	14.7
2004	7,645	7,134	510	13.6
2005	7,990	7,487	504	14.4
2006	7,655	7,150	505	14.1
2007	7,737	7,218	519	14.0
2008	8,113	7,599	514	14.1

* Negligible

Note: Data on deductible benefits were available from seven states. Five states do not allow policies with deductibles. For twelve states data were computed by subtracting various components from total benefit figures provided. For the other twenty-six states and the District of Columbia, deductible benefits were calculated using a ratio of the manual equivalent premiums.

ers or state fund benefits, depending on the type of insurer. Table 6 presents the shares of all benefits paid by private carriers and state funds with and without deductibles. It also includes the percentage share of federal benefits and the share of benefits paid by self-insured.

Employers who have policies with deductibles are, in effect, self-insuring up to the amount of the deductible. That is, they are bearing that portion of the financial risk. Adding deductibles to self-insured benefit payments shows the share of the total market where employers are assuming financial risk (Column (9) of Table 6). This share of total benefit payments for which employers assumed the financial risks rose rapidly from 24.4 percent in 1992 to 34.7 percent in 1995, and then remained between 32 and

36 percent of total benefits through 2001. Between 2003 and 2008 the employers' share of paid benefits has stabilized between 37 and 38 percent of benefit payments. As the share of benefits accounted for by employers directly or through deductibles has increased since the early 1990s, the share of private carrier payments net of deductibles has declined: from 58.1 percent of total benefits in 1990 to 39.1 percent of total benefits in 2008 (Table 6, Column (3)).

The growth in self-insurance and in deductible policies in the early 1990s, as well as the downturn in self-insurance later in the 1990s, probably reflects dynamics of the insurance market that altered the relative cost to employers of purchasing private insurance vis-à-vis self-insuring as well as the rate of

Table 6**Total Amount and Percentage Distribution of Workers' Compensation Benefit Payments by Type of Insurer, 1990–2008**

Year	Total Benefits (in millions)	Percentage Distribution									Total
		Private Carriers			State Funds			Federal ^b	Self-Insured	Self-Insured plus Deductibles	
		All	Deductibles ^a	All without deductibles	All	Deductibles ^a	All without deductibles				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	9=(2)+(5)+(8)	10=(1)+(4)+(7)+(8)		
1990	\$38,237	58.1	*	58.1	15.4	*	15.4	7.6	19.0	19.0	100.0
1991	42,187	58.1	*	58.1	15.9	*	15.9	7.1	18.9	18.9	100.0
1992	44,660	53.8	2.8	51.0	17.5	*	17.5	7.1	21.6	24.4	100.0
1993	42,925	50.7	4.7	46.0	18.9	*	18.9	7.4	23.0	27.6	100.0
1994	43,482	49.2	6.1	43.1	17.0	0.4	16.6	7.3	26.5	33.0	100.0
1995	42,122	47.7	7.3	40.5	18.2	0.8	17.5	7.4	26.7	34.7	100.0
1996	41,960	50.1	8.3	41.8	19.2	0.6	18.6	7.3	23.4	32.3	100.0
1997	41,971	51.6	9.0	42.7	17.1	0.6	16.5	6.6	24.7	34.2	100.0
1998	43,987	53.6	10.0	43.6	16.3	0.6	15.8	6.5	23.5	34.1	100.0
1999	46,313	57.0	11.8	45.2	15.3	0.5	14.8	6.2	21.6	33.8	100.0
2000	47,699	56.3	12.4	43.9	15.5	0.6	14.9	6.2	22.0	35.0	100.0
2001	50,827	54.9	12.0	42.9	15.8	0.6	15.2	6.0	23.3	35.9	100.0
2002	52,297	53.7	12.4	41.3	17.5	0.8	16.7	6.0	22.8	36.0	100.0
2003	54,739	51.9	13.8	38.1	19.1	0.9	18.2	5.8	23.2	37.9	100.0
2004	56,149	51.0	12.7	38.3	19.9	0.9	18.9	5.8	23.4	37.0	100.0
2005	55,630	51.2	13.5	37.7	19.8	0.9	18.9	5.9	23.1	37.5	100.0
2006	54,274	51.1	13.2	37.9	19.6	0.9	18.7	6.0	23.3	37.4	100.0
2007	55,217	51.6	13.1	38.5	18.7	0.9	17.8	6.0	23.7	37.7	100.0
2008	57,633	52.3	13.2	39.1	18.2	0.9	17.3	5.9	23.6	37.6	100.0

* Negligible

a The percentage of total benefits paid by employers under deductible provisions with this type of insurance.

b Reflects federal benefits included in Table 4.

Source: National Academy of Social Insurance estimates based on Tables 4 and 6.

change in underlying system costs. Insurers began offering large-deductible policy options as a way to compete with self-insurance even though, in many cases, insurers were providing first dollar claims administration while receiving less than a first dollar premium. There are several factors influencing decisions to purchase insurance or to self-insure. One is that workers' compensation losses usually involve a high frequency of low-cost claims and a low frequen-

cy of high-cost claims. This characteristic of workers' compensation allows large employers to estimate the annual cost generated by these smaller claims so that their cost can be budgeted should the employer decide to self-insure, while the employer can protect itself from the more unpredictable large claims through some form of "excess" insurance arrangement.

Residual markets, which are available in many states as the market of last resort for employers unable to secure mandatory workers' compensation coverage in the voluntary market, can also influence decisions about whether to purchase insurance or self-insure. This is especially true in markets where the regulated price for such coverage is inadequate and employers in the voluntary market may be subject to higher prices needed to fund insurer assessments for residual market losses (a similar experience occurs for policyholders of state funds that are the market of last resort).

An employer may also decide to self-insure or partially self-insure because it wishes to either administer its own claims or to be free to select a claims administrator other than the insurer. The timing of tax advantages can also make the purchase of insurance attractive—that is, employers can take an immediate tax deduction for premiums they pay for insurance, while, when they self-insure, tax deductions accrue only later as they pay claims. Burton (2004: 11-12) provides another explanation of why some employers purchased insurance policies with large deductibles: “The amount reimbursed by the employer is not considered insurance for purposes of assessments for the residual market or other special funds in most states.”

State Benefits

Table 7 shows annual changes in state benefit payments between 2004 and 2008. In nine jurisdictions, benefits declined between 2007 and 2008 – the District of Columbia, Hawaii, Idaho, Maine, Massachusetts, Michigan, South Dakota, West Virginia and Wisconsin. The largest decline was in Wisconsin, down 7.6 percent. The other 42 states showed an increase in benefits. The largest increase was in Louisiana, where benefits were up by 19.5 percent.

Benefits and how they are reported vary within a state from year to year for many reasons, including:

- Changes in workers' compensation statutes, new court rulings, or new administrative procedures;
- Changes in the mix of occupations or industries, because jobs differ in their rates of injury and illness;
- Fluctuations in employment, because more people working means more people at risk of a job-related illness or injury;
- Changes in wage rates to which benefit levels are linked;
- Variations in health care practice, which influence the costs of medical care;
- Fluctuations in the number and severity of injuries and illnesses for other reasons (for example, in a small state, one industrial accident involving many workers in a particular year can show up as a noticeable increase in statewide benefit payments);
- Changes in reporting procedures (for example, as state agencies update their record keeping systems, the type of data they are able to report often changes, and new legislation can also affect the data states are able to provide); and
- States where changes in the procedures or criteria for lump-sum settlements may affect the amounts in the agreements classified as indemnity payments or medical benefits, thus altering the share of total benefits reported as medical benefits.

State Benefits by Type of Insurance Arrangements

The shares of workers' compensation benefits by type of insurer vary considerably among the states (Table 8). In the four states with exclusive state funds, the shares accounted for by the state funds vary from 99.9 percent in North Dakota and 98.4 percent in Wyoming – states that do not allow self-insurance – to 82.5 percent in Ohio and 75.9 percent in Washington – states that allow qualifying employers to self-insure. Private carriers account for a very small percentage of benefits in these states (other than North Dakota).⁸

In 2008, West Virginia transitioned from a state with an exclusive state fund allowing self-insurance to a state with private insurance carriers and self-

8 The presence of private carriers in states with exclusive state funds may be due to policies sold to employers in those states providing multi-state coverage and also because some exclusive funds may be restricted to providing workers' compensation benefits for the state in which the exclusive state fund issues the policy and might not be permitted to offer employers liability coverage, federal Longshore and Harbor Workers' Compensation Act coverage, or excess coverage for authorized self-insurers.

insurance but no state fund as of 2009. During 2008, the state fund still accounted for 50.8 percent of all benefit payments, in part because many workers with injuries prior to 2008 were still receiving their benefits from the state fund in that year. According to the 2009 Annual Financial Report of the Offices of the Insurance Commissioner in West Virginia, “a significant milestone in the State’s transition of its workers’ compensation system into a competitive insurance market with only private insurance carrier was reached as the insurance market opened to all licensed carriers on July 1, 2008.” As of June 20, 2009, one hundred and fifty four private insurance carriers had written workers’ compensation policies in West Virginia.

In the twenty-one states with competitive state funds in 2008, the percentage of benefits accounted for by the state funds varied from 57.0 percent in Rhode Island to 5.5 percent in Minnesota. The share of self-insurance in states that allow this insurance arrangement varies widely by state, ranging from highs of 52.9 percent in Alabama to lows of 3.5 percent in South Dakota. (North Dakota and Wyoming do not allow self-insurance.) This wide variation in the share of self-insurance reflects the complex nature of the workers’ compensation insurance market.

Medical Benefits by State

The share of paid benefits for medical care (as opposed to cash benefits) varies among states (Table 8). In 2008, the share of benefits for medical care ranged from lows of less than 40 percent—in the District of Columbia, Massachusetts, Michigan, Rhode Island, and Washington—to highs of over 60 percent in Alabama, Alaska, Arizona, Arkansas, Delaware, Florida, Idaho, Indiana, Kansas, Nebraska, New Hampshire, South Dakota, Texas, Utah and Wisconsin.

Many factors in a state can influence the relative share of benefits for medical care as opposed to cash benefits. Among them are:

- Differences in waiting periods for cash benefits and levels of earnings replacement provided by cash benefits, which meant that, all else being equal, states with more generous cash benefits

have a lower share of benefits used for medical care;

- Differences in medical costs, medical practices, and the role of workers’ compensation programs in regulating allowable medical costs;
- Differences in prevalence of lump-sum settlements which can obscure the allocation between medical and other benefits;
- Differences in the role of the state agency, statutes, and case law in defining the limits of medical care that must be provided to workers disabled by workplace injuries and diseases; and
- Differences in the industry mix in each state, which influences the types and severity of illnesses and injuries that occur, and thus the level of medical costs.

Medical benefits were estimated based on information from the National Council on Compensation Insurance (NCCI) for most states. Where NCCI data were not available, medical benefits were based on reports from the states. Methods for estimating medical benefits are described in Appendix F. Over time, the share of benefits for medical care, as opposed to cash benefits in each state, is determined by the growth rates for these categories of benefits in the state. Among the 51 states (including the District of Columbia), on average from 2007 to 2008, medical benefits increased by 8.9 percent, cash benefits increased slightly by 0.1 percent, and total (cash plus medical) benefits increased by 4.5 percent (Table 9)⁹.

In 42 states, total benefits (cash plus medical) increased in 2008. Thirty-one states had increases in medical benefits that exceeded the change in cash benefits. For example, in Mississippi, medical benefits increased by 12.3 percent and cash benefits increased by only 6.2 percent, while in Delaware, medical benefits increased by 11.5 percent while cash benefits decreased by 1.0 percent. In the other 11 states with total benefit increases, cash benefits increased more rapidly than medical benefits. In Kansas, for example, cash benefits were up 9.5 percent and medical benefits were up 3.9 percent.

9 Table 9 includes data for the 51 states including the District of Columbia, while Table 1 also includes data on federal programs.

Table 7**Workers' Compensation Benefits* by State (in thousands) and Annual Percent Change, 2004–2008**

State	Total Benefits					Percent Change				
	2004	2005	2006	2007	2008	2004-2005	2005-2006	2006-2007	2007-2008	
Alabama ²	\$532,000	\$565,013	\$562,632	\$584,941	\$648,094	6.2	-0.4	4.0	10.8	
Alaska ^{2,8}	192,816	182,721	186,507	188,286	205,363	-5.2	2.1	1.0	9.1	
Arizona ^{3,8}	547,872	542,781	608,258	647,417	648,664	-0.9	12.1	6.4	0.2	
Arkansas ^{1,6,7,8}	219,177	192,860	196,782	205,890	215,404	-12.0	2.0	4.6	4.6	
California ^{2,8}	12,446,670	10,832,367	9,914,209	9,509,403	9,426,019	-13.0	-8.5	-4.1	-0.9	
Colorado ^{1,8}	853,273	895,413	864,409	836,030	875,440	4.9	-3.5	-3.3	4.7	
Connecticut ^{1,8}	712,515	708,598	709,258	725,662	781,480	-0.5	0.1	2.3	7.7	
Delaware ^{1,5,7,8}	157,399	185,639	208,308	196,501	208,562	17.9	12.2	-5.7	6.1	
District of Columbia ^{1,5}	93,907	89,879	88,562	83,998	81,263	-4.3	-1.5	-5.2	-3.3	
Florida ¹	2,866,531	2,913,927	2,671,559	2,716,114	2,787,022	1.7	-8.3	1.7	2.6	
Georgia ^{1,5,8}	1,259,155	1,379,383	1,369,685	1,482,217	1,601,644	9.5	-0.7	8.2	8.1	
Hawaii ^{2,8}	271,290	250,779	242,685	247,294	245,763	-7.6	-3.2	1.9	-0.6	
Idaho ^{1,5,8}	235,119	243,123	254,392	266,772	280,276	3.4	4.6	4.9	5.1	
Illinois ^{1,5,8}	2,254,415	2,425,483	2,439,925	2,736,641	2,994,420	7.6	0.6	12.2	9.4	
Indiana ^{1,6,8}	551,071	564,830	559,747	597,200	623,737	2.5	-0.9	6.7	4.4	
Iowa ^{1,5,8}	449,718	489,009	488,534	496,054	575,072	8.7	-0.1	1.5	15.9	
Kansas ^{1,6,8}	377,116	389,693	390,849	393,707	417,517	3.3	0.3	0.7	6.0	
Kentucky ^{1,5,8}	719,610	693,100	626,322	638,478	696,185	-3.7	-9.6	1.9	9.0	
Louisiana ^{1,8}	634,610	597,237	610,479	613,849	733,650	-5.9	2.2	0.6	19.5	
Maine ¹	267,622	272,119	284,643	272,824	261,736	1.7	4.6	-4.2	-4.1	
Maryland ^{1,8}	797,301	784,312	828,821	843,967	935,948	-1.6	5.7	1.8	10.9	
Massachusetts ^{1,7,8}	968,817	904,386	904,767	886,208	842,705	-6.7	0.0	-2.1	-4.9	
Michigan ^{2,8}	1,517,386	1,473,598	1,470,574	1,507,968	1,404,976	-2.9	-0.2	2.5	-6.8	
Minnesota ^{3,8}	934,613	941,636	937,355	951,848	1,007,193	0.8	-0.5	1.5	5.8	
Mississippi ^{1,8}	310,516	311,910	337,849	328,969	361,015	0.4	8.3	-2.6	9.7	
Missouri ^{2,8}	911,059	893,669	831,862	892,225	937,299	-1.9	-6.9	7.3	5.1	
Montana ^{2,8}	211,460	227,321	234,247	242,930	252,648	7.5	3.0	3.7	4.0	
Nebraska ^{1,5,8}	283,197	309,741	275,772	290,644	345,108	9.4	-11.0	5.4	18.7	

STATE	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
New Hampshire ^{1,5,8}	216,360	229,172	219,755	204,374	239,290	5.9	-4.1	-7.0	17.1						
New Jersey ^{1,8}	1,598,596	1,567,238	1,748,108	1,847,036	1,916,466	-2.0	11.5	5.7	3.8						
New Mexico ^{2,8}	198,267	230,591	237,551	242,393	271,573	16.3	3.0	2.0	12.0						
New York ^{2,7}	3,101,314	3,154,126	3,251,427	3,137,467	3,536,944	1.7	3.1	-3.5	12.7						
North Carolina ^{1,5}	1,168,848	1,386,576	1,317,308	1,348,692	1,526,320	18.6	-5.0	2.4	13.2						
North Dakota ³	83,237	82,033	81,297	95,418	105,837	-1.4	-0.9	17.4	10.9						
Ohio ⁴	2,434,715	2,447,038	2,383,544	2,478,080	2,490,080	0.5	-2.6	4.0	0.5						
Oklahoma ^{1,8}	627,174	640,088	674,677	702,295	782,091	2.1	5.4	4.1	11.4						
Oregon ^{3,8}	518,350	553,270	566,593	586,398	601,849	6.7	2.4	3.5	2.6						
Pennsylvania ^{3,8}	2,658,104	2,741,310	2,758,784	2,803,819	2,902,243	3.1	0.6	1.6	3.5						
Rhode Island ^{1,6,8}	143,423	137,202	149,395	152,235	158,006	-4.3	8.9	1.9	3.8						
South Carolina ^{3,8}	855,062	917,191	989,189	884,513	915,014	7.3	7.8	-10.6	3.4						
South Dakota ^{2,8}	77,409	85,889	108,550	119,351	113,555	11.0	26.4	9.9	-4.9						
Tennessee ^{1,5,6,8}	815,838	822,618	881,156	775,361	827,757	0.8	7.1	-12.0	6.8						
Texas ^{1,6,8}	1,624,217	1,548,506	1,384,652	1,414,780	1,514,130	-4.7	-10.6	2.2	7.0						
Utah ^{1,5,8}	241,193	253,763	257,962	282,600	301,116	5.2	1.7	9.6	6.6						
Vermont ^{1,6}	123,000	121,613	124,148	119,149	127,204	-1.1	2.1	-4.0	6.8						
Virginia ^{2,5}	738,475	854,165	807,404	1,069,374	1,148,354	15.7	-5.5	32.4	7.4						
Washington ^{4,8}	1,837,215	1,847,523	1,927,431	1,995,744	2,192,885	0.6	4.3	3.5	9.9						
West Virginia ^{4,6,8}	878,255	818,146	481,668	634,279	603,073	-6.8	-41.1	31.7	-4.9						
Wisconsin ^{4,8}	898,366	1,170,065	1,043,244	1,094,074	1,011,334	30.2	-10.8	4.9	-7.6						
Wyoming ⁴	120,083	116,537	117,322	126,994	137,133	-3.0	0.7	8.2	8.0						
Non-federal total	\$52,892,469	\$52,371,521	\$51,003,712	\$51,876,858	\$54,209,118	-1.0	-2.6	1.7	4.5						
Federal ^a	3,256,202	3,258,155	3,270,322	3,339,892	3,423,825	0.1	0.4	2.1	2.5						
Federal employees ^b	2,445,077	2,462,059	2,454,861	2,586,700	2,676,370	0.7	-0.3	5.4	3.5						
TOTAL	\$56,148,671	\$55,629,676	\$54,274,033	\$55,216,750	\$57,632,944	-0.9	-2.4	1.7	4.4						

*Benefits are payments in the calendar year to injured workers and to providers of their medical care.

a Includes federal benefits as included in Table 8.

b Included in the federal benefits total.

1) Deductible data were not available. Deductibles were estimated using the a ratio based on Manual Equivalent premiums.

2) Deductible data were estimated by subtracting the AM Best data from Agency data.

3) Deductible data were given by the Agency

4) Deductibles not allowed

5) Self-insurance data were not available and were imputed. Method is outlined in Appendix E.

6) Self-insurance data for some years is imputed using previous years' data

7) Estimation methodology may not be same for all the years due to unavailability of the survey response data for some years.

8) Second Injury Fund in the state has been added to the private carriers, state fund and self-insured data according to their share in the total benefits.

Source: National Academy of Social Insurance estimates based on data from state agencies, A.M. Best, National Association of Insurance Commissioners (NAIC), the U.S. Department of Labor and the Social Security Administration.

Table 8

Workers' Compensation Benefits* by Type of Insurer and Medical Benefits, by State, 2008
(in thousands)

State	Private Carriers		State Funds		Self-Insured ^b		Totals	Percent Medical	Medical ^c
	Benefits	Percent Share	Benefits	Percent Share	Benefits	Percent Share			
Alabama	\$305,029	47.1			\$343,065	52.9	\$648,094	68.8	\$445,889
Alaska	151,424	73.7			53,939	26.3	205,363	64.1	131,638
Arizona	175,152	27.0	\$358,955	55.3	114,558	17.7	648,664	68.1	441,740
Arkansas	163,223	75.8			52,181	24.2	215,404	65.1	140,228
California	4,690,810	49.8	1,836,083	19.5	2,899,126	30.8	9,426,019	54.5	5,134,209
Colorado	278,209	31.8	389,858	44.5	207,373	23.7	875,440	49.9	436,844
Connecticut	565,001	72.3			216,479	27.7	781,480	44.4	346,977
Delaware	157,278	75.4			51,284	24.6	208,562	60.0	125,137
District of Columbia	67,417	83.0			13,846	17.0	81,263	35.5	28,848
Florida	1,959,695	70.3			827,327	29.7	2,787,022	64.3	1,792,055
Georgia	1,125,712	70.3			475,931	29.7	1,601,644	48.4	775,196
Hawaii	131,389	53.5	28,589	11.6	85,784	34.9	245,763	43.2	106,170
Idaho	78,956	28.2	154,891	55.3	46,429	16.6	280,276	61.5	172,370
Illinois	2,162,134	72.2			832,286	27.8	2,994,420	48.4	1,449,299
Indiana	557,342	89.4			66,395	10.6	623,737	71.0	442,853
Iowa	441,506	76.8			133,567	23.2	575,072	54.1	311,114
Kansas	300,283	71.9			117,234	28.1	417,517	60.0	250,510
Kentucky	381,116	54.7	88,808	12.8	226,261	32.5	696,185	57.5	400,306
Louisiana	413,675	56.4	158,039	21.5	161,936	22.1	733,650	50.5	370,493
Maine	86,281	33.0	91,856	35.1	83,600	31.9	261,736	47.2	123,540
Maryland	507,854	54.3	228,218	24.4	199,876	21.4	935,948	44.9	420,241
Massachusetts	723,454	85.8			119,250	14.2	842,705	35.4	298,370
Michigan	851,600	60.6			553,377	39.4	1,404,976	36.2	508,649
Minnesota	697,018	69.2	55,568	5.5	254,607	25.3	1,007,193	53.2	536,280
Mississippi	223,753	62.0			137,262	38.0	361,015	59.3	214,082
Missouri	612,933	65.4	89,286	9.5	235,080	25.1	937,299	55.9	523,950
Montana	79,665	31.5	128,197	50.7	44,787	17.7	252,648	59.3	149,821
Nebraska	260,828	75.6			84,280	24.4	345,108	62.2	214,657
Nevada	282,880	72.0			109,783	28.0	392,663	46.3	181,803

New Hampshire	189,068	79.0			50,222	21.0	239,290	61.5	147,163
New Jersey	1,539,188	80.3			377,278	19.7	1,916,466	48.2	923,282
New Mexico	148,793	54.8	32,783	12.1	89,996	33.1	271,573	59.5	161,586
New York	1,683,293	47.6	1,032,617	29.2	821,034	23.2	3,536,944	51.0	1,803,841
North Carolina	1,065,094	69.8			461,226	30.2	1,526,320	45.6	696,002
North Dakota ^a	57	0.1	105,780	99.9			105,837	58.5	61,936
Ohio ^a	23,746	1.0	2,055,456	82.5	410,878	16.5	2,490,080	43.9	1,092,704
Oklahoma	323,987	41.4	280,056	35.8	178,048	22.8	782,091	43.8	342,556
Oregon	238,359	39.6	282,015	46.9	81,475	13.5	601,849	51.9	312,360
Pennsylvania	1,929,826	66.5	348,716	12.0	623,700	21.5	2,902,243	46.5	1,348,210
Rhode Island	47,150	29.8	90,060	57.0	20,795	13.2	158,006	32.1	50,720
South Carolina	669,375	73.2	55,853	6.1	189,785	20.7	915,014	41.0	375,156
South Dakota	109,563	96.5			3,992	3.5	113,555	67.0	76,082
Tennessee	631,401	76.3			196,355	23.7	827,757	52.9	437,883
Texas	874,047	57.7	338,783	22.4	301,299	19.9	1,514,130	61.2	926,647
Utah	100,142	33.3	144,733	48.1	56,241	18.7	301,116	71.6	215,599
Vermont	110,641	87.0			16,564	13.0	127,204	53.1	67,545
Virginia	839,691	73.1			308,663	26.9	1,148,354	58.0	666,046
Washington	21,340	1.0	1,665,190	75.9	506,355	23.1	2,192,885	36.4	798,723
West Virginia ^d	207,109	34.3	306,332	50.8	89,632	14.9	603,073	51.8	312,689
Wisconsin	963,812	95.3			47,521	4.7	1,011,334	73.8	745,931
Wyoming ^a	2,227	1.6	134,906	98.4			137,133	51.8	71,102
Non-federal total	\$30,149,529	55.6	\$10,481,628	19.3	\$13,577,961	25.0	\$54,209,118	51.8	\$28,107,032
Federal ^e							3,423,825	27.9	956,148
Federal employees ^f							2,676,370	29.8	798,039
TOTAL							\$57,632,944	50.4	\$29,063,181

* Benefits are payments in the calendar year to injured workers and to providers of their medical care.

a. States with exclusive funds (Ohio, North Dakota, Washington, and Wyoming) may have small amounts of benefits paid in the private carrier category. This results from the fact that some employers doing business in states with exclusive state funds may need to obtain coverage from private carriers under the USL & HW act or employers liability coverage which the state fund is not authorized to provide. In addition, private carriers may provide excess compensation coverage in some of these states.

b. Self-insurance includes individual self-insurers and group self-insurance.

c. For further details see Appendix C1.

d. West Virginia completed the transition from monopolistic state fund to competitive insurance status on July 1, 2008.

e. Federal benefits include: those paid under the Federal Employees' Compensation Act for civilian employees; the portion of the Black Lung benefit program that is financed by employers; and a portion of benefits under the Longshore and Harbor Workers' Compensation Act that are not reflected in state data, namely, benefits paid by self-insured employers and by special funds under the LHWCA. See Appendix H for more information about federal programs.

f. Included in the federal benefits total.

g. These data may not include second injury fund for all states and may be an understatement of total payments data.

Source: National Academy of Social Insurance estimates based on data received from state agencies, the U.S. Department of Labor, A.M. Best, and the National Council on Compensation Insurance.

Table 9

Medical, Cash and Total Benefits, by state, 2007-2008^a
(in thousands)

State	2007			2008			2007-2008 Percent Change		
	Medical	Cash	Total	Medical	Cash	Total	Medical	Cash	Total
Alabama	\$400,827	\$184,114	\$584,941	\$445,889	\$202,205	\$648,094	11.2	9.8	10.8
Alaska	117,754	70,532	188,286	131,638	73,725	205,363	11.8	4.5	9.1
Arizona	446,226	201,191	647,417	441,740	206,924	648,664	-1.0	2.8	0.2
Arkansas	130,845	75,045	205,890	140,228	75,176	215,404	7.2	0.2	4.6
California	4,868,295	4,641,108	9,509,403	5,134,209	4,291,810	9,426,019	5.5	-7.5	-0.9
Colorado	397,011	439,019	836,030	436,844	438,595	875,440	10.0	-0.1	4.7
Connecticut	317,186	408,476	725,662	346,977	434,503	781,480	9.4	6.4	7.7
Delaware	112,202	\$84,299	196,501	125,137	83,425	208,562	11.5	-1.0	6.1
District of Columbia	30,762	53,236	83,998	28,848	52,414	81,263	-6.2	-1.5	-3.3
Florida	1,691,064	1,025,050	2,716,114	1,792,055	994,967	2,787,022	6.0	-2.9	2.6
Georgia	718,813	763,405	1,482,217	775,196	826,448	1,601,644	7.8	8.3	8.1
Hawaii	104,568	142,725	247,294	106,170	139,593	245,763	1.5	-2.2	-0.6
Idaho	162,492	104,280	266,772	172,370	107,906	280,276	6.1	3.5	5.1
Illinois	1,292,581	1,444,060	2,736,641	1,449,299	1,545,121	2,994,420	12.1	7.0	9.4
Indiana	419,364	177,836	597,200	442,853	180,884	623,737	5.6	1.7	4.4
Iowa	255,813	240,241	496,054	311,114	263,958	575,072	21.6	9.9	15.9
Kansas	241,157	152,551	393,707	250,510	167,007	417,517	3.9	9.5	6.0
Kentucky	370,515	267,963	638,478	400,306	295,878	696,185	8.0	10.4	9.0
Louisiana	323,086	290,763	613,849	370,493	363,157	733,650	14.7	24.9	19.5
Maine	118,207	154,617	272,824	123,540	138,197	261,736	4.5	-10.6	-4.1
Maryland	363,599	480,368	843,967	420,241	515,707	935,948	15.6	7.4	10.9
Massachusetts	307,833	578,375	886,208	298,370	544,335	842,705	-3.1	-5.9	-4.9
Michigan	536,441	971,528	1,507,968	508,649	896,327	1,404,976	-5.2	-7.7	-6.8
Minnesota	492,908	458,940	951,848	536,280	470,913	1,007,193	8.8	2.6	5.8
Mississippi	190,569	138,400	328,969	214,082	146,933	361,015	12.3	6.2	9.7
Missouri	486,767	405,458	892,225	523,950	413,349	937,299	7.6	1.9	5.1

Montana	137,856	105,073	242,930	149,821	102,828	252,648	8.7	-2.1	4.0
Nebraska	182,497	108,147	290,644	214,657	130,451	345,108	17.6	20.6	18.7
Nevada	172,683	205,716	378,400	181,803	210,860	392,663	5.3	2.5	3.8
New Hampshire	125,553	78,821	204,374	147,163	92,127	239,290	17.2	16.9	17.1
New Jersey	886,677	960,359	1,847,036	923,282	993,184	1,916,466	4.1	3.4	3.8
New Mexico	142,116	100,277	242,393	161,586	109,987	271,573	13.7	9.7	12.0
New York	1,129,488	2,007,979	3,137,467	1,803,841	1,733,102	3,536,944	59.7	-13.7	12.7
North Carolina	616,810	731,882	1,348,692	696,002	830,318	1,526,320	12.8	13.4	13.2
North Dakota	51,482	43,936	95,418	61,936	43,901	105,837	20.3	-0.1	10.9
Ohio	1,029,325	1,448,755	2,478,080	1,092,704	1,397,376	2,490,080	6.2	-3.5	0.5
Oklahoma	301,753	400,542	702,295	342,556	439,535	782,091	13.5	9.7	11.4
Oregon	313,624	272,774	586,398	312,360	289,489	601,849	-0.4	6.1	2.6
Pennsylvania	1,251,734	1,552,085	2,803,819	1,348,210	1,554,033	2,902,243	7.7	0.1	3.5
Rhode Island	52,742	99,492	152,235	50,720	107,286	158,006	-3.8	7.8	3.8
South Carolina	370,650	513,862	884,513	375,156	539,858	915,014	1.2	5.1	3.4
South Dakota	79,472	39,878	119,351	76,082	37,473	113,555	-4.3	-6.0	-4.9
Tennessee	418,751	356,610	775,361	437,883	389,873	827,757	4.6	9.3	6.8
Texas	863,229	551,551	1,414,780	926,647	587,482	1,514,130	7.3	6.5	7.0
Utah	199,307	83,292	282,600	215,599	85,517	301,116	8.2	2.7	6.6
Vermont	60,050	59,099	119,149	67,545	59,659	127,204	12.5	0.9	6.8
Virginia	613,628	455,746	1,069,374	666,046	482,309	1,148,354	8.5	5.8	7.4
Washington	723,226	1,272,518	1,995,744	798,723	1,394,162	2,192,885	10.4	9.6	9.9
West Virginia	315,588	318,690	634,279	312,689	290,384	603,073	-0.9	-8.9	-4.9
Wisconsin	811,496	282,578	1,094,074	745,931	265,403	1,011,334	-8.1	-6.1	-7.6
Wyoming	63,186	63,808	126,994	71,102	66,030	137,133	12.5	3.5	8.0
Non-federal total	25,809,808	26,067,050	51,876,858	28,107,032	26,102,086	54,209,118	8.9	0.1	4.5

a) For more detail on state by state methodologies, see, *Sources and Methods: A Companion to Workers' Compensation: Benefits, Coverage, and Costs, 2008* section of the Academy's website at www.nasi.org.

Source: National Academy of Social Insurance estimates based on data from state agencies and A.M. Best.

Table 10**Workers' Compensation Benefits Per \$100 of Covered Wages, by State, 2004–2008**

	2004	2005	2006	2007	2008	Dollar Amount Change	
						2007-2008	2004-2008
Alabama	\$0.94	\$0.95	\$0.88	\$0.87	\$0.95	\$0.07	\$0.00
Alaska	1.82	1.64	1.58	1.50	1.54	0.04	-0.28
Arizona	0.66	0.59	0.60	0.61	0.61	0.00	-0.05
Arkansas	0.68	0.57	0.55	0.55	0.56	0.01	-0.12
California	1.91	1.57	1.35	1.23	1.21	-0.02	-0.70
Colorado	1.03	1.03	0.92	0.84	0.84	0.01	-0.19
Connecticut	0.87	0.82	0.78	0.75	0.80	0.05	-0.06
Delaware	0.91	1.01	1.08	1.00	1.06	0.06	0.14
District of Columbia	0.34	0.31	0.28	0.25	0.23	-0.02	-0.11
Florida	1.17	1.09	0.93	0.92	0.97	0.05	-0.20
Georgia	0.92	0.95	0.90	0.91	0.99	0.08	0.08
Hawaii	1.44	1.24	1.13	1.09	1.06	-0.03	-0.38
Idaho	1.38	1.33	1.26	1.24	1.31	0.07	-0.07
Illinois	0.96	0.99	0.94	1.00	1.08	0.08	0.12
Indiana	0.57	0.57	0.54	0.56	0.58	0.02	0.01
Iowa	1.00	1.04	0.99	0.95	1.07	0.12	0.07
Kansas	0.92	0.91	0.86	0.81	0.82	0.01	-0.10
Kentucky	1.30	1.20	1.03	1.00	1.08	0.07	-0.22
Louisiana	1.10	1.00	0.95	0.88	0.99	0.11	-0.11
Maine	1.46	1.46	1.47	1.35	1.26	-0.09	-0.21
Maryland	0.83	0.77	0.77	0.75	0.81	0.07	-0.02
Massachusetts	0.64	0.58	0.55	0.51	0.47	-0.04	-0.18
Michigan	0.91	0.87	0.86	0.87	0.82	-0.05	-0.09
Minnesota	0.91	0.89	0.85	0.81	0.84	0.03	-0.07
Mississippi	1.08	1.04	1.06	0.98	1.04	0.06	-0.04
Missouri	1.07	1.00	0.89	0.91	0.92	0.01	-0.15
Montana	2.01	2.00	1.90	1.83	1.83	0.01	-0.17
Nebraska	1.05	1.10	0.93	0.93	1.07	0.15	0.02
Nevada	0.86	0.84	0.79	0.71	0.75	0.03	-0.12
New Hampshire	0.92	0.93	0.84	0.75	0.86	0.11	-0.05
New Jersey	0.88	0.82	0.87	0.88	0.90	0.01	0.02
New Mexico	0.93	1.01	0.95	0.90	0.96	0.06	0.03
New York	0.76	0.74	0.71	0.63	0.69	0.07	-0.07
North Carolina	0.93	1.05	0.93	0.89	1.00	0.11	0.07
North Dakota	0.94	0.88	0.81	0.89	0.91	0.02	-0.04
Ohio	1.29	1.26	1.19	1.20	1.19	0.00	-0.10
Oklahoma	1.51	1.45	1.39	1.36	1.43	0.07	-0.09
Oregon	0.94	0.94	0.90	0.88	0.89	0.01	-0.05
Pennsylvania	1.29	1.28	1.22	1.18	1.19	0.01	-0.10
Rhode Island	0.87	0.77	0.80	0.79	0.81	0.02	-0.05
South Carolina	1.60	1.63	1.66	1.41	1.43	0.03	-0.17

continued on p.29

Table 10 continued**Workers' Compensation Benefits Per \$100 of Covered Wages, by State, 2004–2008**

	2004	2005	2006	2007	2008	Dollar Amount Change	
						2007-2008	2004-2008
South Dakota	0.78	0.83	0.98	1.01	0.92	-0.09	0.14
Tennessee	0.95	0.91	0.92	0.77	0.81	0.04	-0.14
Texas	0.61	0.54	0.44	0.42	0.43	0.02	-0.18
Utah	0.74	0.72	0.66	0.66	0.68	0.03	-0.06
Vermont	1.28	1.22	1.19	1.10	1.14	0.04	-0.14
Virginia	0.57	0.62	0.55	0.70	0.73	0.04	0.16
Washington	1.80	1.70	1.63	1.57	1.69	0.12	-0.11
West Virginia	4.46	3.98	2.21	2.79	2.58	-0.22	-1.89
Wisconsin	0.99	1.25	1.06	1.07	0.97	-0.10	-0.02
Wyoming	1.63	1.44	1.25	1.21	1.20	-0.01	-0.43
Total non-federal	1.10	1.04	0.95	0.91	0.94	0.03	-0.16
Federal Employees(a)	1.54	1.50	1.45	1.46	1.46	0.00	-0.08
Total	1.13	1.07	0.98	0.94	0.97	0.03	-0.17

a Includes FECA only.

Source: National Academy of Social Insurance estimates based on Tables 3, 8, D1, D2, D3 and D4.

Among the nine jurisdictions where total benefits declined, two jurisdictions had medical benefits that declined more rapidly than cash benefits, such as the District of Columbia, where medical benefits dropped by 6.2 percent while cash benefits dropped by 1.5 percent. However, seven states had medical benefits that declined less rapidly than cash benefits, such as Massachusetts, where medical benefits were down 3.1 percent and cash benefits were down 5.9 percent. While the long-term national trend has been for medical benefits to grow more rapidly than cash benefits (as shown in Figure 4) experience varies greatly among states and from year to year.

State Benefits Relative to Wages

One way to standardize state benefit payments is to divide each state's total benefits by total wages of covered workers, which takes account of the number of workers and prevailing wage levels in the state. The measure of benefits as a percentage of covered wages helps show whether large growth in a state's benefits payments may be due to growth in the state's population of covered workers and covered payroll or due to other factors. However, when benefits are standardized relative to covered payroll, the

state patterns of change are somewhat different from those revealed by looking only at dollar changes in benefits.

Benefits per \$100 of covered payroll by state in 2004 through 2008 are shown in Table 10. Wyoming is the only state where there was a decrease in benefits relative to covered payroll even though there was an increase in the total dollar amount of benefits in the state. In Wyoming, between 2007 and 2008 there was an 8.0 percent increase in the total benefits but benefits per \$100 of covered wages decreased by one cent.

Benefits per \$100 of payroll are neither a measure of adequacy for workers nor a measure of costs for employers. Although benefit payments that are standardized relative to wages in a state provide a useful perspective for looking at changes within particular states over time, the data do not provide meaningful comparisons of the adequacy of benefits across states. By the same token, these data do not show the comparative cost to employers of locating their business in one state versus another. Some reasons why it is inappropriate and misleading to use

data on benefits per \$100 of payroll to compare the adequacy of benefits for workers or the costs to employers across states are set out below.

Caveats on comparing benefit adequacy across states. As discussed in the Academy's study panel report *Adequacy of Earnings Replacement in Workers' Compensation Programs* (Hunt, 2004), an appropriate study of adequacy compares the benefits disabled workers actually receive with the wages they lose because of their injuries or occupational diseases. Such data are not available for most states. Aggregate benefits relative to aggregate covered wages could be high or low in a given state for a number of reasons unrelated to the adequacy of benefits that injured workers receive.

First, states with more workers in high-risk industries—such as mining or construction—may pay more benefits simply because they have a higher proportion of injured workers and more workers with serious, permanent disabilities that occurred on the job, which resulted in high earnings losses.

Second, states differ considerably in their compensability rules—that is, the criteria they use for determining whether an injury is work-related and therefore will be paid by the workers' compensation program. A state with a relatively lenient compensability threshold might pay more cases, and therefore have higher aggregate benefits relative to the total number of workers in the state, yet pay below average benefits to workers with serious injuries.

Third, injured workers may have their benefits reduced by litigation costs for which they are responsible. The amount of these costs will vary from state to state depending on the state's level of litigation, the magnitude of these costs, and the proportion of the legal fees for which the worker is responsible.

Fourth, in some states, features of the workers' compensation system, employer programs, or labor relations conditions may lead to more effective returns to productive employment for injured workers. Other things equal, a state with better return to work results will have more adequate benefits than another state that pays the same benefits per injured worker because the re-employed workers will experience less loss of earnings due to their workplace injuries.

Caveats on using benefits data to compare employer costs across states. These are benefits paid to workers, not employer costs. An employer's costs for workers' compensation in different states are best compared by knowing the premiums that comparable employers are charged in each state (Thomason, Schmidle, and Burton, 2001). These premiums are affected by the employer's insurance classification and its own experience with past injury rates and the severity of injuries its workers sustained. Data on average benefits per worker or data on paid benefits relative to total wages in the state do not provide information appropriate for determining the employers' costs of workers' compensation in a state for the following reasons.

First, a company in a high-risk industry would not necessarily experience lower costs if it moved to a state with predominantly low-risk industries, since the migrating company would still be in the high risk insurance classification.

Second, changes in state statutes would affect new employers, but these changes are not fully reflected in our data on benefits relative to wages. Premiums charged to employers in a given year are based on the costs of injuries it is expected to incur in that year under policies in effect that year. If a state had changed its statutes either to lower future benefits or to make future benefits more adequate, those policies would not be fully reflected in benefits currently being paid to workers in that state as shown in Table 10. For example, a state that tightened its rules would be expected to have lower future costs for new employers, yet it would not show lower benefits per worker immediately because it would continue to pay workers who were permanently disabled in the past under the old rules.

Third, employers' costs for workers' compensation nationally exceed the benefits paid to workers because of factors such as administrative costs and profits (or losses) of private carriers. However, the relationship of employers' costs relative to workers' benefits varies among states because of various factors, such as the extent of competition in the workers' compensation insurance market and the administrative complexity of different state systems.

In brief, state-level benefits paid per worker or relative to total wages in the state are a way to standardize aggregate benefit payments between large

and small states. However, much more refined data and analyses are needed to assess the adequacy of benefits that individual workers receive or the costs that particular employers would incur in different states.

Employer Costs

Employer costs for workers' compensation in 2008 were \$78.9 billion, a decrease of 6.7 percent from \$84.6 billion in 2007 (Table 11). Relative to total wages of covered workers, employer costs decreased by 11 cents to \$1.33 per \$100 of covered wages in 2008 from \$1.44 per \$100 of covered wages in 2007 (Table 12).

Table 11

Employer Costs for Workers' Compensation by Type of Insurer, 1987–2008
(in millions)

Year	Total	%	Private Carriers		State Funds		Federal ^a		Self-Insurance	
			Total	% of total	Total	% of total	Total	% of total	Total	% of total
1987	\$38,095	*	\$25,448	66.8	\$5,515	14.5	\$1,728	4.5	\$5,404	14.2
1988	43,284	13.6	28,538	65.9	6,660	15.4	1,911	4.4	6,175	14.3
1989	47,955	10.8	31,853	66.4	7,231	15.1	1,956	4.1	6,915	14.4
1990	53,123	10.8	35,054	66.0	8,003	15.1	2,156	4.1	7,910	14.9
1991	55,216	3.9	35,713	64.7	8,698	15.8	2,128	3.9	8,677	15.7
1992	57,395	3.9	34,539	60.2	9,608	16.7	2,454	4.3	10,794	18.8
1993	60,819	6.0	35,596	58.5	10,902	17.9	2,530	4.2	11,791	19.4
1994	60,517	-0.5	33,997	56.2	11,235	18.6	2,490	4.1	12,795	21.1
1995	57,089	-5.7	31,554	55.3	10,512	18.4	2,556	4.5	12,467	21.8
1996	55,293	-3.1	30,453	55.1	10,190	18.4	2,601	4.7	12,049	21.8
1997	53,544	-3.2	29,862	55.8	8,021	15.0	3,358	6.3	12,303	23.0
1998	53,431	-0.2	30,377	56.9	7,926	14.8	3,471	6.5	11,657	21.8
1999	55,835	4.5	33,422	59.9	7,484	13.4	3,496	6.3	11,433	20.5
2000	60,065	7.6	35,673	59.4	8,823	14.7	3,620	6.0	11,949	19.9
2001	65,705	9.4	37,768	57.5	10,598	16.1	3,778	5.8	13,561	20.6
2002	72,577	10.5	41,295	56.9	13,698	18.9	3,898	5.4	13,686	18.9
2003	80,557	11.0	45,276	56.2	16,414	20.4	3,970	4.9	14,897	18.5
2004	84,216	4.5	47,411	56.3	17,494	20.8	4,073	4.8	15,237	18.1
2005	86,389	2.6	50,498	58.5	16,533	19.1	4,096	4.7	15,261	17.7
2006	86,503	0.1	51,385	59.4	15,814	18.3	4,138	4.8	15,165	17.5
2007	84,581	-2.2	51,079	60.4	13,712	16.2	4,236	5.0	15,554	18.4
2008	78,882	-6.7	46,637	59.1	12,074	15.3	4,341	5.5	15,831	20.1

a In all years, federal costs include those paid under the Federal Employees' Compensation Act for civilian employees and the portion of the Black Lung benefit program that is financed by employers and are paid through the federal Black Lung Disability Trust Fund, including interest payments on past Trust Fund advances from the U.S. Treasury. In years before 1997, federal costs also include the other part of the Black Lung program that is financed solely by federal funds. In 1997–2008, federal costs also include a portion of employer-financed benefits under the Longshore and Harbor Workers Compensation Act that are not reflected in state data—namely, costs paid by self-insured employers and by special funds under the LHWCA. See Appendix H for more information about federal programs.

Source: National Academy of Social Insurance estimates of costs for private carriers and state funds are based on information from A.M. Best and direct contact with state agencies. Costs for federal programs are from the Department of Labor and the Social Security Administration. Self-insured administrative costs are based on information from the National Association of Insurance Commissioners.

Table 12**Workers' Compensation Benefit* and Cost** Ratios, 1980–2008**

Year	Employer Costs per \$100 of Wages	Benefits per per \$100 of Wages	Benefits per \$1 in Employer Cost	Medical Benefits per \$100 of Wages	Cash Benefits per \$100 of Wages
1980	\$1.76	\$0.96	\$0.54	\$0.28	\$0.68
1981	1.67	0.97	0.58	0.29	0.68
1982	1.58	1.04	0.66	0.32	0.72
1983	1.50	1.05	0.70	0.34	0.71
1984	1.49	1.09	0.73	0.36	0.73
1985	1.64	1.17	0.71	0.39	0.78
1986	1.79	1.23	0.69	0.43	0.80
1987	1.86	1.29	0.69	0.47	0.82
1988	1.94	1.34	0.69	0.50	0.84
1989	2.04	1.46	0.72	0.57	0.89
1990	2.18	1.57	0.72	0.62	0.94
1991	2.16	1.65	0.76	0.66	0.99
1992	2.13	1.65	0.78	0.69	0.96
1993	2.17	1.53	0.71	0.66	0.87
1994	2.05	1.47	0.72	0.58	0.89
1995	1.83	1.35	0.74	0.54	0.81
1996	1.66	1.26	0.76	0.50	0.76
1997	1.49	1.17	0.78	0.48	0.68
1998	1.38	1.13	0.82	0.48	0.65
1999	1.35	1.12	0.83	0.48	0.63
2000	1.34	1.06	0.79	0.47	0.60
2001	1.43	1.10	0.77	0.50	0.60
2002	1.57	1.13	0.72	0.52	0.61
2003	1.71	1.16	0.68	0.55	0.61
2004	1.70	1.13	0.67	0.52	0.59
2005	1.66	1.07	0.64	0.51	0.56
2006	1.56	0.98	0.63	0.48	0.51
2007	1.44	0.94	0.65	0.47	0.49
2008	1.33	0.97	0.73	0.50	0.48

* Benefits are payments in the calendar year to injured workers and to providers of their medical care.

** Costs are employer expenditures in the calendar year for workers' compensation benefits, administrative costs, and/or insurance premiums. Costs for self-insuring employers are benefits paid in the calendar year plus the administrative costs associated with providing those benefits. Costs for employers who purchase insurance include the insurance premiums paid during the calendar year plus the payments of benefits under large deductible plans during the year. The insurance premiums must pay for all of the compensable consequences of the injuries that occur during the year, including the benefits paid in the current as well as future years.

Source: National Academy of Social Insurance estimates based on Tables 2, 4, and 11.

For self-insured employers, the costs include benefit payments made during the calendar year and the administrative costs associated with providing those benefits. Because self-insured employers often do not separately record administrative costs for workers' compensation, their administrative costs must be estimated. The costs are assumed to be the same share of benefits as are administrative costs reported by private insurers to the National Association of Insurance Commissioners. These administrative costs include expenses for direct defense and cost containment, taxes, licenses, and fees. For more information on the self-insurance costs estimates, see Appendix C. For the federal employee program, employer costs are benefits paid plus administrative costs (U.S. DOL, 2009b). For employers who purchase insurance from private carriers and state funds, costs consist of premiums written in the calendar year plus benefit payments made under deductible provisions. The growing use of large deductible policies complicates the measurement of benefits and costs. As mentioned before, under deductible policies the insurer pays all of the workers' compensation insured benefits, but employers are responsible for reimbursing the insurers for those benefits up to a specified deductible amount. In return for accepting a policy with a deductible, the employer pays a lower premium. Our insurance industry sources of data do not provide separate information on deductibles and many states lack data on deductible payments. Consequently, these benefits had to be estimated, as described in Appendix G. Using these estimates, costs for employers insuring through private carriers were \$46.6 billion in 2008, or approximately 59.1 percent of total costs. Self-insurers accounted for 20.1 percent of total employer costs, state funds represented 15.3 percent of costs, and federal programs were 5.5 percent (Table 11).

Trends in Benefits and Costs

Table 12 and Figure 1 show the trend in benefits paid and employer costs per \$100 of covered wages between 1980 and 2008. Since 2003 or 2004, workers' compensation benefits and employers' cost relative to covered wages have been on the decline and continued to fall in 2008. Nationally, employer costs of \$1.33 per \$100 of covered wages in 2008

were at the lowest point since 1980, which is the earliest date when comparable data are available.¹⁰ Benefits per \$100 of payroll were \$0.97 in 2008, up from \$0.94 per \$100 of payroll in 2007, which was the lowest level of paid benefits relative to wages since the data series with comparable results began in 1980.

Benefits paid in 2008 per \$1 of employer cost in 2008 was \$0.73, an increase of eight cents from 2007, but lower than the amount of paid benefits per dollar of employer costs recorded in 1996 to 2001.

What accounts for the difference between benefits paid to workers and costs to employers? For self-insured employers (or the federal employee program), the difference reflects our estimates of administrative costs (or actual reported costs in the case of the federal program). For these employers, the costs in a calendar year pertain to benefits paid in the same year.

For insured benefits, employer costs are largely determined by premiums paid in the year. Premiums paid by employers do not necessarily match benefits received by workers in a given year for a number of reasons. First, premiums in a calendar year must pay for all of the compensable consequences of the injuries that occur during the year, including the benefits paid in the current as well as future years. Thus, the premiums for 2008 include benefit payments during the year for 2008 injuries, plus reserves for payment of benefits for the 2008 injuries in 2009 and after. In addition, premiums must cover expenses such as administrative and loss adjustment costs, taxes, profits or losses of insurance carriers, and contributions for special funds, which can include the support of workers' compensation agencies.

From the insurer's perspective, the premiums reflect all future costs the insurer expects to incur for injuries that occur in the year. Thus, an increase in expected liabilities could lead to an increase in premiums and a decline in expected liabilities could lead to a decline in premiums. Second, premiums can be influenced by insurers' past and anticipated investment returns on reserves that they set aside to

10 As noted earlier, the national decline in employer costs was driven by a sharp decline in employer costs in California. If California is excluded, employer costs fell 14 cents per \$100 of covered wages between 2007 and 2008 (Table 1).

cover future liabilities. Thus, a decline in investment returns could contribute to an increase in premiums, while an improvement in investment returns could lead to a decline in premiums. Finally, premiums reflect insurers' profits (or losses), since profitability (or lack thereof) will affect the extent of dividends, schedule ratings, and deviations offered by the insurers.

Alternative Measures of Employers' Costs

The National Academy of Social Insurance has published estimates of the employers' costs of workers' compensation as a percent of covered payroll that are comparable across years for the period from 1980 to 2008. These data are presented in Table 12 and are reproduced in Column 2 of Table 13.

Table 13

Workers' Compensation Cost Ratio Comparison of NASI and BLS Costs Estimates

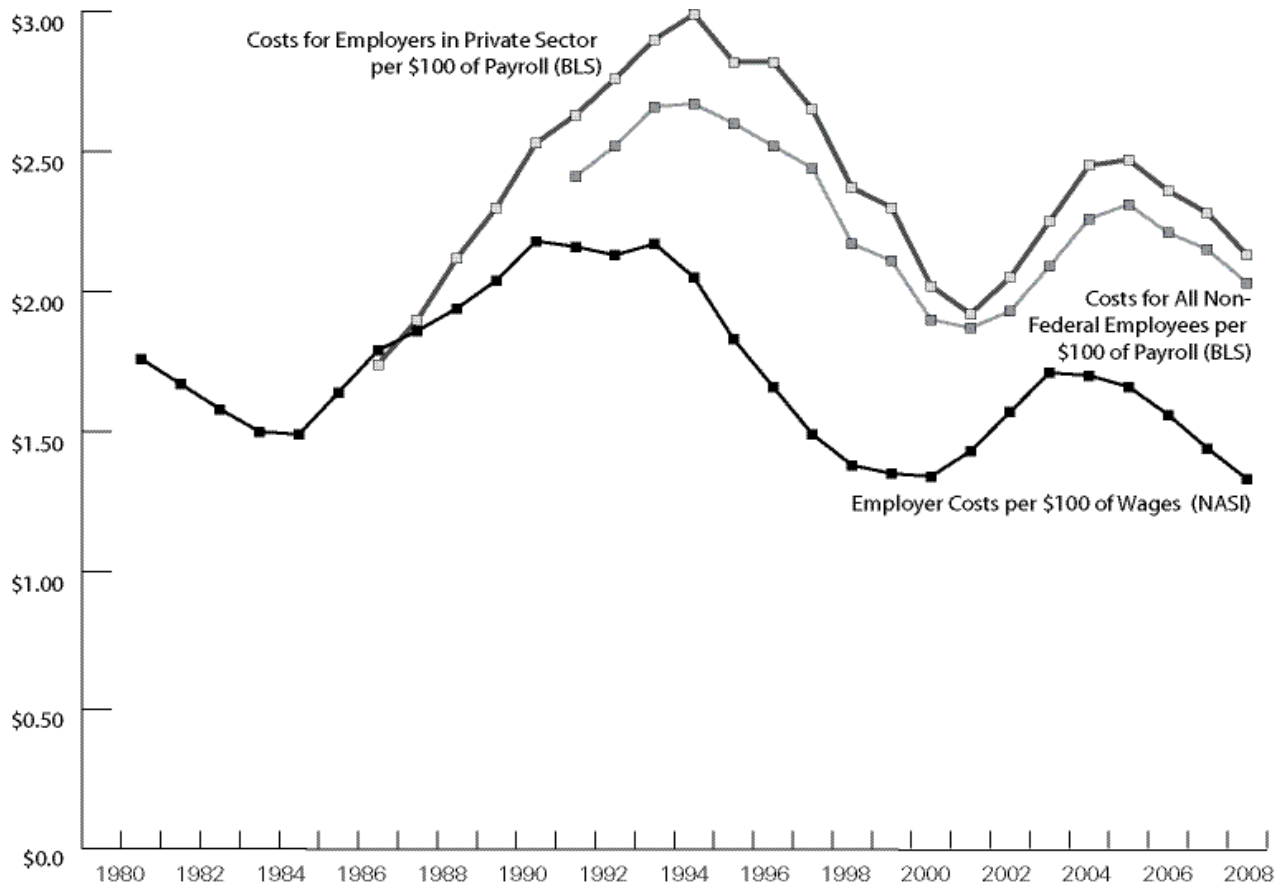
Year	Employer Costs per \$100 of Wages (NASI)	Costs for Employers in Private Sector per \$100 of Payroll (BLS)	Costs for All Non-Federal Employees per \$100 of Payroll (BLS)
(1)	(2)	(3)	(4)
1980	\$1.76	n/a	n/a
1981	1.67	n/a	n/a
1982	1.58	n/a	n/a
1983	1.50	n/a	n/a
1984	1.49	n/a	n/a
1985	1.64	n/a	n/a
1986	1.79	\$1.74	n/a
1987	1.86	1.90	n/a
1988	1.94	2.12	n/a
1989	2.04	2.30	n/a
1990	2.18	2.53	n/a
1991	2.16	2.63	\$2.41
1992	2.13	2.76	2.52
1993	2.17	2.90	2.66
1994	2.05	2.99	2.67
1995	1.83	2.82	2.60
1996	1.66	2.82	2.52
1997	1.49	2.65	2.44
1998	1.38	2.37	2.17
1999	1.35	2.30	2.11
2000	1.34	2.02	1.90
2001	1.43	1.92	1.87
2002	1.57	2.05	1.93
2003	1.71	2.25	2.09
2004	1.70	2.45	2.26
2005	1.66	2.47	2.31
2006	1.56	2.36	2.21
2007	1.44	2.28	2.15
2008	1.33	2.13	2.03

Source: Burton calculations from BLS Employer Costs for Employee Compensation data.

Note: n/a = not available.

Figure 5

**Workers' Compensation Costs per \$100 of Payroll 1980-2008
Comparison of NASI and BLS Costs**



Source: National Academy of Social Insurance estimates.

The Bureau of Labor Statistics (BLS) publishes *Employer Costs for Employee Compensation*, which contains information on wages and salaries and employee benefits provided by employers, including workers' compensation. Data on private sector employers are available since 1986 and data on all non-federal employees are available since 1991.¹¹ These data are provided in Columns 3 and 4 of Table 13.

Figure 5 presents the national BLS data on employers' costs for the private sector and for all non-federal employees as well as the NASI data on employers' costs for all employees. There are similarities and differences between the NASI and BLS data, as discussed in Burton (2008a). One difference is that, except for 1986 and 1987, the costs are higher in the BLS data than in the NASI data. There are also differences in the peak and trough years of the BLS data and the NASI data. For example, the BLS data increased from 2001 until 2005 and then declined

11 The BLS data are available on a quarterly basis. The most recent data used for Table 13 are based on a sample of 13,600 establishments in private industry and 1,900 establishments in state and local governments (U.S. Department of Labor, 2009g). The BLS data on employer costs in the private sector are available by industry, occupational group, establishment size, bargaining status, and for four census regions and for nine census divisions, but are not available for individual states. The BLS methodology and the procedure used to calculate workers' compensation benefits per \$100 of payroll are discussed in Burton (2008a: Appendix A).

Table 14
Number of Fatal Occupational Injuries,
1992–2008

Year	Number of Fatalities
1992	6,217
1993	6,331
1994	6,632
1995	6,275
1996	6,202
1997	6,238
1998	6,055
1999	6,054
2000	5,920
2001	8,801
September 11 events	2,886
Other	5,915
2002	5,534
2003	5,575
2004	5,764
2005	5,734
2006	5,840
2007	5,657
2008	5,214

Source: U.S. DOL 2009c.

until 2008, while the NASI data increased from 2000 to 2004 and then declined until 2008. Despite these differences, the NASI and BLS data agree in general patterns during the last three decades: employers costs increased from the mid-1980s to the early 1990s, then declined rapidly until the late 1990s or early 2000s, then increased for a few years before dropping again during much of the current decade.

Work Injuries, Occupational Illness and Fatalities

National data are not available on the number of persons who file workers' compensation claims or receive benefits in a given year, but trends can be

seen in related data series: the Bureau of Labor Statistics collects information about work-related fatalities from a census and data on nonfatal work injuries or occupational illnesses from a sample survey of employers and the National Council on Compensation Insurance (NCCI) has information on workers' compensation claims insured by private carriers and some competitive state funds in forty-one states (NCCI, 2009).

Fatalities at Work

A total of 5,214 fatal work injuries occurred in 2008 (Table 14), which is a 7.8 percent decrease from the number reported in 2007, and the lowest since this data series began in 1992. Transportation incidents continued to be the leading cause of on-the-job fatalities in 2008, accounting for 40.9 percent of the total. Contact with objects and equipment, assaults and violent acts (homicides and self-inflicted injuries), and falls were the other leading causes of death, accounting for 18.0 percent, 15.7 percent, and 13.4 percent respectively (U.S.DOL, 2009c).

Nonfatal Injuries and Illnesses

The Bureau of Labor Statistics reports a total of 3.7 million nonfatal workplace injuries and illnesses in private industry workplaces during 2008, resulting in a rate of 3.9 cases per one hundred full-time equivalent workers (U.S. DOL, 2009d). Many of these cases involved relatively minor injuries that did not result in lost workdays. The frequency of reported non-fatal occupational injuries and illnesses (incidence rates) has declined every year since 1992 (Table 15).

A total of 1.1 million workplace injuries or illnesses that required recuperation away from work beyond the day of the incident were reported in private industry in 2008 (U.S. DOL, 2009e). The rate of such reported injuries or illnesses per one hundred full-time workers declined from 3.0 in 1992 to 1.1 in 2008 (Table 15). Some of the most common workplace injuries and illnesses are: Sprains and strains (38.6 percent); bruises and contusions (8.7 percent); fractures (8.3 percent); cuts and lacerations (8.1 percent); heat burns (1.4 percent); carpal tunnel syndrome (0.9 percent); and tendinitis, chemical burns and amputations (1.5 percent) (U.S.DOL, 2009e).

Table 15**Private Industry Occupational Injuries and Illnesses: Total Non-fatal Cases and Incidence Rates, 1987–2008**

Year ^a	Number of Cases (in millions)			Incidence Rate ^b		
	All Cases	Cases with Any Days Away from Work	Cases with Job Transfer or Restriction	All Cases	Cases with Any Days Away from Work	Cases with Job Transfer or Restriction
1987	6.0	2.5		8.3	3.4	0.4
1988	6.4	2.6		8.6	3.5	0.5
1989	6.6	2.6		8.6	3.4	0.6
1990	6.8	2.6		8.8	3.4	0.7
1991	6.3	2.6		8.4	3.2	0.7
1992	6.8	2.3	0.6	8.9	3.0	0.9
1993	6.7	2.3	0.7	8.5	2.9	0.9
1994	6.8	2.2	0.8	8.4	2.8	1.0
1995	6.6	2.0	0.9	8.1	2.5	1.1
1996	6.2	1.9	1.0	7.4	2.2	1.1
1997	6.1	1.8	1.0	7.1	2.1	1.2
1998	5.9	1.7	1.1	6.7	2.0	1.1
1999	5.7	1.7	1.0	6.3	1.9	1.1
2000	5.7	1.7	1.1	6.1	1.8	1.2
2001	5.2	1.5	1.0	5.7	1.7	1.1
2002 ^c	4.7	1.4	1.0	5.3	1.6	1.2
2003	4.4	1.3	1.0	5.0	1.5	1.1
2004	4.3	1.3	1.0	4.8	1.4	1.1
2005	4.2	1.2	1.0	4.6	1.4	1.0
2006	4.1	1.2	0.9	4.4	1.3	1.0
2007	4.0	1.2	0.9	4.2	1.2	0.9
2008	3.7	1.1	0.8	3.9	1.1	0.9

a Data after 1991 exclude fatal work-related injuries and illnesses.

b The incidence rate is the number of cases per one hundred full-time workers.

c Data for 2002 and beyond are not strictly comparable to prior year data due to changes in OSHA recordkeeping requirements.

Source: U.S. DOL 2009d.

<http://www.bls.gov/news.release/osh.nr0.htm>

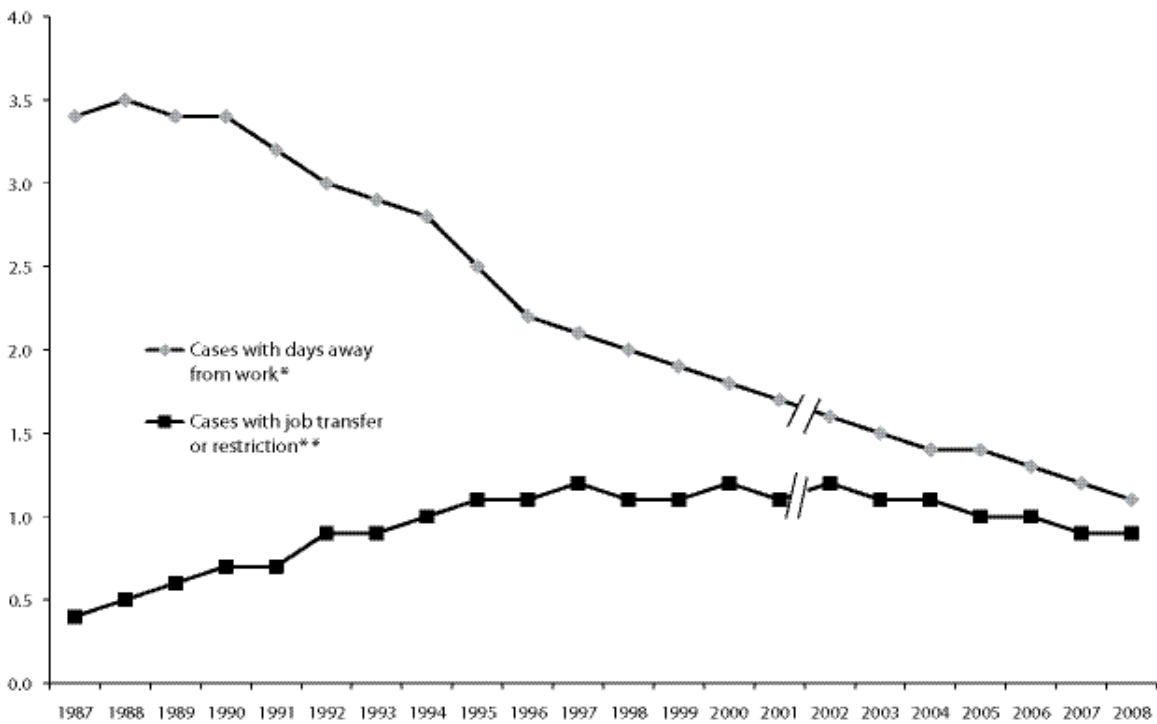
Figure 6 shows the trend in private industry incidence rates of occupational injuries and illnesses involving (a) job transfers or restrictions or (b) days away from work. The break in the graph in 2002 shows the change in OSHA record keeping requirements, indicating that the data after 2002 may not be strictly comparable. However, the graph shows

declining trends in the rates of these measures of occupational injuries and illnesses since 1990.

NCCI reports on the frequency of workers' compensation claims for privately insured employers and some state funds in forty-one states (Table 16). These data show declining trends similar to national

Figure 6

Private Industry Occupational Injuries and Illnesses: Incidence Rates 1987–2008



Note: The break in the graph indicates that the data for 2002 and beyond are not strictly comparable to prior year data due to changes in OSHA recordkeeping requirements.

* Cases involving days away from work are cases requiring at least one day away from work with or without days of job transfer or restriction.

** Job transfer or restriction cases occur when, as a result of a work-related injury or illness, an employer or health care professional keeps, or recommends keeping an employee from doing the routine functions of his or her job or from working the full workday that the employee would have been scheduled to work before the injury or illness occurred.

Source: Bureau of Labor Statistics.

trends in workplace injuries reported by the Bureau of Labor Statistics. Temporary total disability claims are those in which days away from work exceeded the three-to-seven-day waiting period. The frequency of these claims per 100,000 insured workers declined by 51.7 percent between 1992 and 2005. This decline is very similar to the decline in injuries reported by the BLS that involved days away from work. Between 1992 and 2005, the incidence of injuries that involved days away from work declined by about 53.3 percent (from 3.0 per one hundred

fulltime workers in 1992 to 1.1 per one hundred fulltime workers in 2008) (Table 15). The frequency of total workers' compensation claims—including medical—only cases that involve little or no lost work time—declined by about 46.0 percent between 1992 and 2005. This rate of decline is similar to the 48.3 percent decline in the incidence rate for all injuries reported to the BLS in the same period (from 8.9 to 4.6 per one hundred full-time workers between 1992 and 2005).¹²

12 The similarity between the national rates of decline in the BLS injury rates and the NCCI claims rates may be misleading. Guo and Burton (2010) examined the determinants of the amounts of incurred cash benefits per 100,000 workers in 45 states plus the District of Columbia, which is a variable constructed from NCCI data. Between 1990 and 1999, the national average of incurred benefits per 100,000 workers declined by 41.6 percent in constant dollars. However, there were substantial variations among these 46 jurisdictions in the changes in incurred benefits during this period. The authors found that 21 percent of the drop in benefits during the 1990s could be explained by declines in the BLS injury rates in these jurisdictions, but that over 30 percent of the decline in benefits was due to the changes in many states in workers' compensation compensability rules and administrative practices.

Table 16

**Number of Workers' Compensation Claims per 100,000 Insured Workers:
Private Carriers in Forty-One Jurisdictions, 1992-2005**

Policy Period	Temporary Total	Permanent Partial	Total (including medical only)
1992	1,358	694	8,504
1993	1,331	644	8,279
1994	1,300	565	7,875
1995	1,217	459	7,377
1996	1,124	419	6,837
1997	1,070	414	6,725
1998	977	452	6,474
1999	927	461	6,446
2000	870	437	6,003
2001	799	423	5,510
2002	756	413	5,137
2003	718	402	4,888
2004	674	380	4,670
2005	656	382	4,591
Percent decline, 1992–2005	-51.7	-45.0	-46.0

Source: NCCI 1996–2009.

Injury Reporting

Studies during the past several decades have consistently concluded that various systems — including the BLS Survey of Occupational Injuries and Illnesses and state workers' compensation programs — undercount both workplace injuries and illnesses. However, if the extent of under-reporting remained constant over time, the undercounting does not explain the reported injury rates. Hensler et al. (1991) report that 60 percent of those with work-related injuries involving medical care or lost work time received workers' compensation benefits. A study by Lakdawalla and Reville (2005) based on the National Longitudinal Survey of Youth indicates that 55 percent of reported occupational injuries result in workers' compensation claims. Smith et al. (2005) used National Health Interview Survey (NHIS) data and derived injury rates for private industry that are 1.4 times the BLS estimates. Using data from the 2002 Washington State Behavioral Risk Factor Surveillance System survey, Fan et al. (2006) estimate that only 52 percent of injured workers filed a

workers' compensation claim. In another recent study, Rosenman et al. (2006) conclude that BLS and workers' compensation data account respectively for 32 percent and 66 percent of workplace injuries and illnesses in Michigan. Boden and Ozonoff (2008) studied six other states. Their upper-bound estimates suggest that the BLS captures between 51 percent and 76 percent of lost-time injuries in these states, while workers' compensation captures 65 percent to 93 percent. Less conservative estimates suggest ranges of 37 percent to 71 percent and 52 percent to 85 percent respectively.

Further studies are underway to assess the accuracy of BLS data and to help understand whether certain injuries or illnesses are more likely to be underreported. The BLS conducted a quality assurance study and verified that its Survey of Occupational Injuries and Illnesses accurately reflected the information reported by employers on logs required under federal Occupational Safety and Health Administration (OSHA) rules. But the survey is only as complete as the employer reports. For example, employers may

not record cases that are in dispute. Also, long-latency occupational diseases and cases of unknown or disputed etiology may not find their way into OSHA logs. Further, there may be some scope differences between the cases that appear in workers' compensation and those that appear on OSHA logs. Azaroff et al. (2002) provide a review of many studies of injury reporting and a discussion of reasons for underreporting. Workers may not report compensable injuries because, for example, they do not know that they are covered by workers' compensation, or they believe that obtaining benefits can be difficult and stressful (Strunin and Boden, 2004), or they think that benefits are not worth the risks of filing (Fricker, 1999). Workers may also not report workplace injuries or file for workers' compensation benefits because they fear employer retaliation (Pransky et al., 1999). Workers normally cannot sue their employer for workplace injuries because of the exclusive remedy doctrine and, if discharged, normally cannot bring a tort suit against their employers because of the employment-at will doctrine. However, a number of states have statutes protecting workers against retaliation for filing a workers' compensation claim and courts in many states now allow tort suits for wrongful discharge in violation of public policy, such as exercising a statutory right, of which the "classic example" is filing a claim for workers' compensation benefits (Willborn et al. 2007).

For injuries and illnesses that take time to develop, like carpal tunnel syndrome and silicosis, the worker may not be aware of the workplace connection, and therefore will not report. Studies have typically shown much less reporting for such conditions (Stanbury et al., 1995; Biddle et al., 1998; Morse et al., 1998; Milton et al, 1998). Other research suggests that tighter eligibility standards and claims filing restrictions for workers' compensation may explain part of the decline in workers' compensation claims. Low-wage and temporary workers may be least likely to file for these reasons (Shannon and Lowe, 2002). The primary impact of such restrictions is likely to be on workers' compensation claims. However, fewer cases entered into the workers' compensation system could also result in fewer injuries

reported to the BLS. Boden and Ruser (2003) found that between 7.0 and 9.4 percent of the decline in injury rates measured by BLS between 1991 and 1997 is an indirect result of tighter eligibility standards and claims filing restrictions for workers' compensation benefits.¹³

Comparing Workers' Compensation with Other Disability Benefit Programs

Other sources of support for disabled workers include sick leave; short-term and long-term disability benefits; Social Security Disability Insurance; and Medicare. Unlike workers' compensation, these programs are not limited to injuries or illnesses caused on the job. However, some of these programs are not available to workers receiving workers' compensation benefits or the benefits provided by these programs are reduced for workers receiving workers' compensation benefits.

Other Disability Benefits

There are three types of disability benefits for short-term periods of disability available to at least some workers. First, sick leave is a common form of wage replacement for short-term absences from work due to illness or injury. Benefits pay 100 percent of wages for a few weeks. Second, state laws require short-term or temporary disability insurance in five states: California, Hawaii, New Jersey, New York, and Rhode Island. Most programs pay benefits for twenty-six to fifty-two weeks. The methods used for providing coverage vary depending on the state. In California and Rhode Island, the benefits are financed solely by employee contributions. In Hawaii, New Jersey, and New York, employers also contribute. In order to limit benefits, a worker must have a specified amount of past employment or earnings to qualify for benefits. Benefits usually last for up to twenty-six weeks and typically replace about half of the worker's prior earnings. Weekly benefits are related to a claimant's earnings while in covered employment. A third type of benefit available to

13 A recent report by the Government Accounting Office (GAO, 2009) on underreporting of injuries recommended interviewing workers during audits, minimizing the time between the date of recording of injuries and the date they are audited, updating the list of hazardous industries regularly, and educating and training employers on recordkeeping requirements to reduce underreporting.

some workers is short-term disability insurance that is offered by some employers. Both employers and employees may be required to contribute to the cost of the short-term disability insurance (EBRI, 2009). About 39 percent of private sector employees were covered by short-term disability insurance in 2008 (U.S. DOL, 2009a). In general, workers receiving workers' compensation benefits are not eligible for these other types of short-term disability benefits.

Long-term disability insurance that is financed, at least in part, by employers covers about 33 percent of private sector employees. Such coverage is most common among management, professional, and related workers. About 58 percent of management and professional related, 32 percent of workers in sales and office, and 13 percent of service workers had this coverage as of March 2007 (U.S. DOL, 2009a). Long-term disability insurance benefits are usually paid after a waiting period of three to six months, or after short-term disability benefits end. Long-term disability insurance is generally designed to replace 60 percent of earnings, although replacement rates of between 50 percent and 66 percent are also common. Almost all long-term disability insurance is coordinated with Social Security Disability Insurance benefits and workers' compensation benefits. That is, the private long-term disability benefits are reduced dollar for dollar by the social insurance benefits. For example, if Social Security benefits replaced 40 percent of the worker's prior earnings, the long-term disability benefit would pay the balance to achieve a 60 percent replacement. Long-term disability insurance is also sold in individual policies, typically to high-earning professionals. Such individual policies are not included in these data. Retirement benefits may also be available to workers who become disabled. Most defined benefit pension plans have some disability provision; benefits may be available at the time of disability or may continue to accrue until retirement age. Defined contribution pension plans will often make funds in the employee's account available to a disabled worker without penalty, but do not have the insurance features of defined benefit pensions or disability insurance. In addition Supplemental Security Income and Medicaid provide cash and medical assistance to disabled individuals who have low incomes. These means-tested benefits are based on need rather than work experience and are not covered in this report.

Social Security Disability Insurance and Medicare

Workers' compensation is surpassed in size only by the federal Social Security Disability Insurance program and the accompanying Medicare program in providing cash and medical benefits to disabled workers. While Social Security disability benefits and workers' compensation are the nation's two largest work-based disability benefit programs, the two programs differ in many respects. Workers are eligible for workers' compensation benefits from their first day of employment, while Social Security disability benefits require workers to have a substantial work history. Workers' compensation provides benefits for both short-term and long-term disabilities, and for partial as well as total disabilities. However, workers' compensation benefits cover only those disabilities arising out of and in the course of employment. Social Security disability benefits are paid only to workers who have long-term impairments that preclude any gainful work. Social Security disability benefits are provided whether the disability arose on- or off-the-job. By law, the benefits are paid only to workers who are unable to engage in any substantial gainful activity by reason of a medically determinable physical or mental impairment that is expected to last a year or result in death. Social Security disability benefits begin after a five-month waiting period. Medicare coverage begins for those on Social Security disability benefits after a further twenty-four-month waiting period, or twenty nine months after the onset of disability.

Many who receive Social Security disability benefits have impairments associated with aging. The share of insured workers who receive benefits rises sharply at older ages, from less than one percent of the youngest insured workers to about 15 percent of insured workers age 60–64 (Reno and Eichner, 2000). Relatively few individuals who receive Social Security Disability Insurance benefits return to work. Typically, they leave the disability benefit rolls when they die or reach retirement age and shift to Social Security retirement benefits. Workers' compensation paid \$28.6 billion in cash benefits and \$29.1 billion for medical care in 2008. In that year, Social Security paid \$109.0 billion in wage replacement benefits to disabled workers and their dependents and Medicare paid \$63.6 billion for medical and hospital care for

Table 17

Social Security Disability Insurance (DI) Beneficiaries with Workers' Compensation (WC) or Public Disability Benefit (PDB)¹ Number and percentage of beneficiaries, by type of compensation and DI offset status, December 2009

Type of Case	Total		Workers		Dependents	
	Number	Percent	Number	Percent	Number	Percent
All disability insurance beneficiaries	9,693,577	100.0	7,788,013	100.0	1,905,564	100.0
Total with some connection to WC or PDB	1,448,882	14.9	1,113,644	14.3	335,238	17.6
Current connection to WC or PDB	770,475	7.9	592,086	7.6	178,389	9.4
DI reduced by cap	157,670	1.6	108,747	1.4	48,923	2.6
DI not reduced by cap	371,314	3.8	297,165	3.8	74,149	3.9
Reverse jurisdiction	57,807	0.6	45,116	0.6	12,691	0.7
Pending decision on WC or PDB	183,684	1.9	141,058	1.8	42,626	0.2
DI previously offset of WC or PDB	678,407	7.0	521,558	6.7	156,849	8.2

1 Social Security disability benefits are offset against workers' compensation and certain other public disability benefits (PDB). In general, the PDB offset applies to disability benefits earned in state, local, or federal government employment that is not covered by Social Security.

Source: Social Security Administrations' Office of Disability, unpublished tabulations (SSA 2009b).

disabled persons under age 65 (SSA, 2009d; CMS, 2009). Thus, aggregate workers' compensation cash benefits were about one third of the total amount of Social Security disability benefits, and workers' compensation medical benefits were just over half of the total amount paid by Medicare. The much higher fraction paid by workers' compensation for medical benefits can best be attributed to the much greater provider cost controls that Medicare uses relative to workers' compensation. Medicare requires beneficiary cost sharing in the form of deductibles and co-insurance, and it does not cover certain services. At the same time, Medicare covers all medical conditions, not just work-related injuries or illnesses. When a worker receiving workers' compensation is also Medicare eligible, workers' compensation is the primary payer and Medicare is the secondary payer for care related to the occupational injury as a result of the Medicare Secondary Payer Act.

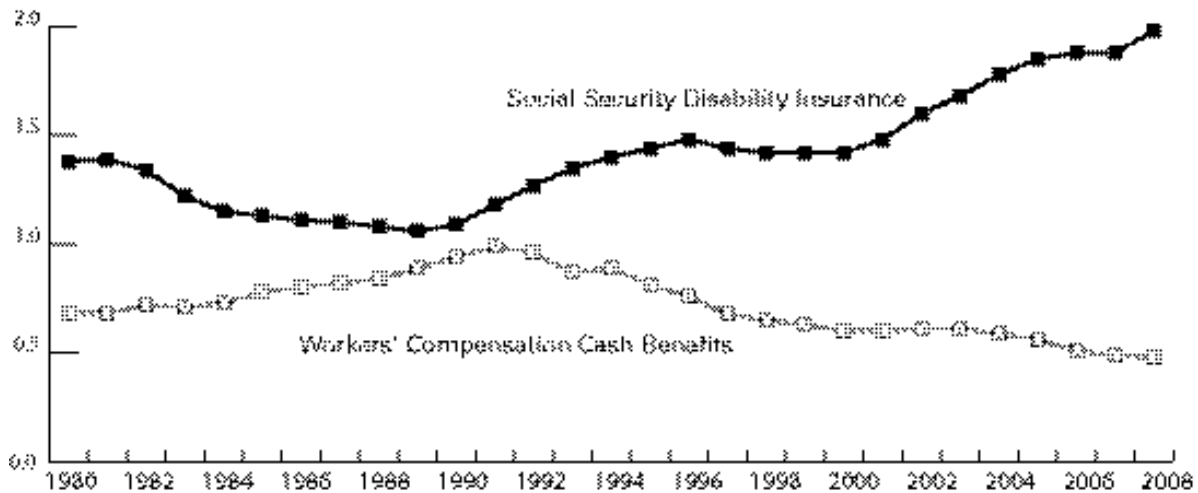
Coordination between Workers' Compensation and Social Security Disability Insurance Benefits

If a worker becomes eligible for both workers' compensation and Social Security disability insurance benefits, one of the programs will limit benefits in order to avoid excessive payments relative to the worker's past earnings. The Social Security amendments of 1965 required that Social Security disability benefits be reduced (or "offset") so that the combined totals of workers' compensation and Social Security disability benefits do not exceed 80 percent of the workers' prior earnings.¹⁴ States, however, were allowed to establish reverse offset laws, whereby workers' compensation payments would be reduced if the worker received Social Security disability benefits. The reverse offset shifts costs to Social Security that would otherwise fall upon the workers' compen-

14 The cap remains at 80 percent of the worker's average indexed earnings before disability, except that, in the relatively few cases when Social Security disability benefits for the worker and dependents exceed 80 percent of prior earnings, the benefits are not reduced below the Social Security amount. This cap also applies to coordination between Social Security Disability Insurance and other public disability benefits (OPDB) derived from jobs not covered by Social Security, such as state or local government jobs where the governmental employer has chosen not to cover its employees under Social Security.

Figure 7

**Social Security Disability Insurance and Workers' Compensation Cash Benefits
Per \$100 of Wages, 1980–2008**



* Starting in 1989, a new method was used to estimate covered wages for the workers' compensation program that accounts for the decrease of benefits as a percent of covered wages in that year.

Source: National Academy of Social Insurance and the Office of the Chief Actuary, Social Security Administration.

sation employer or insurer. Legislation in 1981 eliminated the states' option to adopt reverse offset laws, but the 15 states that already had such laws were allowed to keep them.¹⁵

As of December 2008, about 7.8 million disabled workers and 1.9 million of their dependents received Social Security disability benefits (Table 17). About 1.4 million of these individuals (or 14.9 percent) had some connection to workers' compensation or some other public disability benefits. Of these, 158 thousand persons (or 1.6 percent of the total) were currently receiving SSDI benefits that were reduced because of the offset and 678 thousand (or 7.0 percent of the total) had their Social Security benefits previously reduced because of the offset.

Trends in Social Security Disability Benefits and Workers' Compensation

Figure 7 illustrates the long-term trend in Social Security disability benefits and workers' compensation cash benefits as a share of covered wages. Social

Security disability benefits grew rapidly in the early 1970s and then declined through the 1980s, after policy changes in the late 1970s and early 1980s reduced benefits and tightened eligibility rules. From 1990 to 1996, Social Security benefits again rose as claims and allowances increased, particularly during the economic recession of 1990–1991. Between 1996–2001, disability insurance benefits relative to covered wages leveled off and then rose again following the recession of 2001.

The trend in workers' compensation cash benefits as a share of covered wages followed a different pattern. Workers' compensation benefits grew steadily throughout the 1980s and almost surpassed Social Security disability benefits in the early 1990s. Then, as workers' compensation cash benefits declined as a share of covered wages in 1992–2006, Social Security benefits generally rose. The opposite trends in workers' compensation and Social Security disability benefits during much of the last twenty-five years raise the question of whether retrenchments in one program increase demands placed on the other, and

15 States with reverse offset laws are: Colorado, Florida, Hawaii, Illinois, Louisiana, Minnesota, Montana, Nevada, New Jersey, New York, North Dakota, Ohio, Oregon, Washington, and Wisconsin.

vice versa. The substitutability of Social Security disability benefits and workers' compensation for workers with severe, long-term disabilities that are, at least arguably, work related or might be exacerbated by the demands of work, has received little attention by researchers and is not well understood (Burton and Spieler, 2001).

A recent study finds that work-related disabilities are much more common than might previously have been thought, both among older persons in general and among recipients of Social Security disability benefits in particular (Reville and Schoeni, 2006). Based on reports in the 1992 Health and Retirement Study, more than one third (36 percent) of 51-61 year olds whose health limits the amount of work they can do became disabled because of an accident, injury, or illness at work. Of those receiving Social Security disability insurance, a similar portion (37 percent) attributed their disability to an accident, injury or illness at work. The study also finds that the 51-61 year olds who attribute their disabling conditions to their jobs are far more likely to receive Social Security disability insurance (29.0 percent) than to report ever having received workers' compensation (12.3 percent). It is important to note that these are self reported recollections of work related disability, and in most cases reported many years after the alleged work related disability. These self reported disabling injuries raise the logical question: if these were valid work injuries why were they not reported and accepted by the system? A recent study by Guo and Burton (2008) provides the first empirical evidence that retrenchment in workers' compensation in the 1990s helps explain the increase in Social Security disability insurance applications during the period.

Incurred Benefits Compared with Paid Benefits

The National Academy's estimates of workers' compensation benefits in this report are the amounts paid to workers in a calendar year regardless of whether the injuries occurred in that calendar year or in a previous year. This measure, calendar year paid

benefits, is commonly used in reporting about other social insurance, private employee benefits, and other income security programs. A different measure, accident year incurred losses, which is equivalent to accident year incurred benefits, is commonly used for workers' compensation insurance that is purchased from private carriers and some state funds. It measures benefit liabilities incurred by the insurer for injuries that occur in a particular year, regardless of whether the benefits are paid in that year or in future years. (The terms "losses" and "benefits" are used interchangeably because benefits to the worker are losses to the insurer.) Both measures, calendar year paid benefits and accident year incurred benefits, reveal important information.¹⁶

For the purpose of setting insurance premiums, it is vital to estimate the incurred benefits that the premiums are to cover. When an employer purchases workers' compensation insurance for a particular policy period, the premiums cover current and future benefit liabilities for all injuries that occur during the policy period. State rating bureaus and the National Council on Compensation Insurance, which provides advisory ratemaking and statistical services in thirty-six states, focus on accident year (or policy year) incurred benefits.

Accident year incurred benefits are more appropriate than calendar year paid benefits in estimating the ultimate amount of benefits that will be owed to newly injured workers in response to policy changes. For example, if a state lowered benefits or tightened compensability rules for new injuries as of a given date, then future benefits would be expected to decline. Similarly, if a state raised benefits or expanded the range of injuries that would be compensated by workers' compensation, then future benefits would be expected to increase. The policy change would show up immediately in estimates of accident year incurred benefits, but it would show up more slowly in measures of calendar year paid benefits because the latter measure includes payments for past injuries that would not be affected by the policy change.

A disadvantage of relying solely on accident year incurred benefits is that it takes many years before

16 A fuller discussion of these measures is included in the Glossary and in Thomason, Schmidle, and Burton, 2001, Appendix B.

Table 18**Comparison of Accident-Year Incurred Benefits with Calendar-Year Benefits Paid by Private Carriers and State Funds in Thirty-seven^a States, 1998–2008**

Year	Accident Year Incurred Benefits ^a		Calendar Year Benefits Paid ^b	
	Billions of Dollars	Percent Change	Billions of Dollars	Percent Change
1998	10.8		11.6	
1999	11.8	9.6	11.5	-.8
2000	12.0	1.6	12.5	8.3
2001	12.6	4.7	12.9	3.3
2002	12.5	-1.1	12.9	.2
2003	12.6	1.2	12.9	.0
2004	13.0	3.1	13.3	2.9
2005	13.4	3.1	13.8	3.5
2006	14.0	4.1	13.6	-.9
2007	14.7	5.4	14.0	2.3
2008	14.9	1.3	14.8	5.9
Cumulative % change from 1998-2008			38.0	27.0

a. These data are for the thirty-seven states reported in the Calendar-Accident Year Underwriting Results of the National Council on Compensation Insurance, page 17. They include private carrier and state fund (where relevant) losses incurred in Alabama, Alaska, Arizona, Arkansas, Colorado, Connecticut, the District of Columbia, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, and Virginia. The data for 1996-1999 include thirty-six states as Nevada is excluded.

Accident year data exclude benefits paid under the following categories: underground coal mining, F-classification, national defense project, and excess business. The accident year data also exclude benefits paid under deductible policies.

b. Based on National Academy of Social Insurance data in this report for the states listed in note (a). These data are for private carriers and states funds (where relevant) and excludes benefits paid under deductible policies

Source: NCCI 2009 and calendar year benefits estimated by the National Academy of Social Insurance.

the losses from a particular year are actually known; in the meantime, estimates for the losses for that accident year are updated annually. The National Council on Compensation Insurance updates accident year incurred benefits for sixteen years before the data for a particular year are considered final. In contrast, calendar year paid benefits are final at the end of the calendar year. Accident year incurred benefits are estimated for insurance policies purchased from private carriers and from some state funds, but this information is not routinely available for other state funds and for self-insured employers. In addition, accident year data exclude benefits that are the responsibility of employers under large deductible

policies and all benefits of certain categories of privately insured employers (see footnote (a) of Table 18 for examples of privately insured employers).

For the years 1998 through 2008, Table 18 compares accident year incurred benefits reported by NCCI and calendar year paid benefits estimated by NASI for private carriers and state funds in the thirty-seven states included in the NCCI data. Despite differences in measurements, the dollar amounts of accident year incurred benefits and calendar year paid benefits have been quite similar over the past decade according to estimates in Table 18.

Glossary

General Terms for Workers' Compensation and Related Programs

AASCIF: The American Association of State Compensation Insurance Funds (AASCIF) is an association of workers' compensation insurance entities – referred to as state funds – that specialize in writing workers' compensation insurance in a U.S. state or Canadian province. For more information, visit www.aascif.org.

BLS: The Bureau of Labor Statistics (BLS) in the U.S. Department of Labor is a statistical agency that collects, processes, analyzes, and disseminates statistical data about the labor market. For more information, visit www.bls.gov.

Black Lung Benefits: See Coal Mine Health and Safety Act.

Coal Mine Health and Safety Act: The Coal Mine Health and Safety Act was enacted in 1969 and provides black lung benefits to coal miners disabled as a result of exposure to coal dust and to their survivors.

Compromise and Release Agreement: An agreement to settle a case that usually involves three elements: a compromise between the worker's claim and the employer's offer concerning the amount of cash and/or medical benefits to be paid; the payment of the compromised amount in a lump sum; and the release of the employer from further liability.

Covered Employment: Employees covered by workers' compensation programs.

Defense Base Act: The Defense Base Act (DBA) is a federal law extending the Longshore and Harbor Workers' Compensation Act to persons (1) employed by private employers at United States defense bases overseas, or (2) employed under a public work contract with the United States performed outside the United States, or (3) employed under a contract with the United States performed outside United States under the Foreign Assistance Act, or (4) employed by an American contractor providing welfare or similar services outside the United States for the benefit of the Armed Services.

Disability: Loss of actual earnings or of earning capacity as a consequence of an injury or disease.

DI: Disability insurance from the Social Security program. See: SSDI.

FECA: The Federal Employees' Compensation Act (FECA) provides workers' compensation coverage to U.S. federal civilian and postal workers around the world for work-related injuries and occupational diseases.

FELA: The Federal Employers' Liability Act (FELA) gives railroad workers engaged in interstate commerce an action in negligence against their employer in the event of work-related injuries or occupational diseases.

Guaranty Fund: A guaranty fund is a special fund that assumes all or part of the liability for workers' compensation benefits provided to a worker because the employer or insurance carrier legally responsible for the benefits is unable to make payments. Guaranty funds for private insurance carriers (all states with private carriers have these) and for self-insuring employers (less than half the states have these) are always separate funds.

IAIABC: The International Association of Industrial Accident Boards and Commissions (IAIABC) is the organization representing workers' compensation agencies in the United States, Canada, and other nations and territories. For more information, visit www.iaiabc.org.

Jones Act: The Jones Act is a section of the Merchant Marine Act that extends the provision of the Federal Employers' Liability Act to seamen.

LHWCA: The Longshore and Harbor Workers' Compensation Act (LHWCA) requires employers to provide workers' compensation protection for longshore, harbor, and other maritime workers. See: Defense Base Act (DBA).

NAIC: The National Association of Insurance Commissioners (NAIC) is the national organization of insurance regulators in each state. It assists state insurance regulators, individually and collectively, to

achieve insurance regulatory goals. For more information, visit www.naic.org.

NCCI: The National Council on Compensation Insurance, Inc. (NCCI) is a national organization that assists private carriers and insurance commissioners in setting workers' compensation rates in thirty-seven states. For more information, visit www.ncci.com.

OSHA: The OSHAct created the Occupational Safety and Health Administration (OSHA) within the United States Department of Labor. OSHA is responsible for promulgating standards, inspecting workplaces for compliance, and prosecuting violations.

OSHAct: The Occupational Safety and Health Act (OSHAct) is a federal law enacted in 1970 that promotes workplace safety and health for private sector employers.

Permanent Partial Disability (PPD): A disability that, although permanent, does not completely limit a person's ability to work.

Permanent Total Disability (PTD): A permanent disability that precludes all work.

Second Injury Fund: A second injury fund is a special fund that assumes all or part of the liability for workers' compensation benefits provided to a worker because of the combined effects of a work-related injury or disease with a preexisting medical condition.

Self-Insurance: Self insurance is an insurance arrangement in which the employer assumes responsibility for the payment of workers' compensation benefits to the firm's employees with workplace injuries or diseases. Most employers do not self-insure but instead purchase workers' compensation insurance from a private carrier or state fund.

SSA: The U.S. Social Security Administration (SSA) administers the Social Security program, which pays retirement, disability, and survivors' benefits to workers and their families, and the federal Supplemental Security Income program that provides income support benefits to low-income aged and disabled individuals. For more information, visit www.ssa.gov.

SSDI: Social Security Disability Insurance (SSDI) pays benefits to insured workers who sustain severe, long-term work disabilities due to any cause. See: DI.

Temporary Partial Disability (TPD): A temporary disability that does not completely limit a person's ability to work.

Temporary Total Disability (TTD): A disability that temporarily precludes a person from performing the pre-injury job or another job at the employer that the worker could have performed prior to the injury.

Unemployment Insurance (UI): A federal/state program that provides cash benefits to workers who become unemployed through no fault of their own and who meet certain eligibility criteria set by the states.

USDOL: The U.S. Department of Labor administers a variety of federal labor laws including those that guarantee workers' rights to safe and healthful working conditions, a minimum hourly wage and overtime pay, freedom from employment discrimination, unemployment insurance, and other income support. For more information, visit www.dol.gov.

WC: Workers' compensation.

Work-Related Injury/Illness: An injury or illness caused by the workplace. The usual legal test for "work-related" is "arising out of and in the course of employment." However, the definition of a work-related injury or disease that is compensable under a state's workers' compensation program can be quite complex and varies across states.

WCRI: The Workers Compensation Research Institute (WCRI) is a research organization providing information about public policy issues involving workers' compensation systems. For more information, visit www.wcri.org.

Terms for Workers' Compensation Insurance

Accident Year: The year in which an injury occurred or the year of onset of an illness.

Accident Year Incurred Benefits: Benefits associated with all injuries and illnesses occurring in the accident year, regardless of the years in which the benefits are paid. (Also known as calendar-accident year incurred benefits.)

Calendar Year Paid Benefits: Benefits paid during a calendar year regardless of when the injury or illness occurred.

Combined Ratio After Dividends: $[(1) \text{ Losses} + (2) \text{ Loss Adjustment Expenses} + (3) \text{ Underwriting Expenses} + (4) \text{ Dividends to Policyholders}] / \text{Net Premium}$. The Combined Ratio After Dividends is expressed as a percentage of net premiums. (See Overall Operating Ratio.)

Deductibles: Under deductible policies written by private carriers or state funds, the insurer pays all of the workers' compensation benefits, but employers are responsible for reimbursing the insurer for those benefits up to a specified deductible amount. Deductibles may be written into an insurance policy on a per injury basis, or an aggregate basis, or a combination of a per injury basis with an aggregate cap.

Dividends to Policyholders: Both mutual and some stock insurance companies offer policies that pay dividends to policyholders after the policy period.

Incurred Losses (or Incurred Benefits): Benefits paid to the valuation date plus liabilities for future benefits for injuries that occurred in a specified period, such as an accident year.

Loss Adjustment Expenses: Salaries and fees paid to insurance adjusters, as well as other expenses incurred from adjusting claims.

Losses: Paid benefits or incurred benefits.

Overall Operating Ratio: The combined ratio after dividends minus net investment gain/loss and other income as a percent of net premium. (See Combined Ratio after Dividends.)

Paid Losses (or Paid Benefits): Benefits paid during a specified period, such as a calendar year, regardless of when the injury or disease occurred.

Residual Market: The mechanism used to provide insurance for employers who are unable to purchase insurance in the voluntary private market. In some jurisdictions the state fund is the "insurer of last resort" and serves the function of the residual market. In others, there is a separate pool financed by assessments of private insurers, which is also known as an assigned risk pool.

Underwriting Expenses: Commissions, brokerage expenses, general expenses, taxes, licenses, and fees.

Underwriting Results: The underwriting experience of private insurance carriers. (See Combined Ratio After Dividends and Overall Operating Ratio.)

Valuation Date: A specific time at which data are evaluated in order to determine the losses (or benefits) paid to that date plus reserves as of that date.

Appendix A: Coverage Estimates

The National Academy of Social Insurance's estimates of workers' compensation coverage start with the number of workers in each state who are covered by unemployment insurance (UI) (U.S. DOL, 2008e). Those who are not required to be covered include: some farm and domestic workers who earn less than a threshold amount from one employer; some state and local employees, such as elected officials; employees of some non-profit entities, such as religious organizations, for whom coverage is optional in some states; unpaid family workers; and railroad employees who are covered under a separate unemployment insurance program. Railroad workers are also not covered by state workers' compensation because they have other arrangements (NASI, 2002).

The largest category of workers who are not covered under either unemployment insurance or workers' compensation is self-employed individuals who have not incorporated their businesses. All U.S. employers who are required to pay unemployment taxes must report quarterly to their state employment security agencies information about their employees and payroll covered by unemployment insurance. These employer reports are the basis for statistical reports prepared by the U.S. Bureau of Labor Statistics, known as the ES-202 data. These data are a census of the universe of U.S. workers who are covered by unemployment insurance.

Key assumptions underlying the NASI estimates of workers' compensation coverage, shown in Table A1, are:

- (1) Workers whose employers do not report that they are covered by UI are not covered by workers' compensation.
- (2) Workers that are reported to be covered by UI are generally covered by workers' compensation as well, except in the following cases:
 - (a) Workers in small firms (which are required to provide UI coverage in every state) are not covered by workers' compensation if the state law exempts small firms from mandatory workers' compensation coverage.
 - (b) Employees in agricultural industries (who may be covered by UI) are not covered by workers' compensation if the state law

exempts agricultural employers from mandatory workers' compensation coverage.

- (c) In Texas, where workers' compensation coverage is elective for almost all employers, estimates are based on periodic surveys conducted by the Texas Research and Oversight Council.

All federal employees are covered by workers' compensation, regardless of the state in which they work.

Small Firm Exemptions. NASI assumes that workers are not covered by workers' compensation if they work for small firms in the fourteen states that exempt small employers from mandatory coverage. Private firms with fewer than three employees are exempt from mandatory coverage in eight states: Arkansas, Georgia, Michigan, New Mexico, North Carolina, Virginia, West Virginia and Wisconsin. Those with fewer than four employees are exempt in two states: Florida, and South Carolina. Finally, firms with fewer than five employees are exempt from mandatory coverage in Alabama, Mississippi, Missouri, and Tennessee (IAIABC-WCRI, 2009).

The number of employees in small firms is estimated using data from the U.S. Small Business Administration for each state, which show the proportion of employees in all private firms who worked for firms with fewer than five employees in 2008.

Those percentages for the thirteen states with numerical exemptions are: Alabama, 4.5 percent; Arkansas, 4.9 percent; Florida, 5.9 percent; Georgia, 4.7 percent; Michigan, 4.7 percent; Mississippi, 5.0 percent; Missouri, 4.8 percent; New Mexico, 5.6 percent; North Carolina, 4.8 percent; South Carolina, 4.9 percent; Tennessee, 4.0 percent; Virginia, 4.7 percent; West Virginia, 5.4 percent and Wisconsin, 4.3 percent (U.S. SBA, 2008).

To estimate the proportion of workers in firms with fewer than three or four employees, we used national data on small firms from the U. S. Census Bureau (U.S. Census Bureau, 2005). Of workers in firms with fewer than five employees, 79.0 percent worked in firms with fewer than four employees and 56.7

Table A1**Documenting Workers' Compensation Coverage Estimates, 2008 Annual Averages**

State	UI Covered Jobs ^a		Workers' Compensation Exemptions				WC Covered Jobs (7)	WC as a % of UI (8)
	Total (1)	Private, non-farm firms (2)	Small Firm ^b (3)	Agriculture (4)	Texas (6)			
Alabama	1,884,031	1,564,786	70,982	5,402	-	1,807,647	95.9	
Alaska	298,396	237,284	-	-	-	298,396	100.0	
Arizona	2,528,857	2,161,946	-	-	-	2,528,857	100.0	
Arkansas	1,150,970	964,363	26,730	7,277	-	1,116,963	97.0	
California	15,248,111	12,834,664	-	-	-	15,248,111	100.0	
Colorado	2,258,485	1,931,574	-	11,581	-	2,246,904	99.5	
Connecticut	1,668,433	1,432,890	-	-	-	1,668,433	100.0	
Delaware	416,899	361,576	-	1,227	-	415,672	99.7	
District of Columbia	491,394	452,732	-	-	-	491,394	100.0	
Florida	7,536,585	6,527,853	301,240	58,390	-	7,176,955	95.2	
Georgia	3,933,527	3,329,875	88,782	14,029	-	3,830,716	97.4	
Hawaii	587,490	492,272	-	-	-	587,490	100.0	
Idaho	640,049	522,792	-	-	-	640,049	100.0	
Illinois	5,754,238	5,008,373	-	13,081	-	5,741,157	99.8	
Indiana	2,834,536	2,452,358	-	11,103	-	2,823,433	99.6	
Iowa	1,472,265	1,242,498	-	12,372	-	1,459,893	99.2	
Kansas	1,341,829	1,109,289	-	-	-	1,341,829	100.0	
Kentucky	1,752,461	1,486,405	-	4,054	-	1,748,407	99.8	
Louisiana	1,858,039	1,536,725	-	4,842	-	1,853,197	99.7	
Maine	587,506	499,684	-	2,451	-	585,055	99.6	
Maryland	2,410,569	2,063,680	-	3,494	-	2,407,075	99.9	
Massachusetts	3,197,070	2,827,892	-	-	-	3,197,070	100.0	
Michigan	4,017,543	3,442,824	91,625	21,668	-	3,904,250	97.2	
Minnesota	2,646,051	2,289,270	-	14,936	-	2,631,115	99.4	
Mississippi	1,104,530	882,626	43,948	7,625	-	1,052,957	95.3	
Missouri	2,659,714	2,276,347	109,793	8,750	-	2,541,171	95.5	
Montana	423,988	353,656	-	-	-	423,988	100.0	

Nebraska	906,794	757,814	9,178	-	897,616	99.0
Nevada	1,235,731	1,094,692	2,171	-	1,233,560	99.8
New Hampshire	620,985	540,537	-	-	620,985	100.0
New Jersey	3,874,669	3,313,504	-	-	3,874,669	100.0
New Mexico	794,999	629,142	19,810	-	766,360	96.4
New York	8,481,492	7,143,944	19,231	-	8,462,261	99.8
North Carolina	3,978,614	3,337,016	22,124	-	3,866,388	97.2
North Dakota	340,803	283,614	2,482	-	338,321	99.3
Ohio	5,158,619	4,472,750	-	-	5,158,619	100.0
Oklahoma	1,505,249	1,233,959	6,092	-	1,499,157	99.6
Oregon	1,684,323	1,405,712	-	-	1,684,323	100.0
Pennsylvania	5,554,563	4,917,485	19,194	-	5,535,369	99.7
Rhode Island	459,800	407,257	715	-	459,085	99.8
South Carolina	1,845,763	1,532,990	59,227	-	1,780,275	96.5
South Dakota	385,876	323,844	3,191	-	382,685	99.2
Tennessee	2,672,617	2,300,530	91,927	-	2,575,284	96.4
Texas	10,261,791	8,666,143	45,580	2,565,448	7,650,763	74.6
Utah	1,185,724	1,017,671	3,876	-	1,181,848	99.7
Vermont	296,425	248,304	1,971	-	294,454	99.3
Virginia	3,506,229	2,982,394	79,382	-	3,418,319	97.5
Washington	2,880,786	2,366,316	63,477	-	2,817,309	97.8
West Virginia	686,708	571,196	17,378	-	668,500	97.3
Wisconsin	2,743,267	2,370,956	57,735	-	2,667,980	97.3
Wyoming	278,904	221,457	17,552	-	278,904	100.0
U.S. non-federal	132,044,297	112,425,461	1,148,661	2,565,448	127,881,218	96.8
Federal	2,762,116	-	-	-	2,762,116	100.0
U.S. TOTAL	134,806,413	112,425,461	1,148,661	2,565,448	130,643,334	96.9

a UI-covered employment reported in the ETA-202 data produced by the United States Bureau of Labor Statistics (U.S. DOL, 2009f).

b Data not available for 2008, used the 2006 data.

Source: National Academy of Social Insurance estimates.

percent worked in firms with fewer than three employees. These ratios were applied to the percentage of workers in firms with fewer than five employees in the respective states. For example, the proportion of Arkansas private sector workers in firms with fewer than three employees is: (4.9 percent) x (56.7 percent) = 2.8 percent. These ratios are applied to the number of UI covered workers in private, non-farm firms in each state. In the fourteen States together, we estimate that 1.1 million workers were excluded from workers' compensation coverage in 2008 because of the small employer exclusion from mandatory coverage.

Agricultural Exemptions. We estimate agricultural workers to be excluded from workers' compensation coverage if they work in any state where agricultural employers are exempt from mandatory coverage. The

following fourteen states have no exemptions for agricultural workers: Alaska, Arizona, California, Connecticut, Hawaii, Idaho, Kansas, Massachusetts, Montana, New Hampshire, New Jersey, Ohio, Oregon, and Wyoming. In all the other jurisdictions we subtract from UI coverage those workers employed in agricultural industries.

Texas. In Texas, where workers' compensation coverage is elective for almost all employers, the NASI estimate of coverage is based on periodic surveys conducted by the Texas Department of Insurance and the Workers' Compensation Research and Evaluation Group, which found 75 percent of Texas employees were covered in 2008 (TDI et al., 2009). This ratio was applied to all UI-covered Texas employees other than federal government workers (who were not included in the Texas surveys).

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	5/1/2006 Periodic	5/1/2007 Periodic	5/1/2008 Periodic	5/1/2009 Periodic	5/1/2008 Periodic
5) SPECIAL FUNDS (excluding unemployment)					
Medical Benefits					
Costs Exempt					
Comprehensive Insurance (if not included above)					
ICD10A	YES	NO	YES	NO	YES
Is this amount included in line 8 under 4Y (if no, which code from 4Y?)					
6) INSURANCE GUARANTEE FUND					
Medical Benefits					
Costs Exempt					
Comprehensive Insurance (if not included above)					
ICD10A					
Medical Benefits					
Costs Exempt					
Comprehensive Insurance (if not included above)					
TOTAL					
SECOND YEAR TOTAL DEDUCTIONS (and other adjustments)					
Medical Benefits					
Costs Exempt					
Comprehensive Insurance (if not included above)					
ICD10A					
Are you adding additional information?					

Please e-mail your response to NACS at nacs@ssa.com or to 1-800-855-0111 by November 18, 2008.
For more information, contact John Roseada by e-mail at roseada@ssa.com or by phone at 202-462-8007.

Appendix C: Data Availability

Estimates of benefits paid and employer costs for workers' compensation by the National Academy of Social Insurance (NASI) rely on two main sources: responses to the NASI survey questionnaire from state agencies and data purchased from A.M. Best, a private company that specializes in collecting insurance data and rating insurance companies.

The A.M. Best data show the experience of private carriers in every state, but do not include any information about self-insured employers or about benefits paid under deductible arrangements. The A.M. Best data show total "direct losses" (that is, benefits) paid in each state in 2004–2008, by private carriers and by twenty-one entities that we classify as state funds, based on their membership in the American Association of State Compensation Insurance Funds. A.M. Best did not provide information on the exclusive state funds in Ohio, North Dakota, Washington, and Wyoming. The 2008 NASI survey questionnaire for state agencies asked states to report data for five years, from 2004 through 2008. These historical data were used to revise and update estimates for these past years. Table C1 describes the sources of data available for each state used in the data report.

Private Carrier Benefits

Of the fifty-one jurisdictions, forty-seven allow private carriers to write workers' compensation policies. Of these, eighteen jurisdictions were able to provide data on the amount of benefits paid by private carriers. In the other states, A.M. Best data were used to estimate private carrier benefits. An estimate of benefits paid under deductible policies was added to benefits paid reported by A.M. Best to estimate total private carrier benefits in these states. Methods for estimating deductible amounts are described in Appendix G.

State Fund Benefits

Twenty-six states had a state fund that paid workers' compensation benefits in 2008. Of these, twelve were able to provide benefit data. A.M. Best data and NAIC (National Association of Insurance Commissioners) data were used to estimate state fund benefits in states unable to provide the data. An estimate of benefits paid under deductible policies

was added to benefits reported by A.M. Best to estimate total state fund benefits in these states.

Self-Insured Benefits

All jurisdictions except North Dakota and Wyoming allow employers to self-insure. Thirty-two of these jurisdictions were able to provide data on benefits paid by self-insurers. Prior years' self-insured benefit ratios to total benefits were used to estimate the self-insurance data for three states. Self-insurance benefits were imputed for the thirteen states that were unable to provide data. For one state we had to impute self-insured data using the national average. The self-insurance imputation methods are described in Appendix E.

Second Injury Funds

Thirty-nine states have provided us with second injury fund data. There were twelve states for which second injury fund data were not available. For states where the data were available for reporting purposes, they were distributed evenly across private carriers, state funds and self-insured employers according to their share in the total. Second injury funds are financed through general state revenues or assessments on workers' compensation insurers and self-insuring employers. Second Injury fund data are given in Table J1.

Insurance Guaranty Funds and Self-Insurance Guaranty Funds

Guaranty Funds cover the outstanding claims of insolvent insurance companies, the property and casualty guaranty fund system. Self-Insurance Guaranty funds ensure the payment of outstanding workers' compensation liabilities of self-insured employers that went insolvent. For states where data were available, the Insurance Guaranty Fund data was included in the private carriers' benefits data and the Self-Insurance Guaranty Funds data were included in the self-insurance benefits data for that state.

Benefits under Deductible Policies

Forty-six jurisdictions allow carriers to write deductible policies for workers compensation. Of these jurisdictions, seven were able to provide the amount of benefits paid under deductible policies. Benefits under deductible arrangements were esti-

mated for another thirteen states by subtracting A.M. Best data on benefits paid (which do not include deductible benefits) from data reported by the state agency (which, in these cases, included deductible benefits). Deductible benefits in the remaining states were estimated using a ratio of Manual Equivalent Premiums, as described in Appendix G.

Medical Benefits

The state workers' compensation agency data and rating bureau data for medical share were used in twelve states. The National Council on Compensation Insurance estimates of the medical share of the benefits were used in thirty-seven jurisdictions. Other methods were used for two states for which no information was available from the state or NCCI. More detail on methods to estimate medical benefits is in Appendix F.

Employer Costs

NASI estimates of employer costs for benefits paid under private insurance and state funds are the sum of "direct premiums written" as reported by A.M. Best and the NAIC, plus our estimate of benefits

paid under deductible arrangements (which are not reflected in premiums). In some cases, data provided by state agencies are used instead of A.M. Best data.

State fund premium data for North Dakota, Ohio and Washington were provided by the state agencies. For self-insured employers, the costs include benefit payments and administrative costs. Because self-insured employers often do not separately record administrative costs for workers' compensation, their administrative costs must be estimated. The costs are assumed to be the same share of benefits as administrative costs reported by private insurers to the National Association of Insurance Commissioners (NAIC, 1998-2008). These administrative costs include direct defense and cost containment expenses paid¹⁷ and expenses for taxes, licenses, and fees.¹⁸

The ratios of these administrative costs to direct losses paid by private insurers were:

2004: 16.2 percent
2005: 18.7 percent
2006: 19.9 percent
2007: 19.1 percent
2008: 16.6 percent

17 Direct Defense and Cost Containment Expense Paid: In 1999, as part of a clarification effort, this line was renamed from "Direct Allocated Loss Adjustment Expenses" to "Direct Defense and Cost Containment Expenses." It includes defense, litigation and medical cost containment expenses, whether internal or external. The fees charged for insurer employees should include overhead, just as an outside firm's charges would include. The expenses exclude expenses incurred in the determination of coverage.

18 Taxes, Licenses, & Fees: State and local insurance taxes deducting guaranty association credits, insurance department licenses and fees, gross guaranty association assessments, and all other (excluding federal and foreign income and real estate).

Table C1**Data Sources for 2008**

State	Private Carrier	State Fund	Self-Insured	Second Injury Fund	Guaranty Fund	Self-Insurance Guaranty Fund	PC Deductible	SF Deductible	Medical
Alabama	Agency	-	Agency	-	-	-	Subtraction	-	NCCI
Alaska	Agency	-	Agency	Agency	Agency	-	Subtraction	-	NCCI
Arizona	Agency	Agency	Agency	Agency	-	-	Agency given	Agency given	NCCI
Arkansas	AMBest	-	Agency	Agency	AR Property and Insurance GF	-	Manual Premium Method	-	NCCI
California	Rating Bureau	AMBest	Agency	Subsequent Injury Fund and Uninsured Employers Fund	CA Insurance Guaranty Assn	-	Subtraction	Not Allowed	Rating Bureau
Colorado	AMBest	AMBest	Agency	Agency	Western GF Services	-	Manual Premium Method	Manual Premium Method	NCCI
Connecticut	AMBest	-	Agency	Agency	-	-	Manual Premium Method	-	NCCI
Delaware	AMBest	-	Imputation	Agency	-	-	Agency given	-	Rating Bureau
D.C.	AMBest	-	Imputation	-	-	-	Manual Premium Method	-	NCCI
Florida	AMBest	-	Agency	-	-	-	Manual Premium Method	-	NCCI
Georgia	AMBest	-	Imputation	Subsequent Injury Trust Fund	Agency	Agency	Manual Premium Method	-	NCCI
Hawaii	Agency (includes SF)	AMBest	Agency	Agency	-	-	Subtraction	Subtraction	NCCI
Idaho	AMBest	AMBest	Imputation	Agency	Western GF Services	-	Manual Premium Method	Manual Premium Method	NCCI
Illinois	AMBest	-	Imputation	Agency	-	-	Manual Premium Method	-	NCCI
Indiana	AMBest	-	Agency Compensation Board	Workers	-	-	Manual Premium Method	-	NCCI
Iowa	AMBest	-	Imputation	Second Injury Fund	IA Insurance Guaranty Assn	-	Manual Premium Method	-	NCCI
Kansas	AMBest	-	Agency	Agency	Western GF Services	-	Manual Premium Method	-	NCCI
Kentucky	AMBest	AMBest	Imputation	Agency	-	-	Manual Premium Method	Manual Premium Method	NCCI
Louisiana	AMBest	AMBest	Agency	Agency	-	-	Manual Premium Method	Manual Premium Method	NCCI
Maine	AMBest	AMBest	Agency	-	-	-	Manual Premium Method	Manual Premium Method	NCCI
Maryland	Agency	Agency	Agency	Second Injury Fund	-	-	Subtraction	Subtraction	NCCI
Massachusetts	Agency	-	Agency	Rating Bureau	-	-	Subtraction	-	Rating Bureau
Michigan	Agency	-	Agency	Agency	-	Agency	Subtraction	-	Agency
Minnesota	Agency	Agency	Agency	Agency	Agency	Agency	Agency given	Not Allowed	Agency

Table C1 continued

Data Sources for 2008

State	Private Carrier	State Fund	Self-Insured	Second Injury Fund	Guaranty Fund	Self-Insurance Guaranty Fund	PC Deductible	SF Deductible	Medical
Mississippi	AMBest	-	Agency	Agency	-	-	Manual Premium Method	-	NCCI
Missouri	Agency	AMBest	Agency	Agency	Agency	-	Subtraction	Manual Premium Method	NCCI
Montana	Agency	Agency	Agency	Agency	Western GF Services	-	Subtraction	Subtraction	NCCI
Nebraska	AMBest	-	Imputation	WC trust Fund	-	-	Manual Premium Method	-	NCCI
Nevada	Agency	-	Agency	-	-	-	Imputation	-	NCCI
New Hampshire	AMBest	-	Imputation	Agency	-	-	Manual Premium Method	-	NCCI
New Jersey	Rating Bureau	-	Imputation	Agency	Rating Bureau	Agency	Subtraction	-	Rating Bureau
New Mexico	Agency	Agency	Agency	Agency	-	-	Subtraction	Subtraction	NCCI
New York	AMBest	AMBest	Imputed thr' average	-	-	-	MPNational Average ratio	Not Allowed	Rating Bureau
North Carolina	AMBest	-	Imputation	-	-	-	Manual Premium Method	-	NCCI
North Dakota	AMBest	Agency	-	-	-	-	Agency given	Subtraction	Agency
Ohio	AMBest	Agency	Agency	-	-	-	Not Allowed	Not Allowed	Agency
Oklahoma	AMBest	AMBest	Agency	Agency	-	-	Manual Premium Method	Manual Premium Method	NCCI
Oregon	Agency	Agency	Agency	Agency	Agency	Agency	Agency given	Not Allowed	NCCI
Pennsylvania	Agency	Agency	Agency	Agency	Agency	Agency	Agency given	Agency given	Agency
Rhode Island	AMBest	AMBest	Agency	Agency	-	-	Manual Premium Method	Manual Premium Method	NCCI
South Carolina	Agency	Agency	Agency	Second Injury Fund	-	-	Agency given	Not Allowed	NCCI
South Dakota	Agency	-	Agency	Agency	-	-	Subtraction	-	NCCI
Tennessee	AMBest	-	Agency	Agency	-	-	Manual Premium Method	-	NCCI
Texas	AMBest	AMBest	Imputed from previous years data	WC Subsequent Injury Fund	-	-	MPNational Average ratio	MPNational Average ratio	NCCI
Utah	AMBest	AMBest	Imputation	Employers Reinsurance Fund	-	-	Manual Premium Method	Manual Premium Method	NCCI
Vermont	AMBest	-	Imputed from previous years data	-	-	-	Manual Premium Method	-	NCCI
Virginia	Agency	-	Imputation	-	-	-	Subtraction	-	NCCI
Washington	AMBest	Agency	Agency	Agency	-	-	Not Allowed	Not Allowed	Agency
West Virginia	AMBest	Agency	Imputed from previous years data	Agency	-	-	Not Allowed	Not Allowed	National Average
Wisconsin	AMBest	-	Agency	Agency	-	-	Not Allowed	-	Agency
Wyoming	AMBest	NAIC data	-	-	Western GF Services	-	Not Allowed	Not Allowed	National Average

Appendix D: Revised Data for 2004–2007

In preparing the 2008 estimates for workers' compensation benefits, the National Academy of Social Insurance reviewed and revised all data for calendar years 2004–2007. These revised data are shown in Tables D1 to D4. The revision process began by requesting historical data from state workers' compensation agencies and from AM Best. The revised benefit estimates are reported in the following tables. Revisions to the historical data increase consistency in historical methodology and enhance comparability between years. The following are key revisions made to the historical data:

- Revised data consistently use the same medical benefit estimation methodology described in Appendix F.
- Revised data consistently use the same deductible estimation methodology described in Appendix G.
- Self-insurance benefit imputations were revised using historical data as reported in Appendix E.
- Changes in data reported by state agencies were captured by the revised data questionnaire and are reflected in the revised estimates.
- Administrative costs for self-insurance were re-estimated based on updated information from the National Association of Insurance Commissioners as described in Appendix C.
- The California data were revised to exclude loss adjustment expenses as a component of paid benefits.
- The New Jersey data on self-insured employers are now based on data from the New Jersey Department of Labor and Workforce Developments rather than on a national average of the share of benefits accounted for by self-insuring employers.

The revised data in this appendix should be used in place of previously published data. Historical data displayed in the body of this report incorporate these revisions.

Table D5 is the corrected version of table 9.B1 of the *Annual Statistical Supplement to the Social Security Bulletin*.

Table D1**Workers' Compensation Benefits* by Type of Insurer and Medical Benefits, by State, 2007 (in thousands)**

State	Private Carriers ^a	State Funds	Self-Insured ^b	Total	Percent Medical	Medical ^c
Alabama	\$287,882		\$297,059	\$584,941	68.5	\$400,827
Alaska	136,891		51,395	188,286	62.5	117,754
Arizona	154,150	384,964	108,303	647,417	68.9	446,226
Arkansas	149,429		56,461	205,890	63.6	130,845
California	4,524,287	1,986,230	2,998,885	9,509,403	51.2	4,868,295
Colorado	234,312	409,982	191,736	836,030	47.5	397,011
Connecticut	538,085		187,577	725,662	43.7	317,186
Delaware	146,390		50,111	196,501	57.1	112,202
District of Columbia	70,357		13,641	83,998	36.6	30,762
Florida	1,988,945		727,169	2,716,114	62.3	1,691,064
Georgia	1,057,663		424,554	1,482,217	48.5	718,813
Hawaii	129,383	33,022	84,889	247,294	42.3	104,568
Idaho	74,751	149,553	42,469	266,772	60.9	162,492
Illinois	2,014,366		722,275	2,736,641	47.2	1,292,581
Indiana	535,321		61,879	597,200	70.2	419,364
Iowa	387,906		108,148	496,054	51.6	255,813
Kansas	273,355		120,352	393,707	61.3	241,157
Kentucky	350,233	85,185	203,060	638,478	58.0	370,515
Louisiana	306,611	159,310	147,927	613,849	52.6	323,086
Maine	95,764	91,523	85,537	272,824	43.3	118,207
Maryland	444,332	236,791	162,844	843,967	43.1	363,599
Massachusetts	765,474		120,734	886,208	34.7	307,833
Michigan	912,633		595,335	1,507,968	35.6	536,441
Minnesota	642,202	55,222	254,424	951,848	51.8	492,908
Mississippi	181,916		147,053	328,969	57.9	190,569
Missouri	528,578	84,459	279,188	892,225	54.6	486,767
Montana	72,852	126,017	44,060	242,930	56.7	137,856
Nebraska	223,872		66,773	290,644	62.8	182,497
Nevada	256,015		122,385	378,400	45.6	172,683
New Hampshire	164,396		39,978	204,374	61.4	125,553

New Jersey	1,502,327	344,709	1,847,036	48.0	886,677
New Mexico	123,047	34,806	242,393	58.6	142,116
New York	1,483,609	959,117	3,137,467	36.0	1,129,488
North Carolina	963,130	385,561	1,348,692	45.7	616,810
North Dakota ^a	128	95,290	95,418	54.0	51,482
Ohio	19,335	2,017,613	2,478,080	41.5	1,029,325
Oklahoma	270,012	265,991	702,295	43.0	301,753
Oregon	229,901	276,405	586,398	53.5	313,624
Pennsylvania	1,843,513	342,184	2,803,819	44.6	1,251,734
Rhode Island	42,215	90,619	152,235	34.6	52,742
South Carolina	637,362	47,729	884,513	41.9	370,650
South Dakota	102,731	16,620	119,351	66.6	79,472
Tennessee	640,679	134,682	775,361	54.0	418,751
Texas	813,310	312,801	1,414,780	61.0	863,229
Utah	88,119	143,852	282,600	70.5	199,307
Vermont	103,239	15,910	119,149	50.4	60,050
Virginia	796,504	272,870	1,069,374	57.4	613,628
Washington ^a	21,895	1,502,012	1,995,744	36.2	723,226
West Virginia ^a	228,569	308,956	634,279	49.8	315,588
Wisconsin	930,006	164,068	1,094,074	74.2	811,496
Wyoming ^a	4,035	122,959	126,994	49.8	63,186
Non-federal total	\$28,492,016	\$10,322,595	\$51,876,858	49.8	\$25,809,808
Federal ^d			3,339,892	27.2	909,808
Federal employees ^e			2,586,700	29.1	752,742
TOTAL			\$55,216,750	48.4	\$26,719,616

* Benefits are payments in the calendar year to injured workers and to providers of their medical care.

a. States with exclusive funds (Ohio, North Dakota, Washington, West Virginia, and Wyoming) may have small amounts of benefits paid in the private carrier category. This results from the fact that some employers doing business in states with exclusive state funds may need to obtain coverage from private carriers under the USL & HW act or employers liability coverage which the state fund is not authorized to provide. In addition, private carriers may provide excess compensation coverage in some of these states.

b. Self-insurance includes individual self-insurers and group self-insurance.

c. For further details see Appendix C.1.

d. Federal benefits include: those paid under the Federal Employees' Compensation Act for civilian employees; the portion of the Black Lung benefit program that is financed by employers; and a portion of benefits under the Longshore and Harbor Workers' Compensation Act that are not reflected in state data, namely, benefits paid by self-insured employers and by special funds under the LHWCA. See Appendix H for more information about federal programs.

e. Included in the federal benefits total.

Source: National Academy of Social Insurance estimates based on data received from state agencies, the U.S. Department of Labor, A.M. Best, and the National Council on Compensation Insurance.

Table D2**Workers' Compensation Benefits* by Type of Insurer and Medical Benefits, by State, 2006 (in thousands)**

State	Private Carriers ^a	State Funds	Self-Insured ^b	Total	Percent Medical	Medical ^c
Alabama	\$280,034		\$282,599	\$562,632	66.6	\$374,713
Alaska	138,990		47,517	186,507	58.4	108,920
Arizona	136,623	369,138	102,497	608,258	69.3	421,523
Arkansas	137,147		59,635	196,782	64.2	126,334
California	4,676,403	2,225,017	3,012,788	9,914,209	47.4	4,697,192
Colorado	242,604	423,268	198,537	864,409	49.2	425,289
Connecticut	516,705		192,553	709,258	44.3	314,201
Delaware	152,098		56,210	208,308	58.2	121,235
District of Columbia	73,997		14,565	88,562	40.8	36,133
Florida	2,054,707		616,852	2,671,559	64.0	1,709,798
Georgia	966,977		402,708	1,369,685	50.4	690,321
Hawaii	134,638	28,644	79,403	242,685	40.7	98,773
Idaho	59,075	147,489	47,828	254,392	62.0	157,723
Illinois	1,852,600		587,325	2,439,925	48.2	1,176,044
Indiana	505,756		53,991	559,747	69.3	387,905
Iowa	385,187		103,347	488,534	52.6	256,969
Kansas	267,114		123,735	390,849	58.6	229,038
Kentucky	342,754	84,387	199,181	626,322	58.9	368,903
Louisiana	342,137	130,060	138,282	610,479	52.8	322,333
Maine	106,962	96,415	81,265	284,643	41.1	116,988
Maryland	437,362	239,409	152,050	828,821	43.2	358,051
Massachusetts	785,590		119,177	904,767	35.3	319,192
Michigan	852,208		618,366	1,470,574	37.3	547,794
Minnesota	628,443	62,791	246,120	937,355	50.9	476,770
Mississippi	190,181		147,668	337,849	58.2	196,628
Missouri	506,932	80,552	244,378	831,862	52.4	435,895
Montana	75,074	118,081	41,092	234,247	57.6	134,926
Nebraska	212,602		63,169	275,772	62.7	172,909
Nevada	266,547		127,008	393,555	45.1	177,493

New Hampshire	175,364	44,391	219,755	59.7	131,194
New Jersey	1,420,821	327,287	1,748,108	49.6	866,540
New Mexico	112,501	92,016	237,551	57.4	136,354
New York	1,486,967	706,239	3,251,427	36.0	1,170,514
North Carolina	975,471	341,838	1,317,308	44.8	590,154
North Dakota ^a	81,297	81,297	81,297	55.6	45,218
Ohio	26,343	1,921,443	2,383,544	44.1	1,051,774
Oklahoma	246,521	268,552	674,677	44.1	297,533
Oregon	219,518	267,997	566,593	54.0	305,960
Pennsylvania	1,797,351	353,784	2,758,784	43.8	1,209,115
Rhode Island	39,823	94,218	149,395	33.0	49,301
South Carolina	643,640	137,000	989,189	45.9	453,791
South Dakota	92,453	16,097	108,550	65.0	70,558
Tennessee	665,096	216,060	881,156	51.6	454,677
Texas	803,859	303,828	1,384,652	60.6	839,099
Utah	76,046	43,908	257,962	70.1	180,832
Vermont	107,895	16,253	124,148	50.3	62,447
Virginia	620,331	187,072	807,404	59.6	481,213
Washington ^a	30,302	1,448,619	1,927,431	36.0	694,577
West Virginia ^a	4,681	400,231	481,668	49.2	237,077
Wisconsin	859,915	183,329	1,043,244	72.7	758,351
Wyoming ^a	794	116,528	117,322	49.2	57,746
Non-federal total	\$27,733,140	\$10,628,010	\$51,003,712	49.2	\$25,104,017
Federal ^d			3,270,322	26.2	857,591
Federal employees ^e			2,454,861	28.0	686,935
TOTAL			\$54,274,033	47.8	\$25,961,608

* Benefits are payments in the calendar year to injured workers and to providers of their medical care.

a. States with exclusive funds (Ohio, North Dakota, Washington, West Virginia, and Wyoming) may have small amounts of benefits paid in the private carrier category. This results from the fact that some employers doing business in states with exclusive state funds may need to obtain coverage from private carriers under the USL & HW Act or employers liability coverage which the state fund is not authorized to provide. In addition, private carriers may provide excess compensation coverage in some of these states.

b. Self-insurance includes individual self-insurers and group self-insurance.

c. For further details see Appendix C1.

d. Federal benefits include: those paid under the Federal Employees' Compensation Act for civilian employees; the portion of the Black Lung benefit program that is financed by employers; and a portion of benefits under the Longshore and Harbor Workers' Compensation Act that are not reflected in state data, namely, benefits paid by self-insured employers and by special funds under the LHWCA. See Appendix H for more information about federal programs.

e. Included in the federal benefits total.

Source: National Academy of Social Insurance estimates based on data received from state agencies, the U.S. Department of Labor, A.M. Best, and the National Council on Compensation Insurance.

Table D3**Workers' Compensation Benefits* by Type of Insurer and Medical Benefits, by State, 2005 (in thousands)**

State	Private Carriers ^a	State Funds	Self-Insured ^b	Total	Percent Medical	Medical ^c
Alabama	290,843		274,170	565,013	66.0	372,905
Alaska	137,616		45,105	182,721	57.4	104,839
Arizona	134,335	306,239	102,208	542,781	65.0	352,773
Arkansas	138,429		54,431	192,860	64.9	125,243
California	5,165,482	2,684,600	2,982,285	10,832,367	44.1	4,774,092
Colorado	269,673	417,384	208,356	895,413	48.8	437,197
Connecticut	526,831		181,767	708,598	41.7	295,571
Delaware	136,547		49,091	185,639	58.9	109,341
District of Columbia	73,604		16,274	89,879	34.6	31,062
Florida	2,297,075		616,852	2,913,927	62.3	1,814,914
Georgia	940,625		438,758	1,379,383	50.6	697,833
Hawaii	137,002	32,450	81,327	250,779	39.3	98,665
Idaho	75,227	133,682	34,214	243,123	59.9	145,515
Illinois	1,794,512		630,971	2,425,483	49.5	1,200,148
Indiana	513,158		51,672	564,830	68.5	386,652
Iowa	376,334		112,676	489,009	50.9	248,996
Kansas	262,414		127,279	389,693	57.1	222,628
Kentucky	362,375	76,520	254,206	693,100	55.1	381,673
Louisiana	296,497	165,694	135,046	597,237	51.0	304,555
Maine	97,401	90,670	84,047	272,119	39.8	108,357
Maryland	426,794	216,050	141,467	784,312	40.1	314,343
Massachusetts	755,642		148,744	904,386	36.4	328,794
Michigan	858,953		614,645	1,473,598	34.6	510,063
Minnesota	637,670	65,327	238,640	941,636	49.9	470,015
Mississippi	172,826		139,084	311,910	55.1	171,869
Missouri	547,313	98,336	248,020	893,669	51.7	462,463
Montana	73,259	113,821	40,241	227,321	55.4	125,828
Nebraska	242,330		67,410	309,741	59.8	185,324
Nevada	264,261		122,072	386,333	46.3	178,767

New Hampshire	180,030	49,141	229,172	59.4	136,110
New Jersey	1,260,848	306,391	1,567,238	49.6	776,915
New Mexico	116,557	28,979	230,591	58.1	134,028
New York	1,458,234	967,609	3,154,126	34.4	1,085,820
North Carolina	1,008,960	377,616	1,386,576	44.7	619,794
North Dakota ^a		82,033	82,033	55.0	45,085
Ohio ^a	37,693	1,961,918	2,447,038	46.8	1,144,090
Oklahoma	243,732	236,414	640,088	46.9	300,281
Oregon	221,522	261,171	553,270	54.6	302,112
Pennsylvania	1,878,362	271,457	2,741,310	42.9	1,174,705
Rhode Island	31,259	92,982	137,202	34.0	46,589
South Carolina	624,968	67,434	917,191	45.9	420,762
South Dakota	70,270	15,619	85,889	66.3	56,924
Tennessee	624,627	197,990	822,618	54.2	445,988
Texas	904,379	344,767	1,548,506	62.1	961,376
Utah	77,193	133,281	253,763	69.4	176,184
Vermont	106,221	15,392	121,613	48.3	58,718
Virginia	631,073	223,091	854,165	56.5	482,669
Washington ^a		1,375,658	1,847,523	35.4	654,264
West Virginia ^a	6,993	695,205	818,146	48.1	393,809
Wisconsin	994,633	175,432	1,170,065	65.7	768,405
Wyoming ^a	9	116,528	116,537	48.1	56,094
Non-federal total	\$ 28,482,591	\$ 11,036,210	\$ 52,371,521	48.1	\$ 25,201,149
Federal ^d			3,258,155	25.6	835,208
Federal employees ^e			2,462,059	27.3	671,056
TOTAL			55,629,676	46.8	26,036,357

* Benefits are payments in the calendar year to injured workers and to providers of their medical care.

a. States with exclusive funds (Ohio, North Dakota, Washington, West Virginia, and Wyoming) may have small amounts of benefits paid in the private carrier category. This results from the fact that some employers doing business in states with exclusive state funds may need to obtain coverage from private carriers under the USL & HW Act or employers liability coverage which the state fund is not authorized to provide. In addition, private carriers may provide excess compensation coverage in some of these states.

b. Self-insurance includes individual self-insurers and group self-insurance.

c. For further details see Appendix C1.

d. Federal benefits include: those paid under the Federal Employees' Compensation Act for civilian employees; the portion of the Black Lung benefit program that is financed by employers; and a portion of benefits under the Longshore and Harbor Workers' Compensation Act that are not reflected in state data, namely, benefits paid by self-insured employers and by special funds under the LHWCA. See Appendix H for more information about federal programs.

e. Included in the federal benefits total.

Source: National Academy of Social Insurance estimates based on data received from state agencies, the U.S. Department of Labor, A.M. Best, and the National Council on Compensation Insurance.

Table D4**Workers' Compensation Benefits* by Type of Insurer and Medical Benefits, by State, 2004 (in thousands)**

State	Private Carriers ^a	State Funds	Self-Insured ^b	Total	Percent Medical	Medical ^c
Alabama	\$267,482		\$264,518	\$532,000	62.1	\$330,586
Alaska	144,126		48,690	192,816	55.8	107,578
Arizona	140,814	303,995	103,064	547,872	64.2	351,903
Arkansas	158,949		60,228	219,177	60.7	132,995
California	5,731,475	3,203,319	3,511,876	12,446,670	46.2	5,754,843
Colorado	284,008	422,542	146,723	853,273	48.8	416,038
Connecticut	456,798		255,717	712,515	39.6	281,955
Delaware	119,165		38,234	157,399	45.4	71,459
District of Columbia	76,958		16,949	93,907	37.9	35,558
Florida	2,239,500		627,031	2,866,531	59.3	1,700,643
Georgia	878,464		380,691	1,259,155	47.8	601,592
Hawaii	152,765	32,089	86,436	271,290	38.3	103,900
Idaho	78,383	123,970	32,766	235,119	59.1	138,927
Illinois	1,687,956		566,459	2,254,415	48.5	1,093,523
Indiana	498,273		52,798	551,071	68.0	374,775
Iowa	347,956		101,762	449,718	51.6	232,123
Kansas	252,594		124,522	377,116	55.0	207,272
Kentucky	383,073	65,360	271,176	719,610	54.0	388,392
Louisiana	320,375	176,307	137,929	634,610	50.4	319,955
Maine	90,987	85,788	90,847	267,622	42.0	112,395
Maryland	466,647	203,884	126,771	797,301	41.4	329,922
Massachusetts	823,530		145,287	968,817	34.4	333,251
Michigan	827,277		690,109	1,517,386	37.6	569,855
Minnesota	631,099	65,092	238,422	934,613	48.7	454,755
Mississippi	177,433		133,083	310,516	55.9	173,462
Missouri	555,740	113,871	241,449	911,059	50.4	459,521
Montana	70,579	102,576	38,304	211,460	53.6	113,415
Nebraska	224,829		58,369	283,197	58.9	166,891
Nevada	240,152		118,580	358,732	49.1	176,186

New Hampshire	171,167	45,193	216,360	55.9	121,026
New Jersey	1,277,054	321,542	1,598,596	49.3	787,997
New Mexico	94,436	26,794	198,267	59.1	117,097
New York	1,599,370	775,146	3,101,314	33.8	1,048,907
North Carolina	853,421	315,427	1,168,848	44.2	516,445
North Dakota ^a	260	82,977	83,237	56.3	46,870
Ohio ^a	37,509	1,935,728	2,434,715	46.9	1,141,082
Oklahoma	252,603	222,363	627,174	46.1	288,862
Oregon	217,942	229,013	518,350	53.3	276,405
Pennsylvania	1,861,802	225,990	2,658,104	41.7	1,108,518
Rhode Island	41,786	87,204	143,423	35.1	50,396
South Carolina	573,520	61,670	855,062	46.3	396,159
South Dakota	65,832	11,577	77,409	62.9	48,712
Tennessee	645,816	170,022	815,838	51.6	421,181
Texas	1,002,051	300,038	1,624,217	60.9	988,932
Utah	61,944	135,273	241,193	68.4	164,918
Vermont	107,030	15,971	123,000	45.8	56,288
Virginia	554,397	184,077	738,475	55.1	406,954
Washington ^a	30,843	1,323,410	1,837,215	34.6	636,238
West Virginia ^a	8,429	725,291	878,255	47.7	418,644
Wisconsin	843,431	54,935	898,366	64.6	580,651
Wyoming ^a	3,555	116,528	120,083	47.7	57,241
Non-federal total	\$28,631,582	\$11,146,216	\$52,892,469	47.7	\$25,213,193
Federal ^d			3,256,202	26.6	865,442
Federal employees ^e			2,445,077	28.5	695,680
Total			56,148,671	46.4	26,078,635

* Benefits are payments in the calendar year to injured workers and to providers of their medical care.

a. States with exclusive funds (Ohio, North Dakota, Washington, West Virginia, and Wyoming) may have small amounts of benefits paid in the private carrier category. This results from the fact that some employers doing business in states with exclusive state funds may need to obtain coverage from private carriers under the USL & HW Act or employers liability coverage which the state fund is not authorized to provide. In addition, private carriers may provide excess compensation coverage in some of these states.

b. Self-insurance includes individual self-insurers and group self-insurance.

c. For further details see Appendix C1.

d. Federal benefits include: those paid under the Federal Employees' Compensation Act for civilian employees; the portion of the Black Lung benefit program that is financed by employers; and a portion of benefits under the Longshore and Harbor Workers' Compensation Act that are not reflected in state data, namely, benefits paid by self-insured employers and by special funds under the LHWCA. See Appendix H for more information about federal programs.

e. Included in the federal benefits total.

Source: National Academy of Social Insurance estimates based on data received from state agencies, the U.S. Department of Labor, A.M. Best, and the National Council on Compensation Insurance.

Table D5

Corrected Version of Table 9.B1 of the Annual Statistical Supplement to the Social Security Bulletin
 Coverage, Benefits, and Costs, selected years 1980-2008

Year	Estimated number of Workers covered per month (millions)	Total	Private Carriers	State Funds	Federal Funds	Employers Self-Insurance	Medical and Hospitalization	Compensation payments	Cost of program as a percentage of covered payroll	Benefits as a percentage of covered payroll
1980	87.6	13,618	7,029	1,797	2,533	2,259	3,947	9,671	1.76	0.96
1981	87.0	15,054	7,876	2,017	2,578	2,583	4,431	10,623	1.67	0.97
1982	85.6	16,408	8,647	2,191	2,577	2,993	5,058	11,350	1.58	1.04
1983	86.7	17,575	9,265	2,443	2,618	3,249	5,681	11,894	1.50	1.05
1984	91.0	19,686	10,610	2,754	2,651	3,671	6,424	13,262	1.49	1.09
1985	93.7	22,217	12,341	3,059	2,685	4,132	7,498	14,719	1.64	1.17
1986	95.6	24,613	13,827	3,554	2,694	4,538	8,642	15,971	1.79	1.23
1987	98.2	27,317	15,453	4,084	2,698	5,082	9,912	17,405	1.86	1.29
1988	101.4	30,703	17,512	4,687	2,760	5,744	11,507	19,196	1.94	1.34
1989	103.9	34,316	19,918	5,205	2,760	6,433	13,424	20,892	2.04	1.46
1990	105.5	38,237	22,222	5,873	2,893	7,249	15,187	23,050	2.18	1.57
1991	103.7	42,187	24,515	6,713	2,998	7,962	16,832	25,355	2.16	1.65
1992	104.3	44,660	24,030	7,829	3,158	9,643	18,664	25,996	2.13	1.65
1993	106.2	42,925	21,773	8,105	3,189	9,857	18,503	24,422	2.17	1.53

1994	109.4	43,482	21,391	7,398	3,166	11,527	17,194	26,288	2.05	1.47
1995	112.8	42,122	20,106	7,681	3,103	11,232	16,733	25,389	1.83	1.35
1996	114.8	41,960	21,024	8,042	3,066	9,828	16,739	25,221	1.66	1.26
1997	118.1	41,971	21,676	7,157	2,780	10,357	17,397	24,574	1.49	1.17
1998	121.5	43,987	23,579	7,187	2,868	10,354	18,622	25,365	1.38	1.13
1999	124.3	46,313	26,383	7,083	2,862	9,985	20,055	26,258	1.35	1.12
2000	127.1	47,699	26,874	7,388	2,957	10,481	20,933	26,766	1.34	1.06
2001	127.0	50,827	27,905	8,013	3,069	11,839	23,137	27,690	1.43	1.10
2002	125.6	52,297	28,085	9,139	3,154	11,920	24,203	28,094	1.57	1.13
2003	124.7	54,739	28,395	10,442	3,185	12,717	25,733	29,006	1.71	1.16
2004	125.9	56,149	28,632	11,146	3,256	13,115	26,079	30,070	1.70	1.13
2005	128.2	55,630	28,483	11,036	3,258	12,853	26,036	29,593	1.66	1.07
2006	130.3	54,274	27,733	10,628	3,270	12,643	25,962	28,312	1.56	0.98
2007	131.7	55,217	28,492	10,323	3,340	13,062	26,720	28,497	1.44	0.94
2008	130.6	57,633	30,150	10,482	3,424	13,578	29,063	28,570	1.33	0.97

Source: Annual Statistical Supplement to the Social Security Bulletin, SSA, 2009.

Appendix E: Self-Insurer Benefits Estimates

This report uses a methodology that incorporates historical data to estimate self-insurance benefits in states that were not able to provide recent information.

That methodology is as follows:

Step A: Calculate the share of payroll that is self-insured (in states where we can).

- 1) Use NASI estimates of total covered payroll for calendar year 2008. This procedure is outlined in Appendix A.
- 2) Obtain total payroll for workers insured by private carriers and competitive state funds for policy years from NCCI. This information is available for a subset of states (about 37-39 states), which we call “NCCI states.” (If NCCI payroll for the current year is not available, we use the previous years’ share of NCCI payroll to covered payroll to impute the current year NCCI payroll.)
- 3) For each of the NCCI states, use [1] and [2] to estimate the payroll covered by self-insurers. This is given by [1]-[2].
- 4) For the NCCI states, use [1] and [2] to estimate the percent of payroll covered by self-insurers. The percentage of payroll covered by self-insurers is [3] / [1].

(A similar procedure is used for New Jersey using payroll data from the New Jersey Compensation Rating & Inspection Bureau.)

Step B: Calculate the share of benefits that is self-insured (in states where we can); and

- 5) Compile state-reported data on self-insured benefits where we can.
- 6) Estimate total benefits in states that report self-insured benefits.
- 7) Calculate the share of total benefits that is self-insured in states where we can by dividing self-insured benefits by total benefits. [5]/ [6].

Step C: In states where we have both shares described above, calculate the average relationship between the two shares.

- 8) For each state where we have a self-insured share of payroll [4] and a self-insured share of

benefits [7], calculate the ratio between the two shares. This ratio is [7] / [4].

- 9) Determine the number of states where we have both shares. There were 27 such states in 2008.
- 10) Calculate the average ratio between the two shares for the 27 states. The average ratio in 2008 is 69.8 percent (Table E1). That is, on average, the share of benefits that is self-insured is about 69.8 percent of the share of payroll that is self-insured in states where we have both pieces of information.

Step D: For those states where we have prior years’ data on self-insured benefits, use the latest available year’s self-insured benefits to self-insured payroll ratio to estimate the self-insured benefits for 2008.

- 11) The self-insurance data has been imputed using previous years’ data in 3 states where they were available. Use the ratio of self-insured benefit ratio of the state to the total self-insured benefit ratio

$$\left[\frac{\text{State Self Insured Benefits}}{\text{State Total Benefits}} \right] = \frac{\text{Total available Self Insured Benefits}}{\text{Total Benefits}}$$

(in available years) to impute the ratio in the later years when data were not available.

Step E: Use the average relationship between the two shares to estimate the share of benefits that is self-insured in states where we lack that information but have an estimate of the share of payroll that is self-insured.

- 12) For each of the NCCI states where we lack self-insured benefit data (39-27=12 states), multiply [4] the percentage of payroll covered by self-insurers by the average ratio in [10].
- 13) The ratio in [12] is used to estimate self-insured benefits in those 12 states. We get the self-insured benefits by multiplying

$$(\text{Private Carrier} + \text{State Fund Benefits}) * \left[\frac{\text{Ratio in [12]}}{(1 - \text{Ratio in [12]})} \right]$$

Table E1

Self-Insurer Estimation Results, 2004–2008

Average Ratio of the percent of total benefits paid by self-insurers to the percent of payroll covered by self-insurers, (7)/(4)

Year	Ratio
2004	68.8
2005	70.4
2006	66.0
2007	66.5
2008	69.8

Step F: For states where we lack both ratios described in A and B (above), use the average share of total benefits that is self-insured in the rest of the states.

For 2008, 33 states reported self-insured benefits. For 13 other states, we imputed self-insured benefits using NCCI payroll data. For three states we used prior year's data to estimate self-insured benefit payments in 2008. Two exclusive state fund states – North Dakota and Wyoming – do not allow self-insurance. For the remaining state – New York – we estimate self-insured benefits based on the average of the other states where we have reported or imputed data.

Appendix F: Medical Benefit Estimates

Estimates by the National Academy of Social Insurance (NASI) of the percent of total benefits paid that were for medical care are based on reports from state agencies and from estimates provided by the National Council on Compensation Insurance (NCCI). For 2008, we used the NCCI data for the medical share for thirty-seven states.

The National Council on Compensation Insurance (NCCI) is a private organization that assists private carriers, competitive state funds, and insurance commissioners in setting workers' compensation rates in selected states. NCCI provided NASI estimates of

the percent of private carrier benefits paid that were for medical care in thirty-seven states. For seven states we used the agency information on medical share given to NASI by the state agencies. For California, Delaware, New Jersey, New York, and Pennsylvania, we used data on calendar year paid medical benefits data provided by rating bureaus. For two states, West Virginia and Wyoming, neither state reports nor NCCI estimates of medical benefits were available. For these states, the weighted average of the share of total benefits that were for medical care in the other forty-nine jurisdictions was used.

Appendix G: Deductible Benefit Estimates

NASI has five methods for estimating deductible benefits and total benefits, depending on what is reported by the state.

Method A:

State reports deductible amounts.

Method: Use deductible amount reported by state agencies or rating bureaus.

Seven States: Arizona, Delaware, Minnesota, North Dakota, Oregon, Pennsylvania, and South Carolina.

Method B:

States say deductibles are included in their totals, but do not report amounts of deductibles.

Method: Estimate deductibles by subtracting Net Losses Paid as reported by A.M. Best from state report.

Thirteen States: Alabama, Alaska, California, Hawaii, Maryland, Massachusetts, Michigan, Missouri, Montana, New Jersey, New Mexico, South Dakota, and Virginia.

Note: Before using A.M. Best data, state fund and private carrier data are separated out from both data reported by A.M. Best and state agencies (where necessary, i.e., where A.M. Best or the state agency classify as private carrier an entity that we classify as a state fund).

Method C:

Deductibles are not allowed in the state.

Method: Use state reports as totals. Deductibles equal zero.

Five States: Ohio, Washington, West Virginia, Wisconsin, and Wyoming.

Method D:

State does not report benefit amounts. Deductibles are allowed.

Method: Use Net Losses Paid as reported by A.M. Best and add estimated deductibles, based on the ratio of Manual Equivalent Premiums.

Twenty-three Jurisdictions: Arkansas, Colorado, Connecticut, the District of Columbia, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Mississippi, Nebraska, New Hampshire, North Carolina, Oklahoma, Rhode Island, Tennessee, Utah, and Vermont.

Method E:

State does not report benefit amounts. Deductibles are allowed. Manual Equivalent Premiums are not available.

Method: Estimate the average ratio of Manual Equivalent Premiums from those states where it is available. Use this average with the Net Losses paid as reported by A.M. Best to impute deductibles.
Two States: New York and Texas.

Appendix H: Federal Programs

Various federal programs compensate certain categories of workers for disabilities caused on the job and provide benefits to dependents of workers who die of work-related causes. Each program is described briefly below along with an explanation of whether and how it is included in our national totals of workers' compensation benefits. Our aim in this report is to include in national totals for workers' compensation those federally administered programs that are financed by employers and that are not otherwise included in workers' compensation benefits reported by states, such as the benefits paid under the Federal Employees' Compensation Act. Programs that cover private sector workers and are financed by federal general revenues, such as the Radiation Exposure Compensation Act, are not included in our national totals for workers' compensation benefits and employer costs. More detail on these programs is given below.

Federal Employees. The Federal Employees' Compensation Act of 1916 (FECA), which superseded previous workers' compensation laws for federal employees, provided the first comprehensive workers' compensation program for federal civilian employees. In 2008, total benefits were \$2,676 million, of which 30 percent were for medical care. The share of benefits for medical care is lower than in most state programs because federal cash benefits, particularly for higher-wage workers, replace a larger share of pre-injury wages than is the case in most state programs. Administrative costs of the program were \$143 million in calendar year 2008, or 5.3 percent of total benefits (U.S. DOL, 2010). Table H1 reports benefits and administrative costs for federal civilian employees under the Federal Employees' Compensation Act in 1997 through 2008. These benefits to workers and costs to the federal government as employer are included in national totals in this report, and are classified with federal programs.

Longshore and Harbor Workers. The Longshore and Harbor Workers' Compensation Act (LHWCA) requires employers to provide workers' compensation protection for longshore, harbor, and other maritime workers. The original program, enacted in 1927, covered maritime employees injured while working over navigable waters because the Supreme Court held that the Constitution prohibits states from

extending coverage to such individuals. The Longshore and Harbor Workers' Compensation Act (LHWCA) is a federal workers' compensation program for maritime employees injured while working over navigable waters, excluding the master or crew of a vessel. It also covers other workers who fall outside the jurisdiction of state programs, such as employees on overseas military bases, those working overseas for private contractors of the United States, and private employees engaged in offshore drilling enterprises.

Private employers cover longshore and harbor workers by purchasing private insurance or self-insuring. In fiscal year 2008, about 560 self-insured employers and insurance companies reported a total of 29,170 lost-time injuries to the federal Office of Workers' Compensation Programs. Total benefits paid under the Act in 2008 were \$983 million, which included \$504 million paid by private insurance carriers, \$340 million paid by self-insured employers, \$128 million paid from the federally administered special fund for second injuries and other purposes, and \$10 million for the District of Columbia Workers' Compensation Act (DCCA) Fund. Federal direct administrative costs were \$12.7 million or about 1.3 percent of benefits paid (Table H2). The Academy's data series on benefits and costs of workers' compensation includes at least part of the benefits paid by private carriers under the LHWCA in the states where the companies operate. The benefits are not identified separately in the information provided by A.M. Best and state agencies. Benefits paid by private employers who self-insure under the Longshore and Harbor Workers' Compensation Act are not reported by states or A.M. Best. Consequently, these benefits and employer costs are included with federal programs in this report. Table H-2 shows benefits reported to the U.S. Department of Labor by insurers and self-insured employers under the Longshore and Harbor Workers' Compensation Act in 1997 through 2008. Ideally, benefits and employer costs under the LHWCA would be counted in the states where the employee is located, because our estimates of covered employment and covered workers count these workers and wages in the states where they work. We believe that at least part of LHWCA benefits paid through private insurance carriers are included in state data that are reported to us by

Table H1**Federal Employees' Compensation Act, Benefits and Costs, 1997–2008 (in thousands)**

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Benefits	\$1,900,779	\$2,009,862	\$1,999,915	\$2,118,859	\$2,223,088	2,317,325	2,367,757	2,445,077	2,462,059	2,454,861	2,586,700	2,676,370
Compensation Benefits	1,440,867	1,536,430	1,474,168	1,576,354	1,600,031	1,651,947	1,698,273	1,749,397	1,791,003	1,767,926	1,833,958	1,878,331
Medical Benefits	459,912	473,432	525,747	542,505	623,057	665,378	669,484	695,680	671,056	686,935	752,742	798,039
% Medical	24	24	26	26	28	29	28	28	27	28	29	30
Direct Administrative Costs	80,893	80,235	87,425	91,532	109,326	115,226	130,672	131,920	128,536	137,386	143,768	142,532
Total Costs	1,981,672	2,090,097	2,087,340	2,210,391	2,332,414	2,432,551	2,498,429	2,576,997	2,590,595	2,592,247	2,730,468	2,818,902
Indirect Administrative Costs ^a	6,835	5,750	5,584	6,197	5,056	4,596	4,806	4,587	5,494	7,619	6,774	7,756

a Includes legal and investigative support from the Office of the Solicitor and the Office of the Inspector General. Funded by General Revenues.

Source: U.S. DOL 2010.

Table H2

Longshore and Harbor Workers' Compensation Act, Benefits, Costs and Number of DBA Death Claims, 1997–2008 (Dollars in thousands)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Benefits	\$617,927	\$642,321	\$659,800	\$671,991	\$689,149	\$700,563	\$716,218	\$747,321	\$795,466	\$879,508	\$923,045	\$983,050
Insurance Carriers	219,352	238,464	232,778	249,671	236,726	246,603	262,753	278,887	325,027	367,625	456,773	504,348
Self-Insured Employers	263,255	261,559	283,991	278,952	307,708	310,940	309,843	322,520	325,694	368,744	325,544	340,336
LHWCA Special Fund	123,772	129,777	131,152	131,564	133,374	131,684	132,504	135,073	134,230	132,933	130,673	128,372
DCCA Special Fund	11,548	12,521	11,879	11,804	11,341	11,336	11,118	10,841	10,515	10,206	10,055	9,994
DBA benefits ^a	6,108	7,691	5,452	8,583	9,411	7,582	11,338	30,079	59,797	115,758	170,231	199,837
Number of DBA Death Claims	4	1	3	3	5	7	56	231	284	338	426	289
Total Annual Assessments	121,300	122,000	141,300	145,700	145,000	136,000	135,800	148,500	146,500	135,500	135,000	132,500
LHWCA	110,000	111,000	130,000	133,000	133,000	125,000	125,000	137,000	135,000	125,000	125,000	124,000
DCCA	11,300	11,000	11,300	12,700	12,000	11,000	10,800	11,500	11,500	10,500	10,000	8,500
Administrative Expenses ^b	9,356	9,821	10,822	11,144	11,713	11,945	12,270	12,510	12,568	12,715	12,725	12,667
General Revenue	8,378	8,596	8,947	9,373	9,807	9,988	10,297	10,495	10,553	10,691	10,699	10,633
Trust Fund	978	1,225	1,875	1,771	1,906	1,957	1,973	2,015	2,015	2,024	2,026	2,034
Indirect Administrative Costs ^c	1,799	2,107	2,247	1,787	2,207	2,514	2,347	2,396	2,019	2,115	2,437	1,856

^a Included in Total Benefits. Defense Base Act benefits are paid for injuries or deaths of employees working overseas for companies under contract with the U.S. government.

^b Longshore program administrative funding is divided between two sources. Industry oversight and claims activities are funded from general tax revenues. The program also exercises fiduciary responsibility for a Special Fund, which draws its revenue primarily from annual industry assessments based on anticipated benefit liabilities. This fund makes direct benefit payments for certain categories of claims and provides funding for the program's rehabilitation staff and Special Fund oversight activities.

^c Includes legal and investigative support from the Office of the Solicitor and the Office of the Inspector General. Funded by General Revenues.

Source: U.S. DOL 2010.

A.M. Best or the states. At the same time, self-insured employers under the LHWCA are not included in A.M. Best data and are unlikely to be included in state reports; benefits paid from the LHWCA special funds are not included in state data. Thus, for 1997–2008 data, our estimates of total federal benefits include benefits paid by self-insured employers and the special funds under the LHWCA. Unless otherwise specified, we assume that privately insured benefits under the program are included in state reports. Whether and how LHWCA benefits can be reflected in state reports is a subject for analysis. Total benefits under the Longshore and Harbor Workers' Compensation Act include benefits paid under the Defense Base Act (DBA). Under the DBA, benefits are paid for injuries or deaths of employees (of any nationality) working overseas for companies under contract with the United States government. These benefits are also shown separately in Table H2. Total payments rose from about \$8 million in 2002 to \$200 million in 2008. The number of DBA death claims per year rose from single digits prior to 2003, to 426 in 2007. The increase reflects, in large part, claims and deaths of employees of companies working under contract for the U.S. government in the war zones in Iraq and Afghanistan. Reversing the trend, the number of DBA death claims fell to 289 in 2008.

Coal Miners with Black Lung Disease. The Black Lung Benefits Act, enacted in 1969, provides compensation for coal miners with pneumoconiosis, or black lung disease, and their survivors. The program has two parts. Part B is financed by federal general revenues, and was administered by the Social Security Administration until 1997 when administration shifted to the U.S. Department of Labor. Part C is paid through the Black Lung Disability Trust Fund, which is financed by coal-mine operators through a federal excise tax on coal that is mined and sold in the United States. In this report, only the Part C benefits that are financed by employers are included in national totals of workers' compensation benefits and employer costs in 1997–2008. Total benefits in 2008 were \$531 million, of which \$262 million was paid under Part B and \$269 million was paid under Part C. Part C benefits include \$37 million for medical care. Medical benefits are available only to Part C beneficiaries and only for diagnosis and treatment of black lung disease. Medical benefits are a small share of black lung benefits because many

of the recipients of benefits are deceased coal miners' dependents, whose medical care is not covered by the program. Federal direct administrative costs were \$38 million or about 7.2 percent of benefit payments. Table H3 shows benefits under the Black Lung Benefit program in 1997 through 2008 for both parts of the program. Its benefits are paid directly by the responsible mine operator or insurer, from the federal Black Lung Disability Trust Fund, or from federal general revenue funds. No data are available on the experience of employers who self-insure under the Black Lung program. Any such benefits and costs are not reflected in Table H3 and are not included in national estimates.

Energy Employees. The Energy Employees Occupational Illness Compensation Program Act (EEOICPA) provides lump-sum payments up to \$150,000 to civilian workers (and/or their survivors) who became ill as a result of exposure to radiation, beryllium, or silica in the production or testing of nuclear weapons and other materials. This is Part B of the program, which went into effect in July 2001. It provides smaller lump-sum payments to individuals previously found eligible for an award under the Radiation Exposure Compensation Act. Medical benefits are awarded for the treatment of covered conditions. Total benefits in 2008 were \$605 million, of which \$517 million were paid as compensation benefits (U.S. DOL, 2009a). The EEOICPA originally included a Part D program that required the Department of Energy (DOE) to establish a system for contractor employees and eligible survivors to seek DOE assistance in obtaining state workers' compensation benefits for work-related exposure to toxic substances at a DOE facility. In October 2004 Congress abolished Part D, creating a new Part E program to be administered by the Department of Labor. Part E provides benefit payments up to \$250,000 for DOE contractor employees, eligible survivors of such employees, and uranium miners, millers, and ore transporters. Wage-loss, medical, and survivor benefits are also provided under certain conditions. Total Part E benefits in 2008 were \$469 million. Benefits under both Part B and Part E are financed by general revenues and are not included in our national totals. Table H4 provides information on both Part B and Part E of the EEOICPA, as amended.

Table H3**Black Lung Benefits Act, Benefits and Costs, 1997–2008**
(in thousands)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Benefits	\$1,095,585	\$1,000,383	\$982,787	\$927,973	\$866,069	\$821,678	\$775,098	\$719,065	\$665,844	\$616,039	\$569,300	\$531,018
Part C Compensation	388,656	373,707	360,470	346,903	332,620	316,585	303,724	289,699	276,413	262,026	248,375	231,261
Part C Medical Benefits	92,041	80,450	74,776	69,322	61,136	65,756	59,739	52,992	49,244	41,552	38,545	37,492
Part B Compensation	614,888	546,226	547,541	511,748	472,313	439,337	411,635	376,374	340,187	312,461	282,380	262,265
Total Direct Administrative Costs	25,759	31,030	33,246	32,866	34,657	36,123	37,393	38,057	37,917	38,453	38,749	38,009
Part C (DOL)	25,759	26,698	29,023	28,591	29,897	31,488	31,991	32,157	32,724	33,182	33,374	32,648
Part B (SSA)	*	4,332	4,223	4,275	4,760	4,635	5,402	5,900	5,193	5,271	5,375	5,361
Trust Fund Advances from U.S. Treasury ^a	370,000	360,000	402,000	490,000	505,000	465,000	525,000	497,000	446,000	445,000	426,000	426,000
Interest Payments on Past Advances	470,635	494,726	515,016	541,117	567,814	595,589	620,582	650,579	674,894	694,964	717,214	739,469
Coal Tax Revenues Received by the Black Lung Trust Fund	635,342	634,270	569,704	512,799	511,520	588,000	480,080	577,575	620,420	598,520	650,432	646,800
Indirect Administrative Costs ^b	19,903	20,115	20,882	21,348	22,207	23,050	23,459	23,914	24,424	25,242	26,020	25,473

* information not available

^a Total Trust Fund debt (cumulative advances) at the end of CY 2008 was \$10,483,557,000. In the recent past, most, if not all, of these advances were necessary to pay interest charges on past debt.^b Includes legal and investigative support from the Office of the Solicitor and the Office of the Inspector General, services provided by the Department of the Treasury, and costs for the Office of Administrative Law Judges (OALJ) and the Benefits Review Board (BRB). (Note: OALJ and BRB costs are not included for any other program, but cannot be separately identified for Coal Mine Workers' Compensation.)

Source: U.S. DOL 2010.

Workers Exposed to Radiation. The Radiation Exposure Compensation Act of 1990 provides lump-sum compensation payments to individuals who contracted certain cancers and other serious diseases as a result of exposure to radiation released during above ground nuclear weapons tests or during employment in underground uranium mines. The lump-sum payments are specified in law and range from \$50,000 to \$100,000. From the beginning of the program through March 2010, 22,283 claims were paid for a total of \$1,485 million, or roughly \$66,627 a claim (U.S. DOJ, 2010). The program is financed with federal general revenues and is not included in national totals in this report. Table H5 shows cumulative payments under the Radiation Exposure Compensation Act since its enactment in 1990.

Veterans of Military Service. U.S. military personnel are covered by the federal veterans' compensation program of the Department of Veterans Affairs, which provides cash benefits to veterans who sustained total or partial disabilities while on active duty. In the fiscal year 2008, 2.9 million veterans were receiving monthly compensation payments for service-connected disabilities. Of these, 54 percent of the veterans had a disability rating of 30 percent or less, while the others had higher-rated disabilities. Total monthly payments for the disabled veterans and their dependents were \$2.5 billion in 2008, or about \$30.3 billion on an annual basis (U.S. Department of Veterans Affairs, 2008). Veterans' compensation is not included in our national estimates of workers' compensation.

Table H4

Energy Employees Occupational Illness Compensation Program Act, Part B and Part E Benefits and Costs, 2001-2008 (in thousands)

	2001	2002	2003	2004	2005	2006	2007	2008
Total Benefits Part B	\$67,341	\$369,173	\$303,981	\$275,727	\$392,503	\$502,636	\$561,824	\$605,338
Compensation Benefits	67,330	363,671	288,274	250,123	358,751	460,494	490,089	517,383
Medical Benefits ^a	11	5,502	15,707	25,604	33,752	42,142	71,735	87,955
Direct Administrative Costs ^b	30,189	69,020	65,941	94,158	106,818	104,872	107,417	92,075
Total Benefits Part E ^c	n/a	n/a	n/a	n/a	268,635	270,598	409,100	468,982
Compensation Benefits	n/a	n/a	n/a	n/a	268,586	269,558	407,277	465,742
Medical Benefits ^d	n/a	n/a	n/a	n/a	49	1,040	1,823	3,240
Direct Administrative Costs ^b	n/a	n/a	n/a	n/a	39,295	55,088	61,671	59,152

a Medical payments made for claimants eligible under Part B only and claimants eligible under both Part B and Part E.

b Part B costs for 2002-08 include funding for the Department of Health and Human Services/National Institute for Occupational Safety and Health's conduct of dose reconstructions and Special Exposure Cohort determinations. For 2002, these costs were \$32.7 million; 2003, \$26.8 million; 2004, \$51.7 million; 2005, \$50.5 million; 2006, \$58.6 million; 2007, \$55.0 million; and 2008, \$41.5 million. Part E costs for 2005-08 include funding for an Ombudsman position. For 2005, these costs were \$0.3 million; 2006, \$0.6 million; 2007, \$0.8 million; and 2008, \$0.8 million.

c The Energy Part E benefit program was established in October 2004.

d Medical payments made for claimants eligible under Part E only.

Source: U.S. DOL 2010.

Table H5**Radiation Exposure Compensation Act, Benefits Paid as of March 22, 2010 (benefits in thousands)**

Claim Type	Claims	Benefits
Downwinder	14,054	\$702,670
Onsite Participant	1,414	101,194
Uranium Miner	5,225	521,775
Uranium Miller	1,325	132,500
Ore Transporter	265	26,500
TOTAL	22,283	\$1,484,639

Source: U.S. DOJ 2010.

Table H6 provides information on the Veterans' Compensation program. This program is somewhat similar to workers' compensation in that it is financed by the employer (the federal government) and compensates for injuries or illness caused on the job (the armed forces). It is different from other workers' compensation programs in many respects. With cash benefits of about \$30.3 billion in 2008, veterans' compensation is about 101.3 percent of the size of total cash benefits in other workers' compen-

sation programs, which were \$29.9 billion in 2008. Because it is large and qualitatively different from other programs, veterans' compensation benefits are not included in national totals to measure trends in regular workers' compensation programs.

Railroad Employees and Merchant Seamen.

Finally, federal laws specify employee benefits for railroad workers involved in interstate commerce and merchant seamen. The benefits are not workers' compensation benefits and are not included in our national totals. Instead, these programs provide health insurance and short-term and long-term cash benefits for ill or injured workers whether or not their conditions are work-related. Under federal laws, these workers also retain the right to bring tort suits against their employers for negligence in the case of work-related injuries or illness (Williams and Barth, 1973).

This report includes in national totals for workers' compensation those federal programs that are financed by employers and that are not otherwise included in workers' compensation benefits reported by states in 1997 through 2008. The accompanying tables provide detailed information on federally administered programs, including some that are not included in national totals in this report.

Table H6**Federal Veterans' Compensation Program, Compensation Paid in Fiscal year 2008 (benefits in thousands)**

Class of Dependent	Number	Monthly Value
Veteran Recipients - total	2,952,292	\$2,522,846
Veterans less than 30 percent disabled (no dependency benefit)	1,592,677	336,339
Veterans 30 percent or more disabled	1,359,615	2,186,507

Source: U.S. Department of Veterans Affairs 2008.

Appendix I: Workers' Compensation under State Laws

Table I illustrates the benefit parameters which form the basis for the data estimated in this report. The table is taken from the IAIABC (International Association of Industrial Accident Board and Commissions) and WCRI (Workers Compensation Research Institute) joint publication of *Workers' Compensation Laws* (IAIABC-WCRI, 2009). The state laws are as of July 2008.

The benefit parameters defined in this table portray the workers' compensation differences across states. The difference may lie in (a) when the first day of disability begins (b) compensation that is included in determining the "wage" (c) periods over which the average wage is calculated (d) caps on wages earned by the injured worker (e) differences in calculation of compensation rate, etc.

For each state the table describes:

- The waiting period before a worker receives benefits.
- The maximum benefit payments and length of benefit payments for Temporary Total Disability.
- The weekly payments and benefit limitations for Permanent Total Disability.
- The maximum weekly benefit and benefit limitations for Permanent Partial Disability.
- The maximum weekly benefit and benefit limitations for Death Benefits.

Table I

Workers' Compensation Under State Laws, July 1, 2008^K

State	Waiting Period, Jul 08		Temporary Total Disability, Jul 08		Permanent Total Disability, Jan 08				Permanent Partial Disability, Jan 08		Death Benefits, Jan 08			
	Waiting Period before a worker can receive Indemnity benefits	Retroactive period	Maximum Weekly Benefit Allowed	Limitations	Intended benefit as a % of Weekly	Maximum	Maximum as a % of SAWW	Benefit Limitations	Maximum Weekly Benefit Allowed	Benefit Limitations	Maximum Weekly Benefit Allowed	Benefit Limitations		
Alabama	3 days	21 days	\$706.00	Duration of TTD disability	66 2/3% PIWW	706.00	100	None	Benefits are for the length of disability and may be paid for life	None	\$220.00	300	\$706.00	500 weeks
Alaska	3 days	More than 28 days	\$939.00	Continue until employee is medically stable or released to work	80% NWW	901.00	120	None	Benefits are for the length of disability and may be paid for life	None	\$901 if paid weekly	No unscheduled PPD	939.00	\$12 years of benefits
Arizona	7 days	14 calendar days	\$466.06 with dependents /\$460.25 without	Duration of TTD disability	66 2/3% AMW	461.60	66 2/3% of average wage monthly maximum of \$3000.00	None	Benefits are for the length of disability and may be paid for life	None	depends on the percent of disability	None	\$461.60	None
Arkansas	7 days	2 weeks	\$522.00	450	66 2/3% PIWW	522.00	85	None	Benefits are for the length of disability and may be paid for life	None	\$392.00	450	\$522.20	450 week limit for partial dependents
California	3 days	14 calendar days	\$916.33	10 ^{4a}	66 2/3% AWW	\$230/wk below 70% of PPD; \$270/wk over 70% PPD	established legislatively	Depends on the number of weeks for the disability and the compensation rate-there is no limit for 100% life-time disability	For the number of weeks allowed a specific disability or for life if 100% disability	\$230 if the impairment is below 70% and \$270 above 70%	\$230 if the impairment is below 70% and \$270 above 70%	not applicable	\$958.01	None
Colorado	3 days	14 calendar days	\$786.17	Duration of TTD disability	66 2/3% PIWW	786.17	91	None set	Benefits are for the length of disability and may be paid for life	None set	\$247.42 is weekly rate for all scheduled injuries; \$786.17 weekly is maximum for calculating unscheduled injuries	400j	\$786.17	None

Connecticut	3 days	7 calendar days	\$1,077.00	Duration of TTD disability	75% of spendable earnings	1,077.00	100	Benefits are for the length of disability and may be paid for life	None	\$853.00	520	\$1,077.00	None
Delaware	3 days	7 calendar days	\$605.15	unlimited	66 2/3% up to the maximum at the date permanent impairment becomes fixed	605.15	66 2/3	Benefits are limited to 300 weeks per loss or impairment but maybe paid for life for 100% disability	Maximum payment per impairment is limited to 300 weeks, but can receive benefits for multiple impairment	\$605.15	300	\$726.18	
District of Columbia	3 days	14 days	\$1,288.00	500 weeks for all disability benefits with ability to petition for an additional 167 weeks	66 2/3% PIWW	1,288.00	100% of the DC employed average weekly wage	500 weeks for all disability benefits with ability to petition for an additional 167 weeks		The first \$75,000 in benefits for death or PTD shall be paid by the employer/insurer. Amounts over \$75,000 are paid from PTD death and PTD Trust Fund	\$1,288.00	500 week limit for all disability and worker may petition for an additional 167 weeks	\$1,288.00
Florida	7 days	21 days	\$746.00	104	66 2/3% PIWW	746.00	100	Benefits are payable to age 75. If the injury occurred after age 70, benefits are payable during continuance of PTD not to exceed 5 years following determination of PTD	None	\$746.00	2 weeks for each % of impairment from 1-10%; 3 weeks from 11-15%; 4 weeks from 16-20%; and 6 weeks for each rating over 21%	\$746.00	Maximum payable is \$150,000
Georgia	7 days	21 days	\$500.00	400 weeks unless catastrophic injury	Do not have PTD benefits, but do have catastrophic injuries ^d which are paid at the same rate as TTD	500.00	legislative decision	Benefits are for the length of disability and may be paid for life	None	\$500.00	300	\$500.00	\$150,000 for surviving spouse with no dependents

Table I continued

Workers' Compensation Under State Laws, July 1, 2008^K

State	Waiting Period, Jul 08		Temporary Total Disability, Jul 08		Permanent Total Disability, Jan 08			Permanent Partial Disability, Jan 08		Death Benefits, Jan 08		
	Waiting Period before a worker can receive Indemnity benefits	Retroactive period	Maximum Weekly Benefit Allowed	Limitations Maximum Length of TTD Benefits (in weeks)	Intended benefit as a % of Weekly	Maximum as a % of SAWW	Maximum Length of PTD Benefits	Total Maximum Monetary PTD benefit	Maximum Weekly Benefit Allowed	Maximum PPD benefits for "Unscheduled Injury" (weeks)	Maximum Weekly Benefit Allowed	Benefit Limitations
Idaho	5 days	More than 14 calendar days	\$556.20	Duration of TTD disability	67% of AWW	90	Benefits are for the length of disability and may be paid for life	None	\$339.90	500	\$370.80	500 weeks for spouse
Illinois	3 days	14 calendar days	\$1,178.48	Duration of TTD disability	66 2/3 % AWW	133 1/3	Benefits are for the length of disability and may be paid for life	None	664.72	500	\$1,178.48	\$500,000 or 25 years
Indiana	7 days	14 calendar days	\$636.00	500	66 2/3% PIWW	established by legislature	500 weeks	\$318,000 (500 wks x \$636.00/wk)	not applicable	500	\$636.00	500 weeks
Iowa	3 days	14 calendar days	\$1,366.00	Benefits are for length of disability and maybe paid for life	80% NWW	200	Benefits are for the length of disability and may be paid for life	None	\$1,257.00	500	\$1,366.00	None
Kansas	7 days	3 consecutive weeks	\$529.00	225 to 415 weeks depending on type of injury-also maybe a limitation of \$100,000 or \$125,000 for all indemnity benefits depending on types of benefit paid.	66 2/3% AWW	75	Benefits are for the length of disability and may be paid for life or until maximum of \$125,000 is reached.	\$125,000 ¹	\$529.00	415 weeks but the first 15 weeks does not count toward this maximum	\$529.00	\$250,000
Kentucky	7 days	14 calendar days	\$670.02	Duration of disability or until receipt of Social Security old age and survivor benefits	66 2/3% PIWW	100	Benefits payable until retirement-based on date worker qualifies for Old Age Social Security	None	\$502.51	425 weeks if rating is 50% or less; 520 wks if rating is over 50%	335.01 for spouse; 402.01 for spouse and child	None
Louisiana	1 week	6 weeks	\$522.00	Duration of TTD disability	66 2/3% PIWW	75	Benefits are for the length of disability and may be paid for life	None	\$478.00	520	\$522.00	No

Maine	7 days	14 calendar days	\$596.42	416 weeks	80% NWW	596.42	90	Benefits are for the length of disability and may be paid for life	None	\$596.42	260 weeks for the duration of disability if PPD is greater than 15% of the body	\$596.42	500 weeks or until age 18 for children
Maryland	3 days	14 calendar days	\$877.00	Duration of TTD disability	66 2/3% PIWW	877.00	100	Payable for the length of disability and may be for life	None	for serious disability 2/3 of AWW not to exceed 75% of SAWW or \$658	None	\$565.36	Partial dependency benefits may not exceed \$60,000
Massachusetts	5 days	21 days	\$1,000.43	156	66 2/3% PIWW	1,000.43	100	Payable for the length of disability and may be for life	None	\$1,000.43	364	\$1,000.43	None
Michigan	7 days	14 calendar days	\$739.00	Duration of TTD disability	80% NWW	739.00	90	800 weeks consecutive payment with factual determination thereafter	None	not applicable	not applicable	\$739.00	500 weeks
Minnesota	3 days	10 days	\$750.00	104	66 2/3% PIWW	750.00	legislative decision	Payable until retirement which is assumed to be age 67, but this is rebuttable presumption	None	\$750.00	No	\$750.00	Minimum payable is \$60,000
Mississippi	5 days	14 calendar days	\$398.93	450	66 2/3% PIWW	398.93	662/3	450 weeks	179,519	\$398.93	450	\$398.93	450 weeks
Missouri	3 days	14 calendar days	\$772.53	400	66 2/3% PIWW	772.53	105 length	Payable for the length of disability and may be for life	None	\$404.66	400	\$772.53	None
Montana	32 hours or 4 days, whichever is less	None	\$604.00	Duration of TTD disability	66 2/3% PIWW	604.00	100	Payable until retirement	None	\$302.00	375	\$604.00	500 weeks
Nebraska	7 days	6 weeks	\$644.00	Duration of TTD disability	66 2/3% PIWW	644.00	100	Payable for the length of disability and may be for life	None	\$644.00	300	\$644.00	None
Nevada	5 days	5 consecutive days or 5 cumulative days within a 20 day period	\$784.35	Duration of TTD disability	66 2/3% pre-injury AMW	784.35	150	Payable for the length of disability and may be for life	None	\$784.35	PPD benefits paid for 5 years or to age 70, whichever is later	\$784.35	None unless there are partial dependents only and then 100 months

Table I continued

Workers' Compensation Under State Laws, July 1, 2008^K

State	Waiting Period, Jul 08		Temporary Total Disability, Jul 08		Permanent Total Disability, Jan 08			Permanent Partial Disability, Jan 08		Death Benefits, Jan 08			
	Waiting Period before a worker can receive Indemnity benefits	Retroactive period	Maximum Weekly Benefit Allowed	Limitations Maximum Length of TTD Benefits (in weeks)	Intended benefit as a % of Weekly	Maximum	Maximum as a % of SAWW	Maximum Length of PTD Benefits	Total Monetary PTD benefit	Maximum Weekly Benefit Allowed	Benefit Limitations Maximum PPD benefits for "Unscheduled Injury" (weeks)	Maximum Weekly Benefit Allowed	Benefit Limitations Statutory Limit for Dependency Benefits
New Hampshire	3 days	14 calendar days	\$1,255.50 disability	Duration of Total	60 % PIWW	1,255.50	150	Payable for the length of disability and may be for life	None	\$1,255.00	350 weeks for a whole person award	\$1,255.50	
New Jersey	7 days	7 calendar days	\$742.00	400	70% of actual wage at the time of injury	742.00	75	Payable for the length of disability and may be for life	None	\$742.00	600	\$711.00	
New Mexico	7 days	4 weeks	\$635.46	700	66 2/3% PIWW	635.46	100	Payable for the length of disability and may be for life	None	\$635.46	500 weeks if the rating is less than 80%, 700 weeks if rating is greater	\$595.67	100% of the SAWW for 700 weeks
New York	7 days	14 calendar days	\$550.00	Duration of TTD disability	66 2/3% PIWW	550.00	set by statute	Payable for the length of disability and may be for life	None	\$550.00	Not if date of accident or disability is before March 13, 2007; 525 weeks if date of accident or disability is on or after March 13, 2007	\$550.00	None
North Carolina	7 days	21 days	\$786.00	Duration of TTD disability	66 2/3% PIWW	786.00	110	Payable for the length of disability and may be for life	None	\$786 for scheduled injuries	300	\$786.00	400 weeks unless widow or widower is physically or mentally disabled
North Dakota	5 days	5 days	\$689.00	104	66 2/3% PIWW	689.00	110	Payable until retirement at which time benefits may switch to ABP.	None	\$382.74 x 100% whole body	100% impairment	\$689.00	\$250,000

Ohio	7 days	14 calendar days	\$751.00	as long as disability lasts	72% PIWW	751.00	66 2/3	Duration of disability and may be for life	None	\$751 for scheduled injuries and \$250.33 for unscheduled	200	\$751.00	None
Oklahoma	3 days	None	\$577.00	300	70% PIWW	577.00	100	Payable for the length of disability and may be for life	None	\$289.00	500	\$577.00	None
Oregon	3 days	14 calendar days	\$1,051.21	Duration of TTD disability	66 2/3% PIWW	790.38	100	Payable for the length of disability and may be for life	None	\$790.38 for impairment; \$1051.21 for weekly work loss	Oregon has no scheduled or unscheduled benefits but the theoretical maximum payment for PPD would be \$302,945.73	\$1,053.81	None
Pennsylvania	7 days	14 calendar days	\$807.00	Duration of TTD disability subject to conversion to partial benefits at 104 weeks	No PTD; wage loss benefits may continue for life however	not applicable	not applicable	not applicable	not applicable	\$836.00	Does not have PPD but has specific loss which may be considered similar.	\$836.00	None
Rhode Island	3 days	None	\$882 plus an additional \$15 for each dependent up to 80% of workers' AWW	Duration of TTD disability	75% NWW	\$882 plus an additional \$15 up to each dependent up to 80% of the workers' net wage	115	Payable for the length of disability and may be for life	None	\$90.00	500	\$882 plus \$40 per child not to exceed 80% of AWW	None
South Carolina	7 days	14 calendar days	\$661.29	Duration of TTD disability with a maximum of 500 weeks	66 2/3% PIWW	661.29	100	500 weeks unless eligible for lifetime benefits	\$330,645 unless awarded lifetime benefits	\$661.29	340	\$661.29	500 weeks
South Dakota	7 days	7 calendar days	\$598.00	Duration of TTD disability	66 2/3% PIWW ^f	598.00	100	For length of disability and can be for life	None	\$598.00	312	\$598.00	None
Tennessee	7 days	14 days	\$827.00	400 weeks or for the duration of TTD disability	66 2/3% PIWW	752.00	110	Until Social Security eligibility age	Paid during the period of PTD until the employee is, by age, eligible for full (Old Age) benefits under Social security Act	\$752.00	400	\$752.00	None

Table I continued

Workers' Compensation Under State Laws, July 1, 2008^K

State	Waiting Period, Jul 08		Temporary Total Disability, Jul 08		Permanent Total Disability, Jan 08			Permanent Partial Disability, Jan 08		Death Benefits, Jan 08			
	Waiting Period before a worker can receive Indemnity benefits	Retroactive period	Maximum Weekly Benefit Allowed	Limitations Maximum Length of TTD Benefits (in weeks)	Intended benefit as a % of Weekly	Maximum	Maximum as a % of SAWW	Benefit Limitations Maximum Length of PTD Benefits	Total Maximum Monetary PTD benefit	Maximum Weekly Benefit Allowed	Benefit Limitations Maximum PPD benefits for "Unscheduled Injury" (weeks)	Maximum Weekly Benefit Allowed	Benefit Limitations Statutory Limit for Dependency Benefits
Texas	7 days	2 weeks	\$712.00	105c	75% AWW	712.00	100	For length of disability and can be for life	None	\$498.00	300	\$712.00	A minimum of 364 weeks would be paid in a fatal claim
Utah	3 days	14 calendar days	\$702.00	312	66 2/3% PIWW	597.00	85	Payable for the length of disability and may be for life. PTD status may be reexamined by submitting employee to reasonable medical evaluations; retraining and retraining efforts; disclosure of Federal Income Tax returns	None	\$468.00	312	\$597.00	312 weeks of combined benefits PTD
Vermont	3 days	10 consecutive days	\$1,053.00	Duration of TTD disability; insurer must review after 2 years	66 2/3% PIWW	1,053.00	150	For length of disability and can be for life; PTD status can be reassessed after a minimum of 330 wks.	None	\$1,053.00	405 weeks for non-spinal; 550 weeks spinal	\$1,053.00	
Virginia	7 days	More than 3 cumulative weeks	\$841.00	500	66 2/3% PIWW	841.00	100	For length of disability and can be for life	None	\$841.00	Does not pay for unscheduled PPD	\$841.00	500 weeks
Washington	3 days	14 calendar days	\$1,043.49	Duration of TTD disability	Depends on the option chosen by employee	1,043.49	120	For length of disability and can be for life	There is a maximum payment for lump sums only, up to \$8,500	\$961.43	None	\$1,043.49	18th birthday or 23rd birthday when enrolled in school, or disabled
West Virginia	4 days	7 consecutive days	\$640.35	104	66 2/3% PIWW	640.56	100	Payable until age 70	None	\$448.39	None	\$640.56	None

Wisconsin	3 days	7 days	\$805.00	Duration of TTD disability	66 2/3% PIWW	805.00	110	For length of disability and can be for life	None	\$272.00	1,000	\$805.00	\$241,500
Wyoming	3 days	8 days	\$815.00	24 months	66 2/3% actual monthly wage unless they earn less than 73% of the SWAMW and then it is 92% of their actual monthly wages	543.33	100	Paid for 80 months then benefit becomes "extended PTD" and extended PTD must be renewed annually.	None	None	44 months	Benefits paid monthly	None

- a There are some limited exceptions where benefits can be paid for 240 weeks.
- b Disability under PA laws means loss of earning power. PA law allows employer/insurer to request "Impairment Rating Examination" after employee has received 104 weeks of full benefit payments. If IRE shows less than 50% impairment based on AMA Guides then benefits are reclassified as partial disability compensation and are subject to a 500-week cap.
- c An exception to this amount could be made when an extension of MMI based on spinal surgery is approved by the Division.
- d For purposes of this table, "catastrophic injury" means any injury which is one of the following: (1) Spinal cord injury involving severe paralysis of an arm, a leg, or the trunk; (2) Amputation of an arm, a hand, a foot, or a leg involving the effective loss of use of that appendage; (3) Severe brain or closed head injury as evidenced by: (A) Severe sensory or motor disturbance; (B) Severe communication Disturbance; (C) Severe complex integrated disturbances of cerebral function; (D) Severe disturbances of consciousness; (E) Severe episodic neurological disorders; or (F) Other conditions at least as severe in nature as any condition provided in subparagraphs (A) through (E) of this paragraph; (4) Second or third degree burns over 25 percent of the body as a whole or third degree burns to 5 percent or more of the face and hands; (5) Total or industrial blindness; (6) Any other injury of a nature and severity that prevents an employee from being able to perform his or her prior work and any work available in substantial numbers within the national economy for which such employee is otherwise qualified, provided, however, that the injury has not already been accepted as a catastrophic injury by the employer and the authorized treating physician has released the employee to return.
- e 72% of the workers' pre-injury weekly wage for the first 12 weeks and then 66.67 % thereafter.
- f If the weekly wage is below 50% of the SAWW the calculation is wages, less income tax and social security.
- g Statute restricting benefits to age 65 or 260 weeks if injury occurred after age 60 was held unconstitutional.
- h All earned income of the injured worker and all employment based retirement income is considered in the calculation of extended benefits.
- i KS has a cap of \$125,000 for Permanent Total and that cap includes any TTD paid.
- j Total TTD and PPD for scheduled and unscheduled cannot be greater than \$75,000 if the impairment rating is less than 25% and \$150,000 if more than 25%.

k Workers' Compensation benefit provisions apply to injury dates on and after July 1, 2008 to distinguish them from the benefit levels applicable to most of the calendar year payments shown through the report.

- PIWW Pre-injury Weekly wage
- AWW Average weekly wage
- NWW Net weekly wage
- SAWW State-wide average weekly wage
- AMW Average Monthly wage

Source: IAABC-WCRI (2009)

Appendix J: Second Injury Funds and Guaranty Funds

Second injury funds help reduce the financial impact of a workers' compensation claim in the event a worker with a disability is injured on the job, aggravating pre-existing impairment. Thirty-nine states provided the details of their second injury fund. Details are given in Table J1.

As stated by the annual report of the National Conference of Insurance Guaranty Funds, "The purpose of state guaranty associations is to provide a mechanism for the prompt payment of covered claims of an insolvent insurer, as those terms are defined and limited by guaranty association statutes, so that catastrophic financial loss to certain claimants and policyholders may be avoided." Guaranty Funds

cover the outstanding claims of insolvent insurance companies, the property and casualty guaranty fund system. It is a measure of protection to policyholders, beneficiaries and their families who otherwise would experience lengthy delays getting resolution of their claim, usually receiving only a fraction of the amount due from the insurer (NCIGF, 2009). The Self-Insurance Guaranty Funds help pay the covered workers' compensation claims of insolvent self-insurers.

There were 15 Insurance Guaranty Funds and seven Self-Insurance Guaranty Funds that responded to NASI's Annual Survey 2008. Table J2 and J3 show the totals of these Guaranty funds.

Table J1**Second Injury Funds, 2004–2008**

States	2004	2005	2006	2007	2008
Alabama	-	-	-	-	-
Alaska	3,741,900	\$3,077,376	\$2,899,258	\$2,816,244	\$4,105,087
Arizona	15,843,106	14,987,418	12,930,595	14,767,509	16,471,784
Arkansas	5,265,627	4,476,335	5,449,794	7,691,254	5,617,056
California	2,179,048	11,320,944	13,499,992	14,331,184	11,017,260
Colorado	9,229,036	8,687,027	9,519,611	8,504,329	8,227,347
Connecticut	36,625,832	37,385,612	37,460,632	35,037,646	39,707,328
Delaware	5,756,422	5,376,976	5,735,647	5,886,482	5,789,453
D.C.	-	-	-	-	-
Florida	-	-	-	-	-
Georgia	97,597,368	112,332,534	145,165,702	144,036,385	146,692,209
Hawaii	17,337,008	15,765,723	18,805,177	18,243,489	15,820,705
Idaho	3,757,049	2,351,863	3,740,423	2,437,468	1,051,534
Illinois	11,902,467	1,189,143	1,189,143	1,426,000	2,703,635
Indiana	3,051,575	3,450,365	1,072,277	2,609,113	1,094,521
Iowa	1,292,545	1,809,044	1,862,078	3,049,366	2,464,790
Kansas	2,613,523	3,992,459	3,499,162	4,262,638	4,262,638
Kentucky	76,933,413	72,997,522	70,020,744	69,470,590	67,591,707
Louisiana	34,911,465	48,206,127	38,540,285	41,549,518	42,181,211
Maine	-	-	-	-	-
Maryland	20,414,249	19,928,913	16,715,724	18,171,918	17,921,321
Massachusetts	25,299,116	18,539,957	26,575,339	20,725,671	24,078,327
Michigan	26,851,075	22,657,719	16,221,899	16,253,722	14,472,512
Minnesota	67,051,370	64,178,760	58,914,988	58,621,823	49,058,052
Mississippi	107,349	93,405	110,860	119,113	104,549
Missouri	62,547,853	60,960,007	63,806,940	67,829,414	69,641,680
Montana	631,895	1,208,296	1,315,806	1,510,682	1,538,160
Nebraska	4,442,157	4,153,172	5,025,729	6,805,216	6,454,816
Nevada	2,619,174	1,782,825	1,970,002	2,658,723	-
New Hampshire	4,956,198	12,146,443	8,602,597	7,429,544	15,297,755
New Jersey	138,900,000	144,100,000	150,700,000	163,700,000	164,300,000
New Mexico	2,144,576	2,473,629	2,248,676	1,917,052	1,673,734
New York	-	-	-	-	-
North Carolina	-	-	-	-	-
North Dakota	-	-	-	-	-
Ohio	-	-	-	-	-
Oklahoma	20,414,249	19,928,913	16,715,724	18,171,918	17,921,321
Oregon	832,313	714,773	692,761	677,858	366,617
Pennsylvania	278,936	252,610	246,000	264,001	686,663
Rhode Island	2,626,457	2,540,658	2,828,762	2,617,824	2,673,172
South Carolina	166,947,143	147,638,624	118,252,779	113,231,699	113,715,933
South Dakota	-	-	9,920,262	-	3,856,620
Tennessee	8,299,700	9,717,607	8,805,179	10,465,012	9,073,098
Texas	480,300	462,099	341,760	484,661	632,958
Utah	22,883,650	22,009,500	21,167,000	20,567,500	19,822,500
Vermont	-	-	-	-	-
Virginia	-	-	-	-	-
Washington	229,000	169,000	129,000	68,000	129,000
West Virginia	113,814,010	111,654,401	103,204,303	98,002,249	96,709,472
Wisconsin	3,203,671	15,913,087	12,859,116	16,040,676	4,170,269
Wyoming	-	-	-	-	-
Total	1,024,011,825	1,030,630,867	1,018,761,724	1,022,453,489	1,009,096,793

Source: National Academy of Social Insurance.

Table J2**Guaranty Funds, 2004–2008**

States	2004	2005	2006	2007	2008
Alabama	-	-	-	-	-
Alaska	7,734,513	\$6,190,940	\$4,470,911	\$4,205,913	\$3,935,517
Arizona	-	-	-	-	-
Arkansas	2,723,988	1,460,165	1,164,849	635,795	866,097
California	570,750,382	428,048,226	337,091,556	209,400,799	156,705,011
Colorado	8,898,355	5,749,610	3,104,251	3,219,669	3,511,018
Connecticut	-	-	-	-	-
Delaware	-	-	-	-	-
D.C.	-	-	-	-	-
Florida	-	-	-	-	-
Georgia	3,229,619	3,182,760	3,335,965	3,351,111	1,980,244
Hawaii	-	-	-	-	-
Idaho	2,544,471	1,686,227	1,460,746	1,009,512	853,681
Illinois	-	-	-	-	-
Indiana	-	-	-	-	-
Iowa	3,471,735	3,020,599	1,746,052	1,194,142	1,441,012
Kansas	6,421,147	4,848,908	6,825,891	2,555,985	1,767,431
Kentucky	-	-	-	-	-
Louisiana	-	-	-	-	-
Maine	-	-	-	-	-
Maryland	-	-	-	-	-
Massachusetts	-	-	-	-	-
Michigan	-	-	-	-	-
Minnesota	12,046,812	14,057,879	11,360,818	11,631,274	10,883,162
Mississippi	-	-	-	-	-
Missouri	-	-	-	-	771,713
Montana	2,790,863	2,223,484	2,252,763	2,071,797	1,855,328
Nebraska	-	-	-	-	-
Nevada	-	-	-	486,432	-
New Hampshire	-	-	-	-	-
New Jersey	34,395,180	30,480,297	22,244,861	19,069,203	18,731,182
New Mexico	-	-	-	-	-
New York	-	-	-	-	-
North Carolina	-	-	-	-	-
North Dakota	-	-	-	-	-
Ohio	-	-	-	-	-
Oklahoma	-	-	-	-	-
Oregon	5,404,990	3,388,192	2,021,477	1,488,741	1,212,721
Pennsylvania	58,008,675	58,779,553	66,296,225	49,748,320	43,321,285
Rhode Island	-	-	-	-	-
South Carolina	-	-	-	-	-
South Dakota	-	-	-	-	-
Tennessee	-	-	-	-	-
Texas	-	-	-	-	-
Utah	-	-	-	-	-
Vermont	-	-	-	-	-
Virginia	-	-	-	-	-
Washington	-	-	-	-	-
West Virginia	-	65,492	-	-	-
Wisconsin	-	9,354	-	-	-
Wyoming	21,126	-	10,704	11,084	143,557
Total	718,441,856	563,191,685	463,387,068	310,079,776	247,978,959

Source: National Academy of Social Insurance.

Table J3**Self-Insurance Guaranty Funds, 2004–2008**

States	2004	2005	2006	2007	2008
Alabama	-	-	-	-	-
Alaska	-	-	-	-	-
Arizona	-	-	-	-	-
Arkansas	-	-	-	-	-
California	-	-	-	-	-
Colorado	-	-	-	-	-
Connecticut	-	-	-	-	-
Delaware	-	-	-	-	-
D.C.	-	-	-	-	-
Florida	-	-	-	-	-
Georgia	793,832	291,709	367,048	273,285	\$186,321
Hawaii	-	-	-	-	-
Idaho	-	-	-	-	-
Illinois	-	-	-	-	-
Indiana	-	-	-	-	-
Iowa	-	-	-	-	-
Kansas	-	-	-	-	-
Kentucky	-	-	-	-	-
Louisiana	-	-	-	-	-
Maine	-	-	-	-	-
Maryland	-	-	-	-	-
Massachusetts	-	-	-	-	-
Michigan	-	-	6,370,513	6,429,764	4,994,060
Minnesota	6,813,066	5,233,862	4,762,500	4,132,056	3,947,642
Mississippi	-	-	-	-	-
Missouri	3,058,004	895,781	807,008	20,620,946	-
Montana	-	-	-	-	-
Nebraska	-	-	-	-	-
Nevada	-	-	-	163,816	-
New Hampshire	-	-	-	-	-
New Jersey	200,000	100,000	100,000	900,000	1,700,000
New Mexico	-	-	-	-	-
New York	-	-	-	-	-
North Carolina	-	-	-	-	-
North Dakota	-	-	-	-	-
Ohio	-	-	-	-	-
Oklahoma	-	-	-	-	-
Oregon	363,902	409,123	350,939	364,630	371,074
Pennsylvania	6,024,666	4,631,698	7,876,377	6,223,622	4,497,895
Rhode Island	-	-	-	-	-
South Carolina	-	-	-	-	-
South Dakota	-	-	-	-	-
Tennessee	-	-	-	-	-
Texas	-	-	-	-	-
Utah	-	-	-	-	-
Vermont	-	-	-	-	-
Virginia	-	-	-	-	-
Washington	981,000	1,030,000	787,000	1,078,000	-
West Virginia	-	-	89,873	64,769	-
Wisconsin	-	-	-	-	-
Wyoming	-	-	-	-	-
Total	18,234,470	12,592,174	21,511,258	40,250,887	15,696,992

Source: National Academy of Social Insurance.

References

- A.M. Best. 2008. Private data request. Oldwick, NJ: A.M. Best.
- American Association of State Compensation Insurance Funds (AASCIF), AASCIF Fact Book, 2009, www.aascif.org.
- Azaroff, Lenore S., Charles Levenstein, and David Wegman. 2002. "Occupational Injury and Illness Surveillance: Conceptual Filters Explain Underreporting." *American Journal of Public Health*, 92, no. 9 (September): 1421-1429.
- Barth, Peter. 2004. "Compensating Workers for Permanent Partial Disabilities." *Social Security Bulletin*, 65, no.4.
- Barth, Peter, Mike Helvacian, and Te-Chun Liu. 2002. Who Obtains Permanent Partial Disability Benefits: A Six State Analysis. Cambridge, MA: Workers Compensation Research Institute.
- Barth, Peter and Michael Niss. 1999. Permanent Partial Disability Benefits: Interstate Differences. Cambridge, MA: Workers Compensation Research Institute.
- Biddle, Jeff, Karen Roberts, Kenneth D. Rosenman, and Edward M. Welch. 1998. "What Percentage of Worker with Work-Related Illness Receive Workers' Compensation Benefits?" *Journal of Occupational and Environmental Medicine* 40, no. 4 (April): 325-331.
- Boden, Leslie I. and John W. Ruser. 2003. "Workers' Compensation 'Reforms,' Choice of Medical Care Provider, and Reported Workplace Injuries." *Review of Economics and Statistics* 85, no. 4 (November): 923-929. Cambridge, MA: The MIT Press.
- Boden, Leslie I. and Al Ozonoff A.2008. "Capture-Recapture Estimates of Nonfatal Workplace Injuries and Illnesses." *Annals of Epidemiology*, 18, no. 6, pp 500-506.
- Burton, John F., Jr. 2004. "A Primer on Workers' Compensation." *Workers' Compensation Policy Review*, Vol. 4, No. 6 (November/December): 2-16.
- Burton, John F., Jr. 2005. Permanent Partial Disability Benefits. In *Workplace Injuries and Diseases: Prevention and Compensation; Essays in Honor of Terry Thomason*. Edited by Karen Roberts, John F. Burton, Jr., and Matthew M. Bodah. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Burton, John F., Jr. 2008a. "Workers' Compensation Costs for Employers 1986 to 2007." *Workers' Compensation Policy Review*, Vol. 8, No. 1 (January/February): 19-39.
- Burton, John F., Jr. 2008b. "Workers' Compensation Cash Benefits: Part Two: Cash Benefit Systems and Criteria for Evaluation." *Workers' Compensation Policy Review*, Vol. 8, No 6 (November/December):13-31.
- Burton, John F. Jr., and Emily Spieler, 2001. "Workers' Compensation and Older Workers", *Health and Income Security for an Aging Workforce*, no. 3. Washington, DC: National Academy of Social Insurance.
- Burton, John F., Jr. and Daniel J.B. Mitchell. 2003. Employee Benefits and Social Insurance: The Welfare Side of Employee Relations. In *Industrial Relations to Human Resources and Beyond*. Edited by Bruce E. Kaufman, Richard A. Beaumont, and Roy B. Helfgot. Armonk, NY: M.E. Sharpe.
- Clayton, Ann. 2004. "Workers' Compensation: A Background for Social Security Professionals." *Social Security Bulletin* 65, No. 4.
- Centers for Medicare & Medicaid Services (CMS). 2009. Private data request.
- Employee Benefit Research Institute (EBRI). 2009. Fundamentals of Employee Benefit Programs, Sixth Edition, EBRI-ERF publication.
- Fan Z Joyce, David K. Bonauto, Michael P. Foley, and Barbara A. Silverstein. 2006. "Underreporting of work-related injury or illness to Workers' Compensation: Individual and Industry factors". *Journal of Occupational & Environmental Medicine*; 48(9):914-22.

- FPI. 2007. "New York State Workers' Compensation: How Big is the Coverage Shortfall?" A Fiscal Policy Institute Report, www.fiscalpolicy.org.
- Fricker, Mary. 1997. "California workers try to secure benefits: debilitating delays. Insult to Injury", Workers' Comp series. Available at: <http://www.pressdemo.com/workerscomp>.
- GAO. 2009. "Enhancing OSHA's Records Audit Process Could Improve the Accuracy of Worker Injury and Illness Data". Workplace Safety and Health (October), GAO-10-10.
- Greenhouse, Steven. 2008. "Dozens of Companies Underpay or Misreport Workers, State Says." The New York Times, February 12.
- Guo, Xuguang (Steve) and John F. Burton, Jr. 2008. "The Relationship between Workers' Compensation and Disability Insurance." *Proceedings of the 60th Annual Meeting*. Champaign, IL: Labor and Employment Relations Association.
- Guo, Xuguang (Steve) and John F. Burton, Jr. 2010. "Workers' Compensation: Recent Developments in Moral Hazard and Benefits Payments." *Industrial and Labor Relations Review*, Vol. 63, No. 2 (January): 340-355.
- Hensler, Deborah et al. 1991. "Compensation for accidental injuries in the United States", RAND, Santa Monica *R-3999-HHS/ICJ*.
- Hunt, H. Allan ed. 2004. Adequacy of Earnings Replacement in Workers' Compensation Programs. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research and NASI.
- IAIABC-WCRI. 2009. Workers' Compensation Laws, 2nd Edition. WC-09-30.
- Lakdawalla, Darius N, Robert T. Reville, and Seth A. Seabury. 2005. "How does health insurance affect workers' compensation filing?" *WR-2005-1-ICJ*.
- Leigh, J. Paul, Steven Markowitz, Marianne Fahs, and Philip Landrigan, 2000. Costs of Occupational Injuries and Illnesses. Ann Arbor, MI: The University of Michigan Press.
- Milton Donald K., Gina M. Solomon, Richard A. Rosiello, and Robert F. Herrick. 1998. "Risk and incidence of asthma attributable to occupational exposure among HMO members", *American Journal of Industrial Medicine*; 33, pp 1-10.
- Morse, Timothy F., Charles Dillon, Nicholas Warren, Charles Levenstein, and Andrew Warren, 1998. "The economic and social consequences of work-related musculoskeletal disorders: The Connecticut upper extremity surveillance project (CUSP)", *International Journal of Occupational & Environmental Health*. 4:209-216.
- National Academy of Social Insurance (NASI). 2002. "Workers' Compensation Coverage: Technical Note on Estimates." *Workers' Compensation Data Fact Sheet, no. 2*. Washington, DC: National Academy of Social Insurance.
- National Association of Insurance Commissioners (NAIC). 1998. ————Statistical Compilation of Annual Statement Information for Property/Casualty Insurance Companies in 1997. Kansas City, MO: NAIC. Similar publication for the years 1999-2008.
- National Conference of Insurance Guaranty Funds (NCIGF) 2009. The Property and Casualty Guaranty Fund System – Built to Work. Annual Report 2009.
- National Council on Compensation Insurance, Inc. (NCCI). 2009. ————Annual Statistical Bulletin, 1996 Edition. Boca Raton, FL: NCCI. Similar publication for the years 1997-2009.
- . 2002a. Workers' Compensation Issues Report 2002, Boca Raton, FL: NCCI.
- . 2004a. Workers' Compensation Issues Report 2004, Boca Raton, FL: NCCI.
- . 2009a. Private data request. Hoboken, NJ: NCCI.
- . 2009b. Calendar-Accident Year Underwriting Results. Boca Raton, FL: NCCI.
- Pransky, Glenn, Terry Snyder, Allard Dembe, and Jay Himmelstein. 1999. "Under-reporting of workrelated disorders in the workplace: a case study and review of the literature", *Ergonomics*, 42:171-182.

- Reno, Virginia, and June Eichner. 2000. "Ensuring Health and Income Security for an Aging Workforce." *Health and Income Security for an Aging Workforce*, no. 1. Washington, DC: National Academy of Social Insurance.
- Reville, Robert T. and Robert F. Schoeni. 2005. "The Fraction of Disability Caused at Work," *Social Security Bulletin*, 65, no.4.
- Rosenman, Kenneth D, Alice Kalush, Mary Jo Reilly, Joseph C. Gardiner, Matthew Reeves and Zhewui Luo. 2006. "How Much Work-Related Injury and Illness is Missed by the Current National Surveillance System?" *Journal of Occupational Environmental Medicine*, 48(4): 357-365.
- Sengupta I., Virginia Reno, Christine Baker and Lachlan Taylor. 2008. "Workers' compensation in California and in the Nation: Benefits and Employer Cost Trends, 1989-2005," *IAIABC Journal*, Fall 2008 No.9, Washington DC, National Academy of Social Insurance.
- Sengupta I., Virginia Reno and John F. Burton Jr. 2009. *Workers' Compensation: Benefits, Coverage, and Costs, 2007*. Washington, DC: National Academy of Social Insurance.
- Shannon, Harry S., and Graham S. Lowe. 2002. "How Many Injured Workers Do Not File Claims for Workers' Compensation Benefits?" *American Journal of Industrial Medicine* 42:467-473. Hoboken, NJ: Wiley-Liss, Inc.
- Smith, Gordon S., Helen M. Wellman, Gary S. Sorock, Margaret Warner, Theodore K. Courtney, Glenn S. Pransky, and Lois A. Fingerhut. 2005. "Injuries at Work in the US adult population: Contributions to the total injury burden". *American Journal of Public Health*, 95, pp: 1213-1219.
- Social Security Administration (SSA). Office of Research, Evaluation, and Statistics.
 ———. 2009a. Annual Statistical Supplement, 2007. Washington, DC: SSA.
 ———. 2009b. Unpublished data from the Office of Disability. Baltimore, MD: SSA.
 ———. 2009c. Unpublished data from the Office of the Chief Actuary. Baltimore, MD: SSA.
 ———. 2009d. The 2009 Annual Report of the Board of Trustees of the Federal Old Age and Survivors Insurance and Disability Insurance Trust Funds. Washington, DC: SSA.
- Stanbury M, Joyce P, Kipen H. "Silicosis and workers' compensation in New Jersey." 1995. *Journal of Occupational Environmental Medicine*, 37:1342-1347.
- Strunin, Lee and Leslie I. Boden. 2004. "The workers' compensation system: Worker friend or foe?" *American Journal of Industrial Medicine*, 45(4):338-345.
- TDI (Texas Department of Insurance). 2009. Biennial Report of the Texas Department of Insurance to the 81st Legislature. Division of Workers' Compensation. <http://www.tdi.state.tx.us/wc/regulation/roc/pdf/wc0904est.pdf>
- Thomason, Terry, Timothy P. Schmidle, and John F. Burton Jr. 2001. *Workers' Compensation: Benefits, Costs, and Safety under Alternative Insurance Arrangements*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- U.S. Census Bureau. 2004. *The Number of Firms and Establishments, Employment, Annual Payroll, and Receipts in 1997 by Industry and Employment Size of Enterprise*. Washington, DC: U.S. Census Bureau.
- U.S. Department of Justice (U.S. DOJ). 2010. Private Data Request. Washington, DC: U.S. DOJ.
- U.S. Department of Labor (U.S. DOL). (2010) Office of Workers' Compensation Programs. Private data request.
 ———. 2009a. Bureau of Labor Statistics. National Compensation Survey: Employee Benefits in the United States, March 2009. Summary 09-0872 (July), Washington, DC: U.S. DOL.
 ———. 2009b. Office of Workers' Compensation Programs. Private data request. Washington, DC: U.S. DOL.
 ———. 2009c. Bureau of Labor Statistics. National Census of Fatal Occupational Injuries in 2008 (revised). News. USDL 09-0979 (August). Washington, DC: U.S. DOL.
 ———. 2009d. Bureau of Labor Statistics. Workplace Injuries and Illnesses in 2008. News. USDL 09-1302 (October). Washington, DC: U.S. DOL.

———. 2009e. Bureau of Labor Statistics. Nonfatal occupational injuries and illnesses requiring days away from work, 2008. News. USDL 09-1454 (November). Washington, DC: U.S. DOL.

———. 2009f. ES 202 Report. Washington, DC: U.S. DOL.

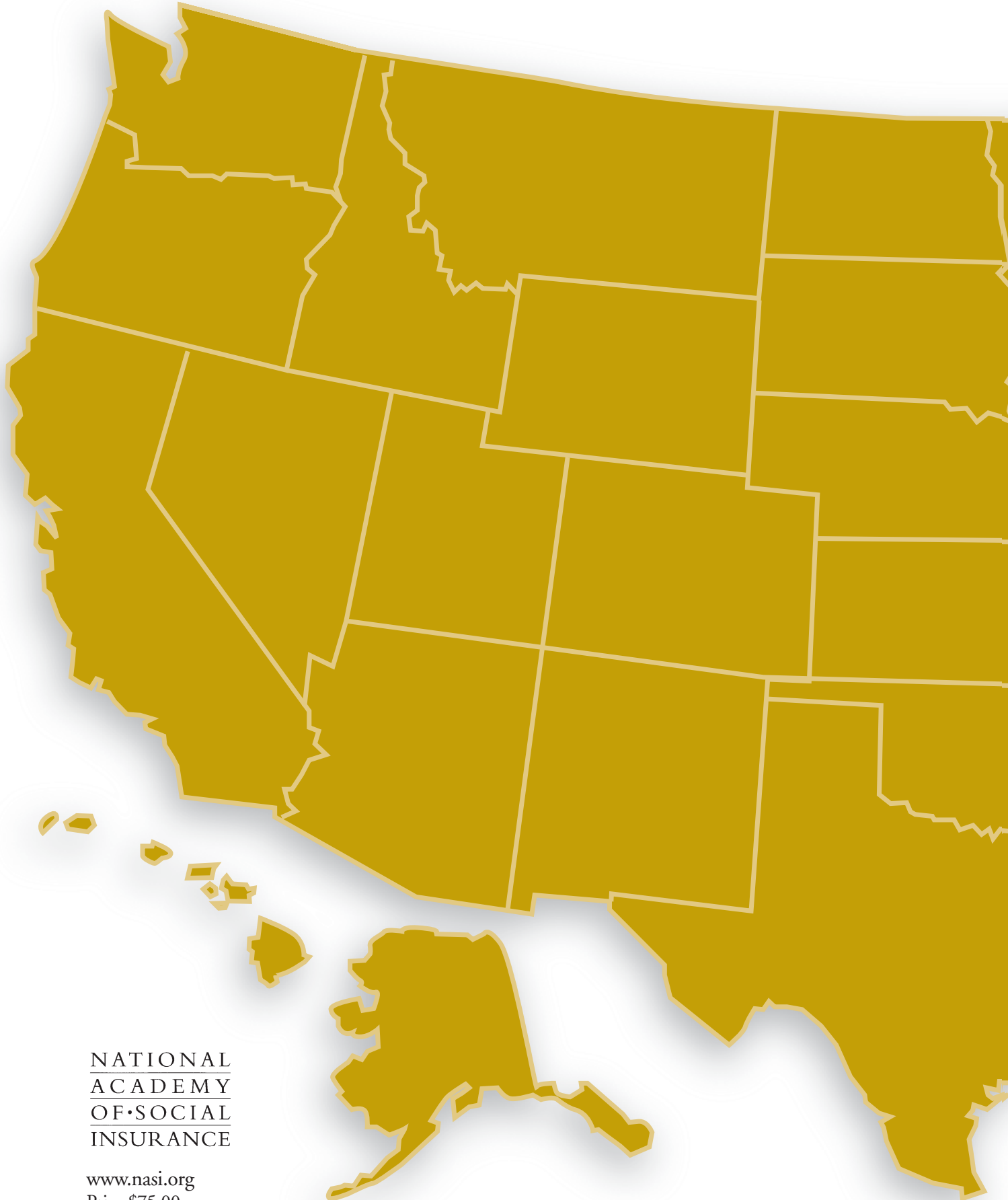
———. 2009g. Bureau of Labor Statistics. Employer Costs for Employee Compensation – December 2008. USDL 09-0247 (March). Washington, DC: U.S. DOL.

U.S. Department of Veterans Affairs. Veterans Benefit Administration. 2008. Annual Benefits Report, Fiscal year 2008. Washington, DC: U.S. Department of Veterans Affairs.

U.S. Small Business Administration (U.S. SBA). Office of Advocacy. 2009. Employer Firms, Establishments, Employment, and Annual Payroll by Firm Size and State, 2006. Washington, DC: U.S. SBA.

Williams, C. Arthur and Peter S. Barth. 1973. Compendium on Workmen's Compensation, Washington, DC: National Commission on State Workmen's Compensation Laws.

Willborn, Steven L., Stewart J. Schwab, John F. Burton Jr., and Gillian L.L. Lester. 2007. Employment Law: Cases and Materials (Fourth Edition) Newark, NJ: LexisNexis.



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