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SPECIAL COMPENSATION FUND
FINANCIAL FORECAST
FOR
FISCAL YEARS 1987 AND 1988

MARCH 31, 1987

Prepared by

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Workers' Compensation Division

CONTENTS

I. Executive Summary	1
II. Projected Changes in the Fund Balance	4
III. Revenue Analysis	5
Assessment Revenue	5
Claims Recovery	7
Other Revenue	8
IV. Expense Analysis	8
Administrative Expenses	8
Special Claims	9
Supplementary Benefits	9
Second Injury	10
V. Summary	12
Appendix of Schedules	
A-1 Triangulation of Reported Second Injury Claims, Yrs 1-13	13
A-2 Triangulation of Reported Second Injury Claims, Yrs 14-30	14
A-3 Total Reported Second Injury Claims	15
B-1 Developmental Multiplier of Reported Second Injury Claims, Yrs 1-13	16
B-2 Developmental Multiplier of Reported Second Injury Claims, Yrs 14-30	17
B-3 Summary of Developmental Multiplier, Second Injury Yrs 1-13	18
B-4 Summary of Developmental Multiplier, Second Injury Yrs 14-30	19
C Estimated Reported Second Injury Losses	20

I. EXECUTIVE SUMMARY

This report analyzes the projected revenues and expenses of the Special Compensation Fund for the next two fiscal years. The factors affecting the Special Compensation Fund balance are analyzed in this report in order to identify the sources and relationships of revenue and expenses and their anticipated changes in the future. With forecasts of future revenue and expenses, short and long range management plans can be developed to control the Fund's financial future. The forecast first analyzes the Fund's revenues and then its expenses.

The Fund's last financial forecast completed in late 1985 was based on only two years of claims-reported data. The reason for this was that prior to 1983, claims were not recorded when they were reported, but only when they were paid. For this report almost four years of claims-reported data is available. In addition, there has been some extrapolation from earlier years. This report was researched and prepared by members of the Special Compensation Fund staff with the assistance of an independent financial consultant.

The most dramatic fact that stands out in this analysis of projected revenues and expenses is that expenses are greatly outpacing revenues. Second injury claims increased at an average rate of 33 percent annually between 1984 and 1986, and special claims costs increased by an annual average of 26 percent between 1981 and 1986, while revenues remained stagnant. We believe these trends will continue, thereby substantially increasing the Fund's deficit in the next few years.

Deficits are not new for the Fund. It has carried a deficit since FY 1980. The deficit represents a delay in payments owed by the Special Fund to insurance companies. The larger the deficit, the longer the delay in payment. The FY 1986 deficit of \$46 million means that insurance companies receive payment about one year after they have been requested.

This forecast presents three projections: most likely case, best case, and worst case. The most likely case shows a deficit of \$59 million for the current fiscal year and a deficit of \$77 million for FY 1988. The best case shows a deficit of \$58.8 million in fiscal year 1987 and \$73.6 million in fiscal year 1988. The worst case shows a deficit of \$60.8 million in fiscal year 1987 and \$89.1 million in fiscal year 1988. Projections are not presented for later years because of their comparatively speculative nature. However, if the trends of the past continue, we believe that the deficit will substantially increase in the years after 1988 unless changes are made.

Revenue Sources of the Special Compensation Fund

- Assessments based on indemnity benefits paid by insurers and self-insurers.
- Assessments paid by insurers and self-insurers as a result of work-related fatalities when there are no eligible dependents.

- Penalties.
- Interest income.
- Reimbursement from the general fund for benefits paid on special claim expenses (special claims expenses consist of uninsured, bankrupt self-insured, and temporary orders).

Expenses of the Special Compensation Fund

- Administrative expenses for the Workers' Compensation Division of the Department of Labor and Industry, the Workers' Compensation Division of the Office of Administrative Hearings, and the Workers' Compensation Court of Appeals.
- Special claims payments.
- Supplementary benefit reimbursement.
- Second injury benefit reimbursement.

Basis for Revenue/Expense Projections of the Special Compensation Fund

Revenue:

The following assumptions were held constant for projections under most likely, best, and worst case scenarios:

- Assessment rate equals 25 percent (the current rate).
- Base multiplier inflation rate equals 4 percent (base multiplier is defined as the revenues generated by one assessment percentage point).
- Claims recovery reflects the expected elimination of the general fund appropriation effective FY 1988 for special claims; penalties and interest remain constant.

Expenses:

The following assumptions were used for the most likely case scenario:

- Administrative costs will increase at an annual inflation rate of 3 percent.
- Special claims expenses will increase 16 percent based on average historical losses which include minor bankruptcies.
- Supplementary benefits will increase at an annual inflation rate of 4 percent.
- Second injury claims will increase 10 percent based on a 4 percent inflation in the indemnity base and a 6 percent increase in the number of claims reported.

For administrative costs, the best case scenario is the same as the most likely, i.e., that there will be a 3 percent inflation rate. The worst case for administrative costs assumes that there will be \$500,000 in additional legal costs to cover two \$1 million bankruptcies of self-insurers.

The best case for special claims assumes a 6 percent increase, which is the minimum increase observed in the historical data. The worst case assumption for special claims expenses is that they will continue to grow 26 percent annually and that there will be two \$1 million bankruptcies of self-insurers.

For supplementary benefits, the best case scenario is the same as the most likely, i.e., a 4 percent inflation rate. The worst case assumes a 4 percent inflation rate. It also reflects the possibility of a use of the Fund that was not contemplated when the law was passed. That use would cover workers who have received the statutory limit of 350 weeks temporary total disability benefits. These workers, after being disabled for seven years, should receive benefits for being permanently totally disabled directly from insurers rather than receive supplementary benefits from the Fund. If, however, these workers' payments are covered by the Fund through the allowance of supplementary benefits as a result of a decision in a pending Minnesota Supreme Court case, it is projected that the additional cost to the Fund would be \$3 million annually.

For second injuries, the best case forecasts the financial position of the Fund if the Fund incurs no further second injury liabilities after July 1, 1987. It should be noted, however, that even if no future liabilities are incurred, the data indicates that current liabilities will not be paid off until the year 2006. The worst case represents a growth rate of second injury losses of 33 percent, which was the rate experienced in 1985 and 1986. It also reflects the impact on the Fund if old injuries are compensated under the Fund as a result of a decision in a pending Minnesota Supreme Court case. It is projected that these injuries would cost the Fund \$2 million annually in additional reimbursements.

The chart on page four shows the projected changes in the Fund balance using the foregoing assumptions for revenue and expenses.

In developing these projected changes, an analysis of the revenue received revealed significant funding gaps and inconsistencies in assessment reporting which must be addressed if the Fund is to be properly managed.

In conclusion, to control the growing deficit, either revenues must be increased to cover estimated expenses, or expenses must be reduced, or a combination of both must occur.

II. PROJECTED CHANGES IN THE SPECIAL COMPENSATION FUND BALANCE

FY	REVENUES					EXPENSES					FUND BALANCE	
	Assess. Rate	Base Multiplier	Assessment Revenue	Claims Recovery	Other Revenue	TOTAL REVENUE	Admin. Expense	Spec. Claims Expense	Supplementary Benefits	Second Injury		TOTAL EXPENSES
MOST LIKELY CASE.												
84												(54,500,000)
85	22.5%	2,461,156	55,376,000	2,734,000	1,030,000	59,140,000	1,987,000	3,101,900	32,835,100	18,776,000	56,700,000	(52,100,000)
86	25.0%	2,840,520	71,013,000	2,000,000	1,887,000	74,900,000	8,796,000	3,790,400	32,092,900	24,920,700	69,600,000	(46,800,000)
87	25.0%	2,745,600	68,640,000	3,000,000	1,400,000	73,040,000	9,200,000	5,700,000	41,300,000	29,457,200	85,657,200	(59,417,200)
88	25.0%	2,855,424	71,385,600	100,000	1,400,000	72,885,600	11,000,000	6,600,000	42,600,000	31,045,019	91,245,019	(77,776,619)
WORST CASE.												
84												(54,500,000)
85	22.5%	2,461,156	55,376,000	2,734,000	1,030,000	59,140,000	1,987,000	3,101,900	32,835,100	18,776,000	56,700,000	(52,100,000)
86	25.0%	2,840,520	71,013,000	2,000,000	1,887,000	74,900,000	8,796,000	3,790,400	32,092,900	24,920,700	69,600,000	(46,800,000)
87	25.0%	2,745,600	68,640,000	3,000,000	1,400,000	73,040,000	9,200,000	5,700,000	41,300,000	30,939,700	87,139,700	(60,899,700)
88	25.0%	2,855,424	71,385,600	100,000	1,400,000	72,885,600	11,500,000	9,200,000	45,600,000	34,852,300	101,152,300	(89,166,400)
BEST CASE.												
84												(54,500,000)
85	22.5%	2,461,156	55,376,000	2,734,000	1,030,000	59,140,000	1,987,000	3,101,900	32,835,100	18,776,000	56,700,000	(52,100,000)
86	25.0%	2,840,520	71,013,000	2,000,000	1,887,000	74,900,000	8,796,000	3,790,400	32,092,900	24,920,700	69,600,000	(46,800,000)
87	25.0%	2,745,600	68,640,000	3,000,000	1,400,000	73,040,000	9,200,000	5,700,000	41,300,000	28,855,400	85,055,400	(58,815,400)
88	25.0%	2,855,424	71,385,600	100,000	1,400,000	72,885,600	11,000,000	6,000,000	42,600,000	28,104,500	87,704,500	(73,634,300)

II. REVENUE ANALYSIS

Assessment Revenue

Minnesota Statute § 176.129 directs the Commissioner of the Department of Labor and Industry to collect an assessment on indemnity benefits paid for workers' compensation injuries on behalf of Minnesota employers. The Commissioner must also adjust the assessment rate each calendar year based on the difference between the revenue received and the claims received during the prior fiscal year.

The amount of revenue received from the assessment is a function of both the assessment rate and the amount of indemnity paid by insurers during the assessment period. While this method of assessment to fund the Special Compensation Fund began in 1972 at 7 percent, the first records of the income from the assessments are from 1975 when \$4,500,000 was received from an assessment rate of 13 percent. The assessment rates and fund balances from 1972 to-date are as follows:

<u>Dates</u>	<u>Assessment Rate</u>	<u>Fund Balance</u>
1/01/72 through 12/31/72	7%	N/A
1/01/73 through 12/31/73	9%	N/A
1/01/74 through 12/31/74	11%	N/A
1/01/75 through 12/31/75	13%	N/A
1/01/76 through 6/30/76	15%	\$ 2,400,000
7/01/76 through 6/30/77	17%	N/A
7/01/77 through 6/30/78	18%	\$ 8,900,000
7/01/78 through 6/30/79	13%	\$ 5,200,000
7/01/79 through 6/30/80	8%	(\$ 7,600,000)
7/01/80 through 6/30/81	6%	(\$19,900,000)
7/01/81 through 6/30/82	8%	(\$36,100,000)
7/01/82 through 6/30/83	15%	(\$45,200,000)
7/01/83 through 6/30/84	17%	(\$54,500,000)
7/01/84 through 12/31/84	20%	(\$50,300,000)
1/01/85 through 6/30/86	25%	(\$46,752,000)

The Fund balance, when stated as a negative figure, represents the dollar amount of claims presented to the Special Compensation Fund that the Fund does not yet have the revenue to pay.

The indemnity base on which the assessment is made has shown some minor variation over time, but has averaged a steady annual increase of 4 percent from 1972 through fiscal year 1985.

The assessment income has shown the expected increase as a function of the assessment rate and the assumed 4 percent growth in the indemnity base through the assessments paid in March, 1986. However, the assessment for the next six-month period generated only \$32.1 million instead of the projected \$35.7 million. The lower revenue receipts for the March through July, 1986, period were statistically lower even when seasonal fluctuations were taken into account. Thus, the projections assume that the lower indemnity base remains constant with the previously observed inflation rate of 4 percent.

An analysis of the revenue received has revealed three areas of concern. These areas seem to be creating funding gaps that increase the growth of the deficit for future years.

The first funding gap is due to a change in accounting procedures. Prior to fiscal year 1983, claims were recorded in the accounting records of the Special Compensation Fund only when a claim was paid (pure cash flow accounting). Due to the efforts by managers of the Special Compensation Fund and the Department of Finance, accounting systems were established to better monitor the Fund's financial position. Since 1983, claims have been recorded as presented (or reported). Since the Special Compensation Fund's revenue is collected only twice per year, and assessments are based on the prior six months of indemnity payments by insurers and employers, there will continue to be a funding gap of approximately three to nine months between the claims reported and the revenue collected.

The second funding gap exists because the claims upon which insurers and employers are assessed have a statistical life of nine years as reported by the National Accounts statistics department (National Accounts, which is a division of Aetna Insurance Company, summarizes insurance statistics). However, the statistical life of second injury claims for the Fund is 20 years based on its own development factors. The reason for the longer life for second injury claims is that claimants tend to be older with more serious injuries. This makes it harder to return them to the work force. This means that the current funding mechanism covers the Fund's claim reimbursements for injury years 1978 through 1986. It does not provide sufficient funding to cover ongoing claims with dates of injury prior to 1978. As an example of this gap, second injury claim reimbursements requested during fiscal years 1983 through 1986 for dates of injury prior to 1979 totalled \$18,000,000. Although these are legitimate claims against the Fund, the current revenue formula does not include concurrent assessments for these injury years. These claims were paid, but payments to insurance carriers for claims from the most recent years then had to be deferred.

The third funding gap revealed by the study was that in addition to the problem with second injuries, assessments received are not currently funding other expenses of the Fund. When administrative costs were shifted from the general fund to the Special Compensation Fund in 1985 (effective fiscal year 1986), the assessment rate was not increased to cover them. In addition, the current funding formula does not account for extraordinary special claims expenses that result when major self-insurers go through bankruptcy. Finally, it does not account for increases in supplementary benefits that may be mandated as a result of Minnesota Supreme Court decisions.

Calculations Based on Current Funding
 Expenses/Base Multiplier* = Assessment Rate Points
 (In Millions)

Administrative Expenses	\$11.0	/	\$2.855	=	3.85
Special Claims Expenses	6.6	/	2.855	=	2.31
Supplementary Benefit Expenses	42.6	/	2.855	=	14.92
Second Injury Expenses	31.0	/	2.855	=	<u>10.86</u>
Total Assessment Points Needed to Fund Expenses				=	31.94
Current Assessment Rate				=	<u>25.00</u>

FUNDING GAP FOR FISCAL YEAR 1988 = 6.94

The chart above covers only the Special Compensation Fund's anticipated expenses in fiscal year 1988 and does not reflect revenue needed to reduce the deficit. To eliminate the deficit reported at the end of fiscal year 1986 (\$46,800,000), it would take an additional 16.39 percent assessment over and above the 25 percent assessment required to fund one year of Special Compensation Fund expenses.

This analysis also reveals discrepancies in the reporting of assessments due by the insurance companies. These discrepancies cannot be explained without auditing, which currently does not occur. If auditing of insurance companies were authorized by the legislature, it would be possible to get significant results without initially auditing all companies. An analysis of the individual companies assessed by the Fund over the past four six-month periods reveals that 10 percent of those companies pay 45 percent of the assessment revenue.

Claims Recovery

Minnesota Statute § 176.183 provides that the Special Compensation Fund will pay workers' compensation benefits to the employees of uninsured and bankrupt self-insured employers and then be reimbursed from the general fund an amount appropriated, or the amount spent by the Fund for this purpose, whichever is greater.

The general fund has reimbursed the Special Compensation Fund for all expenditures for uninsured claims until the past two fiscal years. Until then, the appropriation exceeded the expenditures and all amounts paid were reimbursed upon certification of expenditure to the general fund. In 1983, the expenditure exceeded the appropriation. The 1984 appropriation was greater than expenditures for that year and the excess funds were used to cover the 1983 shortage. The fiscal year 1985 and 1986 appropriations did not cover expenses. Appropriations in fiscal year 1985 were \$2.4 million, while expenses were \$3.3 million. In 1986, the appropriation was \$2 million, and expenses were \$3.8 million. For the next biennium, the Governor is recommending that there be no general fund reimbursement to the Special Compensation Fund.

*Base multiplier is defined as the revenue generated by one assessment percentage point.

Since late 1984, the Fund has been working with the uninsured employers to arrange affordable plans by which the employer can pay the benefits the Fund has paid to that employer's injured workers. Currently, the Fund has 60 such contracts in place, with a total value of approximately \$250,000, generating an annual income for the general fund of just over \$100,000.

The Special Compensation Fund has also assumed liability for several bankrupt self-insurers over the past few years, the most recent being Erie Mining Company, LTV Steel, and Murphy Motor Freight. Because the effect of federal bankruptcy law upon each company is unique, the recovery from bankrupt self-insurers is sporadic and, therefore, not included in the revenue projections. The expense analysis of these special claims is found on page nine.

Other Revenue

The Special Compensation Fund is the recipient of penalties against insurers and employers for noncompliance with the statute. In recent years, the penalties have generated substantially less than \$500,000 and hence are not a significant source of income for the purposes of these projections.

Interest income is earned on the Fund's short-term investment of cash. Over the past few years, approximately \$1,000,000 of interest has been earned per year. Interest income has been included in the revenue projection at an assumed level of \$1 million per year.

IV. EXPENSE ANALYSIS

Administrative Expenses

The cost of administering the workers' compensation law in Minnesota is borne by the Special Compensation Fund. Historically, the Workers' Compensation Division of the Department of Labor and Industry, like most other state agencies, was supported by the general fund, whose revenue comes from the taxpayers of the state. In 1985, this cost was transferred to the users of the system--the workers' compensation insurers and their customers. Thus, the operational expenses supporting the entire Workers' Compensation Division in the Department of Labor and Industry became payable from the Special Compensation Fund. The Special Compensation Fund staff was funded from the Fund prior to 1983.

These administrative expenses totalled \$2,121,000 in fiscal year 1984, and \$1,988,000 in fiscal year 1985. Effective with fiscal year 1986, all state operations associated with the workers' compensation system were funded by the Special Compensation Fund. This includes the Workers' Compensation Division of the Department of Labor and Industry, the Workers' Compensation Division of the Office of Administrative Hearings, and the Workers' Compensation Court of Appeals. This brought the fiscal year 1986 expenditures to \$8,900,000, and \$9,196,000 is appropriated for fiscal year 1987.

At the time of this writing, the exact legislative appropriation from the Special Compensation Fund for administrative expenses for fiscal year 1988 is unknown. However, the Governor's budget recommendation reflects

administrative expenses of \$11,000,000 for fiscal year 1988. This is the figure used in the projections for the best and most likely case scenarios. The worst case assumes that administrative costs would increase an additional \$500,000 for legal fees related to two major bankruptcies of self-insurers.

Special Claims

The Special Compensation Fund is directed under Minn. Stat. § 176.183 to make payments of all workers' compensation benefits due to employees whenever an uninsured or self-insured employer fails to make such payments. In addition, the Fund administers claims pursuant to Minn. Stat. § 176.191 when there is more than one potential insurer responsible for a given injury and benefits are being denied the injured employee. The Fund recovers all benefits paid from the insurer ultimately found liable and hence these payments do not have a long-term effect on the Fund's financial position.

The first year for which records of payments to employees are available is fiscal year 1976. Expenditures that year totalled \$325,144. A similar amount was paid the following year. Roughly \$600,000 was paid in each of the next three years. Then a steady increase began with \$1.2 million spent in fiscal year 1981, \$1.5 million in fiscal year 1982, \$1.7 million in 1983, \$2.8 million in 1984, \$3.5 million in 1985, and \$4 million in 1986.

In 1983, Minn. Stat. § 176.183 was revised to allow the Special Compensation Fund to provide benefits to injured workers on behalf of uninsured employers based on the merits of the claims without the necessity of litigation. This change in delivery system has allowed benefits to be paid sooner than in prior years.

During the summer of 1986, the Special Compensation Fund assumed liability for payments of workers' compensation benefits to the employees of Erie Mining and LTV Steel when these self-insured employers filed for bankruptcy protection. It is anticipated that payments for these two firms alone will reach \$11 million over the lifetime of the obligations, assuming that there are no other new claims.

The uninsured claims expenditures have grown at an average rate of 6 percent annually since fiscal year 1981. That figure includes the annual statutory adjustment in benefits of 6 percent, plus the growth in the number of claims filed. These two figures, 26 percent and 6 percent, were averaged, giving a growth rate of 16 percent. This figure was used in the projection under the most likely case scenario. The projection for special claims expenses under the best case scenario assumes a 6 percent increase, which is the minimum observed in the historical data. The worst case scenario assumes that special claims expenses will continue to grow at an average 26 percent annually, as they have since 1981. It also assumes that there will be two \$1 million bankruptcies of self-insurers.

Supplementary Benefits

Minnesota Statute § 176.132 was created in 1971 and became effective with payments beginning on January 1, 1972, and was retroactive to cover all dates of injury. The purpose of this law was to bring long term injured workers, whose benefits had been frozen at a very low weekly rate, up to

a minimum standard of living by supplementing their benefits to attain 65 percent of the statewide average weekly wage. The cost of this benefit was to be shared by the insurance industry through the assessment and reimbursement system of the Special Compensation Fund.

The first full fiscal year for which supplementary benefit reimbursement claims were received was 1974. Claims that year totalled \$2.4 million. Available data is sketchy for the early years of this program, but it appears that the claim volume grew at the rate of 50 percent annually through fiscal year 1979. The 1975 and 1977 legislative changes which increased the base compensation rate resulted in a reduction of the use of supplementary benefits. Since then, the annual growth rate of supplemental benefit reimbursement claims has increased at a decreasing rate to the point that claims leveled off at \$40 million annually by the mid-1980's. The decreasing rate of growth is due to the fact that in 1983, the waiting period for supplementary benefits was extended to four years from the date of injury. This had the effect of removing the first two years of reimbursement claims the Fund previously received on each file.

For the first time in 1984, Fund staff began participating in the settlement of long-term cases for which the Fund had current and ongoing liability. The typical supplementary benefit settlement in which the Fund staff participates results in the payment of three to five years of benefits in one lump sum to close out all benefits into the future. These settlements increase the Fund's short-term costs, but decrease its long-term liability.

The closure rate for 1985 supplementary benefits claims was greater than that for either 1983 or 1984. Since the Fund changed its settlement policy in 1984, it seemed likely that the new policy accounted for the increased closure rate. It appeared that the settlement rate for 1985 was more indicative of current Fund operation; therefore, the 1985 closure rate was used in the projections rather than an average of prior years.

In making projections of supplementary benefits, the most likely case scenario assumes an inflation rate of 4 percent. The same assumption is used for the best case scenario. The worst case assumes a 4 percent inflation rate. It also reflects the possibility of a use of the Fund that was not contemplated when the law was passed. That use would cover workers who have received the statutory limit of 350 weeks temporary total disability benefits. These workers, after being disabled for seven years, should receive benefits for being permanently totally disabled directly from insurers rather than receive supplementary benefits from the Fund. If, however, these workers' payments are covered by the Fund through the allowance of supplementary benefits as a result of a decision in a pending Minnesota Supreme Court case, it is projected that the additional cost to the Fund would be \$3 million annually.

Second Injury

Under Minn. Stat. § 176.131, the Special Compensation Fund reimburses employers for benefits paid to injured workers when the disability the injured worker suffered was caused by, or is substantially greater because of, a preexisting physical impairment. The basic intent of this law is to encourage employers to hire handicapped employees without the fear of unusually high workers' compensation costs.

Payment of second injury claims was fairly insignificant financially for many decades. This is no longer the case; as the cost of long-term claims has become more significant, insurers have become more sophisticated in seeking reimbursement from the Fund. In fiscal year 1982, second injury claims totalled \$5.5 million. By 1986, those figures had increased to \$18.1 million. Second injury expenses have become the fastest growing liability for the Special Compensation Fund.

In order to project future expenditures, a 25 percent credit was taken on future liabilities to account for the repeal of retroactive registration in 1986. The most likely case includes a growth factor that encompasses both the increase in the indemnity benefits based on salaries (4 percent inflation) and a continuation of the trend of increasing reported losses (6 percent annual increase). The best case assumes that the Second Injury Fund would incur no further liabilities after July 1, 1987. The worst case establishes the ongoing trend of 33 percent increases in reported losses seen in the historical claims for fiscal years 1983 through 1986.

The format used to project the future Fund expenses for second injury claims varies considerably from the 1985 forecast. Earlier studies excluded data prior to the 1983 fiscal year. This model uses data from 1979 through 1986. Although the financial reports for years prior to fiscal year 1983 do not provide a breakdown by year of claims reported, extrapolations of the data were made to make it useful. Inclusion of these years of data doubles the database, making the developmental multipliers and developmental factors stronger tools.

The general format used in the model for projecting second injury claim expenses is recommended by the Bureau of National Affairs (BNA) and is used by many actuaries who study self-funded insurance plans, as well as by insurers in ratemaking. The Triangulation of Reported Claims worksheet converts claims reported to an occurrence basis format (see Schedule A). The Developmental Multiplier of Reported Claims worksheet (see Schedule B) converts the Triangulation worksheet into cumulative paid claims by year of injury, then divides the total cumulative paid claims for the injury by the cumulative reported value of a reporting year.

Reviewing these worksheets reveals two major operating issues for the Fund:

1. Late reporting. The Special Compensation Fund does not see claims related to an injury year until the second or third year after the incident. By that time, it is difficult, if not impossible, to return workers to work, and the claims become a long-term liability.
2. Long development in pay-out times. Second Injury Fund losses are fully developed approximately 20 years after the incident. (The Fund does have some statistical outliers on claims that are reported in the 20th to the 35th year after the injury. The developmental multipliers have been smoothed to deal with this issue.) There is no industry standard with which the Fund can compare its developmental factors since primary insurers' losses are fully developed after eight to nine years.

The formula to estimate fully developed losses per injury year is to multiply total reported claims by the developmental multiplier. Fully developed losses represent the total losses expected to be reported over a 20-year period (the Fund's developmental factor) for each injury year.

Years 1940 through 1966 are considered fully developed because the 20-year development has already occurred. Therefore, fully developed losses for these years equals total paid losses. Fully developed losses for each injury year are then multiplied by the developmental factor. The change in the developmental factor for each year multiplied by fully developed losses equals the reported claims expected for a fiscal year. Schedule C summarizes projected reported losses.

The Developmental Multiplier of Reported Claims worksheet reveals an important issue for the Fund. It shows that claims first seen by the Fund in years two to three after an injury year must be multiplied by approximately 20 to calculate fully developed losses for the related injury year. In other words, if the Fund did not accept claims for injury years after 1986, it would expect to pay its last claim in the year 2006.

V. Summary

As seen in the chart on page four, under the most likely case scenario revenues for fiscal year 1987 are expected to decrease 2 percent; expenses are expected to increase 23 percent. This would increase the Fund deficit from \$46,800,000 to \$59,417,000. The 1988 revenues are expected to increase 0 percent; expenses are expected to increase 7 percent (the increase is less than in 1987 due to the repeal of retroactive registration). This would increase the Fund deficit to \$77,776,000. This represents a 66 percent increase over the 1986 deficit.

Under the best case scenario, the revenues for fiscal year 1987 are expected to decrease 2 percent; expenses are expected to increase 22 percent. This would increase the Fund deficit from \$46,800,000 to \$58,815,000. The 1988 revenues are expected to increase 0 percent; expenses are expected to increase 3 percent. This would increase the Fund deficit to \$73,634,000. This represents a 57 percent increase over the 1986 deficit.

Under the worst case scenario, revenues for fiscal year 1987 are expected to decrease 2 percent; expenses are expected to increase 25 percent. This would increase the Fund deficit from \$46,800,000 to \$60,899,700. The 1988 revenues would increase 0 percent; expenses would increase 16 percent. This would increase the Fund deficit to \$89,166,400. This represents a 90 percent increase over the 1986 deficit.

SCHEDULE A-1

Triangulation of Reported Second Injury Claims - Years 1 through 13

Injury Year	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13
40-50	0	0	0	0	0	0	0	0	0	0	0	0	0
50-60	0	0	0	0	0	0	0	0	0	0	0	0	0
61-67	0	0	0	0	0	0	0	0	0	0	0	0	421,793
68	0	0	0	0	0	0	0	0	0	0	0	421,793	191,284
69	0	0	0	0	0	0	0	0	0	0	421,793	191,284	215,534
70	0	0	0	0	0	0	0	0	0	843,586	191,284	215,534	145,452
71	0	0	0	0	0	0	0	0	843,586	382,567	215,534	145,452	159,340
72	0	0	0	0	0	0	0	843,586	382,567	431,067	145,452	155,664	145,838
73	0	0	0	0	0	0	843,586	382,567	431,067	290,905	112,502	237,764	239,830
74	0	0	0	0	0	843,586	382,567	431,067	290,905	376,636	893,495	399,849	312,501
75	0	0	0	0	843,586	382,567	431,067	290,905	518,377	983,321	542,587	741,168	
76	0	0	0	843,586	382,567	431,067	290,905	529,577	1,474,883	1,070,922	1,124,258		
77	0	0	421,793	382,567	431,067	290,905	625,601	1,762,696	1,822,025	1,564,442			
78	0	84,359	191,284	431,067	290,905	1,151,145	2,356,035	2,384,053	1,508,408				
79	0	38,257	215,534	290,905	1,043,248	2,581,292	1,833,358	1,563,552					
80	0	43,107	145,452	788,901	2,507,717	2,820,692	2,175,165						
81	0	29,090	640,532	2,476,955	2,531,904	2,391,699							
82	0	197,246	1,138,662	2,044,696	2,880,090								
83	0	157,628	1,504,656	5,259,489									

SCHEDULE A-2

Triangulation of Reported Second Injury Claims - Years 14 through 30

Injury Year	<u>Yr 14</u>	<u>Yr 15</u>	<u>Yr 16</u>	<u>Yr 17</u>	<u>Yr 18</u>	<u>Yr 19</u>	<u>Yr 20</u>	<u>Yr 21</u>	<u>Yr 22</u>	<u>Yr 23</u>	<u>Yr 24</u>	<u>Yr 25</u>	<u>Yr 26-30</u>
40-50													33,995
50-60											4,970	10,109	12,668
61						84,359				0	0	26,207	4,182
62					84,359	38,257			43,702	3,690	30,944		
63				84,359	38,257	43,107		10,429	6,040	15,994	9,663		
64			84,359	38,257	43,107	29,090	18,677	35,546	33,911	40,317			
65		84,359	38,257	43,107	29,090	48,811	67,806	101,164	4,179				
66	337,435	38,257	43,107	29,090	65,559	54,041	49,279	49,722					
67	153,027	43,107	29,090	52,191	36,961	83,191	34,106						
68	172,427	29,090	156,948	154,844	188,155	113,334							
69	116,362	135,115	138,168	115,174	217,202								
70	224,928	198,130	149,027	239,169									
71	208,595	250,037	72,486										
72	198,814	146,368											
73	203,644												
74													
75													
76													
77													
78													
79													
80													
81													
82													
83													

SCHEDULE A-3

Total Reported Second Injury Claims

<u>Injury Year</u>	<u>Years 31-35</u>	<u>FY 79-86</u>
1940-1950		\$ 33,995 0
1950-1960	30,953	30,953
1961		114,748
1962		200,951
1963		207,848
1964		323,264
1965		416,773
1966		666,489
1967		853,466
1968		1,427,875
1969		1,550,631
1970		2,207,110
1971		2,277,598
1972		2,449,357
1973		2,741,866
1974		3,930,607
1975		4,733,579
1976		6,147,766
1977		7,301,097
1978		8,397,255
1979		7,566,145
1980		8,481,034
1981		8,070,180
1982		6,260,694
1983		6,921,773
1984		3,498,842
1985		1,007,066
1986		49,822
1987		0
TOTAL REPORTED		\$87,868,785

SCHEDULE B-1

Developmental Multiplier of Reported Second Injury Claims - Years 1 through 13

Injury Year	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13
40-50	0	0	0	0	0	0	0	0	0	0	0	0	0
50-60	0	0	0	0	0	0	0	0	0	0	0	0	0
61-66	0	0	0	0	0	0	0	0	0	0	0	0	0
67	0	0	0	0	0	0	0	0	0	0	0	0	421,793
													2.02
68	0	0	0	0	0	0	0	0	0	0	0	421,793	613,077
												3.39	2.33
69	0	0	0	0	0	0	0	0	0	0	421,793	613,077	828,610
											3.68	2.53	1.87
70	0	0	0	0	0	0	0	0	0	843,586	1,034,870	1,250,404	1,395,856
										2.62	2.13	1.77	1.58
71	0	0	0	0	0	0	0	0	843,586	1,226,154	1,441,687	1,587,140	1,746,480
									2.70	1.88	1.58	1.44	1.30
72	0	0	0	0	0	0	0	843,586	1,226,154	1,657,221	1,802,673	1,958,337	2,104,175
								2.90	2.00	1.48	1.36	1.25	1.16
73	0	0	0	0	0	0	843,586	1,226,154	1,657,221	1,948,126	2,060,628	2,298,392	2,538,222
							3.25	2.24	1.65	1.41	1.33	1.19	1.08
74	0	0	0	0	0	843,586	1,226,154	1,657,221	1,948,126	2,324,762	3,218,257	3,618,106	3,930,607
						4.66	3.21	2.37	2.02	1.69	1.23	1.09	1.00
75	0	0	0	0	843,586	1,226,154	1,657,221	1,948,126	2,466,503	3,449,824	3,992,411	4,733,579	
					5.61	3.86	2.86	2.43	1.92	1.37	1.19	1.00	
76	0	0	0	843,586	1,226,154	1,657,221	1,948,126	2,477,703	3,952,586	5,023,508	6,147,766		
				7.29	5.01	3.71	3.16	2.48	1.56	1.22	1.00		
77	0	0	421,793	804,360	1,235,428	1,526,333	2,151,934	3,914,630	5,736,655	7,301,097			
			17.31	9.08	5.91	4.78	3.39	1.87	1.27	1.00			
78	0	84,339	275,642	706,710	997,614	2,148,759	4,504,794	6,888,847	8,397,255				
		99.54	30.46	11.88	8.42	3.91	1.86	1.22	1.00				
79	0	38,257	253,790	544,695	1,587,943	4,169,235	6,002,593	7,566,145					
		197.77	29.81	13.89	4.76	1.81	1.26	1.00					
80	0	43,107	188,559	977,460	3,485,177	6,305,869	8,481,034						
		196.75	44.98	8.68	2.43	1.34	1.00						
81	0	29,090	669,662	3,146,577	5,678,481	8,070,180							
		277.42	12.05	2.56	1.42	1.00							
82	0	197,246	1,335,908	3,380,604	6,260,694								
		31.74	4.69	1.85	1.00								
83	0	157,628	1,662,284	6,921,773									
		43.91	4.16	1.00									
84	0	306,409	3,498,842										
		11.42	1.00										

SCHEDULE B-2

Developmental Multiplier of Reported Second Injury Claims - Years 14 through 30

<u>Injury Year</u>	<u>Yr 14</u>	<u>Yr 15</u>	<u>Yr 16</u>	<u>Yr 17</u>	<u>Yr 18</u>	<u>Yr 19</u>	<u>Yr 20</u>	<u>Yr 21</u>	<u>Yr 22</u>	<u>Yr 23</u>	<u>Yr 24</u>	<u>Yr 25</u>	<u>Yr 26-30</u>
40-50	0	0	0	0	0	0	0	0	0	0	0	0	33,995 1.00
50-60	0	0	0	0	0	0	0	0	0	0	4,970 6.23	15,079 2.05	27,767 1.11
61	0	0	0	0	0	84,359 1.36	84,359 1.36	84,359 1.36	84,359 1.36	84,359 1.36	84,359 1.36	110,566 1.04	114,748 1.00
62	0	0	0	0	84,359 2.38	122,615 1.64	122,615 1.64	122,615 1.64	166,317 1.21	170,007 1.18	200,951 1.00	200,951 1.00	
63	0	0	0	84,359 2.46	122,615 1.70	165,722 1.25	165,722 1.25	176,151 1.18	182,191 1.14	198,185 1.05	207,848 1.00		
64	0	0	84,359 3.83	122,615 2.64	165,722 1.95	194,813 1.66	213,490 1.51	249,036 1.30	282,947 1.14	323,264 1.00			
65	0	84,359 4.94	122,615 3.40	165,722 2.51	194,813 2.14	243,624 1.71	311,430 1.34	412,594 1.01	416,773 1.00				
66	337,435 1.98	375,691 1.77	418,798 1.59	447,888 1.49	513,447 1.30	567,488 1.17	616,767 1.08	666,489 1.00					
67	574,920 1.48	617,927 1.38	647,017 1.32	699,208 1.22	736,169 1.16	819,360 1.04	853,466 1.00						
68	785,504 1.92	814,594 1.75	971,542 1.47	1,126,386 1.27	1,314,541 1.09	1,427,875 1.00							
69	944,972 1.84	1,080,087 1.44	1,218,255 1.27	1,333,429 1.16	1,550,631 1.00								
70	1,620,784 1.36	1,818,914 1.21	1,867,941 1.12	2,207,110 1.00									
71	1,955,075 1.16	2,205,112 1.03	2,277,598 1.00										
72	2,302,989 1.06	2,449,357 1.00											
73	2,741,866 1.00												
74													
75													
76													
77													
78													
79													
80													
81													
82													
83													
84													

SCHEDULE B-3

Summary of Developmental Multiplier, Second Injury - Years 1 through 13

Injury Year	Year <u>1</u>	Year <u>2</u>	Year <u>3</u>	Year <u>4</u>	Year <u>5</u>	Year <u>6</u>	Year <u>7</u>	Year <u>8</u>	Year <u>9</u>	Year <u>10</u>	Year <u>11</u>	Year <u>12</u>	Year <u>13</u>
1985	20,058	1,007,066											
	50.21	1.00											
1986	49,822												
1987	0												
Total Reported													
Avg. Dev'l Multi.	50.21	22.02	20.50	7.89	4.80	3.14	2.50	2.06	1.76	1.58	1.47	1.39	1.32
* denotes excl.	*	*	*	*	*								
Dev'l Factor	0.02	0.05	0.05	0.13	0.21	0.32	0.40	0.48	0.57	0.63	0.68	0.72	0.76

SCHEDULE B-4

Summary of Developmental Multiplier, Second Injury - Years 14 through 30

<u>Injury</u> <u>Year</u>	<u>Year</u> <u>14</u>	<u>Year</u> <u>15</u>	<u>Year</u> <u>16</u>	<u>Year</u> <u>17</u>	<u>Year</u> <u>18</u>	<u>Year</u> <u>19</u>	<u>Year</u> <u>20</u>	<u>Year</u> <u>21</u>	<u>Year</u> <u>22</u>	<u>Year</u> <u>23</u>	<u>Year</u> <u>24</u>	<u>Year</u> <u>25</u>	<u>Years</u> <u>26-30</u>
1985													
1986													
1987													
Total Reported													
Avg. Dev'l Multi.	1.25	1.19	1.16	1.14	1.09	1.04	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Dev'l Factor	0.80	0.84	0.86	0.88	0.92	0.96	0.98	1.00	1.00	1.00	1.00	1.00	1.00

SCHEDULE C

Estimated Reported Second Injury Losses

Most Likely Case

<u>Injury Year</u>	<u>Total Reported</u>	<u>Est Fully Developed</u>	<u>Est Rept'd 1987</u>	<u>Est Rept'd 1988</u>
40-50	33,995	33,995		
50-60	30,953	30,953		
61	114,748	114,748		
62	200,951	200,951		
63	207,848	207,848		
64	323,264	323,264		
65	416,773	416,773		
66	666,489	666,489		
67	853,466	853,466		
68	1,427,875	1,487,370	29,747	
69	1,550,631	1,685,469	67,419	33,709
70	2,207,110	2,508,080	100,323	100,323
71	2,277,598	2,648,369	52,967	105,935
72	2,449,357	2,915,902	58,318	58,318
73	2,741,866	3,427,332	137,093	68,547
74	3,930,607	5,171,851	206,874	206,874
75	4,733,579	6,574,415	262,977	262,977
76	6,147,766	9,040,832	361,633	361,633
77	7,301,097	11,541,174	546,902	461,647
78	8,397,255	14,817,858	976,714	702,174
79	7,566,145	15,611,374	1,280,794	1,029,018
80	8,481,034	21,187,018	1,787,380	1,738,233
81	8,070,180	25,300,696	2,057,534	2,134,418
82	6,260,694	30,025,945	3,316,703	2,441,806
83	6,921,773	54,613,420	4,465,642	6,032,665
84	3,498,842	71,709,759	5,589,742	5,863,580
85	1,007,066	78,880,735	2,841,660	6,148,717
86	49,822	86,768,808	3,891,014	292,763
87		71,584,267	1,425,763	1,825,427
88		59,057,020		1,176,254
	<u>87,868,785</u>	<u>579,406,182</u>	<u>29,457,200</u>	<u>31,045,019</u>