FY 1986 TRIENNIAL PERFORMANCE AUDIT

OF

SOUTHERN CALIFORNIA RAPID
TRANSIT DISTRICT

PHASE II FINAL REPORT ON
WORKERS' COMPENSATION

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October 3, 1986

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 Commission
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Dear Mrs. Neely:

Enclosed herewith is the finalized version of the FY86 Triennial Performance Audit Phase II report concerning the workers' compensation function of the Southern California Rapid Transit District (SCRTD).

We would like to thank you, Los Angeles County Transportation Commission (LACTC) staff members and SCRTD staff members for the invaluable assistance provided us during the preparation of the report.

Very truly yours,

Price Waterhouse

Enclosures

LOS ANGELES COUNTY TRANSPORTATION COMMISSION

FY 1986 TRIENNIAL PERFORMANCE AUDIT OF THE SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

PHASE II FINAL REPORT ON WORKERS' COMPENSATION

OCTOBER 3, 1986

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I. INTRODUCTION

I. INTRODUCTION

LACTC is the state-designated Regional Transportation Planning Agency (RTPA) and performs some functions of a Metropolitan Planning Organization (MPO) for the Los Angeles region, as mandated in California's Transportation Development Act (TDA) of 1971, as amended in 1981. This Phase II report documents the findings, conclusions and recommendations in the Workers' Compensation area of the Southern California Rapid Transit District (RTD). Two separate Phase II reports present the results of the other two tasks -- operator absenteeism and maintenance absenteeism. A consolidated executive summary, incorporating all three tasks, has been provided as well.

This introductory section briefly describes the Workers' Compensation task background and objectives, and the report organization.

A. BACKGROUND

The Phase I performance audit identified the cost of workers' compensation as a matter of significant concern. During the period FY83-85, workers' compensation expenditures grew from $10.2 million to $19.1 million according to the District's internal system of accounts (i.e., the Blue Books), an increase of 87 percent. This increase accounted for nearly half of RTD's growth in fringe benefits cost over the audit period.

Workers' compensation costs result from injuries to employees sustained while on duty. These costs include direct claims payments, reserves estimated for future payments of current claims, medical costs and other expenses (e.g., legal fees). Also, injured employees receive temporary disability payment for time lost from work and may also be entitled to permanent disability payments based on the extent and type of injury. They may also qualify for vocational rehabilitation if they are not able to return to their regular occupation. RTD is self-insured for these costs of the first $500,000 per occurrence and catastrophic insurance is purchased to cover losses in excess of $500,000. The workers' compensation program is managed centrally (i.e., it is not cost center-based).

The expense figures stated above do not include overhead expenses related to the administration of the workers' compensation program, such as the salaries and overhead expenses of the risk management function and the fee paid to the private, independent claims administrator. The expense does not include any credit for investment income which might be earned on the total reserves. Also, the expenses related to negotiated fringe benefits in excess of legally mandated workers' compensation encumbrances are not included in the costs reviewed in this document (e.g., unprovoked attacks).

Several major changes have occurred over the audit period which suggest insurance should be reviewed to discern the tangible impact of these changes. The California state laws regarding workers' compensation changed in January 1983 and January 1984 -- both have contributed to cost growth. Further, effective October 1, 1984, the District changed from two independent claims administrators which handled claims simultaneously (for different claim years) to a third independent administrator to handle all pending claims and all new claims occurring after October 1, 1984. The manner in which reserves are determined also underwent revision in 1984, resulting in increased workers' compensation reserves. All of these factors contribute to performance trends. A more detailed review is needed to ascertain controllable and non-controllable aspects of workers' compensation cost growth.

For these reasons, workers' compensation was included as an area of investigation in the second phase of the performance audit.

B. OBJECTIVES

The objective of the Phase II review of workers' compensation is to determine the status and performance of the functional area. Phase I did not indicate that there was necessarily a problem in workers' compensation, although it did raise significant questions as to the reasons for high cost growth. Toward this end, the Phase II high-level analysis focused on five areas:

- Location and costs of claims;
- Policies for estimating reserves;
- Analysis of claims for reduction in risks;
- Development and implementation of safety programs; and
- Management reporting of claims and costs.

The review resulted in several recommendations for improved cost containment and identified a recommended methodology for reviewing cost change. It is important to note that unlike the other two Phase II tasks (i.e., operator absenteeism and maintenance absenteeism), this analysis was not intended to be a detailed review and was not to result in prescriptive program recommendations. Rather, it fits into the more traditional role of performance auditing -- determining what occurred and why.

C. REPORT ORGANIZATION

Following this introduction, this report presents the workers compensation findings, conclusions and recommendations in four sections:

- II. Location and Costs of Claims which reviews RTD's cost monitoring program and the category and cost of claims.

- <u>III. RTD Claims Reserving Policies</u> which examines the methodology for reserving against workers' compensation claims, and past reserving performance.

- <u>IV. Safety Programs</u> which highlights the accident/-injury prevention activities undertaken at RTD to reduce the incidence of workers compensation cases.

- <u>V. Conclusions, Plans and Recommendations</u> which presents performance conclusions, RTD plans for FY87 and recommendations for improving cost containment in the workers' compensation area. A cost monitoring methodology is included as a recommendation.

II. LOCATION AND COST OF CLAIMS

II. LOCATION AND COSTS OF CLAIMS

As with the transit industry in general, the cost of workers' compensation is a matter of significant concern at RTD. During the period FY83-85, workers' compensation costs at RTD grew from $10.2 million to $19.1 million, an increase of 87 percent based on RTD's internal record of accounts (i.e., the Blue Books). This increase accounted for nearly half of RTD's growth in fringe benefits cost in the audit period.

Workers' compensation costs result from injuries to employees sustained while on duty. These costs are influenced by the benefit provisions of the California Workers' Compensation Laws. This measurement includes direct claims payments, reserves estimated for future payments of current claims, medical costs and other expenses (e.g., legal fees). Injured employees receive temporary disability payments for time lost from work and may also be entitled to permanent disability payments based on the extent and type of injury. They may also qualify for Vocational Rehabilitation if they are not able to return to their regular occupation. RTD is self-insured for these costs up to a maximum of $500,000 for any one occurrence. Claims in excess of $500,000 are covered up to the workers' compensation statutory limit by an excess insurance policy. The workers' compensation program is also managed centrally (i.e., it is not cost center-based).

A. HOW THE WORKERS' COMPENSATION COST IS MEASURED

Each month, RTD's workers' compensation claims administrator prepares a report which indicates their best estimate of the value of all workers' compensation claims in its inventory. For claims that have not been concluded, the current amount estimated for the unpaid portion is commonly called case reserves. Alone, this current estimate would tend to understate the value of RTD's claims liability for of the following reasons:

- The claims administrator's best current estimate does not have the benefit of all the information that will ultimately develop during the life of the claim to help them estimate the claim's ultimate value.

- A number of claims tend to be reported late. Consequently, at a particular point in time some claims are not included in the claims administrator's total inventory. Such late reported claims are part of RTD's total claim liability because they originated with accidents or incidents which occurred before the liability valuation date, even though they were not reported at that time.

In order to estimate its total ultimate claim liability by fiscal year, RTD adjusts the claim values reported by the claims administrator by applying historical development factors to them. The difference between the estimated ultimate claim liability and the claim values developed by the claims administrator are the incurred but not reported (IBNR) reserves. While case values are calculated on a claim by claim basis -- IBNR values are calculated in the aggregate (i.e., the value of all known claims are inflated to reflect the historical value of late reported claims). The total estimated ultimate claims liability, sometimes referred to as the "incurred loss" in the insurance industry, is comprised of actual claims payments, case reserves and IBNR reserves.

Workers' compensation cost for a single fiscal year includes costs of claim payments made and reserves for losses incurred but not yet concluded. Therefore, total fiscal year workers' compensation cost is the sum of actual claim payments and the net change in reserves over the year (i.e., ending reserves less beginning reserves).

Costs also include expenses for defending and settling claims in litigation -- such as attorneys fees and additional medical examination expenses. It does not include all the overhead expenses related to the administration of the workers' compensation program, such as the salaries and overhead expenses of the risk management department, the fee paid to the claims administrator and the additional benefits paid through union contracts for workers' compensation injuries. Furthermore, cost does not include any credit for the investment income that might be earned on the total reserves (this practice will change in FY87 at RTD, in order to comply with UMTA standards). Since these total reserves are used to pay losses over several years, they earn investment income before they are completely dispersed. Because of the above considerations, care should be used in comparing the cost of the workers' compensation program for RTD with other transit agencies.

B. FACTORS THAT INFLUENCE WORKERS' COMPENSATION COST TREND

There are at least four factors that influence the growth in the workers' compensation cost:

- changes in exposures;
- workers' compensation benefit changes;
- changes in the adequacy of the reserves in prior years; and
- adequacy of reserves on accidents that happened during the current fiscal year.

Each is discussed below.

1. Changes in Exposure

Exposure is a measure of an entity's risk. Changes in the level of risk would have a commensurate change in the expected amount of claims costs. For workers' compensation, an appropriate measure of exposure is $100 of payroll, exclusive of premium time. It concurrently reflects three factors that influence the risk of a workers' compensation claim: the number of employees, their individual salaries and hours of exposure in the workplace. Employees' salaries influence the magnitude of the workers' compensation claim since State Workers' Compensation Laws Benefits are a function of job classification and of a fixed rate per $100 of salary.

In the period FY83-85, payrolls, and hence exposure, have increased by 19.9 percent as follows:

SCRTD Payroll Trend

Fiscal Year	Total Wages Paid (amounts in millions)	Cumulative Growth Rate
1983	$225.3	
1984	250.0	+11.0%
1985	270.1	+19.9%

Because exposure is a measure of risk for workers' compensation, one may expect claims cost to change in direct proportion to risk. Therefore, based on exposure alone, one would expect an increase of almost 20 percent in the period FY83 to FY85.

2. Changes in Workers' Compensation Benefits

Workers' compensation cost trends are also influenced by changes in benefit levels. An increase in the benefit level would obviously result in direct growth of workers' compensation costs. In 1983 and 1984, significant increases in the Workers' Compensation Benefit Levels were imposed by the California Workers' Compensation Laws. RTD estimated the effect of the change in benefit levels due to Workers' Compensation Assembly Bill 684 to be approximately 31 percent of workers' compensation costs. This estimate is documented in an internal memorandum, and is based on self-insurance estimates before the legal changes went into effect. It is possible that the actual impact was higher, albeit data was not available to make this determination.

Legal changes to workers' compensation benefits is an uncontrollable cost growth item from a management perspective. Therefore, one would expect an additional growth in workers' compensation costs of at least 31 percent over the FY83 to FY85.

3. Changes in Adequacy of Reserves in Prior Years

As discussed earlier, claims mature over a period of time -- many over several years -- and case reserves may be adjusted as better information develops on the claim. When reserves are adjusted (upwards or downwards), the net change is generally reported in the financial statement of the year in which the adjustment occurred -- even though the claim creating the cost may have occurred in some prior year. In this case, the error in estimating incurred loss has a financial impact on workers' compensation costs in future years. This is because fiscal year workers' compensation costs are stated as the sum of the estimated incurred loss from incidents which occurred during the current year plus any change in the estimate of incurred loss from prior fiscal accident years. If the estimate of total incurred cost is understated in prior years, any upward adjustment to the estimate would show cost growth in the year of adjustment.

The impact of revisions to prior year incurred loss estimates can be significant when measuring workers' compensation cost growth in a particular fiscal year. For example, on April 30, 1985, RTD estimated that the total incurred loss for claims originating from accidents occurring in FY85 was $15,578,000. Based on new information developed in FY85, RTD also revised its estimate of the incurred loss from claims which occurred between FY79 and FY84, and accordingly increased reserves by $4,510,000. The total workers' compensation cost for FY85 (as of April 30, 1985) is the sum of the two figures, or $20,088,000. Almost one-quarter of this expense is due to underestimating the incurred loss of claims in prior years.

Because of changes in reserves, and the potential impact on monitoring workers' compensation cost trends, it is common practice in the insurance industry to analyze incurred loss trends in workers' compensation on an accident year basis. All claims from accidents which occurred in the same year are grouped together and their total value estimated. Then their yearly growth in value is determined and monitored separately by year in which the accident occurred.

Using this approach, and RTD's Insurance Manager's estimate of fiscal accident year values as of April 30, 1986, results in a growth in workers' compensation cost of only 71 percent instead of 87 percent as follows:

Fiscal Accident Year	Estimated Ultimate Claim Amount (amounts in thousands)	Cumulative Growth Rate
1983	$11,700	
1984	16,000	+36.8%
1985	20,000	+70.9%

The difference (i.e., 16 percent cost growth) is due to the increases in incurred loss estimates for years preceeding FY83, rather than an actual increase in workers' compensation costs for cases originating in the period FY83 to FY85.

4. Adequacy of Reserves in Current Year

The adequacy of current year reserves on accidents occurring during the current fiscal year also impacts workers' compensation cost growth in a manner similar to that discussed above. This is consistent with the definition indicated earlier that workers' compensation cost is the sum of the estimate of incurred loss for claims from accidents that happened during the current fiscal year plus changes in the estimate of incurred loss for prior years. To the extent that the total reserves for these current year claims or accidents are understated, the workers' compensation cost growth trend is understated, and vice versa. An overstated total reserve would also result in an overstated trend.

As will be demonstrated in Section III of this report, RTD underestimated the total incurred loss from current year accidents for reserving purposes in each of FY82, FY83, FY84 and FY85. The RTD's process of reserving, referred to here as the Incurred Loss Development Approach, is a simple mathematical calculation which applies historical claim development factors to reported claims to determine the estimate of total incurred loss for accidents occurring in the fiscal year. The development factors reflect the reported pattern of prior workers' compensation costs occurring as a result of claims. The development factors vary based on the age of the reported claims, and include both the average cost of reported and incurred but not reported (IBNR) claims. At RTD, the calculated incurred loss value is then adjusted (downward over the past three years) using RTD's best judgement as to what actual costs will be. The primary reasons that judgement is applied are that the development factors have not been verified based on an actuarial process and administrative capabilities have resulted in some imperfections in reporting claims (e.g., some double-counting of claims have occurred in the past, and work capacity has resulted in slower processing of some claims in prior years).

Because the actual results of this practice has been under reserved for incurred loss (as shown by the retrospective analysis of reserves in Section III) in the past several years, and judgement has been applied to lower the values calculated by the Incurred Loss Development Approach, another way to examine workers' compensation cost is to use the value calculated by the Incurred Loss Development Approach before judgement is applied. This results in a workers' compensation cost growth trend of 108 percent over the period FY83 to FY85 (as opposed to the 87 percent Blue Book value) as shown below:

Fiscal Accident Year	Estimated Ultimate Claim Amount	Cumulative Growth Rate
	(amounts in thousands)	
1983	$12,353	
1984	19,736	+59.7%
1985	25,699	+108.0%

This could be considered to represent the total cost growth over the FY83-FY85 period.

C. CONTROLLABLE/NON-CONTROLLABLE COST TREND

The growth in workers' compensation costs is attributable to some factors which management cannot influence and some which are subject to influence by management. The increase in exposures (i.e., payroll value) and the increase in benefit levels (i.e., legal changes) could be considered as non-controllable factors. To determine the controllable amount of cost growth, the effect of these two factors could be removed from the total cost growth suggested by claims grouped and valued correctly on an accident year basis. Although the estimate of incurred loss on a fiscal accident year basis using the Incurred Loss Development Approach by RTD could be misstated, it appears to be a reasonable barometer of cost growth given the arguments made above. Using this assumption and removing the effect of the growth in exposures and benefit levels, would result in a cost growth of 33.4 percent which is subject to management influence:

Fiscal Year Period	Cumulative Growth Rate	Increase in Exposures (1)	Increase in Benefit Levels (1)	Controllable Cost Growth (1)
1983-85	+108.0%	+19.9%	+31.0%	+33.4%

(1) Please note that growth rates are to be compounded, and not merely summed.

D. ANALYSIS OF CLAIMS

While it is not the intent of this review to conduct a detailed analysis of claims, it is necessary to comprehend the general characteristics and trends of claims to evaluate overall functional area performance. An analysis of the claims in the eleven months ending May 1986, as reported by the claims administrator, has resulted in the following observations:

- Exhibit I ranks the five types of accident (or type of claim) that contributed the greatest proportion of cases over the period. These cases comprise fully 40 percent of the total period claims of 2,267.

- Exhibit II ranks the five types of accidents that are the largest contributors to the total cost of the workers' compensation program. These accidents are responsible for 67 percent of the total losses of $10.7 million. As the exhibit shows, stress and strain and traffic conditions are the main contributors to the total cost of workers' compensation at RTD.

- RTD's safety department has also determined that in the aggregate, stress and strain injuries, back injuries, and traffic accident-related injuries constitute 97 percent of all workers' compensation cases.

EXHIBIT I

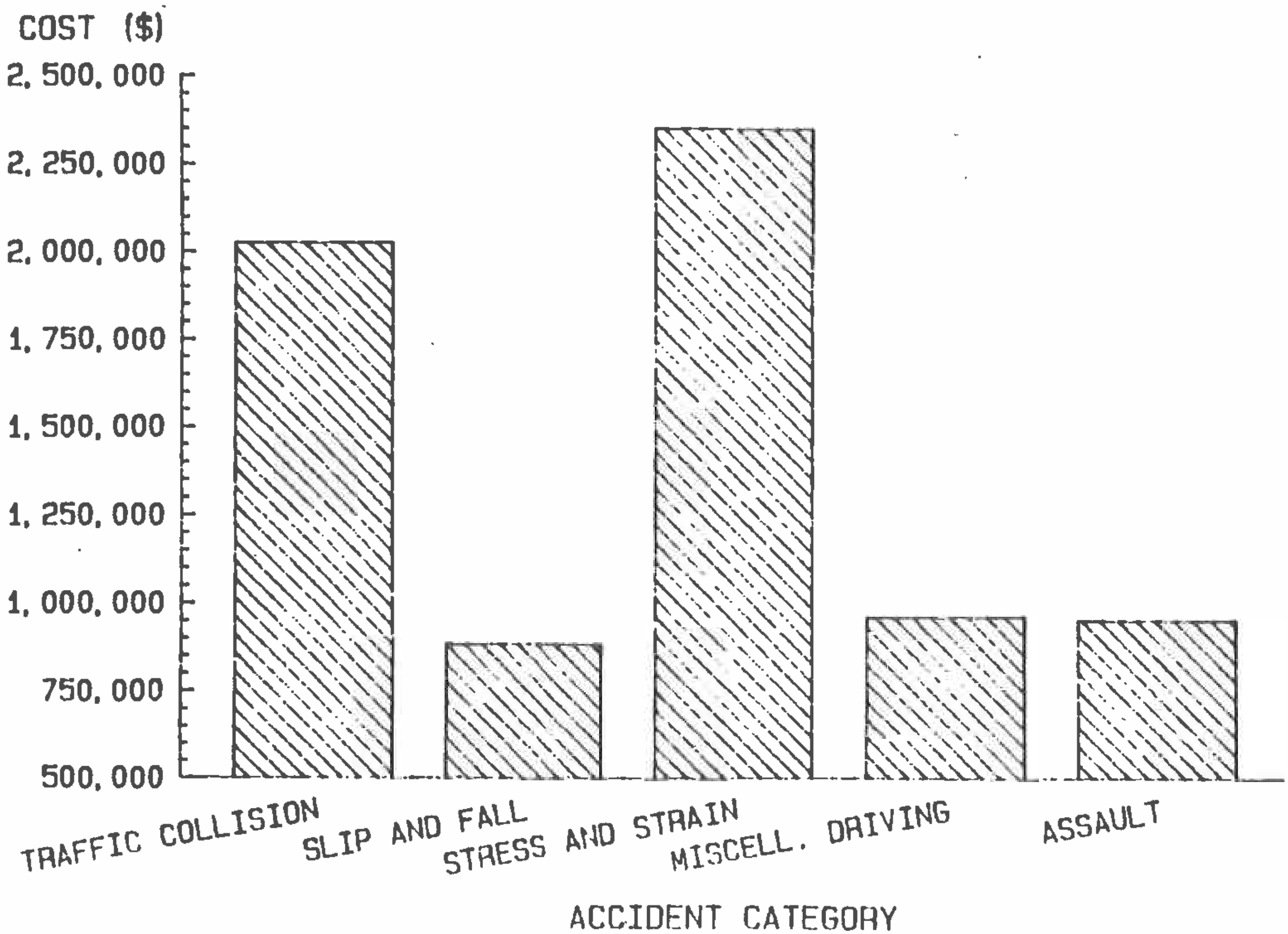
SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

ACCIDENT FREQUENCY AND COST BY CATEGORY: FY 1986 [1]

Accident Category	Number of Cases	% of Total Cases	Cost	% of Total Cost
Struck by Object	253	11.2%	$ 620,626	5.8%
Traffic Collision	250	11.1%	2,027,076	19.0%
Slip and Fall	220	9.7%	883,936	8.3%
Stress and Strain	216	9.5%	2,350,752	22.0%
Miscellaneous Driving	180	7.9%	962,243	9.0%
Assault	148	6.5%	951,140	8.9%

1. Source: Safety Management Scoreboard for SCRTD Workers' Compensation, Leonard J. Russo, Inc., May 20, 1986 (most frequent and costly accident categories). Please note that this was the most complete data available at the time of review. It is not a complete record of all FY86 loss experience.

SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT
ACCIDENT COST BY CATEGORY: FY 1986



- The reason that stress and strain injuries and traffic collisions are high contributions to RTD's workers' compensation costs is that these case types have twice the average severity of all accident types. The six highest severity type of accidents are shown below:

SEVERITY BY TYPE OF ACCIDENT/CLAIMS

Stress and strain	$10,883
Traffic collision	8,108
Assault	6,428
Noise	6,304
Caught in steering	6,246
Pothole driving	5,842
Average severity of all claims	$ 4,713

- Stress and strain and traffic collision accidents are not only the main contributors to the cost of workers' compensation, but are also the main contributors to employee absences. The following ranks the different types of accidents by its contribution to absenteeism:

TOTAL ABSENCES

BY TYPE OF ACCIDENT/CLAIM

	Days Absent	Percent of Total Days Lost to Workers' Compensation
Traffic collision	565	14.9%
Stress and strain	477	12.6%
Miscellaneous driving	405	10.7%
Lifting	317	8.4%
Struck by object	305	8.0%
Subtotal	2,069	54.6%
Total	3,798	100.0%

Determining the trend in workers' compensation claims in terms of frequency and severity is an appropriate means of identifying reasons for cost growth. Frequency and severity are also accepted standards by which most companies appraise their industrial injury record and set goals for achievement. Frequency is the number of claims incurred per exposure unit, (i.e., per $100 of payroll). Payroll is a good measure of risk because it reflects the three items that influence workers' compensation risk: the number of employees, the type of employees and their salary. Severity is the average amount of loss per claim. It measures the seriousness of an injury, as well as the effect of the workers' compensation benefit levels per the incident.

Exhibit III calculates the frequency and severity for the fiscal accident years 1983-1986 based on interim year calculations, and compares the growth rates for frequency and severity. Severity has increased at a far greater pace than has frequency, hence severity has contributed more to overall workers' compensation cost growth than frequency. On a cumulative basis, severity has grown by 45 percent for the period FY 1983-1985, compared to the growth of 19.5 percent for frequency. Furthermore, since there has been a slight reduction in growth for frequency from FY 1984-1985, it appears that some success is being achieved by RTD in their effort to keep the growth in the number of accidents in line with the growth in their exposures.

EXHIBIT III

SCRTD WORKERS COMPENSATION COST REVIEW

FREQUENCY/SEVERITY GROWTH RATES(1)

Fiscal Accident Year	Estimated Ultimate Liability ($ 000's) (1)	Estimated Ultimate # of Claims (2)	Exposure (Per $100 of Payroll) (in $million) (3)	Frequency (4)=(2)/(3)	Severity (5)= (1)/(2)
1983	$12,353	2,307	$2.25	0.103%	5,354.6
1984	19,736	3,134	2.50	0.125%	6,297.4
1985	25,699	3,309	2.70	0.123%	7,766.4
1986	29,610	3,400	2.92	0.116%	8,708.8

GROWTH RATES*

Fiscal Accident Year	Growth Rates: Frequency: Yearly	Growth Rates: Frequency: Cumulative*	Growth Rates: Severity: Yearly	Growth Rates: Severity: Cumulative*
1983	-	-	-	-
1984	+21.4%	+21.4%	+17.6%	+17.6%
1985	(1.6%)	+19.5%	+23.3%	+45.0%
1986	(5.7%)	+12.7%	+12.1%	+62.6%

*Cumulative - starting with Fiscal Accident Year 1983.

(1) These are interim calculations and do not reflect year end values at the RTD. The best available information was used at the time of the review. While the absolute values may not conform with year end values, the trend of frequency and severity is reflective of RTD experience.

III. RTD CLAIMS RESERVING POLICIES

III. RTD CLAIMS RESERVING POLICIES

This section presents RTD's claims reserving procedures, as well as claims administration information relating to the District's management program for workers' compensation.

A. SCRTD PROCEDURE/METHOD TO ESTIMATE TOTAL RESERVES

As discussed in Section II, RTD uses the Incurred Loss Development Approach in estimating reserves. Under this method, claims are reported to date by accident fiscal year and projected to ultimate dollar liability for the District, using development factors. The development factors use the reporting pattern of past claims, including late reporting trends, change in reserves and age of claims to determine anticipated incurred loss. Different development factors are used for groups of claims by age.

This simple calculation forms the base for determining incurred loss, albeit the number calculated is not the ultimate claim value used in establishing reserves. RTD uses its professional judgement to adjust the figure produced by the Incurred Loss Development Approach to reflect what the District believes is a more accurate depiction of ultimate liabilities.

There are several good reasons for not using the Incurred Loss Development Approach exclusively. First, in 1983 and 1984 there were significant changes in the State Workers' Compensation Benefits legislation. Specifically, the maximum benefits for some types of injuries have been increased. In administrative terms, this indicates that it will take longer for the reported claims to reach their ultimate value. Using the historical development patterns for the accident years 1983 and 1984 would tend to underestimate the ultimate incurred loss (i.e., the factors may assume that unreported claims materialize faster than they are likely to under new law).

Second, the development factors used in preparing the total reserve factors do not evaluate changes in the mix of indemnity, medical and loss adjustment expenses. The mix of claims is routinely considered in the development of case reserves as each claim is valued separately by the administrator. The development factors used to inflate case reserves to total reserves are based on the number and age of claims, rather than mix. It makes logical sense that claims that take longer to develop increase as a proportion of total claims over time. To the extent that these claims have a different average value than others comprising the total incurred loss, the ultimate value of the liability will change. Industry experience suggests that claims which take longer to develop often come at a higher cost, indicating a potential for underestimating reserves as a result of changes in the mix of claims.

Third, a recent audit of RTD's claims administrator conducted for the RTD by Warren, McVeigh, Griffin & Savage (WMG&S) found that some duplicate disability reserves have been established in the recent past. Because development factors are applied to case reserves, the overstated amount is compounded and results in overestimated reserves.

Finally, some other administrative issues make use of the Incurred Loss Development Approach calculation subject to question as the "true" ultimate claims liability. The estimate of total reserves is not based on a comprehensive actuarial review, although major parts of an acturary review have been used in some elements. Overall, RTD's management, workers' compensation approach and administration have undergone substantial changes, as discussed throughout this report, which are not reflected in development factors.

These facts support the lack of reliance on the strict calculations from the Incurred Loss Development Approach. In fact they suggest the need for a comprehensive actuarial review to update and quantify more responsive factors for use by the RTD. In the interim, professional judgement prudently applied should provide a benefit in terms of better reserve estimates.

B. ADEQUACY OF RESERVES

Given a general understanding of the claims reserving process and the complexities of estimating incurred losses, it is appropriate to examine the reserving performance of the RTD. Reserving performance is measured in terms of the accuracy with which incurred loss is estimated. An actuarial review is required to strictly quantify the amount of over- or under-reserving, and is not included in the scope of this study. While it is not possible to quantify the magnitude of over- or under-reserving, it is possible to review recent historical reserving performance at the RTD. A reasonable test of reserving adequacy, frequently used in the insurance industry, is the Retrospective Test of Total Reserves. This test evaluates past records of total reserves (i.e., or the past estimate of ultimate incurred loss) against their most recent estimate. This evaluation technique is founded on the premise that the most recent estimate is a good barometer of performance because it has the benefit of more information and more claims have already been concluded.

The results of the Retrospective Test of Total Reserves, shown in Exhibit IV, indicate that RTD's recent historical practices have resulted in under-reserving. On April 30, 1984, RTD valued incurred losses for accident years FY79 through FY84 at $49.5 million. One year later the amount was revised upward to $54 million, and on June 30, 1986 was valued even higher at $59.6 million. This indicates that, in RTD's opinion, the ultimate incurred loss estimate for the accident years indicated made in FY84 was understated by more than $10 million.

EXHIBIT IV

RETROSPECTIVE TEST OF RESERVES

ESTIMATE OF ULTIMATE INCURRED LOSSES

(amounts in thousands)

FISCAL ACCIDENT YEAR	AT VALUATION DATES: 4/30/84	4/30/85	4/30/86	6/30/86
1979	$ 7,300	$ 8,500	$ 8,200	$ 8,315
1980	8,250	8,500	8,300	8,286
1981	8,500	7,800	8,400	8,426
1982	7,000	7,460	8,400	7,743
1983	8,000	9,500	11,700	11,108
1984	10,500	12,250	16,000	15,659
Subtotal	$49,500	$54,010	$61,000	$59,573
1985		$15,578	$20,000	$20,000
Total		$69,588	$81,000	$79,573

On the April 30, 1985 valuation date, RTD estimated the ultimate incurred loss for fiscal accident year 1985 at $15.6 million. Fourteen months later, this figure was increased to $20 million based on RTD's belief that the initial estimate was understated by $4.4 million or 22 percent. Incurred losses for each of FY82, FY83, FY84 and FY85 show significant understatements in the retrospective test of reserves.

Similar trends are found in figures reported to the California Department of Industrial Relations and Self Insurance Plans. The incurred loss, which includes payments to date and remaining reserves, shows consistent understatement in each of the prior three years.

In addition to the complexities discussed under the current reserving practices (in subsection A), there are three primary factors contributing to this trend. First, the average open case reserve has not increased in the same proportion as the increase in the average size or severity of claims, as illustrated in Exhibit V. The exhibit shows a consistent group of claims over a number of development periods. From a logic standpoint, one would expect that the growth in average claim value (i.e., severity) would be reflected in the growth of the average open reserves (i.e., knowledge that cost per concluded claim has increased would result in a like increase in the reserves for open cases).

Comparing the three most recent accident years indicates that average claim value has increased at a rate 132 percent faster than the value of average open reserves (i.e., a 2.3 percent change in average claim value results in a 1 percent change in average open reserves). This suggests that the average open case reserves have not been established using the latest available claims payment information. Consequently, the total case reserves were probably not as adequate as they could have been, had average claim value changes been incorporated more quickly into the reserving process.

EXHIBIT V

SCRTD WORKERS COMPENSATION COST REVIEW

GROWTH COMPARISON:

AVERAGE OPEN CASE RESERVES VERSUS AVERAGE CLAIM

GROWTH* IN AVERAGE OPEN RESERVES

Fiscal Year	Months of Development 10	22	34	46
1982			-	(8.6%)
1983		-	42.4%	10.3%
1984	-	8.8%	55.2%	
1985	37.8%	20.3%		
1986	56.6%			

GROWTH* IN AVERAGE CLAIM VALUE

Fiscal Year	Months of Development 10	22	34	46
1982			-	(1.5%)
1983		-	77.2%	42.6%
1984	-	52.3%	120.9%	
1985	49.4%	91.4%		
1986	84.3%			

*In most recent three accident years.

Second, backlog in claims processing exists because of the lack of claims examiners. In the past two years, there has been a dramatic increase in workload without any accompanying increase in the number of claims examiners. For example, when Leonard J. Russo Insurance Services (LJR) was hired two years ago, it was anticipated that there would be 2,100 new claims per year. LJR has indicated that the actual experience was approximately 2,941 claims incurred during FY85 and 2,597 claims incurred during FY86. Furthermore, the ratio of indemnity to medical only claims was intially estimated at 4:1. Recently, LJR estimated the actual ratio to be more like 7:1. Inasmuch as indemnity files require many more administration hours than medical only files to review and process, work backlogs will naturally occur. This backlog probably contributes to delays in recognizing increases in severity, and hence deters immediate incorporation of new settlement information into case reserving practices.

The backlog has resulted in slower settlement periods, as shown in Exhibit VI. As demonstrated in the exhibit, RTD has moved from closing 55 percent of total reported claims within 10 months (FY83) to closing 35 percent in FY86. This gives the District less information on which to base incurred loss estimates and requires greater care in using old development factors.

RTD has recognized the cumulative impact of excessive claims examiner workloads and has taken positive action to improve the situation. RTD has recently increased the LJR contract to expand the number of claims examiners, among other things, to improve workers' compensation performance. This action and others are discussed in more depth later in this report.

B. CLAIMS ADMINISTRATION AUDIT RESULTS

Since October 1, 1984, the SCRTD workers' compensation claim administration program has been contracted to Leonard J. Russo Insurance Services (LJR). Prior to that, it was administered for

EXHIBIT VI

SCRTD WORKERS COMPENSATION COST REVIEW

RATIO OF CLAIMS CLOSED TO TOTAL NUMBER OF CLAIMS REPORTED

Accident Fiscal Year	Months of Development					
	10	22	34	46	58	70
1979					91.6	94.6
1980				89.7	92.6	92.8
1981			86.6	90.3	90.9	92.8
1982		82.4	90.8	86.3	89.4	
1983	55.0	81.0	78.0	82.0		
1984	50.3	63.5	74.4			
1985	42.1	62.6				
1986	35.2					

separate accident years by the firms of Bierley and Fleming. LJR is a regional company that has its main office in Emeryville, California. LJR administers RTD claims from a dedicated unit in its Los Angeles office.

On May 21, 1986, the risk management firm of Warren, McVeigh, Griffin & Savage (WMG&S) issued a report regarding their audit of RTD's Workers' Compensation Claim Administration Function. In their report, they have concluded that LJR has complied with the Labor Codes as well as the Workers' Compensation State Laws. They have also concluded that the quality of processing for RTD workers' compensation claims has suffered because of inadequate staffing. Excessive case loads have prevented LJR's claims examiners from maximizing their efforts to minimize the value of each claim.

WMG&S also compiled statistics to confirm the extent of the litigation problem in RTD. Based on the information compiled by the California Workers' Compensation Institute on the ratio of applications for adjudication filed to total claims reported (including medical only claims), WMG&S has determined RTD's litigation ratio in the past three years to average 20.0 percent, which is significantly higher than the ratio for California of 8.9 percent, and the average for Northern California of 6.9 percent and for Southern California of 10.4 percent.

D. CHANGES IN CLAIMS ADMINISTRATION CONTRACT

On July 1, 1986, RTD's contract with LJR was renewed for another year. The renewed contract will cost RTD $1,477,600, an increase of $555,600 over the prior years' cost of $922,000. Under this renewed contract, several modifications to the claim administration program were agreed upon with the intent of improving its effectiveness:

- LJR will identify and process multiple claims from the same case as a "package". This will result in better coordination of claims processing and prevent potential duplication of claim payments and claim reserves.

- The staff dedicated to RTD will be increased in order to more effectively deal with the claims processing function. The proposed changes in the staff will be as follows:

Position	Present	Proposed
Hearing representatives	0	2
Field investigators	0	2
Examiners	10	14
Managers/Supervisors	3	4
Technical/Clerical	9.5	11
Total	22.5	33

- Hearing representatives will handle approximately 25 percent of all incoming litigation cases, thereby reducing the cost of a defense council. Since an average annual cost of defense legal costs is $1.5 million, a $400,000 savings is expected by RTD. The hearing representative will also, a) represent RTD in settlement conferences, b) negotiate settlements, c) attend formal and informal rehabilitation conferences, and d) file answers to applications. Field adjusters are expected to provide more timely and more detailed field investigation of claims.

- In addition to the increase in staff, another claims data processing terminal will be added to RTD's location increasing the speed with which claims data are entered into the system.

- LJR will have the added responsibility of handling vocational rehabilitation cases. In the past, this has been handled by an RTD representative. Vocational rehabilitation is the step or steps needed to get an injured worker back to a job after the worker has reached maximum medical recovery.

IV. RTD SAFETY PROGRAMS

IV. SCRTD SAFETY PROGRAMS

SCRTD's Workers' Compensation Safety Program is part of the District's overall Bus Safety Program. This program, which also serves to decrease SCRTD's public liability insurance costs and workers' compensation claims, emphasizes driver education training, as well as supervisory monitoring, to achieve targeted goals and objectives. While not an exhaustive list, following are some of the significant elements of the program:

- The safety program is part of the operator selection and hiring process. Applicants are evaluated to determine if they possess the aptitude, temperament, and physical abilities necessary to safely operate a bus. The process involves a thorough medical examination as well as a drug screen.

- Eligible candidates undergo an intensive driver's certification program. During the probationary period, this program includes driving mechanics, passenger relations, emergency preparedness, and defensive driving.

- All operators are given periodic checks by instructors to insure adherence to prescribed procedures and safe driving techniques.

- District routes are constantly monitored by supervisors who issue citations to operators involved in safety rule violations.

- Operators receive information regarding policies and safe driving practices by means of bulletins and notices.

- Incentive programs, offering recognition to operators driving a full year without incurring a preventable accident, include monetary awards.

- Safety performance information is developed and issued to each division manager. This information assists managers in the loss control efforts as well as in providing feedback to the operator population.

Although the safety program was not a major focus of this performance review, the existing program does contain elements aimed at workers' compensation risk reduction. More importantly, SCRTD has developed a number of initiatives to be executed in FY87, aimed at reducing accidents and injuries to employees. These initiatives are discussed in the next chapter -- Conclusions, Plans and Recommendations.

V. CONCLUSIONS, PLANS AND RECOMMENDATIONS

V. CONCLUSIONS, PLANS AND RECOMMENDATIONS

This section of the Workers' Compensation report presents an overview of study conclusions on performance, RTD's plans and initiatives for FY87, Price Waterhouse recommendations and a suggested cost monitoring methodology.

A. CONCLUSIONS

Following are the conclusions reached as a result of the review of the workers' compensation program of RTD:

- It appears that the 87 percent growth in workers' compensation costs presented in the Phase I report for FY83-85 period might be understated. It is understated because the RTD's claims setting procedures tend to understate their estimated reserves requirement over that period. A simplistic approach that appears to be an improvement of the estimate of the ultimate cost of claims for Fiscal Years 1983 to 1985 suggests a growth rate during the period of about 108 percent. Most of the workers' compensation cost growth was not subject to influence by management. If the noncontrollable factors are removed (i.e., increased payroll cost and legal changes), the resulting controllable growth rate is then 33.4 percent. This number represents a simplistic estimate of incurred loss and net change in reserves requirement over the period in question. It has not been actuarially confirmed.

- RTD's estimate of workers' compensation cost does not include the cost of managing the program, the cost for insuring the portion of each claim that is over

$500,000, or the fringe benefits provided employees beyond legal workers' compensation requirements. Furthermore, there is no recognition of the benefit of investment income that was earned on the claims reserves before they were fully dispersed over the performance audit period. RTD, per UMTA instructions, will reflect investment income from reserves starting with fiscal year 1987.

o Stress and strain injuries, back injuries and traffic collision related injuries constitute 97 percent of all workers' compensation cases. These injuries are also the most expensive on a per claim basis.

o Over the period FY82 to FY85, the RTD generally underestimated the value of ultimate incurred loss on an accident year basis, which resulted in underreserving for claims related to accidents occurring in each of these four fiscal accident years. The magnitude of shortfall has not been actuarially defined, but exists based on better claims information available today in both the opinion of RTD and Price Waterhouse.

o Two primary conditions contributed to the underestimated incurred loss in FY82, FY83, FY84 and FY85. First, the Incurred Loss Development Approach as modified with RTD's professional judgement, has not been sufficiently responsive to changing conditions over the period reviewed. The development factors have not been actuarially defined and they have not been adjusted to accomodate the changed legal environment, changes in claim resolution time and changes in the mix of claims. RTD has recognized some shortfalls related to the mathematical calculation, and applies professional judgement in producing the final estimate. Second, the claims administrator workload has contributed to the underestimation of incurred loss related to case reserves. The average severity of claims (i.e., cost per claim) has increased at twice the rate of the average open case reserve. This indicates that the most recent claims cost information has not been incorporated into reserving practices in a timely manner. Claims are taking longer to conclude, and hence less information is available to estimate incurred loss at any given point in time. Both of these factors suggest that the claims processing and management have suffered as a result of inadequate staffing. RTD's risk management consultant, in a recent audit of workers' compensation, determined that excessive case loads have prevented RTD's claims administrator from maximizing their efforts to minimize the value of each claim. RTD has recognized problems in this area over the period reviewed, and has already taken positive actions to improve results.

o RTD recognizes that the growth in workers' compensation costs needs to be reduced. Consequently, they have implemented various initiatives for Fiscal Year 1987 with the intent of improving the effectiveness of their claims administration procedures and their safety program. RTD has estimated that these initiatives could reduce the workers' compensation cost by $3 million to $5 million. In addition, these initiatives are expected to significantly improve reserving capabilities and safety. Some of the initiatives for 1987 are as follows:

a) The fee that will be paid to RTD's claim administrators was increased from $922,000 to $1,477,000 on July 1, 1986. This increase is being used to increase the staffing level and service received by RTD, with the hope that the resulting workers' compensation cost will be reduced. It is believed that more investigation of claims will be made, and that fewer litigated cases - which tend to be more costly, will develop. Some savings, while not investigated in this review, are reported to already be accruing by RTD (i.e., based on a discussion with RTD staff and LJR in September 1986).

b) The Safety Program will be improved by increasing the involvement and responsibility in the overall District-wide objective of loss reduction to non-contract supervisors. Furthermore, more instructional sessions are planned for next year to increase the safety awareness of workers.

These improvements are discussed in greater detail in the following section.

B. RTD FY 1987 PLANS AND INITIATIVES

RTD is aggressively pursuing improvements in the workers' compensation management program to improve employee safety and reduce costs. Two significant areas of improvement plans include claims administration and the District's safety program.

1. Claims Administration - 1987 Initiatives

In addition to the changes in the contract with LJR, through the direction of the Risk Manager, the following initiatives are being implemented for fiscal year 1987:

- A 90 percent compliance with the claims administration contract and standards of performance will be enforced in 1987. To determine if compliance was made, a sampling of claim files will be audited quarterly for medical control, and reserving practices. Furthermore, investigations will be made to assure that benefits are provided to injured employees expeditiously, paid at proper rates, and that claims are processed in compliance with the contract.

- More investigations of claims will be required in 1987. Instead of 1 in 190 cases which have been the practice in the past, 1 in 20 cases will now be investigated. Through increased investigation and better coordination of the workers' compensation, public liability and property damage investigations, it is hoped that malingering and fraudulent claims can be reduced. Furthermore, RTD believes that through a prompt investigation of claims, the number of litigated claims will decrease.

- An effort will be made in 1987 to reduce the percentage of litigated cases from 20 percent to about 10.4 percent, which is the average percentage in Southern California. This effort is precipitated by the general understanding in industry that litigated claims cost more than non-litigated claims. There are various reasons for this, one of them being that additional expenses have to be incurred such as attorneys' fees and other legal/medical costs for litigated cases. Furthermore, according to WMG&S, in a recent study by the California Workers' Compensation Institute, it has been determined that the cost of litigated claims are not only more expensive but have increased much faster than non-litigated claims in the past 2-3 years. Specifically, the average additional expense for attorneys fees and legal/medical costs on litigated claims have increased by 45 percent over the amount suggested by a similar study done in 1982.

One of the approaches that RTD will use to reduce litigated cases is to communicate to their employees through their internal publication "Headway", that attorney fees are deducted from the award for permanent disability benefits. RTD will also try to indicate to their employees that they will do everything possible to help them with their claim if they are not represented by an attorney, but cannot talk to them if they have one.

- Efforts will be made to reduce malingering and fraudulent claims. RTD plans to identify precedent setting fraudulent cases and to prosecute the employee if the claim is found to be fraudulent. Furthermore, benefits paid to fraudulent employees and abusers of the workers' compensation system will be required to be returned. RTD has indicated that this is not inconsistent with the State workers' compensation laws.

- A plan is also being instituted for 1987 to identify unprovoked attacks and to gather statistics on them. In the past three years, the incidence and amounts paid for unprovoked attacks have increased as indicated below:

GROWTH IN UNPROVOKED ATTACKS

	FY 1982/83	FY 1983/84	FY 1984/85	FY 1985/86 (9 months)
Amount Paid	$246,467	$250,376	$762,834	$469,679
Number of Claims	88	94	100	77
Average Cost	$ 2,801	$ 2,664	$ 7,628	$ 6,100

Growth in unprovoked attacks could be explained by the higher benefits paid for these types of claims as dictated by the employee's union contract. Specifically, for these claims the employee is paid 100 percent of their salary for the first week that they are out of work, and thereafter, 80 percent of their salaries for up to two years that they are out of work. The benefits dictated by the workers' compensation state laws are charged as workers' compensation cost while the remainder is paid by RTD and included as part of the workers' fringe benefits. To reduce the costs of unprovoked attacks in 1987, RTD will investigate all unprovoked assaults and will require that police reports and witness reports be submitted. With this new procedure and requirement, as well as the plan in 1987 to prosecute all abusers of the benefit, it is projected that fraudulent cases relating to unprovoked attacks will be reduced. Also, RTD will continue to pursue on operator-passenger relations training program.

- RTD is restructuring its Special Assistant Program, in which involvement is mandatory as of September, 1986. This program encourages those employees that are injured or ill and not in a vocational rehabilitation program, and released by the attending physican to a temporary work status of light duty, to return to a modified work either in his department or other departments where his assistance if of benefit to RTD.

2. <u>Safety Program - 1987 Initiatives</u>

In addressing the problem of increasing workers' compensation costs, RTD has recently implemented the following loss reduction initiatives as part of its FY87 objectives:

- All non-contract supervisors have now been given increased involvement and responsibility in the overall District-wide objective of loss reduction:

a. Supervisors are now required to develop safety related tasks and standards for controlling and preventing accident losses.

b. Supervisors are now required to investigate all occupational accidents. This is required of both transportation and maintenance occupational accidents.

c. The Safe Awards Program has now been expanded to include supervisors. Previously, this incentive program (which was a way to recognize the employees' contribution to the effectiveness of the District's safety program) covered only transportation and contract personnel. The program will now include such supervisors as Transportation Division Managers, Assistant Managers, Transit Supervisors and Instructors, Maintenance Managers, Supervisors and Transit Police.

o More instructional sessions are planned for next year:

a. The Behavioral Modification Accident Program, which was first implemented at four transportation divisions last year, will be expanded. This program identifies and changes unsafe actions and habits exhibited by operators, and focuses on the prevention of back inquiries.

b. Operators are now required to undergo Defensive Driver Retraining following the first preventable accident.

c. An information campaign, called the Safety Alert Program, has been implemented to increase operators' awareness of the consequences of all types of safety concerns (e.g., wet weather driving, sudden or hard braking).

- The Personal Protection Equipment Enforcement Campaign which was first implemented toward the end of fiscal year 1986, will have its first full year impact in fiscal year 1987. Through this campaign, employees are informed of operations and areas where the use of specific personal protective equipment is mandatory.

- RTD has increased its ability to gather information that will identify the types of accidents that occur which in turn will help them develop loss prevention strategies. For example, the accident investigation procedures were formalized towards the end of FY86. Furthermore, the type of accident codes currently used will be expanded to be more descriptive. For example, the code Various Traffic Collisions will be broken down to better describe the specific type of collision.

- Improved physical class standards and specifications will be implemented in FY87. For example, it has been identified that a minimum physical ability is required for an operator, such as height, weight and physical well being. Consequently, only operators that meet these physical characteristics will be hired. Furthermore, it was determined that certain bus equipment designs and characteristics have increased the frequency of back injuries. This includes the design of some of the seats and the relative position of the steering wheel to the seat. These conclusions were reached through the Anthropometric Survey that was conducted last year to examine the man/machine interface of the bus and operator. Although implementing these new standards and specifications will increase RTD's costs, the benefit of reduced back injuries and stress and strain are expected to more than offset those costs.

C. RECOMMENDATIONS

Because of the comprehensive list of initiatives that RTD plans for 1987, it is difficult to develop additional recommendations without duplicating what is already included in their initiatives. Irrespective, the following is a list of recommendations that RTD should consider:

- One of the priorities for 1987 should be the reconciliation of all claim files with the Claims Information System. This should be done at least once a year. During their audit, WMG&S observed 20 closed claims that are still designated as open in the Claims Information System. Since management strategy, as well as performance evaluation are based on information produced by the Claims Information System, it is necessary that the data in that system be accurate. This is a recommendation that RTD agrees with and will implement in FY87.

- Inasmuch as it takes workers' compensation claims several years to develop and to be paid out completely, total reserves have to be estimated. It is then important that total reserves be estimated as correctly as possible. It is recognized that RTD has done its best to estimate reserves with available information and tools. In fact, RTD's record of reserving performance has been better than its last three claims administrator. Even so, recent past performance has demonstrated significant underestimating. Any understatement or overstatement in reserves would obviously result in an incorrect measure of performance. In order to assist RTD in valuing their total reserves, it would be appropriate for RTD to consider using the services of a consulting actuary. Besides using an acceptable actuarial method, the actuary will have the experience and knowledge to quantify and reflect the following factors in their reserves calculation:

a) changes in claims administrator's case reserves adequacy,

b) changes in the claims reporting and payment pattern,

c) changes in the mix of claims,

d) changes in the benefit laws, and

e) changes in the reinsurance retention level.

This is a recommendation RTD agrees with and plans to implement by December 1986. The results of an actuarial review will complement other programs intended to improve reserving performance.

o Although growth in workers' compensation costs is the final measure of the success of any loss control and loss reduction efforts, additional performance standards should be used in order to determine which aspects of the loss control program have been successful and which have not. Growth in frequency and severity rates are the most commonly used criteria for workers' compensation. Although some measure of frequency is compiled by RTD, it is for the number of accidents instead of total workers' compensation claims. Growth in frequency rates measures the overall performance of the safety program while growth in severity measures more closely the success of the claims administration program. Furthermore, it is appropriate that a report be prepared on a regular basis showing frequency and severity by type of injury, as well as claim -- indemnity, medical or loss expense. Besides frequency and severity, the following performance standards should also be considered:

a) Trend in the litigation ratio;

b) Trend in the subrogation ratio. This could be defined as the number of subrogated cases to total cases as well as the total amounts of subrogation recoveries divided by the total amount of claims;

c) Number of claims investigated over the total number of claims; and

d) Average number of days before settlement, in order to measure the success of bringing claims to an early conclusion thereby reducing the likelihood of a claim becoming more expensive because it becomes a litigated claim, and in order to reduce litigation costs. RTD plans to implement most of the above recommendations.

- RTD should consider using structured settlements in settling claims. At the time of our review, it appears that there is only one open claim that was being considered for settlement on a structured settlement basis. Structured settlements offer opportunities to reduce overall claims expenses. It is estimated that consistent utilization of structured settlements can result in an average reduction of settlement costs of 10-20 percent. This approach, which allows for commutation of workers' compensation claims through either lump sum or periodic payment basis, is receiving increasing acceptance by industrial accident commissions throughout the United States. RTD has agreed to consider the approach.

- Since stress and strain is one of the largest contributors to the overall workers' compensation cost, a study should be done to determine whether understaffing and the current overtime policy and requirements of RTD are contributing to this area of injury. RTD will be looking into a study similar to that suggested.

- As part of the claims administrator's function, RTD should consider requiring the administrator to document on a monthly basis all changes in their claims reserving policy, operations, and judgements in setting up case reserves. Specifically, changes in their productivity requirements, case work load per examiner, backlogs, and changes in their personnel (such as a shift from experienced to inexperienced employees) should be documented. The documentation should be done in order to help the consulting actuary quantify the effects of these changes to the required total reserves requirement. In September 1986, RTD and its claims administrator were working on a draft report outline that, when completed, will meet the needs discussed above.

- The return to work requirement under the Special Assistant Program was not mandatory at the time of the review. It was recommended that RTD consider making it mandatory inasmuch as it will further prevent any fraudulent and malingering cases. It appears that the California State Workers' Compensation Laws allow that it be made mandatory by subjecting the employee to termination of temporary disability benefits if he refuses to abide by the requirement. RTD investigated the feasibility of this recommendation, and implemented it in September 1986.

- It is recommended that RTD report the cost of workers' compensation and any accrued savings (as well as the actions contributing to the savings) to LACTC on a quarterly basis. The first report should be submitted for the period ending December 31, 1986 and should be submitted no later than one month and one day after that date. An annual summary of the quarterly activity should also be submitted to LACTC no later than six weeks after the last day of the fiscal reporting period. The methodology recommended for reporting the costs and savings are presented in the following report subsection.

- It is the intent of LACTC to follow up on RTD's progress in implementing improvements and on realizing cost savings. It is recommended that LACTC's performance auditor review the implementation status of recommendations, and accrued cost savings in six months from the date of this report. In anticipation of this review, it is suggested that RTD continue its practice of monitoring the status of recommended changes in the workers' compensation area.

D. COST MONITORING METHODOLOGY

As indicated earlier, it is appropriate that workers' compensation cost be measured on an accident year basis. RTD currently measures costs and performance on both a net fiscal year and a fiscal accident year basis. In addition, it is appropriate to reflect the following expenses:

- Expenses allocated to workers' compensation of the total Risk Management Department expenses. These expenses would include fees paid to the claims administrator, safety program expenses, salaries and overhead of the Risk Department personnel. These expenses should be included because they are expenses that had to be incurred to manage the self-insurance program. In addition, to reflect a decrease in the cost of the claims because of changes in the claims administrations personnel without reflecting the increased claims administration fee, would understate the cost or overstate the savings.

- o Reinsurance expenses. RTD has insured all amounts in excess of $500,000 in losses per occurrence. This reduces the cost of the claim, but to get this benefit, RTD had to pay reinsurance premiums. Not including these reinsurance premiums would understate cost.

- o Future investment income expected to be earned by loss reserves before they are completely used up for paying losses. This amount is not an expense but rather a reduction in expenses. It should be included in the total cost because this is a benefit of self insurance (it does not occur when purchasing insurance) that should be recognized.

Assuming that the fiscal accident year 1986 projected ultimate losses as calculated by the Incurred Loss Development Method is appropriate, the Fiscal Accident Year 1986 cost that might be the appropriate base to judge performance over the next year would be $21.1 million, which is calculated as follows:

1.	Fiscal Accident Year 1986 Ultimate Losses	$22,800,000
2.	Risk Management Expenses Allocated to Workers' Compensation (including cost of Claims Administrator)	$ 1,462,000

3.	Reinsurance Premiums	$ 252,000
4.	Expected Future Investment Income (1) x 0.152	$ 3,420,000
	Fiscal Accident Year 1986 Cost (1) + (2) + (3) - (4)	$21,094,000

The estimate of $21.1 million is based on RTD's calculation of ultimate incurred losses using the Incurred Loss Development Approach at the end of June 1986 (of $22.8 million). Because this estimate will change as losses develop, the estimate of total fiscal accident year 1986 costs of $21.1 million is also subject to change. Exhibit VII shows the calculation of the discount factor to ultimate losses to estimate the expected future investment income on loss reserves.

It is not assumed that RTD must use the Incurred Loss Development Approach calculation to estimate the incurred loss alone. However, if professional judgement is to be used the reasons for adjustment must be quantified. The performance auditor is expected to review the incurred loss estimate with RTD six months from the date of this report. RTD should recalculate the estimate for FY86 based on the best available data at the time of each report submittal.

EXHIBIT VII

SCRTD WORKERS COMPENSATION REVIEW
CALCULATION OF DISCOUNT FACTOR

Payment Year	Cumulative Payment Percentage (1)	Percent to be paid in years (2)	Present value Factor (3)	Ratio discounted to present Value (4) = 2) x (3)
First	24.2%	24.2%		24.2%
Second	47.5	23.3	.943	22.0
Third	58.8	11.3	.890	10.1
Fourth	65.3	6.5	.840	5.5
Fifth	70.4	5.1	.792	4.0
Sixty	72.8	2.4	.747	1.8
Seventh	80.0	7.2	.705	5.1
Eighth	84.0	4.0	.665	2.7
Ninth	90.0	6.0	.627	3.8
Tenth	92.0	2.0	.592	1.2
Eleventh	98.0	6.0	.558	3.3
Twelfth	100.0	2.0	.527	1.1
	Total	100%		84.8%

*Based on AM Best Statistics.

**Assuming investment rate of 6%.

Conclusion: The factor applied to ultimate losses to estimate future investment income on loss reserves is (1 - .848) = 1/52