program would operate under future conditions that might reasonably be expected to develop

The figures used here are based on the alternative II or "intermediate" assumptions from the 1977 Trustees Reports, including assumptions that

—mortality rates will decline overall by about 18 percent from 1976 to 2050

—the fertility rate will continue to decrease (from its estimated level in 1976 of 174 children per woman), going down to 165 children per woman in 1980, then the rate is assumed to increase gradually, reaching 21 by 2005 and remaining level thereafter—disability incidence rates will continue increasing,

—disability incidence rates will continue increasing, reaching an ultimate level in 1986 that is 33 percent greater than the estimated 1977 level

-labor force participation rates for women will

increase to an ultimate level that is 13 percent greater than the 1976 level

—after 1981, the Consumer Price Index will increase by 4 percent annually

-after 1982, average wages in covered employment will rise by 5% percent annually

—the unemployment rate for the total labor force will be 5 percent after 1980

--hospital costs will increase by about 15 percent annually for the next 5 years, after 10 years the annual increase is assumed to be about 10 percent

Assumptions were also made concerning other variables, such as the timing pattern of fertility, migration levels, insured status, disability termination rates, marital status, administrative expenses, and interest rates

Notes and Brief Reports

Workers' Compensation Coverage, Benefits, and Costs, 1976*

Reflecting the improving economy, the number of workers covered by workers' compensation programs in an average week increased to 69 1 million in 1976. This 3 1-percent rise from the number a year earlier roughly paralleled growth in employment throughout the civilian labor force (3 4 percent) during the same period.

Benefits paid to workers and the cost of the program to employers both rose substantially, as they have for several years In 1976, benefits totaled nearly \$7.5 billion and program costs, including sales expenses, profits, and costs of administration, amounted to \$10.9 billion. The latter figure represents a notable rise of almost \$2 billion or almost 23 percent over 1975 costs. The increase in costs from 1974 to 1975 was 13 percent. The 1976 rate of growth was more than double the average rate during 1970–75. Most of the growth in costs was explained by the continued rise in statutory benefits payable for

medical care and in indemnity awards and by continued inflation. During 1976, for example, the medical care component of the Consumer Price Index rose 9 5 percent.

COVERAGE

The number of workers protected by workers' compensation laws rose in 1976 by 21 million. In 1975, in contrast, it had fallen by 800,000 as a result of the national economic decline that year. In 1976, the proportion of all employed wage and salary workers covered by the laws rose to 885 percent, one percentage point higher than in 1975. This proportion has been growing since 1971.

The 1976 advance in coverage was consistent with a turnabout in the economy Statutory extensions of coverage also had an impact during the year Though an estimated 200,000 workers were added by law in 1976 to the covered work force, the impetus toward new statutory coverage has clearly slowed down in the past few years In 1976 (and again in 1977) a few States actually made minor additions to the provisions excluding certain workers from protection. As the proportion of workers protected becomes rather high, of course, those still left out tend to be persons

^{*}By Daniel N Price, Division of Retirement and Survivors Studies, Office of Research and Statistics, Social Security Administration

who for administrative or other reasons are the most difficult to incorporate into the system

Payrolls covered under workers' compensation laws are estimated each year by the Social Security Administration For 1976, \$729-\$733 billion was paid to employees covered under workers' compensation laws—9 percent higher than the level for the preceding year Covered payrolls represented about 84 percent of total civilian wage and salary disbursements The proportion has fluctuated narrowly (84-86 percent) for at least 18 years

BENEFITS

The \$7,463 million in cash and medical care benefits paid to injured workers in 1976 represented a 145-percent increase over the 1975 figure. This rate of change was 131 percent 1 year earlier. Improvements in statutory provisions, higher wage levels, and a continuing rise in the number of protected workers have all been factors in a particularly large increase in aggregate benefits registered during the 1970's

Another element that has influenced the amount of benefits paid is the extent of work-related disability. The Bureau of Labor Statistics periodically publishes data on lost workdays resulting from occupational injury and illness in private industry. When the number of workdays lost per workday-lost case is computed, a slowly upward moving average is revealed.

Year	Days
1973	154
1974	155
1975	168
1976	

To the extent that workers' compensation claims loads have also followed this pattern, aggregate benefits recorded here presumably have also risen

One component of workers' compensation payments—that is, payments to coal miners and their survivors under the Federal "black lung" program, hit its peak in 1973 and has since leveled off As the following tabulation shows, the \$981 million paid in black lung benefits in 1976, although still a major component of all workers

[Amounts in millions]

Type of payment	1976		1975	Percentage change		
Total Regular Black lung		463 482 981	\$6 520 5,563 957	14 16 2		
Medical and hospitalization . Compensation . Regular Black lung	5	330 133 155 978	1 2 000 4,520 3 565 955	16 / 13 (16 / 2 /		
Disability Regular Black lung Survivor Regular Black lung		328 735 593 805 420 385	3 800 3 205 595 720 360 360	13 1 16 - : 11 16 16 7		

¹ Includes \$1.8 million in 1975 and \$2.6 million in 1976 paid for medical services under the black lung program

compensation payments, was just 25 percent higher than the 1975 amount Payments made to miners who filed their claims after June 1973 are the responsibility of the Department of Labor Relatively few new claims filed since that date have been paid, partly as a result of litigation challenging such awards

With the relatively stable black lung payments excluded, workers' compensation benefits were 16.5 percent higher in 1976 than in 1975—the second highest annual rate for regular program benefits since the series began in 1939. The tabulation above also shows that regular program benefits for medical care, for disability, and for survivors rose at about the same rate, but most of the proportional growth for black lung benefits (not including the minor amounts for medical care) occurred in the death-benefit segment.

The share of regular benefits devoted to medical care, to cash income for disability, and to income for survivors has been about the same for many years. A little more than one-third has gone for medical care costs, somewhat more than one-half for cash disability benefits, and less than one-tenth for survivor benefits.

Benefits paid by State and by type of insurance carrier in 1975 and 1976 are shown in the accompanying table. The \$3,976 million paid through private insurance accounted for 53 percent of the total in 1976. With the amounts disbursed under the black lung program excluded, insurance payments represented 61 percent of the total, a proportion that has remained about the same for many years. Payments made through State funds (25 percent of the 1976 total) and through self-insured employers (14 percent) also exhibited a rather stable pattern.

¹ For further details, see Department of Labor News Release No 77 1031, dated December 1, 1977

State Benefit Patterns

Statutory maximum weekly benefits rose in all but nine jurisdictions in 1976, either through legislation or, as was more often the case, as a result of "flexible" maximum-benefit provisions ² Two of the nine jurisdictions that did not increase benefits in 1976 enacted laws liberalizing benefits effective in 1977 or later

Not only did the statutory benefit amounts rise, but in at least seven States the formula for determining the maximum amount was liberalized, up to 100 percent of the State average wage in several cases (In 1975, 12 States raised their benefit-wage formula)

Notable is the contrast in benefit-amount patterns between States that adopted flexible maximum-benefit provisions as of the end of 1976 and those that still relied upon ad hoc legislative amendments to keep benefits abreast of changing wage levels. Thirty-six of the 39 jurisdictions (including the Federal employees' program) with flexible-maximum provisions raised their benefit levels in both 1975 and 1976. The exceptions were two States in which the automatic procedure was not instituted until 1976 and one where the increase in wages required to establish a new weekly benefit amount was not sufficient in 1975.

Both in 1975 and 1976, only four out of the 13 jurisdictions without automatic increase provisions increased benefits. Three of the 13 jurisdictions had adopted flexible provisions by the end of 1977. Among the remaining 10 still relying on ad hoc statutory benefit increases are California and New York, the two with the largest work forces, except for Arizona, all the other States are in the South or Midwest.

As the following tabulation shows, the rate of increase in total benefit payments from 1975 to 1976 varied considerably among the States A greater number of States in 1976 than in 1975 had high annual rates of growth in benefit payments (15 percent or more) The distributions in terms of covered workers in these States demonstrates a similar upward pattern. Note that about one-third of the workers under workers' compensation laws are in States that increased their 1976 benefit payments by at least 20 percent over their 1975 payments.

Percentage increase from preceding year	Number o	f States 1	Percentage distribution of covered workers		
	1976	1975	1976	1975	
Total Less than 5 0	52	52	100 0	100 0	
5.0-9 9 10 0-14 9 15 0-19 9 20 0 or more	11 7 13 20	10 10 10 18	28 0 12 7 25 7 33 6	23 3 22 4 22 3 22 5	

¹ Includes the program for civilian employees of the Federal Government and the District of Columbia

As in many other social insurance and related programs, the benefits paid in a few States with the largest number of covered workers accounted for a disproportionate amount of total benefits Employers in each of six States paid at least \$300 million in benefits in 1976, with California alone paying \$842 million Payments in these six jurisdictions accounted for more than 41 percent of all workers' compensation benefits among the States (that is, with expenditures for Federal employees and black lung beneficiaries excluded)

On a regional basis, benefits paid in the New England States showed the lowest rate of growth in 1976—94 percent—as they had in each of the previous 2 years. In the other parts of the country, annual rates of change in benefit outlays for recent years through 1976 were not notable or consistent.

COST RELATIONSHIPS

The premium cost of workers' compensation was 148 percent of covered payroll in 1976 This ratio was 12 percent above the 1975 level—by far the largest 1-year increase since 1940 The cost-to-payroll ratio rose relatively rapidly from 1972 to 1976 (113 percent to 148 percent), compared with the change in the preceding 4 years (107 percent to 112 percent) In fact, the change in the 1972–76 period exceeded the combined change for the 31 earlier years for which data have been compiled, both absolutely and relatively. The recent large inflationary spurt in the economy plus the improvements in statutory coverage and benefit provisions have no doubt been the major forces propelling costs upward

In absolute terms, \$10,852 million was paid by employers in 1976 to protect workers against work-related disability. As would be expected from the rise in payrolls in 1976 and the change

⁸ Under "flexible-maximum" provisions, benefit ceilings are raised automatically, generally as State wage levels rise

in the cost-payroll relationship, the 1976 premium total represented a 225-percent rise over the \$8,857 million 1975 figure—the largest jump in costs since 1948

Costs as defined here refer to the amounts spent by employers as premium payments to private insurance companies and to State insurance funds or as self-insurance benefits (including

Estimates of workers' compensation payments, by State and type of insurance, 1976 and 19751

[In thousands]

		•		nousanus					
		19	76		1975				Percentage
State	Total	Insurance losses paid by private insurance carriers ¹	State and Federal fund dis burse ments	Self insurance payments 4	Total	Insurance losses paid by private insurance carriers *	State and Federal fund dis burse ments	Self Insurance payments 4	change in total payments from 1975 to 1976
Total	\$7 462 222	\$3 975 7 96	\$2 588 775	\$898 0:1	\$6,519,790	\$3,411 712	\$2 323 663	\$784 415	14 5
Alabama Alaska Arizona Arkansas California Colorado Connecticut Delaware District of Columbia Florida	58 824 34,267 74,775 42 50h 841,798 51 709 68 237 11,915 36 768 278 284	42 024 32 027 38 261 35 806 557 880 21 219 62 487 8 999 32,918 244 964	31 364 176 918 25 990	16 800 2 240 5,150 6 700 107 000 4 500 5 750 2 920 3 850 33 320	48 660 18 461 69 798 37,940 723 067 44 163 64 004 10 281 26 730 254 090	34,760 17,261 35,399 31,990 472,406 18,396 58,604 7,761 23,950 223,690	29 549 156 161 21,767	13 900 1,200 4 850 5 950 94 500 4 000 5,400 2 520 2 780 30 400	20 9 85 6 7 1 12 0 10 4 17 1 6 6 1 2 9 27 6 9 5
Georgia Hawan Idaho Ilhnois Indiana Iowa Kansas Kentucky Louislana Maine	93 698 28,623 23 403 305 636 65 071 46 168 39 486 77 591 138 014 25,074	80 088 21,523 16 567 256 636 54,821 38,458 36 216 65 731 120 014 21 774	3 986	13 610 7 100 2,900 49 000 10 250 7 700 3 220 9 860 18 000 3 200	77 475 27,129 20 209 238,672 59 735 37 446 33 667 60 485 114 554 19,677	66,225 20,399 14,550 200,472 50,335 31,196 80,917 52,585 99,654 17,077	3 159	11 2-0 1 6,730 2 500 38 200 9 400 6 250 2,750 7 900 14 900 2,600	20 9 5 5 16 1 28 1 8 9 23 3 17 1 25 0 5 27 4
Maryland Massachusetts Michigan Minnesota Mississippi Missouri Montana Nebraska Nevada New Hampshire	86 354 153 701 384 354 107 978 29 515 71 817 18 565 21 769 31 635 19 969	69 484 143 201 222,754 92 278 27,175 62,342 7 790 19 439 163 19 539	4 320 13 200 	12 550 10 500 148 400 15 700 2 340 9 475 2 654 2,330 500 430	73 441 145,950 333 710 85,955 26 711 63 612 16,292 17 899 25,176 16,611	59 098 136 0.0 193 410 73,455 24 591 55 222 6,441 15 979 60 16,251	3,673 11 500 7,349 24,716	10 670 9 900 128 800 12 500 2 120 8 390 2 502 1 920 395 360	17 6 5 3 15 2 25 6 10 5 12 9 14 0 21 6 22 5 22 5 20 2
New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Oregon Pennsylvania Rhode Island	216,246 24 572 447,180 62 040 9 546 476 177 72,344 160 560 278 250 23,082	196 766 21,672 282 226 54 190 106 939 51,159 50 776 188 819 21,842	108,234 9,440 343,238 12 355 99 00 ₀ 40,073	19,480 2 900 56,630 7,850 - 132 000 8,830 10 784 49 358 1,240	194 763 21,072 406,807 50 828 7 627 444,711 59 735 137,351 205 419 18 627	176 733 18,572 261 417 44 378 65 922 46,549 44,242 139 387 17 627	93 890 7,562 312 089 5 896 83,884 4 34 151	18 030 2 500 51 500 6,450 131 700 7 290 9 22 31 881 1,000	11 0 16 6 9 9 22 0 25 2 7 1 21 1 16 9 35 5 23 9
South Carolina South Dakota Tennessee Texas Utah Vermont Virginia Washington West Virginia Wisconsin Wyoming	36,075 6 436 73 459 400,058 17 797 6 846 80 414 179 174 81,407 83 004 4,461	32 215 5 596 66 779 400 0.8 5,067 6 296 63,314 5,969 131 69,154	9,760 149,415 59 996 4 303	3 860 840 6 680 2,970 550 17 160 23 800 21,280 13 850	31 0-8 5,548 61 649 360 333 18 274 6 427 65 902 157,625 75 856 70 008 4 318	27 738 4 828 56 049 360 333 4,063 5 917 51,902 4 347 55 58 356	9 501 - 33,818 55,979 - 4,275	3,320 720 5,600 2,710 510 14,000 19,832 11,650	16 2 16 0 19 2 11 0 9 4 6 5 22 0 13 7 7 3 18 6 3 3
Federal work injury programs Civihan employees 6 "Black lung benefits 7 Other 8	465,981 980 817 11,197	· · ·	465 981 7 980 817 11,197	· · · ·	358 825 957 200 8 719	- · ·	358 825 7 957 200 8 719		29 9 2 5 28 4

¹ Data for 1976 preliminary Calendar year figures, except that data for Montana and West Virginia, for Federal civilian employees and ¹ other Federal workers compensation, and for State fund disbursements in Maryland, Nevada, North Dakota, Utah, Washington, and Wyoming represent fiscal years ended in 1975 and 1976 Includes benefit payments under the Longshoremen s and Harbor Workers Compensation Act and Defense Bases Compensation Act for the States in which such payments are made ¹ Net cash and medical benefits paid during the calendar year by private insurance carriers under standard workers compensation policies Data primarily from A M Best Company, a national data-collecting agency for private insurance

primate insurance

Net cash and medical benefits paid by State funds compiled from State
reports (published and unpublished) estimated for some States

Cash and medical benefits paid by self insurers, plus the value of medical

benefits paid by employers carrying workers compensation policies that do not include the standard medical coverage Estimated from available State data

⁷ Includes \$9,461,000 in 1975 and \$17,550,000 in 1976 paid by U.S. Department of Labor

Includes payment of supplemental pensions from general funds
 Payments to civilian Federal employees (including emergency relief workers) and their dependents under the Federal Employees Compensation Act

ment of Lacor

¹ Primarily payments made to dependents of reservists who died while
on duty in the Armed Forces, to individuals under the War Hazards Act
War Claims Acts and Civilian War Benefits Act and to cases involving
Civil Air Patrol and Reserve Officers Training Corps personnel, maritime
war risks, and law enforcement officers under P L 90-921

administrative costs, estimated at 5-10 percent of self-insurance benefits) Excluded are costs associated with benefits financed through general revenues. The largest item of this type is the cost of the Federal black lung benefits program

In 1976, estimated costs for each type of insurer amounted to. (1) \$7,832 million in premiums paid to private carriers, (2) \$1,530 million in premiums paid to State funds (for the Federal employees' programs financed through congressional appropriations, these "premiums" are the sum of the benefit payments and the costs of the administrative agency), and (3) \$898 million for self-insurance benefits and administration

The share of payroll devoted to benefits reflects the upward trend in costs in recent years. In 1976, benefit expenditures were 0.88 percent of total covered payroll, compared with 0.67 percent in 1972. In cash terms, the 1976 figure was 88 cents of benefits paid for each \$100 of payroll, 21 cents higher than the 1972 amount. From 1948 to 1972 the rise was 16 cents.

A measure of the effectiveness of the workers' compensation system in delivering cash and medical care benefits for occupational disability is the ratio of benefits to premiums (loss ratio)

When benefits financed through general revenues are excluded, the loss ratio for all carriers in terms of direct premiums written fell from 62 percent in 1975 to 59 percent in 1976 This ratio has remained fairly stable, varying by no more than 34 percentage points in the period 1970–76

The loss ratio for private carriers was 50 percent in 1976 Corresponding loss ratios for the State-operated insurance funds have always been higher than those for private carriers. The ratio of losses paid to premiums written for this group was 74 percent in 1976 Unlike the pattern for private carriers, the figures for State funds indicate a notable rise in the loss ratio in each of the past few years up to 1975 From 1975 to 1976 the ratios for both private carriers and State funds dropped several points

Comparisons between private carriers and State funds should take into account the premium income returned to employers as dividends but not provided for in the reported data, particularly with respect to private carriers. Available data indicate that dividends, when related to total premium payments for both dividend-paying and non-dividend-paying companies, generally average 4–6 percent.