SELECT COMMITTEE UPON PUBLIC SECTOR SUPERANNUATION SCHEMES

(together with Minutes of Proceedings)

November 1993

NSW Legislative Assembly

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COMMITTEE MEMBERSHIP

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Mr Bruce Whittle

COMMITTEE SECRETARIAT

Ms Catherine Watson - Project Officer

Ms Kendy McLean - Assistant Committee Officer

CLERK TO THE COMMITTEE

Mr Mervyn Sheather

FOREWORD

It is with satisfaction that I table this report of the Select Committee on Public Sector Superannuation Schemes.

I think I speak for the Committee as a whole, when I say that this has been a most challenging inquiry. This report is the culmination of evidence given to the Committee in the form of public hearings, written submissions and analysis by actuaries. A significant amount of such evidence was extremely technical and in this regard the Committee appreciates the assistance of its advising actuary Mr Bruce Whittle who clarified the more complex actuarial issues for them.

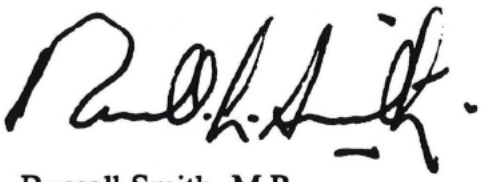
This Chairmanship has presented a particular challenge to myself, as I came late to this Committee after the former Chairman, the Hon Ray Chappell M.P. was unable to complete the inquiry after his elevation to the Ministry.

I consider it particularly pleasing that the Committee was ultimately able to achieve a consensus on the issues before it. Many of these issues had been, previous to the Committee's inquiry, matters of contention on the floor of the NSW Parliament.

I would like to formally place on the record my appreciation to Mr Chappell for his dedicated efforts during this inquiry and also to Mr Tony Packard, another former member of the Committee.

On behalf of the Committee, I also express my appreciation for the most efficient and dedicated way in which Ms Catherine Watson (Project Officer), Ms Kendy McLean (Assistant Committee Officer), and Mr Mervyn Sheather (Committee Clerk) carried out their duties.

Finally, I would like to extend my thanks to the Committee members who made their time available, sometimes at short notice, to attend meetings and hearings.



Russell Smith, M.P.
Chairman

TERMS OF REFERENCE

The Parliament of New South Wales established a Select Committee to consider and report upon:

(a) The accuracy of the government's costing projections and whether the Government's programme of funding the existing superannuation schemes is adequate to achieve a manageable level of unfunded liabilities and finance current and future benefit payments;

and in particular the adequacy of the First State Super Scheme;

(b) A comparison of the S.A.S.S. Scheme with all other existing Public Sector Superannuation Schemes.

GLOSSARY

Accumulation Fund	A superannuation plan where the employer and/or employees contribute a set amount that accumulates and earns income for the benefit of the members.
Defined Benefits Fund	A superannuation fund that contracts to pay a member a fixed or defined amount of money that is linked to the salary level.
Lump Sum Benefit	A benefit paid out in a single cash payment.
Portability	Allowing a superannuation plan to be transferred from one fund (or one employer) to another.
Superannuation Fund	Fund designed to produce retirement benefits for members. To attract tax concessions, it must have these characteristics: (a) be indefinitely continuing and (b) be maintained solely for following purposes: provision of benefits for fund members, or for dependants of each member in the event of death, or any other purpose allowed by the Insurance and Superannuation Commission in writing.
Unfunded Liability	The extent to which sufficient funds have not been set aside to cover current and future costs of superannuation benefits.
Vesting	The established entitlement of a member to his or her own contributions to a superannuation fund, the employer's contributions, and accrued interest.

SUPERANNUATION SCHEME ACRONYMS

FSS	First State Superannuation Scheme
SASS	State Authorities Superannuation Scheme
SANCS	State Authorities Non-contributory Superannuation Scheme
SSF	State Superannuation Fund
PSF	Police Superannuation Fund
PSESS	Public Sector Executive Superannuation Scheme
MCCK	William M. Mercer, Campbell, Cook and Knight Actuarial Consultants
SG	Superannuation Guarantee scheme

SUMMARY OF RECOMMENDATIONS

RECOMMENDATION 1:

Apart from the areas of discrepancy highlighted in the Government Actuary's reviews, the Committee accepts the reasonableness of the Government's costing projections arrived at by Mercer, Campbell, Cook & Knight.

RECOMMENDATION 2:

The Committee is satisfied on the evidence it received that the Government's current program of funding of the existing superannuation schemes is adequate to achieve a manageable level of unfunded liabilities and finance current and future benefit payments.

RECOMMENDATION 3:

The Committee recommends that the NSW Government monitors the ability of FSS to provide an adequate retirement benefit in relation to future trends in SGC levels and productivity bargaining.

RECOMMENDATION 4:

The State Superannuation Investment and Management Corporation should continue to strongly encourage all FSS members to make their own contributions towards FSS.

CLARIFICATION

Although this report was completed after the 1992/93 financial year, 1992 figures have been used throughout. It was considered that this would be most appropriate as the MCCK costing projections were based on these figures, as was the NSW Government Actuary's review.

The Committee does note that the 1992/93 Annual Report of the S.A.S.B. and S.S.I.M.C. does show a decrease in the growth of unfunded liability from $14.148 billion in 1991/92 to $14.117 billion as of 31 March 1993. This decline is similarly highlighted in the NSW Auditor-General's Report for 1993.

CHAPTER ONE

Background to NSW Public Sector Superannuation Schemes

Traditionally, NSW public sector superannuation schemes have been defined benefit schemes. In such schemes the benefit to be received on retirement is usually specified in terms of a multiple of final average salary over the last two years or so of the member's employment. In this type of scheme the onus is on the employer to provide the promised benefit and the member bears no risk. Defined benefit schemes pose particular problems for State Government employers as, even where the levels of employee contributions are fixed, the contributions made by the employer vary with changes to salaries, interest rates, inflation and retirement levels and expensive actuarial projections are needed to estimate future employer liability.

In contrast, the First State Superannuation scheme (FSS) is a wholly accumulation style superannuation scheme. In an accumulation scheme the amount of money receivable on retirement depends upon the amount contributed to the scheme and the level of investment income generated on that capital, less taxes and charges. The employee bears the risk on the rate of return for this investment.

FSS is also a minimum Superannuation Guarantee scheme which means that employer contributions are at the minimum level required under the Commonwealth's Superannuation Guarantee (Administration) Act 1992. This legislation requires the assets of the members' accounts to be fully vested in the member so they do not revert to the employer on some types of exit as is the case with most of the current public sector defined benefit schemes. The term 'vesting' means that members' entitlements are fully portable and if an employee resigns he or she may preserve the benefits within the scheme or roll them over into another superannuation or approved fund. It should be noted that not all accumulation schemes are fully vested and that only some defined benefit schemes are.

Defined benefits funds have responded to the Superannuation Guarantee scheme vesting requirements by adopting either defined resignation benefits detailed by an actuary or accumulation benefits. Often the defined benefits formulae is complex and not easily understood by members. In response, some employers with defined benefit funds have utilised the fully vested benefits scheme in preference to those under the Superannuation Guarantee scheme in order to use simpler formulae in defining the value of the member's accrued defined benefits.

Prior to the introduction of the First State Superannuation scheme, the major ongoing public sector superannuation schemes in NSW were: State Authorities Superannuation Scheme (SASS); State Authorities Non-contributory Superannuation scheme

(SANCS); State Superannuation Fund (SSF); Police Superannuation Fund (PSF); Public Sector Executive Superannuation Scheme (PSESS).

The State Superannuation Fund (SSF) was the initial major scheme for core public service agencies run by the NSW Government. It was closed by the Government in 1985 due to its high cost in employer contributions and the fact that the benefits were not service related. Average employer support in NSW for the SSF was found to be below that of the Commonwealth and most other states.

The SSF was a unit-based scheme, covering employees paid at an annual rate in the budget sector and in named statutory authorities. A characteristic of this scheme was that unit entitlements were related to salary. When salaries increased, an additional unit entitlement applied and the member could either pay his share of the cost of those units or, given certain conditions, take a non-contributory unit of lower value. As benefits resulting from salary increases were paid for by contributions payable over the term till retirement, member contributions rose steeply when either inflation or promotion during middle or older ages occurred. The event of promotion was a most noticeable influence on the level of member contributions.

Employees using this scheme could elect to take either pensions or lump sums and could limit their contributions to 6% of salary. If members chose to take the lump sum benefit, the scheme paid up to five or six times their final salary at age 60. The estimated oncost to the Government of this scheme was 15.2% of salary if members chose to transfer their pensions to lump sums (as 70% of members did), or 21% of salary if all members instead elected to take full pensions.

The SSF was also a split benefit scheme. Members paid for an undefined share of the benefits, i.e. not all employees shares were the same amount, and the employer financed the balance of the benefits. Each member was responsible for meeting a share of the benefits arising from an increase in salary. The way in which a deficiency of the value of assets under the value of accrued liabilities was dealt with was determined by the Government's response to the recommendations of valuing actuaries. Amendments to legislation have altered the conditions of the scheme covering defined benefits, the benefit of surplus and the burden of deficiency which fell to employers.

The benefits of the SSF were not service-related with the exception of a few minor aspects. An employee retiring at 60 after ten years of service received approximately the same employer-financed benefits as an employee who retired after 40 years of service. Obviously this inequity was not sustainable in this modern age where career public sector employment is no longer standard practice and where most late age entrants to the service carried employer-financed benefits from previous employment.

The main reason to close the SSF scheme on July 1 1985 was the absence of a service relationship. Other major factors were the complexity of the scheme, and concern about the liability for indexed pensions under weak funding conditions. The complexity factor would have been compounded with the introduction of a service relationship. However the complicated financing arrangements were simplified as a result of legislative change which broke the fund up into a large number of sub-funds, one for each employer or group of employers.

With the closure of the SSF, a new scheme, the State Public Service Superannuation Scheme (SPSSS) was established for core public sector agencies. It was a lump sum based, service related split benefit scheme of the same general structure as the later SASS, although significantly more expensive in terms of employer contributions. Although SPSSS benefits were significantly lower than SSF benefits for short service employees, they were, on average, better for full career employees.

A variety of statutory and local government schemes simultaneously existed at this time spanning a range of employment areas in the public sector, including local government, hospitals, transport authorities, and various statutory bodies. These schemes were progressively merged and rationalised leading to the creation of the Public Authorities Superannuation Scheme (PASS) in 1985.

The Police Scheme, which was closed to new entrants on the opening of SASS, paid pensions or lump sums. Members contribute 6% of salary and the benefit paid is a maximum lump sum of 7.95 times final salary.

In 1987, following the 3% award superannuation proposed by the 1986 National Wage decision, the NSW Labor Government created a new scheme common to all entrants in the public sector. The State Authorities Superannuation Scheme (SASS), which came into effect on 1 April 1988, was introduced to take the place of the Public Authorities Superannuation Scheme (PASS) and the State Public Service Superannuation Fund (SPSSF). SASS achieved the long standing objective of the NSW Government to provide uniform superannuation for all employees of the budget sector, statutory authorities, local government and hospitals.

SASS was a split benefit scheme where the member-financed benefit was an accumulation of the member's own contributions together with compound interest at the net earning rates on the assets of the Scheme. The employer-financed benefits is of the defined benefits type being a multiple of final average salary which depends on the member's duration of membership and the history of their contributions. The maximum employer-financed benefit for those who entered the Scheme after 1 July 1988, who would have completed at least 30 years of membership by the time they retire, is 3.825 times final average annual salary, dependent on the contribution history being sufficient.

SASS allowed for new employees who were previously eligible to join the State Superannuation Fund (i.e. public servants and employees of named Statutory Authorities paid at an annual rate), police, employees of statutory authorities and local government employees to be incorporated into a common scheme.

The State Public Service Superannuation Scheme (which had replaced SSF) was merged with SASS in 1988 which made provision for a benefit reduction for new entrants. Other schemes were also merged with SASS such as the Transport Workers' Superannuation Scheme. This scheme progressed through a series of schemes - the Gratuity Scheme, the Railways Retirement Fund, the Transport Retirement Fund and the NSW Retirement Fund - before finally being merged with SASS. "Grandfather" clauses were included to cover particular rights.

In a similar fashion, Local Government superannuation has developed from an endowment assurance based scheme managed by a consortium of life insurance companies to a provident fund, then a pension scheme and finally a split benefit scheme similar to SASS before being merged with SASS.

Another new scheme known as the State Authorities Non-Contributory Superannuation Scheme (SANCS) also came into effect on 1 April 1988. This was the employers collective response to industrial award superannuation. Industrial award superannuation, often called "productivity super", was a result of the 1986 National Wage Case decision which provided for a wage increase of 3% of ordinary time earnings to be taken in the form of new or improved superannuation.

SANCS was a defined benefit type scheme which paid only lump sum benefits based on 3% of final average salary for each year of membership of the scheme. It was a Government policy decision of the time that the SANCS Scheme would be only partially funded for budget sector agencies. The unusual feature of SANCS was that it was a defined benefits productivity scheme. This means that in most cases, new schemes established to reflect this development were accumulation schemes, therefore employers were able to negotiate improvements to the schemes to satisfy award conditions.

As a result of the 1987 changes, a large proportion of the public sector workforce (including local government) had their superannuation benefits substantially increased by virtue of the improvement from PASS to SASS, as well as receiving the addition of the non-contributory 3% scheme. Existing members of the SSF and the SPSSS retained membership of those schemes, as well as becoming entitled to the benefit of the 3% scheme. These changes meant that all future public sector employees would only be eligible for membership of the SASS and SANCS Schemes.

SASS was a split benefit scheme where the employer financed benefit paid up to 4.5

times final average salary, while the employee financed benefit was an accumulation of the employee's contributions plus interest. This was a purely voluntary scheme to which members elected to contribute between 1% and 9% of their own salary which was matched on a two-to-one basis by employer contributions. An average 6% employee contribution was required to maximise the employer financed benefit.

The following chart summarises SASS, SSF and the Police Scheme in terms of numbers of members, Government cost expressed as a percentage of salary and the unfunded liability as at June 1992.

NSW SUPERANNUATION SCHEMES SUMMARY

Scheme	No. of Members	Government cost [1]	Unfunded Liability
Contributory schemes:			
- SASS	180,281	14.5%	$2,753m
- SSF	67,943	17.0% [2]	$8,350m
- Police	9,832	24.0%	$3,045m
Sub-total	258,056	15.7%	$14,148m
Non-contributory scheme	98,710 [3]	2.8%	$0m [4]
Total	356,766 [5]	12.6%	$14,148m

Notes:

1) Government cost of superannuation is expressed as a percentage of salary.

2) The Government cost for the SSF varies between members, ranging from around 8% to over 100%.

3) Does not include 150,000 casuals eligible for 3% only.

4) The unfunded liability for the non-contributory scheme is included in the SASS figure.

5) Membership figures as at June 1992.

Under defined benefit schemes, retirement benefits are firmly established by the rules of the schemes. However under accumulation schemes, the ultimate benefits are contingent on the following factors: contribution history; the net after tax rates of investment return; the cost of any insured death and incapacity benefits; and expenses incurred. The relationship between the rates of investment return and earnings progression is influential to the real benefit outcomes of accumulation schemes.

The estimated costs of the defined benefits schemes shown in the table are the current service costs in a fully funded scheme as estimated by the schemes' appointed actuaries. These are costs incurred by an employer who fully funds a scheme. On average, experience has shown the defined benefit funds to be more favourable than the predictions of the actuaries involved. The means that the surplus reduces the employer outlays below the current service cost. In some private sector funds, the surplus has supported the suspension of employer contributions for often lengthy periods. The main sources of this surplus are net investment returns in excess of the actuarial basis.

Unfunded schemes, which lack assets, have no surplus interest to offset employer costs.

The table on the following page outlines the NSW public sector schemes to which employer contributions are made by the State Budget. (Source: Budget Paper No. 2, 1993)

Summary of NSW Public Sector Superannuation Schemes

Scheme	Coverage	Scheme Type	Benefit Type
First State Super (FSS)	All new public sector employees, full time or part time permanent employees not covered by a contributory scheme as at 18-12-1992 and casual employees. As at 30-6-93: approx. 180,000 members	Accumulation scheme requiring full funding of employer contributions which were initially 4 per cent of salary, progressively increasing to 9 per cent by the year 2002 (as scheduled under the Commonwealth Superannuation Guarantee Scheme legislation)	Lump sum
State Authorities Superannuation Scheme (SASS)	Closed to new entrants on 18-12-92. Prior to closure membership was optional for all public sector employees except GIO, State Bank and TAB employees and employees excluded under Schedule 2 of the Act, such as Judges. Also included are members of some transferred closed schemes. As at 31-3-93: 144,581 contributors, 11,863 pensioners	Hybrid scheme - employer financed benefit is defined as a proportion of final or final average salary - employee financed benefit is an accumulation of employees' contributions plus interest.	Lump sum; some indexed pensions available to members of schemes amalgamated to form SASS.

State Superannuation Fund (SSF)	Closed to new entrants in 1985. Prior to closure, was compulsory for all public servants and some employees of authorities. As at 31-3-93:67,576 contributors, 29,960 pensioners, 11,290 commuted pensions since 30-6-85, 3,448 preserved benefits.	The entire benefit is defined in terms of final salary and service and is not separated into employer and employee financed component.	Indexed pension or lump sum.
Police Superannuation Scheme	Closed to new entrants in 1988. Prior to closure, was compulsory for all members of the police force. As at 31-3-93: 9,538 contributors, 3,201 pensioners, 94 preserved benefits	As for SSF	Indexed pension or lump sums available from 1-4-88. Provides both superannuation and workers' compensation coverage.
Judges Pension Scheme (JPS)	Compulsory for members of the judiciary. As at 30-6-93: 133 contributors, 114 pensioners	Benefit is defined in terms of final salary and is employer financed.	Indexed pension.
Parliamentary Contributory Superannuation Fund (PCSF)	Compulsory for Members of Parliament. As at 30-6-93: 141 contributors, 201 pensioners.	As for SSF	Indexed pension or partial indexed pension plus partial lump sum.

State Authorities Non-contributory Superannuation Scheme (Basic Benefit)	Prior to closure on 18-12-92, covered all public sector employees including members of SSF, SASS, PSF) Basic Benefit members only, were transferred to FSS.	Totally employer financed.	Lump Sum; 3 percent of final or final average salary for each year of service as from 1-4-88.

* All members of public sector schemes other than the Judges Pension Scheme and Parliamentary Contributory Superannuation Fund are entitled to a 3 per cent productivity benefit for each year of service after 1 April 1988. This award based entitlement is now included within the contributions of First State Super.

The funding plan of a superannuation fund has the objective of building up assets, through the regulation of contribution inflows, to ensure that liabilities for benefits earned are represented by assets or that emerging benefits can be paid.

In most accumulation schemes, the funding plan is designed to accommodate specified contributions to be paid into the fund regularly during service. This then means that the schemes are fully funded. The value of the assets is allocated to members at every balance date, except for the "investment fluctuation reserve" which is earned income carried forward. Carrying forward undistributed income is a common practice, the aim being to even out distributions of income to members.

Accumulation schemes have neither surpluses of the value of assets over the value of liabilities to members nor deficiencies.

A public sector accumulation scheme could be operated on a partially funded or unfunded basis. Distributions to members' accounts would be based on notional earnings rather than actual earnings. Benefits would be financed by employer payments at the time of benefit emergence which would mean that invested assets need not be drawn upon. Given these conditions, a specified funding plan would be required but would be unacceptable for private sector accumulation schemes.

The aim of a funding plan for a private sector defined benefits scheme is to achieve a fully funded condition. This is unlike the public sector which uses a range of funding plans - fully funded, partially funded and unfunded.

A fully funded plan was used in the local government section of SASS. In this section, a condition has been achieved whereby the value of accrued liabilities is fully covered by the value of assets and the schemes for commercial statutory authorities, with the funding plans targeting 2020 to achieve a fully funded status.

A partial funding plan was employed by the State Superannuation Fund until disaggregation in 1990 when the fund was divided into separate accounts for each employer. However, as a result of the work of the Public Accounts Committee in 1984, additional information was provided by the Government Actuary to commercial statutory authorities to identify their superannuation costs. This information was essential for the proper pricing for the services sold to the community by those authorities.

An unfunded scheme was used in Part 3 of SASS covering hospital and related workers. Whilst Part 3 has assets, the rate of employer contribution is incapable of maintaining them. The valuing actuaries have predicted that the assets will run out within a reasonable time frame.

Another example of an unfunded plan is found in the Police Superannuation Scheme (PSS). In this case, members' personal contributions are not funded which is unusual but indicates the strength of the Government covenant which uses its taxing powers. When the assets of Part 3 of SASS are depleted, then the scheme will become one where members' contributions flow directly into benefits rather than being funded.

The budget sector of SASS and SSF also use unfunded plans but have the condition whereby the plan can be subject to alteration to partial funding when the State gives from deficit to surplus.

Unfunded accrued budget sector superannuation liabilities are equivalent to public sector borrowing. Unfunded accrued superannuation liabilities of statutory authorities are a deduction from the net tangible worth of those authorities.

CHAPTER TWO:

The Unfunded Liabilities

Originally, NSW public sector superannuation schemes, except for the police, were all fully funded until changes were introduced during the Great Depression by the Stevens Government to make the State Superannuation Fund a pay-as-you-go scheme, i.e. that the Government would pay costs as the benefits emerged.

The potential problems facing governments because of increasing unfunded superannuation liabilities became the subject of numerous reviews by authorities throughout Australia in the early 1980's. In NSW, the Auditor-General commented on the problem in both his 1981-82 and 1982-83 Reports to Parliament and expressed particular concern about the fact that many statutory authorities were not adequately reporting or accounting for these liabilities.

The then Treasurer, the Hon Ken Booth, referred the matter to the Public Accounts Committee which subsequently published its findings in August 1984 in Report Number 10. Generally, the Committee found that the concerns expressed by the Auditor-General were justified and that the inadequate accounting and reporting of superannuation liabilities had led to a lack of appreciation of the extent of both the current cost of public sector superannuation to the taxpayer and the unfunded liabilities that had already accrued and were continuing to accrue.

Subsequently, as a result of this report, regulations were made under the Public Finance and Audit Act 1983 requiring all statutory authorities to show in their Annual Financial Statements full details of both accrued and current liabilities in respect of employees' superannuation entitlements. These authorities were also required to start funding their liabilities.

In July 1988 the Curran Report[1] in taking stock of the State's assets and liabilities, expressed concern about the significant growth in the unfunded superannuation liability of the NSW Government and suggested the problem should be addressed as part of an overall program for reduction in State debt. The suggestion was put forward that provision could be made for these liabilities by gradually increasing the employer contributions in all schemes to eventually achieve an annual rate of funding of $1,145m which would meet both the total employer liability accruing in each year and a proportion of existing accumulated unfunded liability. For the budget sector, annual incremental increases of $75m for ten years would have achieved this full

[1] NSW Commission of Audit Focus on Reform: Report on the State's Finances July 1988.

funding rate and the annual ongoing superannuation expense of $769m would be met from this total. The remaining $376m would then be available to reduce the unfunded liability.

Subsequently the NSW Treasury issued Treasurer's Direction 510.02 which required commercial authorities to start funding their employers' superannuation liabilities from 1 July 1991 over a thirty year period.

The problem of the State's unfunded liabilities was further addressed by the Senate Select Committee on Superannuation in the Committee's report to Parliament of June 1992.[2]

State public sector unfunded liabilities are published by the NSW Treasury in the annual Consolidated Financial Statements. These figures reflect the unfunded liability obtained by actuarial methods of all State public sector schemes. Since 1991, the unfunded liabilities of the schemes administered by the State Authorities Superannuation Board have also been published in that organisation's annual report in accordance with Australian Accounting Standard 25.

The following table shows Treasury figures for unfunded superannuation liabilities over the years 1987-92. These figures are not adjusted for inflation. The 1987 figure includes amounts which subsequently became the responsibility of the Commonwealth Government, so the following table provides the inflation-adjusted liabilities for only the most recent five years:

YEAR ENDING 30 JUNE	UNFUNDED LIABILITY (1992 $ millions)
1988	$12, 917
1989	$12,871
1990	$13,279
1991	$14,141
1992	$15,452

[2] Super Guarantee Bills: Second Report of the Senate Select Committee on Superannuation June 1992 p71.

The average annual compound growth in the unfunded liability over this five-year period is 4.6% p.a. It is emphasised that this figure is the real growth rate, ie without allowing for the added impact of inflation. With inflation added, this growth rate is consistent with the Government's projections of the current growth rate, in the vicinity of $1.2 billion per annum.

The following is a breakdown of the net unfunded liabilities of NSW Public Sector Superannuation Schemes (Source: Budget Paper No. 2, 1992):

	Budget Sector $m	Non-Budget Sector $m	Exempt $m	Total $m
State Superannuation Fund (SSF)	7,281	957	1,352	9,590
State Authorities Superannuation Scheme (SASS)	700	1,394	9	2,103
Basic Benefit - All schemes	335	107	9	451
Police Superannuation Fund (PSF)	3,003	....	....	3,003
Judges' Pension Scheme	124	....	...	124
Parliamentary Contributory Superannuation Fund	51	....	....	51
TOTAL	11,494	2,458	1,370	15,322

NOTE:

1) Estimates are net of reserves held in the schemes by various employers and do not account for internal provisions of employers.

2) Figures are Government Actuary's 1992 estimate.

Certain organisations that are exempt from the Public Sector Consolidation of Financial Statements (e.g. universities, local government councils)

3) In Budget Paper No. 2, 1993, the Government Actuary's 1993 estimates aggregated a total of $14,836 million.

CHAPTER THREE:

The Mercer, Campbell, Cook and Knight Report

On August 20 1991, the then Federal Treasurer, the Hon John Kerin M.P., announced the Commonwealth Government's intention to legislate for compulsory employer contributions to superannuation funds on behalf of all employees. The announcement stated that the mandatory level of contributions would begin at 5% from 1 July 1992 (3% for small business), rising to 9% by 1 July 2000.[3]

In the period following this announcement, the NSW Superannuation Office formulated and analysed options for consideration by the NSW Government. In March 1992, the Office sought quotations from both the Government Actuary and Mercer, Campbell, Cook and Knight (MCCK), the two firms with the most recent experience of the major State schemes, for actuarial projections of the cost of two options for the implementation of the SG in NSW. Due to time constraints and financial considerations, at the end of March, Mercer, Campbell, Cook and Knight were commissioned to carry out the costing projections.

The SG legislation had been framed with a defined contribution, or accumulation scheme in mind. Commonwealth regulations would have been required, based on actuarially-determined formulae, to determine whether a defined benefit arrangement would meet the required SG level in all situations.

The cost of the two main options, leaving SASS open versus closing SASS and creating First State Super were projected up until the year 2002. The Report found that the total figure from SASS remaining open (Option A), and the cost of the SG being absorbed within the contributory schemes as far as possible, would mean the total cumulative increase in accrued liabilities due to the SG by the year 2002 would be $2.4 billion in nominal terms or $1.5 billion in 1992 dollars.

By contrast, it was estimated that the additional cost of the SG with the closure of SASS and the creation of First State Super (Option B) was estimated at around $15 million in nominal terms, or $24 million in 1992 values. (The 1992 value is larger

[3] Folllowing negotiations with the Democrats, the schedule of employer contributions was subsequently extended so that it commenced with 4% of salary from 1 July 1992 (3% for small business), rising to 9% by 1 July 2002.

because of the discounting of savings in some future years).[4]

In a letter to the NSW Superannuation Office from Mercer, Campbell, Cook & Knight dated 9 September 1992, an estimate was made in present value terms of the long term cost to Government employers of these two options for meeting the SG. The extra cost of the SG by leaving SASS open was estimated at some $6.6 billion in present value terms, versus a $0.5 billion saving by closing SASS and creating FSS. These costs were based on projected cash flows for the years 1992-2040.

Thus, in present value terms the cost difference between the two options over the next 48 years was estimated to be over $7 billion.[5]

The Government announced the closure of SASS on, and with effect, from 16 August 1992. Following this announcement, successful legal action was taken by the Public Service Association in the Administrative Law Division of the Supreme Court of NSW on behalf of three of it's members, Ms Jan Dooley, Mr Peter Law and Mr Paul Galea, who had intended to join SASS but had been unable to do so due to it's sudden closure by the Government.

As a result of this decision, the State Authorities Superannuation (Scheme Closure) Amendment Bill 1992 was passed by the NSW Parliament which closed the scheme to new entrants from 19 December 1992. This period was established in order to allow existing staff to exercise their option to join SASS.

The following tables supply a detailed breakdown of the projections of the unfunded liability in the two scenarios considered by the Government as supplied to the NSW Superannuation Office by Mercer, Campbell, Cook and Knight:

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[4] Alternatively, percentages of salaries can be quoted rather than nominal dollars. On a cash outlays basis, these increases were estimated at 0.49% of salaries in 1993 rising to 1.65% in 2002. On an accrued basis, the corresponding figures were 0.58% rising to 0.72%. These figures reflect non increases for SSF members and very low increases for SASS members because those schemes almost meet SGC requirements. It should also be noted that the Mercer Report makes no mention of salary and wage offsets for the SGC, a point which is discussed later in this report.

[5] It should be noted that this letter did not state the fact that the Option B result was based on FSS being unfunded to the same extent as the previous arrangements. Also, as previously stated, salary and wage offsets have been ignored. The Government Actuary found in his review of the Mercer Report that almost all of the savings for the next fifty years under the proposal to fund FSS would be in unfunded liabilities at the end of that time.

Table 1a: BUDGET SECTOR UNFUNDED LIABILITIES - NOMINAL $'S
(SASS closed; figures exclude SRA/STA)

Year	SASS				SSF		Total		Total	% of
	Crown	Hosp.	Sub-tot	Growth		Growth		Growth	sal.	sal.
	(nominal $ billions)									
1992	0.363	0.349	0.712		4.987		5.699		6.402	89%
1995	0.890	0.745	1.635	31.93%	6.334	8.30%	7.969	11.82%	7.952	100%
2000	1.920	1.666	3.586	17.01%	9.253	7.88%	12.839	10.01%	11.439	112%
2005	3.118	2.779	5.897	10.46%	14.175	8.91%	20.072	9.35%	16.469	122%
2010	4.086	3.211	7.297	4.35%	21.492	8.68%	28.789	7.48%	23.694	122%
2015	4.462	3.101	7.563	0.72%	25.042	3.10%	32.605	2.52%	34.021	96%
2020	4.110	2.420	6.530	-2.89%	26.308	0.99%	32.838	0.14%	48.852	67%

Table 1b: BUDGET SECTOR UNFUNDED LIABILITIES - 1992 $'S
(SASS closed; figures exclude SRA/STA)

Year	SASS				SSF		Total		Total	% of
	Crown	Hosp.	Sub-tot	Growth	$	Growth	$	Growth	sal.	sal.
	(1992 $ billions)									
1992	0.363	0.349	0.712		4.987		5.699		6.402	89%
1995	0.716	0.600	1.316	22.73%	5.099	0.74%	6.415	4.02%	6.401	100%
2000	1.077	0.934	2.011	8.85%	5.188	0.35%	7.199	2.33%	6.414	112%
2005	1.218	1.085	2.303	2.75%	5.536	1.31%	7.839	1.72%	6.432	122%
2010	1.112	0.874	1.985	-2.93%	5.847	1.10%	7.832	-0.02%	6.446	122%
2015	0.846	0.588	1.433	-6.31%	4.745	-4.09%	6.179	-4.63%	6.447	96%
2020	0.543	0.319	0.862	-9.67%	3.473	-6.05%	4.335	-6.84%	6.448	67%

Note: Discount factor = 7.50%

Table 2: TOTAL SASS AND SSF UNFUNDED LIABILITIES

Year	Pre-SGC			SASS Open			First State Super		
	Nominal	'92 $'s	Growth	Nominal	'92 $'s	Growth	Nominal	'92 $'s	Growth
	($ millions)								
1992	11,052	11,052		11,052	11,052		11,052	11,052	
1995	14,285	11,499	1.33%	14,345	11,547	1.47%	14,067	11,323	0.81%
2000	21,680	12,156	1.12%	22,917	12,850	2.16%	20,134	11,289	-0.06%
2005	34,948	13,649	2.34%	35,845	14,000	1.73%	29,888	11,673	0.67%
2010	54,010	14,693	1.49%	55,989	15,232	1.70%	41,707	11,346	-0.57%
2015	70,964	13,448	-1.76%	74,512	14,120	-1.50%	45,776	8,674	-5.23%
2020	88,987	11,746	-2.67%	94,893	12,526	-2.37%	44,651	5,894	-7.44%
2025	109,880	10,103	-2.97%	118,748	10,918	-2.71%	39,222	3,606	-9.36%
2030	133,803	8,569	-3.24%	147,015	9,415	-2.92%	30,542	1,956	-11.52%

NSW UNFUNDED LIABILITIES

Table 3: AMORTISATION COSTS OF UNFUNDED LIABILITIES

Assume:	Real interest rate	1.50%
	Amortise by the year	2022
	Amortisation period	30 years

	SSF	SASS ($ millions)	TOTAL
Budget sector unfunded (incl. SRA)	4,987	1,763	6,740
Annual amortisation payment	208	73	281
Total unfunded	8,350	2,702	11,052
Non-budget sector unfunded	3,363	939	4,302
Annual amortisation payment	140	39	179
Total amortisation payment	348	113	450

NSW UNFUNDED LIABILITIES

Note: The following tables assume that the SASS non-budget sector (Statutory Authorities, or SA's) unfunded liabilities are amortised over 30 years.

Table 4a: UNFUNDED LIABILITIES - PRE-SG SCENARIO
(1992 $ millions)

Year	Total	SSF			SASS			
		Budget	SA's	Sub-total	Budget	Growth p.a.	SA's	Sub-total
1992	11,052	4,987	3,363	8,350	1,763		939	2,702
1995	11,499	5,099	2,830	7,929	2,707	15.36%	863	3,570
2000	12,156	5,188	2,296	7,484	3,944	7.82%	728	4,672
2005	13,649	5,536	2,483	8,019	5,048	5.06%	583	5,630
2010	14,693	5,847	2,746	8,593	5,674	2.37%	426	6,100
2015	13,448	4,745	2,321	7,066	6,124	1.54%	258	6,382
2020	11,746	3,473	1,766	5,261	6,409	0.91%	76	6,485

Table 4b: UNFUNDED LIABILITIES - SCENARIO WITH SASS OPEN
(1992 $ millions)

Year	**Total**	**SSF**			**SASS**			
		Budget	SA's	Sub-total	Budget	Growth p.a.	SA's	Sub-total
1992	11,052	4,987	3,363	8,350	1,763		939	2,702
1995	11,547	5,099	2,830	7,929	2,756	16.05%	863	3,618
2000	12,850	5,188	2,296	7,484	4,638	10.97%	728	5,366
2005	14,000	5,536	2,483	8,019	5,398	3.08%	583	5,981
2010	15,232	5,847	2,746	8,593	6,212	2.85%	426	6,639
2015	14,120	4,745	2,321	7,066	6,796	1.81%	258	7,054
2020	12,526	3,473	1,788	5,261	7,188	1.13%	76	7,265

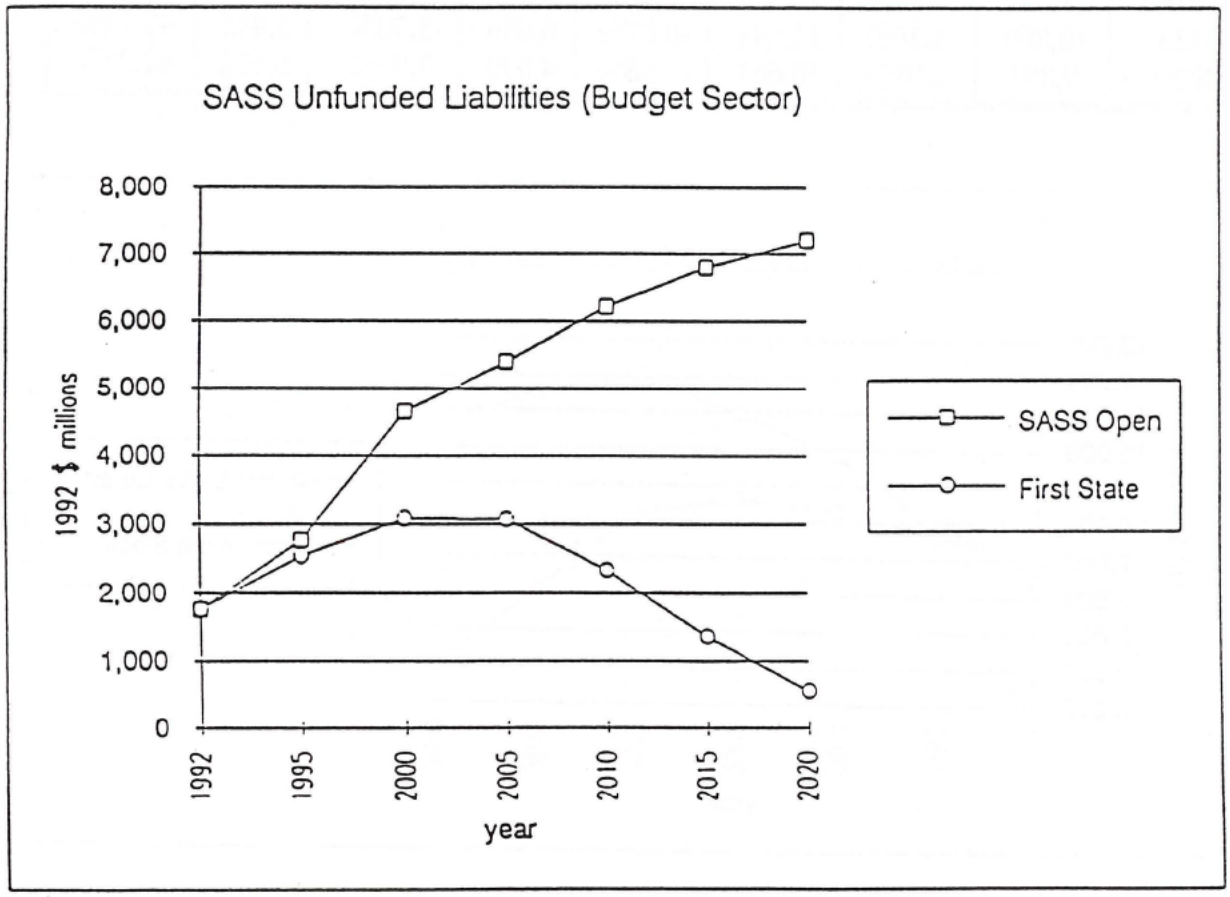
Table 4c: UNFUNDED LIABILITIES - FIRST STATE SUPER SCENARIO
(1992 $ millions)

Year	Total	SSF			SASS			
		Budget	SA's	Sub-total	Budget	Growth p.a.	SA's	Sub-total
1992	11,052	4,987	3,363	8,350	1,763		939	2,702
1995	11,323	5,099	2,830	7,929	2,532	12.82%	863	3,394
2000	11,289	5,188	2,296	7,484	3,077	3.98%	728	3,805
2005	11,673	5,536	2,483	8,019	3,071	-0.04%	583	3,654
2010	11,346	5,847	2,746	8,593	2,327	-5.40%	426	2,753
2015	8,674	4,745	2,321	7,066	1,351	-10.31%	258	1,608
2020	5,894	3,473	1,788	5,261	556	-16.25%	76	633

N.B. The estimates of unfunded liabilities of Statutory Authorities for SSF do not allow for funding policies in place which are expected to eliminate them by about 2020. The totals are correspondingly overstated.

Table 5: SUMMARY OF SASS UNFUNDED LIABILITIES (BUDGET SECTOR)
(1992 $ MILLIONS)

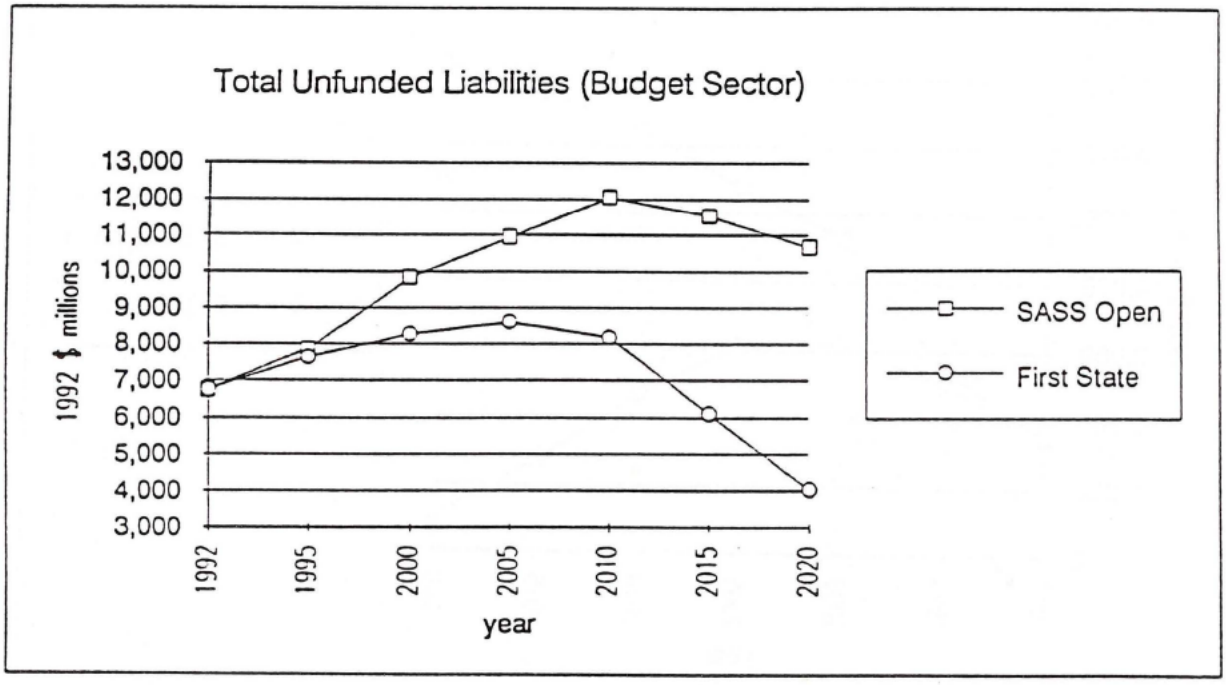
Year	Pre-SGC		SASS Open		FSS		Saving	
	$	Growth p.a.	$	Growth p.a.	$	Growth p.a.	$	%
1992	1,763		1,763		1,763			
1995	2,707	15.36%	2,756	16.05%	2,532	12.82%	224	8.12%
2000	3,944	7.82%	4,638	10.97%	3,077	3.98%	1,560	33.65%
2005	5,048	5.06%	5,398	3.08%	3,071	-0.04%	2,327	43.10%
2010	5,674	2.37%	6,212	2.85%	2,327	-5.40%	3,885	62.54%
2015	6,124	1.54%	6,796	1.81%	1,351	-10.31%	5,445	80.13%
2020	6,409	0.91%	7,188	1.13%	556	-16.25%	6,632	92.26%



N.B. FSS figures assume a closed unfunded SASS and a funded FSS.

Table 6: SUMMARY OF TOTAL UNFUNDED LIABILITIES (BUDGET SECTOR)
(1992 $ millions)

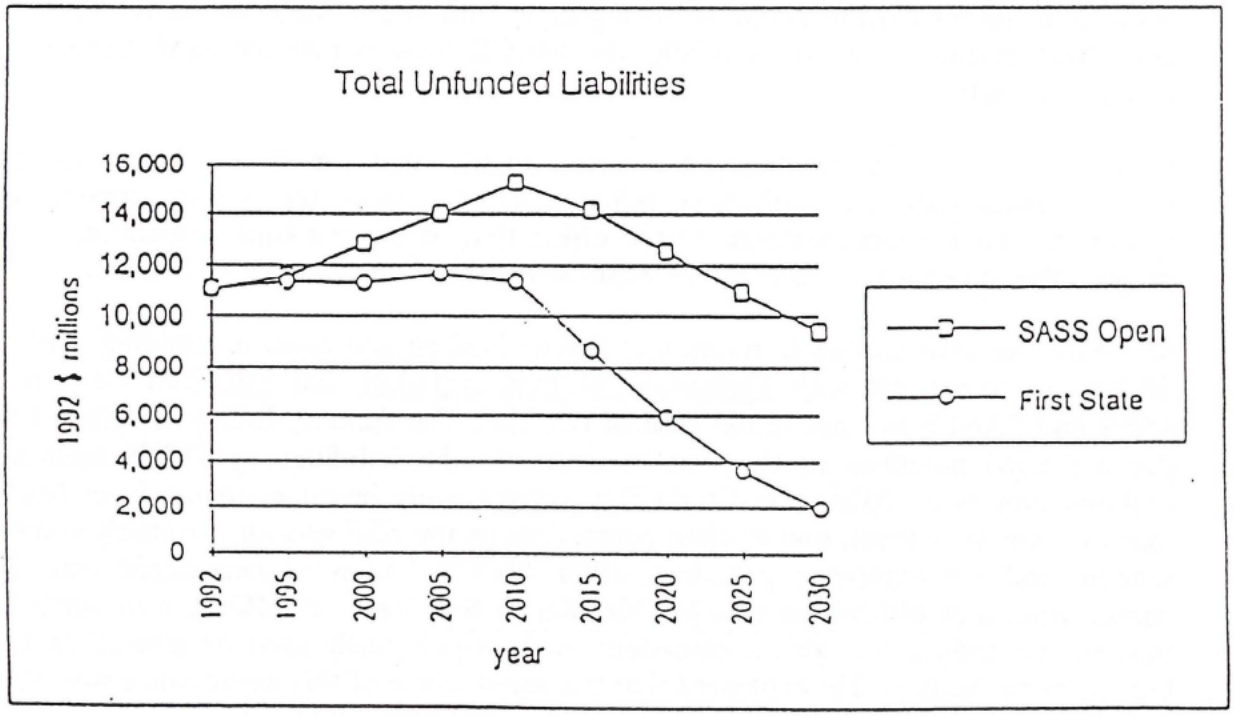
	Pre-SG		SASS Open		FSS		Saving	
Year	$	Growth p.a.	$	Growth p.a.	$	Growth p.a.	$	Growth p.a.
1992	6,750		6,750		6,750			
1995	7,806	4.96%	7,854	5.18%	7,630	4.17%	224	2.85%
2000	9,132	3.19%	9,826	4.58%	8,266	1.61%	1,560	15.88%
2005	10,584	2.99%	10,934	2.16%	8,608	0.81%	2,327	21.88%
2010	11,521	1.71%	12,059	1.98%	8,174	-1.03%	3,885	32.22%
2115	10,869	-1.16%	11,541	-0.87%	6,096	-5.70%	5,445	47.18%
2020	9,881	-1.89%	10,661	-1.58%	4,029	-7.95%	6,632	62.21%



N.B. FSS figures assume a closed unfunded SASS and a funded FSS.

Table 7: SUMMARY OF TOTAL UNFUNDED LIABILITIES
(1992 $ MILLIONS)

Year	Pre-SGC		SASS Open		FSS		Saving	
	$	Growth p.a.	$	Growth p.a.	$	Growth p.a.	$	%
1992	11,052		11,052		11,052			
1995	11,499	1.33%	11,547	1.47%	11,323	0.81%	224	1.94%
2000	12,156	1.12%	12,850	2.16%	11,289	-0.06%	1,560	12.14%
2005	13,649	2.34%	14,000	1.73%	11,673	0.67%	2,327	16.62%
2010	14,693	1.49%	15,232	1.70%	11,346	-0.57%	3,885	25.51%
2015	13,448	-1.76%	14,120	-1.50%	8,674	-5.23%	5,445	38.57%
2020	11,746	-2.67%	12,526	-2.37%	5,894	-7.44%	6,632	52.95%
2025	10,103	-2.97%	10,918	-2.71%	3,606	-9.36%	7,312	66.97%
2030	8,569	-3.24%	9,415	-2.92%	1,956	-11.52%	7,459	79.23%



N.B. FSS figures assume a closed unfunded SASS and a funded FSS. The unfunded liabilities of Statutory Authorities which are included do not allow for funding policies in place which are expected to eliminate them by about 2020.

CHAPTER FOUR:

The Accuracy of the Government's Costing Projections (Part 1): The First Review of the Mercer, Campbell, Cook & Knight Report

In order to meet one of its terms of reference which was to report on the accuracy of the Government's costing projections, the Select Committee engaged the services of the Government Actuary on 5 February 1993 to reassess the Mercer, Campbell, Cook and Knight advice to the NSW Superannuation Office. The designated task was limited to an appraisal of the methodology and assumptions of the Report and the appropriateness of the recommendations embodied therein.

On 19 March 1993 the Committee received the Review by the Government Actuary of the Bases and Assumptions Adopted by William Mercer, Campbell & Knight Pty Ltd in its Reports to the NSW Superannuation Office Dated 8 & 9 September 1992. (Appendix 1) In general it was found that the underlying assumptions of the MCCK Report were "reasonable". However, the Government Actuary stressed that projections rather than forecasts are being dealt with and in areas where future events can affect matters quite substantially, the MCCK view is one amongst many which could be adopted.

Only two major areas of divergence arose. Firstly, that the Police Superannuation Fund, a particularly comprehensive scheme, had not been taken into account. The Committee later heard evidence to the effect that within the time constraints of the project, the data for the NSW Police Scheme had been unavailable to MCCK.

Secondly, the assumptions in relation to future funding and catch-up funding made by MCCK are consistent with Treasurer's Directions 510.01 and 510.02 in the case of SASS and SANCS but not in the case of the SSF. The Actuary found the effect upon the unfunded liabilities of this was to overstate the liabilities by $1,788 million in deflated dollars at 2020. The Committee subsequently heard evidence from MCCK that this was very much due to time constraints as the SSF was an extremely complex scheme and the computer programs which MCCK had were necessarily extremely complicated and difficult to change. Mr Martin Stevenson of MCCK also submitted that the procedure followed a consistent method previously used by himself and the Government Actuary. He explained that the significance of this discrepancy was not as large as it may initially appear :

> **The method used was conservative in the early years as the level of funding that had been used in the previous year was projected forward and that previous year was characterised by high retrenchments which meant high contributions. It was also characterised by the then State Superannuation**

Board encouraging authorities to fund quickly.

However, had the funding assumptions for SSF been consistent with the Treasurer's Directions, Mr Stevenson agreed that it would almost certainly have increased the rate of growth in unfunded liabilities in the earlier years but this would have been followed by a subsequent decrease.

The Labor Council of NSW made written and verbal submissions to the Committee challenging costing projections from the perspective of using nominal values as opposed to using discounted dollar values. The Council pointed to the fact that the Mercer Report did not caution readers against using nominal figures which they felt were likely to mislead them. In Item 27 of his report the Government Actuary raised the issue of putting an alternative projection by deflating the nominal dollar amounts by the Consumer Price Index (CPI) growth assumption (6.0 % p.a.) as opposed to deflating the results by the general salary escalation assumption (7.5% p.a.) adopted by MCCK. Under this approach, projecting in CPI indexed terms, together with adjustments to include the unfunded liabilities of the Police Superannuation Fund and to allow for the continuous application of the Treasurer's Directions, the $1,788 million adjustment to remedy projected underfunding of statutory authorities in 2020 in the State Superannuation Fund, becomes a $2,650 million adjustment.

In response to this, Mr Stevenson on behalf of MCCK submitted that, while there was specific Government interest in nominal figures because Treasury's projections were in nominal figures, this recalculation of deflating dollars in CPI indexed terms rather than by salaries was an equally valid alternative:

> **I also agree with perhaps putting an alternative projection in CPI indexed terms, and then you get something similar to where I was by a different method. To my mind the Government Actuary's approach and mine end up in the same ball park, but the liability starts at a high level. $14 billion is a large amount of money in absolute terms and I think in relation to most measures one might make.[6] The liability will increase in the early years and then will start to level off and perhaps come down. Whilst the exact figures that the Government Actuary has come up with are different from mine, I think the pattern emerges in both cases.**

In Item 27 of his report to the Committee, the Government Actuary provided the following table to illustrate his interpretation of the projection of unfunded superannuation liabilities under the different scenarios. This table is in constant

[6] It is useful to compare this, for example, to the overall salary bill of the membership for the year, which comes to approximately $11.052 billion p.a. in 1992.

purchasing power dollars as at year 1992.

Year	Current Position	Option A	Option B
1992	$14,055m	$14,055m	$14,055m
2020	$16,528m	$17,683m	$7,854m

In response to a later question in relation to the amount of Budget Sector funding required each year to obviate a growth in the dimension of the unfunded liability, the Government Actuary commented:

> **I again stress that the "Current Position" referred to in the heading to this table, to the tables on pages 7 and 8 of my Report of 19 March 1993, and to the table on page 10 of the Mr Stevenson's Report of 8 September 1992, is the position before the introduction of the Superannuation Guarantee scheme legislation.**
>
> **My first approach to answering the Committee's question has been to consider what annual payments of equal purchasing power would limit the unfunded liability in 2020 to $71,845 million, being $14,055 million increased at 6% p.a. compound for 28 years, i.e. the growth assumed in the Consumer Price Index. In making this calculation, I have assumed that the payments are made at the end of each year and themselves increase from year to year by 6%, and earn net interest at 9% p.a. On this approach, the first such payment would be $62.6 million and would relate wholly to the budget sector.**
>
> **On that approach, the payments necessary in constant purchasing power to fund the difference between the 1992 situation and the position in 2020 after the previously existing schemes were modified to allow for the Superannuation Guarantee scheme can be obtained by proportion. The first payment for this purpose is thus calculated by multiplying $62.6 million by the difference in the figures shown on page 8 of my report under the heading "Add SG Expenditure", viz $3,628 million, and dividing by the difference in the figures shown on page 8 of my report under the heading "Current Position", viz $2,473 million. The resulting first payment would be $91.8 million which would again relate wholly to the budget sector.**

The $91.8 million did not appear to the Committee, on the surface, to be a particularly significant sum given that there would be no added increases in respect of members of the closed superannuation schemes. This is due to the employer

contributions under those schemes exceeding the Commonwealth's proposed elevations in the Superannuation Guarantee scheme. However, an obligation remains in respect of those members not opting to join a superannuation scheme. This would be at no lesser level than the scale in the First State Superannuation legislation.

Another challenge in regard to costing projections made by the Labor Council of NSW were the implications of salary sacrifice regarding future productivity gain offsets if applied to the elevations proposed in conjunction with the Superannuation Guarantee scheme. There appears to be a variety of viewpoints on this issue and its significance is discussed in Chapter 7 of this report.

The Labor Council further raised the argument that the MCCK assessment erred in taking the view that if SASS had continued (Option A) its current level of membership would have been maintained. The Council took the alternative view that where employees receive high levels of compulsory employer superannuation contributions there will be a lesser proportion electing to pay voluntary contributions and thus a decline in the rate of increase of unfunded liabilities under SASS.

CHAPTER FIVE

The Accuracy of the Government's Costing Projections (Part 2): The Second Review of the Mercer, Campbell, Cook & Knight Report

On 5 May 1993, the Government Actuary supplied the Committee with a further review of the Mercer, Campbell, Cook and Knight calculations.(Appendix 2) This review was conducted for the purpose of independently verifying the following unfunded superannuation liabilities figures which were set out on page 10 of the MCCK Report:

The progress of the unfunded liability under each Option was calculated as follows:

Year	Current Position		Add SCG Expenditure (Option A)		First State Super (Option B) with full funding	
	Total Nominal $m	Total Deflated $m	Total Nominal $m	Total Deflated $m	Total Nominal $m	Total Deflated $m
1992	11,052	11,052	11,052	11,052	11,052	11,052
1995	14,285	11,499	14,345	11,547	14,067	11,323
2000	21,680	12,156	22,917	12,850	20,134	11,289
2005	34,948	13,649	35,845	14,000	29,888	11,673
2010	54,010	14,718	55,989	15,232	41,707	11,346
2015	70,964	13,448	74,512	14,120	45,776	8,764
2020	88,987	11,746	94,893	12,526	33,651	5,894
2025	109,880	10,103	118,748	10,918	39,222	3,606
2030	133,803	8,569	147,015	9,415	30,542	1,956

(Note: For these projections the actual incidence of pension payments was taken into account.)

The following conclusions were drawn by the Government Actuary regarding these figures:

1. The reconciliation of the results achieved by the Government Actuary with the MCCK figures did not produce complete agreement with the amounts of the unfunded liabilities at various future dates determined by MCCK. It did

appear, however, that agreement was sufficiently close, given the uncertainty attaching to various elements of the basis, to state that:

(a) The methodology used by MCCK had been independently validated, given the time constraints imposed on them;

(b) On the valuation assumptions chosen, the results are in reasonable agreement with the calculations carried out by the Government Actuary given the different approaches to the calculation of unfunded liabilities in the earlier years of the projection. However, it was noted that varying particular economic assumptions either up or down by 1% p.a. can produce very large differences in the final year's unfunded liabilities over the very long period of these projections. Different conclusions may have been reached given sufficiently different economic assumptions.

2. Some departures were made from the data used by MCCK. These departures are referred to above and give rise to differences between the two varying results. These results are set out in the tables within Appendix 2 of the Government Actuary's Report. The Government Actuary did not consider the size of the differences sufficient to indicate any substantial criticism of the methodology adopted by MCCK (other than those referred to in the previous review of 19 March 1993) or their results, except in the matter of the calculation of unfunded liabilities where for practical reasons they used a mixture of methods. In any case, it was considered that these differences were liable to be overtaken by differences arising between actual economic and demographic events, including actual employer payments, and actuarial assumptions made on a long-term basis.

3. As noted in paragraph 21 of the Government Actuary's review dated 19 March 1993, MCCK took note of the current funding practice for commercial authorities for all schemes other than the State Superannuation Fund. This resulted in an overestimation of the unfunded superannuation liabilities by the year 2020.

The Government Actuary's calculations similarly overestimate the unfunded superannuation liabilities in and around that year. However, as this question was confined to the closed State Superannuation Fund, comparisons using the differences between the estimates of unfunded superannuation liabilities under the "existing arrangements" and under Option A and Option B were unaffected.

4. There is a high level of variability in Treasury payments from year to year on account of superannuation. The actual payment for 1991-92 ($885 million) is

compared with expected future payments for 1992-93 ($779 million), for 1993-94 ($892 million) and for 1994-95 ($946 million) in Table 1.4 on page 1-11 of Budget Paper No.2 of the 1992-93 Budget Papers. No allowance has been made in the projections for lump sum retrenchment benefits which may be required; retrenchment benefit payments have been allowed for by Treasury in the past after the actual retrenchment benefits have been determined.

5. The differences in the results obtained by the Government Actuary for unfunded liabilities to the State Superannuation Fund as compared with those obtained by MCCK were largely explained by:

(a) different assumptions as to future funding rates; and

(b) different methodologies in the calculation of unfunded liabilities (traditional actuarial constant-rate funding approach versus the accounting accrued benefits approach).

6. The long period of the projections meant that small differences in year-by-year actual results as compared with projections are magnified as the projection period progresses.

7. Retrenchment and voluntary redundancy programs since 31 March 1991 have reduced employer costs on an accrual basis. Varying rates of employer funding under current flexible funding arrangements have affected and will affect unfunded liabilities in the longer term quite apart from variations in actual economic and demographic experience by the Funds from the actuarial assumptions about future economic and demographic events.

As previously discussed, due to their history of involvement with NSW public sector superannuation schemes, the NSW Government Actuary and Mercer, Campbell, Cook & Knight are considered to be the only two actuarial firms currently possessing the ability to conduct the appropriate actuarial reviews of such schemes. In this regard, the Committee chose to rely on the NSW Government Actuary's assessment of t he Mercer, Campbell, Cook & Knight projections.

In conclusion, various discrepancies arose between the MCCK review of projected unfunded liabilities and the NSW Government Actuary's projections. The Committee was satisfied that these various discrepancies could essentially be explained on the basis of differing time constraints and choice of alternative actuarial approaches and did not appear to in any way erode the validity of the underlying assumptions of the MCCK review.

RECOMMENDATION 1:

Apart from the areas of discrepancy highlighted in the Government Actuary's reviews, the Committee accepts the reasonableness of the Government's costing projections arrived at by Mercer, Campbell, Cook & Knight.

CHAPTER SIX:

The Government Policy Decision to Adopt Option B (FSS)

The Committee received a variety of evidence concerning the policy decisions of the Government regarding the closure of SASS and the opening of the FSS. Both the NSW Treasury and the NSW Superannuation Office cited two separate thrusts. The first was to ensure that the Superannuation Guarantee scheme was contained and offset completely. In addition to this the NSW Government made a decision to actually move to full funding of the new scheme. NSW Treasury submitted to the Committee that:

> **The Government had twin objectives: one was basically to neutralise the substantial cost of the Commonwealth's initiatives in the Superannuation Guarantee scheme which would have increased our liability by $2.4 billion (nominal dollars) by the year 2002. That is separate and distinct from the second objective, which was basically to move to full funding over time in a manageable way within the budget context.**

NSW Treasury further submitted that the Government decision to pursue this second objective was a reaction to both the changing labour market and Commonwealth Government pressures to offer greater flexibility in superannuation funds. One of the major benefits of accumulation funds is the portability they offer, particularly as work patterns change and most employees now leaving the NSW public sector tend to resign rather than go through to retirement. First State Superannuation allows this former category of employee to receive a fully vested benefit which they can roll over into another fund. The ability of the scheme to directly transfer funds to and from outside employers is considered to be directly adhering to the spirit of the Superannuation Guarantee scheme.

Further, acumulation funds are easier for employees to understand than are defined benefit funds and as such meet the SG requirements more readily, as members are able to see what they actually get paid for their credit.

The Committee also heard evidence from the State Superannuation and Management Corporation that an accumulation fund is much cheaper and easier to administer:

> **The old schemes are essentially based on notions of an annual salary. As the benefit is defined in terms of a member's final salary, it means that the scheme administrator has to keep lots of records with respect to service and salary....The workload is much less in First State Super as the benefit is merely the accumulation of the contributions which come in. All we need to**

know is the contribution per pay period...It is like a bank account, the money comes in, the tax goes off, the money is invested, management charges come off, and interest is added each month.

It was generally acknowledged to the Committee that accumulation funds necessitate far less complex benefit calculations than do defined benefit schemes. SSF, for example, requires massive administration to ascertain items such as unit entitlements, outstanding amounts and terminating benefits.

Most parties who submitted to the Committee took the view that a State Government may deliberately choose to not fund its superannuation schemes as part of its overall financial management policies. Until recently many governments both here and overseas have chosen this path. A State government is obviously not under the same type of financial pressure to identify funds to cover these liabilities as is the average employer.

However, it was recognised that an unfunded liability was essentially a debt in that there must always exist the capacity to repay. The major difference is that a debt is at a fixed interest rate or bond rate while unfunded liability growth in real terms depends on the growth of salary relative to inflation. If a scheme is funded, investment gains can be used as a source of ameliorating employer costs of defined benefits funds. However, unfunded schemes miss out on these opportunities of cost remission.

It was submitted by NSW Treasury that one of the principal financial reasons for the Government policy decision to address unfunded superannuation liabilities, apart from an overall shift by the current Government to adopt a more business-like approach in running its budget sector, was the concern expressed by the credit rating agencies Standard & Poors and Moodys towards these liabilities. This was particularly important as NSW had recently been put on "credit watch" and a downgrading in the State's AAA rating would have resulted in an estimated additional $100 million p.a. to meet increased debt-servicing costs.

Improvements in accounting and reporting practices have made these unfunded liabilities more transparent in recent years and Treasury argued that the agencies had begun to take a keen interest in this area of liabilities:

We are regularly visited by the ratings agencies. In the past the agencies have very much focussed on the debt situation. However more recently, over the past couple of years, there has been a noticeable shift in emphasis. The rating agencies are looking at overall liabilities of State governments. They have particularly concentrated on the superannuation area.

This necessity to address the issue of unfunded superannuation liabilities to maintain the State's AAA rating was questioned by the Labor Council of NSW. The Council contended that in private discussions with representatives of Standard & Poors Credit Rating Agency, unfunded liabilities were held not to be a vital component in the State credit rating assessment process. The Labor Council submitted to the Committee it had been informed by Standard & Poors that NSW was financially the best placed of all the Australian States except Queensland in terms of its outstanding unfunded liabilities.

However, it had been submitted by NSW Treasury in evidence to the Committee that the rating agencies look at the State in an "in globo" sense, not at superannuation liabilities in isolation:

> **Rating agencies look at the overall financial position of the State. They try to gauge the State's assets and it's liabilities as well as what it's client base is and it's ability to generate the necessary revenues to meet it's liabilities in the future and replace it's assets.**

This issue of considering liabilities in the context of overall assets was raised with the Committee by Mr Vic Grant, the then Full-Time Employee of the State Authorities Superannuation Board. Mr Grant submitted to the Committee that the money that had not been used to fund superannuation over the years could be considered to have gone into infrastructure and services of the State and thus it was valid to use State assets to offset these liabilities.

The NSW Auditor-General, however, cautioned against adopting this approach by arguing that offsetting unfunded liabilities against State assets is difficult if those assets are not liquid and do not generate any income.

The Committee also heard evidence from Professor Bob Walker of the University of NSW that it may be more relevant to look at the associated cash flows that the government might reasonably expect over time:

> **...When you are looking at the question of superannuation liabilities, it is possibly more relevant not to look at the value of assets. That is relevant, but more relevant I think is to look at projected cash flows associated with the various scenarios of funding or partly funding superannuation, and also the projected revenue base of the State over time.**

Mr Grant argued that some problems were only of a temporary nature due to the recession. Firstly, he submitted that poor investment returns by the State Superannuation Board were due primarily to the property assets of the Fund being temporarily depreciated as a result of the recession and these would improve over

time.[7] Secondly, it was submitted that one of the advantages of having a defined benefit scheme is that Treasury may deliberately choose to underfund in times of poor economic growth and compensate for this in periods of greater prosperity. Mr Grant questioned whether this was in fact what had been done.

It was further submitted by Mr Grant that the growth of the unfunded liability will decline due to the fact that various statutory authorities were funding at a much faster rate than previously envisaged. The Committee also received evidence to the effect that some outer budget agencies were funding their defined superannuation liabilities within a much shorter time-frame than originally projected.

The NSW Labor Council also queried whether a truly valid comparison could be made between the two options presented to MCCK for assessment. This was due to the fact that Option A, which was a continuation of SASS with the addition of the SG, was an unfunded scheme and Option B, which was the introduction of FSS with the closure of SASS, was funded up front.

> **We are looking at two quite different scenarios with Options A and B. I believe it would have been helpful to see the effects on Option A of channelling the contributions in Option B into the Budget sector in Option A.**

The NSW Superannuation Office, however, argued that the comparison between these two options was a valid one:

> **...The comparisons were done, among other things, on an accrual accounting basis. They were also done on a cash basis. If you look at the comparison as done on an accrual accounting basis you will see it is broadly equivalent to considering that the schemes start out as being fully funded and continue to be fully funded. You are actually looking at the accruing liability cost each year rather than the funding situation.**

The Committee considered, overall, that many of the alternative views placed before it by other parties represented an acknowledgement that there are numerouseconomic models which governments can choose to follow when managing their finances. However, it was the view of the Committee that the government of the day should always possess the right to dictate its own economic policy, particularly in relation to

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[7] The Committee received a letter from the NSW Labor Council dated 30 September 1993 which referred to figures in the 1992/93 Annual Report of the S.A.S.B. and S.S.I.M.C. showing that the unfunded liability had decreased from $14.148 billion in 1991/92 to $14.117 billion as of 31 March 1993. The Labor Council attributed this decline in growth to: improved funding by statutory authorities; improved returns on investments; the lesser write-down of property values as the market bottoms out; recognition of the excessive write-down in 1992.

curtailment of debt.[8]

In this regard the policy option adopted by the NSW Government to close SASS and create a new fully funded scheme such as FSS appeared to the Committee to validly represent a way for the NSW Government to realistically address several major issues: it met the Commonwealth mandated SG level of contributions; it fully protected the rights and benefit expectations of employees belonging to the older schemes; it curtailed the growth in unfunded liabilities in SASS; it created a mechanism whereby the overall unfunded liabilities of NSW public sector schemes would eventually be extinguished; it provided a simple, flexible and portable scheme for new employees and those employees who had not joined SASS.

At the conclusion of receiving evidence, the Committee was strongly of the view that it should always be a decision of the Government of the day as to how it acts to control its own debt.

[8] The Committee notes current Victorian Government steps to rationalise its superannuation liabilities. These steps appear to go well beyond the NSW changes and may be necessitated by the fact that this State's relative levels of unfunded liabilities are significantly higher than those in NSW.

CHAPTER SEVEN:

The Unilateral Decision to Close SASS

As superannuation is viewed by many as forming part of an public sector employee's total renumeration package and overall conditions of employment, many industrial relations issues were raised with the Committee regarding the Government's policy decisions to change to FSS. In this regard, submissions were received from the NSW Labor Council, the Public Service Association of NSW, the NSW Fire Brigade Employees Union, the NSW Police Association and the then Full-time Employee Trustee of the State Authorities Superannuation Board, Mr Vic Grant, critical of the Government's decision to close SASS and open FSS.

The union groups all raised the issue of the Government's unilateral decision to close SASS without any union consultation in their evidence to the Committee and cited it as being a historically unprecedented move. The Public Service Association argued that by closing the scheme in this way the NSW Government has effectively breached the implied contracts of employment of all NSW public sector workers. It was suggested that the legislative implementation of the Government's decision has further deprived the employees of a right to common law redress.

In its submission to the Committee of 4 February 1993, the NSW Superannuation Office submitted that the immediate closure of SASS was a result of concern on the NSW Government's part to contain the cost of the SG, as well as the additional cost that would be incurred by an increasing membership of SASS. It was recognised that advance notice of the closure of a more generous scheme for a less generous one in terms of employer contributions may well have led to a rush on membership of SASS. Weight was lent to this argument by providing figures to illustrate that the 15,000 workers who chose to join SASS between 16 August 1992 and 18 December 1993 would place an extra cost on the Government in their first full year of membership of approximately $35-40 million and a long term cost of $300-370 million in 1992 present value terms.

CHAPTER EIGHT:

The 1986 3% Award Based Superannuation Employer Contribution

A major source of controversy arose over whether the 3% award based superannuation employer contribution installed from 1986 onwards was really a foregone wage rise and thus the contributions made by the NSW Government to FSS in future will be paid for by the employee, not the employer, from what would have been inevitable wage increases. The NSW Labor Council in particular argued that the 3% superannuation award did not place an added cost on employers because it was offset against productivity gains and changes in work practices. As such, the argument that the introduction of the SG necessitated the closure of SASS and the introduction of FSS was invalid. In a supplementary submission to the Committee in March 1993 the Labor Council cited a press release put out by the then Federal Treasurer, the Hon Paul Keating M.P., on 16 December 1985, which refers to "the proposed productivity award, to be paid in the form of superannuation" as further evidence of the nexus between the 3% award and the productivity increase.

However, the NSW Department of Industrial Relations also submitted that it was arguable whether there was a direct link between this 3% superannuation flow through the State and Federal awards and productivity increases. In a number of circumstances where superior superannuation was in place, the 3% was absorbed, not added on and thus did not flow universally. It was argued that the NSW Government at the time was under no obligation to pass on the 3% to those employees who already had adequate superannuation cover, but merely chose to do so.

The NSW Department of Industrial Relations gave no specific examples of NSW Industrial Awards or agreements where such an absorption was applied.

It did appear to the Committee, on examination of the Commission's decisions and on other evidence it received, that the establishment of any clear nexus was a matter of conjecture. This may be due to the fact that such offsetting is still in its evolutionary stages, a view acknowledged to the Committee by the NSW Labor Council.

There was also speculation as to whether there would be sufficient productivity gains to offset employer contributions to the SG. As stated previously, these did not figure into MCCK projections of the unfunded liabilities, a point discussed by the Government Actuary in the review of the MCCK Report:

It is impossible from currently available data to establish with any accuracy the overall impact on employer cost to the Superannuation Guarantee scheme....Mr Stevenson (MCCK) made no allowance for any offset or increase in salary and wage agreements of State public sector personnel which may arise from the introduction of this charge or from the closure to new entrants of the State Authorities Superannuation Scheme.

However, Mr Stevenson in a letter to the Committee of 18 February 1993, expressed doubts about the likelihood of any future offsetting:

By enshrining the superannuation benefits in legislation, the NSW Government has considerably weakened its bargaining power in respect of moderating future salary increases...Australia's slow recovery from the recession raises doubts about there being room to offset forgone salary increases (on account of the SG) by productivity gains.

The Committee agrees that it is impossible to establish with any accuracy the overall impact on employers of the Superannuation Guarantee.

The argument was also raised with the Committee that more generous superannuation benefits in the NSW Public Service were by way of compensation for less competitive salaries. The Public Service Association in particular, emphasised that it still considered the NSW Public Service to be a career service and a scheme such as SASS rewarded employees for long service and helped ensure that they did not take their acquired skills elsewhere.

It was further contended that, as a result of FSS, two employees could now be working side by side in the NSW Public Service under different renumeration conditions and this may be a recipe for industrial disaster. This argument was countered by the NSW Superannuation Office who submitted that this was already the case due to the closure of the various more generous schemes before SASS and the very nature of such schemes. In support of this, the Local Government and Shires Association gave evidence to the effect that the voluntary nature of SASS and its structure always created the situation where, depending on whether a member elected to contribute to the scheme and his rate of contribution, his renumeration package varied. This also made it difficult for the employer to work out overall package costs with any accuracy.

The actual "generosity" of SASS was questioned by the Labor Council, who submitted that they had surveyed 20 major employers and while no clear pattern emerged from the survey, as some employers provided better superannuation benefits than the private sector and some worse, the Council concluded that SASS was not an overly generous but merely adequate scheme.

In contrast to this, the Committee heard evidence from Mr Stevenson to the effect that the scheme was slightly more generous than the private sector:

> **The schemes SASS and SANCS have a 14.4% contribution by the employer. That would be generous for award employees. In the private sector, award employees would get considerably less than the 14.4%. It is slightly generous to generous for the staff. My feeling is that staff employees in the private sector get maybe 12% to 12.5%. For senior executives it would be on the low side.**

CHAPTER NINE:

The Question of Additional Death and Disability Cover for High Risk Occupations

The Committee heard from the NSW Fire Brigade Employee's Union and the NSW Police Association to the effect that FSS provides inadequate additional death and disability coverage for employees such as emergency workers who are generally expected to have shorter working lives.

Under SASS the additional benefit is based on prospective benefit points. These are extra points which it is assumed would have accrued by the age of 58 years had total and permanent invalidity retirement or death not occurred. Each prospective benefit point is worth 4% of final salary.

The following table illustrates how the number of prospective benefit points are calculated. The figures in brackets in the table indicate the benefit payable as a multiple of "final salary".

PROSPECTIVE BENEFIT POINTS
AND (shown in brackets)
ADDITIONAL BENEFIT
as a multiple of "Final Salary"

POTENTIAL YEARS OF MEMBERSHIP *	AVERAGE CONTRIBUTION RATE UP TO SCHEME EXIT					
	1%	2%	3%	4%	5%	6% or more
35	35 (1.40)	70 (2.80)	105 (4.20)	140 (5.60)	175 (7.00)	180 (7.20)
30	30 (1.20)	60 (2.40)	90 (3.60)	120 (4.80)	150 (6.00)	180 (7.20)
25	25 (1.00)	50 (2.00)	75 (3.00)	100 (4.00)	125 (5.00)	150 (6.00)
24	24 (0.96)	48 (1.92)	72 (2.88)	96 (3.84)	120 (4.80)	144 (5.76)
20	20 (0.80)	40 (1.60)	60 (2.40)	80 (3.20)	100 (4.00)	120 (4.80)

15	15 (0.60)	30 (1.20)	45 (1.80)	60 (2.40)	75 (3.00)	90 (3.60)
10	10 (0.40)	20 (0.80)	30 (1.20)	40 (1.60)	50 (2.00)	60 (2.40)
5	5 (0.20)	10 (0.40)	15 (0.60)	20 (0.80)	25 (1.00)	30 (1.20)
4	4 (0.16)	8 (0.32)	12 (0.48)	16 (0.64)	20 (0.80)	24 (0.96)
3	3 (0.12)	6 (0.24)	9 (0.36)	12 (0.48)	15 (0.60)	18 (0.72)
2	2 (0.08)	4 (0.16)	6 (0.24)	8 (0.32)	10 (0.40)	12 (0.48)
1	1 (0.04)	2 (0.08)	3 (0.12)	4 (0.16)	5 (0.20)	6 (0.24)

NOTE: The number of prospective benefit points plus accrued points (as explained in Section 5) cannot exceed 180.

(* That is, potential years of contributory SASS membership as a Full-time employee from exit up to age 58 years)

Under First State Super it is also possible to apply for higher levels of death or invalidity cover. However the Committee has received advice that full details of this are unlikely to be finalised until 1 July 1994. Meanwhile, interim arrangements apply whereby on payment of an extra $5 per month, a $50,000 benefit is provided to members under 35 years. The benefit gradually declines after this age.

Evidence was given as to the higher standard of physical fitness demanded of these workers, the fact that they are subject to much higher physical and mental breakdown rates due to the job risks they face.

Both parties considered that Workcover was inadequate and in cases of injury, SASS had always provided a benefit sooner rather than later. Workcover is considered also to be limited because in assessing a compensation payout little regard is given to the fact that injured workers may be physically able to go into other employment but are unable to actually secure such employment.

As previously stated, the Committee could not ascertain what the benefits of FSS are

likely to be regarding insurance but it does appear that they will be less than that offered under SASS. The Fire Brigade Employee's Union in particular, stressed that the marked difference in cost of seeking private insurance for emergency workers should be recognised.

Both parties agreed that the added inherent risks faced by emergency workers as a consequence of their employment should be recognised in a range of remunerative areas, including their superannuation.

This view was supported by Mr Stevenson of MCCK who pointed out that it was quite usual for more generous superannuation benefits to be provided to people in the private sector who have traditionally experienced a shorter working lifetime such as airline pilots.

However, a number of other parties who submitted to the Committee did not believe that additional employee risks should be addressed via superannuation benefits but instead come under the jurisdiction of worker's compensation, special insurance etc. as it is sole role of superannuation to provide for a basic retirement benefit. The Public Service Association raised the argument that many public sector workers aside from those in the emergency services face additional risks as part of their job.

It was a conclusion of the Committee that any provision of additional death and disability coverage to high risk occupations beyond that which is provided by FSS may ultimately be a point of negotiation between the employees concerned and their employer as part of an enterprise agreement.

CHAPTER TEN:

The Adequacy of First State Super (FSS)

One of the Committee's terms of reference was to assess the adequacy of the FSS. It was recognised by the Committee that this task was actually capable of two interpretations. Firstly, the adequacy of the scheme to allow the NSW Government to address its superannuation responsibilities while still containing government debt and secondly, the adequacy of the scheme to provide a realistic retirement benefit for its members.

As previously discussed, the Committee felt that it always remained the exclusive right of a government to make its own policy decisions regarding how it should act to contain its own debt and on the evidence received the closure of SASS and the opening of FSS appeared to be an adequate way for the Government to eventually extinguish its public sector superannuation liabilities while still meeting Commonwealth Government imposed SG requirements for its employees.

Opinion was more divided regarding the ability of FSS, based on current and projected levels of employer funding, to provide an adequate retirement benefit.

The NSW Superannuation Office stressed to the Committee that FSS must be seen in the context of the new superannuation environment created by the SG in which an employee will now be receiving employer-financed superannuation contributions throughout his or her working life and thus accruing a benefit over a much longer period of time than formerly. SASS, for example, allowed for only a maximum of thirty years of service accumulation. After this thirty year point, no more employer contributions were made.

The following graphs supplied to the Committee by the NSW Superannuation Office depict two scenarios for the employer provided benefits from SASS plus SANCS with FSS. The first page compares an FSS member joining on 1 January 1993 and who is therefore initially covered at the 5% rate, with a SASS member under "pre-SG" rules. The second page compares an FSS member joining on 1 July 2002, and hence covered initially at 9%, with a SASS member under "pre-SG" rules.

The SASS plus assumption that either the member retires (at or after age 58), or if resigning before that age, elects to preserve the benefit until retirement and thereby gets the full employer-financed benefit. If instead a member resigns and takes the resignation benefit in cash (which 80% of members do on resignation), then the employer-financed benefit is in general the same as for FSS.

The SASS and SANCS benefit is as high as the FSS benefit in this situation (i.e. resignation) only because of the SG legislation, which stipulates that an employer must provide at least the SG level in all situations. It was also stressed by the Department that before the SG, the only employer-financed resignation benefit for SASS members with less than 10 years service, if they took their contributions and interest in cash, was the basic 3% benefit. The FSS benefit on resignation is therefore superior to this.

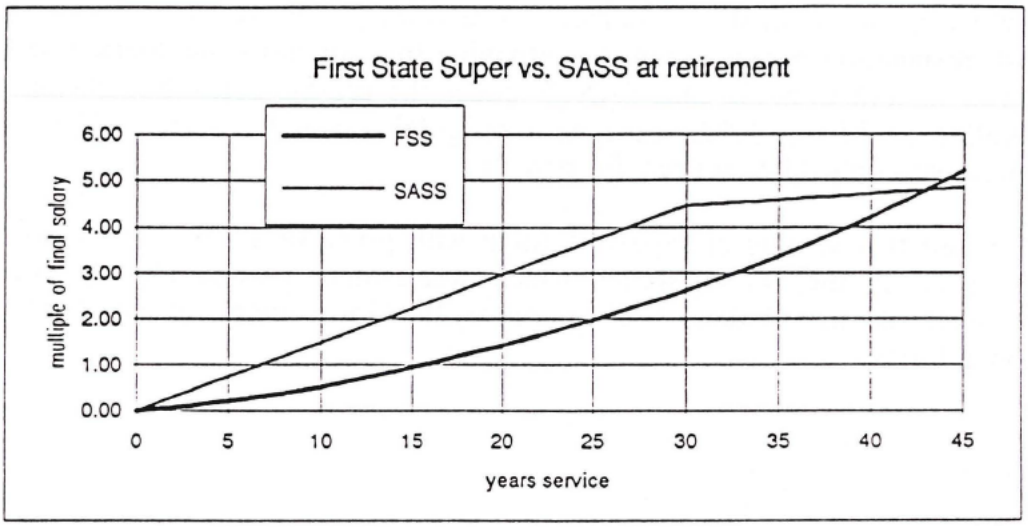
The second graph on each page compares resignation benefits in FSS with those in SASS and SANCS under this pre-SG scenario. As most members resign, rather than retire, from a superannuation scheme, and as most people resigning from SASS take the cash resignation benefit, then it is arguable that for most members, FSS provides a superior benefit to SASS plus SANCS under the pre-SG rules. For example, in the year ending 31 March 1992, 6,252 cash resignation benefits were paid from SASS, compared with only 4,023 retirement benefits.

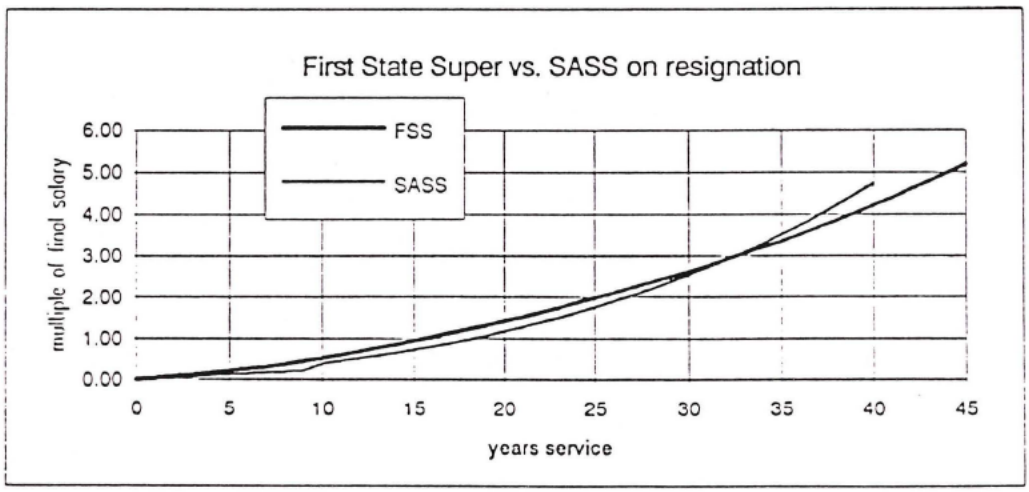
It was noted that vesting of superannuation with preservation was in an evolutionary process prior to the SG legislation which accelerated a trend already evident and which overtook foreshadowed Commonwealth Government requirements for all complying funds.

First State Super

Assumptions	
Interest	7.00%
Salary growth	4.00%
Contributions tax	15.00%
Initial salary	$30,000
E'ee cont'n rate	6.00%
Start date	1/1/93

SGC Table			
Start date	Gross cont'n	Insurance & admin.	Net cont'n
1/7/92	4.00%	0.50%	3.50%
1/1/93	5.00%	0.50%	4.50%
1/7/95	6.00%	0.75%	5.25%
1/7/98	7.00%	1.00%	6.00%
1/7/00	8.00%	1.25%	6.75%
1/7/02	9.00%	1.50%	7.50%





Note: (i) The graphs show only the employer-financed component of the benefits. The employee's own contributions with interest are paid as well for both SASS and FSS.

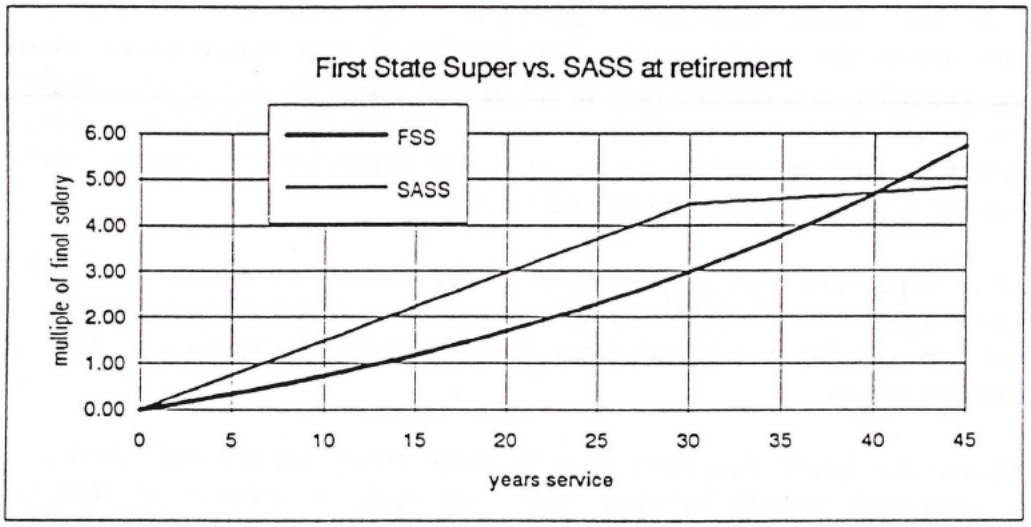
(ii) The SASS benefits include the 3% non-contributory benefit.

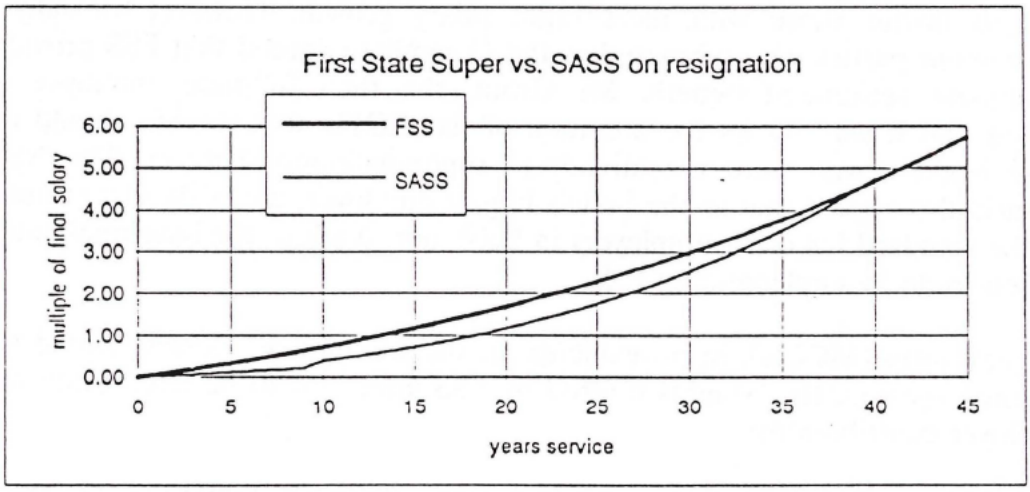
(iii) The SASS resignation benefit is based on "pre-SGC" rules, and on the member taking the cash benefit. It is not shown after 40 years, as only the retirement benefit is payable in SASS from age 58.

First State Super

Assumptions	
Interest	7.00%
Salary growth	4.00%
Contributions tax	15.00%
Initial salary	$30,000
E'ee cont'n rate	6.00%
Start date	1/7/02

SGC Table			
Start date	Gross cont'n	Insurance & admin.	Net cont'n
1/7/92	4.00%	0.50%	3.50%
1/1/93	5.00%	0.50%	4.50%
1/7/95	6.00%	0.75%	5.25%
1/7/98	7.00%	1.00%	6.00%
1/7/00	8.00%	1.25%	6.75%
1/7/02	9.00%	1.50%	7.50%





Note: (i) The graphs show only the employer-financed component of the benefits. The employee's own contributions with interest are paid as well for both SASS and FSS.

(ii) The SASS benefits include the 3% non-contributory benefit.

(iii) The SASS resignation benefit is based on 'pre-SGC' rules, and on the member taking the cash benefit. It is not shown after 40 years, as only the retirement benefit is payable in SASS from age 58.

Evidence was received from the NSW Superannuation Office to the effect that it was considered unlikely that the 9% maximum contribution level would remain constant. It was stressed that FSS was flexible enough to allow the employee to make additional contributions from their salary income, and to negotiate additional employer contributions through enterprise bargaining and/or salary sacrifice arrangements. The NSW Superannuation Office thus considered it to be unrealistic to expect that over the next 40 years the legislative stipulated amount will remain constant as already tax cuts and productivity bargaining have been foreshadowed.

The Committee subsequently also heard evidence from the Department of Industrial Relations that, under enterprise agreements, superannuation is considered to be common across the public sector. DIR submitted that where salary increases are granted, provision is made for part or all of that salary increase to be taken up in the form of additional superannuation coverage. Under enterprise bargaining, the total remuneration package would remain constant regardless of whether increases are taken in the form of superannuation or wages.

Currently, superannuation plays no part in the existing or imminent 62 public sector enterprise agreements in NSW as it is viewed as a constant. However, as previously discussed, it has been acknowledged that enterprise bargaining is presently in its evolutionary stages.

The Committee heard that there may be more equity for the individual employee in an accumulated benefit scheme and that such a scheme is definitely more advantageous to part-time workers and casual employees as defined benefit schemes tend to favour those with most rapid salary growth. However virtually all non-government parties who submitted to the Committee agreed that FSS provided for an inadequate retirement benefit. Mr Grant, the then full-time employee of SASS, argued that it was always the intention of the ACTU that the SG should only cover those workers who were not already in superannuation schemes. The NSW Labor Council also argued that as the State's largest employer, the NSW Government should set the standard for other employers in NSW not to adopt the bare minimum as it has chosen to do by implementing FSS.

Mr Stevenson (MCCK), in his evidence to the Committee, likewise stated that, in his personal opinion, the benefits offered by FSS appeared to be inadequate in terms of employer contributions:

> **In quite a few instances there has been a reduction in the level of superannuation, particularly for award employees. What the NSW Government did is quite a dramatic furtherance of that trend to take that to the next stage and say: all right, there is a standard of 5% and that is what we will pay. It is consistent with trends in the private sector, but probably takes it further in**

nearly all instances.

Mr Stevenson continued on to say that FSS was consistent with developments in superannuation at the national level and that "this is a danger of the national policy, that is set as a minimum but is increasingly regarded as a maximum and is a level that is being set." (sic)

Mr Stevenson then said that he considered that 9% employer contribution from the outset to be desirable, not the 4% initially payable but gradually rising, provided by FSS :

> **..my very broad brush approach is something like a 9% level of benefit, fully vested, fully preserved, for nearly everyone and then maybe, for selected senior people, opportunities to top up.**

This remark was later qualified by the NSW Superannuation Office which advised the Committee that "Mr Stevenson in no way intended to imply that 9% was the minimum sustainable level of contribution by the employer. In fact the remark implicitly recognised the fact that particular circumstances would affect the level of any employer's funding and that the funding level may commence at some lower point with a view to attaining the 9% level, as is the case with First State Super."

The Committee also received evidence that Melbourne Centre for Actuarial Studies, considered that a 16% minimum contribution was necessary to achieve an adequate final benefit.

The Committee was cautious about coming to any definite view as to whether the current level of employer contribution would provide for an eventual retirement benefit that is adequate to meet the retirement needs of employees as it was felt that a multitude of factors, many of which are presently unknown or unquantifiable such as future increases in SG levels of contributions and trends in productivity bargaining, may play a role in determining the final benefit received. As previously stated, based on the evidence given by its Director, Mr David McMahon, the NSW Superannuation Office considers that the present SG levels are unlikely to remain static over the next forty years. The Committee therefore anticipated that the NSW Government may also choose to periodically review the level of its employer contributions in response to such future trends.

Further, in analysing the adequacy of First State Super, the Committee noted that an essential difference with this scheme was that the final payout received may contain no direct financial contributions from the individual employee. Historically public sector superannuation schemes have required a minimum level of employee contributions to reach their desired levels of coverage. Under First State Super there

is currently no such requirement. The Committee also notes the fact that a requirement for a 3% employee contribution has been foreshadowed by the Federal Government as part of the SG. The Committee considered that should there at any stage be a shortfall between what the scheme was projected to provide on retirement and what was generally considered "adequate", it would not be unrealistic to expect employee contributions to pick up at least some of this difference. This could be done on either a voluntary or compulsory basis. The Committee understands that the State Superannuation Investment and Management Corporation does presently encourage employees to contribute to the scheme and advocates the use of substantial education programs to encourage workers to take a financial responsibility for their retirement.

RECOMMENDATION 2:

The Committee is satisfied on the evidence it received that the Government's current program of funding of the existing superannuation schemes is adequate to achieve a manageable level of unfunded liabilities and finance current and future benefit payments.

RECOMMENDATION 3:

The Committee recommends that the NSW Government monitors the ability of FSS to provide an adequate retirement benefit in relation to future trends in SG levels and productivity bargaining.

RECOMMENDATION 4:

The State Superannuation Investment and Management Corporation should continue to strongly encourage all FSS members to make their own contributions towards FSS.

Appendices

APPENDIX ONE

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19 March, 1993

Mr R F Chappell, MP
Chairman
Select Committee of the Legislative
Assembly on Public Sector
Superannuation
Parliament House SYDNEY NSW

Dear Mr Chappell,

Thank you for your letter dated 5 February 1993 confirming that the Committee desires a "reassessment of the Mercer, Campbell, Cook and Knight Report to the NSW Superannuation Office as the basis upon which the NSW Government made policy decisions regarding the First State Superannuation Bill and other public sector superannuation schemes".

I note that the Committee understands my task to be an appraisal of the methodology and assumptions of the Report and the appropriateness of the recommendations embodied therein. In particular, I note that the Committee expected at this stage that it would not be necessary for me to go beyond this Report in order to meet the Committee's needs.

I have therefore initially prepared the attached review of the assumptions of the Report, which I would be pleased to discuss with you at your convenience.

Yours sincerely

(J. H. Taylor)
Government Actuary

SELECT COMMITTEE ON PUBLIC SECTOR SUPERANNUATION SCHEMES

REVIEW BY THE GOVERNMENT ACTUARY OF THE BASES AND ASSUMPTIONS ADOPTED BY WILLIAM M MERCER CAMPBELL COOK & KNIGHT PTY LTD IN ITS REPORTS TO THE NSW SUPERANNUATION OFFICE DATED 8 & 9 SEPTEMBER 1992

INTRODUCTION

1. Following the announcement by the Australian Government of proposals for a Superannuation Guarantee Levy, William M Mercer Campbell Cook & Knight Pty Ltd was engaged in March 1992 by the New South Wales Superannuation Office to advise on a number of options, two of which were reported on in its letters dated 8 & 9 September 1992, copies of which have been supplied to the Select Committee. These letters are signed by Mr M A Stevenson, F.I.A., F.I.A.A..

2. By letter dated 5 February 1993, the Chairman of the Select Committee confirmed arrangements regarding the reassessment by me of these letters in the following terms. "The Committee understands your task to be an appraisal of the methodology and assumptions of the Report and the appropriateness of the recommendations embodied therein. We expect at this stage that it will not be necessary for you to go beyond this Report in order to meet the Committee's needs".

3. Also on 5 February 1993, the Secretary of the Labour Council of New South Wales wrote to the Chairman of the Committee requesting a meeting between its representatives, including its Actuary, Mr Don Steel, and the Committee's Actuary, Mr Bruce Whittle, and myself "to discuss the basis of the actuarial and other costings associated with the decision to close" the State Authorities Superannuation Scheme.

4. Following discussion with the Chairman of the Committee and Mr Whittle, I convened meetings of the actuarial advisers in this matter, namely Messrs. Steel, Stevenson and Whittle and myself, for the purpose of clarifying, delineating and limiting issues of an actuarial nature for the Committee. These meetings were held on 11 February and 3 March and have assisted in the preparation of this review.

THE DATA

5. For the purpose of making the comparisons set out in the Mercer Campbell Cook & Knight letters, Mr Stevenson utilised -

(a) data supplied by the State Authorities Superannuation Board for the statutory actuarial investigations as at 31 March 1991 of

(i) the State Authorities Superannuation Scheme,
(ii) the State Authorities Non-Contributory Superannuation Scheme, and

(iii) the State Superannuation Fund (which was closed to new entrants in 1985),

for which Mr Stevenson and I acted jointly as the valuing actuaries; and

(b) up-dated data (to 30 June 1992) on numbers of members and their salaries for these schemes supplied by the State Superannuation Investment and Management Corporation (which now manages these schemes for the Board) through the NSW Superannuation Office.

6. It will be noted that no data was supplied for the Police Superannuation Scheme (closed to new entrants in 1988) which accounted for some $3,003 million or about a fifth of the net accrued unfunded liabilities of NSW Pubic Sector Superannuation Schemes as at 30 June 1992. Because all or almost all normal retirement age and early voluntary retirement age retirees under the Police Superannuation Scheme commute, on retirement, their pensions and their spouses' reversionary entitlements, it is expected that, if this pattern continues, there will be comparatively little liability remaining in respect of this Scheme by 2030, the end of the projection period.

THE ASSUMPTIONS

A. Statistical

7. For the purpose of projecting the number of members from the existing members of the three schemes mentioned in 5(a) above, Mr Stevenson used the service table relationships, or probabilities of death, retirement, resignation and survivorship, adopted by us for the 1991 statutory actuarial investigations.

A similar procedure was used for estimating proportions giving rise to reversionary benefits, promotional salary scales and proportions of pensions being commuted. While these proportions and rates are subject to review at the next statutory triennial actuarial investigations (as at 31 March 1994), they are the most recent statistically-based estimates available and their use is endorsed.

B. Economic

8. For the purpose of projecting salaries and benefits, Mr Stevenson used the economic assumptions adopted for the main model for the 1991 statutory actuarial investigations. These were -

Net investment earnings-rate	9 per cent per annum
General salary escalation	7.5 per cent per annum
Consumer price inflation	6 per cent per annum

Future experience in these three areas will be determined by a myriad of economic and political influences. These rates represented no more than the valuing actuaries' judgement of what then constituted a reasonable basis. The relationships or gaps between these rates are of particular importance in the case of the State Authorities Superannuation Scheme and the State Authorities Non-Contributory Superannuation Scheme and tend to be more durable than the absolute values assigned at a particular actuarial investigation. The result is that projections

expressed in deflated 'real' money terms, are more stable than those expressed in nominal money terms. Mr Stevenson has provided, on pages 11 to 28 of his letter dated 8 September 1992, a series of projections in nominal money terms and showing the cost as a percentage of salaries for these two schemes from 1992 to 2007, and, on page 10 of that letter, a series of projected unfunded liability figures in both deflated money terms and nominal money terms in 1992, 1995 and thereafter at quinquennial intervals up to 2030. His letter of 9 September 1992 provides capital values of the cost of Option A and the saving from Option B - here capital values are more stable than projected values but, being capital values of differences in cost from the continuance of the existing schemes in the absence of the Superannuation Guarantee Charge, these results are, in my view, subject to greater relative variability than the unfunded liability projections. That said it should also be noted that the difference in cost between Option A and Option B is itself much more stable than the differences in cost between the notional continuance of the existing arrangements and the adoption of either Option A or Option B.

9. It has been suggested that the medium term economic outlook is for lower interest-rates and lower rates of growth in Consumer Price Index than were assumed in the 1991 actuarial investigations. Here I note that the Commonwealth Bank's Chief Economist in the Bank's latest Economic Newsletter (for February - March 1993 based on information available as at 19 February 1993) forecasts a 10-year Commonwealth Bond yield of 9.5 per cent p.a. by 31 December 1993 and a gap of 3.2 per cent p.a. between the official cash rate at that date and the rate of growth in the Consumer Price Index over 1993. As far as recent history is concerned, it might be noted that over the three years ended 30 June 1992, the net earnings rate credited on the funds managed by the State Authorities Superannuation Board, including market value adjustments, averaged 5.57 per cent p.a. while the rate of growth in the Consumer Price Index-Sydney (all Groups) averaged 3.95 per cent p.a. over the same period. In these circumstances, the retention by Mr Stevenson of the 1991 valuation long-term economic bases relating to the net investment earnings-rate and the Consumer Price Index is in my view not unreasonable.

10. The remaining economic area is the assumption relating to future general salary escalation. The introduction of enterprise agreements, the current level of unemployment and the continuing process of integrating Australia into the international economy are just three of the influences which may vary previous expectations as to general salary adjustments in the various parts of the State public sector and beyond. As far as recent history is concerned, it might be noted for comparison with the historical information given in the previous paragraph that the average annual rate of increase in Average Weekly Ordinary Time Earnings over the three years ended 31 May 1992 was 5.43 per cent p.a. In the circumstances, the maintenance by Mr Stevenson of a 1.5 per cent p.a. gap for general salary escalation over consumer price inflation, as used in the 1991 statutory actuarial investigations, for the purpose of illustrating long-term outcomes under the three existing main public sector superannuation schemes in April to August 1992 was in my view not unreasonable.

C. Superannuation Guarantee Charge Offset

11. A more contentious area is whether and, if so, to what extent the introduction of the Superannuation Guarantee Charge would itself result in some real variation in the long term to the growth of salaries within the State pubic sector -

(a) if a minimum level of change were introduced into the three main pre-existing superannuation schemes, as in Option A described in paragraph 4.2 of Mr Stevenson's letter of 8 September 1992, or

(b) where none of those schemes remained open to new entrants and coverage at the Federally enacted levels of the Superannuation Guarantee Charge were introduced, as in Option B described in paragraph 4.3 of Mr Stevenson's letter of 8 September 1992.

Mr Stevenson received no instructions and regards the matter as one on which actuaries, as such, have no special competence to arrive at settled conclusions.

12. As indicated in paragraph 10 above, it may be argued that a variety of influences bear on the fixing of wage and salary levels in the State public sector in the short term and in the long term. Costs to employers are one such influence. Competition for staff is another. The introduction of preservation benefits into the State's public sector superannuation schemes has lessened the importance of superannuation as a means of tying staff and raised the importance of competition for staff via competitive conditions and remuneration, and competitive salaries in particular, in those areas where the State is, from time to time, in competition for staff.

13. At the meeting on 3 March 1993, the private sector actuaries all stated that they had knowledge of firms (which, for reasons of professional confidentiality, they could not name) which had responded to the introduction of the Superannuation Guarantee Charge by closing existing, more generous superannuation schemes to new entrants and, in some such cases, by limiting future benefit accruals to the minimum necessary to meet the requirements of the Charge legislation. In other cases, where only award superannuation existed, this was being increased to the level of the Superannuation Guarantee Charge, while in others, where no superannuation previously existed, the impact was greatest. It is impossible from currently available data to establish with any accuracy the overall impact on employer costs of the Superannuation Guarantee Charge. Other influences, such as enterprise agreement negotiations, are acting simultaneously to cloud the impact so that a simple survey of salaries and wage-rates may incorporate the results of several influences. Mr Stevenson made no allowance for any offset or increase in salary and wage agreements of State public sector personnel which may arise from the introduction of the Superannuation Guarantee Charge or from the closure to new entrants of the State Authorities Superannuation Scheme. In a context in which awards are being replaced by enterprise agreements, it is difficult to see what allowances should be made at this time for these effects but I note that the Keating Government and the ACTU proposed an Accord which would require the increase between the award superannuation level (3%) and the Superannuation Guarantee Charge to be taken into account in Federal wage determinations. Because only a minority of State employees are at this stage substantially affected by the Superannuation Guarantee Charge, the immediate impact on the State of such an Accord would have been to improve the State's competitive position in recruiting staff, had SASS not been closed to new entrants and provided the State's industrial relations arrangements did not follow the proposed Accord.

14. If a series of such Accords come to fruition, if the Superannuation Guarantee Charge legislation remains unaltered and if the State's industrial relations arrangements were adjusted to adopt the principles of such an Accord, an offset in the salary growth assumption would in my view be appropriate. The size of the offset would then vary depending on whether the cost to

the State or a State-wide effect were considered to be the relevant number but would not exceed the equivalent of a long-term reduction in the rate of general salary escalation of 0.5 per cent per annum. Any such restraint would have a marked impact upon the calculated cost of the introduction of the Superannuation Guarantee Charge but much less impact upon the calculated costs of the difference between Option A and Option B.

D. Membership

15. Mr Stevenson made further assumptions regarding the size of the public sector work-force to be covered by superannuation and its composition under Options A and B. His assumption of a constant work-force covered by the three schemes over the projection period serving an expanding State population can be supported as an approximation to the position where State Budgetary receipts are constrained, there is a tendency to scale down the labour force in public utilities, especially the railways, the population is ageing and health, education and law and order expenditure is increasing. Implicitly, he is assuming a reduction in the total public sector workforce by the relatively small number currently covered by the Police Superannuation Fund (9,853 at 31 March 1992).

16. With the State's population expected to increase by some two-fifths over the projection period, an assumption that the public sector workforce would expand at a long-term rate of up to 1 per cent per annum may also be considered reasonable, after allowing for a planned reduction in employment of 8,044 in major public utilities over the three years ending 30 June 1995. Continuation of trends to smaller State Government, through privatisation, closures, contracting out and transfers of responsibilities would, however, lower that rate limit and could make it negative.

17. It has been suggested that, under Option A, there will be an increased propensity to prefer membership of a new defined benefit SGC scheme (of similar design to SANCS) rather than elect to join SASS. (Mr Stevenson made no allowance for this effect). I agree that such a situation would obtain in the absence of marketing efforts by the State Authorities Superannuation Board's managers. In recent years, marketing efforts have lifted the numbers transferring from SANCS to SASS. They may well have continued to do so, had option A been adopted. Likewise any enterprise arrangements, under which conditions are traded for improvements in salaries and wages without a reduction in the numbers employed, would increase the cost impact of the introduction of the Superannuation Guarantee Charge.

18. It has also been suggested that, under the previously existing arrangements, there should be a propensity for replacements of SSF/SASS members to be split between SASS and SANCS as SASS was an optional scheme whereas the SSF was a compulsory scheme. As far as initial decisions about membership were concerned, I agree with that contention but, again, marketing efforts by the State Authorities Superannuation Board's managers cloud the issue as SANCS members were canvassed with some success to join SASS.

E. Costs

19. On Mr Stevenson's calculations, as set out in his letter of 9 September 1992, there is an overall saving in cost in adopting Option B over Option A of some $7.1 billion, being the present value at an interest rate of 9 per cent p.a. of the differences in cost between these two options shown in his annual projections for the years 1992 to 2040. Changes in the assumptions

would still produce a very substantial saving in cost from adoption Option B over Option A. It should be noted that this saving will only emerge over time and has therefore a delayed effect upon future accrued liability figures.

F. Funding

20. For the purpose of projecting unfunded superannuation liabilities, Mr Stevenson made the following funding assumptions -

(a) in the case of SASS, that the non-funding employers would continue to be totally unfunded, while funding employers would contribute the theoretical contribution ratios on the 1991 actuarial valuation basis to employee contributions,

(b) similarly in the case of SANCS, that non-funding employers would continue to be totally unfunded, while funding employers would contribute the theoretical contribution-rates on the 1991 actuarial valuation basis, and

(c) in the case of the State Superannuation Fund (SSF), that the global funding situation based on the overall 1990/91 funding multiple, illustrated in the 1991 actuarial investigation report, would apply. These illustrations showed that, on the 1991 actuarial valuation basis, the overall funding multiple was inadequate and, on such a global aggregation, results in the employer reserves being exhausted in total in this Fund by 2016.

21. The funding assumptions made by Mr Stevenson are consistent with Treasurer's Directions 510.01 and 510.02 (copy annexed) in the case of SASS and SANCS but not in the case of the SSF. It seems clear that the assumption made in the case of the SSF was made for practical reasons such as time pressure and available data. The effect upon the unfunded liabilities, however, is to overstate those liabilities if it be assumed that Treasurer's Directions 510.01 and 510.02 are effective throughout the projection period. On the projection basis adopted by Mr Stevenson this apparent overstatement amounts to $1,788 million in deflated dollars as at 2020, out of a total unfunded liability in the three schemes of $11,746 million in deflated dollars under previous arrangements, $12,526 million in deflated dollars if SASS remained open and $5,894 million in deflated dollars with SASS closed and First State Super opened, on figures advised by Mr Stevenson to the actuaries on 16 February 1993 and set out in Tables 4a, 4b and 4c of Appendix F to the submission dated 3 February 1993 to the Committee from the New South Wales Superannuation Office. This modification, when taken together with the absence of Police Superannuation Fund unfunded liabilities, substantially accelerates the trend shown by Mr Stevenson's figures. One could almost say that the unfunded liabilities appeared to be already under control in a broad sense, although persistent non-funding of the Budget sector limits that argument. Another limitation to the argument arises from the existence of an unallocated amount of some $986 million at 30 June 1992 in the Contributors' Reserve of the State Superannuation Fund - Mr Stevenson has assumed that this unallocated amount would be available to reduce employer liabilities; if left unallocated, this amount would increase by some two-thirds in deflated dollars over the projection period These points are considered further under the heading 'CONCLUSIONS'.

METHODOLOGY

22. The assumption of constant economic bases while the Board adopts net market value as the basis of valuation of assets for accounting purposes under Australian Accounting Standard 25, introduces an element of volatility into future comparisons of then assessed unfunded superannuation liabilities with the projected results, even if the actuarial valuation bases were to be both retained and borne out by future experience. Market valuation of assets is also liable to introduce an element of "short-termism" into the Board and its managers' investment decisions which can have a detrimental effect upon long-term investment earnings. These cautions are raised to warn future readers of the difficulties involved in interpreting projections in this area. In addition, the actuarial valuation methods and bases permissible under that Standard, let alone actual future experience, can result in further variations from the projected results in future years.

23. Mr Stevenson's methodology enables results illustrating trends to be produced in a comparatively short time for most of the relevant funds and schemes.

24. The soundness of Mr Stevenson's computer programs may most easily be tested by independently performing the calculations. This is being done by feeding into my Office's computer programs the various assumptions made by Mr Stevenson together with the valuation data as at 31 March 1992 which is immediately available to my Office. These programs have been developed entirely within my Office from the current legislation, and are therefore independent of Mercer Campbell Cook & Knight's programs.

25. The effect of a limited number of changes in the key assumptions made by Mr Stevenson can be illustrated to give separate estimates of the unfunded liabilities under different sets of assumptions.

CONCLUSIONS

26. Mr Stevenson's report would be enhanced if it were extended to include the unfunded liabilities in respect of the Police Superannuation Fund and if a uniform set of assumptions as to funding were applied to all the main schemes considered (other than First State Super which is to be fully funded). If the current Treasurer's Directions were used as that basis, then, using my calculations for the Police Superannuation Fund and Mr Stevenson's calculations for the remaining three main schemes, the first and seventh lines in the table on page 10 of Mr Stevenson's letter of 8 September 1992 showing the progress of the unfunded liability, in deflated dollars, would read as follows-

Year	Current Position	Add SGC Expenditure (Option A)	First State Super (Option B)
	Total Deflated $m	Total Deflated $m	Total Deflated $m
1992	14,055	14,055	14,055
2020	11,152 ζ	11,932 ζ	5,300

ζ *plus a relatively small amount for replacement police*

The first two sets of figures in this table show the relatively substantial improvement in salary-deflated terms expected, on the projection basis assumed by Mr Stevenson, to occur over the next 28 years due to the closure to new entrants in 1985 of the State Superannuation Fund and to the closure to new entrants in 1988 of the Police Superannuation Fund and the State Public Service Superannuation Fund and to the Treasurer's 1991 Directions that commercial authorities should fully fund their superannuation liabilities over not more than 30 years, while Budget-funded departments and organizations should not fund. Further improvements in real terms are expected to occur for some years after 2020 on the basis of those past decisions.

27. For the purpose of deflating the nominal dollar amounts, Mr Stevenson deflated the results by the general salary escalation assumption (7.5 per cent per annum). On 17 March 1993, Mr Stevenson was good enough to supply me with a further set of results deflated by the Consumer Price Index growth assumption (6.0 per cent per annum), copy attached. Using these latter results, together with adjustments to include the unfunded liabilities of the Police Superannuation Fund and to allow for the continuous application of the Treasurer's Directions, yields the following table showing a rather different progress, on the valuation assumptions, of the unfunded liability in 1992 dollars of constant purchasing power.

The $1,788 million adjustment mentioned in paragraph 21, to remedy projected underfunding of statutory authorities in 2020 in the State Superannuation Fund, becomes a $2,650 million adjustment under this approach and has also been taken into account in the following table.

Year	Current Position	Add SGC Expenditure (Option A)	First State Super (Option B)
	1992 dollars $m	1992 dollars $m	1992 dollars $m
1992	14,055	14,055	14,055
2020	16,528 ζ	17,683 ζ	7,854

ζ *plus a relatively small amount for replacement police*

28 These two depictions may be reconciled by noting that the former table gives a relationship to public sector salary rates whereas the latter table is denoted in constant purchasing power (1992) dollars. They act as a good demonstration of the way apparently small changes in assumptions can have major effects on later values in long-term projections.

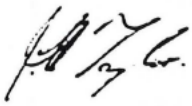
29. The effect of adjustments to the projection bases for possible future membership growth act in the opposite direction (i.e as an offset) to the effect of any assumptions of lower general salary escalation relative to the other economic assumptions.

30. There is some force in the argument that, without marketing efforts, there would be a greater propensity to remain in a minimum scheme satisfying the Superannuation Guarantee Charge, rather than move into the State Authorities Superannuation Scheme, than occurred when the Basic Scheme provided non-contributory benefits at only the Award (3%) level. However, marketing efforts have been shown to influence this propensity. If marketing were abolished or inapplicable (as in Option B), this effect would result in lower costs in the long-term. The effect could be illustrated by reducing the proportion of new entrants electing to join SASS by, say, 2 per cent in any year. Only actual experience will show whether such an assumption (or what sized assumption) would be justified.

31. The question of salary offset for the introduction of the Superannuation Guarantee Charge is far more complicated, in the absence of some powerful uniform wage-fixing arrangements. As indicated in paragraphs 12, 13 and 14 above, the direct cost to the State of the Superannuation Guarantee Charge is relatively less than for an employer sponsoring only Award (productivity 3%) superannuation or for an employer with no superannuation, but relatively more than for an employer with a generous superannuation scheme, who closes it to future accruals of benefit and substitutes future accruals at only the Superannuation Guarantee Charge levels. What offset, if any, will occur in wage-fixing arrangements for the State, only time will tell. Even then, it may be hard to disentangle that effect from the other influences bearing on wage-fixing, particularly under enterprise agreements where salaries may be increased if conditions are surrendered or revised to produce productivity improvements. The current high level of unemployment may also be a factor in overall wage-bargaining at this time. These other influences, however, would be expected to bear on all three projections of unfunded liabilities on page 10 of Mr Stevenson's letter of 8 September 1992.

32. Other matters which were resolved by discussion and exchanges between the actuaries, or are regarded as being of minor importance, have been omitted from this review.

33. I await the Committee's directions as to any further work to be performed by my Office.



(J H Taylor)
Government Actuary
19 March, 1993

508.02 Upon receipt of the Public Employment Industrial Relations Authority's advice to the Treasury, consideration will be given to the provision of funds and the department notified of the Treasurer's decision. In no circumstances shall new appointments be made until advice has been received that the required funds have been provided by the Treasurer.

TD89/4
508.03 As departments will not make a direct approach to the Treasury for the provision of funds in these cases, full information concerning the costs involved, both on an annual and current financial year basis, and the vote or votes affected, should be incorporated in the submissions to the Public Employment Industrial Relations Authority.

ACCOUNTING FOR AND FUNDING OF EMPLOYEE ENTITLEMENTS(SUPERANNUATION, LONG SERVICE LEAVE, SICK LEAVE ETC.)

510.01 GOVERNMENT SERVICES (fully budget funded) and SEMI-COMMERCIAL AUTHORITIES (subsidised by the budget).

Organisations in this category should:-

1. recognise all employee entitlements in the financial period in which they emerge,
2. progressively seek to recover these from revenues
3. not fund the liability.

510.02

COMMERCIAL AUTHORITIES (self funded Government trading enterprises, including State owned corporations).

Organisations in this category should:-

1. recognise all employee entitlements in the financial period in which they emerge
2. fully fund superannuation entitlements
3. meet other employee entitlements on a normal commercial basis from general operating cash flow (i.e. no specific funding).

WILLIAM M.
MERCER CAMPBELL COOK & KNIGHT
PTY. LTD.

A.C.N. 005 315 917

FAX MESSAGE

DATE: 17 March 1993

TO: Mr John Taylor

Government Actuary, NSW Government Actuary Office

FROM: Martin Stevenson

Mercer Campbell Cook & Knight

CODE: HOUSE:IN:01 **NO. OF PAGES** *(including this page)* 2

FAX NO: 299 5835

Dear John

As discussed, please find enclosed the unfunded liability calculations, with inflation at 6% per annum as well as at 7.5% per annum.

Regards

Martin

If you have not received all pages transmitted please telephone (02) 2290800 or facsimile number (02) 229 0980

Year	Current Position			Add Sgc Expenditure (Option A)			First State Super (Option B)		
	Total Nominal	Total Deflated 7.5%	Total Deflated 6.0%	Total Nominal	Total Deflated 7.5%	Total Deflated 6.0%	Total Nominal	Total Deflated 7.5%	Total Deflated 6.0%
1992	11,052	11,052	11,052	11,052	11,052	11,052	11,052	11,052	11,062
1995	14,285	11,499	11,994	14,345	11,547	12,044	14,067	11,323	11,811
2000	21,680	12,156	13,602	22,917	12,850	14,378	20,134	11,289	12,632
2005	34,948	13,649	16,385	35,845	14,000	16,806	29,888	11,673	14,013
2010	54,010	14,693	18,922	55,989	15,232	19,615	41,707	11,346	14,612
2015	70,964	13,448	18,578	74,512	14,120	19,507	45,776	8,674	11,984
2020	88,987	11,746	17,409	94,893	12,526	18,564	44,651	5,894	8,735
2025	109,880	10,103	16,063	118,748	10,918	17,359	39,222	3,606	5,734
2030	133,803	8,569	14,616	147,015	9,415	16,060	30,542	1,956	3,336

APPENDIX TWO

New South Wales Government

Government Actuary's Office

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Sydney 2000

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Sydney N.S.W. 2001

Our Reference:

Your Reference:

Telephone : 299 5344
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Mr R F Chappell, M.P
Chairman
Select Committee upon Public Sector
Superannuation Schemes
Parliament House
SYDNEY NSW 2000

5 May, 1993

Dear Mr Chappell

As requested at the Committee's hearing on 24 March 1993, calculations have been made by my Office for the purpose of independently verifying the unfunded superannuation liabilities figures set out on page 10 of the report dated 8 September 1992 by William M Mercer Campbell Cook & Knight Pty Ltd. The results of these calculations are attached to the enclosed report, which examines in some detail reasons for any divergences between the two sets of calculations.

Extra Cost of Superannuation Guarantee Charge

2. Results obtained by discounting the extra cash costs that would arise under Option A or B on the economic and statistically-based assumptions adopted by Mercers, when applied to my Office's data, gave comparatively close agreement with the values set out in Mercer's letter dated 9 September 1992 for Option A, namely a present value of the extra cash costs up to the year 2040 of approximately $7 billion.

In the case of Option B, because my Office unlike Mercers had assumed full-funding of First State Super, the present value of the extra cash costs up to the year 2040 came to $5.6 billion. This extra cost is, however, offset by the reduction in unfunded employer liabilities over time, so that again the result of my Office's calculation is close to that produced by Mercers.

I would stress that these calculations do not allow for any offset to occur in the rates of salary growth as a result of the introduction of the Superannuation Guarantee Charge.

3. The reconciliation of the results of this Office with Mercers has not produced answers in complete agreement with the amounts of the unfunded liabilities at various future dates determined by Mercers. However it appears that agreement is sufficiently close, given the uncertainty attaching to various elements of the basis, to state that:

(a) The methodology used by Mercers has been independently validated, given the time constraints imposed on Mercers.

(b) On the valuation assumptions chosen, the results are in reasonable agreement with the calculations carried out by my Office given the different approaches to the calculation of unfunded liabilities in the earlier years of the projection. However, it is noted that varying particular economic assumptions either up or down by 1% p.a. can produce very large differences in the final years' unfunded liabilities over the very long period of these projections.

Unfunded Superannuation Liabilities

4. The report highlights methodological issues in relation to the calculation of unfunded superannuation liabilities at particular times.

5. From the year 2000 onwards, Mr Stevenson has used a traditional actuarial method, devised to arrive at set rates of funding. This method calculates unfunded liability as the present value of future benefits payable, less the present value of future contributions payable, and less the value of the assets in the Fund. However, for the year 1992, he adopted a method prescribed by Australian Accounting Standard 25 (AAS25) for reporting unfunded liabilities by superannuation funds. For the intervening years, he moved gradually from one method to the other.

6. My Office adopted a variant of the AAS25 approach. Under this variant, unfunded liability is calculated as the present value of accrued future benefits payable from employer reserves, less the amount in the employer reserves held in the Fund at the point of calculation. This variant reflects the existence of separate reserves for contributors and is in line with previous advice to the Treasury and other employers.

In general, my Office's approach tends to produce lower values of unfunded liabilities than Mr Stevenson's traditional method as long as employees are contributing to defined benefit funds, but higher values than AAS25 results due to the recognition (and hence exclusion from employer reserves) of surplus or unallocated moneys in the Contributors' Reserve in the State Superannuation Fund which AAS25 regards as generally available to pay benefits. My Office's approach has been devised for financial reporting purposes in the context of the State's superannuation legislation.

It should be noted that in the time-frame for results to be produced, it was simply not possible for Mr. Stevenson to use an accrued benefit method; the only practical calculation option available to him was to adopt a 'present value of future benefits less present value of future contributions and assets' approach.

7. The unfunded liabilities produced by Mr Stevenson's traditional method would be regarded as overstatements by those, such as accountants, whose concern is to measure the value of accrued superannuation benefits and who recognise that an accrual of benefit close to retirement has a higher value than the same accrual of benefit at an earlier age. Mr Stevenson's traditional method is designed to trace chronologically the level to which a fully funded fund should rise where employer contributions are specified as a constant ratio to employee contributions and is valuable in that context.

8. In the event, contributions by State employers are flexible, being periodically determined by the State Authorities Superannuation Board (subject to the concurrence of the Treasurer), having regard to actual experience to the date of calculation.

9. It is of interest to note that, at future dates, Mr Stevenson would be expected to use, for accounting purposes, a method akin to the method used by my Office for the purpose of ascertaining the value of accrued liabilities and hence reporting unfunded liabilities. It should also be noted that requirements for employer moneys in order to pay benefits depend on benefits promised, future employee contributions and the investment of the assets and not on rules as to what constitutes accrued or past service liabilities.

10. Minor variations in assumptions and data assume greater importance in the later values of projections. Such variations exist between the work of my Office and that of Mr. Stevenson's due to the independence of the calculations. It is pleasing therefore to be able to advise that the results of my Office's calculations of unfunded superannuation liabilities agree within a reasonable tolerance with those produced by Mr Stevenson's officers for the year 2030.

11. I would again stress that these calculations have been made on an assumption that no salary offset will occur as a result of the introduction of the Superannuation Guarantee Charge.

12. I should be glad to discuss these matters if desired.

13. I should add that the differences in the earlier years of the projections between the results of my Office's calculations for the unfunded liabilities and those of Mercers were such that I felt it necessary to discuss them with Mr Stevenson before submitting this report. This discussion was held on 3 May 1993 following Mr Stevenson's return from overseas.

Yours faithfully

(J H Taylor)
Government Actuary

SELECT COMMITTEE ON PUBLIC SECTOR SUPERANNUATION SCHEMES

Supplementary Report by the Government Actuary on the Report Dated 8 & 9 September 1992 by William M Mercer Campbell Cook & Knight Pty Ltd to the NSW Superannuation Office

INTRODUCTION

1. This report is supplementary to my review dated 19 March 1993 of the bases and assumptions adopted by William M Mercer Campbell Cook & Knight Pty Ltd in its letters dated 8 & 9 September 1992 to the New South Wales Superannuation Office.

   It will be recalled that these letters provided projections of the impact of the Superannuation Guarantee Charge upon the State Superannuation Fund, the State Authorities Superannuation Fund and the State Authorities Non-Contributory Superannuation Scheme, but not the Police Superannuation Scheme.

2. This report is set out under the following headings -

METHODOLOGY

3. In paragraph 24 of my review, I noted that the soundness of Mr Stevenson's computer programs could most easily be tested by independently performing the calculations and that this was being done by feeding into my Office's computer programs the various assumptions made by Mr Stevenson together with the valuation data as at 31 March 1992 which was immediately available to my Office.

I also noted that these programs have been developed entirely within my Office from the current legislation, and are therefore independent of Mercer Campbell Cook & Knight's programs.

4. At the Select Committee's hearing on 24 March 1993, the Chairman stated that, at that stage, no further variables need be built into these calculations, the results of which are presented in this supplementary report.

However it is noted that, as a consequence of the development of this model, results on differing economic assumptions may be readily obtained in this Office, subject only to the cost of computer time necessary to make the calculations and relatively small additional staff costs.

5. The economic and statistically-based assumptions and all the decrement rates applicable to each scheme were known and readily available so that it was clear that my Office was, in these respects, replicating Mercer's assumptions.

6. A number of details, such as the expected levels of future employer funding for particular groups of employers in the different schemes, could not be readily compared or ascertained from Mercer's letter. For matters such as these, reasonable assumptions were made which, however, may not reflect those made by Mercers. Similar remarks apply to the expected distributions by age and sex of the new entrants to the schemes. The total number of members in particular scheme groups were constrained in a similar manner to the constraints on numbers adopted by Mercers.

Some variations in methodology occurred in relation to initial values where Mercers adopted AAS 25 values whereas my Office retained a distinct Contributor's Reserve for the State Superannuation Fund as specified by the relevant legislation. These variations were worked off by Mercers over the period to the year 2000.

7. Further variations in methodology applied from the year 2000 onwards in the case of the State Superannuation Fund, where Mercers calculated the unfunded liability as the present value of future benefits payable, less the present value of future contributions payable less the value of assets in the Fund, whereas my Office calculated, annually, present values of accrued benefits on a proportionate basis before deducting the value of employer reserves, following the principle underlying the current accounting approach.

8. In addition, my Office used later information as to the numbers and ages of members in each scheme at the commencement of the projections.

9. Finally, to expedite the calculations, my Office assumed that in the case of Option A, new employees who did not elect to join the State Authorities Superannuation Scheme would join a fully funded non-contributory scheme of a similar type to First State Super.

10. For these reasons, some divergence may be expected between the Mercer projections and my Office's results.

RESULTS

11. Tabulations of my Office's calculations of the unfunded superannuation liabilities for the schemes considered by Mercer's, are attached as appendices. They are summarised in following table, where the nominal results have been deflated by the general salary growth assumption (7.5 per cent per annum), together with the corresponding deflated results from the Mercer projections, in the case of Option B (with full funding of First State Super) and the previously existing arrangements. (A similar table in nominal dollars is attached as Appendix 4).

Year	Previously Existing Arrangements			With First State Super On a fully funded basis (Option B)		
	MCCK Total Deflated $m	GAO Total Deflated $m	Difference $m	MCCK Total Deflated $m	GAO Total Deflated $m	Difference $m
1992	11,052	11,756	-704	11,052	11,793	-741
1995	11,499	11,755	-256	11,323	11,587	-264
2000	12,156	11,763	+393	11,289	11,130	+159
2005	13,649	11,821	+1,828	11,673	10,483	+1,190
2010	14,693	11,923	+2,770	11,346	9,496	+1,850
2015	13,448	12,111	+1,337	8,674	8,287	+387
2020	11,746	12,123	-377	5,894	7,084	-1,190
2025	10,103	10,431	-328	3,606	4,530	-924
2030	8,569	9,031	-462	1,956	2,651	-695

Negative differences indicate that MCCK's figures are smaller than my Office's for the year shown.

12. In my evidence to the Committee at its initial hearings, I alluded to the fact that there are a number of different approaches to quantifying unfunded liabilities.

13. One method, the traditional actuarial method devised to assist firms in developing rates of contribution to fund superannuation liabilities, takes the amount of unfunded liabilities as being the present value of future benefits payable, less the present value of future contributions payable and less the value of assets in the Fund. Mr Stevenson used this method for the State Superannuation Fund for the years commencing 2000 (and blended into that method from the AAS25 method over the intervening years from 1992) while applying the AAS25 method for SASS and SANCS throughout his projection.

My Office, on the other hand used the accrued benefits method which undergirds accounting standards developed over the past two decades i.e. the present value of accrued benefits calculated on a proportionate basis less the value of the relevant assets.

14. The following table compares the differences in salary growth-deflated dollars between MCCK's and my Office's results for the previously existing arrangements, with the differences in deflated dollars between the two actuarial groups' sets of results for the State Superannuation Fund alone.

Year	Previously Existing Arrangements Deflated Dollars			State Superannuation Fund Deflated Dollars			Difference between the Differences
	MCCK $m	GAO $m	Difference $m	MCCK $m	GAO $m	Difference $m	$m
1992	11,052	11,756	-704	8,350	9,197	-847	143
1995	11,499	11,755	-256	7,929	8,750	-821	565
2000	12,156	11,763	+393	7,484	7,906	-422	815
2005	13,649	11,821	+1,828	8,019	7,063	956	872
2010	14,693	11,923	+2,770	8,593	6,365	2,228	542
2015	13,448	12,111	+1,337	7,066	6,019	1,047	290
2020	11,746	12,123	-377	5,261	5,779	-518	141

15. It can be seen that, after the initial period from 1992 to 2000 in which Mercer's use of AAS 25 results (which attribute surpluses or unallocated moneys in the Contributor's Reserve to the employers instead of the contributors in the State Superannuation Fund) reduces the calculated amounts of unfunded superannuation liabilities, most of the difference in the results is attributable to the use by Mercers of a method in relation to

the State Superannuation Fund, and apparently to SASS and SANCS as well, which is not related to the method used to report unfunded accrued superannuation liabilities for the purposes of the State Consolidated Financial Statements. The remainder of the differences appear to be due to the need by my Office to modify the salary-weighted new entrant distribution shown in Appendix E8 of the Mercer report dated 8 September 1992, to derive a new entrant distribution by number of entrants, and to the use of some approximations as to funding ratios, total membership and taxation. These modifications and approximations have their greatest influence in the later years of the projections.

16 Turning to Option A, the following table compares the differences, in salary growth-deflated dollars, between MCCK's and my Office's results, with the differences in deflated dollars between the two actuarial groups' sets of results for the State Superannuation Fund alone.

Year	Deflated Dollars			Deflated Dollars			Difference between the Differences
	MCCK Option A $m	GAO Option A* $m	Difference $m	MCCK SSF $m	GAO SSF $m	Difference $m	$m
1992	11,052	11,793	-741	8,350	9,197	-847	106
1995	11,547	11,668	-121	7,929	8,750	-821	700
2000	12,850	11,642	1,208	7,484	7,906	-422	1,630
2005	14,000	11,707	2,293	8,019	7,063	956	1,337
2010	15,232	11,778	3,454	8,593	6,365	2,228	1,226
2015	14,120	11,955	2,165	7,066	6,019	1,047	1,118
2020	12,526	11,894	632	5,261	5,779	-518	1,150
2025	10,918	10,173	745				
2030	9,415	8,839	576				

* (with full funding for new non-contributory members)

It is clear that the differences in this case have been exaggerated by my Office's simplifying assumption that all new non-contributory members would be fully funded.

17. Turning to Option B, the following table compares the differences, in salary growth-deflated dollars, between MCCK's and my Office's results, with the differences in deflated dollars between the two actuarial groups' sets of results for the State Superannuation Fund alone.

Year	Option B (with full funding for First State Super) Deflated Dollars			State Superannuation Fund alone Deflated Dollars			Difference between the Differences
	MCCK $m	GAO $m	Difference $m	MCCK $m	GAO $m	Difference $m	$m
1992	11,052	11,793	-741	8,350	9,197	-847	106
1995	11,323	11,587	-264	7,929	8,750	-821	557
2000	11,289	11,130	159	7,484	7,906	-422	581
2005	11,673	10,483	1,190	8,019	7,063	956	234
2010	11,346	9,496	1,850	8,593	6,365	2,228	-378
2015	8,674	8,287	387	7,066	6,019	1,047	-660
2020	5,894	7,084	-1,190	5,261	5,779	-518	-672
2025	3,606	4,530	-924				
2030	1,956	2,651	-695				

In this case, excluding the different treatment of the State Superannuation Fund has explained part but not all of the differences in the results.

18. The following notes trace the differences in nominal terms and the likely causes of the differences in some detail.

Comparison of the unfunded liabilities under existing arrangements

19(a) As at 31 March 1992 the initial unfunded employer superannuation liability was determined by my Office as $11.756 Bn based on the actual data of that date and recognising the existence of surplus in the Contributors' Reserve of the State Superannuation Fund. This compares with $11.052 Bn taken by Mercers from the State Authorities Superannuation Board's balance-sheet as at 31 March 1992 which was calculated under AAS25. My Office's figures continued to exceed Mercer's at the 1995 quinquennial rest, when the respective unfunded liabilities were $14.603 Bn and $14.285 Bn.

(b) From the quinquennial rest in the year 2000 up to and including the quinquennial rest in the year 2015, my Office's figures were always below Mercers, the maximum difference reaching $10.184 Bn in 2010. At that date the respective figures were $43.826 Bn and $54.010 Bn.

(c) For the quinquennial values at 2020, 2025 and 2030 my Office's figures were above Mercer's. The maximum difference of $7.216 Bn occurred at 2030. The respective figures were $141.019 Bn and $133.803 Bn.

(d) It will be seen that my Office's figures are generally higher than Mercers, although for a period of about 15 years from 2000, Mercer's figures exceeded my Office's.

20. The differences can be attributed to the base figures available to my Office being higher than those used by Mercers, and to the blending by Mercers of their results for the SSF into the results from the 1991 statutory actuarial investigation by the year 2000. In addition, my Office's calculations assumed a continuance of 1991-92 rates of employer funding whereas Mercers assumed a continuance of 1990-91 rates of funding, at least for the State Superannuation Fund (SSF). It should be noted that, for a considerable period over which Mr Stevenson's work was being carried out, the 1991/92 rates of employer funding were not known. The impact of these influences is reflected in the progression of the SSF liabilities determined in this Office being lower than that derived by Mercers for the years 2000 to 2020. These SSF differences represent about 50% of the differences in the totals for the years in this period.

Comparison of the unfunded liabilities under Option A

21(a) The progression of the liabilities under this scenario shows that my Office's figures are consistently lower than Mercers at each quinquennial rest after, and including, the year 2000.

(b) My Office's results were slightly higher in the base year 1992 and again in 1995. The initial differences were probably due to the larger membership at the base date as discussed earlier.

(c) The trend in the projected results for the year 2000 and after, shows that the largest divergence between the two projections was $12.7 Bn in 2010, where the respective results were $43.292 Bn and $55.989 Bn.

(d) The differences remained fairly constant up to 2030, the end of the projection. At that date the difference was $9.0 Bn, the respective projected values being $138.0 Bn and $147.0 Bn.

However these differences may be explained by the fact that, in my Office's projections, it was assumed that the new entrants to the non-contributory scheme would always be fully funded, a condition not specified when Mercer's option A calculations were made.

22. The underlying assumptions made in my Office's calculations with respect to the allocation of benefits to the membership and the funding arrangements are as follows.

(a) Of the existing schemes, the SSF i.e. the State Superannuation Fund, remains closed.

(b) SASS, i.e. the State Authorities Superannuation Scheme, remains open.

(c) The Basic Benefit Scheme, i.e. the State Authorities Non Contributory Scheme, is repealed.
The entitlement to the Basic Benefit for the existing SASS members is obtained additionally from that scheme and has been costed on this basis. The SGC safety net calculations have been made to ensure the minimum benefit is valued.

(d) New entrants to SASS obtain benefits on the same basis as in (c).

(e) The new entrants have been projected on the basis that the workforce covered by SASS and SSF will be constant in future years, eventually by number, age and sex.

For this purpose, exits from the SASS and SSF schemes have been projected for each future year together with exits from the projected new entrants to SASS in future years.

(f) Existing members of the Basic Benefit scheme, who were not entitled to benefits from any other superannuation scheme, were assumed to be covered for the benefits of First State Super from 31 March 1992. Since this scheme has been assumed to be fully funded, no unfunded liability arises from these members at any future date.

(g) The exits from the existing Basic Benefit only membership have been projected for future years, together with the exits of the projected new entrants. These members have been assumed to derive their superannuation benefits from the fully funded First State Super scheme.

23. Hence it may be seen that, under option A (as described above), the level of employer funding is greater than under the existing arrangement because of the progressive coverage of new members by First State Super, where my Office has assumed full funding of the benefits of these members. This appears to explain why my Office's unfunded liabilities are lower than Mercer's values for this option at future dates, and why the unfunded liabilities from this scenario are slightly lower and diverging over time from my Office's values in respect of the existing arrangements.

Comparison of the unfunded liabilities under Option B (where First State Super is fully funded)

24(a) Under this arrangement, my Office's results at the base date 1992 and again in 1995 exceed Mercer's results.

(b) From the quinquennial rest at year 2000 until the quinquennial rest at year 2025, my Office's results were below Mercer's values.

(c) From the quinquennial rest at 2025 until the end of the projection, my Office's results were above Mercer's.

(d) It will be noted that both sets of projections exhibit the same feature, namely, rising nominal values to a peak value followed by a progressive fall.

It will be also seen that the two sets of projections reach the peak value at slightly different quinquennial points in time, my Office's at 2020 while Mercer's peaks at 2015.

(e) The comparison of the progression of the two sets of values shows that Mercer's values initially rise more steeply, reach almost a plateau from 2010 to 2025, but slightly peak at 2015, and then fall, slowly at first but then reducing more rapidly, to the value at 2030 of $30.542 Bn.

(f) My Office's results rise more slowly, reach a higher and more pronounced peak and then fall more rapidly but still above Mercer's values, to the 2030 value of $41.398 Bn.

25. The differences in the two sets of projections may be explained by the points at which the employer assets in each fund have been projected to be exhausted. In my Office's calculations it has been assumed that the 1991/92 funding multiples by the employers will continue until the different points in time are reached where the assets of individual parts of each separate scheme are exhausted. When this condition is reached, separately for each part of each scheme, full payment of the emerging benefits by the employers is then assumed.

26. As noted earlier, while these are reasonable assumptions, they have not been compared in detail with Mercer's assumptions.

Present Values of Extra Cash Costs to 2040

27. Results obtained by discounting the extra cash costs that would arise under Option A or B on the economic and statistically-based assumptions adopted by Mercers, when applied to my Office's data, gave comparatively close agreement with the values set out in Mercer's letter dated 9 September 1992 for Option A, namely a present value of the extra cash costs up to the year 2040 of approximately $7 billion. I would again stress that these calculations do not allow for any offset to occur in the rates of salary growth as a result of the introduction of the Superannuation Guarantee Charge.

28. Some difficulty was experienced in my Office in reconciling the present value of the cash flows representing the difference between the existing arrangement and option B. Mercer's report indicated that a net cash saving having a present value of 0.5 Bn would be achieved in relation to the existing arrangements, only if the First State Super Scheme was funded to the current extent. This, however, apparently meant funded to the previous extent, i.e. the extent prior to the introduction of First State Super on a fully funded basis.

29. Initially one would expect that the cash flows in Mercer's report of 8 September 1992 and the unfunded liabilities shown in the same report would have been prepared on the same basis. The sentence immediately above paragraph 6.4 on page 9 of the report states that the "cash" projections assume that "the current funding methods are maintained". However, it appears that this statement refers to the funding methods in vogue prior to the introduction of full funding into the First State Superannuation Scheme. Paragraph 6.4 of the Mercer report records that "It was decided to adopt Option B on an accumulation, fully funded basis", and it is apparent that the unfunded liabilities on page 10 of that report for Option B, and only Option B, have been prepared on that basis.

30. When a comparison of cash flows in present value terms was reported in Mercer's letter of 9 September 1992, the cash flows used were those calculated on the old funding basis.

31. It is clear that the present values of the cash flows under the various arrangements shown in the letter of 9 September are not comparable with the unfunded liability results shown on page 10 of the report dated 8 September 1992. The annual cash flows required under the fully funded approach for Option B are substantially larger than those shown for that option in the Mercer reports referred to me for comment. Indeed, the present value at 9 per cent p.a. of the additional cash flows required until 2040 under a fully funded approach to Option B amounts to $5.6 billion on my Office's calculations, although the

introduction of Option B gives rise to a saving of some $99.6 billion in unfunded liabilities by 2030 compared with the previously existing arrangements (which has a present value of $5.3 billion as at 1992). These calculations confirm Mr Stevenson's conclusion that on the assumptions in his report, a saving would result from the adoption of Option B

CONCLUSIONS

32. The reconciliation of the results of this Office with Mercers has not produced answers in complete agreement with the amounts of the unfunded liabilities at various future dates determined by Mercers. However it appears that agreement is sufficiently close, given the uncertainty attaching to various elements of the basis, to state that:

(a) The methodology used by Mercers has been independently validated, given the time constraints imposed on Mercers

(b) On the valuation assumptions chosen, the results are in reasonable agreement with the calculations carried out by my Office given the different approaches to the calculation of unfunded liabilities in the earlier years of the projection. However, it is noted that varying particular economic assumptions either up or down by 1% p.a. can produce very large differences in the final year's unfunded liabilities over the very long period of these projections. Different conclusions may have been reached given sufficiently different economic assumptions.

33. As noted earlier, some departures were made from the data used by Mercer Campbell Cook & Knight. These departures are referred to above and give rise to differences between my Office's results and those of Mercer Campbell Cook & Knight. The results are set out in the attached tables. The size of the differences are not sufficient to indicate any substantial criticism of the methodology adopted by Mercers (other than the matters referred to in my review dated 19 March 1993) or their results, except in the matter of the calculation of unfunded liabilities where for practical reasons they have used a mixture of methods. In any case, these differences are liable to be overtaken by differences arising between actual economic and demographic events, including actual employer payments, and the actuarial assumptions made on a long-term basis.

CONSEQUENCES OF FULLY FUNDING FIRST STATE SUPER

34. It should be noted that the adoption of Option B with First State Super on a fully funded basis, has placed upon the Budget Sector requirements for cash to pay -

(a) pensions as they fall due to members and their reversioners in the case of the closed Police Superannuation Fund, the closed State Superannuation Fund and the closed State Authorities Superannuation Fund (which last pensions arose in large measure from the closed Railways Superannuation Account and the first five years of operation of the closed New South Wales Retirement Fund),

(b) lump sum benefits as contributors retire from the State Authorities Superannuation Fund, including benefits arising from previous service in the Railways Superannuation Account, the Railways Retirement Fund, the Transport Retirement Fund, the New South Wales Retirement Fund, the Public Authorities Superannuation Fund, the State Public Service Superannuation Fund and the Transport Gratuities Scheme, and in respect of previous service for members of the State Authorities Non-Contributory Superannuation Scheme, and

(c) fully funding contributions during service for members of First State Super,

for schemes administered by the State Authorities Superannuation Board.

35. Thus if current funding arrangements are maintained in place for those schemes, the generations of tax-payers over the next forty to fifty years will be paying:

(a) pension benefits during the retirement of existing pensioners and currently serving members of pension schemes who receive pensions and during the widowhood of their spouses who receive pensions.

(b) lump sum benefits at retirement of existing members of lump sum schemes and on commutation in unfunded schemes (this acceleration of employer payments over payments of pension benefits commenced in 1964 with the introduction of the Railways Retirement Fund and continued until 1988 when early voluntary retirement and commutation were introduced into the Police Superannuation Scheme, but the cash effects of this acceleration were offset to some extent by, inter alia, reduced concurrent employer funding for new contributors to the State Superannuation Fund after 1963, compulsory pensions for those retiring from the New South Wales Retirement Fund between 1972 and 1978 and the introduction of flexible funding into the State Superannuation Fund from 1988), and

(c) employer contributions during employees' service for all new employees.

36. After that period, cash requirements from taxpayers on the current funding basis will no longer be required for the lump sum benefits mentioned at 35(b) above. Cash payments for pensions {35(a) above} may be expected to be required, on a diminishing basis in real terms, for the next eighty or so years, judging from experience under the 1884 Civil Service Pensions Act. It is only in the very long term that Budget sector contributions for superannuation would reduce to those fully attributable to the current service of employees, i.e. the payments mentioned at 35(c) above.

37. In the case of commercial authorities, provisioning began after the then Auditor-General requested major Authorities in 1983 to commission my Office to identify unfunded superannuation liabilities. This process was given impetus by the 1984 report of the Public Accounts Committee and the Public Finance and Audit (Statutory Bodies) Regulation, 1985. The 1991 Treasurer's Direction requires such bodies to fully fund superannuation entitlements. Current practice is for such funding to be completed within thirty years or the expected working lifetime of current employees, whichever is the shorter.

ADDITIONAL COMMENTS

38. As noted in paragraph 21 of my review dated 19 March 1993, Mr Stevenson took note of the current funding practice for commercial authorities for all schemes other than the State Superannuation Fund. This resulted in an overestimation by Mr Stevenson of the unfunded superannuation liabilities in the year 2020.

My Office's calculations similarly overestimate the unfunded superannuation liabilities in and around that year. However, as this question is confined to the closed State Superannuation Fund, comparisons using the differences between the estimates of unfunded superannuation liabilities under the "existing arrangements" and under Option A and Option B (First State Super fully funded) are unaffected.

39. There is a high level of variability in Treasury payments from year to year on account of superannuation. The actual payment for 1991-92 ($885 million) is compared with expected future payments for 1992-93 ($779 million), for 1993-94 ($892 million) and for 1994-95 ($946 million) in Table 1.4 on page 1-11 of Budget Paper No. 2 of the 1992-93 Budget Papers. No allowance has been made in the projections for lump sum retrenchment benefits which may be required; retrenchment benefit payments have been allowed for by the Treasury in the past after the actual retrenchment benefits have been determined.

40. The differences in the results obtained by my Office for unfunded liabilities to the State Superannuation Fund as compared with those obtained by Mercer are largely explained by

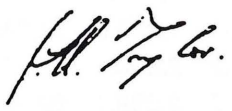
(a) different assumptions as to future funding rates, and

(b) different methodologies in the calculation of unfunded liabilities (traditional actuarial constant-rate funding approach versus the accounting accrued benefits approach),

41. The long period of the projections means that small differences in year-by-year actual results as compared with projections will be magnified as the projection period progresses.

42. Retrenchment and voluntary redundancy programs since 31 March 1991 have reduced employer costs on an accrual basis. Varying rates of employer funding under current flexible funding arrangements have affected and will affect unfunded liabilities in the longer term quite apart from variations in actual economic and demographic experience by the Funds from the actuarial assumptions about future economic and demographic events.

43. I am indebted to Messrs. L.H. Teh, B.Ec., F.I.A.A., and M.J. Connors, B.A., for the calculations and to my Deputy, Mr. C. G. Ghosn, B.Sc., F.I.A., F.I.A.A., for much of the commentary in this report.



(J.H. Taylor)
Government Actuary
5 May, 1993

APPENDIX 1

UNFUNDED LIABILITIES UNDER EXISTING ARRANGEMENT

		SASS Part 1			BB Part 1			SASS	BB	
Year	SSF	Crown	non-Cr	SRA	Crown	non-Cr	SRA	Part 3	Part 3	Total
	$M	$M	$M	$M	$M	$M	$M	$M	$M	$M
1992	9,196.6	217.9	439.6	1,161.2	281.4	98.5	55.6	298.0	6.8	11,755.6
1993	9,742.8	261.7	449.5	1,223.0	386.0	112.5	73.1	360.1	6.6	12,615.3
1994	10,288.7	323.9	474.5	1,286.6	508.7	135.2	91.2	440.3	15.2	13,564.3
1995	10,870.6	397.3	502.3	1,355.4	648.6	160.7	111.0	532.2	25.2	14,603.4
1996	11,458.7	483.5	533.3	1,430.5	791.2	189.3	132.7	637.2	36.9	15,693.4
1997	12,071.1	584.1	567.5	1,513.4	940.9	221.4	156.6	756.9	50.4	16,862.3
1998	12,697.5	700.9	605.4	1,604.8	1,103.4	257.2	182.8	893.2	65.9	18,111.0
1999	13,399.7	835.9	647.6	1,705.4	1,278.8	297.1	211.4	1,047.9	83.7	19,507.4
2000	14,099.5	991.5	694.7	1,815.2	1,467.2	341.7	242.3	1,223.2	104.0	20,979.3
2001	14,828.3	1,170.1	747.1	1,935.1	1,668.2	391.4	275.8	1,421.4	127.2	22,564.6
2002	15,590.4	1,374.8	805.4	2,067.0	1,882.0	446.6	312.1	1,645.3	153.5	24,277.2
2003	16,378.5	1,608.7	870.4	2,212.3	2,108.4	508.1	351.3	1,897.8	183.3	26,118.7
2004	17,213.9	1,875.3	942.7	2,369.2	2,346.8	576.4	393.3	2,181.9	217.1	28,116.6
2005	18,083.6	2,178.4	1,023.3	2,538.5	2,596.1	652.3	438.0	2,501.4	255.2	30,266.9
2006	19,010.7	2,522.6	1,113.0	2,720.8	2,854.7	736.5	485.6	2,860.1	298.1	32,602.2
2007	19,995.0	2,913.2	1,213.5	2,917.8	3,124.3	829.9	536.2	3,262.3	346.3	35,138.4
2008	21,032.0	3,355.7	1,325.4	3,132.3	3,404.8	933.4	590.1	3,713.0	400.5	37,887.1
2009	22,157.6	3,855.6	1,450.2	3,361.9	3,692.1	1,048.2	646.7	4,095.2	461.3	40,768.7
2010	23,396.5	4,419.5	1,588.1	3,606.5	3,986.0	1,175.3	705.8	4,418.9	529.3	43,826.0
2011	24,747.7	5,054.9	1,741.1	3,869.8	4,284.5	1,316.1	768.0	4,757.7	605.4	47,145.1
2012	26,235.2	5,770.6	1,910.8	4,155.5	4,587.6	1,471.9	833.5	5,117.9	690.4	50,773.4
2013	27,861.9	6,575.2	2,098.3	4,463.1	4,900.3	1,644.3	902.5	5,505.4	785.3	54,736.3
2014	29,687.7	7,476.2	2,302.3	4,789.8	5,220.2	1,835.0	974.6	5,917.5	891.1	59,094.4
2015	31,764.8	8,484.3	2,525.7	5,137.5	5,546.1	2,045.9	1,049.1	6,350.4	1,009.0	63,912.8
2016	34,081.7	9,610.9	2,770.3	5,507.1	5,878.8	2,278.9	1,125.9	6,806.8	1,140.2	69,200.5
2017	36,669.1	10,513.6	3,036.7	5,899.4	6,228.4	2,536.3	1,206.5	7,303.5	1,286.2	74,679.7
2018	39,546.0	11,478.3	3,325.9	6,315.6	6,603.3	2,820.6	1,291.1	7,837.7	1,448.6	80,667.3
2019	42,748.6	12,516.3	3,640.3	6,757.8	7,006.8	3,134.5	1,378.3	8,405.9	1,629.1	87,217.6
2020	43,782.7	13,624.2	3,981.5	7,226.7	7,438.9	3,480.9	1,468.0	9,013.1	1,829.6	91,845.7
2021	43,854.6	14,804.2	4,353.3	7,723.6	7,903.7	3,863.0	1,560.7	9,658.9	2,052.1	95,774.1
2022	43,795.0	16,080.9	4,759.5	8,250.7	8,414.3	4,284.6	1,658.5	10,364.2	2,299.1	99,906.7
2023	43,597.8	17,461.6	5,202.9	8,810.5	8,976.3	4,749.5	1,763.3	11,136.2	2,573.2	104,271.3
2024	43,275.1	18,931.7	5,681.0	9,401.9	9,590.0	5,212.8	1,875.0	11,970.9	2,877.0	108,815.4
2025	42,821.9	20,494.3	6,197.4	10,027.0	10,257.0	5,584.0	1,993.6	12,866.1	3,213.7	113,455.0
2026	42,222.5	22,158.3	6,755.6	10,687.7	10,977.1	5,983.5	2,120.2	13,824.6	3,586.5	118,315.9
2027	41,484.1	23,943.7	7,359.9	11,386.1	11,762.5	6,420.2	2,258.3	14,869.3	3,999.3	123,483.4
2028	40,606.4	25,854.6	8,014.5	12,124.4	12,622.0	6,898.1	2,410.4	16,001.3	4,456.2	128,987.8
2029	39,593.0	27,883.4	8,723.7	12,904.7	13,551.9	7,413.7	2,575.4	17,223.4	4,961.6	134,830.9
2030	38,438.0	30,032.6	9,491.6	13,729.1	14,554.5	7,967.0	2,754.2	18,531.3	5,520.4	141,018.8

APPENDIX 2

UNFUNDED LIABILITIES UNDER OPTION A

Year	SSF	SASS Part 1 Crown	SASS Part 1 non-Cr	SASS Part 1 SRA	BB Part 1 Crown	BB Part 1 non-Cr	BB Part 1 SRA	SASS Part 3	BB Part 3	Total
	$M	$M	$M	$M	$M	$M	$M	$M	$M	$M
1992	9,196.6	225.3	448.1	1,170.1	281.4	98.5	55.6	310.7	6.8	11,793.1
1993	9,742.8	274.0	460.0	1,234.4	301.1	111.9	60.0	378.8	7.0	12,569.9
1994	10,288.7	342.5	488.0	1,300.9	384.5	132.4	74.7	466.9	11.8	13,490.5
1995	10,870.6	423.6	519.7	1,373.1	475.9	155.3	90.7	568.5	17.4	14,494.9
1996	11,458.7	518.9	555.5	1,452.3	575.5	180.9	108.2	685.1	23.9	15,558.9
1997	12,071.1	630.2	595.6	1,539.7	683.5	209.4	127.3	818.7	31.4	16,707.0
1998	12,697.5	759.7	640.7	1,636.2	800.4	241.2	148.3	971.2	40.0	17,935.3
1999	13,399.7	909.7	691.6	1,742.3	926.3	276.5	171.1	1,145.1	49.8	19,312.1
2000	14,099.5	1,081.8	748.0	1,858.3	1,061.2	315.8	195.8	1,342.2	61.1	20,763.6
2001	14,828.3	1,279.7	811.8	1,984.7	1,204.7	359.4	222.4	1,565.9	73.9	22,330.7
2002	15,590.4	1,506.7	883.4	2,123.6	1,356.7	407.8	251.1	1,819.3	88.4	24,027.3
2003	16,378.5	1,764.3	961.8	2,276.4	1,517.1	461.5	282.1	2,104.0	104.9	25,850.4
2004	17,213.9	2,058.5	1,050.3	2,440.8	1,685.4	521.0	315.1	2,425.5	123.5	27,834.0
2005	18,083.6	2,393.4	1,149.9	2,617.8	1,860.7	586.8	350.1	2,787.8	144.5	29,974.7
2006	19,010.7	2,773.9	1,261.7	2,807.9	2,041.7	659.7	387.3	3,195.5	168.2	32,306.5
2007	19,995.0	3,206.0	1,387.7	3,012.6	2,229.6	740.4	426.5	3,653.6	194.9	34,846.2
2008	21,032.0	3,695.7	1,529.3	3,234.8	2,424.1	829.6	468.2	4,051.1	224.8	37,489.7
2009	22,157.6	4,249.4	1,688.3	3,472.1	2,622.4	928.2	511.8	4,377.0	258.3	40,265.0
2010	23,396.5	4,874.3	1,865.6	3,724.1	2,823.6	1,037.2	557.1	4,718.1	295.9	43,292.3
2011	24,747.7	5,578.9	2,063.7	3,994.4	3,026.0	1,157.6	604.4	5,073.4	337.9	46,584.1
2012	26,235.2	6,373.0	2,285.3	4,286.9	3,229.7	1,290.6	654.0	5,449.3	384.8	50,188.7
2013	27,861.9	7,266.1	2,532.2	4,604.2	3,438.1	1,437.5	705.8	5,851.6	437.1	54,134.5
2014	29,687.7	8,267.0	2,804.2	4,945.0	3,649.7	1,599.5	759.7	6,277.3	495.4	58,485.5
2015	31,764.8	9,169.3	3,104.9	5,307.1	3,863.3	1,778.3	814.9	6,722.7	560.4	63,085.8
2016	34,081.7	10,001.7	3,437.2	5,690.6	4,079.5	1,975.4	871.4	7,190.6	632.6	67,960.7
2017	36,669.1	10,905.0	3,803.0	6,106.3	4,306.6	2,192.7	930.0	7,697.6	713.0	73,323.2
2018	39,546.0	11,877.3	4,204.4	6,558.2	4,554.7	2,432.2	991.0	8,240.8	802.3	79,206.9
2019	42,748.6	12,920.6	4,645.2	7,039.2	4,828.1	2,696.1	1,053.2	8,816.8	901.4	85,649.2
2020	43,782.7	14,031.5	5,128.7	7,551.8	5,126.7	2,924.0	1,116.7	9,431.7	1,011.4	90,105.2
2021	43,854.6	15,211.7	5,660.2	8,099.3	5,452.9	3,114.2	1,181.3	10,085.0	1,133.5	93,792.7
2022	43,795.0	16,486.0	6,245.4	8,695.2	5,816.0	3,319.7	1,248.9	10,798.1	1,268.8	97,573.0
2023	43,597.8	17,860.5	6,889.4	9,348.8	6,220.8	3,542.6	1,320.6	11,577.8	1,418.8	101,777.1
2024	43,275.1	19,321.6	7,591.7	10,058.3	6,668.5	3,781.6	1,396.7	12,421.0	1,585.0	106,099.6
2025	42,821.9	20,872.9	8,358.7	10,824.1	7,159.2	4,038.9	1,477.1	13,326.7	1,769.0	110,648.3
2026	42,222.5	22,523.2	9,196.5	11,650.2	7,689.6	4,316.0	1,562.3	14,297.8	1,972.5	115,430.5
2027	41,484.1	24,292.0	10,112.4	12,554.7	8,267.2	4,618.9	1,655.1	15,357.3	2,197.7	120,539.4
2028	40,606.4	26,182.2	11,114.3	13,545.6	8,897.2	4,950.5	1,757.2	16,505.8	2,446.7	126,005.8
2029	39,593.0	28,185.5	12,210.1	14,615.1	9,577.0	5,309.4	1,868.5	17,746.7	2,722.0	131,827.2
2030	38,438.0	30,305.8	13,408.0	15,761.3	10,305.6	5,695.0	1,989.3	19,077.2	3,026.2	138,006.5

APPENDIX 3

UNFUNDED LIABILITIES UNDER OPTION B

		SASS Part 1			BB Part 1			SASS	BB	
Year	SSF	Crown	non-Cr	SRA	Crown	non-Cr	SRA	Part 3	Part 3	Total
	$M	$M	$M	$M	$M	$M	$M	$M	$M	$M
1992	9,196.6	225.3	448.1	1,170.1	281.4	98.5	55.6	310.7	6.8	11,793.1
1993	9,742.8	271.9	460.3	1,231.8	297.7	111.7	59.4	376.5	7.0	12,559.0
1994	10,288.7	333.2	488.7	1,290.1	374.0	131.6	72.8	456.8	11.4	13,447.4
1995	10,870.6	400.8	520.1	1,347.9	454.4	153.3	86.7	544.1	16.2	14,394.3
1996	11,458.7	475.3	554.8	1,405.4	538.4	177.0	101.3	639.2	21.4	15,371.6
1997	12,071.1	557.2	593.1	1,463.1	625.7	202.9	116.7	742.9	27.0	16,399.6
1998	12,697.5	647.2	635.3	1,520.5	716.4	231.2	132.8	855.9	33.1	17,469.9
1999	13,399.7	746.2	682.0	1,577.9	810.1	262.1	149.6	979.1	39.7	18,646.3
2000	14,099.5	854.0	733.1	1,634.3	906.0	295.7	167.1	1,113.2	46.9	19,849.7
2001	14,828.3	972.4	789.9	1,689.0	1,003.0	332.4	185.0	1,259.5	54.6	21,114.2
2002	15,590.4	1,102.2	852.9	1,742.2	1,099.7	372.3	203.5	1,419.2	63.1	22,445.3
2003	16,378.5	1,242.3	920.8	1,793.2	1,194.6	415.7	222.4	1,591.6	72.2	23,831.3
2004	17,213.9	1,395.8	996.5	1,840.3	1,287.6	462.9	241.4	1,779.9	82.1	25,300.4
2005	18,083.6	1,563.5	1,080.7	1,882.8	1,376.5	514.2	260.5	1,985.0	92.9	26,839.7
2006	19,010.7	1,746.8	1,174.3	1,919.3	1,458.8	569.9	279.4	2,181.9	104.5	28,445.6
2007	19,995.0	1,947.4	1,278.8	1,947.7	1,533.5	630.5	297.7	2,240.7	117.1	29,988.3
2008	21,032.0	2,166.8	1,395.3	1,968.3	1,598.5	696.2	315.4	2,286.8	130.7	31,589.9
2009	22,157.6	2,398.0	1,525.0	1,980.5	1,652.3	767.6	332.2	2,320.8	145.4	33,279.4
2010	23,396.5	2,469.5	1,668.4	1,982.9	1,693.0	845.0	347.8	2,341.4	161.3	34,905.8
2011	24,747.7	2,523.1	1,827.6	1,976.3	1,717.0	902.6	362.1	2,345.4	178.5	36,580.3
2012	26,235.2	2,557.6	2,004.3	1,958.8	1,721.0	910.4	374.7	2,332.0	197.1	38,290.9
2013	27,861.9	2,577.1	2,199.9	1,929.5	1,706.2	911.5	385.2	2,303.9	217.2	40,092.4
2014	29,687.7	2,584.7	2,210.7	1,890.8	1,673.3	907.8	393.8	2,261.7	238.8	41,849.3
2015	31,764.8	2,578.2	2,165.2	1,840.6	1,621.2	898.4	399.9	2,202.5	262.3	43,733.1
2016	34,081.7	2,559.7	2,106.6	1,776.6	1,548.5	882.6	402.8	2,127.7	287.6	45,773.7
2017	36,669.1	2,528.3	2,035.2	1,700.6	1,458.1	860.2	402.7	2,042.3	315.1	48,011.6
2018	39,546.0	2,474.9	1,952.6	1,613.0	1,357.7	831.6	399.2	1,940.2	344.8	50,460.0
2019	42,748.6	2,409.6	1,858.6	1,511.0	1,254.4	796.6	391.7	1,823.3	376.9	53,170.8
2020	43,782.7	2,331.6	1,755.6	1,398.3	1,148.8	756.2	380.3	1,700.7	411.8	53,666.2
2021	43,854.6	2,238.2	1,642.0	1,276.0	1,041.3	709.9	364.7	1,571.7	449.7	53,148.2
2022	43,795.0	2,132.0	1,521.1	1,145.8	933.8	659.0	345.1	1,440.0	478.4	52,450.1
2023	43,597.8	2,011.0	1,396.4	1,012.8	828.3	603.8	322.4	1,309.1	440.0	51,521.6
2024	43,275.1	1,874.5	1,270.0	882.1	730.8	545.6	297.5	1,180.7	398.2	50,454.5
2025	42,821.9	1,729.9	1,144.2	756.0	642.0	487.1	270.6	1,059.3	354.5	49,265.5
2026	42,222.5	1,580.3	1,016.6	635.4	556.3	428.4	241.8	947.9	310.1	47,939.2
2027	41,484.1	1,417.9	890.1	524.2	472.1	370.7	212.0	845.3	265.5	46,482.1
2028	40,606.4	1,235.9	766.2	425.3	391.2	314.8	182.6	748.2	221.3	44,891.9
2029	39,593.0	1,040.8	648.1	338.5	316.2	262.4	154.1	661.3	179.5	43,193.9
2030	38,438.0	841.0	537.8	264.4	247.6	213.6	127.4	586.6	142.0	41,398.4

APPENDIX 4

Year	Previously Existing Arrangements			First State Super On a fully funded basis (Option B)		
	MCCK Total Nominal $m	GAO Total Nominal $m	Difference $m	MCCK Total Nominal $m	GAO Total Nominal $m	Difference $m
1992	11,052	11,756	-704	11,052	11,793	-741
1995	14,285	14,603	-318	14,067	14,394	-327
2000	21,680	20,979	701	20,134	19,850	284
2005	34,948	30,267	4,681	29,888	26,840	3,048
2010	54,010	43,826	10,184	41,707	34,906	6,801
2015	70,964	63,913	7,051	45,776	43,733	2,043
2020	88,987	91,846	-2,859	44,651	53,666	-9,015
2025	109,880	113,455	-3,575	39,222	49,266	-10,044
2030	133,803	141,019	-7,216	30,542	41,398	-10,856

Year	Option A MCCK Total Nominal $m	Option A* GAO Total Nominal $m	Difference in Nominal $m
1992	11,052	11,793	-741
1995	14,345	14,495	-150
2000	22,917	20,764	2,153
2005	35,845	29,975	5,870
2010	55,989	43,292	12,697
2015	74,512	63,086	11,426
2020	94,893	90,105	4,788
2025	118,748	110,648	8,100
2030	147,015	138,007	9,008

* (with full funding for new non-contributory members)

Minutes of Proceedings

PARLIAMENT OF NEW SOUTH WALES
LEGISLATIVE ASSEMBLY

MINUTES OF PROCEEDINGS

Select Committee upon Public Sector Superannuation Schemes.

Friday 27 November,1992, at Parliament House, Sydney at 3.00pm

Members Present

Mr R.F. Chappell (Chairman)

Mr J.S.D. Kinross
Mr S.T. Neilly
Dr P.A.C. Macdonald
Mr K. M. Yeadon
Mr A.C. Packard

Mr M. Sheather, Serjeant-at-Arms and Clerk to this Committee opened the meeting and read the following;

"Entry 13, Votes and Proceedings of the Legislative Assembly of 25 November, 1992"

(1) That a Select Committee be established to consider and report upon;

(a) The accuracy of the government costing projections and whether the Government's programme of findings the existing superannuation schemes is adequate to achieve a manageable level of unfunded liabilities and finance current and future benefit payments and in particular the adequacy of the First State Super Scheme.

(b) A comparison of the S.A.S.S. Scheme with all other existing Public Sector Superannuation Schemes;

(2) That the committee consist of Mr Chappell, Mr Kinross, Dr Macdonald, Ms Neilly, Mr Packard and Mr Yeadon;

(3) That not withstanding anything contained in the Standing Orders, Mr Chappell be the Chairman of the Committee.

(4) That as any meeting of the committee any four Members shall constitute a quorum;

(5) That the Committee have leave to sit during the sittings or any adjournment of the House; to adjourn from place to place; to make visits of inspection within New South Wales;

(6) That the Committee report by 22 February, 1993; Amended Entry 31 votes and Proceedings 27 November, 1993 to respect by 31 March, 1993.

(7) That should the House stand adjourned and the Committee agree to any report before the House resumes sitting;

(a) The Committee have leave to send any such report, minutes and evidence taken before it to the Clerk of the House.

(b) The documents shall be printed and published and the Clerk shall forthwith as it necessary to give effect tot he order of the house, and

(c) the documents shall be laid upon the Table of the House at its next sitting".

Procedural Motions

Resolved on the motion of Mr Yeadon, seconded by Mr Packard; "That the procedural motions as circulated and read by the Clerk be agreed to"

Staffing Arrangements

The Chairman informed the Committee that Mr M Sheather (Serjeant-at-arms) and as Clerk to the Committee and Ms Catherine Watson as Project Officer.

Draft Advertisement

Agreed that the Chairman arrange for an advertisement to be placed in the newspapers, and the closing date for submissions was set down for 29 January, 1993.

Agreed that letters be sent to the relevant persons and organisations seeking submissions, with a briefing paper to proceed the submission.

Chairman

Clerk to the Committee

PARLIAMENT OF NEW SOUTH WALES
LEGISLATIVE ASSEMBLY

MINUTES OF PROCEEDINGS

Select Committee upon Public Sector Superannuation Schemes, at Parliament House, Sydney, 20 January, 1993 at 9.20am

Members Present

Mr R.F. Chappell (Chairman)

Mr J.S.D. Kinross
Mr S.T. Neilly
Mr K.M. Yeadon
Dr P.A.C. Macdonald
Mr A.C. Packard

Ms C. Watson, Project Officer, Ms L. Collingridge and Ms R. McMahon advisers to the Committee in attendance.

Minutes of the previous meeting were deferred. The Committee deliberated.

Moved by Mr Packard, Seconded by Mr Yeadon that the Chairman proceed to select an actuary to assist the Committee.

The press and public were admitted.

The Clerk read the Committee reference.

By direction of the Chairman the Clerk read Legislative Assembly Standing Order No. 362 relating to the Examination of Witnesses.

Mr David Richard McMahon, Policy Director, New South Wales Superannuation Office called and affirmed as a witness.

The witness acknowledged receipt of a summons issued under the Parliamentary Evidence Act.

Evidence concluded the witness withdrew.

By direction of the Chairman the Clerk read Legislative Assembly Standing Order No. 362, relating to the examination of witnesses.

Mr Michael George Lambert - Deputy Secretary, called and affirmed as a witness;

Mr Maximillian John Danker - Manager, Superannuation and Finance Administration.

Mr Joseph John Kristof - Financial Analyst. All from New South Wales State Treasury; called and sworn as witnesses;

The witnesses severally acknowledged having received summons issued under the Parliamentary Evidence Act.

The witnesses were examined.

Evidence concluded the witnesses withdrew.

By direction of the Chairman the Clerk read Legislative Assembly Standing Order No. 362, relating to the examination of witnesses.

Mr James Reginold Mitchell - Assistant Auditor-General, called and affirmed as witness.

Mr Anthony Clement Harris - Auditor-General called and sworn as a witness.

The witnesses acknowledged having received summonses issued under the Parliamentary Evidence Act.

The witnesses were examined.

Evidence concluded the witnesses withdrew. The Chairman advised that as the next witnesses had been in the room for the full hearings that it would not be necessary for the Clerk to read Legislative Assembly Standing Order 362.

Mr John Henry Taylor, New South Wales Government Actuary; and Mr Carl George Ghosn, Deputy Government Actuary; called and sworn as witnesses.

The witness acknowledged having received summonses issued under the Parliamentary Evidence Act.

The witnesses were examined.

Evidence concluded the witnesses withdrew.

Mr Peter Thomas Binns, State Superannuation Investment and Management Corporation; called and sworn as a witness.

The witness acknowledge having received a summons issued under the Parliamentary Evidence Act.

The witness was examined.

Evidence concluded the witness withdrew.

The Committee deliberated.

Moved by Mr Neilly seconded by Mr Packard that, "as a formality, that the Committee release all submissions received to date and corrected transcripts of evidence heard this day".

Committee adjourned at 4.42pm. Sine due.

Chairman

Clerk to the Committee

PARLIAMENT OF NEW SOUTH WALES
LEGISLATIVE ASSEMBLY

MINUTES OF PROCEEDINGS

Select Committee upon Public Sector Superannuation Schemes.

Thursday 11 February, 1993, at Parliament House, Sydney at 9.00am

Members Present

Mr R.F. Chappell (Chairman)

Mr J.S.D. Kinross
Mr S.T. Neilly
Mr K.M. Yeadon
Dr P.A.C. Macdonald
Mr A.C. Packard

Mr B. Whittle, actuary and Ms R. McMahon advisors to the Committee in attendance.

The Committee deliberated.

The Committee adjourned at 1.00pm, until Tuesday 16 February, 1993 at 10.00am.

Chairman

Clerk to the Committee

PARLIAMENT OF NEW SOUTH WALES
LEGISLATIVE ASSEMBLY

MINUTES OF PROCEEDINGS

Select Committee upon Public Sector Superannuation Schemes.

Tuesday 16 February 1993, at Parliament House, Sydney at 10.00am

Members Present

Mr R.F. Chappell (Chairman)

Mr J.S.D. Kinross
Mr A.C. Packard
Mr S.T. Neilly
Mr K.M. Yeadon

Ms C. Watson, Project Officer.

Mr B. Whittle, actuary and Ms McMahon advisors to the Committee in attendance.

Mr Whittle reported proceedings of the meeting held on 12 February 1993, between Mr Whittle, advisors to this Committee, Mr D. Steel, actuary advising the Labour Council of New South Wales and Mr John Taylor, Government Actuary.

The Committee deliberated.

The Committee adjourned at 1.00pm until Thursday 25 February, 1993 at 3.30pm.

Chairman

Clerk to the Committee

PARLIAMENT OF NEW SOUTH WALES
LEGISLATIVE ASSEMBLY

MINUTES OF PROCEEDINGS

Select Committee upon Public Sector Superannuation Schemes.

Thursday 25 February 1993, at Parliament House, Sydney at 3.30pm

Members Present

Mr R.F. Chappell (Chairman)

Mr J.S.D. Kinross
Mr S.T. Neilly
Mr K.M. Yeadon
Dr P.A.C.Macdonald
Mr A.C. Packard

Ms C. Watson, Project Officer.

Mr B. Whittle, Actuary, Ms L. Collingridge advisors to the Committee in attendance.

Consideration of Mr Whittle's response dated 25 February 1993 concerning the further meeting held between Mr Whittle, Advisor to this Committee, Mr D. Steel, Actuary advising the Labour Council of New South Wales, Mr J. Taylor, Government Actuary.

The Committee deliberated.

The Committee adjourned at 4.45pm until Thursday 11 March 1993 at 8.00am.

Chairman

Clerk to the Committee

PARLIAMENT OF NEW SOUTH WALES
LEGISLATIVE ASSEMBLY

MINUTES OF PROCEEDINGS

Select Committee upon Public Sector Superannuation Schemes.

Thursday 11 March 1993, at Parliament House, Sydney at 8.00am

Members Present

Mr R.F. Chappell (Chairman)

Mr J.S.D. Kinross
Mr S.T. Neilly
Dr P.A.C.Macdonald
Mr A.C. Packard

Ms C. Watson, Project Officer.

Mr B. Whittle, Actuary, Ms R. McMahon advisors to the Committee in attendance.

Minutes of the previous meeting was deferred.

The Committee deliberated.

The Committee adjourned at 8.55am.

Chairman

Clerk to the Committee

PARLIAMENT OF NEW SOUTH WALES
LEGISLATIVE ASSEMBLY

MINUTES OF PROCEEDINGS

Select Committee upon Public Sector Superannuation Schemes.

Tuesday, 16 March 1993, at Parliament House, Sydney at 9.00pm

Members Present

Mr R.F. Chappell (Chairman)

Mr J.S.D. Kinross
Mr S.T. Neilly
Dr P.A.C. Macdonald
Mr K. M. Yeadon
Mr A.C. Packard

Mr B. Whittle, Actuary, Ms C. Watson Project Officer, Ms L. Collingridge advisors to the Committee in attendance.

Minutes of the previous meeting were deferred.

The press and public were admitted. By direction of the Chairman the Clerk read the Committee reference and Legislative Assembly Standing Orders No. 362 relating to the Examination of Witnesses.

Mr Victor James Grant, Full-time trustee, State Authority Superannuation Board Office called and sworn as a witness.

The witness acknowledged receipt of a summons under the parliamentary Evidence Act.

The witness was examined. Evidence concluded the witness withdrew.

Mr John Wallace Seade, Mr Paul Francis Good; New South Wales Fire Brigade Employee's Union called as witnesses.

The witnesses acknowledged receipt of summones under the Parliamentary Evidence Act.

The witnesses were examined. Evidence concluded the witnesses withdrew.

Mr Geoffery Richard Green, Secretary, Legal Division Police Association of New South Wales.

Mr Gregory Thomas Shilvers, Assistant Secretary, Legal Division, Police Association of New South Wales; called and sworn as witness.

The witnesses were examined.

Evidence concluded the witnesses withdrew.

Mr Allan Gibson, General Secretary, Public Service Association of New South Wales, called and sworn as a witness.

The witness acknowledged receipt of summons issued under the Parliamentary Evidence Act.

The witness was examined.

Evidence concluded the witness withdrew.

Mr Donald Charles Steel, consulting actuary, Ms Beryle Eileen Ashe; Executive Officers the Labour Council of New South Wales called and sworn as witnesses. The witnesses acknowledge receipt of summons issued under the Parliamentary Evidence Act. The witnesses were examined. Evidence concluded the witnesses withdrew.

The Committee adjourned at 4.50pm until 17 March, 1993.

Chairman

Clerk to the Committee

PARLIAMENT OF NEW SOUTH WALES
LEGISLATIVE ASSEMBLY

MINUTES OF PROCEEDINGS

Select Committee upon Public Sector Superannuation Schemes.

Wednesday 17 March 1993, at Parliament House, Sydney at 9.00am

Members Present

Mr R.F. Chappell (Chairman)

Mr J.S.D. Kinross
Mr S.T. Neilly
Mr K. M. Yeadon
Mr A.C. Packard

Ms C. Watson, Project Officer

Mr B. Whittle, Actuary, Ms R. McMahon advisors to the Committee in attendance.

Apology received from Dr. P.A.C. Macdonald.

Minutes of the previous meetings were deferred.

The press and public were admitted.

By direction of the Chairman the Clerk read Legislature Assembly Standing Order No. 362 relating to the Examination of Witnesses.

Mr Anthony Harris, Auditor General; and Mr James Mitchell, Assistant Auditor General recalled as witnesses.

The Chairman reminded the witness of their previous obligation having been previously sworn as witnesses on the 20 January, 1993.

The witnesses acknowledged their obligation as witnesses.

The witnesses were examined. Evidence concluded the witnesses withdrew.

The Committee deliberated.

Ms Mary Thuy Shellers, Chief Accountant called and affirmed as a witness; Mr Ian William Neale, Assistant Secretary called and sworn as a witness; Mr Joseph John Kristof, Financial Analyst, New South Wales State Treasury, called and sworn as a witness.

The witnesses acknowledged receipt of a summons under the Parliamentary Evidence Act.

The witnesses were examined. Evidence concluded the witness withdrew.

The Committee adjourned at 1.05pm, until Wednesday 24 March, 1993 at 9.00am.

Chairman

Clerk to the Committee

PARLIAMENT OF NEW SOUTH WALES
LEGISLATIVE ASSEMBLY

MINUTES OF PROCEEDINGS

Select Committee upon Public Sector Superannuation Schemes

Wednesday, 24 March, 1993

Members Present

Mr R.F. Chappell (Chairman)

Mr A.C. Packard
Mr S.T. Neilly
Mr K.M. Yeadon

Mr R. McMahon, Mr B. Whittle and Ms C. Watson, Project Officer, were also present.

Apologies received from Dr P.A.C. Macdonald and Mr J.S.D. Kinross.

The first witness to give evidence was Mr Rodney Dale Morrison, Director of Public Employment and Industrial Relations Services, N.S.W. Department of Industrial Relations.

Following Mr Morrison were representatives of the Local Government Association of NSW and Shires Association of NSW. Mr David John Gibson, Director of the Industrial Relations and Employment branch of the Association, Mr Stephen Robert Ward, President of the Shires Association of NSW and Mr Murray Kidnie, Secretary to the Local Government Association all gave evidence to the Committee.

Mr John Henry Taylor, Government Actuary and Mr Carl George Ghosn, Deputy Government Actuary, gave evidence.

Mr Martin Stevenson, Consulting Actuary with MCCK, also gave evidence.

The last witness was Mr David McMahon, Director of Policy, NSW Superannuation Office.

The Government Actuary's report was circulated to everyone who made submissions to the Treasury.

Mr B. Whittle was to draft a letter to John Taylor.

Moved by Mr Neilly, seconded by Mr Yeadon, that there be an extension for the draft report to 16 April.

The first draft was expected to be completed by April 9 and would include a range of opinions of each member indicating the key points and identifying specific issues.

Chairman

Clerk to the Committee

PARLIAMENT OF NEW SOUTH WALES
LEGISLATIVE ASSEMBLY

SELECT COMMITTEE ON PUBLIC SECTOR SUPERANNUATION SCHEMES

Minutes of Meeting
Wednesday 12 May 1993 at 3.30pm
Room 1136

Members Present

Mr R.F. Chappell (Chairman)
Mr A.C. Packard
Mr J.S.P. Kinross
Dr P.A.C. Macdonald
Mr S.T. Neilly
Mr K.M. Yeadon

Also present: Mr M. Sheather, Clerk to the Committee, Catherine Watson, Project Officer to the Committee.

The Government Actuary's supplementary review of the Mercer, Campbell, Cook & Knight Report was tabled.

The Chairman's draft report was circulated for comment.

The Committee agreed to meet again on Tuesday 18 May 1993 to discuss the draft report.

The meeting closed 3.55pm.

Chairman

Clerk

PARLIAMENT OF NEW SOUTH WALES
LEGISLATIVE ASSEMBLY

SELECT COMMITTEE ON PUBLIC SECTOR SUPERANNUATION SCHEMES

Minutes of Meeting
Tuesday 18 May 1993 at 3.30pm
Room 1136

Members Present

Mr R.F. Chappell (Chairman)
Mr A.C. Packard
Mr J.S.P. Kinross
Dr P.A.C. Macdonald
Mr S.T. Neilly
Mr K.M. Yeadon

Also present: Mr M. Sheather, Clerk to the Committee,
Ms Catherine Watson, Project Officer.

The Committee considered the Chairman's Draft report.

It was agreed that all matters of substance had been covered in the Draft report with the exception of the supplementary report of the Government Actuary which had not been received at the time of drafting and would need to be incorporated.

The Committee considered whether the present First State Super Scheme was adequate to provide for a reasonable retirement benefit.

The executive summary of the Draft report was to include concepts and unfunded liability definition.

The Commitee discussed the adequacy of the First State Superannuation Scheme in comparision with previous schemes and considered the possibility that any financial discrepancy could be addressed in future award negotiations.

Agreed that the Draft report would be further considered at the next meeting of the Committee.

The Committee adjourned at 4.40 p.m.,sine die.

Chairman

Clerk

PARLIAMENT OF NEW SOUTH WALES
LEGISLATIVE ASSEMBLY

SELECT COMMITTEE UPON PUBLIC SECTOR SUPERANNUATION SCHEMES

Minutes of Meeting held Tuesday 26 October 1993
at 4.05pm in Waratah Room, Parliament House.

Members Present: Mr Russell Smith MP (Chairman)
Mr Peter Cochran MP
Mr Jeremy Kinross MP
Mr Stan Neilly MP
Mr Kim Yeadon MP

Also in attendance: C. Watson, Project Officer, K. McLean, Assistant Committee Officer, M. Sheather, Clerk

Apologies were received from Dr Peter Macdonald MP.

Minutes of the previous meeting were moved by Mr Yeadon and seconded by Mr Neilly.

The draft Report was distributed to the Committee and the Committee decided to discuss the recommendations at the next meeting.

The meeting adjourned at 4.25pm until Thursday 28 October 1993 at 4pm.

Chairman **Clerk**

PARLIAMENT OF NEW SOUTH WALES
LEGISLATIVE ASSEMBLY

Thursday, 28 October 1993

Minutes of Proceedings

Select Committee upon Public Sector Superannuation Schemes
at Parliament House,Sydney,at 4.00 p.m.

Members Present

Mr R.H.L. Smith (Chairman)

Mr P.L. Cochran	Dr P.A. Macdonald
Mr J.S.P. Kinross	Mr S.T. Neilly
	Mr K.M. Yeadon

Mr M. Sheather,Clerk to the Committee
Ms Catherine Watson,Project Officer
Ms K. Mc Lean,Assistant Committee Officer,in attendance.

Minutes of the previous meeting held on 26 October,1993,were confirmed.

The Committee deliberated.

The Committee further considered the Draft Report.

Chapter 1,read and,agreed to.
Chapter 2,read and agreed to.
Chapter 3,read and agreed to.
Chapter 4,read and agreed to.
Chapter 5,read and agreed to.
Chapter 6,read and agreed to.
Chapter 7,read and agreed to.
Chapter 8,read and agreed to.
Chapter 9,read and agreed to.
Chapter 10,read and agreed to.

Recommendation 1,as amended,agreed to.
Recommendation 2,as amended,agreed to.
Recommendation 3,as amended,agreed to.
Recommendation 4,as amended,agreed to.

Resolved,on the motion of Mr Neilly,seconded by Dr Macdonald that the draft report,as amended and agreed to be the report of the Committee.

The Committee deliberated.

The Chairman stated that he appreciated the co-operation and assistance of all Members and staff of the Committee.

The Committee adjourned at 5.16 p.m., sine die.

Chairman

Clerk