

**STUDY OF THE WORKERS' COMPENSATION PROGRAM
OF THE STATE OF HAWAII**

**Conducted by
Haldi Associates, Inc.**

A Report to the Legislature of the State of Hawaii

**Submitted by the
Legislative Auditor of the State of Hawaii**

**Report No. 83—14
December 1983**

FOREWORD

In the 1983 legislative session, the Hawaii State Legislature adopted two resolutions (Senate Concurrent Resolution No. 61 and House Concurrent Resolution No. 172) directing the Legislative Auditor to conduct a comprehensive study of Hawaii's workers' compensation program.

The call for the study reflected the Legislature's growing concern that high and increasing workers' compensation insurance rates were imposing a heavy burden on employers and could adversely affect the State's business climate and economy.

Our consultant for the study is Haldi Associates, Inc. of New York City. The study specifications prepared by our office instruct the consultant to: (1) identify the public policy objectives towards which the State's workers' compensation program should be directed; (2) evaluate the existing workers' compensation system in Hawaii; (3) develop alternatives to the existing system and conduct systematic analysis of the alternatives; and (4) on the basis of the evaluation of the current system and the analysis of alternatives, recommend changes to the system.

The study will result in a final report of findings and recommendations to be submitted for consideration in the 1985 legislative session. In the meanwhile, this interim report is being submitted to apprise the Legislature of some of the issues which are being evaluated and analyzed.

We thank the many persons in government and the private sector who have cooperated in the study, and we trust that we can continue to count on their participation in the next and final phase of the study.

Clinton T. Tanimura
Legislative Auditor
State of Hawaii

December 1983

TABLE OF CONTENTS

<i>Chapter</i>		<i>Page</i>
1	INTRODUCTION	1
	The Workers' Compensation Program in Brief	2
	Program Issues	3
	Coverage	4
	Benefits	7
	Benefit Distribution	7
	Workers' Compensation Insurance Rates, 1982 ...	11
	Organization of This Report	11
2	BENEFIT STRUCTURE AND PROGRAM ADMINISTRATION	13
	Major Elements of Benefit Structure	13
	The Presumption of Work-Related Injury	14
	Medical Costs	16
	The Waiting Period	19
	Permanent Partial Disability:	
	Wage Loss, Scheduled Awards, and Return to Work Incentives	20
	Other Benefit Issues	24
	Claims, Hearings, and Appeals Process	27
	The Special Fund	31
	Other Program Administration Issues	32
3	THE INSURANCE AND RATEMAKING SYSTEM	35
	Insurance Commissioner	35
	Rating Organization	35
	Ratemaking Data, Procedures and Issues	37
	Trending	37
	Loss Development	38
	Market Competition and "Open Rating"	40
	Functions and Performance of State Insurance Funds	42

APPENDICES

<i>Appendix</i>	<i>Page</i>
A Special Funds in Hawaii and Seven Other States . .	47
B Rehabilitation in Other States	57
C Recent Law Changes in Six Other States	61
D Index of Manual Rates: Comparison of Hawaii and Eight Other States	65
E Selected Statistical Data Pertaining to Hawaii Workers' Compensation Program	69

LIST OF TABLES

<i>Table</i>	<i>Page</i>
2.1 Claims Received and Decisions Rendered by the Disability Compensation Division	30
2.2 Caseload of the Labor Appeals Board, 1975–1982	31
3.1 Types of Workers' Compensation Systems in the United States	43

LIST OF FIGURES

<i>Figure</i>	<i>Page</i>
1.1 Workers Covered by the Hawaii Workers' Compensation System, 1982	5
1.2 Payroll Covered by the Hawaii Workers' Compensation System, 1982	6
1.3 Benefits Paid by Workers' Compensation, State of Hawaii, 1982	8
1.4 Benefit Distribution of Workers' Compensation, State of Hawaii, 1982	9
1.5 Average Rates for Workers' Compensation, 1982, Ranked by State	10
2.1 Medical Costs Per Case, 1978–79, Ranked by State	17
2.2 Frequency of Medical Cases Per 100,000 Work-Years, 1978–79, Ranked by State	18
2.3 Hawaii Workers' Compensation Hearing and Appeals System	29

Chapter 1

INTRODUCTION

Workers' compensation was the first no-fault law adopted in Hawaii. It has been in effect since 1915. Around that time similar laws were adopted throughout the United States as a means of protecting employees against ravages of the industrial workplace while protecting employers against the rising tide of civil court actions. The no-fault concept was originally promoted and successfully lobbied by such divergent elements as the National Association of Manufacturers and Professor John R. Commons of the University of Wisconsin.

In brief, the law requires that employers guarantee employees payments for lost wages and medical expenses stemming from an injury-causing accident without regard to fault or negligence by the employer. As a *quid pro quo*, employers are exempted from negligence suits for such work-related injuries.

The original focus was on injuries from workplace accidents. Serious injuries such as loss of a limb, loss of an eye, or even loss of life were both common and obvious in the early 1900s. Since that time, workplace safety has improved while employment in manufacturing, construction, mining, and lumbering—industries with a high rate of serious accidents—has been a declining share of the total labor force. Costs of workers' compensation have not declined, however.

In the early part of this century relatively little was known about the variety of occupational diseases that can result from long-term exposure to carcinogens or other toxic materials. The workers' compensation program, both in Hawaii and elsewhere, has adapted to increasing scientific knowledge about occupational diseases.

Yet another long-term trend throughout the country has been towards liberalization of coverage to include compensation for cardiovascular, soft tissue, and stress-related cases that may have had origins outside the workplace. These developments have increased costs in virtually all jurisdictions. In Hawaii, the increase in rates for workers' compensation insurance has been particularly sharp.

Over the past four years rates have risen by nearly 75 percent, with an increase of over 29 percent in 1983 alone.¹

The Workers' Compensation Program in Brief

For employees who incur work-related injuries and illnesses, the workers' compensation program provides three principal types of benefits:

1. Cash awards to cover a portion of lost wages, subject to some maximum amount;
2. Reimbursement for medical and hospitalization expenses, unlimited as to amount;
3. Rehabilitation services to aid early return to work.

Additional cash awards are made for loss or impairment of bodily functions as well as for disfigurement. For those disabilities that are permanent or result in death, beneficiaries (including survivors) receive a pension, based on earnings prior to the injury or illness. All cash benefits under the workers' compensation program are tax free to the recipient.

Employers pay for workers' compensation by either buying insurance, or they can self-insure provided they have sufficient financial resources. Employers that purchase workers' compensation insurance pay premiums based on (1) size of their payroll, and (2) the risk of injury or illness associated with their business. Businesses are placed in one or more of 600 risk categories or classifications. Theoretically, those with similar risk characteristics and loss experience pay the same rate. In practice, smaller firms typically purchase coverages at so-called manual rates, while larger firms can reduce their premium cost through various dividend schemes and rating plans that reflect their safety and claims experience. Those large firms that self-insure are insulated from the insurance rating and classification mechanism. They simply internalize their loss costs directly.

1. A legislative moratorium was enacted in 1983, barring further changes until January 1, 1985.

Program Issues

Interested parties in Hawaii have expressed a number of concerns about the workers' compensation program as it is currently operating. The problem is that issues raised by different parties often conflict.

For instance, fee arrangements for lawyers, medical practitioners, chiropractors, and private rehabilitation specialists are considered by contending parties to be either too little or too excessive and without adequate control or supervision of actual services rendered to clients. It is also alleged that this pioneering no-fault insurance has become increasingly litigious with resulting delays in the adjudication of claims, some manifest overcompensation of minor claims and the distinct possibility that more serious disabling work injuries and illnesses are undercompensated. Workers who have legitimate claims find themselves competing for consideration with a welter of frivolous claims. Moreover, the fact that workers' compensation benefits are tax free make it very attractive as a supplementary benefit program. It can often be more advantageous to file for a compensation claim than to use sick leave or wage continuation benefits, or to use less remunerative temporary disability benefits. In this environment, safety and loss prevention become weak palliatives in terms of inducing workers (or employers) to adopt safer practices.

Insurers complain about administrative delays in processing claims and appeals, the weight of evidentiary documentation required to complete claims dockets, the increasing tendency towards the presumption that more and more disabilities are work-related, and the inability to terminate payments even when fraud is present and proven. Others feel that poor claims management by insurance companies and self-insurers is a major contributing factor to increasing costs.

Finally, employers have been forced to pay rapidly escalating costs for this mandatory insurance while feeling helpless about either curtailing or containing it. They feel whipsawed by suspicions of double dipping, malingering or even out-and-out fraud. Those who buy insurance suspect that liberal court interpretations are used to over-inflate costs through ever increasing reserves. Many small employers feel that the marketplace does not recognize their long spells of little or no claims experience while large risks continue to receive price breaks despite possible adverse claims experience.

Opinions and impressions about workers' compensation are based on a welter of anecdotal stories. While most such stories are presumably factual, a number of them are "horror stories" about an isolated incident. Many are just that, an isolated incident which cannot and should not be generalized into a condemnation of a group of people (or institutions) or the entire system. The workers' compensation system does appear to have some fundamental underlying problems, and certain stories appear to be symptomatic of these problems.

The purpose of this study is to dispel confusion over contending positions by conducting a comprehensive analytical evaluation that encompasses all major issues within the framework of basic public policy objectives. As a starting point, we now turn to an examination of selected data pertaining to Hawaii's workers' compensation program. Those data provide a factual overview of (1) who in the labor force is covered; (2) how benefits under the system are financed; (3) the distribution of benefits by major expense categories; and (4) a comparison of insurance rates for this form of industrial insurance in Hawaii and other states.

Coverage

Virtually every worker in the State of Hawaii is entitled to compensation for job-related accidents under Hawaii's workers' compensation statutes. Principal exclusions are those workers who come under the Federal Harbor and Longshore Workers Act. That act covers workers at federal installations as well as longshore workers.

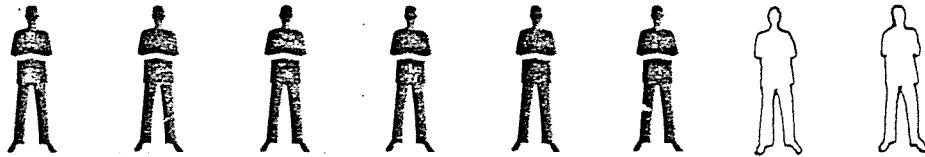
In 1982, the Hawaii workers' compensation system covered a total of 376,000 workers. Of these, 280,000, or three-fourths of the total, worked for employers who provided coverage through private insurance carriers, and the other one-fourth, or 96,000, worked for employers who were self-insured (Figure 1.1). Self-insured employers include state and local government, plus a number of larger employers who have the financial capability to self-insure. The largest self-insurer in Hawaii is state government.

Payrolls covered under Hawaii's workers' compensation amounted to over \$5.5 billion in 1982. Payrolls of self-insured employers represented 30 percent of total payrolls (Figure 1.2).

Figure 1.1

WORKERS COVERED

BY THE HAWAII WORKERS' COMPENSATION SYSTEM, 1982



COVERED BY INSURANCE CARRIERS

280,000

(74.4%)

SELF-INSURED

96,000

(25.6%)

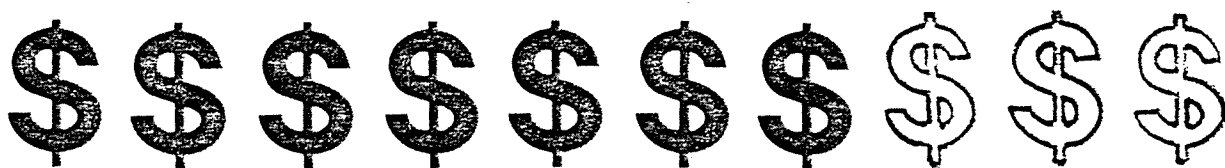
EACH FIGURE REPRESENTS APPROX. 47,000 WORKERS

Source: Department of Labor and Industrial Relations.

Figure 1.2

PAYROLL COVERED

BY THE HAWAII WORKERS' COMPENSATION SYSTEM, 1982



COVERED BY INSURANCE CARRIERS
\$3,838.7 MILLION
(69.5%)

SELF-INSURED
\$1,687.4 MILLION
(30.5%)

EACH SYMBOL REPRESENTS APPROX. 552.6 MILLION DOLLARS IN PAYROLL

Source: Department of Labor and Industrial Relations.

Those 96,000 who worked for self-insured employers earned an average annual wage of \$17,509, while the 280,000 covered by insurance carriers earned an average annual wage of \$13,712.

Benefits

Total benefits paid for work injuries during 1982 amounted to approximately \$91 million (Figure 1.3). Some 28 percent of these benefits were paid by self-insured employers, 65 percent were paid by insurance carriers, and 7 percent were paid from the State's special fund.

Benefits paid out of the special fund are financed through assessments on self-insured employers and insurance carriers. Assessments are in proportion to covered wages. When this assessment is prorated back to the funding sources, self-insured employers and insurance carriers paid in 1982 total benefits of \$27.6 and \$63.2 million, respectively. On this basis, self-insured employers paid 30 percent of all benefits and insurance carriers paid 70 percent. It thus turns out, coincidentally perhaps, that in 1982 the percentage of benefits paid by self-insurers was the same as their percentage of covered payrolls.

Benefit Distribution

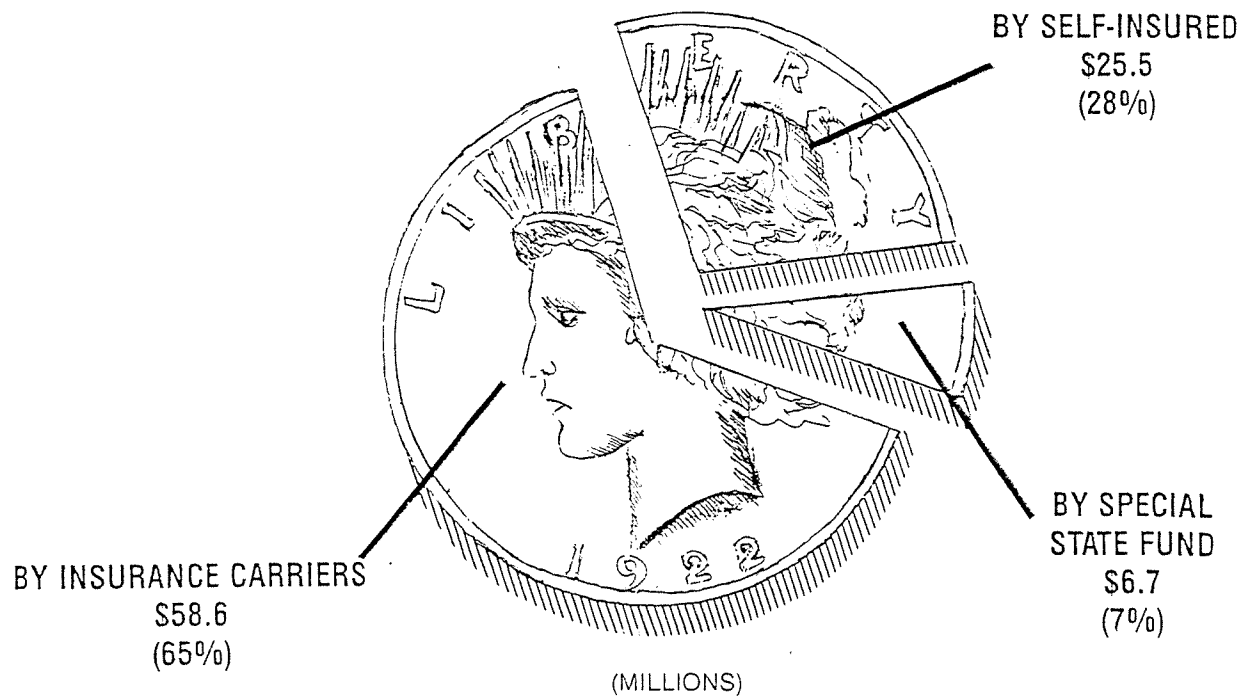
Benefit payments, by major category, are shown in Figure 1.4. The largest expense category was payment of medical costs, which represented almost one-third of total benefit payments. Because medical expenses are such a large portion of total benefits, attention is appropriately directed to further evaluation and analysis of these costs.

The second most important expense category is indemnity payments for temporary total disability. These payments represent wage loss replacement during the healing period. Temporary total disability indemnity (wage loss) payments are made to many who also have a permanent partial disability. These wage-loss payments were just under one-third of total payments in 1982. With regard to temporary total disability payments, numerous interested parties have expressed concern about the waiting period. The waiting period is discussed further in Chapter 2.

Figure 1.3

BENEFITS PAID

BY WORKERS' COMPENSATION, STATE OF HAWAII, 1982

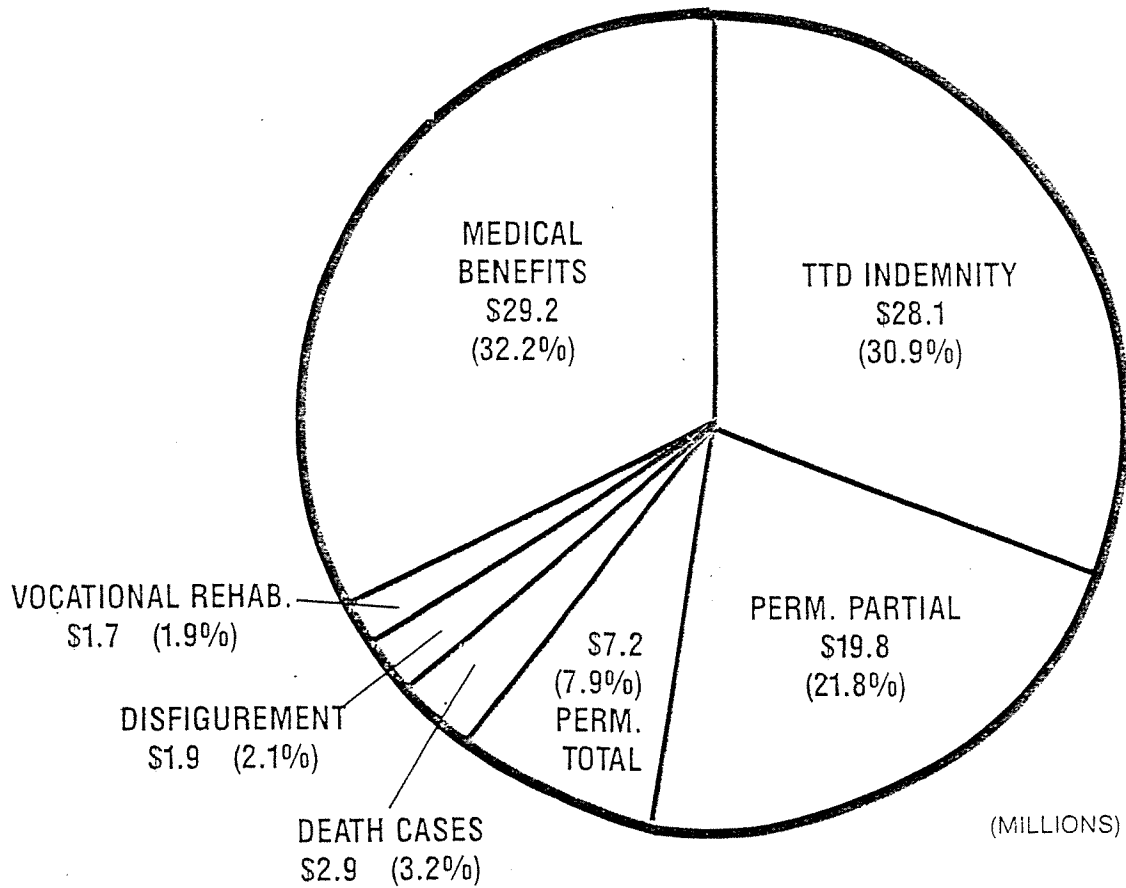


Source: Department of Labor and Industrial Relations.

Figure 1.4

BENEFIT DISTRIBUTION

OF WORKERS' COMPENSATION, STATE OF HAWAII, 1982

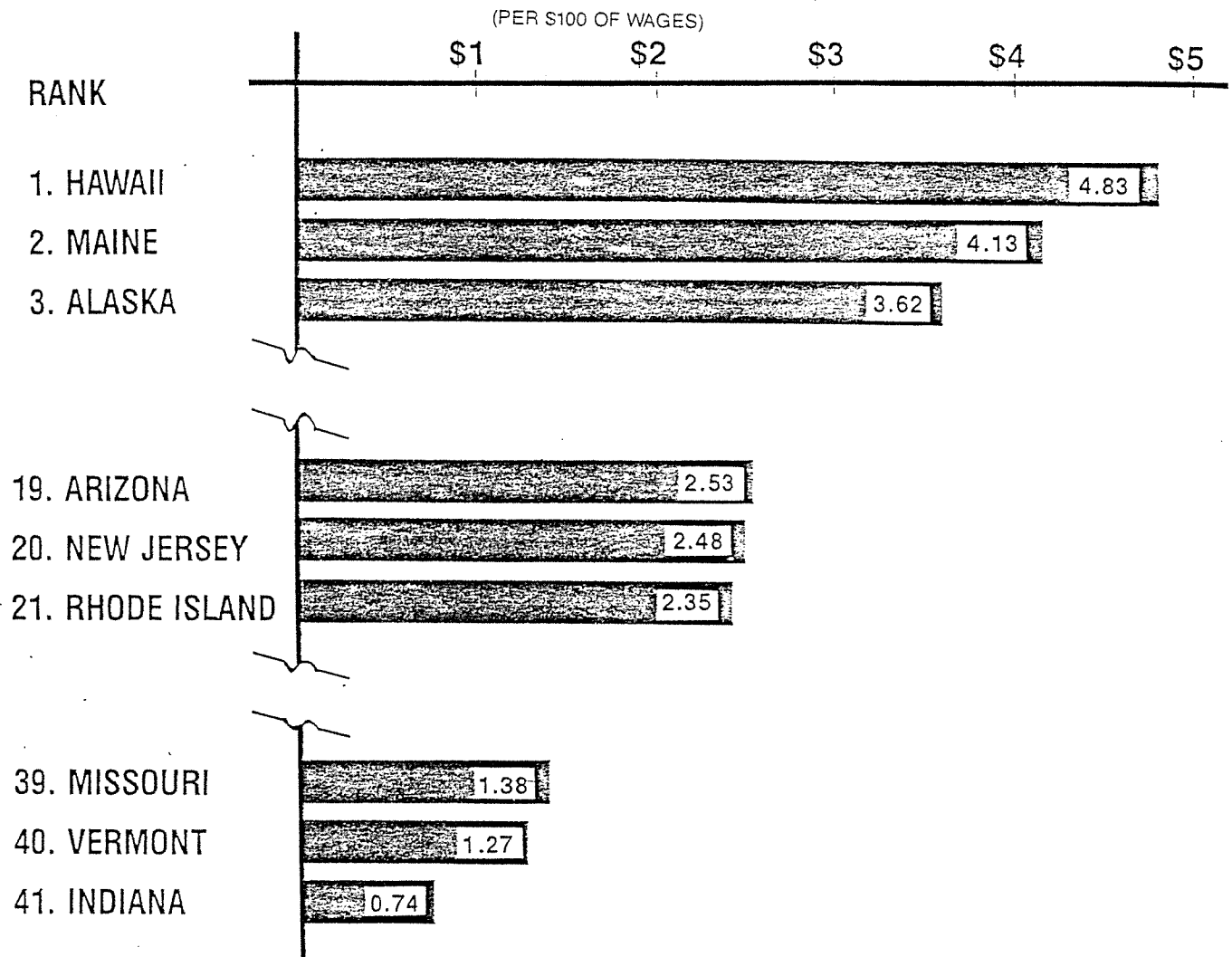


Source: Department of Labor and Industrial Relations.

Figure 1.5

AVERAGE RATES

FOR WORKERS' COMPENSATION, 1982, RANKED BY STATE



Source: NCCI Statistical Handbook, 1983, p. 142.

Workers' Compensation Insurance Rates, 1982

Data from the National Council of Compensation Insurers confirm that during 1982, employers in Hawaii paid the highest average rate in the United States: \$4.83 per \$100 of covered payroll (Figure 1.5). The second highest state, Maine, had a rate of \$4.13 per \$100, almost 15 percent less than Hawaii. Of the 41 states for which data are available, the median rate was \$2.35. The median rate was slightly less than half the rate in Hawaii.

A more detailed comparison of rate levels can be found in Appendix D. As shown there, Hawaii has had a high rate of increase since 1979.

Organization of This Report

The remainder of this report contains two chapters plus five appendices. Chapter 2 reviews underlying statutory and program administration issues that pertain to the basic workers' compensation system as it affects all employers, regardless of whether they self-insure or buy insurance from a private carrier. Chapter 3 examines insurance ratemaking methods and the competitive marketplace in which workers' compensation coverages are delivered in Hawaii. As indicated previously, only large employers that self-insure are unaffected by these insurance issues.

Chapter 2

BENEFIT STRUCTURE AND PROGRAM ADMINISTRATION

This chapter examines the basic workers' compensation system as it affects all employers, regardless of whether employers self-insure or buy coverage from an insurance carrier. Various parties have expressed concern about a number of issues that pertain to the structure of benefits as well as administration of the program. Pertinent information and findings on those issues which have been addressed to date are discussed in the following sections.

Major Elements of Benefit Structure

Workers' compensation benefits are commonly divided into (1) medical benefits; (2) lost-time benefits; (3) lost income, temporary or permanent; and (4) disability, either partial or total. In recent years, many states, including Hawaii, have added vocational rehabilitation as a benefit.

In most jurisdictions, workers' compensation benefits for medical services are quite comprehensive in nature, held to the general criteria that they relate reasonably to medical needs and be reasonable in cost. Many states, including Hawaii, have fee schedules for common procedures to aid in determining reasonable charges.

Lost-time benefits are subject to minimum and maximum dollar limits and often to the number of weeks for which benefits will be paid. For total disabilities, either temporary or permanent, most states pay a specified percentage of a worker's pre-injury wage, subject to an overall maximum based on a specified percentage of the statewide average weekly wage. In Hawaii, a totally disabled worker receives 66-2/3 percent of pre-injury income, up to a ceiling which is 100 percent of the statewide average weekly wage.

Benefits for permanent partial disability in Hawaii, as well as in most other states, are calculated by reference to a claimant's pre-injury wages. Permanent partial disability benefits are discussed at greater length in a subsequent section of this chapter.

In all jurisdictions, the relative “adequacy” or “generosity” of workers’ compensation benefits is a concern that periodically spurs legislative amendments designed to increase the covered share of a worker’s pre-injury income and to adjust benefits to offset losses due to inflation. Changes in workers’ compensation benefits in Hawaii in recent years have reflected national trends toward providing more adequate compensation. The structure of available benefits and limitations in Hawaii is similar to that found in most other states. The levels of benefits (as determined by formulas determining maximum amounts) place Hawaii in the most progressive one-third to one-fourth of states, but Hawaii’s benefits are by no means so generous as to appear dramatically out of line with national trends. Further, there appears to be widespread recognition among all parties that the statutory benefits provided in Hawaii’s law are not out of line with other states. During the past few years, however; the overall cost of the workers’ compensation program has caused rising concerns among many employers, insurers, and government officials.

Total benefit costs reflect not only statutorily defined minimums and maximums, but are also a product of other important factors. Patterns of utilization, including the average frequency and duration of different types of claims, are extremely important in determining total program costs. So, too, are standards applied by those who administer the workers’ compensation program. Incentives to encourage productive use of available benefits and rehabilitation—and discourage overutilization—are also important in determining overall system costs. As discussed elsewhere in this report, Hawaii’s program may contain a number of dysfunctional incentives.

The Presumption of Work-Related Injury

Workers’ compensation benefits are for work-related injuries. Demonstrating occupational causality in individual claims is not always simple, however. Accidents occurring at work are relatively clear-cut, but it is often more difficult to make determinations about causation of disabling injuries which are related to a multiplicity of pathological conditions (e.g., heart attacks).

Reflecting humanitarian objectives of workers’ compensation programs, state legislatures and courts have developed a variety of statutory provisions and judicial doctrines which tend to help an injured worker demonstrate occupational causality

in the sometimes difficult legal process. The general philosophy has been that it is better to err by compensating a possibly invalid claim than to err by failing to compensate a claim that was valid. It also reflects a presumption that employers and insurance companies are more knowledgeable about workers' compensation laws than the individual worker and are better able to afford expert legal representation. In consequence, a widespread preference has evolved for resolving doubts about the merit of a claim in favor of the claimant.

A number of rulings by the Hawaii Supreme Court are widely viewed as significantly broadening the basis for workers' compensation eligibility. Using the presumptions clause found in Chapter 386-85 of the Hawaii Revised Statutes, the court has rather dramatically increased the evidentiary burden on employers and insurers.

Other states have faced similar choices in recent years. Motivated primarily by cost concerns, they have chosen to emphasize in different ways limiting the standards of evidence for occupational causation and an appropriate "balance" between the needs and rights of employers and claimants.

In 1980, the State of New Jersey implemented a rigorous test for a claimant establishing occupational causality in cardiovascular cases:

"In any claim for compensation for injury or death from cardiovascular or cerebral vascular causes, *the claimant shall prove by a preponderance of the credible evidence* that the injury or death was produced by the work effort or strain involving a substantial event, condition or happening in excess of the wear and tear of the *claimant's daily living*, and in reasonable medical probability *caused in a material degree* the cardiovascular or cerebral vascular injury or death resulting therefrom." [Emphasis added.]

Material degree means an appreciable degree substantially greater than *de minimis*.

More recently, the State of Minnesota has enacted (for implementation in January 1984) a more general statement of legislative intent:

"It is the intent of the legislature that Chapter 176 be interpreted so as to assure the quick and efficient delivery of indemnity and medical benefits to injured workers at a reasonable cost to the employers who are subject to the provisions of Chapter 176. *It is the specific intent of the legislature that workers' compensation cases shall be decided on their merits* and that the common law rule of 'liberal construction' based on the supposed 'remedial'

basis of workers' compensation legislation shall not apply in such cases. The workers' compensation system in Minnesota is based on a mutual renunciation of common law rights and defenses by employers and employees alike. Employees' rights to sue for damages over and above medical and health care benefits and wage loss benefits are to a certain degree limited by the provisions of this chapter, and employers' rights to raise common law defenses such as lack of negligence, contributory negligence on the part of the employee, and others, are curtailed as well. Accordingly, *the legislature hereby declares that the workers' compensation laws are not remedial in any sense and are not to be given a broad liberal construction in favor of the claimant or employee on the one hand, nor are the rights and interests of the employer to be favored over those of the employee on the other hand.*" [Emphasis added.]

In 1972, the Commonwealth of New Zealand moved in the opposite direction. It enacted a comprehensive program of accident compensation covering accidents in and out of the workplace.

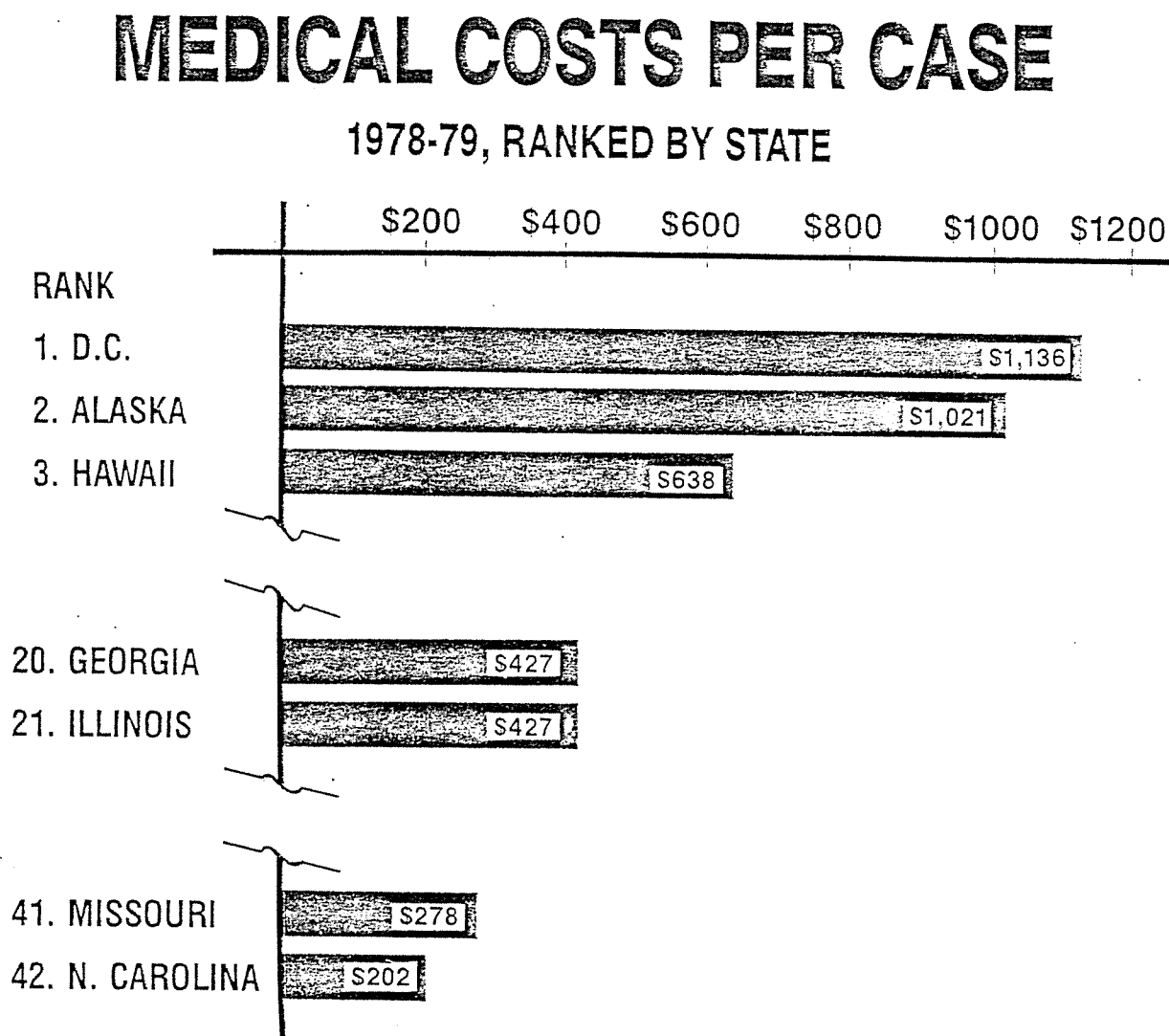
In our final report, we will provide additional information indicating how other jurisdictions are dealing with this problem, and specific recommendations for the Hawaii State Legislature.

Medical Costs

The most recent insurance data on medical costs for states other than Hawaii cover the period 1979 to 1980. Among 42 states for which such data were available, Hawaii had the third highest medical cost **per case** (Figure 2.1). This comparison with other states indicates that containment of Hawaii's medical costs merits careful evaluation as part of this study. At the same time, it should be recognized that averages represent crude data which must be interpreted with caution. The nature and severity of work-related accidents can vary significantly between states. Those states with concentrations of heavy industry, lumber, mining, or oil fieldwork will on the average tend to have a higher proportion of more serious injuries.

The other aspect of medical costs is the frequency (per 100,000 work years) of work-related accidents that require medical attention. Available data indicate that Hawaii's frequency is *not* out of line with experience in other states. Specifically, Hawaii ranked 28th among 42 states, which is slightly below the median (Figure 2.2).

Figure 2.1



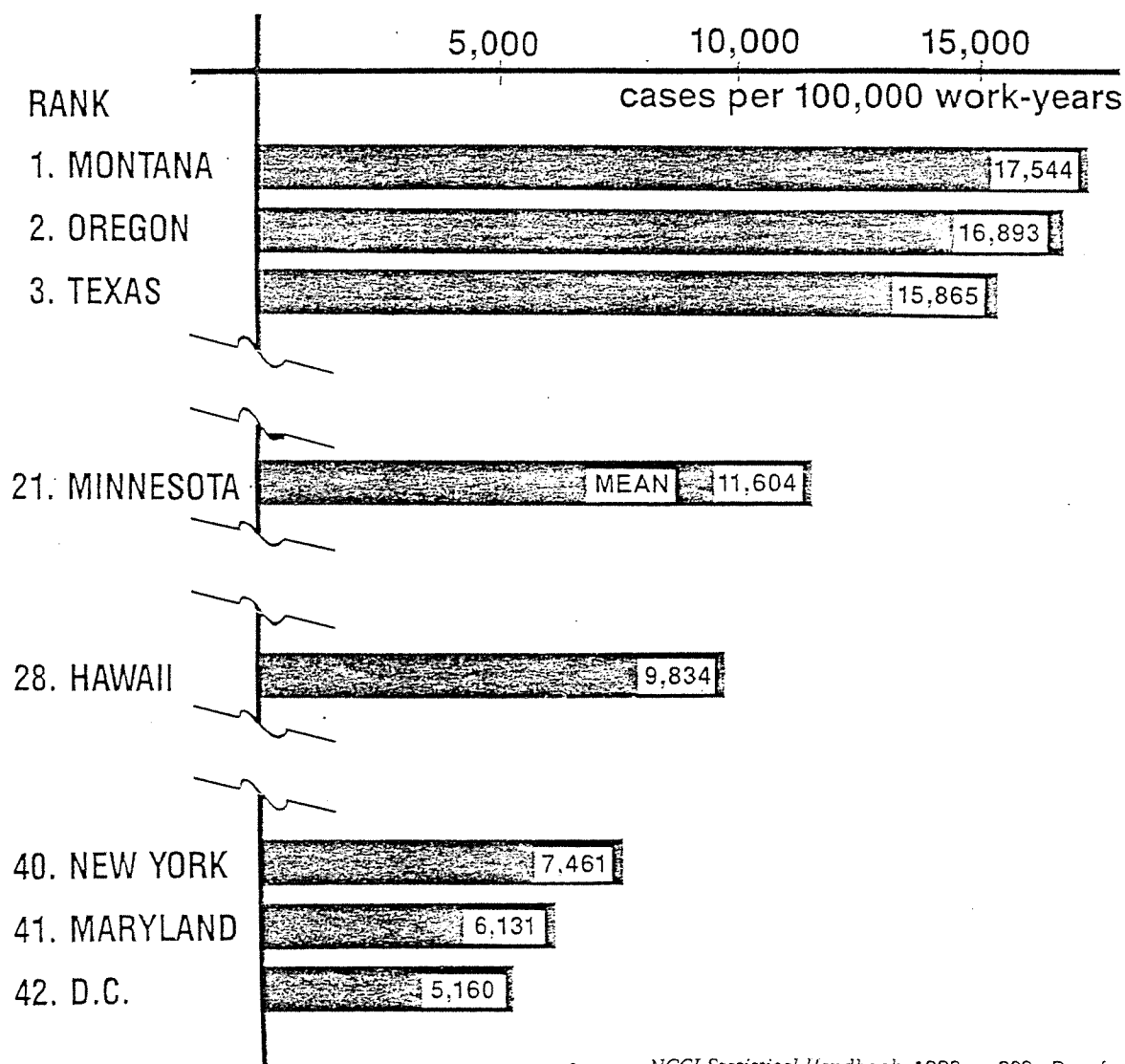
Source: NCCI Statistical Handbook, 1983, p. 207.

Figure 2.2

FREQUENCY OF MEDICAL CASES

PER 100,000 WORK-YEARS

1978-79, RANKED BY STATE



Source: *NCCI Statistical Handbook*, 1983, p. 209. Data for some states have been normalized to a 12-month basis.

Cost containment of all medical expenses for workers' compensation will be examined as part of this study. Our initial efforts, however, have focused on chiropractor costs. Data made available through the Hawaii Insurers Council indicate that chiropractor fees amounted to approximately 16 percent, or one-eighth, of total medical costs.¹

Prior testimony submitted to the Legislature indicates "that the average charge per visit for a chiropractor is 77% higher than for a physician."² Data from Hawaii Medical Service Association (HMSA) also indicate that chiropractors have a higher average charge per visit than other practitioners.³ Also of importance, HMSA data show that the average number of visits per case is substantially higher for chiropractors than for other practitioners.⁴ Consequently, the cost per case is substantially higher for chiropractors than for other practitioners, and it appears that chiropractors may be an important part of the explanation for the high medical cost per case in Hawaii relative to other states.

However, to help keep the issue of chiropractic costs in perspective, it should be kept in mind that chiropractic fees account for only one-sixth of all medical costs. If chiropractic fees were completely eliminated, Hawaii would still have a high medical cost per case in relation to other states. Hence, other factors will also need to be examined.

The Waiting Period

Assuming that a worker's injury meets the occupational causality test, existing Hawaii law provides a two-day waiting period for entitlement to benefits. If a disability exceeds five days, however, benefits are payable from the first day of disability. In this respect, Hawaii is the most generous of American jurisdictions. Information from 43 other jurisdictions indicates that 22 have a three-day waiting period, while 21 have a seven-day waiting period. Because of the comparative

1. These data are from a sample of over 9,000 medical invoices from Hawaii that were submitted to Modata, Inc., a statistical agency in California.

2. Statement of the Hawaii Insurers Council to the House of Representatives Committee on Employment Opportunities and Labor Relations, February 25, 1983 (House Bill 1524).

3. Review of HMSA coverage of chiropractic services (internal HMSA document, dated February 25, 1983).

4. Exhibit, Review of Chiropractic Data, HMSA testimony on Senate Bill 812, S.D. 1, 1982.

generosity of the Hawaii provision, a number of parties have expressed concern that this may be a significant component in the current cost problem confronting the Hawaii system.

Hawaii is known to have a high frequency of claims for temporary total disability. To examine whether the short waiting period acts generally as a positive incentive towards more claims, a statistical analysis of 45 states (including Hawaii) has been conducted. In brief, our findings disclose a statistically significant connection between length of waiting period and claims frequency. These results give strong support to the notion that short waiting periods give rise to a greater number of claims.

The analysis has not yet studied effects of the short five-day retroactive period on claims frequency and benefit payment. On the basis of our analysis to date, however, it nevertheless appears that longer waiting and retroactive periods would deter some claims. At the same time, a longer retroactive period would constitute a new target for minimum benefit utilization, possibly inducing a larger number of claims to incur a longer healing period in order to qualify for full benefits.⁵ The final study report will contain further findings concerning the waiting and retroactive periods.

Permanent Partial Disability: Wage Loss, Scheduled Awards, and Return to Work Incentives

Fashioning an appropriate benefit structure for permanent partial disability poses a thorny challenge to the fairness and effectiveness of any workers' compensation system. Provision of a benefit for permanent partial injuries involves central trade-offs among three competing public policy objectives: (1) fair and adequate compensation of individual workers; (2) efficient allocation of limited compensation dollars to areas of greatest need; and (3) incentives that encourage maximum feasible rehabilitation of partially disabled workers and their return to gainful employment, compatible with the nature of their injuries.

5. The concern here is somewhat analogous to considerations of an appropriate "threshold" provision barring lawsuits for small claims in no-fault automobile insurance plans. When the threshold is set too low and is relatively easy to achieve, it encourages extra and unnecessary medical expense so that a greater number of claims will just meet the threshold requirement.

In Hawaii, as in many other jurisdictions, compensation of permanent partial disabilities amounts to about 22 percent of total benefits (See Figure 1.4). Besides objective injuries—loss of an eye, an arm, a leg, etc.—this category also includes back injuries and a variety of soft-tissue injuries whose identification and scope may be largely subjective, thereby generating disagreement and debate. Compensation payable for some basic injuries is specified in a schedule contained in the statute. Compensation for unscheduled injuries, such as partial loss or use of a member named in the schedule, must be determined by reference to a comparable disability named in the schedule. Still other injuries must be rated as a percentage of total loss or impairment of the “whole man.”

Thus, computation of benefit entitlement for many permanent partial injuries requires extensive medical and legal judgments in identifying the kind and degree of disability. Rendering of these judgments entails maintenance of a complex administrative apparatus for decisionmaking, and in cases of disagreement, invites additional complications and costs of litigation.

Aside from such procedural difficulties, treatment of permanent partial disabilities as it has evolved in Hawaii and other states seems to mask some important underlying and unresolved conflicts about the nature of compensation goals and priorities. It is generally acknowledged that a primary goal of workers' compensation programs throughout the United States is to compensate economic loss—medical costs and wage losses sustained by a worker as a result of an injury.

From the standpoint of the goal of providing fair and adequate compensation, it has been argued that the existing benefit structure fails by overcompensating some permanent partial disabilities while undercompensating others in relation to their income loss. From yet another vantage point, the present system may undercut useful incentives for rehabilitation by making available benefits which are payable for an extended period without regard to a worker's success or failure in achieving re-employment.

Disfigurement awards in Hawaii provide an example of how an original compensation standard has been distorted through administrative interpretation. According to Professor Arthur Larson, the noted workers' compensation legal authority, the original concept of disfigurement awards was to provide a form of general damages to facilitate early return to work.

The standard subsequently adopted by most jurisdictions was to limit such awards to those injuries with scarring or disfigurement on visible portions of the head, neck, and extremities. This standard has been adopted by virtually all jurisdictions in the United States. In Hawaii, it has been expanded to conform to local dress codes and even minor injuries to the extremities (e.g., scratches) are used as a basis for filing and receiving such awards. Thus, the original purpose of such awards has been far exceeded and has led to frivolous and fractious behavior and bargaining during the claims settlement process in Hawaii. The net result is that over time, given the current standards, disfigurement awards could become a growing and perhaps material element in indemnity cost for workers' compensation in Hawaii. The issues of what is an appropriate role for such awards, as well as the standard of compensation and their resulting cost effects, will be addressed in the final report.

In conducting a study of this general problem for the Provincial Government of Ontario, Harvard Law Professor Paul Weiler concluded that the real flaw in compensating permanent partial injuries—and in designing any improvements in the benefit structure—is a confusion of compensation priorities which has crept into the system since its early days.⁶ Even though compensation of economic loss has always been the primary goal, development of scheduled awards and ratings of other injuries as a percentage loss of the whole man—without regard to actual earnings loss—have also reflected a more implicit notion that perhaps injured workers should be compensated for loss of enjoyment (non-economic loss) in their non-working life. It is only in this implicit frame of reference that rating the value of a disability without regard to its different impacts on the earnings capacity of different workers has any appeal.

In trying to achieve two compensation goals using only one type of benefit, Weiler argues that the present system has performed neither task very well. Neither adequate compensation of variable economic loss, nor equal compensation for identical injuries, is produced under this hybrid approach.

To resolve the dilemma, Weiler recommended for Ontario a dual system of awards, one for economic loss and the other for non-economic losses associated with

6. Paul C. Weiler, *Reshaping Workers' Compensation for Ontario*, Ministry of Labour, 1980.

permanent partial disabilities. Non-economic losses would be compensated through a moderate, lump-sum award based on an appraisal of the seriousness of an injury and would not vary for different workers (except, perhaps, on the basis of age, with younger workers receiving larger awards for loss of employment). Economic loss would be directly compensated by periodically comparing a worker's post-injury earnings (if any) with pre-injury income. Actual economic losses of partially injured workers could be compensated at a higher percentage level of pre-injury income, adjusted for inflation. At the same time, a worker able to perform an *available* job, and not accepting that job, would have his economic loss benefit reduced by the amount he could have earned at the available job.

In suggesting lump-sum payments for non-economic loss, Weiler concedes that his approach "does stray from the initial rationale of the (workers' compensation) system,"⁷ which was to compensate economic loss. He also recognizes that it will not eliminate the need for complex and expensive "ratings" of subjective injuries.

In contrast to the approach recommended by Professor Weiler, some states have attempted to reform the benefit structure for permanent partial disability by returning to the initial rationale of workers' compensation. In 1979, the State of Florida was the first to enact a "wage loss" statute designed to emphasize more adequate compensation of economic loss for permanent total as well as partial disabilities, while reducing the need for "ratings" of subjective injuries and attendant legal costs.⁸ In the case of partial disability, lost work income is compensated only to the extent that it cannot be replaced through available employment that a worker is qualified to perform. The system places a higher priority on rehabilitative services, and provides stronger financial incentives for all parties—claimants, employers, and state officials—to work together to promote rehabilitation and rapid return of injured workers to their jobs. Cost studies made since 1979 suggest that Florida generally has eliminated overcompensation of minor injuries and has used resulting savings to finance increased benefits for workers with more serious injuries, while placing a curb on the rate of increase in overall system costs.

7. *Ibid.*, p. 55.

8. Legal costs in Hawaii appear to be somewhat lower (in relation to total program costs) than they were in Florida when wage-loss reforms were enacted.

Consideration of wage-loss proposals and experience in other jurisdictions provides a useful framework for examining interaction of underlying, and to some extent, conflicting goals in compensation programs. At the same time, wage-loss reforms are not viewed as a panacea. Wage-loss reforms do not address the two most significant elements in total benefit costs in Hawaii: (1) high medical costs, and (2) high frequency and high payout associated with indemnity payments for temporary total disability. The final report will examine in greater detail provisions and cost effects of wage-loss programs in other jurisdictions and their possible applicability to Hawaii.

Other Benefit Issues

Minimum benefits for part-time workers. Section 386-51, Hawaii Revised Statutes, establishes two minimum benefit provisions or "floors" for computing the average weekly wage for workers whose pre-injury work and earnings have been erratic or based on part-time employment. The statute provides that this minimum shall be no less than the employee's "hourly rate of pay multiplied by thirty-five" nor shall it be less than "the average weekly wages earned at the time of the injury by an employee in comparable employment engaged as a full-time employee on an annual basis in the type of employment in which the injury occurred."

Some employers and insurers are concerned that this section operates to the detriment of good incentives because for some part-time employees it provides a weekly benefit that is significantly higher than their average pre-injury earnings, however measured.⁹ In the case of temporary and partial disabilities, motivation to return to the job is accordingly weakened. Such concern is obviously well placed. Insurance systems, in general, do not function well when people tend to "make a profit" from the system. What needs to be evaluated is the cost of impact of this provision on total benefit costs. Data for this particular issue are not yet available.

Coordination of benefits. Hawaii has a number of different insurance benefits that are widely available. In addition to all the federally mandated programs, Hawaii mandates employer-provided health care coverage for the vast majority of the labor force, and it has compulsory no-fault auto insurance for all

9. In somewhat similar fashion, the law also provides that injured workers under age 25 have their rate of pay calculated on the basis of a 25-year-old employee.

motor vehicle accidents. The State of Michigan has recently enacted legislation aimed at coordinating benefits better, while eliminating much duplication, overlap, and double payments. Early indications are that substantial savings are being realized from this effort. In our final report, interrelationships and possible overlaps between workers' compensation and other programs in Hawaii will be evaluated.

Wash-out and structured settlements. Two issues that have—or could have—a significant effect on the claims settlement process are so-called wash-out and structured settlements. The former is a settlement where claimants receive a lump-sum amount and in return waive their rights to reopen cases or to future medical benefits. A structured settlement, by contrast, converts lump-sum awards to periodic payments, generally using an annuity as the funding mechanism.

Our survey of leading workers' compensation insurers in Hawaii revealed an extensive backlog of several hundred cases awaiting approval of wash-out or stipulated settlements. This backlog appears to have grown considerably over the past several years, largely because of requirements that both the Disability Compensation Division and the Labor Appeals Board review such settlements to assure protection of claimants' rights. During 1983, an eight-to-twelve-week delay for review by the appeals board has further complicated and delayed the settlement process.

The Workers' Compensation Program Commission investigated the so-called "wash-out" settlement issue. As stated by the Commission:

"Section 386-78(a), HRS, provides for the Director's approval of compromises of claims. That statute, however, forbids approval of a compromise which will prejudice the claimant's right to reopen his case or to future medical benefits. Settlements including waiver of those rights are commonly referred to as 'wash-out' settlements. It is not clear from the statute whether the appeals board has authority to allow wash-out settlements."

The Commission recommended the following with regards to wash-out settlements:

"The Commission recommends that the Legislature amend Section 386-78, HRS, to allow for 'wash-out' settlements at both the DCD and the AB [appeals board] levels where both the Director, or his representative, and the AB [appeals board] have approved the settlement. Further, the amendment should allow for a reduction in the number of hearings necessary on claims."

The final report will independently review this recommendation, focusing especially on whether indeed claims will likely be reduced by such an amendment.

Structured settlements, especially for large-dollar permanent disability or death cases under workers' compensation, have found increasing favor on the mainland for several reasons. *First*, claimants usually obtain larger benefits in the form of periodic payments stretched over their remaining lifetime. *Second*, property and liability insurers can generally provide these periodic payments by purchasing an annuity for a lump-sum amount from a national life insurance company. *Third*, use of annuity substitutes in structured settlements permits insurers to reduce long-term case reserves, which infuses lower demands for increases in basic rate level requirements.

As of November 1983, it appears that fewer than two dozen claims have been developed by Hawaii insurers using structured settlement techniques. Insurers cite two factors as presenting barriers to wider use of this settlement method. *First*, Hawaii lacks a compromise and release capability statute. Such a law would provide authority and standards for periodic payments, which could then be applied to all liability insurance claims, including workers' compensation. *Second*, the Disability Compensation Division and Labor Appeals Board have deemed substitution of an annuity by major national life insurers as being beyond their effective control for purposes of monitoring both solvency and payment performance. *Finally*, it was apparent that the various parties lack an adequate appreciation as to how the structured settlements mechanism operates and the extent of benefits that might be obtained by claimants.

Benefit maximums. In common with the majority of other states, the Hawaii statutes now provide that income-related benefits (for temporary total, permanent total, and permanent partial disabilities) shall be equal to 66-2/3 percent of the injured worker's average weekly wage.

Whether a particular worker will actually receive this percentage of his pre-injury income, however, also depends on operation of the overall benefit ceiling, which is set at 100 percent of the statewide average weekly wage. The latter figure is determined annually and in 1982 was set at \$252. Only a handful of states provide for a maximum benefit level which exceeds 100 percent of the statewide average weekly wage. Illinois sets the ceiling at 133-1/3 percent of the average weekly wage; Alaska, Iowa, and Maine set it at 166-2/3 percent.

Workers' compensation traditionally has been considered an insurance program, not a social assistance plan. In replacing tort law remedies available to workers, the program aimed to provide not merely subsistence benefits (like those that might be available under public programs) but rather a level of income more directly related to what particular workers lose as a result of work-related injury. Systematic exclusion of more adequate benefits for an important segment of the work force thus raises serious questions. Such concerns, however, are counter to present concerns about overall system costs. Nevertheless, this issue also requires consideration in a comprehensive review of the workers' compensation system.

For the State's more highly paid workers, the effect of the maximum benefit limitation is to provide compensation of less than 66-2/3 percent of pre-injury wages. In its 1980 report, the Hawaii Workers' Compensation Program Commission concluded that the number of workers adversely affected by this limitation in 1979 was 17.8 percent of all workers injured that year. The Commission noted that in the construction industry, 45.9 percent of workers had earnings sufficiently high that, because of the maximum benefit provision, would cause them to receive less than 66-2/3 percent of their lost earnings in the event of injury.

Claims, Hearings, and Appeals Process

The workers' compensation program itself is administered by the Disability Compensation Division (DCD) within the Department of Labor and Industrial Relations (DLIR).¹⁰ Initial reports of accidents are filed with the DCD, as well as subsequent reports of payments and disposition of cases. Claimants who are not satisfied with the amount or terms of their benefit award are entitled to a hearing before the DCD. If still not satisfied, they may appeal their case, first to the Labor Appeals Board and then to the Supreme Court. In developing this interim report, we took note of Chapter VIII of the January 1982 *Report of the Workers' Compensation Program Commission*, which identified the following as being among the areas of concern: (1) the six-month waiting period at DCD for a hearing to take place; and (2) an 18-month waiting period at the Appeals Board for a hearing to take place.

10. The Insurance Commissioner, in the Department of Commerce and Consumer Affairs, is responsible for regulation of insurance policies which contain workers' compensation coverages.

Figure 2.3 is a schematic diagram of the flow of cases through the Hawaii hearings and appeals system. Data on caseload and appeals provide useful perspective on waiting periods and delays at the DCD and the Appeals Board. In fiscal year 1982, DCD's 11 hearing officers conducted 5,972 hearings for an average caseload of 540 cases per year. DCD data on claims and decisions from 1971 to 1982 are shown in Table 2.1. These data are collected and reported on a basis that is consistent year-to-year. At the same time, the claims data contain a significant amount of multiple counting. The DCD statistical system tabulates each claim for a separate benefit as a claim. Thus, if a single work injury results in: (1) a medical claim, (2) a claim for temporary total disability indemnity (lost wages), and (3) a permanent partial claim, the DCD statistical system would count this particular situation as representing three claims.¹¹

The statistical system run by the insurance industry, by contrast, reports the number of accidents. For the 15-month period from March 1978 through May 1979, the insurance industry recorded 18,269 separate accident cases, which is about 14,600 cases over a 12-month period.¹² As noted previously, the insurance industry covers about three-fourths of the work force. For the entire labor force, the number of accidents would be about 20,000 per year. Since the number of DCD decisions was about 6,000 per year in 1981 to 1982, it would appear that at the present time, about 30 percent of all cases are being contested.

Approximately 10 percent of all DCD decisions are currently being appealed to the three-member Appeals Board. The board's caseload since 1975 is shown in Table 2.2. Since 1975, the caseload at the Appeals Board has virtually doubled, while the number of decisions rendered by the DCD has increased by about 20 percent. This indicates that litigiousness in the system is increasing.¹³ Only a small fraction of cases are appealed from the Appeals Board to the Hawaii Supreme Court—13 cases in 1981, and 8 cases in 1982.

11. This is merely an explanation of what the DCD data represent and should not be construed as a criticism of the manner in which the DCD collects statistics. The DCD system has certain merits not discussed here.

12. *NCCI Annual Statistical Bulletin*, 1983, p. 209.

13. Between 1971 and 1982, the number of DCD decisions have seen an increasing percent of total claims. (See Table 2.1.) This trend is yet another indication that the amount of contention in the system has been increasing.

Figure 2.3

HAWAII WORKERS' COMPENSATION HEARING AND APPEALS SYSTEM

(Chapter 386, H.R.S. and Related Administrative Rules, Chap. 10, Title 12)

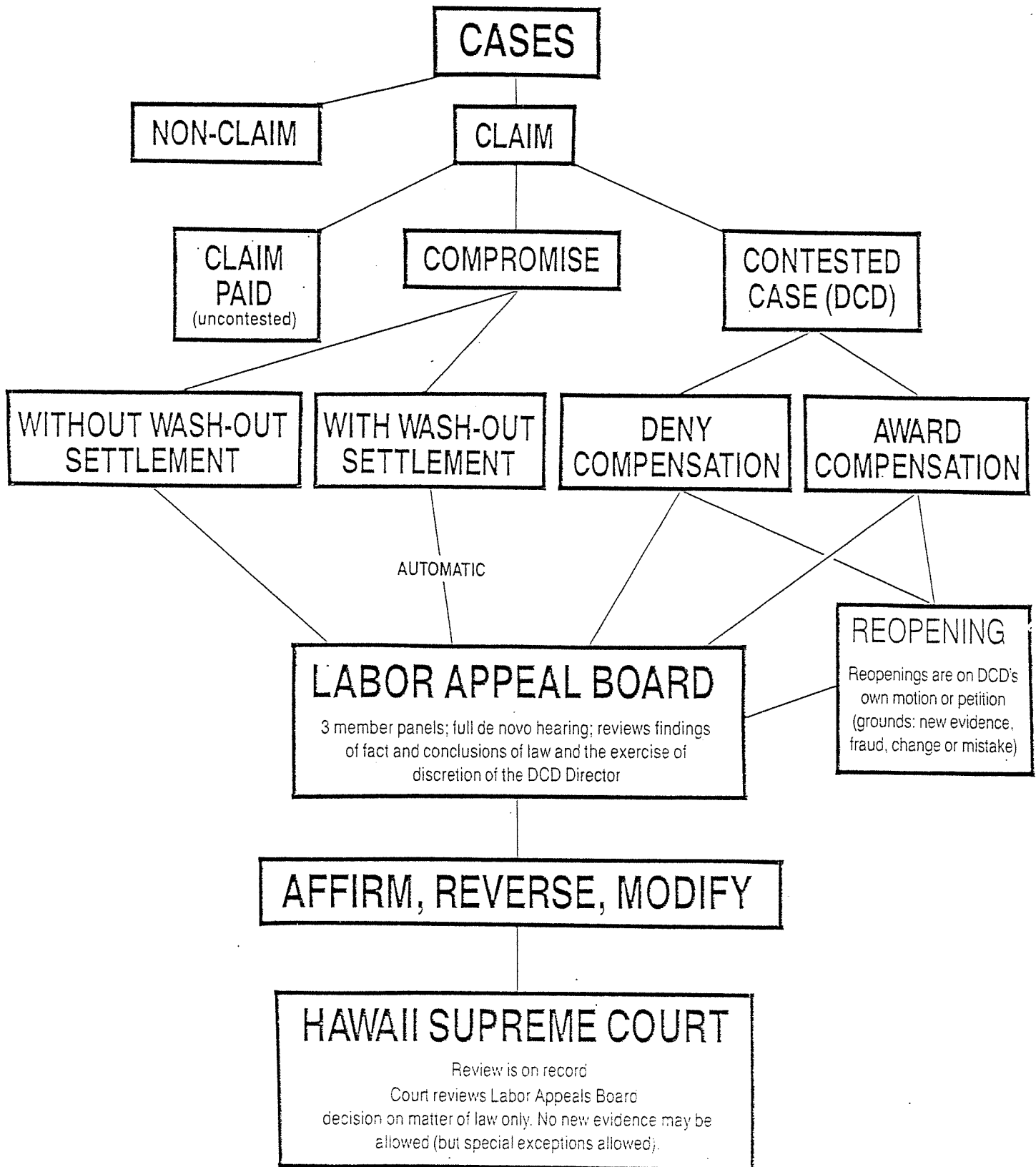


Table 2.1
Claims Received and Decisions Rendered
by the Disability Compensation Division

<i>Year</i>	<i>Claims Received</i>	<i>Decisions</i>	<i>Decisions as Percent of Cases Received</i>
1971	42,740	4,559	10.7
1972	49,479	4,895	9.9
1973	45,379	5,206	11.5
1974	39,140	4,596	11.7
1975	42,817	4,952	11.6
1976	51,790	5,007	9.7
1977	33,349	4,941	14.8
1978	38,683	5,298	13.7
1979	46,522	4,835	10.4
1980	47,725	6,294	13.2
1981	44,320	6,003	13.5
1982	40,521	5,972	14.7

Sources: *Report of the Workers' Compensation Program Commission*, January 1981, and data from the Department of Labor and Industrial Relations, Disability Compensation Division.

Table 2.2
Caseload of the Labor Appeals Board
1975-1982

<i>Year</i>	<i>Cases Pending at the Beginning of the Year</i>	<i>Cases Filed</i>	<i>Cases Closed</i>	<i>Cases Pending at the End of the Year</i>
1975	225	389	213	301
1976	301	377	284	394
1977	394	430	299	525
1978	525	441	308	658
1979	658	444	403	699
1980	699	551	476	774
1981	774	603	635	742
1982	742	509	538	713

It is generally felt that an expeditious hearings and appeals process can play a role in reducing total program cost, whereas undue delays in the process tend to increase costs. As possible solutions to the lengthy waiting periods and delays in the present system, the Workers' Compensation Program Commission investigated and rejected the following alternative solutions: (1) eliminate hearings in certain noncontested cases; (2) eliminate *de novo* review at the Appeals Board; and (3) allow individual members of the Appeals Board to hear cases instead of the entire three-member board. This study plans to re-examine these possibilities on their merits, as well as other alternatives.

The Special Fund

The State of Hawaii operates a multi-purpose special fund for which needed revenues are obtained primarily through assessments on insurers and self-insured employers. Among other functions, the special fund pays for: (1) inflation adjustments in benefit payments, and (2) compensation of "second injuries" of workers after the first 104 weeks of benefits.

Several issues have been raised about operations of Hawaii's special fund. A 1983 decision of the Hawaii Supreme Court held that an employer's access to the fund for excess compensation of second injuries is permissible only when the injury occurred before the first date of employment with that firm.¹⁴ The court reaffirmed this decision after a review was requested by employers, insurers, and unions. The decision provides a strong economic incentive for an employer to terminate and not to rehire any worker who is injured. It thus appears to run directly counter to the purpose of second injury funds, which is to encourage re-employment of injured workers.

Insured and self-insured employers in Hawaii have also questioned the wisdom of having the Disability Compensation Division administer the Special Compensation Fund, when at the same time it is rendering decisions that affect the level of funding assessments and fund solvency. Although many other states mandate and administer special compensation funds, the alternative of a fund jointly administered by government and industry (perhaps modeled after state insurance guaranty funds) has been suggested as a more appropriate mechanism.

Additional details concerning Hawaii's special fund and a comparative analysis of similar funds in other states is provided in Appendix A. In light of findings to date, it is anticipated that the final report will contain recommendations pertaining to the special fund.

Other Program Administration Issues

Vocational rehabilitation. Rehabilitation services include medical or physical rehabilitation and vocational rehabilitation. Medical rehabilitation may include such activities as physical therapy, occupational therapy, speech therapy, and pain management. Vocational rehabilitation is illustrated by job analysis, job modification, analysis of transferrable skills, on-the-job training, and other retraining.

14. *Medeiros v. Maui Land & Pine*, No. 8317 Hawaii Supreme Court, 1983.

To manage and monitor the rehabilitation process, Act 224, SLH 1980, authorized the establishment of a special unit within the Department of Labor and Industrial Relations. This unit screens all reports of injury and claims and refers cases to insurers to screen for rehabilitation. The law also established a system of certifying private rehabilitation counselors and providers. To date, more than 30 private rehabilitation counselors have established operations in Hawaii.

Although studies performed by the U.S. Department of Health and Human Services in the 1970s indicated substantial returns from rehabilitation, largely from increased earnings potential and reduced compensation and maintenance support, some parties in Hawaii contend that rehabilitation under workers' compensation has been counter-productive. They claim that rehabilitation has not facilitated early return to work but has diverted injured workers into a long-term career education development path. Specific features criticized as being counter-productive include:

1. The ability of injured workers, upon advice of counsel, to forego rehabilitation;

2. Lack of any time limit on rehabilitation programs, which has assertedly led to development of plans entailing extensive amounts of college-level or technical schooling designed to take the injured worker far beyond his or her skill level at the time of injury; and

3. Failure to involve employers actively in the plan development process.

These are considered by program critics as contributing to dysfunctional increases in claimant compensation and maintenance costs. Available rehabilitation program performance data from DLIR for fiscal year 1982-83, present the following:

1. Of 973 cases closed during the reporting period, two-fifths, or 385, were evaluated as *not* requiring rehabilitation.

2. Another one-third, or 314 cases, closed before a rehabilitation plan could be initiated, and the claimant *did not* return to work.

3. Less than one quarter, or 215 cases, were deemed successful closures because the claimant returned to work in some form of plan.

4. Of 103 cases sampled during the first half of 1983, half returned to the same or a closely related occupation, while the other half went on to different occupations.

5. On the average, the length of time in rehabilitation programs was 11 months.

Data are not presently available that could determine the relative costs and benefits of Hawaii's rehabilitation law, although controversy continues as to whether it is effective or efficient. It might be noted that, in Hawaii, rehabilitation is a benefit cost. Its expenses are financed through the premiums paid for workers' compensation insurance or by self-insurers.

Most observers agree that a program of prompt and effective rehabilitation for disabled workers will reduce workers' compensation claim payments by more than the rehabilitation expenses. If this assertion is correct, Hawaii should be able to reduce its net workers' compensation costs by adopting or emulating the more successful measures found in the most rehabilitation conscious states. The provisions of several states are summarized in Appendix B.

Possible revisions for the present program that might be considered include the following: (1) the present law might be changed to require a disabled employee to accept an approved rehabilitation plan; (2) time limits might be placed on the extent of retraining and emphasize on-the-job rather than formal retraining; and (3) performance standards might be adopted to assure rehabilitation screening or consultation within a specified number of days following injury.

Fraud. A number of parties have expressed concern about what they perceive to be weak statutory provisions for fraud, and even weaker enforcement of the existing statute by the State. The statute provides a penalty of \$1,000 for anyone who fraudulently collects workers' compensation benefits. The law does not, however, permit employers or insurers to terminate all benefits, even though the claim for such benefits may be fraudulent. It is further alleged that the penalty is enforced rarely, if ever. The study will review these aspects.

Chapter 3

THE INSURANCE AND RATEMAKING SYSTEM

Setting rates for workers' compensation insurance usually requires participation by insurance companies, a rating bureau, and the insurance department. Though the exact roles may differ, the institutional rates can be characterized in general, and for Hawaii in particular, in a fairly straightforward manner.

Insurance Commissioner

The Hawaii Insurance Commissioner is charged with the responsibility of ensuring that rates are neither excessive nor inadequate nor unfairly discriminatory. To discharge this function, the Commissioner has authority to review and approve all rate filings before they are implemented. The review may include requests for specific information on items underlying the rate proposal.

The Insurance Commissioner may also be called upon to approve specific elements of the classification and rating of risk. The classification system governs the ways in which data are collected and aggregated. Different classes may have different rates reflecting different loss costs. Consequently, control of the classification system is an important element in controlling potential discrimination.

Rating Organization

Under Hawaii's insurance laws, the Insurance Commissioner may appoint a rating advisory organization to collect and process data for each line of business and to file, on behalf of member insurers, for changes in rate level indications, risk classification systems, and policy forms. Hawaii is one of 13 states with rating organizations purportedly independent of the principal national rating advisory bureau for workers compensation, the National Council on Compensation Insurance (NCCI). In actuality, the Hawaii Insurance Rating Bureau (HIRB) compiles rating data from member companies and then contracts with the NCCI for preparation of the Hawaii experience data base and filings made before the Insurance

Commissioner. The NCCI is a licensed rating organization in 30 states and the District of Columbia. Of the 13 state rating bureaus, all but New Jersey are controlled and funded by their member insurance companies.¹ In New Jersey, it is controlled by the insurance department and funded by the industry.

The rating organization typically is charged with calculating rates that its member insurers require to meet loss costs, operating and marketing expenses, plus a fair profit. In order to perform this function, the rating organization obtains from its members data related to past operations. The data include premiums earned at established manual rates and losses incurred. The rating organization may also obtain, from time to time, additional information such as the relation between expenses and size of the risk, which relate to specific elements in the ratemaking process.

Insurance companies which are members or subscribers of the rating organization are generally required to provide necessary data. Such insurers may adopt rates which have been filed by the bureau, once these rates have been approved. Insurers which are not members or subscribers of the bureau must make their own data available to the Insurance Commissioner and may be required to file rates independently. Insurers who belong to the rating organization may choose to file independently if they believe their own experience justifies a rate level or rating system which is different from that filed by the rating organization. The Hawaii Insurance Commissioner has no record of independently filed rates or any deviations. In addition to the reporting requirements imposed on companies by the ratemaking structure, insurers must also file reports with the Department of Labor and Industrial Relations, Disability Compensation Division, whenever injuries are reported to them or payments are made by them to satisfy, in whole or in part, any claim for an employment-related injury or disability.

For that large segment of the market which insures through the private insurance mechanism, the cost of supporting Hawaii's workers' compensation system depends largely on applicable rates. These rates result from filings made by the HIRB and approved by the Insurance Commissioner. Some workers' compensation

1. States with independent rating organizations are: California, Delaware, Hawaii, Indiana, Massachusetts, Michigan, Minnesota, New Jersey, New York, North Carolina, Pennsylvania, Virginia, and Wisconsin.

policies contain an experience-rating or retrospective-rating plan which incorporates prior experience of the insured into the rates. In Hawaii, these plans also are subject to regulatory approval.

Ratemaking Data, Procedures and Issues

As indicated elsewhere in this report, data on benefit payments show a marked upward trend. At the same time, total benefits paid by insurers are substantially less than the premiums which they collect. This situation has led many employers, especially small employers, to question whether insurance rates are fairly set, and whether the insurance industry could provide workers' compensation coverage for lower premiums.

The following paragraphs discuss briefly certain areas associated with rate filings and other insurance issues that are under investigation.

In its simplest form, ratemaking is nothing more than forecasting the future cost of providing coverage. In concept, this can be done quite readily. In practice, however, it is a difficult task because (1) the data is imperfect, and (2) even with perfect data, forecasts of the future may be subject to changes not reflected in the historic data base.

Because of such complexities, a highly technical system has been developed to estimate rates. This system relies on a number of key assumptions. Two assumptions, in particular, are open to question in the present context. They deal with the appropriateness of "trending" and "loss development" procedures used in ratemaking.

Trending

The technique used to estimate rates takes explicit account of factors such as a legislated change in benefits or a rise in the cost of medical care. These are straightforward.

In addition, the ratesetting technique also attempts to take into account other systemic changes which affect compensation costs. Examples of a systemic change would be an increase (or decline) in accident frequency, or a change in medical treatment not reflected by indices showing cost of medical care. Traditionally, such

factors have been recognized by analyzing the trend in losses incurred by calendar year, after adjustment for rate level changes and law changes. It is assumed that trends observed in the past will be perpetuated into the short-term future. Such an assumption may be reasonable under certain conditions.

Under other conditions it is clearly not reasonable, as when a significant fraction of the change between one year and preceding years is due to losses incurred in relation to policy years that are long since past. To illustrate, suppose insurers learned this year that some occupational disease has created a potential liability for policies written 10 or 20 years ago, but the conditions which caused the occupational disease no longer exist. These losses would be "incurred" when they are recognized and would affect results for those prior calendar years. Emerging recognition of these new liabilities could create an artificial upward trend with no bearing on current operations, relevant as they may be to the past. Yet the trending procedure used for setting rates would nevertheless assume that this trend is real and applicable to the future, and would provide a rate level corresponding to that assumption. Such a rate level would be excessive.

These observations could be relevant for Hawaii because recognition of liability for diseases such as asbestosis or bisynosis may have influenced trending data over the past decade. It is possible that rate trends for the past five years or so may have been overstated by the progressive recognition of liability for such losses. But the same logic suggests that, if the trending procedures used in the past (which under the hypothesis would have unduly benefited insurers) were to be used in the future, then insurers might be disadvantaged and perhaps be impaired in their ability to pay future losses.

Loss Development

When rates have to be determined, many cases on file will not have been fully settled. In a number of cases the worker's medical condition may still be changing. For all such cases, the ratemaking system depends on insurer's estimates of future costs. Ultimate costs will of course not be known until cases are completely disposed of. In order to take these effects into account, the ratemaking process assumes that the ratio of the ultimate cost to the estimated incurred cost remains stable over calendar time.

Actuaries apply this procedure by developing ratios of ultimate cost to cost estimated at the time when cases have been pending for 6 months, 12 months, etc. The ratio developed when the cases have been pending for six months will of course be different from the ratio developed when the case has been pending for two and a half years. These ratios for shorter or longer periods of time are known as "development factors."

Development factors are assumed to be independent of time and are applied in that way. The assumption, however, may not be valid for changes in the administrative system or new precedents set through the courts. For example, if a court decision sets a new precedent, the ultimate cost will necessarily reflect the change. Earlier estimates developed before the precedent will be too low or too high depending on the direction of the change. It is possible for insurers to adapt quickly to new court precedents, while loss development factors catch up with a lag. Under certain conditions it is possible that the insurance industry may, in essence, double-count the effect of the change. If substantial changes in benefits are perceived as having been created by court decisions, a situation such as that experienced in Hawaii, it is likely that insurers will reflect the changes in required reserves with substantial lag, but will do so nonetheless. The fact that development factors for Hawaii are higher than they are for other states creates the possibility of double-counting in the required rate level. Therefore, this area will be investigated, along with trending procedures, in some detail.

A major source of data to provide decent estimates of the degree of overlap between changes in reserving practices and existing development factors would be a file of detailed claims in machine-readable form. At present, such data are not available for Hawaii. Within the next decade it is anticipated that such data will be available with sufficient history for meaningful analysis. The major alternative method to estimate the degree of overlap is by comparing development factors on a paid basis with those on an incurred basis. This method has been used in other states and has a number of advocates who claim that it provides a much more accurate picture of the needed rate requirement. We are currently attempting to develop the data base required to estimate whether the use of paid-loss development in the context of Hawaii could lead to more accurate ratemaking data, and to measure what the impact of the recent years and into the future might be.

An important part of the data base will be the information filing which the insurance industry, through the HIRB, is expected to make early in 1984. This filing, along with the data used to support it, will reflect the most recent trends and developments in Hawaii. The HIRB is expected to submit this information filing shortly after the Insurance Commissioner establishes an approved methodology for taking account of investment income in rate proposals. Taking account of investment income is now required by Act 263, passed by the Legislature in 1983.²

Market Competition and "Open Rating"

Supporters of the present system of administered pricing maintain sufficient competition exists in workers' compensation; opponents contend this simply is not the case. Competitive aspects which already exist and which are cited in defense of the current system include: (1) dividends to policyholders; (2) services such as safety and loss prevention studies; (3) plans for experience and retrospective rating, cash flow plans, and other cost reducing options; (4) "account pricing" in which insurers make price concessions on other lines of insurance in order to obtain a workers' compensation account; (5) self-insurance and group self-insurance; and (6) deviation from bureau rates (allowed but not used in Hawaii).

Most competitive aspects of the current system provide "competition" which is controlled by the individual insurer rather than the market. Thus, employers are not in a good position to determine the ultimate cost of coverage or to compare price quotes from various companies. The ability of the customer to shop around for the best available price is a key to real competition and this is not the case under the current system of administered pricing. The following is a discussion of the principal forms of price competition and their incidence in Hawaii.

Dividend plans. Insurers offer dividend plans whose purpose is to reduce the net cost of workers' compensation insurance to the employer. These dividends cannot be "guaranteed" and must be declared by the board of directors of the insurer offering such plans.

2. Hawaii is not the first state to require an investment offset in the ratemaking procedure. Experience in Massachusetts, Minnesota, and New Jersey indicates that proper recognition of investment income in the development of rates for workers' compensation may result in a reduction of rates on the order of 10 percent.

Some insurers pay the same dividend rate to all insureds. Others use sliding scale dividend plans, or similar retention plans, in which dividends reflect the insured's own loss experience. The dividend usually depends on the loss ratio and on the premium size of the insured. Safety groups combining small to medium-sized employers are a variation in the use of dividend plans by insurers.

Retrospective rating. Insurers also offer retrospective rating plans approved by the State. The plans are a contractual agreement and do not require that an insurer's board of directors declare dividends.

There are five different retrospective rating plans. Four of the plans are uniform and approved by the particular state or states. A fifth one, known as Plan D, is actually a set of formulas and factors that are used to develop a tailor-made plan which may include general and auto liability and some other lines of insurance as well. Only this "D" plan appears to be used in Hawaii.

Schedule rating. Schedule rating refers to the method by which an underwriter debits or credits an employer's premium based on physical characteristics of the risk at hand. Our survey of major insurers suggests that this is not used in Hawaii.

Cash flow plans. Cash flow plans are premium payment plans that delay remittances and results in a different net cost to an insured based on the time value of money. The premium payment option contained in the workers' compensation rating manual in effect in most states is an example. Under this plan, an insured pays a deposit premium and the balance of the premium is paid over the policy period. Insureds with workers' compensation premiums in excess of \$500,000 might be offered more sophisticated cash flow plans. For example, under a "paid loss" retrospective rating plan the insured pays a negotiated initial deposit and thereafter reimburses the insurer for losses actually paid.

Self-insurance. Individual self-insurance, as permitted in most states, allows an individual employer to self-insure its workers' compensation exposures. Each state must approve an employer desiring to self-insure and appropriate bonds may have to be posted to guarantee financial solvency. As a rule of thumb, employers do not consider self-insurance unless their annual premium volume in one state is in excess of \$200,000.

Group self-insurance. Group self-insurance allows smaller employers to band together and pool their risks. In California, Illinois, Minnesota, and Texas, group self-insurance has been confined primarily to governmental associations. In other states, commercial employers as well as governmental agencies may engage in group self-insurance. Our survey has not developed any information on group self-insurance in Hawaii.

Safety groups. The method of grouping smaller employers into safety experience "pools" has long been used to provide added inducements for safety. This is accomplished by providing to members of the group a reward of loss-sensitive dividends that can range up to 30 percent of premiums or more. Most often insurers offer group participation to trade association members that fit a particular rating classification, representing a particular hazard. For example, members of the Hawaii Chapter of the American Bus Association participate in a group endorsement to solicit the safety dividend program. The program, arranged through Alexander of Hawaii, the Honolulu affiliate of the national brokerage firm of Alexander and Alexander, Inc., provides for a guaranteed cost reduction to participants of 10 percent with additional participating dividends calculated at 18 months. These future cost reductions in the form of dividends have averaged 17 percent, and could range as high as 30 percent.

Functions and Performance of State Insurance Funds

While workers' compensation coverage in Hawaii is provided through either private carriers or through self-insurance, a number of states and provinces in both the United States and Canada rely on either exclusive or competitive state funds. Employers in six states insure with an exclusive state fund (four of these states also permit self-insurance). Twelve states have competitive state funds. All Canadian provinces have boards and commissions similar to exclusive funds in jurisdictions in the United States. In 1982, Minnesota created a competitive state fund, the first one enacted since 1933. (See Table 3.1.)

Table 3.1

Types of Workers' Compensation Systems
in the United States

A. Exclusively by private insurance:

Texas

B. By private insurance or by authorized self-insurance:

Alabama	Iowa	New Jersey
Alaska	Kansas	New Mexico
Arkansas	Kentucky	North Carolina
Connecticut	Louisiana	Rhode Island
Delaware	Maine	South Carolina
Florida	Massachusetts	South Dakota
Georgia	Mississippi	Tennessee
Hawaii	Missouri	Vermont
Illinois	Nebraska	Virginia
Indiana	New Hampshire	Wisconsin

C. Exclusively by State Fund:

North Dakota
Wyoming

D. By either State Fund or authorized self-insurance:

Nevada
Ohio
Washington
West Virginia

E. By any one of three means: Private insurance, State Fund
or authorized self-insurance:

Arizona	Michigan	Oklahoma
California	Minnesota	Oregon
Colorado	Montana	Pennsylvania
Idaho	New York	Utah
Maryland		

Sources: *Analysis of Workers' Compensation Laws*—1983 Edition.
Best's Insurance Reports, Property and Casualty Edition, 1983.

Principal benefits of state funds are: (1) they assure an available market for workers' compensation for all risks; and (2) they provide, generally, prompt delivery of benefits at low cost. As an example of the latter point, the average expense ratio for the period 1974-78 as compiled by Best's insurance industry reporting organization, was 7.1 percent for state funds, 13.8 percent for mutuals, and 18.8 percent for stock carriers. Several of the exclusive state and provincial funds have been innovators in the comprehensive delivery of benefits to injured workers and have facilitated the introduction of new technologies. The Canadian exclusive provincial funds in Ontario and British Columbia have been leaders in provision of comprehensive services to injured workers through a comprehensive network of in-resident facilities and outpatient rehabilitation nurse and counselors. Exclusive funds in Washington and Nevada have similar comprehensive approaches. The California, Ontario, Oregon, and Washington state funds have adopted highly sophisticated computer and video technologies for automatic claims handling and team management of cases.

A P P E N D I C E S

Appendix A

SPECIAL FUNDS IN HAWAII AND SEVEN OTHER STATES

Special funds are used to pay workers' compensation benefits or administrative expenses when a specified contingency occurs. All states, including Hawaii, have at least one type of special fund.

Several concerns have been expressed about the special compensation fund in Hawaii. This appendix presents relevant background information on how special funds operate in Hawaii and seven other states, after which some detailed concerns about Hawaii's special fund are discussed. Principal types of special funds found in Hawaii and other states are as follows.¹

1. *Second or subsequent injury funds* which are designed to remove one perceived disincentive to the hiring of handicapped workers (all 50 states plus the District of Columbia).

2. *Benefit guarantee funds* which protect workers against (a) uninsured employers (18 states plus the District of Columbia); (b) insolvent insurers (all states except those with an exclusive state fund); and (c) insolvent self-insurers (11 states).

3. *Benefit adjustment funds* for long-term beneficiaries, which attempt to preserve, at least in part, the purchasing power of some long-term disability or death benefits (16 states plus the District of Columbia).

4. *Rehabilitation funds* which finance partially the rehabilitation services provided under the law (14 states plus the District of Columbia).

5. *Funds for continuation of payments* used in long-term cases for which the employer's liability is limited by law. The funds may continue medical expenses (4 states) or cash benefits (4 states).

1. See Lloyd W. Larson and John F. Burton, Jr., *Special Funds in Workers' Compensation*, an unpublished report prepared for the Employment Standards Administration, U.S. Department of Labor, July 1981. This section on special funds is based on (1) this report; (2) *State Workers' Compensation Laws, July 1983*, published by the Employment Standards Administration; (3) materials provided by the states included in the more detailed comparison; (4) corresponding state statutes; and (5) information from Hawaii's Department of Labor and Industrial Relations.

6. *Occupational disease funds* which compensate workers disabled by job-related chronic diseases, especially long-lasting cases (7 states).

Funds in each category differ greatly according to events that trigger any payments, the amount of those payments, and how the funds are administered and financed. Some states have a single multi-purpose fund; others have separate funds for each purpose. Most funds are financed through assessments paid by carriers and self-insurers, but formulas for determining the assessment or charge vary widely. Many funds operate on a pay-as-you-go basis; others accumulate reserves against future payouts for injuries or diseases that have already occurred.

Hawaii Special Fund

Prior to 1963, Hawaii had a special fund that served only one purpose—payment of part of the compensation for permanently disabled workers whose disability was in part caused by a previous disability. Hawaii's special fund plus a separate insurance guarantee fund now serve three of the six purposes listed above, plus three others. The different roles played by Hawaii's Special Compensation Fund are as follows.

1. *A second injury fund.* If a worker with a previous permanent partial disability that would have supported an award of 32 weeks or more subsequently suffers an injury that results in greater permanent partial disability or in permanent total disability or death, the employer pays the weekly benefits for the combined disability during the first 104 weeks; the second injury fund pays the excess.

2. *A benefit guarantee fund.* This fund protects workers against non-payment of benefits by insolvent insurers.

3. *A retroactive benefit adjustment fund.* A worker who was disabled on or before June 18, 1980 had his or her benefit increased on that date. A supplemental allowance from the fund increased the prior benefit by the ratio of the maximum weekly benefit as of June 18, 1980 to the maximum weekly benefit as of the date of the work injury.

4. *An attendant services adjustment fund.* If the maximum amount allowed for procurement of attendant services is increased, the fund pays a supplemental

allowance that increases the prior benefit by the ratio of the new maximum to the former maximum. This fund could be considered to be a prospective benefit adjustment fund.

5. *A prompt payment fund.* The fund pays a disabled worker who, though eligible, does not receive prompt and proper compensation from his or her employer. The fund then takes over all of the rights and remedies of the person receiving the payments against the employer or insurer.

6. *A concurrent employment fund.* The fund pays a worker (disabled while concurrently engaged in more than one employment) the amount by which the benefits to which he or she is entitled exceeds the liability of the employer in whose employment the injury occurred.

All of these funds except the benefit guaranty fund are part of one multi-purpose special fund called the Special Compensation Fund. The State Director of Finance makes all disbursements upon orders by the Director of Labor and Industrial Relations. The funding mechanism is primarily through a special assessment levied against insurers and self-insureds for workers' compensation. In fiscal year 1982, the fund received over \$7.5 million in funding for such levies and paid out almost \$7.0 million in specified contingencies (Table A-1).

Table A-1
Hawaii Workers' Compensation Special Compensation Fund
Summary Statement of Receipts and Payments
(millions)

	1980	1981	1982
Fund Balance at Beginning of Period	\$1,120.2	\$1,061.7	\$ 3,302.2
Receipts	4,059.8	7,812.4	7,548.7
Total Funds Available	5,180.0	8,874.1	10,850.9
Payments	4,118.3	5,571.9	6,981.0
Fund Balance at End of Period	\$1,061.7	\$3,302.2	\$ 3,869.9

Source: State of Hawaii, Department of Labor and Industrial Relations.

Special Funds in Seven Other States

The seven states compared with Hawaii also have special funds that, singly or combined, serve several purposes. The principal types of funds in these states plus Hawaii are shown below.

<i>State</i>	<i>Second Injury Fund</i>	<i>Benefit Guarantee Fund</i>	<i>Benefit Adjustment Fund</i>	<i>Rehabilitation Fund</i>	<i>Occupational Diseases</i>
California	x	x	x		x
Florida	x	x	x	x	
Hawaii	x	x	x		
Lousiana	x	x			
Michigan	x	x	x		x
Minnesota	x	x	x		
Rhode Island	x	x		x	
Wisconsin	x	x	x		x

Second Injury Funds

All eight states have second injury funds. Table A-2 compares these funds as to (1) any requirements imposed on (a) the prior injury, (b) the subsequent injury, and (c) the combined effect of the prior impairment and the subsequent injury; (2) the financial responsibilities of the employer and the special fund; and (3) the way the fund is financed.

Benefit Guarantee Funds

Benefit guarantee funds differ according to whether they cover one or more of the following: (1) uninsured employers, (2) insolvent insurers, and (3) insolvent

Table A-2

Some Key Characteristics of the Second Injury Funds in Hawaii and Seven Comparison States

State	Requirements Imposed On			Financial Responsibility		Method of Financing Fund
	Prior Injury	Subsequent Injury	Combined Effects	Employer	Fund	
California		At least 40% disability.	At least 70% disability.	Portion of disability caused by subsequent injury alone.	Excess	Appropriations, assessment on death cases with no dependents.
Florida	Loss of hand, arm, foot, leg or eye. Permanent disability that would hinder employment. Presumed eligible if one of over 20 listed impairments or at least 20% disability.	Opposite member affected.	Greater permanent partial disability, permanent total disability or death.	Varies by type of disability or death benefit.	Excess	Assessments on insurers and self-insurers.
Hawaii	Permanent partial disability that would have supported a 32-week workers' compensation award.		Greater permanent partial disability, permanent total disability or death.	First 104 weeks or actual permanent partial award if less.	Excess	Assessments, penalties, assessment on death cases with no dependents.
Louisiana	Permanent partial disability that would hinder employment. Presumed eligible if one of 30 listed impairments.		Disability that is materially and substantially greater than would have resulted had prior injury not been present.	Permanent partial disability—40%. Permanent total disability—104 weeks. Death—175 weeks. Medical expenses—50% of first \$10,000.	Excess	Assessments.
Michigan	Loss of hand, arm, foot, leg or eye.	Loss of hand, arm, foot, leg or eye.	Permanent and total disability.	Portion of disability caused by subsequent disability alone.	Excess	Assessments.
Minnesota	One of 19 listed impairments plus any other impairment that would produce a disability rating of at least 10%. Pre-injury registration or record of impairment.		Substantially greater than would have resulted from subsequent injury alone or caused by prior injury.	First 52 weeks and \$2,000 of medical expenses unless subsequent injury alone results in permanent partial disability in which case employer is responsible for disability caused by subsequent injury alone.	Excess	Assessments on insurers and self-insurers, assessment on death cases with no dependents.
Rhode Island	Work-related injury that would hinder employment.		More than 104 weeks of disability.	More than 104 weeks of disability.	Excess	Assessments on insurers and self-insurers.
Wisconsin	Permanent disability that would have supported 200 weeks of payment reduced by 2½% for each year of age over 50.	Permanent disability that would have supported 200 weeks of payments reduced by 2½% for each year of age over 50.		If permanent partial disability, fund pays smaller of two disability awards. If permanent total, fund pays permanent total minus previous award amount.		Assessment in cases involving loss of hand, arm, foot or eye.

self-insurers. The coverage in Hawaii plus the other seven comparison states is as follows:

<i>State</i>	<i>Uninsured Employers</i>	<i>Insured Employers</i>	<i>Insolvent Self-Insurers</i>
California	x	x	
Florida		x	
Hawaii		x	
Louisiana		x	
Michigan		x	x
Minnesota	x	x	x
Rhode Island		x	
Wisconsin		x	x

Benefit Adjustment Funds

Benefit adjustment funds can be divided into three categories: (1) funds that automatically adjust certain benefits on new cases for future increases in wages or prices;² (2) funds that make certain ad hoc retrospective adjustments on old cases; and (3) funds that automatically make certain retrospective benefits on old cases. As shown below, one or more of the three types of funds exists in at least one comparison state or Hawaii. Minnesota requires prospective adjustments but has insurers include the cost of these adjustments in their pricing.

<i>State</i>	<i>Prospective Adjustments</i>	<i>Retroactive Adjustments</i>	
		<i>Ad Hoc</i>	<i>Automatic</i>
California			
Florida	x		x
Hawaii		x	
Louisiana			
Michigan	x		x
Minnesota	Premiums		x
Rhode Island			
Wisconsin		x	

2. Of 17 states that adjust benefits prospectively, 10 have insurers and self-insurers include estimated costs of these future adjustments in their workers' compensation premiums or reserve calculations. The other seven states have special prospective benefit adjustment funds. All retrospective adjustments are financed through special funds and, in one case, general revenues.

Florida and Minnesota provide the highest adjustments. Once each year Florida increases by 5 percent permanent total disability benefits that started after June 30, 1955. Florida also increases annually by 5 percent (but never more than the increase in the consumer price index) all wage loss benefits paid workers with permanent partial disabilities starting two years after the workers have reached maximum medical improvement. Minnesota also makes two adjustments. *First*, on each anniversary date of a totally disabled worker's injury or death, Minnesota adjusts the weekly benefit upward by the percentage increase in the state average weekly wage, but no more than 6 percent. *Second*, after a worker has been totally disabled 204 weeks, the minimum weekly benefit becomes 65 percent of the current and future state average weekly wage.

Michigan provides two benefit adjustments for certain permanently and totally disabled workers. The first increases the benefit for workers who have been (1) totally disabled for two years, and (2) receiving a weekly benefit equal to less than half the state average weekly wage on the date of their injury if the worker can demonstrate that because of the worker's age, education, training, experience or other evidence, his or her wage could have increased since that time. The benefit can be increased up to half the state average weekly wage on the date of injury. The second adjustment affects workers who were permanently and totally disabled on or after June 25, 1955. This adjustment raises the weekly benefit of any worker who received the maximum weekly benefit at the top of his or her injury to the amount he or she would be receiving had the current maximum weekly benefit been in effect. This same adjustment also continues benefits for workers whose benefits would have stopped under earlier duration limits. A third adjustment raises benefits for workers disabled between September 1, 1965 and December 31, 1979 to approximately the level they would have received if their salaries at the time they were injured had been increased by the annual increases in the State Average Weekly Wage (limited to 5 percent) since the date of their injury through 1979. This third adjustment also applies to death benefits.

Wisconsin's ad hoc retroactive adjustment is similar to Hawaii's.

Rehabilitation Funds

Rehabilitation funds finance some of the rehabilitation services to which a worker is entitled under the workers' compensation law. Among the seven

comparison states, only Florida and Rhode Island have such a special fund. Through the special fund, both states finance a workers' compensation rehabilitation unit that provides rehabilitation services directly to claimants. Claimants, however, have the right to secure their services elsewhere. In Rhode Island, the Dr. John E. Donley Rehabilitation Center is usually selected for medical rehabilitation services because it is well equipped and staffed to provide these services, and insurers, who support the Center through assessments, pay less for its services. The Center provides only limited vocational rehabilitation services.

Other Special Funds

Other special funds found in the eight states compared here include three occupational disease funds (California, Michigan, and Wisconsin) and two concurrent employment funds (Hawaii and Michigan).

California has an Asbestos Workers' Account that pays benefits to workers disabled by asbestos when the responsible employer either cannot be located or does not pay any benefits within 30 days. California finances this fund with general revenues but hopes to receive from the responsible employers most of the money spent.

Michigan has a silicosis, dust disease, and logging industry compensation fund that reimburses insurers for (1) sums paid in excess of \$12,500 for disability or death benefits from silicosis or other dust disease or arising out of employment in the logging industry, and (2) benefits paid for disability or death causes, contributed to, or aggravated by previous exposure to polybrominated biphenyl. Michigan also has a special concurrent employment fund that closely resembles the corresponding Hawaii fund described earlier. One major difference is that, in Michigan, the employer is responsible for all benefits if the employer paid more than 80 percent of the employee's total wages.

Wisconsin's special occupational disease fund pays benefits to workers whose occupational disease did not disable them until the statute of limitations on such claims had expired.

Hawaii is the only state with an attendant services adjustment fund. Only Wisconsin has a special fund that continues death benefits for children after the 300 week maximum duration on regular death benefits has expired.

Minnesota has created a unique Workers' Compensation Reinsurance Association that, in exchange for premiums received, reinsures all insurers and self-insurers against losses per occurrence in excess of specified amounts. The Workers Compensation Reinsurance Association, however, is not a special fund.

Multiple Funds vs. Single Fund

Except for special funds that protect employees against uninsured employers, insolvent insurers or insolvent self-insurers, three of the eight states included in this analysis have a single multi-purpose fund. These states are Hawaii, Minnesota and Wisconsin. Designation of the single fund is as follows:

Hawaii	Special Compensation Fund
Minnesota	Special Compensation Fund
Wisconsin	Work Injury Supplemental Benefit Fund

Issues Concerning Hawaii's Special Fund

Three particular issues have been raised about Hawaii's special fund. These are:

1. A recent decision by the Supreme Court (the Medeiros decision).
2. Dysfunctional incentives that are implicit in using the fund as an excess loss reinsurance mechanism.
3. Whether administration of the fund by the Disability Compensation Division puts the division in the role of judge and jury.

The Medeiros decision. This decision, handed down by the Supreme Court in 1983, would permit access to the second injury fund only when the prior accident occurred before the worker was first employed by the present employer. This decision gives employers a strong incentive to terminate and not rehire any worker who is injured. The incentive effects implicit in this ruling thus appear to run directly counter to the purpose of second injury funds, which is to encourage employment and retention of handicapped workers. In a rare show of unanimity, employers, insurers, and unions petitioned the court for a review. Following such review, the court reaffirmed its decision, thereby leaving the matter for the Legislature to resolve.

An excess loss reinsurance mechanism. As indicated previously, Hawaii's special fund pays all losses for second injuries in excess of 104 weeks. There are some who believe that because an injured worker might receive a subsequent on-the-job award within two years following an initial claim, insurers may tend not to contest too strongly an initial award of 32 weeks or higher because, in case a subsequent injury occurs, the initial injury would trigger payment by the Special Compensation Fund of the excess loss beyond the first 104 weeks. If current claim frequency trends persist, this will have the tendency over time to accelerate the rate of growth in assessments for the Special Compensation Fund.

Administration. Although many states mandate and administer special compensation funds, that is not necessarily the most effective form. Insurers and self-insureds in Hawaii have both questioned the wisdom of having the Disability Compensation Division administer the Special Compensation Fund, when at the same time it is rendering decisions that affect the level of funding assessments and fund solvency. One alternative is a jointly administered system. Under this form, the Insurance Commissioner would be authorized to oversee the functioning of the Special Compensation Fund through a governing board comprised of designated representatives of the Commissioner and representatives of insureds and self-insureds.

Appendix B

REHABILITATION IN OTHER STATES

All states provide some rehabilitation benefits, but details vary widely. All states entitle workers to medical rehabilitation either as part of their medical expense benefit or separately, and all but six states provide statutorily for some form of vocational rehabilitation. A brief summary of major provisions of these statutes follows.¹

All states have state workers' compensation rehabilitation units except 19.² Thirty-one states plus the District of Columbia provide services as follows:

Provide services directly	9
Refer to state agencies or private companies	7
Refer and monitor referred cases	11
Provide and refer	2
Provide, refer, and monitor	3

An employee is statutorily required to accept physical rehabilitation in all but 12 states.³ Of the states that require vocational rehabilitation, about half penalize workers who do not accept an approved program.⁴ The usual penalty is a suspension of benefits, but some states only reduce the benefits, generally by 50 percent.

In most states, an employee undergoing vocational rehabilitation continues to receive temporary total disability benefits plus books or tools needed, necessary travel, and board and lodging if away from home. Some limit the weekly maintenance costs paid, the number of weeks of vocational rehabilitation or both.

1. See *State Worker's Compensation Laws, July 1983* (Washington, D.C.: U.S. Department of Labor, Division of State Workers' Compensation Programs, July 1983). This section on rehabilitation is based on this publication plus materials provided by the eight states included in the more detailed comparison, the corresponding state statutes, and interviews with Hawaii's Department of Labor and Industrial Relations personnel.

2. The 19 states without rehabilitation units are: Alabama, Arizona, Arkansas, Delaware, Illinois, Indiana, Louisiana, New Jersey, New Mexico, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Wisconsin, and Wyoming.

3. These 12 states are California, Hawaii, Iowa, Idaho, Massachusetts, New Mexico, New York, Ohio, Oklahoma, West Virginia, Wisconsin, and Wyoming, plus the District of Columbia.

4. The states which penalize workers are Alabama, Alaska, Delaware, Florida, Georgia, Kansas, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, Montana, Nebraska, Nevada, New Hampshire, New Jersey, North Dakota, Oregon, Rhode Island, Utah, Vermont, Virginia, and Washington.

Rehabilitation in Comparison States

Like Hawaii, the other seven comparison states (California, Florida, Louisiana, Michigan, Minnesota, Rhode Island, and Wisconsin) provide statutorily for some form of physical and vocational rehabilitation. Further details are presented below.

Workers' compensation rehabilitation units. Five states (California, Florida, Michigan, Minnesota, and Rhode Island) have rehabilitation units in their workers' compensation division. Louisiana and Wisconsin do not have such units, but Wisconsin does have a rehabilitation specialist in its division.

When and how employees are referred. Some states specify certain times after which a worker's situation must be reviewed relative to potential rehabilitation, but most states depend upon the initiative of either the employer or the employee. The practice in each of the comparison states is as follows:

California	Employer or employee initiative.
Florida	Employer or employee initiative plus identification by bureau of workers' compensation rehabilitation as part of its case monitoring.
Louisiana	Employer or employee initiative.
Michigan	Employer or employee initiative or the director on his own motion. Insurers are required to report at the end of three months from the date of injury and each subsequent four months concerning provisions for rehabilitation.
Minnesota	Rehabilitation consultation required within 5 days after the employee has lost 60 days of work time (30 days for back injuries).
Rhode Island	Evaluation report required by department of labor every three months after compensation begins.
Wisconsin	Referral required if worker probably disabled at least 100 weeks.

Voluntary or mandatory. California and Wisconsin (like Hawaii) permit a disabled worker to refuse rehabilitation. The other five states require the worker to accept both physical and vocational rehabilitation. Florida and Louisiana penalize the worker refusing rehabilitation by reducing the benefit by 50 percent; Michigan gives its director the right to order a loss or unspecified reduction of benefits; and Minnesota and Rhode Island suspend disability benefits during the refusal period.

Employee benefits during vocational rehabilitation. For an employee undergoing vocational rehabilitation, most states pay temporary total disability benefits plus such extra costs associated with rehabilitation as travel, tuition, board, and lodging. All comparison states provide these benefits, but the following limit either the amount or the timing in some way:

California	Vocational rehabilitation must be requested within 15 days after the date of injury.
Florida	Vocational rehabilitation benefits are limited to 26 weeks but may be extended another 26 weeks.
Louisiana	Vocational rehabilitation benefits are limited to 52 weeks, but may be extended another 52 weeks.
Michigan	Vocational rehabilitation benefits are limited to 52 weeks, but may be extended another 52 weeks.
Minnesota	Retraining limited to 156 weeks; in unique circumstances Minnesota may also provide additional compensation up to 25 percent of the weekly disability benefit.
Wisconsin	Vocational rehabilitation benefits are limited to 40 weeks, but this may be extended.

Appendix C

RECENT LAW CHANGES IN SIX OTHER STATES

This section summarizes major changes since 1978 in workers' compensation laws of six other states. Some changes were important because of a serious problem that existed in a particular state. Others may be more general in their application. Whether any of these changes are applicable to Hawaii require further study. Inclusion of these changes in this appendix should not be construed as a recommendation.

Florida

1979 Wage-loss approach adopted for permanent partial disability claims. Florida thus became the first state to adopt such an approach. Wage loss benefit is 95 percent of the difference between 85 percent of the employee's prior monthly earnings and his or her post-injury earnings after reaching maximum medical improvement. The worker also receives an impairment benefit equal to \$50 for each percentage of impairment up to 50 percent plus \$100 for each additional percentage.

Louisiana

1983 Wage loss approach introduced for permanent partial disabilities. "Wage loss" benefit is 74 percent of difference between 90 percent of the prior monthly earnings and the post-injury earnings. This benefit, called a supplemental earnings benefit, is limited to 520 weeks.

Impairment awards are also paid for specified impairments. Anatomical loss of use or loss of function must exceed 50 percent as established in the American Medical Association's *Guide to the Evaluation of Permanent Impairment*. Impairment awards are reduced by any temporary total, permanent total or supplemental earnings benefits.

Employer required to provide rehabilitation services.

First Office of Workers' Compensation Administration created.

Michigan

- 1979 Payments for exposure to polybrominated biphenyl were authorized from Silicosis and Dust Disease Fund.
- 1980 Weekly benefits changed to 80 percent of an employee's spendable or "after tax" wages, subject to a maximum weekly benefit equal to 90 percent of the statewide average weekly wage. Minimum weekly benefits for disability were eliminated; minimum weekly benefits for death cases was set at 50 percent of the statewide average weekly wage.
- 1981 Worker required to accept an offer of reasonable work or lose benefits. Partial benefits are provided if the new job pays less than the old job. Workers with a scheduled impairment receive a weekly benefit for the scheduled number of weeks. If they still have a wage loss resulting from the disability after the prescribed number of weeks, they will receive non-scheduled permanent partial disability payments after that time.
- After a disabled worker has been employed for 100 weeks, loses a job through no fault of the worker, and is still disabled, an administrative judge will determine whether compensation should be based upon the worker's earnings in the former employment or the new employment. If the new employment has lasted more than 250 weeks, the new wage earning capacity is assumed. If the new employment has lasted less than 100 weeks, the prior earning capacity is assumed.
- 1982 Open competition rating law.

Minnesota

- 1979 Rehabilitation provisions substantially strengthened to require rehabilitation consultation within specified time.
- 1981 Duration of spouse-only death benefits shortened from widowhood or widowerhood to 10 years.
- Open competition rating transition ordered to become fully effective in 1986.

1983 Duration of temporary total disability benefits limited to 90 days after an employee reaches maximum medical improvement or completes an approved retraining program. If during this 90-day period the employer makes a suitable job offer to the employee (or secures a job for the employee from some other employer), the employee receives an *impairment compensation*. This impairment compensation is a stated dollar amount that is related to the percent of disability. A schedule prepared by the Commission relates the percent of disability to the injury sustained. If the employer does not make a suitable job offer, the employee receives as *economic compensation* a weekly benefit based on prior wages for the number of weeks indicated by the percent of disability. Because economic compensation is higher than impairment compensation, employers have an incentive to offer a job to the worker.

Other changes: statement of intent that law is not to be interpreted in favor of employee or employer; strengthened medical provider rules and reviews; rehabilitation referrals required within 5 days after 60 days of lost work and employee required to accept rehabilitation; new competitive state fund; open competition fully effective date advanced to 1984.

Administrative changes: sizeable staff increases; administrative conference introduced as the initial step in resolving disputes; time limits on when compensation judges must render a decision.

Rhode Island

1982 An earning capacity for a partially incapacitated worker is established by an employer's offer of suitable employment. Prior to this change, two State Supreme Court decisions (1973 and 1977) had caused partial disability cases to receive the same benefits as totally disabled workers. Under the new law, if an employer offers any suitable alternative employment, the employer is liable only for two-thirds of the difference between the worker's prior earnings and the earning capacity determined by the job offer.

The current second injury fund replaced a narrower version. Binding decisions can now result from pre-trial conferences.

A modified form of competitive rating was enacted. Large insurers are required to file their own rates instead of filing through the National Council on Compensation Insurance. All rates, however, must still be approved by the insurance commissioner.

Rhode Island became the second state (Florida being the first) with a workers' compensation insurance excess profits statute.

Wisconsin

1981 Work Injury Supplemental Benefits Fund made responsible for occupational disease cases barred by statute of limitations.

Appendix D

INDEX OF MANUAL RATES: COMPARISON OF HAWAII AND EIGHT OTHER STATES

It is well known that workers' compensation rates in Hawaii have increased rapidly over the last decade. This might be said of other states as well. In order to assess rate increases in some perspective, the increases in Hawaii were compared with those in eight other states: California, Florida, Louisiana, Michigan, Minnesota, New Jersey, Rhode Island, and Wisconsin. From 1966 to 1982, the manual rates in Hawaii increased by 370 percent, far more than in the other states. The next highest increase, 220 percent, was experienced in Louisiana. Five states—Florida, Michigan, Minnesota, New Jersey, and Rhode Island—experienced increases of approximately 160 percent. California and Wisconsin exhibited increases of only 90 percent.

The indices of workers' compensation rates were developed as follows:

1. For each state, the effective rate for January 1, 1966, was used as a starting point;
2. Effective rates were adjusted to give effect to increases in manual rates instituted after that date, as published by the National Council for Compensation Insurance;
3. The rates were then converted into indices by dividing by the rate in effect on October 1, 1979.

The relative increase in rates and the pattern of change in rates is often dominated by changes or reforms in the workers' compensation system.

California

Rates in California started from a relatively higher level than those in Hawaii in 1966, but underwent little change through 1972. From this date, they increased gradually until 1977. In Hawaii, the increase started earlier and from a lower base. After 1977, California rates remained stable while those in Hawaii continued to increase at a rate comparable to that exhibited in 1974 to 1978.

Florida

Rates in Florida started, in 1966, at a relative level which is comparable to that for rates in Hawaii. The two indices increased at about the same rate until 1973, after which the index for Florida increased faster and to a relatively higher level than in Hawaii. This continued until 1979, the year in which workers' compensation wage loss reforms in Florida were adopted. In ensuing years, the Florida rate index decreased by some 25 percent while that in Hawaii increased by 60 percent.

Louisiana

Rates in Louisiana followed the same pattern as rates in Hawaii, though the Louisiana rates began to increase somewhat earlier in the seventies than those in Hawaii. After 1980, rates in Louisiana have increased, but only half as much as those in Hawaii. Louisiana adopted a series of reforms of its workers' compensation laws in 1982.

Michigan

From 1966 to 1979, rates in Michigan experienced the same total increase as those in Hawaii. Experience in Michigan is characterized by a fairly stable rate of increase throughout the period 1969 to 1979. After 1979, the rates in Michigan have undergone a decrease of about 25 percent, comparable to that experienced in Florida. In Michigan's case, these decreases reflect a mandatory rate reduction ordered by the state insurance department, as well as recent legislative reforms which coordinate workers' compensation benefits with other benefits.

Minnesota

Rates in Minnesota have paralleled those in Hawaii except during two periods:

1. In 1971 to 1976, the Minnesota rates increased at a uniform rate, whereas those in Hawaii remained constant from 1971 to 1974 and increased sharply in the next two years.
2. Since 1979, Minnesota rates have remained stable while Hawaii rates have increased by 60 percent.

Minnesota recently adopted reforms of its workers' compensation system of which major aspects will go into effect January 1, 1984.

New Jersey

Rates in New Jersey started from a much higher relative level in 1966 and increased faster than those in Hawaii until 1977. Since then, rates in New Jersey have increased very little. The rapid increase experienced in Hawaii between 1975 and 1977 brought levels in the two states into relative parity in 1977. Between 1977 and 1980, rates in the two states paralleled each other, but in the last two years New Jersey rates have been stable while those in Hawaii increased by 40 percent. New Jersey passed significant reforms of its workers' compensation program in 1980, following several years of debate among all parties. New Jersey has its own state compensation rating bureau, which is controlled by the state insurance department.

Rhode Island

Rates in Rhode Island started from a relatively higher level in 1966 and terminated at a relatively lower level in 1982. Thus, the overall increase has been substantially smaller, amounting to about 140 percent in Rhode Island versus about 400 percent in Hawaii. Timing of the increases has corresponded fairly closely in these two states. Rhode Island adopted major workers' compensation reform legislation in 1982.

Wisconsin

Rates in Wisconsin started from a higher relative level and ended at a relatively lower level. The overall increase in Wisconsin was less than 100 percent, or one quarter of that experienced in Hawaii. There are also substantial differences in the timing of rate changes. Wisconsin rates remained substantially unchanged from 1966 to 1973 and increased at a steady rate after 1973; Hawaii rates experienced some increase in the sixties, were stable from 1971 to 1974 and have increased thereafter at a rate which is much larger than that experienced in Wisconsin.

Table D—1

Indices of Manual Rates in Various States
 As of January 1 of Each Year
 (October 1, 1979 = 1.00)

<i>Year</i>	<i>Index</i>								
	<i>CA</i>	<i>FL</i>	<i>HI</i>	<i>LO</i>	<i>MI</i>	<i>MN</i>	<i>NJ</i>	<i>RI</i>	<i>W</i>
1966	0.499	0.330	0.343	0.377	0.333	0.353	0.462	0.468	0.619
1967	0.513	0.330	0.358	0.377	0.318	0.361	0.484	0.442	0.621
1968	0.504	0.337	0.377	0.374	0.325	0.417	0.626	0.422	0.618
1969	0.487	0.358	0.364	0.372	0.323	0.418	0.626	0.422	0.605
1970	0.475	0.371	0.404	0.404	0.360	0.416	0.636	0.545	0.590
1971	0.486	0.383	0.447	0.432	0.365	0.429	0.613	0.545	0.597
1972	0.486	0.383	0.414	0.442	0.365	0.470	0.632	0.511	0.594
1973	0.549	0.437	0.414	0.460	0.460	0.479	0.663	0.532	0.598
1974	0.557	0.533	0.414	0.520	0.480	0.651	0.661	0.576	0.656
1975	0.654	0.533	0.572	0.559	0.522	0.651	0.645	0.651	0.673
1976	0.701	0.825	0.704	0.757	0.573	0.727	0.655	0.803	0.747
1977	1.007	1.027	0.790	0.860	0.666	0.766	0.733	0.919	0.723
1978	0.981	1.177	0.790	0.969	0.875	0.918	0.866	0.919	0.810
1979	0.977	1.177	1.000	1.000	0.875	1.000	0.921	1.000	0.908
1980	1.002	1.000	1.117	1.180	1.089	1.000	1.185	1.000	1.075
1981	0.967	0.844	1.401	1.233	1.089	1.000	1.280	1.137	1.075
1982	0.940	0.929	1.617	1.265	0.847	0.950	1.204	1.137	1.174

Appendix E

SELECTED STATISTICAL DATA
PERTAINING TO
HAWAII WORKERS' COMPENSATION PROGRAM

Table E-1

State of Hawaii
 Employment, Reported Injuries, and Compensation Costs
 in Construction as Compared with State Totals
 1973-1982

Year	Employment in Construction as Percent of State Total	Reported Injuries			Compensation Payments		
		Construction	Total Labor Force	Percent	Construction	All Industries	Percent
1973	8.7	9,570	36,277	26.4	6,940,153	19,547,713	35.5
1974	9.0	10,452	37,646	27.8	6,282,799	18,340,945	34.3
1975	8.2	10,850	40,435	26.8	7,437,616	22,502,542	33.1
1976	6.6	7,112	38,721	18.4	8,981,225	27,760,402	32.4
1977	5.9	5,683	37,393	15.2	6,707,653	23,652,284	28.4
1978	5.9	6,091	38,869	15.7	8,780,327	32,847,329	26.7
1979	6.4	7,972	43,057	18.5	11,846,875	42,572,568	27.8
1980	6.4	9,124	47,725	19.1	15,097,527	55,331,292	27.3
1981	5.7	7,705	44,320	17.4	18,536,408	66,949,693	27.7
1982	5.1	5,240	40,521	12.9	21,764,858	90,777,582	24.0

Note: Reported Injuries (Col. 3) reflect injuries during the year while Compensation Payments reflect current year payments from all cases (current and prior year injuries).

Table E-2
State of Hawaii
Maximum Effective and Average Weekly Wage
1973-1983

<i>Year</i>	<i>Maximum Effective Weekly Wage—Total and Permanent Partial Disability</i>	<i>Average Weekly Wage—Private Employment</i>
1973	\$168.75	\$151.00
1974	168.75	162.50
1975	232.50	175.00
1976	250.50	184.35
1977	268.50	192.87
1978	283.50	207.73
1979	300.00	225.62
1980	322.50	244.17
1981	352.50	261.04
1982	378.00	273.52
1983	399.00	N/A

Table E-3

State of Hawaii
Ratio of Medical Benefits Paid to Total Benefits Paid
1973-1982

<i>Year</i>	<i>Total Benefits</i>	<i>Medical Benefits</i>	<i>Percent</i>
1973	\$19,547,713	\$ 5,231,431	26.8
1974	18,340,945	5,045,274	27.5
1975	22,502,542	6,421,115	28.5
1976	27,760,402	7,789,950	28.1
1977	23,652,284	7,025,293	29.7
1978	32,847,329	9,399,695	28.6
1979	42,572,568	11,838,327	27.8
1980	55,331,292	16,546,221	29.9
1981	66,949,693	21,174,823	31.6
1982	90,777,582	29,236,459	32.2

Table E-4a

State of Hawaii
 Numbers and Costs of Processed Temporary Total Disability Cases
 Compared with All Processed Disability and Death Cases
 1973-1982

<i>Year</i>	<i>All Disability and Death Cases</i>		<i>Temporary Total Disability Cases</i>			
	<i>Number</i>	<i>Amount</i>	<i>Number</i>	<i>% of Total</i>	<i>Amount</i>	<i>% of Total</i>
1973	20,762	\$18,683,004	15,101	72.73	\$ 7,999,669	42.82
1974	17,278	17,535,423	12,795	74.05	7,641,232	43.58
1975	18,171	20,979,750	13,308	73.24	9,044,079	43.11
1976	23,195	26,232,095	17,062	73.56	11,674,756	44.51
1977	15,464	16,552,976	11,909	77.01	9,018,181	54.48
1978	18,802	23,364,465	13,656	72.63	12,258,563	52.47
1979	23,860	30,578,291	16,768	70.28	14,553,677	47.59
1980	25,644	38,618,035	18,527	72.25	19,139,671	49.56
1981	27,687	45,291,072	19,260	69.56	22,306,224	49.25
1982	26,980	59,733,237	18,630	69.05	28,085,982	47.02

Table E-4b

State of Hawaii
 Numbers and Costs of Processed Permanent Partial Disability Cases
 Compared with All Processed Disability and Death Cases
 1973-1982

<i>Year</i>	<i>All Disability and Death Cases</i>		<i>Permanent Partial Disability Cases</i>			
	<i>Number</i>	<i>Amount</i>	<i>Number</i>	<i>% of Total</i>	<i>Amount</i>	<i>% of Total</i>
1973	20,762	\$18,683,004	2,550	12.28	\$ 7,757,007	41.52
1974	17,278	17,535,423	2,069	11.97	7,124,405	40.63
1975	18,171	20,979,750	2,026	11.15	8,128,474	38.74
1976	23,195	26,232,095	2,630	11.34	10,496,749	40.01
1977	15,464	16,552,976	1,330	8.60	4,922,986	29.74
1978	18,802	23,364,465	1,669	8.88	6,702,804	28.69
1979	23,860	30,578,291	2,550	10.69	10,465,804	34.23
1980	25,644	38,618,035	2,442	9.52	11,202,831	29.01
1981	27,687	45,291,072	3,120	11.27	14,940,810	32.99
1982	26,980	59,733,237	3,450	12.79	19,833,041	33.20

Table E-4c
State of Hawaii
Numbers and Costs of Processed Disfigurement Cases
Compared with All Processed Disability and Death Cases
1973-1982

Year	<i>All Disability and Death Cases</i>		<i>Disfigurement Cases</i>			
	<i>Number</i>	<i>Amount</i>	<i>Number</i>	<i>% of Total</i>	<i>Amount</i>	<i>% of Total</i>
1973	20,762	\$18,683,004	2,745	13.22	\$ 951,599	5.13
1974	17,278	17,535,423	2,077	12.02	831,328	4.74
1975	18,171	20,979,750	2,487	13.69	1,013,567	4.83
1976	23,195	26,232,095	3,184	13.73	1,346,667	5.13
1977	15,464	16,552,976	1,905	12.32	815,278	4.93
1978	18,802	23,364,465	3,016	16.04	1,305,835	5.59
1979	23,860	30,578,291	3,999	16.76	1,751,621	5.73
1980	25,644	38,618,035	3,982	15.53	1,764,104	4.57
1981	27,687	45,291,072	4,606	16.64	2,063,829	4.56
1982	26,980	59,733,237	4,081	15.13	1,913,720	3.20

Table E—4d

State of Hawaii
 Numbers and Costs of Processed Death Cases
 Compared with All Processed Disability and Death Cases
 1973—1982

<i>Year</i>	<i>All Disability and Death Cases</i>		<i>Death Cases</i>			
	<i>Number</i>	<i>Amount</i>	<i>Number</i>	<i>% of Total</i>	<i>Amount</i>	<i>% of Total</i>
1973	20,762	\$18,683,004	211	1.02	\$ 1,163,139	6.23
1974	17,278	17,535,423	183	1.06	1,131,937	6.46
1975	18,171	20,979,750	182	1.00	1,581,528	7.54
1976	23,195	26,232,095	170	.73	1,537,395	5.86
1977	15,464	16,552,976	137	.89	840,663	5.08
1978	18,802	23,364,465	169	.90	1,179,574	5.05
1979	23,860	30,578,291	184	.77	1,416,452	4.63
1980	25,644	38,618,035	210	.82	2,317,502	6.00
1981	27,687	45,291,072	202	.73	1,621,182	3.58
1982	26,980	59,733,237	231	.86	2,857,050	4.78

Table E—4e

State of Hawaii
 Numbers and Costs of Processed Permanent Total Disability Cases
 Compared with All Processed Disability and Death Cases
 1973—1982

<i>Year</i>	<i>All Disability and Death Cases</i>		<i>Permanent Total Disability Cases</i>			
	<i>Number</i>	<i>Amount</i>	<i>Number</i>	<i>% of Total</i>	<i>Amount</i>	<i>% of Total</i>
1973	20,762	\$18,683,004	155	.75	\$ 805,590	4.31
1974	17,278	17,535,423	154	.89	806,521	4.60
1975	18,171	20,979,750	168	.92	1,207,102	5.75
1976	23,195	26,232,095	149	.64	1,176,528	4.49
1977	15,464	16,552,976	183	1.18	955,868	5.77
1978	18,802	23,364,465	292	1.55	1,917,689	8.21
1979	23,860	30,578,291	359	1.50	2,390,737	7.82
1980	25,644	38,618,035	483	1.88	4,193,927	10.86
1981	27,687	45,291,072	499	1.80	4,359,027	9.62
1982	26,980	59,733,237	588	2.18	7,043,444	11.79