

1 Executive Summary

1.1 Project Objective (section 2)

Professional Financial Solutions (PFS) was appointed to develop a financial model to help the Public Accounts Committee (the Committee) assess the impact of changing the financing arrangements of the NSW Fire Services. The primary functions of the model are:

- To estimate the total revenue that would be collected from a property based fire service levy (FSL) and
- To compare on an individual basis whether property owners, who currently insure, would contribute more or less under a property based system.

In addition, the model also:

- Estimates the amount the NSW Government and local councils would pay under the property based FSL and
- Estimates the amount of revenue lost if an exemption was provided to mining properties with their own rescue service.

1.2 The Financial Model (sections 10, 11 and Appendix 1)

The financial model was developed using 30 June 2003 land valuation details from the Valuer General's office and insurance policy data from six major general insurance companies operating in NSW.

The Valuer General's database provided a complete list of assessed properties in NSW along with important details such as the type of property.

Following a call for records from the Committee, six insurance companies provided PFS with, in total, 2.75 million policy records. This consolidated to approximately 1.39 million records with separate identifiable addresses. PFS then matched the insurance records with the Valuer General's database of land values to produce approximately 900,000 matched records. All matched records showing obvious data errors (eg. negative FSL values) were removed. In addition, all matched records with contents or building only cover were removed, leaving only those matched records with both building and contents cover. The remaining 23,000 commercial and 536,000 residential and rural properties records were used as the dataset for the Individual Comparisons.

To account for the impact of GST and stamp duty, which are applied on top of the insurance FSL, the FSL figures in the matched dataset were increased by 15.5%.

1.3 Scenarios Tested and Results (section 6)

Four test scenarios were developed to show the Committee the quantitative impact of different property based systems on the matched dataset. Where a second ad valorem rate applies, it is an additional amount, over the first ad valorem rate, which applies on that part of the land value over \$500,000. The flat levies and ad valorem rates used were set for illustrative purposes only. The Base Levy was set at \$50 for GMR properties, except in sections 1.3.1 and 1.3.3 where a lower amount raised the required revenue for residential properties in the GMR. The test scenarios are set out overleaf.

1.3.1 Beneficiary Pays

This levy structure is designed to link the property based FSL contribution to the level of benefit received from the fire services.

Test Levy Structure

Property Type	Base Levy	Ad valorem Rate 1 (per \$1,000 of LV)	Ad valorem Rate 2 (per \$1,000 of LV)
Residential – GMR	\$34	Nil	Nil
Commercial – GMR	\$50	\$0.32	\$5.60
Residential – Non-GMR	\$50	\$0.25	Nil
Commercial – Non-GMR	\$50	\$0.32	\$42.00

Note 1: GMR is the Greater Metropolitan Region.

Note 2: A cap of \$200,000 applies for commercial and \$175 for residential properties.

1.3.2 Service Standards

This levy structure is designed to link the property based FSL contribution to the level of service received from the fire services.

Test Levy Structure

Property Type	Base Levy	Ad valorem Rate 1 (per \$1,000 of LV)	Ad valorem Rate 2 (per \$1,000 of LV)
Residential – GMR	\$50	\$0.14	Nil
Commercial – GMR	\$50	\$0.32	\$5.27
Residential – Non-GMR	\$30	\$0.08	Nil
Commercial – Non-GMR	\$30	\$0.19	\$3.16

Note: A cap of \$200,000 applies for commercial and \$175 for residential properties in the GMR and \$125,000 and \$105 respectively in the Non-GMR.

1.3.3 User Pays

This levy structure is designed to link the property based FSL contribution to the level of fire service usage.

Test Levy Structure

Property Type	Base Levy	Ad valorem Rate 1 (per \$1,000 of LV)	Ad valorem Rate 2 (per \$1,000 of LV)
Residential – GMR	\$38	Nil	Nil
Commercial – GMR	\$50	\$0.32	\$2.35
Residential – Non-GMR	\$50	\$0.58	Nil
Commercial – Non-GMR	\$50	\$14.00	\$41.30

Note: A cap of \$200,000 applies for commercial and \$175 for residential properties.

1.3.4 Combined

This levy structure is designed to combine features of the earlier approaches and treat small commercial properties similarly to residential properties.

Test Levy Structure

Property Type	Base Levy	Ad valorem Rate 1 (per \$1,000 of LV)	Ad valorem Rate 2 (per \$1,000 of LV)
Residential – GMR	\$50	\$0.13	Nil
Commercial – GMR	\$50	\$0.13	\$5.55
Residential – Non-GMR	\$30	\$0.13	Nil
Commercial – Non-GMR	\$30	\$0.13	\$5.55

Note: A cap of \$200,000 applies for commercial and \$175 for residential properties.

In all four test scenarios, the amount of money to be raised has been set at \$412 million comprising of the following components:

1. The insurance levy share of the 02/03 fire services budget (\$375.5 million);
2. The estimated amount needed to compensate the NSW Government for losses on stamp duty and GST (\$31.0 million) and
3. Assumed administration cost of \$2 per property (\$5.5 million).

1.4 Results of Analysis (sections 6 and 7)

The following tables show the key results from the Aggregate Calculations and Individual Comparisons. The “% Cont. Less” figures in the tables below represent the proportion of properties in that dataset that would contribute less under a property based system. The final two columns represent the average reduction in contributions for those properties contributing less, and the average additional contribution for those properties contributing more.

1.4.1 Beneficiary Pays

Property Type	Share of Revenue	% Cont. Less	Av. Contribution Reduction	Av. Additional Contribution
Residential – GMR	14.7%	99.8%	\$78	\$13
Commercial – GMR	56.4%	48.5%	\$594	\$2,423
Residential – Non-GMR	15.0%	67.4%	\$28	\$22
Commercial – Non-GMR	13.9%	64.1%	\$259	\$1,601

Under this scenario, the share attributable to commercial properties would increase from the current allocation of 55.6% to over 70%.

This scenario favours GMR residential properties at the expense of commercial properties and, to a lesser extent, Non-GMR residential properties.

1.4.2 Service Standards

Property Type	Share of Revenue	% Cont. Less	Av. Contribution Reduction	Av. Additional Contribution
Residential – GMR	36.9%	71.5%	\$36	\$19
Commercial – GMR	53.7%	48.8%	\$600	\$2,298
Residential – Non-GMR	7.7%	98.8%	\$49	\$11
Commercial – Non-GMR	1.7%	83.3%	\$245	\$200

Under this scenario, GMR properties would contribute over 90% of the property based FSL.

This scenario favours the Non-GMR properties and produces similar results for commercial GMR properties to the Beneficiary Pays Scenario.

1.4.3 User Pays

Property Type	Share of Revenue	% Cont. Less	Av. Contribution Reduction	Av. Additional Contribution
Residential – GMR	16.3%	99.8%	\$74	\$14
Commercial – GMR	28.9%	52.2%	\$685	\$1,077
Residential – Non-GMR	20.0%	41.6%	\$26	\$44
Commercial – Non-GMR	34.8%	4.7%	\$627	\$2,449

Under this scenario, Non-GMR properties would contribute 54.8% of the target amount of \$412 million, to reflect the higher per unit cost of the fire services in the region.

This scenario favours properties in the GMR over Non-GMR properties with more than 50% of the Non-GMR residential property owners contributing more.

1.4.4 Combined Scenario

Property Type	Share of Revenue	% Cont. Less	Av. Contribution Reduction	Av. Additional Contribution
Residential – GMR	35.9%	75.1%	\$36	\$17
Commercial – GMR	53.0%	60.0%	\$532	\$2,910
Residential – Non-GMR	8.7%	96.9%	\$45	\$16
Commercial – Non-GMR	2.4%	85.8%	\$239	\$418

The results of this scenario show that in all datasets tested, more than 50% of the properties would contribute less. However, some of the commercial properties in the GMR contributing more would contribute significantly more.

Rural properties were also analysed separately, the results for these groups were similar to the Residential group.

1.4.5 A Hybrid System

The introduction of a hybrid system, in which the current insurance FSL is replaced by a property based system for residential properties, or for commercial properties, would mean that the funding shares between commercial and residential properties would need to be fixed. Therefore, the level at which the allocation is set, will determine which groups are going to contribute more and which groups are going to contribute less (refer to section 7.1).

1.4.6 Impact on the NSW Government

Public Trading Enterprises (PTEs) have been modelled separately to the other NSW Government properties. The results under the four scenarios show that estimated contributions on all these properties, if they were subject to the levy, would vary between \$9.9 million and \$15.0 million with PTE properties responsible for between \$0.8 and \$1.5 million (refer to section 7.5).

1.4.7 Impact on Local Councils

The total estimated contribution under the four scenarios for local government properties, if they are subject to the levy, range between \$6.1 million (Service

Standards Scenario) to \$53.1 million (User Pays Scenario). The data provided to PFS indicated that a large proportion of local council properties are in the Non-GMR region, therefore the cost to local councils is very sensitive to amount levied on commercial Non-GMR properties (refer to section 7.6).

For the purposes of this report, it has been assumed that the level of direct contributions from local councils remains unchanged as the report focuses on the impact of removing the current insurance levy. It is up to the Committee to consider whether the councils should continue to make direct contributions or to pay a levy on their properties.

1.4.8 Value of Exemption to Mines

PFS has modelled the impact of providing all mining properties, with a mining lease number, an exemption from the property based levy. The results show that the total value of this exemption ranges from \$0.6 million under the Service Standards Scenario to \$5.2 million under the User Pays Scenario (refer to section 7.4). These figures assume that properties would be levied with the commercial rates.

1.4.9 Impact of Motor Vehicle Levy

As at 30 June 2003 there were 4.6 million registered vehicles in NSW. Therefore a flat levy of \$10 per vehicle would reduce the amount needed from a property based FSL by \$46 million (refer to section 7.2).

1.4.10 Impact of a Pensioner Discount

Data from the Department of Local Government shows that in the financial year 2002/03, 524,000 householders claimed the Pensioner Rebate. Using these figures, the cost of providing a 50% discount to this group has been estimated at between \$10.0 million under the Beneficiary Pays Scenario and \$16.8 million under the Combined Scenario (refer to section 7.3).

1.5 Limitations of Calculations and Analysis (section 9)

The following limitations should be considered when reading this report.

- Local councils currently operate on a three year cycle; therefore the actual values currently used by local councils may be up to three years behind the values used in this model. Timing Adjustment Factors could be produced for each local council (by property type) to allow for the different land valuation dates.
- The results of the Individual Comparisons for commercial properties will understate the amount currently paid under the insurance-based FSL system. This is particularly the case for large commercial property owners where, for example, tenants purchase business insurance policies or where large businesses pay the FSL on non-property related insurance (eg. consequential loss cover).
- The model only allows for direct impacts. Therefore, possible secondary impacts, such as a body corporate passing on the savings from removing the FSL on the building insurance cover to unit owners, or a commercial building owner passing on higher FSL payments on to tenants, are not reflected in the results.

- Due to the difficulties in matching the addresses of unit and townhouses and allocating the building cover to individual owners, units and townhouses have not been included in the Individual Comparisons.
- Only those residential and rural properties with both building and contents cover have been included in the analysis.

1.6 Work Following the Release of the Interim Report

1.6.1 Issues Arising From Submissions

High Contributions from Commercial Properties with High Land Values

The high level of contributions payable by the owners of these properties under the Combined Scenario was the major issue arising from the release of the Interim Report. Section 8.2.1 details the main reasons for these high contributions being:

1. No risk rating in proposed approach;
2. Concentration of commercial land values on CBD properties that have relatively low fire risk and
3. The narrowing of the contribution base.

This section also details possible ways to achieve a reduction in contributions for these properties; such as reducing the overall funding share from commercial properties.

Direct Local Council Contributions

Local councils currently make a direct contribution of 12.6% of the Fire Services Budget. If this is replaced by a direct contribution from property owners, the original levies used in the Combined Scenario would need to increase by approximately 15.5%. Section 8.2.3 shows the results of the Individual Comparisons under this levy structure. It is important to note that the results do not take account of any reductions in local council rates.

Mining Properties

The data for the mining model has been altered:

1. To include only coal mining properties (as these properties are required to have a rescue service) and
2. To apply the levy applicable to the zoning classification of the property instead of the commercial levy structure.

This change has reduced, dramatically, the cost of the mining exemption with the estimated cost under the Combined Scenario falling from \$900,000 to \$60,000 (refer to section 8.2.4).

Inclusion of State Forests

State forests are currently classified as either scenic protection or rural properties. Therefore, it has been assumed that these properties would be levied under a property based system.

Exemption for Fire Service Volunteers

Assuming that the percentage of fire service volunteers who own their homes falls between 25% and 40% and that the average land value of a volunteer's

home is the same as the State overall, the cost of an exemption would fall between \$1.3 million and \$2.1 million. This is a very simple estimate; an accurate calculation would require property details on an individual volunteer basis.

1.6.2 Size of a Motor Vehicle Levy

PFS has analysed the incident data provided by the fire services to estimate the proportion of resource usage attributable to motor vehicle incidents. The analysis shows that approximately 11% of all incidents in 2003 relate to motor vehicles. If false alarms are removed from the data, then this figure increases to 17%. Hence, if a motor vehicle levy is introduced, the amount of money raised by this levy, compared to the total amount raised, should fall within this range. The figures for the range could be much smaller if another measure is used eg. personnel effort or claims cost.

1.6.3 Additional Scenario

An additional scenario has been developed using the levy structure in the Combined Scenario but with changes to:

1. Have similar proportions contributing less in both the GMR and Non-GMR;
2. Incorporate a motor vehicle levy;
3. Increase the proportion of revenues generated from base levies to reduce the impact of land value changes and
4. Reduce the burden on high-valued commercial properties.

The levy structure tested under this scenario is set out below:

Property Type	Base Levy	Ad valorem Rate 1 (per \$1,000 of LV)	Ad valorem Rate 2 (per \$1,000 of LV)
Residential – GMR	\$55	\$0.11	Nil
Commercial – GMR	\$80	\$0.20	\$2.97
Residential – Non-GMR	\$55	\$0.11	Nil
Commercial – Non-GMR	\$80	\$0.20	\$2.97

Note: A cap of \$200,000 applies for commercial and \$175 for residential properties.

Plus a Motor Vehicle Levy of \$13.50 per vehicle

The results under this scenario are set out below:

Property Type	Share of Revenue	% Cont. Less	Av. Contribution Reduction	Av. Additional Contribution
Residential – GMR	42.3%	76.2%	\$36.1	\$15.4
Commercial – GMR	39.7%	49.6%	\$692.9	\$1,250.8
Residential – Non-GMR	15.5%	81.5%	\$27.6	\$12.0
Commercial – Non-GMR	2.5%	52.2%	\$325.8	\$99.9

Note: The Individual Comparisons do not take into account any motor levy contributions made by property owners.

The results show that the majority of non-commercial insured property owners will still be contributing less. However, the number of commercial properties contributing less has fallen. This is because the large majority of commercial properties which have low land values are contributing more and that additional revenue is being used to reduce the contributions from those properties with

land values over \$500,000. Overall, revenues from commercial properties will be much less with the commercial share falling from 55.6% to 35.8% (a reduction of \$81.7 million).

1.6.4 Variation to the Additional Scenario

A Flat 3 Tier Approach

A further scenario has been developed to show the impact of applying a very simple flat tiered levy structure for non-commercial properties. Under this scenario, non-commercial properties would be levied as follows:

Land Value	Levy
0 to \$200,000	\$60
\$200,001 to \$400,000	\$85
Above \$400,000	\$145

Plus a Motor Vehicle Levy of \$13.50 per vehicle.

The results (see section 8.5.1) show that the change in structure produces similar results to the Additional Scenario however the change will tend to benefit Non-GMR properties as these properties have lower land values than GMR properties.

Alternatives to Further Reduce the Levy on Large Commercial Properties

The Property Council of Australia met with PFS after the release of the Interim Report and suggested that the reduction of \$31 million in direct funding from the NSW Government could be replaced by a reduction in the amount raised from the Commercial sector. The impact of this change is to reduce the Ad Valorem Rate 2 for commercial properties to \$2.15 per \$1,000 of land value from \$2.97 in the Additional Scenario (refer to section 8.5.2).

Removal of Direct Local Council Contributions

PFS also examined the impact of increasing the levies by 15.5% to allow for the removal of the direct contributions from local councils under the Additional Scenario structure. See section 8.5.3 for the results of the Individual Comparisons.

Signed

Doug Drysdale BSc FIAA Principal	Thach Huynh BEc AIAA Consultant
-------------------------------------	------------------------------------

Date:

Professional Financial Solutions Pty Limited
ABN: 84 096 646 178